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# Gaffers, Gofers, and Grips: Role-Based Coordination in Temporary Organizations

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Temporary organizations are known to provide flexibility for industries that rely on them, but we know little about Their implications for how work is accomplished and coordinated. In this paper, I propose that common portrayals of temporary organizations as ephemeral and unstable are inaccurate: Temporary organizations are in fact organized around structured role systems whose nuances are negotiated in situ. This paper analyzes one type of temporary organization, film projects, exploring the way in which roles both organize immediate work and maintain continuity across different projects. On each film set, role expectations are communicated through practices of enthusiastic thanking, polite admonishing, and role-oriented joking, which enable crew members to learn and negotiate role structures. Two important structural characteristics of film projects provide the organizational context within which coordination takes place: interorganizational career progression and projects as temporary total institutions. By showing how these structural elements and role enactments support one another, this work generates a more complete understanding of the conditions that affect coordination, including role duration, expectations of future interaction, and visibility of work.

Key words: coordination; roles; temporary organizations

It is 6 A.M. when I arrive in Rittenhouse Square for the first scene of the shoot, as instructed by the location manager. Two people with their hoods up against the pouring rain are waiting at the edge of the pavement in front of a seafood restaurant: a woman on her cell phone and a tall man with a walkie-talkie in his hand. As I introduce myself, two trucks pull up to the curb and with a quick apology, the location manager and her assistant head off in opposite directions—one toward the trucks to tell them where to park, the other into the restaurant to talk with the owner. The back of the truck opens and purposeful-looking people equipped with headphones pour out. "Watch your back!" someone yells at me as they pass by, carrying wheeled equipment carts, lights and directors' chairs into the restaurant.

... A day later, they have finished filming the commercial, and I comment to the location manager, "Yesterday morning seemed amazingly orderly for the first day of shooting." "We only have two days to do it," she replied, "We need to get things done right away." (Excerpted from field notes, March 17–18, 2000).

The above excerpt characterizes an important problem for temporary organizations: On what basis can they organize swiftly to accomplish their work? Temporary organizations try to capitalize on the specialized skills of their members, while keeping costs of coordination to a minimum. These organizations bring together a group of people who are unfamiliar with one another's skills, but must work interdependently on complex tasks (Goodman and Goodman 1976). Accomplishing such tasks in the face of significant uncertainty and extreme time constraints reinforces the importance of coordination mechanisms (Menger 1999).

The activities of temporary organizations have attracted attention as contingent and temporary forms of work have become more common. While industries such as theater and construction have a longstanding history of organizing on a temporary basis (Goodman and Goodman 1972, 1976; Eccles 1981), more recently project-based organizing has become prevalent outside of these fields (Peters 1992, Kanter 1989, Jones 1996). This has spurred increased interest in how these systems operate, mostly focused on their temporary nature. In these views, temporary organizations are characterized as flexible, discontinuous, and ephemeral; they require "swift trust" on the part of their members to make up for the limitations of working in the organizational equivalent of a "one-night stand" (Christopherson and Storper 1989, Peters 1992, Meyerson et al. 1996).

Temporary organizations contrast with traditional hierarchical organizations as they are governed through networks of relationships rather than by lines of authority (Powell 1990, Jones et al. 1997). Thus, coordination across firms in these networks relies more heavily on social mechanisms such as reciprocity, socialization, and reputation (Jones et al. 1997). However, as Powell (1990, p. 327) suggests, "we know very little about the phenomenology of work" within these organizations, which raises questions about "how people cope with circumstances in which control is not direct and immediate, and conformity to well-established administrative routines not guaranteed." An investigation of the actual practices of coordination in temporary organizations would not only help us understand the implications of this form for the work of its members, but also provide insight into how coordination is achieved more generally in settings with few formal organizational structures.

In this paper, I examine a particular type of temporary organization, film sets, which require that their members coordinate complex interdependent activity under severe time pressure. I propose that the portrayal of temporary organizations as ephemeral, unstable systems that require swift trust is inaccurate: In fact, these organizations are organized around enduring, structured role systems whose nuances are negotiated in situ. I find that what drives coordination in these temporary organizations and maintains continuity across projects is the negotiated reproduction of role structures-the mutual reinforcement of the generalized role structure and repeated enactments of these roles on specific sets. An ethnographic analysis of four sets demonstrates that for temporary organizations in the film industry, the interaction that occurs while individuals enact roles on a particular project both coordinates work activities on a given set and sustains role expectations beyond the confines of the set.

### **Coordination in Temporary Organizations**

Temporary forms of organizing are not new. However, as contingent organizing has become more common, academic interest in temporary organizations has grown. Scholars point to a rise in the use of contingent and temporary employment (Belous 1989, Davis-Blake and Uzzi 1993). Although contingent work has always been a feature of our employment system, it is only recently that we have seen the spread of such arrangements to professional work such as engineering and law (Polivka 1996, Kunda et al. 2002). Such changes in the nature of the employment relationship are likely to influence workplace organization. For example, some suggest that the division of labor is increasingly shifting away from hierarchical lines of organization (Barley 1996, Vallas and Beck 1996, Zetka 2003). This raises questions about the implications of temporary organization for the coordination and control of work.

Much of our current understanding of coordination of highly complex, interdependent activity is rooted in the premises of organizational design (Heath and Staudenmayer 2000). These theories argue that firms organize in response to uncertainty in both task and environment. With greater uncertainty, firms shift away from coordinating via formal organizational structures such as rules, schedules, and division of labor, and move toward the use of interpersonal coordination mechanisms such as liaisons or informal communication (March and Simon 1958, Thompson 1967, Galbraith 1973). Thus, as temporary organizations face high levels of task and environmental uncertainty, they would be expected to rely on interpersonal processes rather than depend on formal structures.

While theories of organization design are suggestive, there is little empirical evidence showing how coordination happens in temporary organizations, mostly because few organizational scholars have systematically examined the internal functioning of temporary organizational forms (Meyerson et al. 1996, Powell 1990). Those who have studied temporary organizations focus primarily on the flexibility they afford for firms or industries. For instance, to contend with environments that are complex and variable, temporary organizations have been found to reduce costs and control risk through the fluid movement of specialized personnel (Christopherson and Storper 1989, Faulkner and Anderson 1987). Instead of training, supervision, and formal rules and hierarchy, temporary organizations rely on short-term workers with the requisite ability and experience to perform the tasks assigned to them (DeFillippi and Arthur 1998, Faulkner and Anderson 1987).

Consistent with organization design's premise that high uncertainty results in less use of formal structure, by focusing on flexibility these analyses depict temporary organizations as having little structure. Temporary organizations are short lived: People change positions frequently across these fluid projects, providing career opportunities (Baker and Faulkner 1991). Thus, temporary organizations are thought to engender mobile and boundaryless careers (Jones and DeFillippi 1996). Concurrently, some authors maintain that temporary organizations are therefore ephemeral and unstable (Kanter 1995), lacking formal or normative structure (Meyerson et al. 1996).

However, recent studies of careers in industries with few organizational boundaries challenge the notion that a lack of formal organizational structures implies an absence of structure or constraint. Studies of hightechnology contracting, for instance, illustrate that flexibility in employment from the firm or industry perspective requires individuals to assemble independent career structures. While many contractors prize their mobility, they also perceive such work as uncertain and insecure, and structure their social networks accordingly-building the reach and range of their contacts in order to acquire future jobs (Barley and Kunda 2004). Workers' careers are therefore constrained by their ability to build networks of relationships and to maintain their reputations in those networks (Jones 1996). Additionally, the labor market itself provides constraints on workers (Gunz et al. 2000), as both contractors and employers create cognitive boundary mechanisms. Zuckerman and his colleagues analyzed actors' careers in Hollywood, for instance, and showed that actors who are typecast, sticking with the same genre of work, have more success obtaining future employment (Zuckerman et al. 2003). Typecasting, although not a formal structure, is a significant constraint on the careers of such individuals. Boundaryless careers, therefore, encompass structures that influence the work experiences of temporary workers.

Further, studies of team-based organizational structures indicate that organizational flexibility does not necessarily occasion unstructured work organization. For example, although self-managed teams lack the controls of bureaucracy and hierarchy, they tend to develop alternative control mechanisms. With these less centralized control tactics, normative control constrains and structures the behavior of team members (Smith 1997, Prechel 1994, Barker 1993). In the self-managed groups that Barker (1993) studied, for instance, the move away from hierarchical lines of authority did not create unstructured, ephemeral groups, but instead created groups whose value-based work ethic turned gradually into a strong source of normative rules.

Taken together, these studies of work imply that while temporary organizations may provide flexibility from an industry standpoint, the stylized view of temporary organizations as unstructured at the level of the work is inaccurate. Even flexible systems have means of organization, constraint, and control, and a closer look at the work organization of temporary projects is needed to further understand its implications for the coordination of the work itself. While temporary organizations lack the permanent structures such as stable rules and hierarchies that we associate with bureaucratic mechanisms for coordination, they have both industry structures and emergent practices that coordinate and control activity. By specifying such practices, we can learn more about the processes of coordination that operate in the absence of permanent organizational structures.

One mechanism for coordination suggested in the organizational literature is a clear role structure, as illustrated in studies of high-reliability organizations that require careful coordination of complex, interdependent activity in order to avoid catastrophic or highly costly errors. Authors in this tradition argue that members of aircraft carrier crews (Weick and Roberts 1993), firefighting brigades (Weick 1993), and emergency response teams (Bigley and Roberts 2001) use the role structure to organize their behavior in relation to one another. These groups develop a shared view of their world, and by attending carefully to one another's behavior, can organize to prevent error.

However, while suggesting the benefits of a clear role structure, the theories developed in these studies frequently presuppose that such a structure already exists in the minds of the participants. For example, Weick (1993) describes the disastrous consequences of the disintegration of the role structure in the Mann Gulch fire, but he does not explore how these roles had been enacted prior to the fire. Similarly, in emergency response teams occupants switch between roles with "well-defined expectations and reporting relationships" (Bigley and Roberts 2001, p. 1287). In high-reliability settings, deep socialization or familiarity among participants is assumed to create the role structure. Thus, while roles are understood to help coordinate activity, little attention has been paid to the practices by which roles are created and enacted.

An alternative conception of how roles might coordinate activity is suggested by the recent focus in organization theory on explanations of organizing that involve both structure and the agency of individuals. These authors argue that structure and action are interrelated, and thus a thorough explanation of organizational activity should be both grounded in the practices of work (Barley and Kunda 2001) and also take into account the structures that are created and recreated through those practices (Feldman and Pentland 2003). For instance, following a structurationist perspective, recent analyses of organizational routines describe routines not as fixed programs or rules, but as patterns of action that emerge in the context of organizational structures (Pentland and Rueter 1994, Feldman and Pentland 2003). Similarly, Birnholtz et al. (2004, p. 15) demonstrate how organizational regeneration is accomplished through a set of practices that become a "coherent system" they call "organizational character." These and other practice-oriented examinations of organizations (Orlikowski 2002, Carlile 2002) thus implicate an approach to coordination that analyzes how structure and action interrelate in accomplishing the work.

A structurationist approach suggests that to understand how roles might function as coordination practices, role structures cannot be taken as given, but must be viewed in light of the actions taken by people who occupy these roles. Fortunately, a well-established sociological literature on role theory provides such a processual understanding of how roles work, focusing on the interplay between role structure and role enactment. Roles represent expectations associated with social positions, and therefore can facilitate continuity of behavior over time. At the same time, roles can be loosely and dynamically structured, as expectations are negotiated in interaction. This conception of roles as both negotiated and able to structure expectations over time offers a way to understand the process by which roles enable coordination in temporary projects.

### A Role-Based Approach to Coordination

Roles are the basic units of socialization that provide continuity in organizations (Goffman 1961b), and a theory of roles, as Turner suggests, provides an "understanding of why different patterns of social organizations emerge, persist, change, and break down" (1986, p. 360). Two streams of role theory, the structural and the interactionist, provide different approaches to role analysis.<sup>1</sup> From a structural perspective, a role is a bundle of tasks and norms, the behaviors that are expected of those who occupy a position in a social structure (Hughes 1958, Linton 1936, Biddle and Thomas 1966). Structural role theory focuses on the ways in which role expectations, arising from norms and demands from other role occupants and audiences, constrain and circumscribe individuals' behavior. Interactionist approaches to roles, in contrast, focus on the ways individuals can construct and reconstruct social arrangements through role-taking; role structures are a general framework, but individuals enact their own roles in relation to particular others (Turner 1986).

Both conceptions of roles offer insight into how work is organized in the absence of permanent structures and rules. One way to integrate the two approaches is to adopt a negotiated order perspective on roles. This perspective, most clearly articulated in the work of Strauss and colleagues (Strauss et al. 1963, Strauss 1978, Stelling and Bucher 1972), argues that social order is repeatedly reconstructed through interaction and negotiation (Strauss et al. 1963). Structures and processes are interpenetrated: "structural arrangements exist in and through processes that render those structures operative" (Maines 1982, p. 278). Most analyses of negotiated order, while arguably more focused on interaction (Day and Day 1977), examine the structural context that constrains, enables, and is created and changed by such interaction. For instance, Strauss et al. (1963) investigate the rules and administrative structure on the psychiatric ward as well as the working arrangements of doctors, administrators, and nurses, pointing out how these rules alternately guide behavior and are ignored, are drawn on for influence over others, and are reappraised in light of the pattern of working arrangements.

The interplay of structural context, role structure, and role enactment is similar to the administrative structure, rules, and working arrangements described above. Entrants to a role find expectations about their identity as well as resources with which to negotiate it (Handel 1979). They interact with others who also have expectations about each role within the system. However, while roles provide some normative expectations, individual definitions of these roles can be ambiguous or vague (Turner 1986). Further, although many aspects of these role expectations are socially shared, they are individually held, leaving room for negotiation in enactments. These enactments and individuals' understandings of the role structures also need to be understood in light of the organizational context within which the roles are created and recreated.

Because roles are enacted in particular situations, but conceptions of roles are held abstractly beyond those situations, they provide a constructive way to frame notions about how temporary organizations work. In the absence of formal rules and permanent organizational structures, role structure and negotiation create the order needed for coordination. Below, I describe the process by which role expectations and enactments provide a continuous yet negotiated way to coordinate the work in one type of temporary organization, film projects. Following a negotiated order approach to roles, I consider two important structural characteristics of film projects that represent the organizational context within which coordination takes place: interorganizational career progression and projects as temporary total institutions. This context, in which members are isolated in a work world that strongly socializes them to enthusiastically embrace their roles, provides participants with an understanding of general role structures on film sets. However, such role structures are provisional, influenced and maintained by participants' behavior on each set. Thus, I analyze the interactive practices of coordination on the set, detailing how thanking, admonishing, and joking provided a means for learning, negotiating, and generalizing role structures. Relating how these elements of structure and enactment mutually support one another generates a more complete understanding of the conditions that affect coordination, including role duration, expectations of future interaction, and visibility of work.

### Methods

### **Research Sites**

In the spring of 2000 and the spring of 2001, I conducted an ethnographic study of four film projects: two movies, a music video, and a commercial. Film production projects are an opportune setting for examining coordination in temporary organizations. The work is highly interdependent, and the organizations that produce films are both temporary and time constrained. Because the projects are temporary, the members of the organization begin the project with relatively less knowledge of one another's abilities or personalities than people in more traditional organizations.<sup>2</sup> However, the interdependence of the work requires coordination of an immediate and real-time nature. These pressures create dilemmas that make coordination on film sets a compelling dynamic for study.

The four projects I studied were of differing duration, focus, and location. The first three projects were filmed in Philadelphia, where I obtained access through an informant in the city's Film Office. *Alo*,<sup>3</sup> my first project, was a commercial for a long-distance telephone company with a production crew of 50 people, that filmed in several days. *Murder Mansion* was an independently funded horror film with a budget of approximately \$2 million. Shooting lasted five weeks with a crew of about 50 members. Immediately following, I worked on a rap music video, *Playaz Ball*, for the duration of both preproduction and shooting, which took five days with 35 crew members. The following spring, I spent six weeks

on location with *Talk to the Animals* in New York City. In contrast to the smaller-budget, nonunion projects in Philadelphia, this Hollywood studio film, with a budget of over \$100 million, had a unionized crew of 175 members from both coasts, working in two units. On all four projects, I gathered data from participant observation, interviews, and documents.

Participant Observation. I was a full-time participant on all three Philadelphia sets, working every day as a production assistant (PA), which entailed such duties as going on runs for supplies, running copies, locking up locations, and generally helping out in the departments through which I rotated (including office, locations, wardrobe, electric, grip, property, and sound).<sup>4</sup> As a production assistant, my incessant note taking on small pads went relatively unnoticed, as it is not unusual for those just starting out in film production to be very eager to learn. I typed up expanded field notes every night after leaving the set. On the set of Talk to the Animals, the studio, citing liability concerns, would not permit me to formally participate. Therefore, I was an observer in such departments as camera, wardrobe, grip, and visual and aerial effects; I also informally assisted the office production crew when asked. For a more detailed description of the research sites and my participation, please see Appendix 1.

Interviews and Documents. During downtimes in the work process, which were frequent and sometimes lengthy, I spontaneously interviewed many of the members of each crew. In addition to the unstructured, informal interviews that regularly occurred while I was observing the work, I interviewed several other informants without direct connections to the projects I observed. These included two local production managers in Philadelphia, several independent producers and crew members in Los Angeles and New York, and several studio executives. These interviews served to expand my understanding of hiring and career issues in the film industry and their impact on the work on the set.

Another important source of data was the written material that the crew used to support and perform their work. The documents included call sheets (the daily schedules), crew lists, scripts, sides (the daily scripts), shooting schedules (the listing of scene order for the remaining days of production), and directions to the location. Finally, I supplemented my field work with archival industry perspectives. In addition to my subscription to *Variety* magazine, I read insider accounts of the industry (Dunne 1969, Goldman 1983, Bart 1999) and viewed movies about filmmaking, such as *Living in Oblivion, State and Main*, and the HBO series *Project Greenlight*.

### Analysis

I followed a grounded-theory approach of comparison and contrast (Glaser and Strauss 1967, Strauss

and Corbin 1990) in analyzing the data. This approach entailed an iterative process of theoretical sampling, comparing and contrasting examples from the data to build theoretical categories, which were then compared and interrelated to form the basis for this paper. I analyzed data and adjusted categories periodically throughout the fieldwork to confirm the test categories and further focus my study. These categories were also refined through discussions with both colleagues and informants. By the third project, I had confirmation of particular patterns of interaction that were evident in the role enactments on all the sets. I then pursued a fourth, much larger, project to ensure that such patterns were representative of the behavior of individuals on big-budget studio films as well. No significant new categories emerged during the course of this project, which indicated that theoretical saturation had been reached (Glaser and Strauss 1967).

At the end of the field work, I reanalyzed field notes and the memos I had produced during the study to further clarify what interactive practices seemed important to coordination. This focus on coordination led to an analysis of three types of practices-thanking, admonishing, and joking-which seemed central to the process of learning role expectations. Once I selected these rolebased interactions as the core practices, I analyzed these categories in relation to the structural context of the film industry to determine what conditions led to these particular forms of interactive practices. For instance, I was struck by the repeated gratitude and overwhelming politeness demonstrated in interaction. I delved into the causes of such politeness, noticing that it occurred even in the presence of obvious mistakes and potentially damaging problems.<sup>5</sup> I not only analyzed how these behaviors were likely to influence role expectations, but also noted the elements of the structural context that would create conditions that were likely to result in such behavior. Here, I begin with a description of this structural context, and describe how the conditions contribute to crew members' understanding of the generalized role structure. This role structure is one necessary element of coordination in temporary projects. The other equally important element, depicted in the following section, is the process of role enactment, in which roles are clarified and refined by film crew members as they go about their work. Finally, I analyze the conditions that link the structural context to the practices as they are enacted on film sets.

## **Role-Based Coordination in Temporary Organizations**

# Structural Context for Role-Based Coordination on Film Sets

Role-based coordination entails the daily enactment by crew members of a generalized role structure that allows

for continuity as well as negotiation of roles on each film set. While a visible generalized role structure is a necessary backdrop for coordination, such coordination is accomplished through the interactions between crew members, in which tasks are accomplished and role expectations are clarified. A negotiated order approach to roles necessitates an understanding of the structural context that frames this interplay of role structure and enactment. Two important structural elements of the film industry are the structure of the career progression and the nature of the temporary project itself. Both career structure and project characteristics influenced how roles were enacted and how role structure was developed and maintained. The career progression provided the continuing context for crew members to understand and generalize the role structure, while the institutional nature of film sets enabled strong social pressures that guided role enactment. This context created conditions of intensive and visible short-term interaction with an expectation of repeated interactions in the future, and this influenced the form of public interactions between crew members.

Interorganizational Career Progression. Historically, job roles in the film industry evolved through longtime convention and the establishment of union rules. These roles developed during the studio era as film production departmentalized (Silver and Ward 1992) and the division of tasks became increasingly specialized. In 1946 the Hollywood below-the-line production unions negotiated a "Basic Agreement" with the Association of Motion Picture Producers that set the basis of employment for production workers (Amman 1996). This agreement fashioned work rules and job categories for production workers in Hollywood, and, while it did not directly govern the film industry elsewhere, it did shape the structure of film production jobs in the rest of the country. Productions vary as to the strictness of their adherence to union rules: Tasks that would be divided among several individuals such as a grip, electrician, and property assistant on one set might be performed by just one property assistant on another (Kawin 1992, p. 290). By the late 1980s, a shift to nonunion production on independent films increased flexibility in these job categories (Cooper 1988). However, while these roles are less tightly circumscribed than in the 1950s, the historical conventions institutionalized by union rules served to establish the basic role structure in the film industry.

Career advancement in the film industry occurs between projects, as opposed to within one organization (Bielby and Bielby 1999, Jones 2002, Faulkner and Anderson 1987). The system of jobs or positions is temporarily enacted on each project, and there is no movement beyond the initial assignment of a role. A general picture of the roles in a film production organization and their relationships is presented in Figure 1. This role structure, which is relatively consistent across films, is rather strictly organized by department, with a thin upper hierarchy, and a pool of production assistants at the bottom. The shaded boxes represent roles that are a bit more fluid in tasks and in relationships to others. For example, the reporting relationships of the above-the-line members (those who appear in the opening credits, such as the director) are dependent on the skills and personalities of the individuals on each set. The roles of the production assistants are also more fluid; they are not always tied to a particular department.

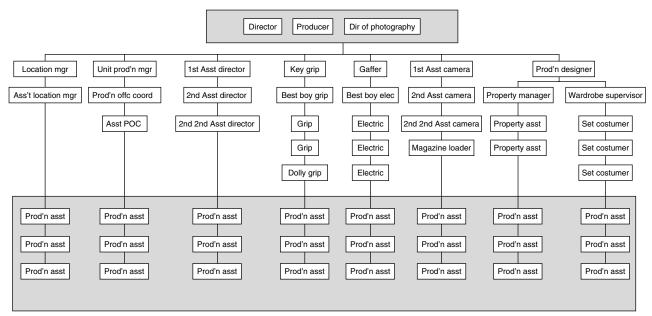


Figure 1 Roles on a Film Set (A Representative Subset; Space Prohibits a Listing of All Crew Members)

In addition to their lack of mobility across roles on a project, the production crew are likely to stay in their roles on the project for the duration of the shoot. Firing is not frequent in this industry, particularly at the top of the crew hierarchy. Key crew members bring both equipment and other crew with them when they are hired; production managers prefer to hire those they know will do a professional job, and are hesitant to hire strangers. The film industry is noted for its skewed distributions of participation; while a majority of both above- and belowthe-line participants only have one film to their credit, those who are successful tend to engage in repeated partnerships (Faulkner and Anderson 1987, Jones 1996, Zuckerman 2004), participating in projects with people with whom they feel comfortable.

For instance, Don, the unit production manager of *Talk* to the Animals, was very unhappy with the performance of the gaffer (the head of the electric department) on the set, whom he had hired on the recommendation of several other New York production managers. He could not hire his first few choices for the gaffer position because they were already working on other projects. However, as Don pointed out, "I can't fire him, because I need his equipment, and we're already halfway into the shoot, so it'd be too difficult to get someone else at this point. But I am never going to work with this guy again." Don's is a typical production manager's dilemma: The pool of available people he wants to hire is small, and the consequences of firing a key crew member are severe in terms of cost and lost productivity.

While an individual serves in only one role on a particular project, on the next project he or she may move to another role. This is particularly true early in their careers, when crew members are figuring out which role best suits them. For example, John, the sound mixer on Murder Mansion, mentioned to me that he had worked with a grip (a person who does mechanical and construction work), Sam, on a previous project. Sam came highly recommended by the director as a boom operator (the sound person who carries an overhead microphone), so John hired him. However, on the drive over to the location, John discovered that Sam had never operated a boom before. Sam's previous job with this director was in craft service (food and beverage provision). Thus, in the span of six months, Sam had worked in the craft service, sound, and grip departments.

This example typifies the experience of many earlycareer crew members, who begin their careers as members of the undifferentiated mass of production assistants. As production assistants work on more projects, they assist different departments. It is very difficult to get jobs in the film industry, so aspiring crew members will accept practically any position offered to them when they are first starting out. Additionally, to succeed on a film crew one needs to be a self-starter and volunteer to do as many tasks of as many types as possible. In their career progression, they then work upward in the hierarchy toward the position in which they are most interested. As Debby, a production assistant in the electric department on *Murder Mansion*, told me:

I got hired as a PA, and I started bugging the right people [in the electric department] right away. I asked Bill (an electrician), "Is there anything I can do for you?" I wrapped a cable; he thought it would take 45 minutes but I came right back. Then he asked me if I could gel lights. When I said yes, he let me do that also. And so I've been working with the electric department the whole time.

Because of early-career mobility, by the time individuals settle into a particular role, they have experienced intense socialization through a progression of many other roles (Jones 1996). This makes the role structure more visible to all crew members-they have crossed roles by assisting in a variety of functions, and learned not only the expectations for that role, but also how the roles in the organization relate. As role theory suggests, roles are enacted in response to the roles of others (Turner 1978, Turner 1986). Thus, crew members learn the expectations for particular roles by enacting different roles, interacting with others, and watching others perform their roles. This also allows crew members to get a sense for the patterns of relations between roles. The interorganizational career progression therefore creates a generalized role structure that provides crew members with an understanding of the function of each position that generalizes across projects. In the words of Mark, the first AC (assistant camera operator) on Talk to the Animals:

These systems have been established for years; there are clear lines of communication. When I get on a show, if I need something moved, I know to go to transpo; the medics, the food, the systems are in place to take care of every need. And they are the same from show to show. They are like jump rope rhythms, passed off from child to child.

As Mark's metaphor suggests, the generalized role structure that is communicated from project to project both contributes to coordination and helps provide the continuity within which crew members accomplish their work and undertake their roles. Because of their career experiences as they advance across projects, film crews develop the understanding of this structure that helps them to coordinate their activities.

Film Sets as Temporary Total Institutions. In addition to the influence of the career structure, the institutional nature of film projects also forms a structural context that encourages particular practices of coordination on film sets. For an understanding of role-based coordination it is analytically useful to think about each project not just as a temporary organization, but as a temporary total institution. As Goffman (1961a, p. xiii) describes, total institutions are "places of residence and work where a large number of like-situated individuals, cut off from the wider society for an appreciable period of time, together lead an enclosed, formally administered round of life." Although they exist only for short periods of time, in many other ways film production organizations exhibit the characteristics of total institutions.

Film sets are both physically and temporally isolated from the outside world (Goffman 1961a). Many film shoots take place in hard-to-reach, isolated locations (e.g., *Castaway*, a film in which the crew, lugging their equipment in waterproof containers, had to be rowed in small boats to the island for the shoot). Further, even those films that are shot in the middle of large cities are physically removed from everyday urban activity. The crew obtains city permits to block off streets, buildings, and parking spots, and the production pays people to leave their homes, offices, shops, and places of worship for the duration of the filming. During the actual filming, crew members are stationed at the perimeter of the shoot to make sure that no "bogeys" (noncrew or cast members) are allowed on the set.

The temporal structure of film production work, particularly on location, is also separated from the work performed by much of the surrounding community. Many film crews work a six-day work week, with two days off in-between. Thus, almost immediately upon joining a new production, crew members no longer share a weekend with the outside world. In addition, the daily work schedule of film crews is highly variable and unpredictable, predicated on such factors as the amount of shooting that is finished in a day and the union rules. For example, if the crew shoots late on Monday night and wrap time (the time that people leave the set) is at midnight, some unions require that their members not be called in to work on Tuesday until 10 A.M. The result of these contingencies is that the crew may come in to work at daybreak on the first day of the week, but by the end of the week the shooting day could begin in the afternoon and run deep into the night. This physical and temporal isolation means that not only do the crew members spend most of their time together during work, but also have few options for socializing outside of their fellow crew from the set. The drifting work schedule makes it difficult to have a social or home life outside of the institution. As Goffman (1961a) points out, this leads to blurred boundaries between the work and play of the same small set of individuals.

Film production is also characterized by strongly enforced interdependent activity schedules (Goffman 1961a). Crew members' daily activity is governed by the call sheet, which indicates what time each person is to arrive and what scenes will be shot on a particular day. The work involved in shooting a particular scene requires many different departments to work together on each shot. For instance, in Murder Mansion there was a climactic thunderstorm scene in which one of the actors, Taylor, ran down a fiery hallway and kicked in the basement door to run down the stairs. To shoot this scene, the gaffer (the head of the electric department) and the key grip (the head of the grip department) met with the director of photography to discuss how to light the scene, and then the rest of their departments set it up. Once the scene began shooting, several electricians stayed on the set to operate the lights to simulate fire and lightning. The property master and his assistant set up the candles that lit the hallway, and then waited behind the basement door to set up resistance and throw up the dust that made it appear that Taylor had kicked it in. Several production assistants took positions around the perimeter of the set to keep extraneous people from getting in the shot and to cue the property department. The director of photography, first assistant director, and boom operator ran ahead of Taylor to film her, and the person responsible for craft services waited on the sidelines to provide Taylor with a bottle of water between takes.

This interdependence of tasks also contributes to the crew's sense that work and play are interwoven. Because task execution of the departments is closely interrelated, some members of the crew are idle while waiting for others to finish planning, making decisions, or performing particular tasks. For instance, as in the scene described above, the electric and grip crews cannot set up the lights for a particular scene until the director of photography decides how to light it. This leads to periods of forced idleness (DeFillippi and Arthur 1998): During down times, crew members, when not ducking out for a cigarette, stand around, watch what others are doing, gossip, and crack jokes.

While most of the activity on film sets is immediately visible due to the physically close quarters, film productions further increase visibility through repetitive, public processes of communication. This also serves to reinforce the role structure. Film sets are characterized by an atmosphere of continual communication, in which people update one another and provide information over a variety of technologies such as walkie-talkies, cellular phones, and megaphones. Therefore, much of the activity on a set is public, visible to people even when they cannot physically see what is happening, which emphasizes the tasks and behaviors that are associated with roles on the set.

Visibility, temporality, and interdependence bolster the sense that the crew are members of a total institution, where work and play is intermingled and they are immersed in an organization isolated from the outside world. However, in contrast to the total institutions Goffman (1961a) focuses on, like jails and mental hospitals, where members are often reluctant participants, on film sets participants embrace their roles, looking to capitalize on their experiences to move forward and upward in the network of their career progression. Approaching the structural context of film sets as temporary total institutions gives us insight into how the immersion experience inherent in a film project supports coordination both within the temporary organization and across these experiences. The strong social pressures exerted by temporary total institutions make it more likely that interactions on one set have the impact on individuals' understandings of roles to provide both continuity in the generalized role structure and conformity to established roles. Next, I turn to the enactment process, describing the interactive work by which the generalized role structure is understood by participants and actually made real.

# **Coordination and Role Enactment on Film Sets**

The interorganizational career structure and the institutional nature of the film project are the context within which the generalized role structure is understood and role enactments take place. However, while having a visible generalized role structure is a necessary element underlying coordination in temporary organizations, it is not sufficient for actually coordinating the work on a particular project. While from the perspective of experienced crew the systems appear to "have been in place for years," in actuality these systems are (re)created through the interactions crew members have as they enact their roles on each set. As crew members create working arrangements on a project, role expectations are clarified and reinforced through practices of thanking, admonishing, and joking. In other words, within each project, the generalized role structure is instantiated by a set of crew members who negotiate and modify their particular roles. The generalized role structure and the role enactments mutually support one another, while at the same time establishing a means for almost immediate coordination on each new project.

# Role Enactments: Thanking, Admonishing, and Joking

The interactions experienced by crew members on the set as they went about their work were a key element of coordination, as they directed tasks at the same time that they communicated role expectations. Public interactive practices on film productions were characterized by effusive thanking, polite admonishing, and role-oriented joking. Within the structural context described above, these interactions provided crew members with clear signals about tasks, behaviors, and expectations of their roles as well as the roles of others and the relationships between them.

Enthusiastic Thanking and Polite Admonishing. One way in which crew members' role behaviors were

sustained was through explicit, immediate responses to both their appropriate and inappropriate role enactments. Gratitude and praise were frequent and enthusiastic; crew members were often told directly that they were enacting their roles well. Because many role enactments happened within view of others, it was relatively easy to provide responses immediately. The gaffer on Murder Mansion, for example, while watching the PA assigned to the electric department operating the machine that simulated flickers of lightning, enthused, "Great job, Debby!" Crew members were also acknowledged with enthusiastic gratitude after performing a task, even the most simple. Gratitude was so pervasive, in fact, that I eventually ceased scribbling detailed notes on the structure of such interactions, just jotting "thanks." On the set of Murder Mansion, any time a PA completed a task such as cleaning dishes or making photocopies, we were thanked repeatedly and soundly by the person who requested the assistance, as well as by others in the department. Similarly, on the set of Talk to the Animals, I heard the key grip thank his crew over the walkie-talkie several times a day.

In like fashion, admonishing typically came almost immediately upon inadequate completion of a task, and these corrections had a predictable structure. After crew members made a mistake, they were directed by the person who asked them to perform a task how to do it properly. Upon apologizing, they received a standard disclaimer-"Oh, that is fine, don't worry, no problem"-and then an admonition to do it the proper way the next time. For instance, one afternoon on the set of Murder Mansion, the assistant production office coordinator (APOC) telephoned a few additional grips<sup>6</sup> and gave them a call time for the following day. She then informed the key grip which additional crew would be coming in the next day, and he corrected her, saying, "I'd really like to know before you call these guys." She immediately apologized, and he replied, "Nope, that's fine. Just for the future if you could let me know first that'd be great. Thanks!" Being unable to approve his crew for the following day was a minor problem for the key grip, which he tried to ensure would not be repeated by providing clarification for the APOC. He did so in a polite manner that also helped reassure her and maintain their relationship.

This type of admonishing was evident at all levels of the crew hierarchy, including among the key crew members and the studio executives. For instance, one of the vice presidents of production at the Hollywood studio that produced *Talk to the Animals* expressed his willingness to directly let subordinates know what was expected of them. The unit production manager complained, "The script supervisor is not giving me thorough information about the completed number of pages for the morning report. I have asked her a couple of times now and she acts like she is too busy to help us." The vice president's response was, "If you aren't getting satisfaction with [the script supervisor], I'm happy to set up a conference call so she knows we want this number." Apologies and gratitude were second nature to the unit production manager, as he spent much of his time correcting others, and fixing or smoothing over problems that arose. In these cases, a chorus of "I'm sorry," "Don't worry," and "Thank you" often rang out from the parties involved in the exchange.

Thanking and admonishing were often used by senior crew members to provide role clarification for the junior crew members within the same departments, but in addition I observed a similar pattern of interactions across departments. In some cases, a member of one department helped out a member of another with instructions on how to do something, such as when the sound mixer on Murder Mansion directed an electrician to place a cable away from his sound cart. In other cases, members of other departments reminded individuals of the expectations of their roles. In one instance, on the set of Alo, the location manager and the key grip were discussing a rooftop location where the director wanted to shoot. The location manager, Pam, said she was uncomfortable with the location: "I just don't think it's safe." The key grip agreed. Pam responded firmly: "You are the key; it's your place to say it. Not just that you don't like it, but that you won't shoot here!" Admonishing across groups also could be seen on the HBO series Project Greenlight. When several key crew members were unhappy with the director of photography's behavior, the first assistant director pointed out to the associate and line producers, "You guys are the producers. I can't make [the director of photography] do it; you can!"

Similarly, one day on the set of *Talk to the Animals*, Don, the unit production manager, complained to the production accountant about a problem he was anticipating with meal penalties. Meal penalties are fees that the production pays the crew for working too long without breaking for a meal; they accrue additively as the minutes pass. Don said:

We're into our second meal penalty, and meal penalties can get so expensive. On [a previous film set] the associate producer didn't wise up about meal penalties, and they went to seven penalties one day for the whole crew. The production took a \$200,000 hit just for that day. Ten minutes ago, I told Jim (the producer of *Talk to the Animals*), "There's no way in hell we go for a third; we need to get the shot and move on."

On a previous set, Don had a bad experience with a producer who did not pay attention to meal penalties and cost the production money. As a result, Don was not certain that the producer for *Talk to the Animals* would be attentive to the meal penalty issue either. He therefore was quick to approach Jim after the second meal penalty with a strong admonition, providing the direct feedback

that they needed to move on rather than incur a third meal penalty.

Direct responses worked to quickly and consistently link tasks and behaviors to roles. As Weider's (1974) study of convicts "telling the code" demonstrates, verbalization makes the code explicit. In telling the code, convicts refer explicitly to the set of shared expectations about the activities they should and should not engage in. By both describing the code and reprimanding those who break it, verbalizing thus reinforces the code as a control device. Similarly, on film sets social pressure ensured that crew members did the work correctly while reinforcing the meaning of the role structure. Enthusiastic praise and thanking reinforced appropriate role behaviors, rewarding crew members for enacting their roles properly and making them feel happy about doing a good job. Direct, polite admonishing called attention to poor or incomplete role performance, offering instructions for future enactment of the role while softening the blow of correction with politeness. Such role clarification gave crew members a more complete image to draw on for their future role performances. Simultaneously, these interactions helped coordination by smoothing over problems and difficulties so they did not escalate and make working together more difficult.

*Role-Oriented Joking.* Another means of surfacing role expectations and reinforcing social order was through the use of humor. Humor at work has been shown both to relieve stress and to provide pressure to conform to expectations (Roy 1959, Hatch 1997). On film sets joking accomplished similar purposes to thanking and admonishing, reinforcing appropriate role enactment and correcting inappropriate role enactment. However, humor allowed for expectations and understanding of roles to be displayed in a less direct, and possibly less threatening, way. It also furnished crew members with a means for role distancing; humor was a safety valve that enabled them to complain about their role constraints while still enacting roles appropriately and accomplishing their work.

Teasing and ribbing about appropriate role behaviors occurred across departments at all levels of the crew hierarchy. For example, one day on the set of Murder Mansion, a few of the crew were working in the room that served as the killer's bedroom, preparing the props and lighting for a shot that would be filmed in a few hours. Reaching out as though to grab one of the orange peels scattered across the bed, the gaffer said to the set dresser, "Did you place that orange peel? Is this a hot set?" They laughed, because they both knew that the set dresser had just spent an hour dressing the room for the shot. A hot set, which is a set that is prepared for shooting, is labeled as such to ensure that nobody touches or moves anything that might interfere with the visual continuity of the scenes in the film. Maintaining continuity entails making the set look the same in every scene, and can take a long time, as it requires using photographs for comparisons while placing items in their matching locations. By teasing the set dresser that she might take a peel, the gaffer demonstrated that she knew what his role was and she knew that she was not supposed to touch anything. At the same time, these types of humorous comments, while said in a light manner, publicly reinforced the appropriate role behaviors of the crew members.

Humor out of the target's presence tended to be a bit sharper, and focused on inadequate role performance. For example, on the set of *Murder Mansion* one afternoon, the first assistant director (AD) announced to the crew over the walkie-talkie, "Lock it up, we're going two times in a row without cutting." The second AD was sitting in the middle of another room with about 10 idle crew members, watching the video feed of the shot. Aloud, he chimed in mockingly with the appropriate terminology, "Sort of like a series?"

In this example, the second AD was pointing out the inadequacy of the first AD's knowledge of the role, because the first AD did not seem to be aware that the term "series" meant shooting repeated versions of the shot without stopping in between them. At the same time, the second AD was demonstrating that he himself was knowledgeable about the correct terms to use. While the second AD was constrained from performing the tasks associated with the first AD's role, he could express his frustration through sarcasm. By interjecting his mocking comment, the second AD not only contributed to sustaining a particular definition of the first AD's role (as one that requires the use of roleappropriate language), but also asserted his ability to perform that role, in the event that someone within hearing range would have influence in hiring for that position on a future project.

Teasing and sarcastic comments such as those of the second AD and the gaffer in the previous examples were also used as status indicators. One's ability to "make" and "get" jokes can establish an individual's place in the status hierarchy (Boland and Hoffman 1983). For instance, one ubiquitous joke on all sets revolved around the role of the PAs, the gofers who generally performed all of the menial work. When individuals such as the locations assistant or the set dresser, for instance, were asked to perform a task that they did not consider part of their roles, they would scoff, "Do you think I'm a PA?" Doing so clearly and publicly demarcated the tasks that were considered by the crew to be beneath everyone except for those in the lowest status role, the production assistants. By using such humor, crew members strongly encouraged sustaining particular definitions of certain roles while reinforcing the status of the roles in the crew hierarchy.

Humor also served as both role reinforcement and distancing mechanism in the following example. One morning while I was working with the wardrobe department of Talk to the Animals, the producer asked Nancy, a set costumer, to run back and get a particular outfit from the wardrobe truck. She did not return to the truck, which was located several miles away at the other end of the park. At lunch, she told the story to a couple of other costumers. One of them, Marcia, joked, "Yeah, you'll swim over to 59th Street and get it!" Nancy replied, "Any time a producer asks you for something like that, you know not to bother to go. I've gone a couple of times, and by the time you get back they've already done the shot." Marcia chimed in, "Like they'll hold camera for you, right!" These costumers had learned over time that running to accommodate a producer's whim is often fruitless; in contrast, they often ran to accommodate the requests of the wardrobe supervisor and the costume designer, as that was more relevant to their role and their careers.

The interaction between these costumers demonstrates how humor simultaneously reinforces role expectations and expresses role distance (Goffman 1961b). Joking that rushing out to grab an outfit for a producer is a bad idea not only displays role expectations for all the costumers at lunch, but does so in a way that demonstrates membership and enacts distance. Running back to get an outfit is not a pleasant part of the costumers' role, but is a necessary one in certain circumstances. Like the sarcastic comment of the second AD described earlier, the costumers' joking gives them an outlet for their stress and frustration, allowing them the distance to continue to perform the role.

Humor and direct comments worked simultaneously to express role expectations. In another instance of mocking role-based humor, the production office coordinator for Murder Mansion, Craig, was checking over a set of mileage reports from the production assistants, who submitted these reports to be reimbursed for their gas usage. He remarked bitingly to the assistant production office coordinator and several others in the room, "This PA has more mileage than the location scout!" When Craig was not actually talking to the PA in question, he was sarcastic in criticizing her role performance: The location scout logs many miles looking for places to shoot and production assistants merely go to local stores to pick up supplies. However, when he talked with the PA and showed her the proper way to fill out the report, Craig was far more polite and direct, pointing out in the standard fashion what the PA did wrong and telling her, "No problem, just do it the right way next time."

Role-oriented joking, therefore, in combination with polite admonishing and gratitude, served as a softer, friendlier means of role reinforcement. The crew members worked in the close quarters of a total institution, and their future careers depended on the maintenance of friendly relationships with their colleagues. Therefore, overtly expressing anger was avoided. While I saw some anger expressed by individuals on all sets, most of the time it was not voiced publicly. Private complaints and frustration were not uncommon among confidantes, but these were polished into more polite admonishing in public. For instance, as described earlier, the unit production manager of *Talk to the Animals* was unhappy with the role enactment of the gaffer, and privately complained to me about his performance. He repeatedly and politely tried to indicate his expectations to the gaffer, finally vowing (again, privately) to not work with the individual on any future projects. However, I never once heard him lose his temper and address the gaffer in an angry tone.

The one public display of anger I witnessed was notable both for its rarity and for the reactions it produced among the rest of the crew. An assistant director working on *Murder Mansion* was frustrated by the behavior of the head of his department throughout the shoot, and on one specific day near the end of filming, he blew up about it and went "on strike" for several hours, refusing to perform his tasks. Responses to his actions from the other crew inside and outside his department ranged from "He's an asshole!" and "He's completely unprofessional!" to "Why does the unit production manager keep hiring this guy?" Both his anger and his refusal to perform his role led others to be wary of working with him in the future.

As this example illustrates, while sarcasm, joking, and admonishing were acceptable behavior, anger and acting out was not. Crew members engaged in a delicate balancing act: performing their own role to get the work accomplished, while at the same time demonstrating understanding of other roles and maintaining working relationships with others. Crew members upset this balance at their own peril. As these roles were conditioned by the career structure and the institutional structure, joking and politeness were far more common than anger because they enabled the work to continue, smoothed over potential obstacles, and kept the social system running.

Finally, learning how roles interacted with one another was also integral to coordination. In the example of the costumers, their understanding of when it was effective for them to run back to the truck saved them time and effort and offered the opportunity to perform more important tasks such as checking the costumes of the actors in order to be ready for the next shot. In like fashion, Don's improved understanding from both past experiences and current role negotiation that part of his role was to pressure the producer to take a meal break was what enabled the production to move onward. The understanding created through the interplay of structure and enactments thus facilitated quick coordination on film sets.

### **Discussion and Conclusions**

This study offers a role-based analysis of coordination, demonstrating that in these temporary organizations,

the role structure and enactments coordinated, enabled, and constrained work activity. The results provide us with a detailed picture of the coordination activity in temporary organizations, extending our understanding of how the work happens in this organizational form. Moreover, the focus on how roles provide negotiated structure in temporary organizations both contributes to role theory by elaborating our knowledge of how roles are constituted in organizations and highlights the contribution of role enactment to our understanding of coordination in organizations.

Examining coordination from a role-oriented perspective allows us to further our understanding of the nature of temporary organizations. The film sets I observed could not be characterized as organizational "one-night stands" that required swift trust in execution (Meyerson et al. 1996). Instead, from the first moment they arrived on set, members of these temporary organizations relied on role expectations to guide relationships and tasks. These expectations were based on two interrelated elements of roles: structure and enactment. The generalized role structure provided the continuity and stability that the individual temporary projects lacked. On each project, members in certain roles were expected to perform certain tasks. At the same time, strong social pressure was exerted to ensure that crew members conformed to role expectations. The coordination practices at the crew level were influenced by the structural context of the film industry: In order to maintain friendships and further careers, people were inclined to express expectations in as soft a manner as possible and to accept criticism and try hard to meet those expectations. This social pressure not only helped coordinate tasks, but also contributed to sustaining the generalized role structure.

This research demonstrates how role structure and role enactment are paramount for coordinating the work as well as maintaining the social system. Because this was an ethnographic study of four sets, it cannot provide definitive evidence on the social structure of the film industry. A longitudinal qualitative analysis of the role enactments of all the participants in a temporary system would have to be undertaken to produce such support. However, this study is suggestive of how the generalized role structure and role enactments interact to rapidly create working temporary organizations. As such, it advances our understanding of how clear role structures are actually learned and elaborated through the interactive process of enactment. The analysis also links the structural context of this particular industry to the role enactments that enable coordination. In doing so, it enables us to think about particular conditions under which these coordination practices happen.<sup>7</sup> Examining these conditions helps us to understand how coordination practices on film sets might generalize to other settings.

# Conditions Influencing Role Enactment and Structure

Four conditions are meaningful for linking role structure and enactment to explain coordination in temporary organizations: position and status of individuals, expectations of interaction in the future, visibility of interaction, and duration in role. The career structure creates a context in which crew members spend only short times in particular roles because each project is temporary. However, crew members have high expectations of interacting with some of the same people on future projects. Additionally, in a temporary total institution interaction is highly visible, and people spend a lot of time together both working and socializing.

Duration in Role. Because careers in the film industry are interorganizational, there is a new arrangement of people occupying the roles on each particular project. Therefore, coordination on each project requires speedy understanding of the new instantiation of the role structure. This contrasts with other structural contexts that have greater stability of membership, such as high-reliability organizations like aircraft carrier crews (Weick and Roberts 1993) or ship navigators (Hutchins 1990, 1995). As in film projects, these settings require active coordination and rely on attentive communication. However, in high-reliability organizations, roles are usually occupied continuously by the same set of people. As a result, people can rely on their relationships with one another and their longstanding performance of the same roles to "heedfully interrelate" (Weick and Roberts 1993). In these settings, technology often serves as a structuring mechanism that creates stability, orienting members toward their interdependent tasks (Hutchins 1995). Over time, people in these settings also develop idiosyncratic ways of relating to one another while working.

In contrast, temporary organizations must create coordination under conditions in which new sets of people occupy the roles on each project. Instead of technology or longstanding relationships, roles are the primary structuring and stabilizing force. Crews use practices of admonishing, thanking, and joking to accelerate familiarity with one another and reinforce role expectations. These practices of interrelating are "heedful" in the sense that crew members are paying attention to and actively encouraging and discouraging certain elements of role performance. However, analyzing such practices with respect to the role structure demonstrates exactly what people are being attentive to-not just specifics about task accomplishment but social cues about appropriate behavior that organize emergent structure and provide continuity across projects.

*Expectation of Future Interaction.* Understanding the conditions inherent in a temporary total institution also helps account for the social dynamics seen in role

enactments on film sets. My description of crew members' balancing act between role performance and relationship maintenance allows us to see how thanking and role-based joking help perpetuate the role system. Relationships with fellow crew members are paramount in this structural context, where both careers and emotional well-being are conditioned on successful role performance. Among crew members, there is an expectation that they will be interacting with these colleagues continuously for the duration of the shoot. Also, they rely on positive assessments by these colleagues for future employment opportunities. Therefore, the crew rarely break out of role or act contrary to role expectations. Instead, they joke and complain to reduce their stress while continuing to act in a role-appropriate manner. As Coser (1959) points out in her study of humor in a hospital ward, joking can shape the social structure of the group. On film sets, joking strengthens the role structure, making it less likely that role negotiation will result in great structural change.

Thus, as temporary total institutions, the structural and career context of film projects creates conditions of both opportunity and constraint for role occupants. Considering how roles are negotiated within the structural context provides an understanding of the process that creates role stability in these organizations alongside role change, illustrating the work done by members of organizations in order to produce situations in which little change seems to happen. By examining how role structure and enactments are related, this study demonstrates how situations of strong institutional context encourage the maintenance of shared definitions of roles through the interactive processes of joking, admonishing, and thanking.

Visibility of Interaction and Status of Position. Further, another way the temporary total institution of film projects sustains role structure is by creating conditions that increase the visibility of interaction and emphasize the relative status of positions. On film sets, everyone carrying a walkie-talkie on their belt or a call sheet in their pocket knows who is occupying each role. Members of the crew watch one another at work and at play, and therefore they look to their colleagues for both social and career approbation. As a result of the normative pressure of these temporary projects, while crew members maneuver within their role enactments, broad change in roles is unlikely.

This contrasts the experience of filmmakers described by Baker and Faulkner (1991) in their influential paper exploring roles in the context of temporary systems. Some of these directors, screenwriters, and producers used their roles as resources, adopting new combinations of roles that provided the "institutional and cultural means to compete and negotiate" (Baker and Faulkner 1991, p. 284) that allowed them to successfully shape ferent, as the behavioral latitude granted a producer or director does not extend down the crew hierarchy to the grips and the electricians. The crew members who perform much of the coordination work of film production are therefore not the creators of positions that Baker and Faulkner (1991) describe. A similar dynamic holds in another cultural industry, restaurant kitchens, in which autonomy and latitude are the province of the chef, who decides not only what meals are cooked but also which cooks will do the cooking (Fine 1992, 1996). In the film industry, the above-the-line roles and key crew members are akin to chefs in terms of their autonomy and status. Production crew, like cooks, are more constrained; while enacting their roles they are less likely to create greatly changed roles than executives are. For most crew members, film sets are a highly institutionalized setting in which they may stretch role boundaries, but they do not have the power to break out of the structural confines of their roles.

This behavior fits with Turner's (1962) contention that role making only happens in certain kinds of structural situations; in institutionalized situations the flexibility accorded to participants is reduced. This comparison also contributes to our understanding of role theory by clarifying the conditions under which roles can successfully be used as resources, and when they cannot (Baker and Faulkner 1991, Callero 1994). Lower status, more institutionally constrained roles are not likely to be used to expand the resources of those who claim them, as the potential behaviors associated with enacting these roles are limited by the structural context. However, the data do illustrate that crew members at all levels of the status hierarchy participate in reinforcing the role expectations while enacting their roles. Thus, we see thanking, admonishing, and joking among all crew members, in all types of status combinations. These practices can both reinforce the status hierarchy, as when crew members joke about being a PA, while also endorsing the role expectations of higher-status crew members, as when the unit production manager urges the producer to take a lunch break.

This particular example also illustrates how the structural context of film production promotes elements of change in individual role enactments. Roles are not completely specified by the role structure, but provide some wiggle room for crew members. In particular, because individuals enact their roles on different projects over time, they develop their own approach to particular roles in response to the enactments of others. This can be seen in the way Don, the unit production manager on Talk to the Animals, responded to the meal-penalty issue on the set. Don chose to be somewhat aggressive in admonishing Jim, the producer, about taking too many meal penalties. His previous experience on a different set

suggested that he needed to tell producers more clearly what they needed to do, and thus Don negotiated his role in this instance. Jim accepted this small change in Don's role, and thereafter Don would probably continue to interact with producers in this new manner.

This study therefore encourages reflection on the issue of how we define role stability and change. Conceptualizing change as the normal condition of organization life suggests taking a closer look at the negotiated changes that "sustain and, at the same time, potentially corrode stability" in organizations (Tsoukas and Chia 2002, p. 568). Specifically, my data show that role enactment over a series of projects is made up of many small role changes within a relatively persistent pattern of role stability. If we examine these nuanced, negotiated changes in roles, we realize that from an individual perspective, roles are constantly being learned and elaborated. However, within a temporary total institution such as a film set, role expectations receive strong reinforcement through the isolation of temporary projects, the blurring of work and social boundaries between people, expectations of future interaction, and role-based socialization practices like thanking, admonishing, and joking. This results in a role structure that appears stable from the perspective of the film industry, and encourages participants' belief in systems that are "the same from show to show." Thus, this study reminds us that roles are both stable and changing, as they provide strong expectations for behavior that enables continuity across projects while also allowing individuals room to enact changes in particular instantiations of their roles. Such findings suggest a closer exploration of the dynamics of role change, specifying the impetus for changes that continue across projects versus those that are more ephemeral, in order to understand the emergent patterns of stability in organizations.

### **Implications for Coordination in Organizations**

Finally, this study explored the importance of roles for coordination in organizations, deepening our understanding of how the process of role enactment contributes to coordination. Early understandings about organization design suggested that as uncertainty facing organizations increases, coordination needs become more complex (Galbraith 1973, Thompson 1967, Lawrence and Lorsch 1967). In particular, as interdependencies among functions increased, organizations were thought to shift coordination mechanisms from standardization, hierarchies, and routines to informal mechanisms such as mutual adjustment (Thompson 1967). More recent coordination theory focuses on organizational processes, and conceptualizes coordination as managing dependencies among activities (Crowston 1997, Malone et al. 1999). It argues that a variety of coordination mechanisms such as planning, standards, and simulations can be used to manage different types of dependencies such as those in which tasks share a common input or output (Crowston 1997, Malone et al. 1999).

However, these theories do not adequately account for the process by which coordination takes place in temporary organizations—the negotiated order created through role enactments. In particular, this study demonstrates the importance of the interplay between the structural context and the negotiated enactment of roles in order to coordinate activity on film sets. The relationship between structure and action in coordination is one that has not been explored by coordination theories. Because these theories focus on contrasting alternative mechanisms for coordination, they tend to portray trade-offs between formal structures and informal action, rather than investigate how coordination practices rely simultaneously on structure and enactment.

The benefits of exploring the interplay of these aspects of coordination can be seen when comparing the results of this study of negotiated order of film sets with Stelling and Bucher's (1972) investigation of the negotiated order of hospitals. Film projects and hospitals share the structural context of total institutions. However, they differ in terms of their formal structures-film sets lack permanent hierarchy and rely less on standardization-for instance, while hospitals abound with such structures. Interestingly, Stelling and Bucher (1972, p. 443) find that "medical wards with the strongest hierarchical component also demonstrate the greatest amount of autonomy" or latitude in role behavior. Thus, while the two settings share the institutional element of their structural context, the formal structural elements in the settings appear to be different and, as a consequence, so does the behavioral latitude granted to participants. This brief comparison suggests that examining the relationship between the structural context of organizations and the negotiated behaviors of individuals provides greater explanatory power by pinpointing the conditions under which we might see particular coordination practices.

Examining role-based organizing from a negotiated order perspective therefore enabled me to specify and elaborate on the conditions that influenced coordination practices in film projects. For instance, I showed how the context of film sets as temporary total institutions creates a powerful environment of social control for crew members. This control is greater as the length of the project increases-on a rap video shoot that lasts a week the isolation and social pressure is not as intense as on a three-month film shoot on a deserted island or even on a six-week shoot in a major metropolitan area like New York City. This strong environment makes it possible for roles to work as a coordination mechanism. The narrow and overlapping social and work worlds of the crew members leaves the crew with less exposure to outside influence, and therefore strengthens the impact of role expectations. Without the intense interdependence

created in this setting, it is not clear that roles would be as clear or effective for coordination.

Thinking about how these structural conditions are linked to coordination practices invites investigation of other settings where interdependent, complex work may be organized in a temporary manner. For instance, intense work environments seem to be on the rise concomitantly with temporary forms of organizing. These project-based environments, seen in advertising, consulting, and high-tech firms, are characterized by long hours spent working in temporary groups, sometimes "on location" as opposed to in a permanent office (Shenhar 2001, Grabher 2002). A consulting team, however, may not exhibit as many conditions of a temporary total institution as a film set. Consultants often return to their offices on Fridays and spend weekends at home with family and friends, for example. The study of film sets raises questions about how coordination might be accomplished in such settings: How might role expectations be created within the structural context of these other environments? Mere intensity of interaction while at work may not be sufficient. Similarly, the institutionalization of the role structure in consulting is not as longstanding or well-developed as that of the film industry. This prompts consideration of how temporary organizing can be successful in settings without a generalized role structure.

While roles are important elements of work in all organizations, we would also expect that they would be drawn on in different ways depending upon the structural context. Further, if these environments do not rely heavily on roles, what processes are key to achieving coordination? It remains to be seen how the coordination practices found in this study of film sets compare to those in other settings. For instance, the practical activities of police SWAT teams entail regular rehearsals to anticipate potential coordination problems: Team members meet for scheduled practice of scenarios in order to enable quick action in real engagements (Okhuysen 2005). In contrast, the interaction between functional groups in manufacturing teams is ongoing and relies on the use of material objects to coordinate work: It is structured by formal engineering drawings, and punctuated by problem solving around prototypes during production (Bechky 2003). These examples suggest that the importance of different types of coordination practices will vary across settings, and depend on the structural context of such practices. Future research therefore should focus on comparative studies of coordination, examining underlying similarities and differences in coordination practices across settings. Only then can we develop a truly thorough understanding of how organizations coordinate activity under different conditions.

This paper reveals that examining how people negotiate roles is a useful tool for investigating coordination in organizations. Coordination on film sets was sustained by the creation of an enduring generalized alized role structure understood by members as they arrived on a temporary project. At 6 am, when the crew members in my introductory story reported to the set, they arrived not just with their raincoats, equipment, and lights, but also with their understandings of the role structure. All that remained was the negotiation of how these roles would be enacted on this particular set: Who would put the lights in place, and what would be said while placing them?

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#### **Appendix 1. Participation at Research Sites**

My aim was to gather information about the work involved in film production, with a particular focus on the interaction of the different departments and the coordination of the work. Because film production is accomplished within temporary organizations, I knew I would need access to several projects before I felt that I had an understanding of the work. Initially, I met with the deputy director of the Philadelphia Film Office, who expressed his interest in the research and began to connect me with local film crews. I started my fieldwork on the site of a commercial, as my informant in the film office thought that a smaller, self-contained project would be a good introduction to the industry. The fieldwork then extended over a progression of projects, both through snowballing from the initial contact and developing new contacts in other cities.

### Alo

My first project, in March 2000, was a commercial for a longdistance telephone company with a production crew of about 50 people. My film office informant introduced me to the location manager, who took me under her wing for the two days of the shoot. I explained my role as a researcher who would be "hanging out" in her department and assured her that I would maintain confidentiality. I spent the duration of the project working with the location manager and her two assistants, scouting locations, putting up and removing flyers around the city, and "locking up" various street corners to prevent pedestrians from gaining access to the film site.

#### Murder Mansion

My second project, in April 2000, was an independently funded horror film with a budget of approximately \$2 million. The

same film office informant connected me to a local production manager who was serving as a consultant for the starting phase of production of Murder Mansion. She immediately put me to work as a production assistant in the office, after we obtained the unit production manager's approval for my research project. Murder Mansion took five weeks to film, and had a crew of about 50 members. The extended duration of the project allowed me to develop close relationships with several people who acted as "key informants," and I worked with those individuals most often, focusing on the departments to which they were assigned. These informants provided me with exhaustive detail about their work and the culture of the project. On Murder Mansion, I was able to rotate through many departments, including office, wardrobe, electric, grip, property, and sound. My work entailed standard production assistant duties: going on runs for supplies, locking up locations, and running copies of the "sides," the reduced-size copies of the scenes that will be shot on a given day. Additionally, because this was a nonunion set, I was able to lend a hand in the more technical departments, and helped to operate lights and create props. I was assigned my own walkie-talkie, which allowed me to monitor communications on different channels for each department. I also occasionally socialized with informants after we finished shooting in the evening, as well as attended the wrap party after filming was completed.

### Playaz Ball

In May 2000, the production office coordinator from *Murder Mansion* invited me to work as a production assistant on another project, a rap music video. This provided me the opportunity to observe some preproduction work as well as work as a member of the office and set crew once shooting began. I set up the rooms for auditions and assisted the production office coordinator with locating and securing equipment and transportation. During shooting, I transported the band members, locked up the set, and helped prepare the props. The project lasted five days and had a crew of 35 members.

### Talk to the Animals

In the spring of 2001, I obtained access to a Hollywood studio film, with a budget of over \$100 million, which was shooting on location in New York. This six-week location shoot had a unionized crew of 175 members from both coasts, filming as two separate units. My key informant was the New York unit production manager (UPM), who spent a month negotiating access with the studio on my behalf. For liability reasons, the studio would not let me work as a crew member, and thus I mostly observed. However, I informally assisted the UPM on a daily basis, as well as the office production crew once a week. Additionally, many of the other departments allowed me to observe their activities more directly, including the camera, grip, wardrobe, visual and aerial effects, and set-dressing departments. As a result, on the set of Talk to the Animals I learned how to enter payroll, distribute per diems, and load a magazine (prepare film for the camera).

### Endnotes

<sup>1</sup>For analyses of the differences between the two approaches, see Turner (1986) and Handel (1979).

<sup>2</sup>Because the hiring of film crews is dependent on social and professional networks (Faulkner and Anderson 1987, Jones 1996), often crew members have worked with some others on

the project before. However, there are always crew members who are strangers to one another, and often members are in positions that are new to them.

<sup>3</sup>The names of all four projects, as well as all crew members, are pseudonyms. Some of the particular role titles have also been altered to further disguise the identities of the crew members.

<sup>4</sup>The office department handles all administrative tasks for the set, managing paperwork and supplier relations. Locations is responsible for finding and negotiating access to places to shoot. The wardrobe department is responsible for costumes. Lighting and power needs are supplied by the electric department, while the grip department provides mechanical and construction support. The property department procures and manages the "props" that will be seen on-screen, and the sound department captures and records the sound and dialogue.

<sup>5</sup>Being more familiar with the academic culture of criticism, I was skeptical at first of people thanking me so frequently and correcting me so gently, but I quickly became accustomed to it. <sup>6</sup>An additional is someone who is not a regular member of the crew, but is hired on a contingent basis when extra help is needed in a department.

<sup>7</sup>Strauss (1978) would call these conditions the negotiation context: the particular elements of the structural context that directly influence negotiations.

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