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Jacks of All Trades and Masters of None: Audiences' Reactions to Spanning Genres in Feature Film Production

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I would like to thank Beth Bechky, Stanislav Dobrev, Özgecan Koçak, Mike Hannan, Paul Ingram, Peter Roberts, Toby Stuart, Anand Swaminathan, and Ezra W. Zuckerman for helpful comments on earlier versions of this paper. I am also grateful to *ASQ* Associate Editor Huggy Rao and three anonymous reviewers for their thoughtful comments and advice. Please direct correspondence to Greta Hsu, Graduate School of Management, University of California at Davis, 1 Shields Avenue, Davis, CA 95616; e-mail: grhsu@ucdavis.edu. Through analyses of audience reception of U.S.-produced feature film projects from the period 2000-2003, I develop insight into the trade-off assumed in organizational ecology theory between an organization's niche width and its fitness. This assumption, termed the principle of allocation, holds that the greater the diversity in regions of resource space targeted by an organization, the lower the organization's capacity to perform well within them. Using data at both the professional critic and consumer levels, I demonstrate the empirical validity of this principle: films targeting more genres attract larger audiences but are less appealing to those audience members. Moreover, I find that audiences' perceptions of a film's fit with targeted genres drive this trade-off, as multi-genre films are difficult for audiences to make sense of, leading to poor fit with tastes and lowered appeal. These findings highlight the key role audiences' perceptions play in the trade-offs associated with different niche strategies.

Organizational theories of the niche, following Levins (1968), assume a trade-off between an organization's niche width and its capacity for performance. The underlying premise is that organizations must devote time and resources to targeting a specific region in their resource space. Because an organization's level of investment is finite, greater diversity in targeted regions results in lower investments in each. This presumably results in lowered appeal among targeted audiences for organizations of broader niche widths. Hannan and Freeman (1989: 106) captured this idea succinctly when they noted that "organizations and their designers face a classic problem: should they seek to become jacks-of-all-trades (and masters of none), or should they concentrate on developing one or a few capacities?"

This trade-off, termed the principle of allocation, is a key assumption in theories of organizational niche dynamics. It guides propositions about the relative fitness of generalists versus specialists under different types of resource conditions (e.g., Hannan and Freeman, 1977, 1989; Freeman and Hannan, 1983; Péli, 1997; Dobrev, Kim, and Hannan, 2001). It also informs understanding of resource-partitioning theory, which posits a relationship between the distribution of taste positions in a market and the relative advantage of organizations espousing different niche strategies (Boone, Carroll, and Witteloostuijn, 2002). In their formalization of niche theories, Hannan, Carroll, and Pólos (2003) used the principle of allocation to construct propositions about the relative fitness of organizations that conform versus those that stray outside the boundaries of their population's fundamental niche.

Although a considerable body of work has emerged around this trade-off, the principle itself has never been tested empirically. Studies have merely inferred its presence indirectly through the differential mortality rates of generalists versus specialists in particular kinds of environments (Freeman and Hannan, 1983; Hannan and Freeman, 1989; Dobrev, Kim, and Hannan, 2001). Providing empirical support for this principle among organizations would appear to be of particular importance given the influx of purely theoretical work in niche literature. In recent years, formal logic has increasingly

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been used to integrate disparate lines of theorizing and build new theoretical propositions about organizational niche dynamics (e.g., Bruggeman, 1997; Péli, 1997; Hannan, Carroll, and Pólos, 2003; Boone and Witteloostuijn, 2004). Theorists have also relied on geometrical principles to develop predictions about niche dynamics under different types of resource conditions (Péli and Nooteboom, 1999; Péli, 2004). Such work holds great promise for guiding and facilitating future empirical research, but its usefulness depends on the validity of its foundational assumptions.

In addition, the factors that contribute to the proposed tradeoff between niche width and audience appeal remain underdeveloped. Original descriptions of the principle of allocation spoke at a general level of the trade-off between niche width and fitness levels. The underlying intuition was that generalists are less efficient than specialists at exploiting environmental positions because they spread their capacities across multiple positions. The primary focus was thus placed on the internal structure and operations of the organization and how these affect performance. This focus, however, overlooks the power of the audience in shaping organizational opportunities and constraints.

Theorists have long acknowledged the key role that audiences play in organizational dynamics. A core notion driving literature on legitimacy is that audience members' shared beliefs about what types of organizations are desirable and appropriate exert strong pressures on organizations (see Suchman, 1995, for a review). Organizations must demonstrate conformity with audiences' expectations to obtain their approval and thus the material and social resources necessary for survival (Meyer and Rowan, 1977; DiMaggio and Powell, 1983). Work on market structuration similarly proposes that audiences' perceptions compel market producers to adhere to an orderly schedule of distinct roles (White, 1981; Podolny, 1993, 1994).

Although the audience has played a prominent role in such theories, understanding of this role has been largely conceptual-generalized audience pressures have been treated as a powerful yet unobservable phenomenon. In recent years, however, a number of empirical studies have focused on how audiences' perceptions and reactions discipline producers (Zuckerman, 1999; Zuckerman and Kim, 2003; Carroll and Swaminathan, 2000; Rao, Monin, and Durand, 2003, 2005; Dobrev, Ozdemir, and Teo, 2005). Such work has led to a arowing recognition of the importance of developing greater understanding of the constraints imposed by audiences on organizations. The current study contributes to this emerging focus by examining the key role audiences' perceptions play in the trade-offs involved in spanning market positions. More specifically, I examine how the ability of audience members to clearly perceive and identify an organization's fit with targeted market positions varies systematically with niche width and the consequences of this for organizations competing to attract audiences' resources.

I focus on the U.S. feature film industry for the period 2000–2003, a context in which the issue of whether to target

a broad niche or a specific one is highly salient to producers. The envisioned audience for a film shapes many factors in the production process, such as the way a script is developed and pitched to potential investors, whether the film will attract well-known actors, directors, and other skilled workers, and how much of a studio's promotional capacity will be devoted to a film. In this study, I test the principle of allocation at the level of the film project. Films are produced by temporary, single-project organizations (Faulkner and Anderson, 1987), which typically operate in environments that are complex and uncertain, coming together for a limited time to produce a unique output through team-based coordination of diverse experts, technicians, and professionals. This characterization meshes well with audiences' perceptions of filmsfilm-goers generally focus on individual film projects when developing expectations for particular film-going experiences, making quality assessments, and choosing whether or not to award their resources and support. Audiences' beliefs about producers' identity can thus be seen as forming at the level of the project rather than the studio (Zuckerman and Kim, 2003). Though discussion of the principle of allocation was originally framed in terms of traditional organizations, singleproject organizations are equivalent along dimensions relevant to trade-offs inherent in the principle of allocation. The agents producing these projects have limited capacities to devote to the production of their offering. They can also choose to tailor and market their project around a broad constituency or a more specific one.

Moreover, such organizations facilitate a strict test of the principle of allocation. The principle of allocation works from a default expectation of equality in the overall capacities of organizations in a population (Hannan, Carroll, and Pólos, 2003), which allows one to compare organizations of a given type against one another and predict that those targeting a broader niche suffer in terms of audience appeal relative to their more specialized counterparts. To test the principle of allocation, one must therefore be able to control for differences in the overall capacity of organizations, which is difficult to do in traditional organizational populations, where generalists often enjoy economies of scale and/or scope. The project-based organizations I studied, however, facilitate such a test. Even more, I was able to gather a wide variety of data related to the potential capacity levels of film projects, such as the total size of the film budget, the number of opening exhibition sites, the box office draw of the film's stars and director, whether the film was a sequel, and whether its distributor was a major or independent studio. Accordingly, while I explore the implications of niche width for the performance of film distributors in supplementary analyses, the main test of the principle of allocation is at the level of the film project.

NICHE WIDTH AND AUDIENCE APPEAL

Analytical treatments of the niche in organizational ecology are premised on Hutchinson's (1957, 1978) abstract conceptualization of the niche as the set of points in n-dimensional space for which a biological population's fitness is non-negative. Hannan and Freeman (1977) applied this concept to the

world of organizations, in which the environments of interest reflect a diverse array of social, cultural, economic, and political dimensions. Accordingly, they defined an organization's fundamental niche as the set of all points along such dimensions for which the organization is potentially (but not necessarily) able to garner the resources necessary for survival. Niche-width theories focus on differences in fundamental niche width when predicting the relative fitness of organizations, rather than on the "realized" niche, which incorporates the presence and impact of competitors on growth rates in its specifications of an organization's resource space (e.g., Carroll, 1985; McPherson, 1983; McPherson and Ranger-Moore, 1991). Because the principle of allocation concerns the trade-offs involved in determining the width of an organization's fundamental niche, theoretical work outlining this principle falls within the purview of niche-width theory.

The width of an organization's niche refers the level of variance in environmental resources within the region bounded by these points. Organizations targeting a wide diversity of environmental resources are classified as having broad niches and are labeled "generalists." Those that limit their focus to a tight region in the environmental space are treated as having narrow niches and are labeled "specialists." Hannan and Freeman (1977) considered the relative fitness of generalists versus specialists under different environmental conditions. Their propositions were guided by the key idea of a trade-off between an organization's niche width and its fitness across those positions. Specialists concentrate their capacities on performing one type of action efficiently and reliably, while generalists divide their capacities across many different kinds of activities, reducing their potential for performance in each. Specialists are thus expected to out-compete generalists in regions they both target. Of course, generalists have their advantages as well. Given a highly variable or unpredictable distribution of resources, generalists are likely to outlast specialists because they spread risk across multiple regions of the environment. Empirical support for these ideas has been found in a variety of contexts (e.g., Freeman and Hannan, 1983; Hannan and Freeman, 1989; Dobrev, Kim, and Hannan, 2001; Dowell and Swaminathan, 2000).

In a recent formalization of theories of the niche, Hannan, Carroll, and Pólos (2003) delved into the mechanisms underlying this trade-off in greater detail. They began their account with an environment composed of audience members that may include a wide variety of constituents, such as consumers, investors, employees, partners, and analysts. Relevant audience members exercise social or material control over the fates of producers and thus represent the resource distribution from which organizations attempt to survive. Members of the audience often hold distinct tastes, or sets of preferences, for organizational offerings. For example, in the market for music, different segments of the audience express tastes for different types of music, such as classical, jazz, heavy metal, and reggae (Mark, 1998). Accordingly, audiences can be seen as occupying different "taste positions" in an organization's multidimensional resource space. These positions are treated as abstract representations of audi-

ences' preferences; they correspond to general distinctions in the needs or desires of some portion of the market's audience. To garner audiences' attention and resources, organizations must tailor their concrete offerings to the preferences represented at particular positions.

Where exactly an organization's niche lies relative to particular positions depends on two factors. The first is the intrinsic fit between its offering and taste preferences. Without fit between an organization's concrete offerings and the preferences held at a particular position, there is no potential to accumulate resources. Yet the existence of intrinsic fit by itself is not enough to lead to the resources necessary for survival. An organization must also devote some level of engagement, or sustained focus, to making its offerings available and known to targeted audience members. It must strive to ensure that audience members actually perceive the fit of its offerings with their preferences. Without such recognition, the offering again has no possibility of attracting audiences' resources. An organization's fundamental niche therefore consists of those positions for which the organization's engagement is nonzero and there is some intrinsic fit between the organization's offering and the taste.

Engagement refers not only to designing features of the offering to fit specific tastes but also to such diverse actions as learning about the idiosyncratic tastes of targeted audiences, tailoring the mode of presentation of its offering to those audiences, and establishing a clear and desirable organizational identity (Hannan, Carroll, and Pólos, 2003). The amount of engagement that an organization devotes to a particular taste position affects its ability to communicate and elicit appeal among audiences at the position. Generally speaking, appeal at a particular taste position is expected to grow with the level of engagement.

Given that organizations have a finite capacity for engagement, any increase in niche width must decrease the level of an organization's engagement across its diverse positions. Paying attention to a broader, more diverse set of audiences therefore means less attention paid to establishing and communicating a clear fit to each. This is expected to result in lowered appeal (and thus fitness) across these positions. By targeting a broader array of taste positions, an organization increases the sheer number of audience members that it is able to reach. If this is true, the audience that is attracted to an organization with a broad niche should normally be greater in size than the audience for an organization with a narrow niche. But because the ability of the organization to effectively appeal to audience members decreases as it stretches its focus to include more taste positions, the appeal audiences experience for the organization's offerings should generally decrease with its niche width. These arguments lead to two main predictions representing the key trade-offs in the principle of allocation:

Hypothesis 1 (H1): The number of audience members an organization attracts is an increasing function of its niche width.

Hypothesis 2 (H2): The appeal of an organization to audience members is a decreasing function of its niche width.

The first two hypotheses should hold in markets meeting three basic conditions. The first concerns advantages due to scale. In markets in which environmental resources are highly concentrated, resource partitioning theory holds that organizations residing in high-resource positions often come to enjoy scale-based advantages, which they use to improve the appeal of their offerings relative to those of competitors (Carroll, 1985). As a result, large organizations in resource-abundant positions may have an enhanced ability to appeal to audiences, overriding the costs of targeting a broad niche (Hannan, Pólos, and Carroll, 2006). In contexts in which a high concentration of resources leads to significant economies of scale for generalist organizations, the principle of allocation is not expected to hold.

A second condition concerns complementarities between a market's taste positions. When skills and features tailored to one taste position can be parlayed into another without the dedication of significant effort and resources, spanning positions is not likely to have significant negative effects on audience appeal (Carroll, Dobrev, and Swaminathan, 2002). The potential benefits in terms of audience size should significantly outweigh the negative effects of spanning multiple positions. When market positions are strictly incompatible with one another, however, one would expect the negative impact in terms of appeal to overshadow any benefit in audience size. When categories are incompatible or oppositional, producers who attempt to span positions encounter substantial difficulty in appealing to and retaining consumers (Carroll and Swaminathan, 2000; Zuckerman and Kim, 2003; Rao, Monin, and Durand, 2003, 2005). The principle of allocation applies when features specific to each position in a market are different enough that producers must engage in some non-significant effort to span them, but not so incompatible that efforts to span boundaries would result in consumers sharply rejecting them.

Lastly, the first two hypotheses should only be operative when the stages of gaining audience attention and of evaluation are temporally distinct from one another. In many contexts, audiences are able to gather information on producers' appeal before consumption through activities such as personal testing, reading published reviews, and word of mouth. When these two stages are intertwined, producers targeting broad regions of the market are likely to suffer a penalty in total audience size because of their lowered appeal.

The Role of Audience Perceptions

The trade-offs posited by the principle of allocation are likely driven by differences in the way in which audiences perceive and make sense of organizations of different niche widths. Hannan, Carroll, and Pólos (2003) maintained that an organization that targets broader diversity in taste positions will encounter greater difficulty in establishing its fit with those positions than an organization that specializes its activities in a narrow niche. In spreading its capacity across diverse positions, the generalist is less likely to clearly communicate and

establish its fit with any one. This meshes with McKendrick et al.'s (2003) finding that producers who participate in a variety of market categories are less likely to instill clear identities in the eyes of relevant audiences relative to producers with "perceptually focused" identities. The extent to which audience members clearly perceive an organization's fit with targeted taste positions should therefore decrease as the organization stretches its focus to address more taste positions.

One way in which such clarity of fit manifests itself is through consensus in the beliefs audience members hold about how to classify organizations relative to established market positions (Zuckerman, 2004). Organizations that clearly establish themselves will experience a high level of agreement in audiences' perceptions about their fit with targeted positions. Conversely, those that are less effective in communicating fit will experience greater dissensus among audience members about their positioning. If organizations targeting a broader niche are less effective in communicating their fit with targeted positions, they are generally likely to engender less consensus about their respective positions.

Hypothesis 3 (H3): Audience members' consensus about an organization's fit with targeted taste positions is a decreasing function of its niche width.

Previous research suggests that producers must advance through two stages to gain an audience's resources: gaining the audience's attention and demonstrating appeal (Zuckerman. 1999). Difficulty in establishing fit with established market positions is expected to hinder an organization's performance in both stages. Lack of fit is expected to decrease the likelihood that audiences will grant attention or consideration (Zuckerman, 1999, 2000; Zuckerman et al., 2003). Offerings that clearly fall within the categories audiences use to make sense of offerings are perceived to have common characteristics that audience members can easily identify and compare. Those that do not fit the established mold of the market, by comparison, are difficult for audiences to interpret and evaluate and are thus ignored. If effectively communicating and establishing a clear fit with targeted taste positions is a key factor in attracting audiences, organizations that have established greater consensus among audience members' in perceptions of fit with targeted taste positions should attract more audience members.

Hypothesis 4 (H4): Audience members' consensus about an organization's fit with targeted taste positions increases the number of audience members an organization attracts.

This dynamic is likely to put generalists at a disadvantage because it is more difficult for them to establish a clear fit in the minds of audience members (Zuckerman et al., 2003). Importantly, this does not negate the earlier prediction that organizations that target a broader diversity in taste positions will attract larger audiences. When producers target multiple taste positions, they increase the total size of the market that they have the *potential* to appeal to and glean resources from. When producers bridge multiple positions, however,

audiences have more difficulty interpreting their identities. Thus the extent to which producers capitalize on their potential audience will be shaped by the extent to which they are effective in establishing their fit with targeted positions.

Establishing clear fit with targeted positions should also play an important role in the relationship between niche width and an organization's appeal to audience members. When organizations enjoy high audience consensus about their fit with targeted positions, their match with the taste preferences held at those positions is clear. Such organizations have effectively communicated and established their possession of attributes central to the audience's enjoyment of offerings. As a result, clear fit with taste preferences results in greater appeal among targeted audience members (Hannan, Pólos, and Carroll, 2006). Audience members' consensus in perceptions of fit is thus expected to be a key mediator in the relationship between niche width and appeal. Targeting a broad niche hinders an organization's ability to engender a high level of consensus. Because organizations that more effectively establish fit will experience greater audience appeal, organizations addressing a broader niche should have less appeal.

Hypothesis 5 (H5): Consensus among audience members about an organization's fit with targeted taste positions mediates the effect of niche width on the appeal of an organization to audience members.

Together, H4 and H5 suggest that producers who can establish a clear consensus will benefit in both stages of market acceptance: gaining the audience's consideration as a potential exchange partner and being evaluated as a better fit with taste preferences relative to other producers.

METHOD

Setting: U.S. Film Industry

To test the hypotheses, I focused on audiences' responses to projects in the contemporary U.S. film industry (2000-2003). In this context, there is a straightforward operationalization of taste position: film genre. Austin (1988: 75) noted that audiences "have film type preferences and can articulate their preferences, frequently by employing commonly used genre labels." This suggests that genres correspond to sets of preferences held by members of the film audience. Films classified under the same genre share common story-line elements that form the basis for audiences' expectations of a particular film experience. These elements include such features as the nature of the protagonist and antagonist, the structure of dramatic action, the catalytic event, narrative style and structure, and tone (Dancyger and Rush, 2002). Neale (2000: 227) provided some examples: "The science fiction film is set in the future and deals with the intrusion of 'others'; the gangster film is set in the present and deals with the contradictions that stem from striving for social and financial success; and the western is set in the past and deals with the ethics of violence."

In providing unifying elements, genres play a key role in the production process. Genres facilitate communication and coordination among project personnel and provide clear

frameworks for selecting film projects, organizing projects' development, and guiding studio resource allocation decisions (Schatz, 1981; Altman, 1999). Genre also has a profound impact on audiences' perceptions and expectations. Film researchers have consistently found a film's genre to be the most important reason audience members cite for attending a specific film (Austin, 1988). Moreover, conventional wisdom suggests there is demographic variation in the audiences for different genres. Action, adventure, and war, for example, are generally known as "male" genres, while romance is often considered a "female" genre. Academic research corroborates the existence of significant differences in film audiences by gender as well as by age and racial and ethnic groups (Fischoff, Antonio, and Lewis, 1998).

In this context, the principle of allocation implies that films targeting a wide diversity in genres will have a large, diverse audience from which to draw resources. And film studios appear quite cognizant of the multi-audience appeal of multi-genre films. For example, Altman (1999: 129) observed that Hollywood's basic script development process consists "not only of mixing genres but of thinking about films in terms of the multiplicity of genres whose dedicated audiences they can attract." Moreover, films that are commonly referred to as "high concept"—involving high-profile stars and directors, simple motifs, saturated marketing campaigns, and substantial merchandising efforts—are almost certainly pitched to studio executives as attractive to a diverse and broad-based audience (Wyatt, 1994; Lieberman, 2002).

Studios also capitalize on multi-genre appeal in film promotion by manipulating the portraval of a film's generic identity in order to target different audiences. Altman (1999) illustrated this practice in his analysis of audience research documents for Touchstone Picture's Cocktail. Altman described how the studio tested out four different ways of conceptualizing and marketing the film, each of which corresponded to four distinct genres. The studio subsequently produced multiple television commercials that correspondingly varied in their generic framing of the film. The careful placement of such ads, based on targeted demographics, is standard practice in the film industry (Friedman, 1992). Lieberman (2002) observed a similar strategy in the marketing of the film *The* English Patient, which turned what might otherwise have been a niche-oriented film into a mass-audience vehicle. Miramax, the U.S. marketer of this film, produced two different ad campaigns, one emphasizing the film's action and war components, and another emphasizing the romantic elements of the movie. By appealing to both men and women, Miramax succeeded in expanding the potential audience of the film. As Lieberman (2002: 54) noted, "The women brought the men and the men went willingly, resulting in a great marketing success."

Although there is a clear grounding for a film's generic identity—individual producers use a particular set of genres to guide the production process, and elements of those genres are embedded in the final product audiences are exposed to—there is flexibility in the extent to which this is clearly established and communicated to audiences. Even more, stu-

dios have an incentive to include as many generic connections as possible in their communications, giving rise to a common Hollywood marketing strategy observed by Altman (1999: 59): "tell [audiences] nothing about the film, but make sure that everyone can imagine something that will bring them to the theatre." This flexibility suggests that audiences' perceptions of producers' positioning will be generally less clear in this context than when producers have limited flexibility to adjust their niche position or must declare their position formally before entering the market. It also makes the film industry a highly relevant context in which to test for the principle of allocation: producers constantly think about how broad an audience to target throughout the production process, and the extent to which they clearly convey fit is affected by the amount of focused effort they dedicate during production and promotion to any one position.

The Audience: Critics and Consumers

I examined the impact of a film's niche width on the reactions of two important audiences: professional critics and general consumers. Professional critics are often thought to exert a significant influence over consumers' decisions in the U.S. film industry (e.g., Wyatt and Badger, 1984; Eliashberg and Shugan, 1997; Holbrook, 1999; Basuroy, Chatterjee, and Ravid, 2003). In addition, a number of studies have found a positive relationship between favorable critical reviews and theatrical rentals or revenues (e.g., Litman, 1983; Wallace, Seigerman, and Holbrook, 1993; Prag and Casavant, 1994; Sochay, 1994; Sawhney and Eliashberg, 1996; Litman and Ahn, 1998). Although some researchers have proposed that critics may be more appropriately viewed as good predictors or forecasters of film consumers' preferences (e.g., Eliashberg and Shugan, 1997), whether critics act as influencers or predictors of consumers' reception of a film is not a key issue—what *is* crucial is that critics act as an important audience in this context. Zuckerman and Kim (2003: 47) observed several features of the film industry, such as "the prominent display of critical endorsements in advertisements, the efforts by film distributors to shape critical opinion ... and the rise of certain critics to celebrity status" that support the notion that critics receive considerable attention from producers and are a key audience in the film industry.

Critics typically make decisions to review or not review a film before or at the very beginning of its theatrical release. At that point, they must determine whether the film is worth the allocation of limited time and print space, given the myriad other films available. They must weigh several types of information, including the perceived ability of the various experts associated in putting together the project (assessed through status, experience level, etc.) and the film's fit with the tastes of their own constituents before deciding to review it. So for this key audience, the stages of gaining attention and of evaluation are distinct from one another, and there can be a major disconnect between the size of the critical audience that reviews a film and its evaluations of that film. Of course, once film critics have viewed the film, information about quality is transmitted to the rest of the audience through published reviews as well as by word of

mouth. De Vany and Walls (1996) found that information about evaluations plays a large role in whether the audience will subsequently venture to see a film. As this information is transmitted to other audience members, the demand for films develops dynamically over time. This suggests that the relationship between niche width and audience size should be weaker at the general consumer level, because appeal influences the total size of the consumer audience that attends a film in exhibition. Therefore, although both critics and general consumers are key audiences targeted by producers in this context, critics' reactions should be regarded as the clearest test of the principle of allocation.

Measures

The sample used in this study consists of films produced in the U.S. from 2000 to 2003. Financial, production, and distribution data on films came from the Internet Movie Database (IMDB). The main analyses for this study focus on featurelength films that (1) ran a minimum of one day in any domestic theater and (2) had an original release date between April 16, 2000 and Dec 31, 2003. In total, 949 films met these criteria.

Dependent variables. The two main outcomes of interest in this study were audience size and overall appeal. I measured audience size at the professional critic level in terms of the number of reviews published in major media outlets, gathering information on critics' reviews from RottenTomatoes.com (RT), a Web site dedicated to archiving critical opinions of films. Outlets archived in this Web site include top newspapers by distribution as well as popular magazines, Web, TV, and radio critics focused on critics whose reviews by professional critics focused on critics whose reviews included numerical ratings of the film's quality, which allowed a clear test of the trade-offs in terms of audience size and appeal; supplementary analyses showed no systematic difference in coverage of critics who did not provide numerical ratings and those who did.

At the regular consumer level, I collected two types of data: (1) responses to films among online film aficionados and (2) total U.S. box office gross receipts. I treated both box office gross and the number of film aficionados who rated a film as proxies for the size of the consumer audience each film attracted. I gathered data on the number of film aficionados' ratings for each film from IMDB. Registration at this Web site is free of charge, and registered users can enter ratings for any of the films listed. I gathered information on box office grosses for films through the paid subscription area of IMDB.

The second outcome is the overall appeal of each film to audiences. Professional critics provide numerical ratings of films on a 0–10 scale, while ratings among IMDB voters are on a 1–10 scale. I assessed the overall appeal of each film through the average of its ratings among each of the audiences.

Niche width. The main explanatory variable of this study is the width of the fundamental niche for each film, which is represented by the number of distinct taste positions that

each film targeted. I used several different archival sources for film niche information. The genre classifications listed in these sources are used as indicators of each film's fundamental niche; they represent taste positions to which the organization has dedicated some degree of focus in establishing fit with relevant audiences. I gathered information about the film genres assigned to each film from IMDB, RT, and Showbizdata.com (SBD). There was some variation in the specificity of the genre assignments among archival sources. For example, while SBD used the comedy subgenre labels of "black comedy" and "satire," IMDB only used the general genre label of "comedy." When a label was a clear subgenre of a single larger genre, I classified it as the larger genre. In constructing the genre measures, I did not consider genres that were not recognized by all three sources and were not clear subgenres. In these sources, films were classified along 17 common genres: action, adventure, animation, comedy, crime, documentary, drama, family, fantasy, horror, musical, mystery, romance, science fiction, thriller, war, and western.

I treated niche width as the total number of distinct genres under which each film was classified across the three sources and used the natural log of this term because its distribution is skewed to the right-hand side. This treatment of niche width corresponds with the empirical approach adopted by Hannan and Freeman (1989), who measured the niche width of labor unions by the number of occupational and industrial categories they claimed to organize and the niche width of semiconductor firms by the fraction of the industry's product types offered by firms. Table 1 shows the box office gross by genre for the 17 genres identified for the study. Some genres clearly earn more at the box office than others, representing high-resource niche positions.

As noted earlier, the principle of allocation is not expected to hold when organizations located in high-resource positions enjoy economies of scale. In the current context, however, this does not appear to be a significant concern. Film produc-

| Genre | Total \$ | Number of films | Mean \$ |
|-----------------|----------|-----------------|---------|
| Action | 14400 | 646 | 64.4 |
| Adventure | 14800 | 458 | 71.7 |
| Animation | 2630 | 80 | 59.8 |
| Comedy | 15700 | 1407 | 32.4 |
| Crime | 5750 | 375 | 32.9 |
| Documentary | 282 | 753 | 2.5 |
| Drama | 15300 | 1805 | 26.2 |
| Family | 7380 | 298 | 54.6 |
| Fantasy | 9980 | 228 | 80.5 |
| Horror | 3430 | 400 | 39.4 |
| Musical | 809 | 66 | 20.2 |
| Mystery | 3300 | 210 | 41.8 |
| Romance | 8200 | 588 | 33.7 |
| Science fiction | 7350 | 250 | 77.4 |
| Thriller | 11500 | 881 | 40.3 |
| War | 1820 | 73 | 49.1 |
| Western | 245 | 31 | 27.2 |

Table 1

Box Office Gross by Genre (in Millions \$)

ers flock to high-resource positions, where disproportionate rewards are available to the very top performers (Frank and Cook, 1996). This heightened level of competition in resource-abundant positions seems to work against any advantage that location in such positions may impart to producers. In support of this, I find the correlation between total and average box office gross for film genres to be relatively low at 0.37.

The average number of genres assigned to the films in this sample by each of the archival sources used ranged from 1.71 to 2.33. Films thus appear to be more likely to cross genres than to remain strictly within one. At the same time, however, they tend to cross a relatively low number of boundaries, given that the total number of distinct genres is 17. This suggests that positions are generally not incompatible with one another, but that spanning boundaries requires a non-significant effort.

Audience consensus on fit. To measure audience members' consensus on a film's fit with targeted genres, I assessed similarity in genre classifications across the different archival listings for each film. Roughly one-fifth of the films in the main sample were assigned the same genres by all of the sources in which it was listed. The majority of films experienced dissensus in perceptions of their generic fit to varying degrees. For some films, there was no consensus. The film September 11 (2002), for example, was labeled a drama by IMDB, a documentary by SBD, and a war film by RT. Other films had partial but not full consensus on their classification. For example, The Quiet American (2002) was labeled as romance/drama by RT, mystery by SBD, and drama/thriller/romance/war by IMDB. And while the movie Unfaithful was simply a drama by SBD's standards, it was a drama/thriller according to IMDB and a drama/mystery/thriller according to RT. As these examples show, there was variation not only in which genres were assigned to a film but also in the number of genres that sources assigned to each film.

To measure consensus, I calculated the average pairwise similarity between each archival source that listed a film. For films listed in only two of the three sources, the measure simply reflected the pairwise similarity between those two sources. Films listed in only one source were assigned a value of 0 for this variable, and a binary variable that equals one if a film was listed in only one source and equals zero otherwise was included in the regressions.

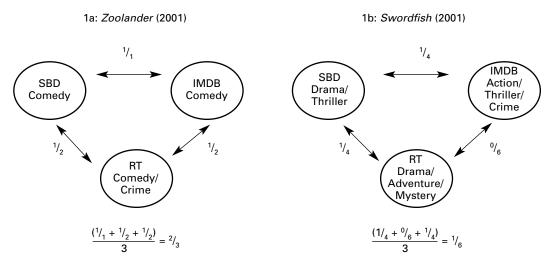
I used Jaccard's coefficient to measure similarity between the classifications of a film in each pair of sources. This measure reflects the proportion of binary classifications that match between two sources, excluding those classifications that are missing from both. It is a commonly used similarity measure that is appropriate when attributing a high similarity to a pair of classifications simply because they both lack a high proportion of attributes is not an accurate reflection of their similarity (Everitt, Landau, and Leese, 2001). The Jaccard coefficient takes the following form:

 $\frac{a}{a+b+c}$

where a reflects the sum of positive matches between the two pairs, b reflects the sum of cases in which there was a positive classification by the first and a negative classification by the second, and c reflects the sum of cases in which there was a negative classification by the first and a positive classification by the second. For the 949 films in this sample, consensus scores range from 0 to 1, with a mean of 0.619.

Figure 1a, which shows the various genre classifications for the film Zoolander (2001), provides a concrete example of how similarity in genre classifications was measured. While IMDB and SBD regarded Zoolander as pure comedy. RT perceived it to be both comedy and crime. The total number of genres under which this film is classified across the three sources is therefore equal to 2. This figure shows the Jaccard coefficients for each of the three pairwise comparisons: it has a value of 1 for the IMDB-SBD comparison, and a value of 1/2 for both the SBD-RT and IMDB-RT comparisons. The average of these pairwise coefficients is 2/3, which is the genre consensus value assigned to Zoolander. Figure 1b provides an illustration of a film with less audience consensus, Swordfish (2001). While IMDB regarded Swordfish as a mix of action, thriller, and crime, SBD regarded it as a drama/thriller, and RT perceived it to be drama/adventure/mystery. The total number of genres for this film is 6, and the genre consensus value assigned to this film is 1/6.





Control variables. The treatment of niche width I used does not take into account potential differences in the volume of the resource space that individual taste positions cover. For example, it is likely that the audience for drama encompasses a wider variety of demographic characteristics than the audience for genres such as documentary or romance. Some studies have addressed such differences by locating targeted audience members along metric resource space dimensions

such as age, occupational prestige, education, and income (e.g., McPherson, 1983; McPherson and Ranger-Moore, 1991; Mark, 1998). This information has then been used to calculate the volume in resource space covered by a single position. But a number of the key demographics for film viewership, such as gender, race, and ethnicity, are non-metric. I addressed this issue in two ways. In the main analyses, I included individual genre-level indicator variables in the reported models, which helps to control for the effect of differences in the niche volume of individual genres on the results. In supplementary analyses predicting audience size, I controlled for the average resource abundance of genres that a film spans, measured as the average of (1) total and (2) mean U.S. gross of a film's genres during the period under investigation (In).

I also controlled for a variety of organization-specific factors that may affect relative capacity levels. One of the most commonly mentioned factors in film research is star power, the ability of a star to draw a large audience of film-goers. A number of studies have found star power to have a clear positive impact on consumers' attendance decisions (De Silva, 1998; Litman and Ahn, 1998; De Vany and Walls, 1999; Ravid, 1999) and a film's financial performance (e.g., Litman and Kohl, 1989; Wallace, Seigerman, and Holbrook, 1993; Sochay, 1994). I gathered measures of star power through Hollywood Reporter's 1999 and 2002 Star Power® surveys, in which film industry insiders were asked to rank actors in terms of their ability to ensure financing, major studio distribution, and wide theatrical release, as well as open a film on the strength of their name alone. I set a film's star power at the top Star Power ranking of all the actors on its cast. For films that did not have any actors who were listed in the Star Power rankings, I assigned a score of 0 for this measure. I constructed similar measures of films' director power using data from Hollywood Reporter's 2000 Director Power® Survey.¹

Other variables I gathered from IMDB to control for the overall capacity of a film are (1) the broadness of each film's theatrical exhibition during its opening weekend (measured as the natural log of its number of opening screens), (2) total size of its budget. (3) whether or not it was a sequel, and (4) whether the film was backed by a major or independent distributor. According to the Motion Picture Association of America, the seven major distributors of film in the U.S. are Buena Vista Pictures Distribution, Sony Pictures Entertainment, Inc., Metro-Goldwyn-Mayer Studios, Inc., Paramount Pictures Corp., Twentieth Century Fox Film Corp., Universal City Studios LLLP, and Warner Brothers Entertainment, Inc. (Motion Picture Association of America, http://www.mpaa.org/about/; accessed 12/01/04). Together, these seven major distributors accounted for the distribution of 62.1 percent of the films in the sample. To capture their impact, I created a variable indicating whether a film was backed by one of these seven companies. To take into account that several other companies in recent years have grown in terms of market share, I constructed an alternative measure indicating whether a distributor accounted for more

John Burman, executive director of the Star Power[®] and Director Power[®] projects provided helpful insight into the construction of these surveys.

than 2 percent of total yearly market share during the period preceding this study (1997–1999). Market share data came from BoxOfficeGuru.com (02/14/05). This added the following distributors to the list: Miramax Film Corp., New Line Cinema, and DreamWorks SKG. This expanded group accounted for 68.1 percent of the films in the sample. Of the two measures, the second generally had more explanatory power and was used in the reported results.

Crowding within a film's niche is also likely to have an impact on the amount of attention an offering actually generates. Greater similarity in targeted taste positions is generally thought to result in a greater level of competitive intensity (Hannan and Freeman, 1977; Barnett and Carroll, 1987; Podolny, Stuart, and Hannan, 1996; Dobrev, Kim, and Hannan, 2001). Overlapping films are in direct competition for the same audience members, who have a finite amount of attention that they can allocate at any given time. So, the greater a film's overlap in targeted genres with other films in theatrical exhibition at the same time, the less attention from potential audiences it should receive. Niche crowding may also affect audience appeal; the more saturated the audience becomes with a certain type of film, the less appealing films of that type may seem.

I measured the niche overlap between two films as the fraction of the total genres under which the focal film was classified that the alter film was also classified under (MacArthur, 1972). For critics, I treated crowding around a focal film's niche as the sum of its niche overlaps with all films that were in theatrical exhibition at the time of its release. For general consumers, I treated it as the sum of niche overlaps with all films exhibited during the length of its exhibition. This difference in the niche overlap measures reflects the fact that critics typically choose whether or not to review a film at the time of its release, while IMDB users may choose to view and rate a film any time during its exhibition.

To control for general fluctuations in audience demand for films, I included a variable indicating whether each film was released during the summer months or winter holiday period, both of which are commonly considered high attendance periods in which films may be able to attract larger audiences. I controlled for any general trends over the four-year period in audience demand or enjoyment of films through a set of indicator variables reflecting the year of each film's release.

I also controlled for the number of archival sources in which films were classified. Although the majority of films in the sample appeared in all three sources (68.3 percent), 26.0 percent appeared in only two, and 5.7 percent appeared in only one source. Because the number of genres under which a film is classified is likely to increase with the number of different sources in which it is listed, I included in the analyses dummy variables reflecting the number of sources listing each film.

RESULTS

Table 2 presents descriptive statistics for key variables in the reported analyses. As this table shows, while there were 949 films in the main sample, several variables have missing observations. Budget information is the most incomplete, with 605 (63.8 percent of the sample) having a reported budget. Rather than drop films with missing budget information from the analyses, I included a binary variable (any budget information) that equals one when this information is present and zero otherwise. I then coded the main budget variable as zero for observations with missing information.

Also, as this table shows, professional critics did not review all of the films in the sample. As a result, assessments of the percentage of positive reviews for each film were available for 819 of the 949 films. Average critics' ratings on a 0–10 scale had a mean of 5.18. IMDB users voted for 946 of the 949 films in the sample, with a mean number of 6143.8 votes for each film. Ratings among IMDB users had a mean score of 6.06 on a 1–10 scale. Analyses of evaluation valence only included those films that received any reviews or ratings from its respective group of critics.

Table 2

Key Descriptive Statistics

| Variable | Ν | Mean | S. D. | Min. | Max. |
|---------------------------|-----|--------|---------|-------|---------|
| Budget (In) | 605 | 16.825 | 1.39 | 10.31 | 18.98 |
| Box office gross (In) | 949 | 15.047 | 3.16 | 5.01 | 19.82 |
| No. of opening sites (In) | 949 | 4.808 | 3.17 | 0 | 8.23 |
| Top star power | 949 | 41.081 | 32.52 | 0 | 100 |
| Top director power | 949 | 18.900 | 25.89 | 0 | 100 |
| Sequel | 949 | 0.065 | 0.25 | 0 | 1 |
| Major distributor | 949 | 0.644 | 0.48 | 0 | 1 |
| Holiday release | 949 | 0.253 | 0.43 | 0 | 1 |
| Genre | | | | | |
| No. of genres | 949 | 2.895 | 1.44 | 1 | 9 |
| Niche overlap density | 949 | 20.557 | 9.73 | 0 | 74 |
| Audience reaction | | | | | |
| No. of critic reviews | 949 | 12.196 | 8.11 | 0 | 28 |
| Average critic rating | 819 | 5.179 | 1.73 | 0.2 | 8.9 |
| No. of IMDB votes | 949 | 6143.8 | 10833.6 | 0 | 140,074 |
| Average IMDB rating | 946 | 6.061 | 1.23 | 1.3 | 9.3 |

2

In an alternative specification, I estimated the number of professional reviews for each film using a count model. Because of overdispersion in the distribution of the dependent variables, I used the negative binomial model, a generalized case of the Poisson model appropriate for overdispersed data (Barron, 1992). The results of the tobit and negative binomial models were very similar. I report the tobit regressions here because, in the parallel analyses reporting the number of IMDB user votes, high skewness in values suggested that it was more appropriate to model the natural log of count of votes rather than the count itself.

Niche Width vs. Appeal

I first analyzed reactions among professional critics. To estimate the impact of niche width on the number of professional critics (In) who reviewed each film, I used tobit regression, which is appropriate when modeling continuous variables that cover a limited range of values. The possible range of values for the number of reviews is left-censored because it is not possible for a film to receive a negative number of reviews.² I also used tobit regression to estimate the average rating of each film among both professional critics and IMDB users. In that case, the possible range of values for the average rating is both left- and right-censored, varying from 0 to 10 for critics and from 1 to 10 for IMDB users.

Table 3 reports estimates of the effects of key variables on audience size and appeal for professional critics.³ It shows that a greater niche width results in a significantly greater number of critical reviews. This supports H1, that the number of audience members an organization attracts increases with niche width. Supplementary analyses using the box office gross in a film's genres as a control rather than individual genre indicator variables also support the predicted relationship. In support of H2, the results show that a broader niche width significantly lowers the average rating assigned by critics to each film. Of the variables intended to control for a film's capacity for engagement, only backing by a major distributor and star power significantly increase both the number of critics who review a film and the appeal of the film among critics. But though a wide opening release increases the number of critical reviews a film attracts, it significantly decreases its appeal.

The results show the anticipated effect of niche crowding on appeal: greater crowding significantly lowers the appeal of a film among critics. At the same time, however, a greater level of crowding actually increases the number of a film's professional reviews, and the effect holds for a number of alternative specifications of the niche crowding variable. But this effect reverses among IMDB voters. It also reverses in analyses predicting each film's total domestic box office receipts, with greater niche crowding resulting in significantly lower returns. This pattern of effects may reflect the fact that critics are inclined to review films that can be readily compared with existing offerings as a point of contrast; everyday consumers, however, may simply seek to allocate their attention optimally among a group of similar offerings.

Table 4 reports results of the analyses of the impact of niche width on audience size and appeal of a film among IMDB users. As the table shows, niche width does not have a significant impact on either the number of users who vote for a film or total U.S. box office gross, but a broader niche width significantly lowers the average rating assigned by IMDB users to each film. This supports the idea that the transmission of negative evaluations through professional reviews and word of mouth weakens the impact of niche width on audience size at the general consumer level.

Table 3

able upon request.

| Audience Size and Appeal a | among Professional Critics* |
|----------------------------|-----------------------------|
|----------------------------|-----------------------------|

Full reports of all the models in this paper.

which include the effects of dummy vari-

well as supplementary analyses are avail-

ables for each year and number of sources in which each film was listed, as

| Variable | No. of reviews | (In) (N = 949) | Average rating (N = 819) | | |
|---------------------------|----------------|----------------|--------------------------|---------|--|
| Total no. of genres (In) | 0.401 | (2.08) | -1.064 | (-2.53) | |
| Any budget info | -0.080 | (-0.16) | 0.078 | (0.07) | |
| Budget (In) | 0.024 | (0.76) | 0.025 | (0.38) | |
| No. of opening sites (In) | 0.026 | (1.91) | -0.182 | (-6.25) | |
| Top star power | 0.004 | (3.91) | 0.005 | (2.24) | |
| Top director power | 0.001 | (0.76) | 0.011 | (4.30) | |
| Major distributor | 0.407 | (5.56) | 0.449 | (2.87) | |
| Sequel | 0.145 | (1.38) | 0.310 | (1.44) | |
| Holiday release | 0.019 | (0.33) | -0.102 | (-0.83) | |
| Niche overlap | 0.031 | (6.91) | -0.028 | (-2.74) | |
| Constant | 0.604 | (3.87) | 4.896 | (13.82) | |

| | Ta | bl | le | 4 |
|--|----|----|----|---|
|--|----|----|----|---|

| Variable | IMDB votes (| In) (N = 949) | Box office gross | s (In) (N = 949) | Avg. IMDB rat | ting (N = 946) |
|---------------------------|--------------|---------------|------------------|------------------|---------------|----------------|
| Total no. of genres (In) | -0.090 | (-0.32) | -0.145 | (-0.39) | -0.629 | (-2.45) |
| Any budget info | -1.344 | (-1.75) | -1.419 | (-1.40) | -2.126 | (-3.06) |
| Budget (In) | 0.148 | (3.02) | 0.176 | (2.71) | 0.151 | (3.41) |
| No. of opening sites (In) | 0.060 | (2.83) | 0.429 | (15.22) | -0.167 | (-8.68) |
| Top star power | 0.013 | (7.90) | 0.010 | (4.79) | 0.004 | (2.95) |
| Top director power | 0.009 | (4.52) | 0.006 | (2.33) | 0.007 | (4.26) |
| Major distributor | 0.759 | (6.77) | 0.948 | (6.37) | 0.285 | (2.80) |
| Sequel | 0.020 | (0.12) | 0.419 | (1.94) | 0.040 | (0.27) |
| Holiday release | -0.137 | (-1.54) | 0.120 | (1.02) | -0.155 | (-1.93) |
| Niche overlap | -0.024 | (-4.23) | -0.061 | (-8.05) | -0.022 | (-4.17) |
| Constant | 5.734 | (25.83) | 12.178 | (41.36) | 6.052 | (29.98) |

Among the other covariates, star and director power, budget size, and backing by a major distributor all significantly increase both the number of votes and appeal among IMDB users. As with the analyses of critics, a greater number of opening sites increases the number of users who vote for a film at the same time that it decreases the appeal of that film. Also, greater niche overlap results in both a decreased number of votes and decreased appeal among voters. The results of key control variables are similar for predictions of U.S. box office gross. The only difference is that being a sequel appears to increase a film's gross but does not have a significant impact on its IMDB votes.

One concern with the results reported thus far is the possibility of endogeneity bias. It may be that when audience members are excited and interested in a film, they process it in more complex ways and tend to see relations to more genres than for films that they only feel lukewarm about. This suggests that the same films that get people excited enough to classify them under multiple genres are those that command greater attention from professional critics and consumers. If this were true, then multiple-genre films should generate either higher evaluative ratings or more extreme evaluative ratings. The main analyses of appeal, however, show that films with more genres tend to generate lower ratings among both professional and regular audience members. And supplementary analyses using data from individual critics' ratings suggest that classification under a greater number of genres tends to *decrease* the average strength of ratings (measured as the average of the absolute value of the difference between each critic's numerical rating on a 0–10 scale and the center value of 5).

It is also possible that the appeal that audience members experience for a film may itself be influenced by audience size. More specifically, audience members may derive pleasure from the belief that they are part of a group that is exclusive or eclectic in its tastes. Expressed appeal for a film would therefore be greater when audience members attend a film that targets a specific, limited segment of the audience. To investigate this, I included the count of major media reviews (In) and IMDB votes (In) for each film as covariates in

models predicting appeal among professional critics and IMDB voters, respectively. These supplementary models also show a significant negative effect of niche width on appeal.

Finally, the positive relationship between niche width and audience size may be contingent on a producer's market location. Dobrev, Kim, and Carroll (2002) noted that in markets in which resources are highly concentrated, consumers' preferences in the market center will be condensed within a relatively narrow range. This suggests complementarities among categories occupying the market center that may facilitate spanning categories. By contrast, producers targeting peripheral regions of the market are unlikely to enjoy such complementarities in preferences across categories. This raises the possibility that the positive relationship between niche width and audience size is driven by category spanning in the most resource abundant areas of the market. To test for this, I followed Dobrev, Kim, and Carroll (2002) by including the effects of niche width and position simultaneously when estimating audience reception, examining the effect of locating oneself in the market center (i.e., highest grossing genres) and the interaction of this with niche width. This specification supported the main effect of niche width on audience size and appeal, suggesting that the hypothesized effects of niche width occur regardless of where a producer is positioned in the market.

The results thus confirm the presence of the principle of allocation at the level of professional critics: films targeting a broader niche width attract more professional critics but, at the same time, generate lower appeal. Among IMDB voters, the relationship between niche width and appeal is also significant, but niche width does not have a significant effect on IMDB voting audience size, suggesting that the transmission of negative evaluations from critics and early consumers prevents films targeting a broad range of genres from gaining a larger constituency among regular consumers.

Consensus on Fit with Targeted Genres

I also conducted analyses to assess the role that audience consensus regarding a film's fit with targeted genres plays in the dynamics underlying the principle of allocation. Table 5 displays estimates of key factors affecting the amount of

| Variable | | |
|---------------------------|--------|----------|
| Total no. of genres (In) | -1.876 | (-23.54) |
| Any budget info | -0.666 | (-1.07) |
| Budget (In) | 0.053 | (1.36) |
| No. of opening sites (In) | 0.038 | (2.41 |
| Top star power | 0.002 | (2.10 |
| Top director power | -0.001 | (-0.83 |
| Major distributor | 0.035 | (0.40 |
| Sequel | 0.129 | (1.22 |
| Holiday release | 0.075 | (1.07 |
| Constant | 2.022 | (16.77 |

Table 5

consensus in genre classifications. This was estimated using the fractional logit regression model proposed by Papke and Wooldridge (1996).⁴ This model deals specifically with the estimation of proportions. In support of hypothesis 3, that consensus decreases with niche width, results show that targeting a greater number of genres has a significant negative effect on audience consensus. Factors that lead to greater consensus include a wide opening release and star power.

Table 6 reports results on analyses of the impact of consensus about genre classification on the number of critics a film attracts. In support of H4, that consensus on fit with targeted taste positions increases audience size, I find that consensus on classification significantly increases the number of critics who review a film. And relative to the results for professional critics presented in table 3, the positive effect of niche width on the estimated number of reviews is larger and stronger in significance when audience consensus is included as a covariate. Among IMDB users, the effect of niche width on the number of votes for each film continues to be non-significant. The same is found for predictions of U.S. box office gross. The effect of consensus in genre classification on consumer audience size, however, appears slightly stronger. Consensus in genre classification has a significant positive effect on box office gross, but its effect on the number of IMDB user votes, though positive, only approaches significance (p < .15).

Finally, I examined the extent to which consensus on genre classification mediates the relationship between niche width and audience appeal. Earlier results, in tables 3 and 4, showed a significant negative effect of niche width on audience appeal for both sets of audience members. And table 5 also showed that niche width exerts a significant negative effect on audience consensus about genre classification. Following a standard procedure for determining mediation (Baron and Kenny, 1986), I next estimated the effect of consensus about genre classification on appeal without controlling for niche width. The results for professional critics and IMDB users are shown in tables 7 and 8, respectively (model A in each). As expected, appeal is significantly greater when

4

This was estimated through the generalized linear model package provided by STATA 8.0, using logit as the link function and the Huber/White/sandwich estimator of variance.

. ..

| Table 6 | |
|---------|--|
| A 17 | |

| Variable | No. of critic | reviews (In) | No. of IMDB votes (In) | | Box office | Box office gross (In) | |
|---------------------------|---------------|--------------|------------------------|---------|------------|-----------------------|--|
| Total no. of genres (In) | 0.790 | (3.66) | 0.163 | (0.50) | 0.330 | (0.76) | |
| Consensus in classif. | 0.573 | (3.87) | 0.335 | (1.54) | 0.629 | (2.18) | |
| Any budget info | -0.188 | (-0.38) | -1.405 | (-1.83) | -1.532 | (-1.51) | |
| Budget (In) | 0.030 | (0.96) | 0.151 | (3.09) | 0.182 | (2.81) | |
| No. of opening sites (In) | 0.022 | (1.62) | 0.058 | (2.70) | 0.424 | (15.04) | |
| Top star power | 0.004 | (3.49) | 0.012 | (7.73) | 0.010 | (4.58) | |
| Top director power | 0.001 | (0.75) | 0.009 | (4.51) | 0.006 | (2.31) | |
| Major distributor | 0.405 | (5.57) | 0.758 | (6.77) | 0.945 | (6.37) | |
| Sequel | 0.145 | (1.39) | 0.020 | (0.12) | 0.418 | (1.93) | |
| Holiday release | 0.021 | (0.36) | -0.136 | (-1.54) | 0.121 | (1.03) | |
| Niche overlap | 0.032 | (7.16) | -0.023 | (-4.08) | -0.060 | (-7.84) | |
| Constant | 0.570 | (2.80) | 5.063 | (17.29) | 11.670 | (30.08) | |

there is greater consensus on a film's fit with targeted genres. Model B, in tables 7 and 8, estimates the effects of both niche width and audience consensus on appeal for the two sets of audiences. In both models, the estimated effect of niche width decreases in size and becomes non-significant, while the effect of consensus on genre classification remains highly significant. This suggests, in support of H5, that consensus about genre classification mediates the effect of niche width on the appeal of an organization to audience members.

To help illustrate the results, figure 2 provides comparisons of the expected critical reception of films that differ along the key dimensions of niche width and consensus about classification but that are similar in all other respects. It displays two sets of lines, reflecting the expected number of reviews in major media publications and the expected average rating within these reviews, respectively. As this figure shows, the number of reviews a film is expected to receive increases as the number of targeted genres increases. In addition, the expected number of reviews for films with a high consensus on classification (consensus score = 0.80) is higher than the expected number for films with a low consensus (consensus score = 0.20), reflecting the advantage provided by greater consensus about a film's fit with targeted genres. This figure

Table 7

| Appeal of Films among Professional Critics, Including Consensus* | | | | | | |
|--|--|---|--|--|--|--|
| Мос | lel A | Мос | Model B | | | |
| | | -0.171 | (-0.36) | | | |
| 1.428 | (4.83) | 1.372 | (4.12) | | | |
| -0.059 | (-0.06) | -0.063 | (-0.06) | | | |
| 0.033 | (0.49) | 0.033 | (0.50) | | | |
| -0.191 | (-6.64) | -0.190 | (-6.59) | | | |
| 0.004 | (1.63) | 0.004 | (1.64) | | | |
| 0.011 | (4.37) | 0.011 | (4.36) | | | |
| 0.436 | (2.81) | 0.437 | (2.82) | | | |
| 0.313 | (1.47) | 0.318 | (1.49) | | | |
| -0.097 | (-0.80) | -0.100 | (-0.83) | | | |
| -0.024 | (-2.39) | -0.025 | (-2.40) | | | |
| 3.981 | (8.80) | 4.033 | (8.50) | | | |
| | 1.428 -0.059 0.033 -0.191 0.004 0.011 0.436 0.313 -0.097 -0.024 | Model A 1.428 (4.83) -0.059 (-0.06) 0.033 (0.49) -0.191 (-6.64) 0.004 (1.63) 0.011 (4.37) 0.436 (2.81) 0.313 (1.47) -0.097 (-0.80) -0.024 (-2.39) | Model A Model -0.171 1.428 (4.83) 1.372 -0.059 (-0.06) -0.063 0.033 (0.49) 0.033 -0.191 (-6.64) -0.190 0.004 (1.63) 0.004 0.011 (4.37) 0.011 0.436 (2.81) 0.437 0.313 (1.47) 0.318 -0.097 (-0.80) -0.100 -0.024 (-2.39) -0.025 | | | |

T-statistics are in parentheses.

Table 8

Appeal for Films among IMDB Users, Including Consensus*

| Variable | Мос | lel A | Model B | | |
|---------------------------|--------|---------|---------|---------|--|
| Total no. of genres (In) | | | -0.150 | (–0.54) | |
| Consensus in classif. | 0.614 | (3.62) | 0.567 | (2.97) | |
| Any budget info | -2.227 | (-3.21) | -2.216 | (–3.20) | |
| Budget (In) | 0.157 | (3.56) | 0.157 | (3.54) | |
| No. of opening sites (In) | -0.172 | (-9.02) | -0.170 | (–8.88) | |
| Top star power | 0.004 | (2.68) | 0.004 | (2.69) | |
| Top director power | 0.007 | (4.25) | 0.007 | (4.24) | |
| Major distributor | 0.285 | (2.83) | 0.287 | (2.85) | |
| Sequel | 0.035 | (0.24) | 0.040 | (0.27) | |
| Holiday release | -0.150 | (-1.87) | -0.152 | (-1.90) | |
| Niche overlap | -0.019 | (-3.81) | -0.020 | (-3.84) | |
| Constant | 5.613 | (24.02) | 5.640 | (23.60) | |

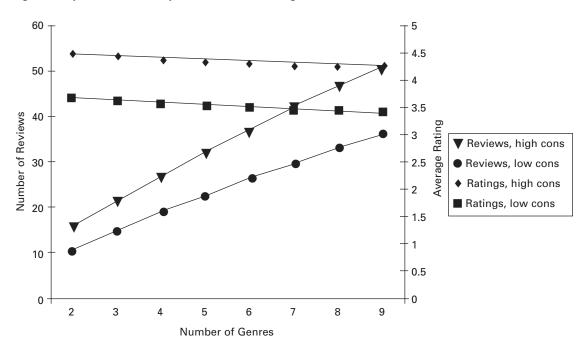


Figure 2. Expected critical reception of films of differing niche width and consensus about classification.

also illustrates the difference in average ratings for high-versus low-consensus films—the line reflecting the expected rating for a high-consensus film is located significantly above the line for a low-consensus film. But, as one would expect, given the mediating role consensus plays between niche width and appeal, the expected rating does not decrease significantly as the film's genre number increases when consensus on classification is modeled simultaneously. This figure depicts the positive advantages that greater niche width and consensus on classification impart on audience size, as well as the key role that consensus on classification plays in shaping the appeal critics experience for films.

One potential concern with the results of regressions comparing the effects of the number of genres with consensus about genre classification is that there may be a strong relationship between these two key explanatory variables, especially because the correlation between the consensus score and the natural log of the number of genres for the films is relatively high at -0.67. This correlation is driven in large part by films classified under a single genre; for such films, the consensus score, by default, must have a value of one. When the 166 films classified under a single genre are not taken into account, the correlation between the consensus score and the natural log of genre number drops to -0.30. To address concerns about whether the results continue to hold without the contribution of single-genre films, I reestimated the models of audience size and appeal using only films classified under more than one genre. These analyses produced the predicted effects of the number of genres and consensus about genre classification, providing additional support for the story suggested by the main analyses.

In supplementary analyses, I also considered variance in the degree to which there was collective agreement about the

location of distinct taste positions in the market. To guide market behavior effectively, such positions should represent clear sets of expectations that are understood by relevant actors. Adding indicator variables for each genre to regression models predicting audience members' reactions addressed potential differences in the consensus about genres to some degree. But these differences may also reflect the fact that certain genres are commonly confused with particular others by the archival sources. For example, films classified as crime by one source may be commonly perceived as mystery by another. In this case, a film that aims to target the single genre of crime may often be classified under both the crime and mystery genres and will, as a result, appear to be broader in focus than it actually intends to be. To investigate the extent to which certain genres were conflated, I examined the extent to which archival sources tended to "switch" genres with one another. For each pairwise combination of genres, I calculated the extent to which one archival source would attribute a film to one of the genres, while the other source would attribute the same film to the other. For example, for the pairing of action-adventure, I examined the frequency with which one source would label a film an action (and not an adventure film), while the other would label the film an adventure (and not an action film), and vice versa. The most worrisome pairing is science fiction and fantasy, which was conflated 22 percent of the time between Showbizdata.com and RottenTomatoes.com. For all other genre pairs, switching occurred less than one-fifth of the time that either genre label was applied to a film. In supplementary analyses, I collapsed the classifications of science fiction and fantasy into a single category and reestimated the study's models. These analyses again demonstrated support for the study's main predictions.

Supplementary Analyses: Film Distributors

The analyses presented so far concern the implications of variance in niche width and clarity of generic identity for the performance of film projects, but exploring the implications of the arguments for film distributors may shed additional light on their generalizability. The studios responsible for film distribution are formed around permanent rather than temporary goals and often handle multiple films in a given year. They may also choose to focus on particular genres and develop genre-specific identities in the eyes of relevant audiences. I began by considering whether clustering the results by distributor has an impact on the general relationship between niche width and performance found in the main analyses. In my earlier analyses, I modeled the data using tobit regression, but researchers have demonstrated that, for nonlinear models such as tobit, introducing fixed effects renders the maximum likelihood estimator inconsistent (Hsiao. 1986). For these supplementary analyses, I employed linear regression, clustered by distributor, in analyses of audience size. In analyses of audience appeal, I employed fractional logit regression models, adjusting the scale of ratings accordingly. When effects were clustered by distributor, the results supported the hypotheses.5

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Thirty-nine films were dropped from the sample because distributor information was not available for them. In the main analyses, which were simply concerned with whether a film was backed by a major or independent distributor, films with missing distributor information in IMDB were assumed to be distributed by independent distributors. I also examined the impact of niche width on box office performance at the distributor level by estimating the yearly U.S. box office gross of film distributors, using the method of generalized estimating equations (GEE) developed by Liang and Zeger (1986; Zeger and Liang, 1986). This method employs robust estimators that allow variation among distributors and within distributors over time to be analyzed. The dependent variable was the total box office gross earned by films distributed by each organization in a given year (In). The main independent variables were (1) the number of distinct genres the distributor's films spanned in each year and (2) the average genre consensus score assigned to the distributor's films in each year. Other controls were aggregated to the level of the distributor when possible (i.e., total budget for films distributed by the organization in that year, total star power of films, number of films that were sequels, etc.). I also included a control for the number of films produced by that distributor in each year.

As table A.1 in the Appendix illustrates, niche width by itself has a positive but non-significant impact on box office gross, but when consensus about genre classification is included in the model, both targeting a greater number of genres and having established a greater consensus in genre classification have a positive effect on box office gross.⁶ This supports the earlier finding that producers who target a broad area of the market have access to greater potential revenue; the extent to which they capitalize on this potential, however, depends on the clarity with which they communicate their fit with targeted genres. These results at the distributor level suggest that, even when moving to consider more traditional organizations producing multiple products (rather than strictly a single product), the general intuition underlying the principle of allocation applies.

DISCUSSION

This study provided evidence supporting the empirical validity of the principle of allocation. Films that target broader niches generally attract a larger proportion of the audience at both the professional critic and consumer levels. At the same time, however, they generate less appeal among those audience members. The results also demonstrate the key role that audience consensus about fit with targeted positions plays in these dynamics. When producers target multiple positions, they increase the total size of the market that they have the potential to appeal to and glean resources from. When producers bridge multiple positions, however, audiences have more difficulty interpreting their identities and become more likely to ignore producers. Moreover, audiences are likely to disapprove of the broad-aiming producers who do gain their attention because of poor fit with their expectations and preferred tastes. But this does not appear to be particularly harmful to film producers' box office success. As previous research suggests, whether being a generalist is generally beneficial or harmful for producers' performance is largely context-based. Factors such as environmental variability and uncertainty (e.g., Freeman and Hannan, 1983; Hannan and Freeman, 1989; Dobrev, Kim, and Hannan, 2001), concentration in the distribution of market

Similar effects were found when genrelevel box office gross was included as a control instead of individual genre dummies.

resources (e.g., Boone, Carroll, and Witteloostuijn, 2002), and the perceived compatibility of participation in market categories (Carroll and Swaminathan, 2000; Rao, Monin, and Durand, 2003) are factors that are all likely to affect the relative success of generalists versus specialists. In the film industry, general uncertainty in consumers' tastes and network effects in consumer demand likely work to the advantage of generalists. Nevertheless, the "winner-take-all" dynamic observed by Frank and Cook (1996) works against generalists, whose spread across multiple positions results in lowered appeal among audiences and thus lower revenues at the consumer level. Perhaps as a result of these competing pressures, the results showed no robust effect of greater niche width on box office gross receipts at the film-project or distributor level.

The current study contributes to existing work in organizational ecology by highlighting the role that audience members' perceptions play in niche-based dynamics. In doing so, it points to key complementarities between ecology and recent studies on market structuration. Work in this latter tradition highlights the importance of conformity with the belief systems audiences rely on to interpret market activity and behavior. Research by Zuckerman and colleagues (Zuckerman, 1999, 2000; Zuckerman and Kim, 2003; Zuckerman et al., 2003) has demonstrated the powerful constraints audiences exert on producers. Through the threat of social and economic penalties, audiences pressure producers to conform to existing categories and serve to reproduce the existing structure of the market.

Greater attention to the way in which audiences respond to and shape the organizations that rely on them for social and material resources is likely to enhance understanding of organizational processes. This paper has illustrated this in the realm of niche theory. To date, ecological notions of the benefits of generalism versus specialism have largely ignored the impact of audience members' perceptions of fit with established categories. Yet such perceptions play an integral role in the trade-offs involved in the adoption of these strategies.

Focusing on audience members' perceptions and beliefs paves the way for a dynamic understanding of the consequences of spanning different market positions. Work by Rao, Monin, and Durand (2003) has documented the impact audience members have on categorical boundaries by examining the role that audiences played in the erosion of the boundary separating the traditionally oppositional categories of classical and nouvelle French cuisine. They found that extensive theorization by culinary journalists about the virtues of nouvelle cuisine significantly influenced the propensity of French chefs to cross over from classical to nouvelle cuisine. Rao, Monin, and Durand (2005) further illustrated how the penalties that the Guide Michelin imposed on chefs for crossing this boundary weakened over time as a result of shifting beliefs. By attending to the audience's perceptions of categories, researchers can examine how key aspects of the market structure, such as the strength of boundaries separating categories and consensus in the audience's beliefs about where categorical boundaries lie, shift over time. This focus

paves the way for answering a number of future research questions, such as how audiences and producers interact to form consensus about the categories that structure interactions in the market and the impact of varying consensus about organizational classification systems on organizational opportunities and outcomes.

A related future direction concerns understanding differences in the way audience members react to and discipline producers. For example, critics themselves are likely to be shaped in their review choices by their particular position in the market's social structure. Factors such as the status and resources of the organizations they belong to and the type of readers they target are likely to influence the decisions that critics make. One of the key ideas underlying this study's predictions is that critics are influenced in their decisions about whether or not to review a film by perceptions of the film's fit with the tastes of their own constituents. This suggests that critics who have a larger, more diverse constituent base to satisfy are more likely to be influenced by the size of a film's targeted niche.

In exploratory analyses, I focused on critics for major daily newspapers and investigated the extent to which critics were influenced in their review decisions by their newspapers' circulation. The results suggest an interesting interaction: critics of papers with greater circulation are influenced to a greater extent by a film's niche width. Put differently, gatekeepers of organizations with a broader audience are more influenced in their film choices by the broadness of a film's potential appeal. Focusing on how the specific positions of gatekeepers in the market structure affect their attention and evaluation patterns is likely to shed greater light on the audience-based constraints affecting producers' behavior and success.

This study also directs attention to interesting possibilities for expanding current approaches to studying organizational identity. Research in the organizational behavior literature on identity has highlighted the importance of external constituents in shaping and constraining organizational identity (Albert and Whetten, 1985), but such constraints have largely been studied from the vantage of organizational insiders, as in work on insiders' perceptions of how external constituents view the organization (Dutton and Dukerich, 1991; Dutton, Dukerich, and Harquail, 1994) or the images projected by insiders to manage external impressions (e.g., Gioia and Thomas, 1996). The current study has largely focused on external perceptions of organizational identity but points to interesting ways of conceptualizing and measuring consensus in the perceptions of internal and external audiences. Focusing on the relationship between internal and external perceptions of identity may allow researchers to investigate issues such as how external beliefs are circumscribed by internal attributions (or vice versa), how internal and external perceptions of identity diverge, and the impact of such divergence on organizational behavior and functioning.

Finally, this study calls attention to the benefits of addressing key assumptions in the ecological literature. Since its emer-

gence, ecology has attracted a number of critiques for its reliance on inferences about the relationship between population characteristics and key social processes. Perhaps the best example of this is the long-standing debate over densitydependence theory (Hannan and Freeman, 1989). A number of theorists have challenged the assumption that population density serves as an accurate reflection of legitimation processes, citing lack of prior evidence of the validity and specific nature of this relationship (Zucker, 1989), exclusion of other forms of legitimacy in density measures (Baum and Powell, 1995), and lack of consideration of other factors that may be driving density effects (Delacroix and Rao, 1994). Such protests suggest that an empirical study of the validity of the assumed relationship between population density and cognitive legitimacy would contribute greatly to general acceptance of this core ecological theory. As in the current paper, this type of test would require direct study of audience members' perceptions. In particular, it would require measuring audience-based factors such as the amount of attention an organizational population receives, consensus in audience members' beliefs about key features of the population, and consensus on the perceived membership within that population. Given the recent adoption by organizational theorists of methodologies designed to tap into audience members' perceptions and beliefs about organizational forms (see Hsu and Hannan, 2005, for a review), this is likely to be a feasible endeavor with the potential to benefit both ecology and related areas in the sociology of organizations.

REFERENCES

Albert, S., and D. Whetten

1985 "Organizational identity." In L. L. Cummings and B. M. Staw (eds.), Research in Organizational Behavior, 7: 263–295. Greenwich, CT: JAI Press.

Altman, R.

1999 Film/Genre. London: British Film Institute Publishing.

Austin, B. A.

1988 Immediate Seating: A Look at Movie Audiences. Belmont, CA: Wadsworth.

Barnett, W. P., and G. R. Carroll

1987 "Competition and mutualism among early telephone companies." Administrative Science Quarterly, 32: 400–421.

Baron, R. M., and D. A. Kenny

1986 "The moderator-mediator variable distinction in social psychological research: Conceptual, strategic and statistical considerations." Journal of Personality and Social Psychology, 51: 1173–1182.

Barron, D. N.

1992 "The analysis of count data: Overdispersion and autocorrelation." In P. V. Marsden (ed.), Sociological Methodology: 179–220. Oxford: Basil Blackwell.

Basuroy, S., S. Chatterjee, and S. A. Ravid

- 2003 "How critical are critical reviews? The box office effects of film critics, starpower, and budgets." Journal of Marketing, 67: 103–117.
- Baum, J. A. C., and W. W. Powell 1995 "Cultivating an institutional ecology of organizations: Comment on Hannan, Carroll, Dundon, and Torres." American Sociological Review, 60: 529–538.

Boone, C., G. R. Carroll, and

A. van Witteloostuijn 2002 "Resource distributions and market partitioning: Dutch daily newspapers, 1968 to 1994." American Sociological Review, 67: 408–431.

Boone, C., and A. van Witteloostuijn

2004 "A unified theory of market partitioning: An integration of resource-partitioning and sunk cost theories." Industrial and Corporate Change, 13: 701–725.

Bruggeman, J.

1997 "Niche width theory reappraised." Journal of Mathematical Sociology, 22: 201–220.

Carroll, G. R.

1985 "Concentration and specialization: Dynamics of niche width in populations of organizations." American Journal of Sociology, 90: 1262–1283.

Carroll, G. R., S. Dobrev, and A. Swaminathan

2002 "Organizational processes of resource partitioning." In B. M. Staw and R. M. Kramer (eds.), Research in Organizational Behavior, 24: 1–40. New York: Elsevier/JAI.

Carroll, G. R., and A.

- Swaminathan
- 2000 "Why the microbrewery movement? Organizational dynamics of resource partitioning in the U.S. brewing industry." American Journal of Sociology, 106: 715–762.

Dancyger, K., and J. Rush

2002 Alternative Scriptwriting: Successfully Breaking the Rules, 3rd ed. Boston: Focal Press.

Delacroix, J., and H. Rao

1994 "Externalities and ecological theory: Unbundling density dependence." In J. A. C. Baum and J. V. Singh (eds.), Evolutionary Dynamics of Organizations: 255–268. New York: Oxford University Press.

De Silva, I.

1998 "Consumer selection of motion pictures." In B. R. Litman (ed.), The Motion Picture Mega Industry: 144–171. Needham Heights, MA: Allyn and Bacon.

De Vany, A., and W. D. Walls

- 1996 "Bose-Einstein dynamics and adaptive contracting in the motion picture industry." Economic Journal, 106: 1493–1514.
- 1999 "Uncertainty in the movies: Can star power reduce the terror of the box office?" Journal of Cultural Economics, 23: 285–318.

DiMaggio, P. M., and W. W. Powell

1983 "The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields." American Sociological Review, 47: 147–160.

Dobrev, S. D., T.-Y. Kim, and G. R. Carroll

2002 "The evolution of organizational niches: U.S. automobile manufacturers, 1885–1981." Administrative Science Quarterly, 47: 233–264.

Dobrev, S. D, T.-Y. Kim, and M. T. Hannan

2001 "Dynamics of niche width and resource partitioning." American Journal of Sociology, 106: 1299–1337.

Dobrev, S. D., S. Z. Ozdemir, and A. Teo

- 2005 "The ecological interdependence of emergent and established organizational populations: Financial cooperatives and commercial banks in Singapore, 1925–1995." Working paper, University of Chicago, Graduate School of Business.
- Dowell, G., and A. Swaminathan 2000 "Racing and back-pedalling into the future: New product introduction and organizational mortality in the U.S. bicycle industry, 1880–1918." Organization Studies, 21: 405–431.

Dutton, J. E., and J. M. Dukerich 1991 "Keeping an eye on the mirror: Image and identity in

organizational adaptation." Academy of Management Journal, 34: 517–554.

Dutton, J. E., J. M. Dukerich, and C. V. Harquail

1994 "Organizational images and member identification." Administrative Science Quarterly, 39: 239–263.

Eliashberg, J., and S. M. Shugan

1997 "Film critics: Influencers or predictors?" Journal of Marketing, 61: 68–78.

Everitt, B. S., S. Landau, and M. Leese

2001 Cluster Analysis, 4th ed. New York: Oxford University Press.

Faulkner, R. R., and A. B. Anderson

1987 "Short-term projects and emergent careers: Evidence from Hollywood." American Journal of Sociology, 92: 879–909.

Fischoff, S., J. Antonio, and D. Lewis

1998 "Favorite films and film genres as a function of race, age, and gender." Journal of Media Psychology, 3:1–9.

Frank, R. H., and P. J. Cook

1996 The Winner-Take-All Society. New York: Martin Kessler Books at the Free Press.

Freeman, J., and M. T. Hannan

1983 "Niche width and the dynamics of organizational populations." American Journal of Sociology, 88: 1116–1145.

Friedman, R. G.

 1992 "Motion picture marketing."
In J. E. Squire (ed.), The Movie Business Book, 2d ed.: 291–305. New York: Fireside.

Gioia, D. A., and J. B. Thomas

1996 "Identity, image, and issue interpretation: Sensemaking during strategic change in academia." Administrative Science Quarterly, 41: 370–403.

Hannan, M. T., G. R. Carroll, and L. Pólos

- 2003 "The organizational niche." Sociological Theory, 21: 309–340.
- Hannan, M. T., and J. Freeman 1977 "The population ecology of organizations." American
- Journal of Sociology, 82: 929–964. 1989 Organizational Ecology. Cam-
- bridge, MA: Harvard University Press.

Hannan, M. T., L. Pólos, and G. R. Carroll

2006 "Logics of organization theory: Audiences, codes, and ecologies." Working paper, Stanford University, Graduate School of Business.

Holbrook, M. B.

1999 "Popular appeal versus expert judgments of motion pictures." Journal of Consumer Research, 26: 144–155.

Hsiao, C.

1986 Analysis of Panel Data. Cambridge: Cambridge University Press.

Hsu, G., and M. T. Hannan

2005 "Identities, genres, and organizational forms." Organization Science, 16: 474–490.

Hutchinson, G. E.

- 1957 "Concluding remarks." Cold Spring Harbor Symposium on Quantitative Biology, 22: 415–427.
- 1978 An Introduction to Population Ecology. New Haven, CT: Yale University Press.

Levins, R.

1968 Evolution in Changing Environments. Princeton, NJ: Princeton University Press.

Liang, K.-Y., and S. L. Zeger 1986 "Longitudinal analysis using

generalized linear models." Biometrika, 73: 13–22.

Lieberman, A., with P. Esgate

2002 The Entertainment Marketing Revolution: Bringing the Moguls, the Media, and the Magic to the World. Upper Saddle River, NJ: Prentice Hall.

Litman, B. R.

1983 "Predicting success of theatrical movies: An empirical study." Journal of Popular Culture, 16: 159-175.

Litman, B. R., and H. Ahn

1998 "Predicting financial success of motion pictures." In B. R. Litman (ed.), The Motion Picture Mega Industry: 172-197. Needham Heights, MA: Allyn and Bacon.

Litman, B. R., and L. S. Kohl

1989 "Predicting financial success of motion pictures: The '80s experience." Journal of Media Economics, 2: 35-50.

MacArthur, R. H.

1972 Geographical Ecology: Patterns in the Distribution of Species. Princeton, NJ: Princeton University Press.

Mark, N.

1998 "Birds of a feather sing together." Social Forces, 77: 453-485.

McKendrick, D. G., J. Jaffee, G. R.

Carroll, and O. M. Khessina 2003 "In the bud? Analysis of disk array producers as a (possibly) emergent organizational form." Administrative Science Quarterly, 48: 60-93.

McPherson, J. M.

1983 "An ecology of affiliation." American Sociological Review, 48: 519-532.

McPherson, J. M., and J. R.

- Ranger-Moore
- 1991 "Evolution on a dancing landscape: Organizations and networks in dynamic Blau space." Social Forces, 70: 19-42.

Meyer, J. W., and B. Rowan

1977 "Institutionalized organizations: Formal structure as myth and ceremony." American Journal of Sociology, 83: 340-863.

Neale, S.

2000 Genre and Hollywood. London: Routledge.

Papke, L. E., and J. M.

- Wooldridge
- 1996 "Econometric methods for fractional response variables with an application to 401(K) plan participation rates." Journal of Applied Econometrics, 11: 619-632.

Péli, G.

- 1997 "The niche hiker's guide to population ecology: A logical reconstruction of organizational ecology's niche theory." Sociological Methodology, 27: 1-46.
- 2004 "Affiliation within boundaries: Niche span optimization in the resource space." Working paper, University of Groningen, Faculty of Economics.

Péli, G., and B. Nooteboom

1999 "Market partitioning and the geometry of the resource space." American Journal of Sociology, 104: 1132-1153.

Podolny, J. M.

- 1993 "A status-based model of market competition." American Journal of Sociology, 98: 829-872.
- 1994 "Market uncertainty and the social character of economic exchange." Administrative Science Quarterly, 39: 458-483.

Podolny, J. M., T. E. Stuart, and M. T. Hannan

1996 "Networks, knowledge, and niches: Competition in the worldwide semiconductor industry, 1984-1991." American Journal of Sociology, 102: 659-689.

Prag, J., and J. Casavant

1994 "An empirical study of the determinants of revenues and marketing expenditures in the motion picture industry." Journal of Cultural Economics, 18: 217-235.

Rao, H., P. Monin, and R. Durand

- 2003 "Institutional change in Tocqueville: Nouvelle cuisine as an identity movement in French gastronomy." American Journal of Sociology, 108: 795-843
- 2005 "Border crossing: Bricolage and the erosion of categorical boundaries in French gastronomy." American Sociological Review, 70: 968-991.

Ravid, S. A.

1999 "Information, blockbusters and stars." Journal of Business, 72: 463-492.

Sawhney, M. S., and J. Eliashberg 1996 "A parsimonious model for forecasting gross box office revenues of motion pictures." Marketing Science, 15: 113-131.

Schatz, T.

1981 Hollywood Genres: Formulas, Filmmaking, and the Studio System. Boston: McGraw-Hill.

Sochay, S.

1994 "Predicting the performance of motion pictures." Journal of Media Economics, 7: 1-20.

Suchman, M. C.

1995 "Managing legitimacy: Strategic and institutional approaches." Academy of Management Review, 20: 571-610.

Wallace, W. T., A. Seigerman, and M. B. Holbrook

1993 "The role of actors and actresses in the success of films." Journal of Cultural Economics, 17: 1-27.

White, H. C. 1981 "Where do markets come from?" American Journal of Sociology, 87: 517-547.

Wyatt, J.

1994 High Concept: Movies and Marketing in Hollywood. Austin, TX: University of Texas Press.

Wyatt, R. O., and D. P. Badger

1984 "How reviews affect interest in and evaluation of films." Journalism Quarterly, 61: 874-878.

Zeger, S. L., and K.-Y. Liang

1986 "Longitudinal data analysis for discrete and continuous out-comes." Biometrics, 42: 121-30.

Zucker, L. G.

1989 "Combining institutional theorv and population ecology: No legitimacy, no history." American Sociological Review, 54: 542-545.

Zuckerman, E. W.

- 1999 "The categorical imperative: Securities analysts and the legitimacy discount." American Journal of Sociology, 104: 1398-1438.
- 2000 "Focusing the corporate product: Securities analysts and de-diversification." Administrative Science Quarterly, 45: 591-619.
- 2004 "Structural incoherence and stock market activity." American Sociological Review, 69: 405-432.

Zuckerman, E. W., and T.-Y. Kim 2003 "The critical tradeoff: identity assignment and box-office success in the feature-film industry." Industrial and Corporate Change, 12: 27–67. Zuckerman, E. W., T.-Y. Kim, K. Ukanwa, and J. J. Von Rittman 2003 "Robust identities or non-entities? Typecasting in the feature film labor market." American Journal of Sociology, 108: 1018–1074.

APPENDIX

Table A.1

| Variable | Mod | del A | Mo | Model B | | del C |
|---------------------------|--------|---------|--------|---------|--------|---------|
| Total no. of genres (In) | 0.543 | (1.14) | | | 1.174 | (2.15) |
| Consensus in classif. | | | 0.648 | (1.46) | 1.201 | (2.36) |
| Budget (In) | 0.116 | (6.32) | 0.113 | (6.12) | 0.111 | (6.07) |
| No. of opening sites (In) | 0.721 | (10.48) | 0.733 | (10.80) | 0.710 | (10.42) |
| Top star power | 0.000 | (0.22) | 0.001 | (0.35) | 0.001 | (0.50) |
| Top director power | 0.002 | (0.71) | 0.001 | (0.52) | 0.002 | (0.71) |
| No. of films | 0.139 | (0.99) | 0.127 | (0.91) | 0.117 | (0.85) |
| Major distributor | 0.823 | (2.24) | 0.786 | (2.18) | 0.785 | (2.20) |
| No. of sequels | 0.043 | (0.21) | 0.017 | (0.08) | 0.064 | (0.32) |
| Niche overlap | -0.006 | (-1.00) | -0.008 | (-1.39) | -0.006 | (-1.13) |
| Constant | 9.286 | (33.98) | 8.792 | (20.83) | 8.431 | (18.71) |