Translating Expertise across Work Contexts: U.S. Puppeteers Move from Stage to Screen

Michel Anteby[a] (iD) and **Audrey L. Holm**[a] (iD)

Abstract

Expertise is a key currency in today's knowledge economy. Yet as experts increasingly move across work contexts, how expertise translates across contexts is less well understood. Here, we examine how a shift in context—which reorders the relative attention experts pay to distinct types of audiences—redefines what it means to be an expert. Our study's setting is an established expertise in the creative industry: puppet manipulation. Through an examination of U.S. puppeteers' move from stage to screen (i.e., film and television), we show that, although the two settings call on mostly similar techniques, puppeteers on stage ground their claims to expertise in a dialogue with spectators and view expertise as achieving *believability*; by contrast, puppeteers on screen invoke the need to deliver on cue when dealing with producers, directors, and co-workers and view expertise as achieving *task mastery*. When moving between stage and screen, puppeteers therefore prioritize the needs of certain audiences over others' and gradually reshape their *own* views of expertise. Our findings embed the nature of expertise in experts' ordering of types of audiences to attend to and provide insights for explaining how expertise can shift and become co-opted by workplaces.

Keywords

expertise, audiences, puppetry, film and television

Expertise has become a fundamental currency in today's knowledge economy. In such a world, which relies more heavily on intellectual capabilities than on physical inputs or natural resources to produce goods and services (Powell and Snellman 2004), individuals who possess a distinct expertise play leading roles in ensuring the proper functioning of our economy. It is these experts, for instance, who write the code that powers large online platforms and develop new pharmaceuticals to treat diseases. As career mobility becomes the norm, experts frequently move between work contexts; such moves, particularly for professionals, offer opportunities to expand their jurisdiction and to bring their "abstract knowledge" to bear on an ever-expanding set

of cases (Abbott 1988:8). Yet as experts navigate these new contexts, how their expertise translates across work contexts is less well understood.

Past scholarship tends to view expertise as not only a fixed body of knowledge that experts carry with them from job to job, but as a relational configuration in which others validate or challenge experts' authority and

[a]Boston University

Corresponding Author:
Michel Anteby, Boston University, Management & Organizations, 595 Commonwealth Avenue, Boston, Massachusetts 02215
Email: manteby@bu.edu

status (Abbott 2005; Bechky 2003; Epstein 1995, 1996; Eyal 2013; Huising 2015; Knorr Cetina 2009; Reilly 2017, 2018; Timmermans 2005; Wynne 1989, 1996), that shapes experts' relationships with their work (Ranganathan 2018; Wrzesniewski, Dutton, and Debebe 2003), and that even influences experts' success at their jobs (DiBenigno 2018; Sandefur 2015). It is therefore not only what experts do, but also with whom they perform their work that determines how expertise unfolds. Yet when moving from one context to the next, experts' relations with other people are likely to change. For example, with the rise of telemedicine, some physicians and nurses may shift from "contact medicine" to "distance medicine" and end-up interacting more with colleagues than with patients (Nicolini 2011:602). Similarly, college instructors who teach massive open online courses might interact more with technical crews recording their performance than with students (Vardi 2012). Put otherwise, the types of relational partners with whom experts co-construct their expertise can easily get reshuffled as experts move across work contexts. How the reshuffling of experts' relations affects the nature of expertise, however, remains unclear.

In this study, we attend to one type of reshuffling in experts' relations: what we label "audience reorderings." We define audience reorderings as situations entailing a reordering of experts' relative attention paid to distinct types of audiences. By types of audiences or audience-types, we mean the types of individuals (e.g., students and technical crews for online teachers) with whom the expert performance is co-constructed. Acknowledging both the relational nature of expertise and the specialized knowledge de facto associated with an expert's work, we view expertise as the value co-created by an expert's use of specialized knowledge in a given social configuration. Here, we ask how audience reorderings and, more broadly, shifting work contexts might shape experts' views of their expertise.

To better understand the interplay between shifting work contexts and experts' views

of expertise, we consider an established expertise within the creative industry: puppet manipulation. We first examine labor market changes undergone by U.S. puppeteers and their implications for the relational structures in which they perform their work. In moving from stage work to screen work (i.e., film and television) puppeteers represent an "extreme case" (Patton 2002) of an audience reordering that can inform our broader understanding of such reorderings. On stage, spectators constitute puppeteers' main relational partner. On screen, producers, directors, and co-workers on filming sets eclipse this audience to become newly preeminent relational partners. We then compare the meanings and practices of puppeteers' work when performed with their attention primarily focused on spectators versus producers, directors, and co-workers.

Our analysis suggests that, as work changes and select audience interactions are deemphasized from the practice of expert work, experts' views of their own expertise also shift. In short, a change in the context of work can result in a reordering of experts' relation to their audiences, which in turn transforms experts' views of their own expertise. The stage and screen puppeteers in our study used mostly similar basic sets of performance skills, but stage puppeteers relied heavily on spectator interaction to ground their understanding of expertise, whereas screen puppeteers generally invoked technical proficiency to claim their expertise when dealing with producers, directors, and co-workers. The latter understanding of expertise as a readily-accessible proficiency was reinforced by critical shifts in work patterns: from reliance on spectator feedback to learning by repeatedly training, often alone, and from experimenting with spectators to delivering on cue with co-workers on production sets. In the process, many puppeteers shifted their view of expertise from *achieving believability* to *achieving technical mastery* when moving from stage to screen.

These findings suggest a shift in the prevailing views of expertise that derives, in part, from the audience reordering in which expertise

is produced. We argue that because experts attend to the needs of their relational partners, the meanings they associate with expertise shift to align with their most salient audience-type. More broadly, we posit that novel configurations that reshuffle experts' attention toward select audience-types can gradually reshape the essence of expertise. Our study is set in the creative field, but we speculate that these dynamics occur in other fields as well. Accordingly, jurisdictional expansion cannot be properly understood without analyzing audience reordering of the expertise being redeployed. And, as experts move between contexts, particularly ones that direct their attention away from traditional audiences, their expertise can ultimately morph into something quite different from its initial blueprint. In documenting this move, we extend the study of expertise by examining the specific audience reorderings under which different meanings come to be associated with expertise, and we explain how expertise can shift and become co-opted by workplaces.

EXPERTISE AND AUDIENCES

Often narrowly defined as merely the sine qua non condition of professional work (Gorman and Sandefur 2011:278), expertise characterizes a broad set of occupations, ranging from barbers to craft-beer distillers, whose members all possess what they perceive as a distinct set of capabilities (Ocejo 2017:152, 205). Also, because many kinds of work have gradually become routinized (Crompton and Jones 1984), finding and retaining a good job often means being seen as an "expert" by employers. In this context, expert knowledge—or, more simply, expertise—is increasingly valued, and experts have emerged over time in all arenas of social and economic life (Brint 2020; Stehr and Ericson 1992; Zald and Lounsbury 2010).

The terms *expert* and *expertise* are generally considered self-explanatory: an expert is one who possesses a specialized form of substantive or embodied knowledge and can apply it efficiently to perform a task (Dreyfus

and Dreyfus 1986). In this view, expertise is typically conceptualized as a stable and well-defined body of knowledge, which exists independently of the context in which it is applied (Cambrosio, Limoges, and Hoffman 1992:347–49). Expertise is thus a specialized type of knowledge that is accumulated, and experts do their work by consistently applying this knowledge to their tasks. In turn, the definition of expert work is variously characterized as technical knowledge (Weber 1978); abstract knowledge applied to particular cases (Abbott 1988; Barley and Tolbert 1991); the circulation of knowledge, information, or ideas (Stehr 1992); and the use of substantive knowledge (Collins and Evans 2007; Dreyfus and Dreyfus 2005).

But expertise does not solely reside in what experts know; it is also embodied in *how* they enact their knowledge in everyday work (Anteby 2010; Carr 2010; Christin 2018; Eyal 2013; Huising and Silbey 2011; Knorr Cetina 2009; Smets and Jarzabkowski 2013). For example, studies of jurisdictional expansion have problematized experts' substantive knowledge by spelling out how variation in task jurisdictions can lead to variation in experts' ability to achieve their goals (e.g., Huising 2014; Kahl, King, and Liegel 2016). In other words, experts adapt their behavior to new work contexts and modify how they perform their work (Smets and Jarzabkowski 2013:1280). For instance, when former print journalists expand their reach to online work contexts, the nature and content of their jobs evolve (Christin 2018). Their primary expertise—producing well-crafted news stories—transcends domains, but how they utilize their journalistic expertise to achieve their goals varies. Expertise, then, is "something people do rather than something people have or hold" (Carr 2010:18) and is thus "an actively (re)constructed boundary, which has to be studied as an ongoing accomplishment and not be taken for granted" (Cambrosio et al. 1992:343).

Accordingly, not only is expert knowledge central to expert work; so too are the social relations in which the work is embedded. Past studies have shown the importance of

relational configurations to the performance of expert work. Especially in the realm of the professions (Abbott 1988), expertise is often associated with the ability to secure others' cooperation. Such cooperation typically occurs in "linked ecologies," namely, the set of social relations between multiple elements "that are neither fully constrained nor fully independent" (Abbott 2005:248). For example, after the Chernobyl nuclear accident, the credibility of scientists' pronouncements on health risks to cattle hinged in part on farmers' ability to debate the assumptions and models used by these scientists (Wynne 1989). Similarly, during the AIDS epidemic, social activists became "genuine participants" in the construction of scientific knowledge and de facto partners in medical professionals' claims to expertise (Epstein 1995:409).

As Eyal (2013) documents, professional knowledge only results in expertise when produced within *specific* social arrangements. He shows, for instance, that physicians are only able to diagnose children on the autism spectrum after interacting with children's middle-class parents and with other medical professionals (Eyal 2013:868); although a diagnosis draws on physicians' medical knowledge, its establishment is inherently dependent on interactions within specific webs of relations. The relational dynamics surrounding expertise have been documented in many other settings as well (e.g., Craciun 2018; DiBenigno 2018; Kaynak and Barley 2019; Kellogg 2011, 2014; Nicolini et al. 2018). Thus, understanding the webs of relations within which expert knowledge operates is key to understanding expertise and its possible alteration over time. In particular, studying how changes in relational configurations lead to changes in experts' views of expertise might shed light on how expertise is established and produced.

One type of configuration that has been central to discussions of expert work is that between experts and their characteristic audience-types in given work contexts.[1] As an illustration, stand-up comedians rely on multiple audience-types (e.g., peers, aficionados,

industry scouts, mass consumers) to claim their expertise, but depending on the context, their attention tends to focus on distinct audience-types (e.g., peers in a local club versus mass consumers on a national tour) (Reilly 2017). Similar dynamics prevail in many other industries. Authors, for example, need to keep both an industry audience (i.e., agents, publishers, editors) and consumers (i.e., readers) happy (Childress 2017:116). Yet when writing for a national imprint versus an academic publishing house, authors might re-order the attention they give to mass readers versus editors, with some audience-types gaining more preeminence than others. Songwriters, too, often develop a specific "audience-orientation" when envisioning the main partners whom they intend to engage (e.g., peers versus consumers) (Cornfield 2015:22). Similarly, medical examiners juggle at least two audiences—public health officials and relatives of the deceased—and when determining a cause of death, their authority depends not only on "professional standards," but also on "who constitutes the audiences of their determination" (Timmermans 2005:313–14).

This is not to say experts do not try, when feasible, to please all audiences at once, but their attention can prove limited and selective. Professionals often view the general public as their dominant audience-type, but in some instances they may also view the government as a dominant audience (Abbott 1988:163). And in Berlin police precincts, for instance, "[t]he primary audience to which police performance is directed is other police officers" (Glaeser 2000:206). Depending on the work context, an implicit ordering of audience-type often prevails.

We know that expert–audience interactions can be central to how experts perform their work, but we know little about what happens to experts' views of expertise when they reorder their attention away from a typical audience and toward a previously less salient one. Here, we examine the reordering of expert–audience interactions to further our understanding of the meanings experts associate with expertise. As the contexts in which work takes place are

increasingly being reconfigured, questioning how audience reorderings affect the nature of expertise seems especially timely. This study examines one instance of such a reordering to explore the shifting nature of expertise across work contexts.

SETTING, DATA, AND METHODS

Contemporary U.S. Puppetry

Contemporary puppetry in the United States is largely situated in two very different work contexts. First, puppetry is performed with a live audience in a stage-like context. Stage work flourished in the United States beginning in the 1920s; it draws on a long-standing worldwide heritage of puppetry styles, ranging from Asian shadow puppets to French marionettes (Bell 2008). Puppeteers working on stage typically sell their shows directly to venues like local theaters, schools, libraries, and museums. They usually work either alone or with a small group of fellow puppeteers to create performances from beginning to end: building their own puppets, writing storylines, selecting music, manipulating, and more (Jones 2006; McCormick and Pratasik 1998). Some entrepreneurial stage puppeteers have even opened their own theaters, like Bob Baker's Marionette Theater in Los Angeles (founded in 1963) and Mary Churchill's Puppet Showplace theater near Boston (1974), to showcase their work.

Second, puppetry can also be performed on screen. The incorporation of puppetry into film, television, and advertising in the twentieth century has enabled the diffusion of puppetry beyond traditional stage work. Puppeteers first performed characters like Lamb Chop (1957) and the Muppets (1966) on television; puppetry then moved to film, with the advent of "creatures" like Yoda in *Star Wars* (1980) and the aliens in *Men in Black* (1997). (See Table 1 for a chronology of puppetry in screen work.) A key milestone was the success of *Jurassic Park* (1993), in which puppeteers operated many large animated creatures.

More recently, the growth of streaming and web-based television series has created new opportunities for puppeteers in the film and television industries. Finally, new puppetry styles (e.g., digital puppetry, the manipulation of a puppet via a computer system) have enabled puppetry to remain competitive with computer-generated imagery (CGI). In short, puppetry has been "transformed from a marginalized and overlooked genre" to "an integral part of contemporary stage, film, and television" (Kaplin 1999:28). The diffusion of puppeteers across so many contexts—a form of jurisdictional expansion—has led some observers to call the current era a "puppet moment" (Collins-Hughes 2017; Posner, Orenstein, and Bell 2014:2).

Puppeteers who seek to make a living from their work often cobble together a number of jobs, simultaneously or serially, including voiceovers, building puppets, teaching, and performing in various contexts. Like many other kinds of workers, they juggle gigs in a labor market increasingly characterized by contingent and contract work (Barley and Kunda 2004; Batt and Appelbaum 2017; Kunda, Barley, and Evans 2002; Sundararajan 2016; Weil 2014). Earning at least a partial living from puppetry can be achieved by combining local theater performances with school and cruise-ship appearances or commercials. Because there is no federal data on puppeteers' incomes per se, average earnings are difficult to estimate. A 2006 profile of a puppeteer published by the Bureau of Labor Statistics noted, however, that "experienced puppeteers who put in the hours can make at least $40,000 a year" (Jones 2006:35). Puppeteers' earnings likely vary widely, and many puppeteers combine gigs across stage and screen contexts.

Importantly for our inquiry, a key relational distinction exists between stage and screen work. As a close observer of puppetry noted, "a puppet is created with the audience in mind. . . . It exists through interaction with an audience and only the imagination of spectators give it life" (cited by Bernier and O'Hare 2005:8). Whereas stage puppetry is mostly embedded in relations with

Table 1. Major Events in the Development of U.S. Puppetry and Screen Work

1916	Ellen van Volkenburg from the Chicago Little Theater coins the term "puppeteer."
1915	Tony Sarg, known as "America's Puppet Master," and a key disseminator of puppetry art in the United States, arrives in New York City from Germany. He is soon joined by Remo Bufano, from Italy, who will direct the federal Works Progress Administration's puppet-show program in the 1930s.
1920s	Puppetry spreads in the United States via its use in classrooms, "how-to" books, and workshops.
1930s	Paul McPharlin, a Detroit-based puppeteer, creates *The Puppetry Yearbook*, which helps connect and inform U.S. puppeteers.
1937	Puppeteers of America, a non-profit dedicated to promoting puppetry, is founded.
1938	Paul McPharlin begins experimenting with television puppetry.
1947	Puppetry develops on mass-market television. Burr Tillstrom, a Chicago-based puppeteer, introduces *Kukla, Fran and Ollie* on local television. In 1949, NBS begins broadcasting it nationwide. NBC also hires puppeteers Rufus and Margo Rose to work on *The Howdy Doody Show*, which runs from 1949 until 1960.
1950s	Bob Keeshan creates *Captain Kangaroo* and Shari Lewis creates *Lamb Chop*. Both characters gain popularity in television shows.
1960s	Jim Henson, creator of the Muppets, appears regularly on the *Today Show* and the *Ed Sullivan Show*, manipulating puppets adapted to the television screen.
1962	Puppeteer Frank Ballard adds puppetry to the University of Connecticut's curriculum, planting the seeds for the foundation of a puppetry arts program.
1963	*The Mickey Mouse Club* dominates puppet television.
1963	Peter Schuman, a puppeteer from Germany who arrived in the United States in 1961, founds the Bread & Puppet Theater, an anarchic, noncommercial, participatory and politically engaged form of performance.
1965	Puppeteer Bil Baird participates in the movie *The Sound of Music*.
1969	*Sesame Street* airs on PBS as an educational children's show.
1976	*The Muppet Show* brings together puppeteers Jim Henson, Frank Oz, Jerry Juhl, and others.
1978	The Center for Puppetry Arts opens in Atlanta.
1980	The World Puppetry Festival is held in Washington, DC.
1985	Puppeteers are recognized by the Screen Actors Guild as principal on-camera performers.
1999	The movie *Being John Malkovich* showcases Phillip Huber's puppetry skills.
2002	The television show *Crank Yankers*, using puppets to reenact crank calls made by celebrities, debuts. As of 2020, it includes 6 seasons and 90 episodes.
2004	*Team America* is released. All the movie's characters are marionettes. Greg Ballora, Scott Land, and Tony Urbano are the lead puppeteers.
2008	Puppeteers perform and voice digitally animated characters on the PBS series *Sid the Science Kid*.
2019	*The Dark Crystal: Age of Resistance*, one of the largest screen puppetry productions in the United States, becomes a Netflix television series.

Note: Adapted from Stoessner (2008) and other sources.

spectators, screen puppetry by its nature has a much weaker direct relationship with spectators. Nonetheless, both settings allow for puppetry work, because both require the presence of a puppeteer at the time of the performance. Indeed, as Searls (2014:296) notes, "To be a puppeteer, the person controlling the image/object must be present during the performance, even if it is recorded and otherwise retouched before intended audiences perceive it." Using this definition, puppetry encompasses not only physical objects that are touched by the puppeteer but also puppets that are brought to life in virtual and digital environments by a puppeteer (e.g., in the series *Sid the Science Kid* and *Frances* on PBS) (Baisley and Sturman 1997). Comparing how the same expert work is performed

Table 2. Key Variations between Stage and Screen Contexts

	Typical Stage Context	Typical Screen Context
General Background		
Heritage	Worldwide puppetry tradition	1950s/1960s U.S. television shows
Puppetry styles	Any style, including shadow puppets, marionettes, and hand and rod	Largely hand and rod (e.g., Muppet style), but also others (including digital)
Organization of Work		
Type of employment	Tours of local venues, often with shows created by the puppeteer	Large productions
Type of contract	Independent, often a one-off contract with a venue	Union and non-union project-based contracts
Work Configuration		
Typical venues	Theaters, birthday parties, libraries, and schools	Television and film sets
Performance set-up	Interaction mainly with spectators	Interaction mainly with co-workers on set

in two distinct relational configurations will help us to uncover differences in puppeteers' work across settings and to specify how such differences might reshape views of expertise. Table 2 summarizes key differences between stage and screen.

Data Collection

To understand how a shift in work contexts might affect the nature of expertise, we rely on interviews with, observations of, and archives about U.S. puppeteers. The shifting nature of expertise is a theme that emerged inductively from analysis of these data sources.

Interviews. We collected 74 interviews, 69 with puppeteers and five with interviewees whose occupations are closely associated with puppetry (e.g., a specialized librarian, producers, and educators). Interviews lasted between 30 minutes and three hours, averaging 70 minutes; four interviews were conducted in two segments. Fifty-two interviews were conducted face-to-face, by phone or by Skype; 22 were drawn from the podcast "Under the Puppet," whose host questions puppeteers about their work, following an interview protocol very close to ours. (All but four of the podcast interviewees were

individuals with whom we had not spoken.) Because the host was also a professional puppeteer, he brought a level of depth to the exchange that eased any concerns we had about using such data (for other instances of podcast data use in the social sciences, see Lundström and Lundström 2020). All interviews were transcribed. To collect the 52 interviews we conducted directly, we identified 210 puppeteers and puppet companies, contacted 73, and dropped 21 due to scheduling issues; this sampling led to a final response rate of about 71 percent. Our formal interviews were supplemented with multiple informal interviews during fieldwork.

During our semi-structured exchanges, we asked interviewees about their career histories and encouraged them to talk about any topic pertinent to their work experience; we also urged them to comment on specific performance events and challenges. When asking questions, we relied on "how" and "what" questions to encourage interviewees to share details and individual views (Weiss 1994). We allowed interviewees to shape as much of the interview as possible, changing our protocol early on when certain themes emerged more frequently than others. Our initial interview protocol included, for example, a question about the role of technology that often

surprised interviewees. Many interviewees commented that the camera was one puppetry technique among others, and dismissed the topic as an irrelevant line of inquiry; instead, they described the relational issues at stake in film and television productions.

We initially used two sampling strategies. We first used snowball sampling to identify professional puppeteers.[2] Those we contacted either performed at local theaters or were recommended by other puppeteers during interviews or at festivals and conferences we attended. Via this sampling strategy, we interviewed puppeteers of different ages and genders who performed in children's theater, adult theater, educational settings, and therapy. Our second early sampling strategy was to select puppeteers who had received grants from the Jim Henson Foundation. The foundation is the main nationwide grant-making institution in puppetry and thus a strategic gateway into the puppetry community.[3] We selected and contacted grantees from 2015, 2016, and 2017 based on variation in gender, geography, and grant category (Trost 1986).

This first phase of our inquiry identified many puppeteers who performed in stage but fewer who worked in television or film. We thus proceeded to a second stage of data collection in which we deliberately sought puppeteers in those alternative settings. To do so, we asked interviewees for the names of puppeteers who worked for large productions in television or film. We also collected information about screen puppeteers from IMDb, an online database about performers and technicians in movies and television worldwide. We looked for puppeteers who had held prominent roles in big productions involving puppetry (e.g., *The Muppets* and *Splash and Bubbles*). We then emailed them or approached them at events we attended.

Overall, of the 74 interviewees we found via snowball sampling, purposeful sampling, and archived podcasts, we categorized 31 as having worked on both stage and screen, 25 mainly on stage, and 18 mainly on screen (concentrated in Los Angeles and New York City). All but one puppeteer in our sample had started out working on stage. A few puppeteers in our sample graduated from the University of Connecticut's puppet arts program (a historical hub of such training in the United States), but the vast majority came from a wide range of backgrounds (e.g., education, crafts, other performing arts) and trained via an apprenticeship or workshops with more senior puppeteers. Table 3 describes our interviewee sample.

Observation. In addition to interviews, we spent about 150 hours observing and participating in puppetry events and gatherings: attending puppet shows for children and adults, visiting screen sets, observing and participating in post-performance discussions and interactions at local theaters and festivals, and (for one co-author) volunteering at events. Attending national and local puppetry workshops, classes, guild meetings, and conferences enhanced our understanding of the culture of puppeteers and even prompted one co-author to learn some basic puppetry skills, including manipulating hand and rod puppets and improvisation. This fieldwork also increased our appreciation of puppeteers' techniques and the physical demands of puppetry.

Archives. Finally, to supplement our interviews and field work, we analyzed archival data at the Center for Puppetry Arts in Atlanta and the Jim Henson Foundation in New York, as well as film-credit attributions from IMDb. These archives include grant applications, board-meeting minutes, donated personal archives, credit lists, and more. Via triangulation of multiple data sources (Jick 1979), we developed a layered and rich understanding of puppeteers' move from stage to screen, and we relied on key informants to clarify ambiguities.

Data Analysis

We began analysis in parallel with data collection (Golden-Biddle and Locke 2007). We read our data closely, composing memos after each interview and field observation, and

Table 3. Details of Interview Sample

	Mainly Stage	Mainly Screen	Both Stage and Screen	Total
	25	18	31	74
Primary Occupation				
Puppeteer	23	15	31	69
Other (e.g., producer, educator)	2	3		5
Gender				
Female	13	5	13	31
Male	12	13	18	43
Age Range				
25 to 34	5	1	2	8
35 to 49	6	5	15	26
50 to 64	10	9	9	28
65 and over	4	3	5	12
Main Work Location				
New York City	4	1	10	15
East Coast (non-NYC)	12	3	5	20
West Coast	6	14	13	33
Midwest	1		1	2
South	2		2	4
Type of Interview				
Interview	23	7	18	48
Podcast	2	11	9	22
Interview and podcast			4	4

Note: To categorize puppeteers as mainly stage, mainly screen, or both, we used IMDb: those with IMDb credentials were coded as having worked in screen. We used puppeteers' webpages and other online resources (e.g., the Muppet Wiki page) to triangulate this information. These data allowed us to determine whether puppeteers had done stage work as well. Interviewees without IMDb credentials were listed as mainly stage.

regularly discussed emerging themes. Following a grounded-theory approach (Strauss and Corbin 1997), we inductively coded interviews, field notes, and archives to identify key themes central to puppeteers' work. Specifically, coding revealed the recurrence of stories about performance skills and the multiple styles and contexts of puppetry work. For example, we initially coded as "skills" a puppeteer's comment that "puppetry is a weird mishmash of skills that are very specific and not common," and we used codes such as "family theater," "birthday parties," "TV show," and "film" when puppeteers described different types of performance contexts.

We soon realized that many professional puppeteers routinely cross the boundary between stage and screen work, and that we were therefore able to compare how puppeteers talked about performance when describing the two contexts. Because the spectator experience was a dominant theme in puppeteers' narratives, we grew eager to better understand how puppeteers navigate the different relational configurations of stage and screen performances. As we moved back and forth between data and analytic categories, we also came to understand puppetry performance as a specific form of expertise: puppeteers often distinguished good puppetry from bad, and pointed out instances of exemplary performance by "master puppeteers." For example, the distinction between "expert" and "amateur" puppetry became salient when one puppeteer explained that when watching a performance "you can see when it's not a

puppeteer" and can discern whether "what goes out there to the audience is good."

As we further analyzed our data and reviewed the literature on expert work, we found relational definitions of expertise particularly relevant to how puppeteers were performing. Having noticed variation in puppeteers' descriptions of the relational contexts they worked in, we engaged in a process of comparing and contrasting descriptions of performances specific to different contexts. In summary, we operated iteratively, moving back and forth between the data and our emerging conceptual framework and adding to our interviewee sample until we reached theoretical saturation (Strauss and Corbin 1998). This process revealed similarities and differences in how puppeteers view expertise on stage and on screen. Here, we build on this analysis to discuss broader links between audience reorderings and the nature of expertise, and to suggest that analyzing relational reshufflings away from spectators in this setting paves the way to "logically generalize" (Patton 2002) to other cases of work undergoing sudden or significant audience reorderings, including many other forms of expert work.

THE RISE OF SCREEN WORK ALONGSIDE STAGE WORK

Historically, puppeteers have had to juggle multiple work contexts because puppetry has never provided stable employment, functioning "at the margins of the economic market" (Shershow 1995:3). This situation still prevails today: for instance, in the course of a given month, a puppeteer may be hired by a screen production, sell a show to a stage venue, or both. One stage and screen puppeteer, asked how she selected gigs, explained that she went "where the pay is": "You knock on a door, over and over, and it stays closed, so you try another door" (ST/SC-30).[4] The Jim Henson Foundation's board acknowledges this reality, noting that "many artists have difficulty finding new venues and audiences" (board meeting minutes, December 11, 2003). As a result, for people seeking to

make a living from puppetry, the choice of employment contexts depends as much on available gigs as on individual preference. With screen work on the rise and stage work becoming more difficult to sustain, puppeteers' labor market has gradually tilted toward screen work.

Over the past few decades, working as a screen performer has gained popularity among puppeteers. In the same way that musicians and music composers flocked earlier to film studios (Faulkner 1971, 1983), puppeteers started heading to Hollywood in the late 1970s (Sergeant 2019:181). The reasons are multiple, but first and foremost, screen work provides higher paychecks and sometimes even health insurance. In 1985, the Screen Actors Guild (SAG) modified its commercial contract to categorize puppeteers as principal on-camera performers, rather than mere prop builders and special-effects technicians (Sturz and Wilson 1991:16).[5] This new recognition brought more economic benefits to screen puppeteers.

Screen work also generated growing demand for puppetry: more productions started to use puppets and other "performing objects" that relied on puppetry (Bell 2008:147). Figure 1 presents evidence of this growing demand by tracking the number of puppetry-related roles in film and television credits over time, from almost none in 1950 to close to 400 roles per year by 2013. As film and television productions increasingly used puppetry for special effects (Bell 2008:160), the number of SAG members who listed puppetry as a skill in their profiles rose to 1,432 by 1990 (Sturz and Wilson 1991:18). Even today, puppetry remains a cost-effective and often more convincing alternative to CGI. As a puppeteer explained during fieldwork, Disney reverted to a combination of puppets and digital imagery after producing several full-digital films "because puppets are so real" (field notes).

A second reason some puppeteers prefer screen work is that screen productions can often afford to invest in resources too costly for independent puppeteers. One stage and screen puppeteer explained: "Particularly if
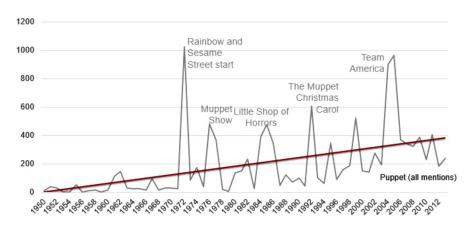
Figure 1. Number of Puppet-Related Roles Credited in IMDb, 1950 to 2013
Note: A search of IMDb credits for the years 1950 to 2013 generated 12,472 credited roles that included the term *puppet*. The most common such roles were *puppeteer* (65 percent) and *puppet maker* (23 percent), followed by *lead puppeteer* (6 percent), *assistant puppeteer* (6 percent), and *puppet maintenance* (1 percent). Roles are credited the year a production is completed. The film titles provide context for peak years. The red line is a trend line calculated over the entire period.

it's a TV show or a film . . . you're just never going to have those resources on your own. The money that's poured in, the skill—everyone from the cameramen to the directors, the producers—like, there's no way to harness that on your own. And so that makes you work at a certain level, which you may not work at just doing your own piece" (ST/SC-6). Another puppeteer explained that screen work enables a puppeteer to "play around" with resources not available in stage work (ST/SC-4). Screen work often means more employment stability and more resources with which to perform.

Finally, some puppeteers are inspired to work in screen contexts by television shows they saw in their youth. For many, screen work means following in the footsteps of such well-known puppeteers as Frank Oz (whose characters included Miss Piggy on *The Muppets* and Cookie Monster on *Sesame Street*) and Shari Lewis (whose Lamb Chop character aired on the NBS network's morning television). One puppeteer, asked whether she enjoyed her work as a Muppet performer, looked surprised and responded: "Who wouldn't?" She added that it was an opportunity to honor the legacy of Jim Henson, and most puppeteers of her generation

would feel the same way (field notes). For some, television puppetry is an inspiration to become a puppeteer; for many, it generates a drive to pursue screen work in particular.

In contrast, opportunities on stage have slowly declined in the past few decades. Securing funding for stage puppetry has always been difficult, and recent reductions in public and private performing-arts funding have made it especially challenging. One interviewee recalled a conversation with seasoned puppeteers who were struggling to find performance venues: "They talk about that: how they're filling in the gaps, and how those gaps are larger, and how they used to do three to five shows a week and now they do one a month" (ST-10). "It's tougher today; it's really tougher today," an experienced puppeteer concurred, recalling earlier stages of her career (ST-15). Another puppeteer summarized the economic challenge of stage performance: "Like, you do a show in [a] theater, and you're going to lose money. Period. You just are. I mean, who makes money?" (ST/SC-8).

Funding challenges are due to cutbacks in work opportunities at public venues and limited private funding. Puppeteers have traditionally worked in schools, libraries, and museums, but public funding for puppetry

in these venues has become scarce. A close observer noted in 1969 that "it has not been difficult . . . for [puppetry] troupes to gain support from agencies that wished to . . . promote public relations, or disseminate information through puppet shows" (McPharlin and McPharlin 1969:373); the same cannot be said today. One puppeteer described the effect of the 2008 financial crisis on puppet shows in schools and libraries: "We had all of our work drop off because schools were—they couldn't hire a kindergarten teacher; they certainly couldn't have a puppet-show assembly. The schools just—they did not have an extra penny" (ST-23).

Another challenge to stage puppetry is the shortage of resources—public and private—dedicated to funding puppetry. The Jim Henson Foundation supports puppeteers, but between 2003 and 2018 was only able, on average, to allocate a total of $120,000 per year to around 30 projects (Foundation archives). Many puppeteers find it difficult to convince private funders of the arts in general (as opposed to puppetry in particular) that their work merits support or is even an art form. One puppeteer described having trouble funding shows designed for family audiences because "shows for families are not seen as high of an art form as shows for adults" (ST-10). For all these reasons, the majority of puppeteers we met reported fewer and less stable work opportunities on stage than on screen. Yet in moving from stage to screen, puppeteers not only changed contexts, they also encountered very different relational configurations.

AUDIENCE ENGAGEMENT AND REORDERING

For puppeteers on both stage and screen, the most important sign of expertise is engaging the audience, regardless of whether the audience is directly present or not. When asked why he admired a particular puppeteer, an interviewee replied: "He's really good. He really knows how . . . to captivate an audience" (ST-4). Another puppeteer elaborated: "What makes [good] puppetry special is it's

one of the few performance arts that calls to action the audience. . . . If it's done well, an audience really responds to it" (ST/SC-30). A third puppeteer who had performed in multiple contexts described working in screen: "You're still performing for an audience; you're not getting the immediate response. . . . I mean, your intention is still to draw that response from the audience. You're just not hearing it" (ST-7). All puppeteers we interviewed described engaging the audience as their ultimate goal. One puppeteer who had worked in stage and screen characterized this goal as hoping to take audience members on "a ride" (ST/SC-21).

In parallel, many puppeteers described audience members' disengagement as evidence of bad puppetry or lack of expertise. One commented on performances in which puppeteers were apparently not "thinking about the audience's experience": "I don't want them to feel like they have no clue as to what's happening or what they just watched. . . . I feel like I've seen plenty of things where it just seems . . . you're not taking care of the audience in thinking about their experience. You don't want your audience to feel that way" (ST-6). Other puppeteers expressed similar views; one even criticized instances of his own "bad" puppetry in terms of audience reactions: "It's just something that doesn't entertain, or bores, or makes no sense. Or it alienates the audience in some way, but not in a good way" (ST/SC-6). Another instance of perceived audience disengagement was recounted by a puppeteer who had been hired to mount a show by someone he considered to be a "bad" performer:

> This number we did last year, it's a beautiful, crazy, wonderful number with like 30 puppets in three minutes, you know? And there is this ending. Anybody in show business would either shut the curtain, turn off the lights, do something right then, and that audience would jump to their feet. . . . So he, at that point, just has this weird character kind of wander on the stage, and then wander back, and just starts pacing . . . enough for the audience to go, "Is it over?" . . . He doesn't care if you jump to your feet or not, you

know? And because I've been in the business too long, I *do* care. . . . He's like, "Oh, do you think people will have a problem with that?" . . . I said, "People aren't going to applaud as loud at the end of this. . . . And if that's what you want to do, then you've made a bad choice." (ST/SC-11)

In short, the audience's engagement is a central concern of puppeteers on both stage and screen: their expertise rests, in part, on getting audience members to react to the performance. Yet although stage and screen puppeteers share the same desire to engage others, the contexts in which they attempt to do so greatly vary. These contexts shape the relative attention puppeteers pay to distinct types of audiences.

Stage Work as a Dialogue with Spectators

On stage, puppeteers' attention is mainly focused on catering to spectators' needs. Describing stage work, puppeteers often reported not merely engaging an audience but deeply "connecting with the [live] audience" as a central feature of their work and a source of pride and enjoyment. One puppeteer described interaction with spectators as "instant gratification" (ST/SC-4). Another said that, for her, performance is not only about the task of performing but also about "dialogue" with the audience. "I have things I want to say to audiences. Or, if I'm dealing with kids, I want to do more than entertain them. Personally, the personal motivation is to get that moment" (ST-4). Connection with spectators was repeatedly described as a central aspect of stage work. When asked what he enjoyed about his work, a highly experienced puppeteer answered that connecting with the audience was exhilarating: "When you get it all right, and you get it in front of an audience, and you feel their reaction, you see it or hear it or feel it. And of course, that is a really exhilarating thing . . . to have that dialogue with the audience, to feel the audience giving [a] reaction back that stimulates [one] even further in [a] character" (ST/SC-18).

On stage, puppeteers emphasized, dialogue with spectators is key to producing a successful performance. During any stage performance, puppeteers attend to spectators' reactions, whether laughter, silences, or tears, to assess the effect of the performance. One evening, introducing a show that was part of a "puppet slam"—a series of short performances, some still in the making—the master of ceremonies encouraged spectators to make their emotions evident to the performer and not to refrain from reacting. "We love to hear from you, this is a live performance," she added, urging the audience to "laugh out loud or react" vocally. Another puppeteer described audience reactions that had assured her she had successfully conveyed what she intended:

> We worked on a show that was based on the true story of . . . people who survived the Holocaust. . . . And I remember getting to intermission, and you could hear a pin drop. And I [first] remember thinking, "Oh, my god, they're either asleep or they hate it." Then everybody left without speaking. And it was like they haven't taken a breath yet. And it was the first time in a really long time that I felt like, "Oh, we've got them. We've got them." And not only are they into the story, but they're accepting these puppets as—like they've bought into these puppets. (ST/SC-4)

Spectators' reactions to a performance often result in puppeteers drastically rethinking certain stage decisions. One puppeteer working on stage described a disappointing spectator reaction in terms that make clear how much can be at stake. He had stationed himself in the audience during a show presented by the company he directed: "And so I'm sitting in the audience opening night, excited for their puppet to be—because I think this is a gorgeous puppet. And I've been seeing it for eight weeks in rehearsals, and it's finally moving very well, and beautiful. And so there's this moment where they sort of snuck out, and then they're revealed all of a sudden. And it's a beautiful reveal." He then shared his shock after realizing that what he had thought

of as a "beautiful reveal" seemed to leave audience members quite unconvinced: "And I was expecting to hear the audience [gasp]. I'm sitting right in the middle of everyone; I was expecting this blend of . . . amazement and beauty. And what I felt around me was 'Hmmm.' Like a complete, like, 'What's going on here?' And I nearly died" (ST/SC-7). He added: "You can create in your mind and envision the way it's going to be, but the audience is your ultimate test for anything." In other words, as another puppeteer noted, "You can watch it a million times, but you only really know if it works when you put it in front of an audience" (ST/SC-20).

Interviewees often noted the absence of a dialogue with spectators in screen work versus stage work. One stage puppeteer described how screen work eliminates the connection with spectators: "If you record something, then you don't have that [audience] interaction. You don't have that moment that you're all in the same room, and laughing at the same joke, and seeing it in other people's eyes" (ST-23). Another puppeteer concurred that on screen: "There's never that feeling that you're connecting with the audience the way you are, obviously, when you're in front of an audience" (ST/SC-23). A third puppeteer described finding that connections on stage were more meaningful to her than the few spectator-like connections she could find on screen: "I did TV puppetry for a couple of years, and there was no children on set, and I'm just making, like, 40-year-old cameramen laugh. And it's just—just wanted that live interaction. And to just—that immediate sense that there is a connection happening was really important for me" (ST/SC-32). On screen, unable to cater directly to the needs of spectators, most puppeteers focused their attention on alternative audiences.

Focusing on Producers, Directors, and Co-workers in Screen Work

Producers, directors, and co-workers often become screen puppeteers more salient audience. One puppeteer explained the importance of adhering to these people's decisions on set: "Following directions . . . [is] absolutely critical to a production" on screen (ST/SC-9). Another asserted that any screen performance is heavily dependent on the director's needs: "Every choice you make as a [screen] puppeteer is based on what the director [wants] and the camera angle, everything—which is always different, right?" (ST/SC-6). Some described the production process as somewhat collaborative. As one puppeteer explained: "If they know [the puppet] is going to be there for a while, then they'll work with us [puppeteers]" (SC-7). Another added: "You can give them ideas, they're going to love that" (ST/SC-25). Yet adjusting to a production's needs generally meant screen puppeteers worked to fit into a broad configuration of work. For instance, one puppeteer described constant coordination with numerous other participants involved in a production: "So there's all these different departments. There's set design. There's a production designer. There's the director. There's the workshop. You know, they obviously know what they're doing, but there is coordination that happens between myself, the workshop, and the production itself" (SC-11).

Many puppeteers conflated screen work with an obligation to prioritize other people's needs on set. As one puppeteer explained about television work, "There's a lot of people watching you, and a little bit of pressure to make sure you do good—a lot of pressure, sometimes." She continued: "When you screw up, you're wasting 100 people's time. And that feels really terrible" (ST/SC-14). This explains why puppeteers often described having to come ready to accommodate to the constraints imposed by a production. For example, one puppeteer described the equipment he brought on set to make sure he could perform: "When you have to fly in to do something, when you're called to set . . . usually it's uncomfortable. You're right out of sight of [the] shot, or you have to reach in, and then you have to fold your body, no matter who you are, into something small and insignificant, and hide. So [you need] kneepads . . . [and] a back brace" (SC-13). Anchoring their

work in relation to others on set became the norm for puppeteers on screen.

At the same time, some puppeteers struggled to make sense of decisions made on set that were at odds with their own perceptions of what spectators deserved. Certain pre-established decisions—about a puppet's physique, for example—struck puppeteers as breaches of the puppet–spectator relationship. One screen puppeteer described a production crew's modification of a puppet between two episodes of a TV show: eyeballs had replaced the puppet's button eyes. The puppeteer who performed the character suggested an amendment to the story line—"Let's have him go get puppet plastic surgery!"—to account for the change and to engage spectators with this new reality. Instead, the production opted to provide spectators no explanation. "And not only that, but they aired the episodes out of order. So, you know, one episode he had buttons and the next he had blinking eyes" (SC-12). This puppeteer was worried about the spectators' reaction, but the producers' needs superseded it.

It is important to acknowledge that large stage performances also oblige puppeteers to adjust to other peoples' needs and attend to the reactions of producers, directors, and fellow performers. But when puppeteers mentioned collaboration on stage, they associated adjusting to others with shared and explicit concern for the spectators' experience. For instance, one stage puppeteer, describing how a team of puppeteers responded to a performance mishap, made it clear that, even when coordination was needed, spectators' feelings were at the forefront of her mind: "You know, sometimes your puppet fell on the floor and you, like, didn't realize it. And so, like, everyone has to either, like, decide whether you're going to, like, cut to the next [stage] shot or, like, wait to find it. . . . So you're always sort of making accommodation . . . working with so many people. . . . [But] I would say the audience never can feel [that something went wrong] from us" (ST-11).

In summary, in the screen work context, adjusting to the needs of producers, directors, and co-workers became a repeated focus of puppeteers; because spectators were not directly present, their needs often got eclipsed by those of others. This audience reordering, we argue, proved key in informing puppeteers' changing views of expertise. Before describing this change, we analyze how the shift in work context entails new patterns of work that reinforce puppeteers' perceptions of one audience's saliency over the others, and ultimately helps explain their evolving views of expertise.

REINFORCING WORK PATTERNS

The reordering of audiences from stage to screen required puppeteers to cater to a newly salient set of needs. But this reordering also had implications for puppeteers' work patterns; indeed, puppeteers reported experiencing limited feedback and experimentation for screen versus stage work.

Limited Feedback on Screen versus Stage

Puppeteers who had worked on both stage and screen repeatedly mentioned the lack of direct and immediate feedback from spectators during screen performances. One puppeteer who characterized spectator feedback as something she could "feel" and that improved her performance, said that on screen, "you never know if the audience is buying it" (ST/SC-4). This sentiment is nothing new. In the late 1960s, a puppeteer remarked that "a show presented directly to an audience has a theatrical impact which many showmen find more satisfactory than television or films" (McPharlin and McPharlin 1969:557). More recently, another puppeteer noted that the delayed feedback from screen spectators was of limited value in adjusting her performance. She enjoyed film work less because "instead of the audience feeling and responding, the alternative is ratings—and ratings don't tell you a lot of things. What did they like? What not?" (ST/SC-5). The absence of spectators on most screen sets meant puppeteers had few direct and immediate reactions to rely on to assess the effect of their performance.

Puppeteers found the absence of spectator feedback salient despite the presence of a production crew who, in theory, could help them assess whether their performance would be engaging to an audience. One seasoned puppeteer explained that on-set interactions rarely compensated for the absence of the ultimate audience's reactions and added: "Sometimes you'll get reaction from the studio people around you, which is wonderful when that happens. But your focus is just very technical" (ST/SC-18). Occasionally puppeteers only realized later, watching their own performance on screen, that they had not performed as well as they had thought. One puppeteer described her reaction to a film of her performance: "You look at a performance and you go, 'If I just—wow, why did they use that take? Wow.' You can pretty much drive yourself crazy, so pretty much everything— That could have been funnier. That eye line could have been nailed a little better. Oh, I was late on that gesture" (SC-10).

Some productions had feedback systems in place and even puppet "leads" or "captains" to help hired puppeteers. One screen puppeteer recounted receiving notes on his performance on set: "As far as, like, voice and look and feel and, you know, stuff . . . there's a show-quality person that . . . comes up and watches and will give notes" (SC-7). But most puppeteers described receiving almost no feedback on screen, and at least one puppeteer characterized screen work as performed for an audience of one: "I can be the audience as well as the performer, and I can almost direct the performance while I'm doing it. . . . It's like a [solo] feedback loop" (SC-14). The relational configuration that characterizes screen work (particularly its unique audience reordering) proved consequential for puppeteers' experience of their work.

Experimenting on Stage versus Delivering on Cue on Screen

Screen work also offers fewer opportunities than does stage work to experiment while performing. Traditionally, stage puppeteers will "try out" their performances by presenting them to spectators. A puppeteer who often performed on cruise ships noted that such gigs could "improve your performance" (ST/SC-18) because it allowed him to test out acts that might appeal to adults and children, and see how each group reacted. Perhaps the most extreme venue for experimentation is a puppet slam, a type of show specifically designed to test audience response. Puppeteers working on stage have long been accustomed to experimenting with spectators to make a performance better. One puppeteer working on a miniature-puppetry project described the process of adjusting a performance: "Go test it in the universe and come back and tell us your thoughts. Go and do it in the street, in the lobby of a place no one asked you to do it" (ST/SC-12). "Trying it out" does not preclude practicing beforehand, but the best way to build expertise on stage is the act of performing itself.

Describing his work process on stage, one puppeteer attributed primary value to spectator interaction in honing his expertise: "Everything I do, you know, I say . . . 'I'm going to try this joke a little differently,' or 'I'm going to change, sort of, when this puppet comes in,' and I see how the audience reacts. And I say, 'Oh, I want to keep that' or 'I'm going to lose that.' And, you know, as the show keeps going, I'll take out things that I think, you know, even if I practice a lot, become too technically difficult to keep doing" (ST-7). Thus, spectators' feedback enables puppeteers to constantly build expertise.

Screen work, in contrast, rarely allows experimentation, in part because of the limited number of possible "takes." Describing screen work, one puppeteer said, "You can have fun, but you . . . better deliver" (ST/SC-24). Many others remarked on the importance of getting their performances right the first time: "There's no safety net except for your own experience and the people around you. . . . On a lot of these productions, you just get one or two takes . . . and they're going to buy what they buy. And you're going to have to live with it. . . . It forces you to just focus like a

laser" (ST/SC-6). One trick puppeteers have devised is to curse on screen occasionally to force a reshoot since they do not have the luxury of experimenting in real time.

Participating in and revisiting performance decisions is made difficult on screen by the sheer number of people involved in a production and the often-fleeting presence of puppeteers (e.g., a single, brief monster scene in a much larger production, such as in *Alien: Resurrection*). One screen puppeteer recalled that Jim Henson, in his early years, had encouraged anyone on set to contribute ideas, but the multiplicity of people involved made that dynamic difficult today: "[Jim Henson would say] 'I don't care where it comes from, if you have an idea, speak up. And if that's a good idea, we're going to use it. . . . Speak up.' And it's not so much today, because everybody, you know—there's so many cooks in the kitchen" (SC-13). Disney's firing of the puppeteer who had performed Kermit the Frog for more than 25 years attests to puppeteers' difficulty in having a voice in large screen productions (Schmidt 2017). Disney cited the puppeteer's "unacceptable business conduct" (Deb and Haigney 2018), but many in the puppetry community attributed the firing to the puppeteer's noncompliance with the production managers' needs (field notes).

A field exchange that compared the two modes of work with different genres of music captures the difference between stage and screen work: "It's like in music. . . . Classical singers develop a specific range, with a professor; then they do what's in their range, and then keep pushing themselves for the next time. An improv jazz singer knows it all, in and out, and then will push it in front of you [i.e., a spectator]" (field notes). Like improv performers, who rely heavily on interaction with their spectators to grow, stage puppeteers view spectator interaction as a key building block of their expertise; in comparison, classical singers and screen puppeteers often rely on their focused preparation to ensure a quality performance. Another puppeteer, describing puppeteers whose work on screen he admired, spoke highly of their ability to figure out

ahead of time what would have an effect: "I call them puppet scientists, because they don't ever seem to make a bad choice. They even seem to be able to calculate what's needed for this, and then they spit it out and it's really funny" (SC-14). Puppeteers' views on working on screen echoed others who entered the film industry before them—such as Hollywood music composers in the 1960s and 1970s who learned that "innovation is risky, since there are enough gambles in the business of film without handing over the dice" to co-workers (Faulkner 1983:123). Just like sought-after film composers learned to follow directors' and producers' guidelines, the most successful screen puppeteers have learned not to roll the dice on set and to deliver on cue.

Overall, the reordering of puppeteers' audience-types and the subsequent shift in work patterns led most puppeteers to speak of expertise in contrasted ways on stage and on screen. As detailed next, on stage they saw their expertise as being mainly about achieving believability, whereas on screen, their views of expertise centered around achieving task mastery.

CONTRASTED VIEWS OF EXPERTISE

Expertise on Stage as Achieving Believability

Puppeteers on stage mostly viewed expertise as their ability to render a puppet "believable" and to feel spectators willingly engage with the puppet despite its inanimate nature. Echoing Coleridge's notion of the "willing suspension of disbelief," whereby readers fully embrace a writer's imagination, puppeteers invite spectators to fully believe in an inanimate object's living character.[6] Stage work allows puppeteers to connect with their spectators and test whether they have reached their goal of believability. Feeling their spectators' suspension of disbelief is the ultimate manifestation of expertise. When praising the stage performance of a fellow puppeteer, for instance, one interviewee explained, "I don't

know if I call it a skill so much as a quality. . . . You are part of a whole energy. Even if you are a solo performer in a theatrical setting, what you are doing is reliant upon the audience's suspension of disbelief. They have to want to . . . believe that that thing that you are manipulating has thought and expression" (ST/SC-21).

Another puppeteer commenting on a highly regarded stage show remarked, "This puppet, who had been so magnificently alive one moment, was completely motionless and dead the next. The moment was absolutely striking. I have never seen a human actor die on stage without breaking my suspension of disbelief to some degree. There was no suspension of disbelief necessary [here], however, to believe that there was no life left in this puppet" (Hunter 2006:16). In this example, the puppet was no longer an object, and its living existence became even more believable than that of a human. Likewise, a third puppeteer evoked the "veil" or "imaginary, invisible curtain, which separates the audience from the stage"—a veil that disappears as the expert puppeteer performs. Amazed by the quality of a stage performance, he noted, "The suspension of disbelief is encountered here as Pinocchio, a mere wooden marionette, comes to life. This is an occurrence that astonishes even Gepetto himself . . . we as puppeteers are masters of transcending the veil" (Carranza 2003:13). Such a suspension of disbelief "points to something more tense, and intentional, than simple belief" (Sussman 2001:73) and many puppeteers tried to capture this intensity by evoking the degree of "believability" of a performance when describing expertise on stage.

Importantly, believability can generally only be assessed in the moment and based on spectators' reactions. Granted, puppeteers can watch a recorded performance and hypothesize on its believability, but spectators' reactions are necessary to really know how believable an act can be. As one puppeteer noted, "They [spectators] see us doing the puppet and they *still* believe in the puppet's agency. And it's that wonderful dichotomy of,

yes, it's a puppet, but it's still real, and I'm still reacting to it, and I'm still believing in it" (ST-23). Children are a particularly unforgiving audience, so puppeteers view them as a good test of a show's believability. Describing what she considered to be a bad performance, a puppeteer remarked, "People do [bad shows]. They throw puppets on and go out to a library and do a show. But they learn the hard way that it takes a while and that the audience gets up and leaves. And even if you're doing kids, they'll sit there because they're polite. But then they start screaming, yelling, and walking out of the room, you know?" (ST/SC-14).

By contrast, when puppeteers were able to render a puppet believable to their spectators (and particularly an audience of children), they felt validation of their expertise. Another interviewee explained, "Seeing kids in a live theater with a puppet is so wonderful . . . of course the better you are at the marionette, probably the more alive it will look . . . the more believable it will be . . . there's something really great about experiencing that with kids" (ST/SC-16). The assumption is that children will not lie about a show's believability. As another puppeteer discussing children shows summed it up, "A lot of puppetry is [about] honesty . . . [and it] starts in believability" (ST/SC-13). When spectators are eclipsed by other audiences (e.g., co-workers on a screen set), puppeteers' ability to attend to spectators' needs is reduced, and the believability test becomes much harder to deploy as a gauge of expertise.

This is not to say that all screen work prevents puppeteers from achieving believability; screen puppeteers who seek direct and immediate relations with spectators can build on these experiences to develop their expertise. For instance, a puppeteer recalled moments on screen when he could mimic the "uncanny" interactions he had as a kid with his parents' friends, when walking around with Kermit nestled in his arm:

I would make a point of just having him look around. . . . I would keep him alive. . . . My parents' friends were definitely, like, "What

are you doing? He seems so real." And I'm like, "He is real." . . . [Later in life] When we were shooting public access in New York, I could talk to addicts on the street in Washington Square Park, and I could talk to Wall Street executives downtown, and they all stopped and talked to Greg [his new puppet]. I mean with maybe one or two very rare exceptions, people locked eyes with the puppet and just talked to him. . . . And it's like amazing. (SC-12)

Other puppeteers who combined stage and screen work talked about proactively seeking spectator interactions to maintain a sense of what was believable. However, such moments of connection between the puppeteer and spectators proved rare for screen performers. Therefore, many puppeteers came to develop an alternative understanding of their expertise when working in screen contexts.

Expertise on Screen as Achieving Task Mastery

Given their desire to engage spectators, the absence of a dialogue with their audience, and more attention paid to producers, directors, and co-workers' needs, puppeteers described it as a condition of success to approach a screen performance knowing exactly how they would perform. Task mastery and its related preparation de facto *became* equated with expertise on screen.

Puppeteers described task mastery on screen as, first, the art of preparing a puppet's pre-established character. Although they mentioned character work as a feature of both stage and screen, puppeteers especially stated it as a central preoccupation when describing screen work. One screen puppeteer reported a mentor's advice about practicing a character: "When you're at home, just be that character, you know. While you're making something, talk about [it]—if you're making a recipe, just be that character making that recipe, you know? And just constantly, constantly, constantly do it" (SC-11). Another puppeteer described character work as the performer's

homework: "It's homework. You do the homework. You know, you really do take the time to prepare" (ST/SC-25). All puppeteers work on developing their puppet's character, but, on screen, character work usually needs to be nailed before the performance. On stage, by contrast, a puppeteer can more easily develop a character during a show or over the course of several performances.

On screen, showcasing and honing expertise is much less about trying things with spectators and much more about mastering specific knowledge *before* a performance. Seasoned stage puppeteers described developing their puppetry knowledge on the job, and performing as an exercise of "never-ending learning." As one stage puppeteer put it, "Puppetry is . . . one of the few industries that is a more successful form of training through what I refer to as a living curriculum. . . . You learn by doing it" (ST-3). However, screen puppeteers have less opportunity to do so on the job. One screen puppeteer emphasized training prior to performing, rehearsing alone, and taking classes: "I'm a huge believer in taking class . . . an improv class, a singing class. I think it's super-important. . . . There's always room for improvement for all of us, all the time, so I'm a huge believer in class" (SC-10).

Yet learning largely happened separate from the screen performance. Just as stage puppeteers recommended trying out an act with spectators, screen puppeteers advised others to "practice [on your own] on camera as much as you can" (SC-13). One elaborated: "A lot of times you don't get the luxury of rehearsal in film and TV. It's set the camera and go. So you rely on those experiences that only live theater can really teach you, where you get a chance to hone things like that. And then you bring that to the set. And then, of course, the faster you can work, the happier people are" (ST/SC-22). Expertise involved instantly delivering the character one was asked to perform.

One puppeteer summarized this screen culture by describing screen performance as a "military operation" in which "you have to be aware and on your game" (SC-13). Another

confirmed the requirement to be ready for anything when performing on screen: "So any kind of theatrical expression, or movement expression, or puppetry style, you should at least familiarize yourself with, so that when you're called on in those moments, it's *not* a learning curve. It's not [that] you have to figure it out in order to get the moment done; it's [that] you have to figure out how to best apply the knowledge that you already have to achieve the moment" (ST/SC-21). A third puppeteer characterized screen work as "engineering" and spoke about the need to "hit every note" when performing in that context: "Yeah. I mean some people, like, really want to be a TV puppeteer. There's nothing wrong with that. I'm just saying personally, for me [less so] . . . I always look back to instrumental training when I think about puppetry. It's the same thing as somebody who plays an instrument. Like is a good guitar player somebody who hits every note?" (ST-13). In his view, screen work equated with producing the perfect note each time. This analogy is not merely hypothetical; it captures the ethos of studio musicians who are said to be able "to play anything at sight, in any style, to follow any conductor no matter his abilities, and do this efficiently, with precise intonation, phrasing, and attack" (Faulkner 1971:7). This understanding of expertise as task mastery stands in stark contrast to the idea of achieving believability that stage puppeteers described.

These two views of expertise are idealtypes that anchor an obviously more complex and layered understanding of expertise. In the same way that not all stage work is about believability, not all screen work is about task mastery. Several screen puppeteers, particularly those working in Jim Henson's lineage, were highly concerned about their ability to render a character believable.[7] Nonetheless, most screen puppeteers emphasized the need for task mastery more than believability. For example, a longtime TV puppeteer said, "I appreciate the history of puppetry and what it means to a lot of people, it's important to know, and to understand, and to have a feeling for that kind of craftsmanship, and love

for that art, whether you feel you are fully invested or not" (SC-18). But he then added that others like him (who did TV work) did not want as much to become "characters" as to work with special effects people and perform tasks that made a scene work. Another puppeteer described the problem with specializing in one work context: "The difficulty is that, whatever you specialize in [stage or screen work], as you're practicing the other thing, it short-circuits what you already know" (ST/SC-13). Over time, resisting such a short-circuiting and the redefinition of one's (even initially) more complex and layered view of expertise proved challenging.

POSSIBLE ALTERNATIVE EXPLANATION

We have argued that an audience reordering linked to a shift in work contexts set in motion the dynamics leading puppeteers to develop contrasted views of expertise. It is important to add that puppeteers on stage and screen emphasized mostly similar manipulation techniques as part of their specialized knowledge. Thus, a possible alternative explanation that puppeteers relied on distinct sets of skills across contexts to develop different understandings of expertise seems unlikely.

Indeed, many puppeteers pointed to overlapping techniques on stage and screen—that it is imperative to pay attention to a puppet, to make a puppet look like it is breathing, and to attend to the laws of gravity that make a puppet's movements resemble a human's. They reported practicing these basic skills facing a mirror, or filming themselves, to perfect their movements. Such skills are considered "Puppetry 101"; lacking them means a performance will "look amateurish" (SC-1). As another puppeteer put it: "The long and the short of it is . . . there is definitely some basic elements of puppetry manipulation . . . that can be learned and should be learned" (ST/SC-6). Before mastering these skills, aspiring puppeteers remain amateurs.

A first key technique on both stage and screen is to draw spectators' attention to the

puppet rather than the performer. When learning how to draw spectators' attention to the puppet during a workshop, one co-author was told to "look at *your* puppet when it is talking, and to the *other* puppet that is talking when it isn't yours" (field notes). Echoing these instructions, one stage puppeteer, describing a show she was directing, explained that the puppeteers needed to keep their eyes on the puppet to draw spectators in: "There's a three-person team manipulating one figure. The focus of those three people is on that puppet, because that helps the audience—that automatically takes the audience focus to where it should be, which is on the puppet" (ST-6).

To further focus spectators' attention, puppeteers also try to ensure a puppet's eye contact with spectators. As another puppeteer explained: "If you have a decent eye line [level of the eyes], people believe that you're thinking about that thing. But if that eye line is off, you've broken your relationship with the audience. They don't believe in you anymore" (SC-4). In other words, the puppeteer must maintain the audience's focus on the puppet to sustain the relationship between puppet and audience. One interviewee compared the behavior of puppeteers and actors to help illustrate where the ideal focus should be: "The point is [for] the audience [to] focus on the puppet. And so some great actors make terrible puppeteers, because they can't direct the audience's attention onto the puppet. . . . They want people to look at *them*, whereas often really good puppeteers will be less attention-seeking because they want to project it through this inanimate object" (ST-12).

A second important technique on stage and screen is to make a puppet look as if it is breathing. Part of the "magic" of puppetry entails mimicking life, and breath in particular, when manipulating an inanimate object. As a puppeteer noted, "You know, there will always be a place for puppets because people respond to puppets, you know? There's something about it that's just, you know, it's magical. Something that doesn't exist suddenly lives and breathes before you" (ST/SC-16). Puppeteers need to pay attention to

the inhales and exhales of their character, the exhaustion that might come from their character running on stage, and much more.

Most puppeteers try to translate their own breath into the puppet's. Only then are they truly "in service of the puppet." As one renowned puppeteer summarized, "Breath is how we experience the world . . . [as puppeteers] we allow our breath to go through our hands, through the puppet, and out into the world. . . . We meet our audience there" (Bass 2014). To "establish a puppet's breath" is critical and "once you've established that it has breath and it's alive and living, the puppeteer [can] play with it breathing very gently and delicately" (ST-6). The breathing technique requires much practice and rehearsing, a bit like playing a musical instrument: "If someone hands you a saxophone, sure you can make noise, but can you make music? . . . Getting down to the technique and the craft, and making this believable character breathe and live, make people laugh, etc. it takes some time" (ST/SC-24). During a "puppet improv" class that one co-author participated in, the instructor (a stage and screen performer) taught students one way to develop their breathing technique:

> She [the instructor] insists on the fact that to make it alive you need the breath. . . . She explains that we need to breathe, inspire when you see someone, expire when you leave. We do that first with our bodies only. We then pick up a pair of ping-pong balls connected with a band. We slip them around our fingers for the balls to rest on the top of our hand of choice. We now have a puppet! The balls are our puppet's eyes. Our hands can now open, thumb towards the ground, to be the mouth. We repeat the breathing exercise with our newly created eyes and mouth. At each inhale, I feel my chest synching with the lift of my elbow and the drop of my thumb. (field notes)

A third critical technique across work contexts is to attend to the laws of gravity. As early as 1810, Kleist discussed this attention

to gravity in his seminal essay on puppet theater. He reports quizzing a puppetry aficionado (and a dancer) on how puppets worked: "Every movement, he said, had a center of gravity; it sufficed if this, inside the figure, were controlled; the limbs, which were nothing but pendula, followed without further interference, mechanically of their own accord" (Kleist 2004:411–12). Continuing his response, the aficionado explained how gravity could be achieved. Kleist recalled: "[it] was something very mysterious. For it was nothing other than *the way of the dancer's soul*; and he doubted whether it could be discovered otherwise than by the operator's putting himself into the center of gravity of the marionette." Still today, puppeteers emphasize the need to pay attention to gravity and make a puppet "walk across the floor in a way so its feet aren't flying or dragging" (ST/SC-14).

Learning to respect gravity often starts with simple manipulation tasks that help embody what gravity feels like. For instance, during the Eugene O'Neil National Puppetry conference, which includes skill-development workshops for puppeteers, one co-author observed students in such a workshop walking around a park while balancing apples at the end of a string. When inquiring about the exercise's goal, an experienced puppeteer explained that feeling the weight of an apple was the first step to learning gravity. Another respected puppeteer described a much more elaborate case of attention to gravity when detailing the somersaults and back handsprings of a marionette he had manipulated for a film. He noted that it "wasn't easy" to "keep the puppet balanced and everything." Yet such efforts to abide by the laws of gravity paid off. Later commenting on the result of his performance, he said: "when the film was shown, I had a friend . . . [who] told me that they watched that film and they said . . . 'a marionette can't do that'" (ST/SC-18)—a reaction the puppeteer coded as a compliment and indicative of his mastery of attending to the laws of gravity.

Above and beyond these basic skills, puppeteers learn specialized techniques of the particular style of puppetry they are performing.

Each style has its challenges: marionettes are considered difficult because of the delicacy needed to manipulate a puppet using strings. In hand and rod puppetry, the style used in *The Muppets*, one must manipulate the puppet's mouth and move the rods at the same time. In *bunraku*, a traditional Japanese style, three puppeteers move each puppet, controlling the head and face, arms and hands, and legs and feet, respectively; this means each puppeteer needs to learn the exact movement associated with a body-wide position and coordinate with the other puppeteers to produce it. Each type of puppetry thus presents unique challenges, and becoming an expert puppeteer means learning the techniques of the style needed in a given performance.

Despite the consistently-voiced need to develop similar basic and specialized techniques across stage and screen work, puppeteers engaging in screen work do need to pick up at least one added skill: "monitor work." When filmed, puppeteers need to view a mirror image of their own work on a monitor while performing for a camera. Puppeteers can learn this technique in workshops. For instance, when we interviewed a puppeteer at the theater he ran, he encouraged us to stay that evening to attend a weekly "monitor" training workshop, geared toward puppeteers who had never done screen work. "It will be fun and easy, a few sessions should be enough," he added encouragingly.

During the Puppeteers of America annual conference, intensive workshops to learn manipulation skills for camera puppetry are routinely offered. In one such training (attended by a co-author), most participants were able in just a few hours to perform a short routine while viewing their puppet on a monitor. Some puppeteers required more time to master this technique, but others saw it as intuitive. A puppeteer who started his career on screen noted how "great" monitor work could be as a means to see his own performance, "I had only worked on puppetry on a TV camera, the puppet frame, I mean the TV frame, was my stage. And I think that was important because in doing television

Table 4. Puppeteers' Audience-Type, Work Patterns, and Views of Expertise between Stage and Screen Contexts

	Typical Stage Context	Typical Screen Context
Audience-Type Saliency (from most to least salient)	Spectators Co-performers (often puppeteers) Technical crew (e.g., lights, sound) Venue directors and bookers	Producers and directors Co-workers (often non-puppeteers) Lead puppeteers or captains (when present) Spectators once the performance is released
Reinforcing Work Patterns		
Feedback	Spectators' interactions	Limited feedback
Perceived expectations	Experimenting	Delivering on cue
Puppeteers' Views of Expertise	Expertise as achieving believability	Expertise as achieving technical mastery

puppetry, it was a way of thinking . . . how a puppet relates to the screen. . . . And it's really great because you look at monitors and [see] what they reflect" (SC-18). Monitor work was a specific technique associated with working on screen; using it was not seen as any different from using other specialized techniques required for other styles of puppetry.

In summary, stage and screen work require mostly overlapping techniques. Divergent skills across stage and screen can thus hardly account for puppeteers' contrasted views of their own expertise. Instead, the audience reordering between stage and screen, and its implications for experts' work patterns, seems a much more likely explanation for this contrast. Table 4 summarizes our findings.

DISCUSSION

As individuals increasingly change work contexts and even freelance for multiple organizations, rather than remaining in one context (Kalleberg 2011; Tolbert 1996), their expertise is more frequently scrutinized and sought after by employers. Yet the nature of expertise itself should not be taken for granted: it can morph as people move from one context to another and experience audience reorderings. By examining what happens when a relation between puppeteers and spectators gets eclipsed by relations with other audiences

such as producers, directors, and co-workers, we show that this shift leads puppeteers to rethink the very nature of their expertise and enact it differently. More specifically, over the past few decades, the audience reordering introduced by screen work has challenged puppeteers' view of their expertise as achieving believability. Without the ability to attend to spectator reactions and amend their efforts accordingly, puppeteers engaged in screen work mostly rely on their prior knowledge to deliver a performance on cue and in response to directors, producers, and other co-workers' demands. As puppeteers increasingly shift their attention away from spectators and toward a different audience-type in their new work context, they start catering to the needs of this alternative audience. In the process, their understanding of their *own* expertise also shifts from achieving believability to achieving task mastery. The implications of these findings for the study of expertise and expert work in organizations and beyond are at least threefold.

First, our analysis suggests expertise needs to be assessed in light of the relative saliency for experts of particular types of audiences. The relational nature of expertise, or for that matter any social phenomenon (Emirbayer 1997), is nothing new, but the effect of audience reorderings on experts' understandings of their expertise has been less explored. At

the field-level, we know professionals' claims to expertise are nested in a larger social ecology that both shapes and reflects their standing and legitimacy (Abbott 2005), and these layered interdependencies are consequential for the performance of expert work. At a more granular level (Fine 1984), we show how the *relative* attention that experts pay to select audience-types in their daily work shapes their views of expertise. As people increasingly "assemble" an array of gigs and tasks, often performed for different types of audiences, to create their jobs (Cohen 2013), they are not merely working across settings; they are developing distinct views of what expertise entails.

For example, we would argue that when academics start working as experts in government task-forces or committees and interacting with public officials, their views on what defines expertise are also likely to change. Similarly, were the U.S. Supreme Court to allow the live broadcast of its court proceedings (i.e., creating a novel work context), its members would probably develop a new view on *their* expertise due to the new saliency afforded to the viewing public. Audience reorderings are accompanied by novel assessments of worth, because what is valued by one audience might be discounted by another. Experts in a given context will likely focus their attention toward the perceived needs of the audience-types that are most salient in that context. As Emirbayer and Mische (1998:979) remind us, "social actors are able to focus attention upon only a small area of reality" at any point in time and develop a "selective attention" that is both informed by history and projected in future action. Thus, the nature of current and future expertise cannot be decoupled from the types of audience with which experts pursue their work. In particular, jurisdictional expansion cannot simply assume the deployment of a given expertise in new contexts (e.g., Faulconbridge and Muzio 2008; Freidson 1970; Larson 1979; Suddaby and Greenwood 2001). Instead, in any expansion, the dynamic nature of expertise across types of audiences needs to be accounted for.

Moreover, workplaces do not merely hire experts with prior expertise; hiring experts may de facto entail reordering their audiences and therefore shaping their views of expertise. With knowledge work more prevalent than ever in today's economy, what type of expertise is needed in a given workplace often amounts to trying to figure out which experts are needed, without exploring the implications of how the hiring context might (re)shape their expertise. As an illustration, Sandefur (2015:909) has shown that in U.S. civil trial courts (i.e., one form of work context), lawyers' past relations to court decision-makers (e.g., whether a lawyer worked on a prior case with the same judge) affects their success at winning a case: such relations may shape "the conduct and consequences of professional work." Alongside this suggestion, we argue that repeated work in such a context may also shape the nature of expertise. Over time, co-optation by employing contexts shapes experts' understandings of expertise. Eventually, being well-connected to the court might prove a form of expert knowledge that trial lawyers expect for themselves and seek in others when assessing their expertise. Thus, expertise might equate more with lawyers' ability to connect with judges rather than their mastery of the law.

The reordering of audiences is quite explicit in the case of trial lawyers (i.e., attending primarily to judges' needs), but more subtle reordering can also occur. For instance, police officers have traditionally considered fellow officers as their primary audience, because they alone are thought best able to assess the quality of police work (Glaeser 2000:206). With the rise in police departments requiring body-worn cameras, officers now need to pay more attention to the broader (viewing) public. We suspect officers' views of expertise will likely shift in such novel work contexts where the saliency of audience-types gets reshuffled.

Second, our findings shed light on the role of audience reorderings in the development of expertise. The audience reordering puppeteers encountered in the shift to screen work

might seem unique, but many other experts likely face similar situations. Instances of audience reorderings permeate modern life: consider teachers creating content for massive open online courses (rather than directly for students) and preachers performing on television (rather than for a live congregation). Similarly, when hospitality professionals begin catering more to the needs of online platforms (e.g., TripAdvisor) than to their clients' needs (Orlikowski and Scott 2014), they too might experience a shift in their expertise.

As experts become less connected with their traditional audiences, expertise can easily change from a co-construction with these audiences to a technical proficiency demanded by others. But how do experts develop such a technical proficiency without an initial training ground? In our setting, almost all puppeteers working on screen had previously trained on stage. How will new puppeteers working directly on screen learn to deliver reliably and effectively on cue without such a background? By the same token, will college instructors who start teaching massive online courses ever develop the kind of expertise their peers who trained in live classrooms would recognize? Future research could examine, more broadly, which sequences of audience-type interactions are likely to lead to the development of particular forms of expertise.

Third, our study's findings open up the possibility for experts' concomitant but plural understanding of expertise across work contexts. Past scholarship mostly assumes audience reorderings occur sequentially over the progression of an expert's career. In artistic worlds, songwriters can move gradually from impressing peers to convincing publishers (Skaggs 2019), and stand-up comedians can shift from their proximate to a mass-consumer audience as they gain national recognition (Reilly 2017). Yet our study spotlights more concurrent and often-repeated shifts in work context and audience reorderings during a career. These circumstances might become increasingly common in a fragmented economy, where bouncing between different contexts is the new norm—raising questions of how to juggle potentially contrasting views of expertise.

An understanding of expertise developed in one context might contaminate another and lead to "spillovers" within a profession (rather than between professions, see Bechky 2020). In the puppetry world, as an illustration, the spread of task mastery into stage work can be seen by the growing demand for experts able to manipulate "animatronic" puppets on stage, such as in the stage adaptations of the movies *How To Train Your Dragon* (2012) and *King Kong* (2013) (Jochum, Millar, and Nuñez 2017:375). In this process, believability might become less of a concern and raise the fear of "expectations from capitalism, particularly the premium it places on efficient task mastery, colonizing the practice of puppetry" (ST-1). Alternatively, experts might be able to entertain a plural understanding of their expertise—a form of bilingualism or even multilingualism—that enhances their parallel work across contexts. Future research could examine more quantitatively the contagion or plural understanding of expertise across contexts.

Limitations

A first limitation of our study is that our claims emphasize individual perceptions over how these perceptions transform into action. This stems from our reliance on interviews more than on observations, and it raises the possibility of a disconnect between attitudes and behavior—a concern multiple field scholars have voiced (e.g., Jerolmack and Khan 2014; Winchester and Green 2019). For example, puppeteers might view their expertise differently on stage and screen but still behave similarly across contexts. Yet interviewers (including ourselves) are not merely "stenographers." Instead, they use "time-honored strategies to get beyond this display work" and "ask for specific examples to get past belief statements" (Pugh 2013:54) and surface action. Moreover, well-conducted interviews capture more than declarative statements, they often unearth cultural

contexts with "stable cultural scaffoldings" that "matter in driving action" (Lizardo and Strand 2010:216–17). More observations might have allowed us to more directly see the effect of distinct understandings of expertise on puppeteers' behavior, but observations alone might have also led us to miss the unique historical patterns that interviews often reveal (Lamont and Swidler 2014).

A second limitation is that not all experts are as attuned to audiences' reactions as those we studied. A case analysis of experts situated in the creative arts offers an extreme example (Patton 2002) of how audience reorderings can shape expertise; other professional groups might seem to rely less on audiences to establish their expertise. Clearly, professionals in creative industries—such as puppeteers, professional musicians (Becker 1951), Hollywood studio musicians (Faulkner 1971), and Nashville musicians (Cornfield 2015)—are acutely aware of their (external) audiences' role in co-constructing their expertise. By contrast, professionals in less creative realms often lack such awareness, despite generally needing to "align" with others in their work (Tomaskovic-Devey and Avent-Holt 2019:58). There might be a range of awareness of the audience's role in establishing one's expertise, but few experts are immune to the effect of audience interactions on their expertise. Even less creative professionals, such as medical examiners (Timmermans 2005) and mental health care providers (DiBenigno 2018), can identify the key audiences they need to convince of their expertise. Future studies could try to specify experts' varying degrees of awareness of their dependence on audiences to establish their expertise and examine how such dependencies inform the shifting nature of expertise.

A third limitation of our study is that some experts whose attention to audience-types shifts over time might experience this shift less as an audience reordering (i.e., a reshuffling of the relative attention paid to distinct audiences) than as a new relation with an alternative audience (akin to a re-anchoring). As an illustration, individuals whose

work has migrated online, such as "online chefs" and "influencers," might envision an "imagined audience" (Litt 2012; Marwick and boyd 2011) that has little bearing on their prior physical audience. They then gradually come to view this imagined audience as their main type of audience. Longitudinal studies of audience-type replacement and turnover might shed more light on such a phenomenon.

A final limitation of our argument is that audience reorderings across work contexts could prove so radical as to *segment* a group of experts: instead of a fairly unified community's reconsideration of its expertise, such a process could create two distinct groups with different types of expertise. As Strauss (1975:15, 20) pointed out, when "members of a profession become involved with sets of relationships that are distinct to their own segment," they can develop their own "ideologies." Those ideologies could entail two distinct notions of expertise that no longer coalesce. The split between advertising writers and scriptwriters might exemplify such a segmentation (Fisk 2016). Initially quite similar, these two groups' expertise gradually diverged: one aimed at composing memorable slogans, whereas the other worked collaboratively on composing film scripts. A closer look at this and other schisms could enhance our understanding of the role of audience reorderings in promoting segmentations of expertise.

Conclusion

If experts and their expertise are becoming increasingly central to the functioning of our economy, and if their work is increasingly performed in novel contexts (often mediated by new technologies), it is imperative to develop a better understanding of experts' views of expertise and how these views transform across contexts. Otherwise, experts might opt to work in new contexts without considering the likelihood that their expertise can be co-opted by workplaces in which new saliency is given to select types of audiences. Additionally, employers will hire

experts under the assumption they are adding to an organization's capabilities in a certain way without considering the possibility that expertise might morph in the face of audience reorderings. These combined dynamics might lead some observers less attuned to workplace interactions to presume a "death of expertise" across workplaces (Nichols 2017), when in fact a shift in and co-optation of expertise is occurring. Given the key role of experts in addressing societal challenges, more attention needs to be paid to the audience dynamics that govern the shaping, translation, and evolution of their expertise.

Authors' Note

Acknowledgments and Funding

Orcid iDs

Michel Anteby (iD) https://orcid.org/0000-0002-2629-2529
Audrey L. Holm (iD) https://orcid.org/0000-0002-5250-0643

Notes

1. As Abbott (2005:246) rightly notes, the term "audience" does not properly account for the relational nature of expertise, because it suggests fairly passive "fixed and unproblematic entities" judging claims of professional authority. The term "relational partner" might be more precise, but we opted to keep the term "audience" because many other scholars refer to these partners as "audiences" in their writing.

2. Professional puppeteers typically distinguish themselves from amateurs, who perform puppetry but do not seek income from it, and from enthusiasts who enjoy puppetry but do not necessarily perform.

3. The Jim Henson Foundation's mission is to promote, develop, and encourage interest in the art of puppetry in the United States. Each year, the foundation awards grants to an average of 30 puppeteers and puppetry companies who perform live. See Stoessner (2008) for more on the Foundation's work.

4. Participants are identified by codes indicating whether they perform mainly on stage (ST), screen (SC), or both (ST/SC). Quotes are drawn from interviews and fieldwork.

5. SAG's membership consists mainly of actors, singers, stunt performers, and models. The organization engages in collective bargaining with studios for better working conditions in film and television.

6. British poet and philosopher S. T. Coleridge discusses in his literary biography the suspension of disbelief. He writes about the "the power of exciting the sympathy of the reader by a faithful adherence to the truth of nature, and the power of giving the interest of novelty by the modifying colors of the imagination." Balancing these elements produces "a human interest and a semblance of truth sufficient to procure for these shadows of the imagination that willing suspension of disbelief for the moment, which constitutes poetic faith" (Coleridge 1847:2).

7. The Jim Henson Company was unique in its use of a puppeteer as a producer and sometimes director. It played a key role in popularizing and promoting believable characters during the first wave of blockbuster films that were heavily reliant on live-action puppets—such as *E.T.: The Extra-Terrestrial* (1982), *Gremlins* (1984), and *Little Shop of Horrors* (1986) (Sergeant 2019)—and still today some puppeteers divide screen work into "Muppet-style" (Henson-inspired) performers and "the technical puppeteers that do live special effects and creature effects like Baby Yoda" (a character in Disney's original television series *The Mandalorian*) (ST/SC-24).

References

Abbott, Andrew. 1988. *The System of Professions: An Essay on the Division of Expert Labor*. Chicago: University of Chicago Press.

Abbott, Andrew. 2005. "Linked Ecologies: States and Universities as Environments for Professions." *Sociological Theory* 23(3):245–74.

Anteby, Michel. 2010. "Markets, Morals, and Practices of Trade: Jurisdictional Disputes in the US Commerce in Cadavers." *Administrative Science Quarterly* 55(4):606–38.

Baisley, Sarah, and David Sturman. 1997. "A Day in the Life of a Real-Time 3-D Animated Character." *Animation* Jan./Feb.:45–49.

Barley, Stephen R., and Gideon Kunda. 2004. *Gurus, Hired Guns, and Warm Bodies: Itinerant Experts in a Knowledge Economy*. Princeton, NJ: Princeton University Press.

Barley, Stephen R., and Pamela S. Tolbert. 1991. "Introduction: At the Intersection of Organizations and Occupations." *Research in the Sociology of Organizations* 8:1–12.

Bass, Eric. 2014, May 14. "The Myths of Puppet Theater." Retrieved June 1, 2017, HowlRound Theatre Commons (https://howlround.com/myths-puppet-theater).

Batt, Rosemary, and Eileen Appelbaum. 2017. "The Networked Organisation: Implications for Jobs and Inequality." Pp. 70–89 in *Making Work More Equal*, edited by D. Grimshaw, C. Fagan, G. Hebson, and I. Tavoral. Manchester, UK: Manchester University Press.

Bechky, Beth A. 2003. "Object Lessons: Workplace Artifacts as Representations of Occupational Jurisdiction." *American Journal of Sociology* 109(3):720–52.

Bechky, Beth A. 2020. "Evaluative Spillovers from Technological Change: The Effects of 'DNA Envy' on Occupational Practices in Forensic Science." *Administrative Science Quarterly* 65(3):606–43.

Becker, Howard S. 1951. "The Professional Dance Musician and His Audience." *American Journal of Sociology* 57(2):136–44.

Bell, John. 2008. *American Puppet Modernism*. New York: Palgrave Macmillan.

Bernier, Matthew, and Judith O'Hare, eds. 2005. *Puppetry in Education and Therapy: Unlocking Doors to the Mind and Heart*. Bloomington, IN: AuthorHouse.

Brint, Steven. 2020. *In an Age of Experts: The Changing Roles of Professionals in Politics and Public Life*. Princeton, NJ: Princeton University Press.

Cambrosio, Alberto, Camille Limoges, and Eric Hoffman. 1992. "Expertise as a Network: A Case Study of the Controversies over the Environmental Release of Genetically Modified Organisms." Pp. 341–61 in *The Culture and Power of Knowledge*, edited by N. Stehr and R. V. Ericson. Berlin: De Gruyter.

Carr, E. Summerson. 2010. "Enactments of Expertise." *Annual Review of Anthropology* 39:17–32.

Carranza, David L. 2003. "Illusion Collusion: Transcending the Veil." *The Puppetry Journal* 54(3):13.

Childress, Clayton. 2017. *Under the Cover: The Creation, Production, and Reception of a Novel*. Princeton, NJ: Princeton University Press.

Christin, Angèle. 2018. "Counting Clicks: Quantification and Variation in Web Journalism in the United States and France." *American Journal of Sociology* 123(5):1382–415.

Cohen, Lisa E. 2013. "Assembling Jobs: A Model of How Tasks Are Bundled Into and Across Jobs." *Organization Science* 24(2):432–54.

Coleridge, Samuel Taylor. 1847. *Biographia Literaria*. London, UK: W. Pickering.

Collins, Harry M., and Robert Evans. 2007. *Rethinking Expertise*. Chicago: University of Chicago Press.

Collins-Hughes, Laura. 2017, December 22. "Give Them a Hand: Puppet Artists Are Having a Moment." *The New York Times* (https://www.nytimes.com/2017/01/31/theater/puppet-artists-chicago-international-puppet-theater-festival.html).

Cornfield, Daniel B. 2015. *Beyond the Beat: Musicians Building Community in Nashville*. Princeton, NJ: Princeton University Press.

Craciun, Mariana. 2018. "Emotions and Knowledge in Expert Work: A Comparison of Two Psychotherapies." *American Journal of Sociology* 123(4):959–1003.

Crompton, Rosemary, and Gareth Jones. 1984. *White-Collar Proletariat: Deskilling and Gender in Clerical Work*. London, UK: Macmillan Press.

Deb, Sopan, and Sophie Haigney. 2018, January 20. "Kermit the Frog Performer and Disney Spar Over an Ugly 'Muppet' Firing." *The New York Times* (https://www.nytimes.com/2017/07/17/arts/television/kermit-the-frog-disney-firing.html).

DiBenigno, Julia. 2018. "Anchored Personalization in Managing Goal Conflict between Professional Groups: The Case of U.S. Army Mental Health Care." *Administrative Science Quarterly* 63(3):526–69.

Dreyfus, Hubert L., and Stuart E. Dreyfus. 1986. *Mind over Machine: The Power of Human Intuition and Expertise in the Era of the Computer*. New York: Free Press.

Dreyfus, Hubert L., and Stuart E. Dreyfus. 2005. "Peripheral Vision: Expertise in Real World Contexts." *Organization Studies* 26:779–92.

Emirbayer, Mustafa. 1997. "Manifesto for a Relational Sociology." *American Journal of Sociology* 103(2):281–317.

Emirbayer, Mustafa, and Ann Mische. 1998. "What Is Agency?" *American Journal of Sociology* 103(4):962–1023.

Epstein, Steven. 1995. "The Construction of Lay Expertise: AIDS Activism and the Forging of Credibility in the Reform of Clinical Trials." *Science, Technology, & Human Values* 20(4):408–37.

Epstein, Steven. 1996. *Impure Science: AIDS, Activism, and the Politics of Knowledge*. Berkeley: University of California Press.

Eyal, Gil. 2013. "For a Sociology of Expertise: The Social Origins of the Autism Epidemic." *American Journal of Sociology* 118(4):863–907.

Faulconbridge, James, and Daniel Muzio. 2008. "Organizational Professionalism in Globalizing Law Firms." *Work, Employment and Society* 22(1):7–25.

Faulkner, Robert R. 1971. *Hollywood Studio Musicians: Their Work and Careers in the Recording Industry*. Chicago: Aldine Atherton.

Faulkner, Robert R. 1983. *Music on Demand: Composers and Careers in the Hollywood Film Industry*. New Brunswick, NJ: Transaction Books.

Fine, Gary Alan. 1984. "Negotiated Orders and Organizational Cultures." *Annual Review of Sociology* 10:239–62.

Fisk, Catherine L. 2016. *Writing for Hire*. Cambridge, MA: Harvard University Press.

Freidson, Eliot. 1970. *Profession of Medicine: A Study of the Sociology of Applied Knowledge*. New York: Harper and Row.

Glaeser, Andreas. 2000. *Divided in Unity: Identity, Germany, and the Berlin Police*. Chicago: University of Chicago Press.

Golden-Biddle, Karen, and Karen Locke. 2007. *Composing Qualitative Research*, 2nd ed. Thousand Oaks, CA: Sage.

Gorman, Elizabeth H., and Rebecca L. Sandefur. 2011. "'Golden Age,' Quiescence, and Revival: How the Sociology of Professions Became the Study of Knowledge-Based Work." *Work and Occupations* 38(3):275–302.

Huising, Ruthanne. 2014. "The Erosion of Expert Control through Censure Episodes." *Organization Science* 25(6):1633–61.

Huising, Ruthanne. 2015. "To Hive or to Hold? Producing Professional Authority through Scut Work." *Administrative Science Quarterly* 60(2):263–99.

Huising, Ruthanne, and Susan S. Silbey. 2011. "Governing the Gap: Forging Safe Science through Relational Regulation." *Regulation & Governance* 5(1):14–42.

Hunter, Kurt. 2006. "In Review: 'Pierrot Lunaire—A Cabaret Opera.'" *The Puppetry Journal* 57(4):16.

Jerolmack, Colin, and Shamus Khan. 2014. "Talk Is Cheap: Ethnography and the Attitudinal Fallacy." *Sociological Methods and Research* 43(2):178–209.

Jick, Todd D. 1979. "Mixing Qualitative and Quantitative Methods: Triangulation in Action." *Administrative Science Quarterly* 24(4):602–11.

Jochum, Elizabeth, Philip Millar, and David Nuñez. 2017. "Sequence and Chance: Design and Control Methods for Entertainment Robots." *Robotics and Autonomous Systems* 87:372–80.

Jones, Elka. 2006. "You're a What? Puppeteer." *Occupational Outlook Quarterly* 50:34–35.

Kahl, Steven J., Brayden G. King, and Greg Liegel. 2016. "Occupational Survival through Field-Level Task Integration: Systems Men, Production Planners, and the Computer, 1940s–1990s." *Organization Science* 27(5):1084–1107.

Kalleberg, Arne L. 2011. *Good Jobs, Bad Jobs: The Rise of Polarized and Precarious Employment Systems in the United States, 1970s–2000s*. New York: Russell Sage Foundation.

Kaplin, Stephen. 1999. "A Puppet Tree: A Model for the Field of Puppet Theatre." *TDR: The Drama Review* 43(3):28–36.

Kaynak, Ece, and Stephen R. Barley. 2019. "Shaping the Political Environment: An Ethnography of Public Affairs Professionals at Work." *Work and Occupations* 46(3):265–306.

Kellogg, Katherine C. 2011. *Challenging Operations: Medical Reform and Resistance in Surgery*. Chicago: University of Chicago Press.

Kellogg, Katherine C. 2014. "Brokerage Professions and Implementing Reform in an Age of Experts." *American Sociological Review* 79(5):912–41.

Kleist, Heinrich Von. 2004. "The Puppet Theatre." In *Selected Writings*, edited and translated by D. Constantine. Indianapolis, IN: Hackett Publishing.

Knorr Cetina, Karin. 2009. *Epistemic Cultures: How the Sciences Make Knowledge*. Cambridge, MA: Harvard University Press.

Kunda, Gideon, Stephen R. Barley, and James Evans. 2002. "Why Do Contractors Contract? The Experience of Highly Skilled Technical Professionals in a Contingent Labor Market." *ILR Review* 55(2):234–61.

Lamont, Michèle, and Ann Swidler. 2014. "Methodological Pluralism and the Possibilities and Limits of Interviewing." *Qualitative Sociology* 37(2):153–71.

Larson, Magali S. 1979. *The Rise of Professionalism: A Sociological Analysis*. Berkeley: University of California Press.

Litt, Eden. 2012. "Knock, Knock. Who's There? The Imagined Audience." *Journal of Broadcasting & Electronic Media* 56(3):330–45.

Lizardo, Omar, and Michael Strand. 2010. "Skills, Toolkits, Contexts and Institutions: Clarifying the Relationship between Different Approaches to Cognition in Cultural Sociology." *Poetics* 38(2):205–28.

Lundström, Markus, and Tomas Poletti Lundström. 2020. "Podcast Ethnography." *International Journal of Social Research Methodology* (https://doi.org/10.1080/13645579.2020.1778221).

Marwick, Alice E., and danah boyd. 2011. "I Tweet Honestly, I Tweet Passionately: Twitter Users, Context Collapse, and the Imagined Audience." *New Media & Society* 13(1):114–33.

McCormick, John, and Bennie Pratasik. 1998. *Popular Puppet Theater in Europe, 1800–1914*. Cambridge, UK: Cambridge University Press.

McPharlin, Paul, and Marjorie B. McPharlin. 1969. *The Puppet Theatre in America: A History 1524–1948, with a Supplement: Puppets in America since 1948*. Boston, MA: Plays, Inc.

Nichols, Thomas. 2017. *The Death of Expertise: The Campaign against Established Knowledge and Why It Matters*. New York: Oxford University Press.

Nicolini, Davide. 2011. "Practice as the Site of Knowing: Insights from the Field of Telemedicine." *Organization Science* 22(3):602–20.

Nicolini, Davide, Bjørn Erik Mørk, Jasmina Masovic, and Ole Hanseth. 2018. "The Changing Nature of Expertise: Insights from the Case of TAVI." *Studies in Continuing Education* 40(3):306–22.

Ocejo, Richard E. 2017. *Masters of Craft: Old Jobs in the New Urban Economy*. Princeton, NJ: Princeton University Press.

Orlikowski, Wanda J., and Susan V. Scott. 2014. "What Happens When Evaluation Goes Online? Exploring Apparatuses of Valuation in the Travel Sector." *Organization Science* 25(3):868–91.

Patton, Michael Q. 2002. "Purposeful Sampling." Pp. 230–44 in *Qualitative Research and Evaluation Methods*. Thousand Oaks, CA: Sage Publications.

Posner, Dassia N., Claudia Orenstein, and John Bell, eds. 2014. *The Routledge Companion to Puppetry and Material Performance*. London, UK: Routledge.

Powell, Walter W., and Kaisa Snellman. 2004. "The Knowledge Economy." *Annual Review of Sociology* 30(1):199–220.

Pugh, Allison J. 2013. "What Good Are Interviews for Thinking about Culture? Demystifying Interpretive Analysis." *American Journal of Cultural Sociology* 1(1):42–68.

Ranganathan, Aruna. 2018. "The Artisan and His Audience: Identification with Work and Price Setting in a Handicraft Cluster in Southern India." *Administrative Science Quarterly* 63(3):637–67.

Reilly, Patrick. 2017. "The Layers of a Clown: Career Development in Cultural Production Industries." *Academy of Management Discoveries* 3(2):145–64.

Reilly, Patrick. 2018. "No Laughter among Thieves: Authenticity and the Enforcement of Community Norms in Stand-Up Comedy." *American Sociological Review* 83(5):933–58.

Sandefur, Rebecca L. 2015. "Elements of Professional Expertise: Understanding Relational and Substantive Expertise through Lawyers' Impact." *American Sociological Review* 80(5):909–33.

Schmidt, Samantha. 2017, July 14. "The Voice of Kermit the Frog Has Been Fired. He's 'Devastated.'" *Washington Post* (https://www.washingtonpost.com/news/morning-mix/wp/2017/07/14/kermit-the-frogs-voice-and-puppeteer-has-been-fired-hes-devastated/).

Searls, Colette. 2014. "Unholy Alliances and Harmonious Hybrids: New Fusions in Puppetry and Animation." In *The Routledge Companion to Puppetry and Material Performance*, edited by C. Orenstein, D. N. Posner, and J. Bell. New York: Routledge.

Sergeant, Alexander. 2019. "Crafted Wonder: The Puppet's Place within Popular Special Effects Reception." Pp. 181–202 in *The Crafty Animator*, edited by C. Ruddell and P. Ward. Cham, Switzerland: Palgrave Macmillan.

Shershow, Scott Cutler. 1995. *Puppets and "Popular" Culture*. Ithaca, NY: Cornell University Press.

Skaggs, Rachel. 2019. "Socializing Rejection and Failure in Artistic Occupational Communities." *Work and Occupations* 46(2):149–75.

Smets, Michael, and Paula Jarzabkowski. 2013. "Reconstructing Institutional Complexity in Practice: A Relational Model of Institutional Work and Complexity." *Human Relations* 66(10):1279–1309.

Stehr, Nico. 1992. "Experts, Counsellors and Advisers." Pp. 107–56 in *The Culture and Power of Knowledge: Inquiries into Contemporary Societies*, edited by N. Stehr and R. V. Ericson. New York: W. de Gruyter.

Stehr, Nico, and Richard V. Ericson. 1992. *The Culture and Power of Knowledge: Inquiries into Contemporary Societies*. New York: W. de Gruyter.

Stoessner, Jennifer K. 2008. "Building American Puppetry on the Jim Henson Foundation." Doctoral Dissertation, Ohio State University, Columbus, OH.

Strauss, Anselm L. 1975. *Professions, Work, and Careers*. New Brunswick, NJ: Transaction Books.

Strauss, Anselm L., and Juliet M. Corbin. 1997. *Grounded Theory in Practice*. Thousand Oaks, CA: Sage Publications.

Strauss, Anselm L., and Juliet M. Corbin. 1998. *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory*. Thousand Oaks, CA: Sage Publications.

Sturz, Lisa, and Mark B. Wilson. 1991. "On Camera: SAG Puppeteers." *Screen Actor* Summer:14–18.

Suddaby, Roy, and Royston Greenwood. 2001. "Colonizing Knowledge: Commodification as a Dynamic of Jurisdictional Expansion in Professional Service Firms." *Human Relations* 54(7):933–53.

Sundararajan, Arun. 2016. *The Sharing Economy: The End of Employment and the Rise of Crowd-Based Capitalism*. Cambridge, MA: MIT Press.

Sussman, Mark. 2001. "Performing the Intelligent Machine: Deception and Enchantment in the Life of the Automaton Chess Player." Pp. 71–86 in *Puppets, Masks, and Performing Objects*, edited by J. Bell. Cambridge, MA: MIT Press.

Timmermans, Stefan. 2005. "Suicide Determination and the Professional Authority of Medical Examiners." *American Sociological Review* 70(2):311–33.

Tolbert, Pamela. 1996. "Occupations, Organizations, and Boundaryless Careers." Pp. 331–49 in *The Boundaryless Career*, edited by M. B. Arthur and D. M. Rousseau. New York: Oxford University Press.

Tomaskovic-Devey, Donald, and Dustin Avent-Holt. 2019. *Relational Inequalities: An Organizational Approach*. New York: Oxford University Press.

Trost, Jan E. 1986. "Statistically Nonrepresentative Stratified Sampling: A Sampling Technique for Qualitative Studies." *Qualitative Sociology* 9:54–57.

Vardi, Moshe Y. 2012. "Will MOOCs Destroy Academia?" *Communications of the ACM* 55:5–5.

Weber, Max. 1978. *Economy and Society: An Outline of Interpretive Sociology*, Vol. 1, edited by G. Roth and C. Wittich. Berkeley: University of California Press.

Weil, David. 2014. *The Fissured Workplace: How Work Became So Bad for So Many and What Can Be Done to Improve It*. Cambridge, MA: Harvard University Press.

Weiss, Robert S. 1994. *Learning from Strangers: The Art and Method of Qualitative Interview Studies*. New York: Free Press.

Winchester, Daniel, and Kyle D. Green. 2019. "Talking Your Self into It: How and When Accounts Shape Motivation for Action." *Sociological Theory* 37(3):257–81.

Wrzesniewski, Amy, Jane E. Dutton, and Gelaye Debebe. 2003. "Interpersonal Sensemaking and the

Meaning of Work." *Research in Organizational Behavior* 25:93–135.

Wynne, Brian. 1989. "Sheepfarming after Chernobyl: A Case Study in Communicating Scientific Information." *Environment: Science and Policy for Sustainable Development* 31(2):10–39.

Wynne, Brian. 1996. "May the Sheep Safely Graze? A Reflexive View of the Expert-Lay Knowledge Divide." Pp. 44–83 in *Risk, Environment and Modernity: Towards a New Ecology*, edited by S. Lash, B. Szerszynski, and B. Wynne. London, UK: Sage.

Zald, Mayer N., and Michael Lounsbury. 2010. "The Wizards of Oz: Towards an Institutional Approach to Elites, Expertise and Command Posts." *Organization Studies* 31(7):963–96.

Michel Anteby is a Professor of management and organizations and (by courtesy) sociology at Boston University. His research looks at how people relate to their work, their occupations, and the organizations to which they belong. Studied populations have included airport security officers, clinical anatomists, factory craftsmen, ghostwriters, and subway drivers.

Audrey L. Holm is a doctoral candidate in management and organizations at Boston University's Questrom School of Business. Her research focuses on shifting occupational dynamics, evolving relationships at work, and new labor market challenges. Her dissertation looks more specifically at how members of intermediary-organizations (such as back-to-work programs) accompany returning citizens in their job searches.