

**Work Space, Gendered Occupations, and the Organization of Health: Redesigning  
Emergency Department Communication**

Joshua B. Barbour  
The University of Texas at Austin

Rebecca Gill  
Massey University

Marleah Dean  
University of South Florida

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### **Abstract**

Underpinning this chapter is the idea that intervening in professionalized, knowledge-intensive organizing such as the provision of healthcare means coming to terms with the macromorphic Discourses and material conditions that enable and constrain medical work. As such, we focus in this chapter on the entwined influence of occupational Discourse and physical space on everyday communication in healthcare settings. Our goal is to articulate communication as design as one tool for useful intervention in the organizing of healthcare. To make our case, we draw on research on healthcare organizations and health in organizations. We apply the theorizing in the case of a particular hospital emergency department—EmergiCare. This exemplar demonstrates the theoretical and practical aims of the chapter: It is *in the rethinking of communication that seemingly disconnected concerns for the gendered Discourse of organizations, physical space, and communication dynamics may be integrated.*

## **Work Space, Gendered Occupations, and the Organization of Health: Redesigning Emergency Department Communication**

Communication in healthcare organizations involves complex problems of uncertainty and information management, multiple competing and collaborating professions, pressing resource constraints, and high stakes outcomes (Barbour, 2010; Dean & Oetzel, 2014), paralleling, for example, communication in settings such as nuclear power plants (Barbour & Gill, 2014), fire departments (Myers & McPhee, 2006), and other risky workplaces (Barbour & James, forthcoming; Real, 2008). The presence of such issues in healthcare contexts, such as in hospital emergency departments (EDs) makes them particularly important settings for study (Eisenberg, 2006; Eisenberg et al., 2005).

Taking care with communication in such settings means acknowledging and accounting for the material conditions in and through which communication unfolds (Aakhus & Laureij, 2012; Ashcraft, Kuhn, & Cooren, 2009), including the spatial and temporal (Ballard, 2014; Harrison, 2014; Harrison, Morgan, Chewning, et al., 2011). We contend that intervening in professionalized, knowledge-intensive organizing such as the provision of healthcare means coming to terms with more than the challenges of sending and receiving messages or installing the right equipment.

That is, theorizing the gendered, power-laden character of organizing and how it becomes expressed in and through, for example, the arrangement of an organization's physical environment, can elucidate what have otherwise been intractable problems of interprofessional communication (e.g., the persistence of medical error despite the widespread recognition of it as a problem, Ulrich et al., 2008). The health, safety, and wellbeing of individuals and organizations are intertwined with the physical spaces in which organizing occurs, and physical space enables

and constrains role performances and interactions (Elsbach & Pratt, 2007). However, whereas research has tended to focus on the design of spaces for physiological health and wellbeing, in particular in healthcare settings, we know much less about the design of workspaces to support healthier and safer organizational communication (Ulrich et al., 2008).

As such, our chapter focuses on the intersection of (a) discursive patterns, (b) work space, and (c) health and (d) organizational communication. We contend that broader Discourses in medical work are (re)produced in everyday communication and reflected in the arrangement of physical space, and that one tool for useful intervention in the organizing of healthcare is in understanding communication as designed (Aakhus, 2007; Aakhus & Jackson, 2005; Jackson & Aakhus, 2014). To make this case, we draw on examples from research on healthcare organizations and health in organizations (Harrison, 2014; Real, 2010) and one ED in particular—EmergiCare.

Throughout our chapter, we offer examples from EmergiCare in *italics* to illustrate our claims. This exemplar demonstrates that it is *in the rethinking of communication that seemingly disconnected concerns for the gendered discourse of organizations, physical space, and communication dynamics may be integrated*. The design choices made about the organization of physical working space at EmergiCare “reveal how important aspects of organizational and professional life are organized around the possibilities for orchestrating interactivity to facilitate some forms of communication while inhibiting other forms” (Aakhus & Laureij, 2012, p. 42). Communication redesign offers a space for the consideration of what might be instead. In this, insights about healthcare organizing may provide resources for improving the health of organizations and the organization of health.

### ***Communication at EmergiCare***

*EmergiCare is a Level I Trauma and Academic Medical Center ranked among the top 100 US hospitals. It is located in a populated Southwestern US city and sees approximately 70,000 patients per year. The adult emergency department (versus the pediatric one) has two sides, Manzia and Sundano, which are divided by a solid wall. Each side has a nurse's and physician's station with patient rooms located around the perimeter (see Figure 1).*

*Communication in EDs is distinctive compared to other healthcare organizations as EDs provide 24-hour care and are fraught with time constraints, dialectic tensions, limited resources, and high patient influx, as well as being marked by uncertainty and unpredictability (Dean & Oetzel, 2014; Eisenberg, 2006). Health care professionals in EDs have several roles and responsibilities, must make quick decisions, and deal with multiple hierarchies and expertise (Eisenberg et al., 2005). EDs are intense physical spaces susceptible to accidents, medical errors, and staff injury (Ulrich et al., 2008).*

### **Organizing for Health through a Lens of Macromorphic Discourse**

As demonstrated throughout this volume, productive possibilities emerge at the nexus of health and organizational communication scholarship. Our contribution is to present and consider how Discourse—a concept drawn from the work of Michel Foucault and others—influences and shapes communication in medical contexts, and specifically in EDs, while accounting for the physical environment of organizations in particular (an aspect of materiality overlooked in strictly discursive approaches, Vásquez & Cooren, 2013). Although there are a number of levels of analysis at which we could define discourse (see Alvesson & Kärreman, 2000; Fairhurst & Putnam, 2004), our approach here is to understand it as a “macromorphic” phenomenon,

meaning that we are interested in the social-level patterns of communication that extend across and beyond particular situations and contexts but which nonetheless affect them. We use the term macromorphic to retain the idea that these Discourses are not fixed but are becoming. In this, Discourse is analytically distinct from, though entwined with, institutional and meso-level explorations of healthcare organizing (e.g., Barbour & Lammers, 2007; Eisenberg et al., 2005; Lammers & Barbour, 2006), which tend to be tethered more to specific organizations, professions, and institutions.

Macromorphic Discourse has been described as “an assemblage of knowledge that creates ‘truth effects’” (Tracy & Trethewey, 2005, p. 169), thereby (re)producing and regulating beliefs, attitudes, and behaviors. Such truth effects “fix” particular assumptions and normalize “the way things are” so that to resist Discourse would risk being perceived as eccentric or inappropriate, as not “following the ‘rules’”, or as an outsider (Alvesson & Willmott, 2002). Such beliefs and behaviors are (re)produced in medicine in the perceived status of the physician and the concomitant role that nurses, patients, and others are expected to play (see Murphy, Eisenberg, Wears, & Perry, 2008, for a useful review). Physicians are given leave to analyze patients’ bodies through a seemingly expert “medical gaze,” thus enacting a kind of regulatory power over patients’ bodies and choices (Foucault, 1963, 1973). For patients to “flip the script” and self-diagnose (or even offer medical advice to physicians!) would appear bizarre. And yet, although patients’ involvement in their own medical care has initially been perceived as unorthodox, the increasing participation of patients in medicine (Street et al., 2009) demonstrates that Discourse can indeed change, given time and space (Alvesson & Willmott, 2002; Scott, Ruef, Mendel, & Caronna, 2000; Trethewey, 1997).

### **The Character of Occupations**

Recognizing that the field of medicine is “[not] immune from the values, mores, and prejudices of the wider society” (Gamble, 2000, p. 168-169), we turn our attention to the work undertaken within this field. Specifically, our interest is in recent attention to occupations as themselves possessing “characteristics” that shape the performance of work (Ashforth, Rogers, & Corley, 2011; Barbour & Lammers, 2015; Cheney & Ashcraft, 2007). Arguments around this suggest, “much like organizations, occupations are distinguished by collective identities, in that we treat lines of work as typified by central, abiding, and unique features” (Ashcraft, 2013, p. 8). Ashcraft’s (2013) “glass slipper” metaphor illuminates how occupations are perceived as a singular, fixed “thing” (e.g., that declaring oneself as a “physician” speaks for itself), and yet are constructed in and through the ongoing patterning of communication:

Much like Cinderella’s shoe, occupational identity is an artifact manufactured through artifice [where] the “magic” behind the making of occupational identity quickly fades into presumption of authenticity. The invention becomes forgotten as such, taken instead as an accurate description of what an occupation entails. (p. 16)

Occupational discourses are thus “transcendent” and collective, informing our thinking about how to do a job or what it “should” be like (Scott, 2008). Scholarly inquiry along these lines has also examined the occupations of pilot (Ashcraft, 2007), veterinarian (Lammers & Garcia, 2009), fundraiser (Meisenbach, 2008), lawyer (Kuhn, 2009), entrepreneur (Gill & Larson, 2014), and scientist (Wells, 2013), among others. Accordingly, this perspective helps us theorize how medical professionals develop an identity that informs, and is informed by, their occupation (Apker & Eggly, 2004; Barbour & Lammers, 2007; Lammers & Barbour, 2009) to enable interventions in interprofessional communication (Barbour, 2010).

One important facet of the glass slipper metaphor is that it highlights that occupations are not necessarily “one size fits all.” Rather, occupational Discourses are formed through and alongside the social identities perceived to be the “right fit” for the occupation, including the idealized gender, ethnicity/race, sexuality, age, and so forth, of the worker in that role (Acker, 1990; Allen, 2004; Ashcraft, 2007; Trethewey, 1997; Wells, 2013). Occupational Discourse is therefore “ordered” by assumptions regarding the appropriate behaviors, bodily appearances, and performance of tasks that inform who is perceived as being fit for the job, and also influences judgments and evaluations of those working in the position. Thus, we understand and examine work and organizing through the communication of difference (Ashcraft, 2011).

The importance of occupational Discourse for our focus here is that it helps us recognize not only the bias of occupations, but also that, accordingly, people are influenced to shape or comport themselves, their communication, and even the arrangement of work space to “fit” that occupation (Alvesson & Willmott, 2002; Ashcraft, 2013). That is, in seeking to look and act the part of the occupation, people navigate the occupational “image” when they enact their “role,” meaning that “the latter (i.e. occupational identity *communication*) negotiates the former (i.e. occupational identity *discourse*) in the context of everyday work life” (Ashcraft, 2007, p. 12, emphasis in original).

Understanding Discourse as organizing occupations underscores a central claim of our chapter: *that we cannot positively or meaningfully intercede in the organization of healthcare without also understanding the significant and enduring influences of Discourse on medical workers’ understanding of what they do and why they do it.* That, the “transmission” of communication is not just improved by enhancing communication competencies but also by recognizing the Discursive patterns in medical work that shape practice. As such, we now turn to



a focused discussion of how medical professions possess their own socio-occupational identity, and how this identity influences the “doing” of these occupations.

### **The Importance of Occupational Discourse for Medical Work**

Following from claims regarding occupations as characterized and ordered through assumptions of difference, we now consider the gendering of medical occupations and how this shapes communication. Overall, occupational segregation literature has illuminated how assumptions of femininity and masculinity are “patterned in and thorough” occupations, often presuming a “masculine” or “feminine” body as being more suited to a particular job (see Acker, 1990). Particularly in the case of “professional” work, women have historically been segregated into passive, unskilled, and “assistance-based” positions such as secretarial or service work, and men into active, skilled, and often prestigious and leadership positions such as managers and experts (see Ashcraft, 2013, for an extensive review).

In medical Discourse, assumptions of masculinity inform the historical associations of medicine as requiring a strong stomach, quick decision-making, emotional detachment, and long hours—qualities and characteristics seen as inappropriate for women or those with “feminine” dispositions (Pringle, 1998). These associations continue to be prevalent today, where physicians are constructed (and construct themselves) as masculine, hands-on, technical, and possessing particular body parts needed for their work (e.g., “balls,” Hinze, 1999). Indeed, Apker and Eggly (2004) found that medical residents learned to adopt ways of thinking and acting that reinforced historically masculine ideologies. During morning report conferences, for instance, residents who offered opinions and explanations culled from their own life experiences were corrected and guided by faculty toward “preferred,” biomedical and technologically informed explanations.

Contrasting this is the association of feminine qualities with nurses. The occupation of “nurse” has historically involved being a helpmate to a physician (Davies, 2003) and requiring a soft touch, the expression of care and concern, and an unassuming nature. While managerial tasks have more recently been added to nursing duties (Halford & Leonard, 2006), and some organizations have developed higher-status nursing roles (Apker, Propp, & Zabava Ford, 2005), the perception that the primary responsibility of nurses is to provide soothing and sympathetic touch and talk remains dominant. For instance, McMurray (2011) found that whereas general practitioners mentored nurses’ efforts to become Advanced Nurse Practitioners, the general practitioners did not accept the nurses’ abilities to diagnose patients once certified.

Such gendered Discourses are brought into relief by, for example, the specific labeling of men in nursing as “male nurses,” which has the effect of distinguishing them from the *presumed* sex of people in this occupation (i.e., female). Moreover, when men *are* present in the nursing field, they are often disassociated from emotional work and (re)associated with technical and managerial work (Hallam, 2000). As such, gender segregation occurs even within nursing, further compounding care as feminine and technical knowledge as masculine.

Entwined with the gendered character of these occupations is that they are also underpinned by ethnic/racial, class, and heteronormative assumptions where the “standard” medical professional is white, middle-upper middle class, and heterosexual (indeed, such assumptions are inherent in the notion of a “professional” more generally, Cheney & Ashcraft, 2007). The patriarchal and rational physician and the gentle and caring nurse are images that contrast with other powerful stereotypes of, for instance, the angry black man or woman and evoke assumptions of genteel whiteness (for this discussion in the context of entrepreneur discourse, Knight, 2005). Illuminating this, Gamble (2000) noted that racial and ethnic minority

medical students had been “mistaken (even by medical professionals) for janitors, maids, and dietary workers” (p. 165) and recalled “being asked to leave the doctors’ eating area because we did not fit the picture of the typical physician” (p. 165). In addition to drawing attention to the discrimination and tokenism that medical professionals of color may experience, Gamble’s account highlighted the racial and ethnic characteristics *that make up the physician and nurse occupations* themselves. The intersecting of these social identities is noted in her realization: “I would not just be a physician, but a black woman physician. I recall thinking that if I had been a white woman, the patient would have mistaken me for a nurse rather than a maid” (pp. 167-168).

The historical character of macromorphic Discourse matters here, because it frames and undergirds how we think about medical work, our judgements about the quality and importance of different sorts of medical work, and how we attempt to intervene in it. In short, the associated expectations for everyday communication and role performance is informed by the gendered, raced, and classed Discourses of medical work. Because physicians are expected to gather and give information to make a diagnosis as well as be efficient (Apker & Eggly, 2004; Dean & Oetzel, 2014), and nurses are expected to be caring, demonstrate compassion and build relationships (e.g., Davies, 2003; Morse et al., 1990), individuals in these positions seek to enact these roles, thereby reinforcing the Discourse.

### ***Occupational Communication at EmergiCare***

*At EmergiCare, communication patterns reflected the social identities of medical occupations as gendered, specifically, but also as subtly incorporating assumptions of class and race/ethnicity. Physicians, most often but not always males, used **case talk**. Case talk meant communication should be direct and assertive (Mulac, 2006). Case talk displayed knowledge and control. Case talk served to confirm and challenge medical judgments among those in the know.*

*Case talk involved forceful opinions and authoritative directions. Case talk evidenced a control of emotion (Guerrero, Jones, & Boburka, 2006), without common articulations of sympathy or understanding (Eisenberg, 2002).*

***Comfort talk**, on the other hand, was typically used by nurses, who were most often but not always female. Comfort talk meant providing support for patients (Guerrero et al., 2006; Mulac, 2006) through informative but encouraging messages (Ellingson & Buzzanell, 1999). Comfort talk demonstrated responsiveness to patients, helping them feel valued and important (Chatham-Carpenter & DeFrancisco, 1998). Comfort talk created space for patients to express their emotions and opinions without disrupting the overall nursing work.*

### ***Gendered Discourse at EmergiCare***

*Case and comfort talk reflect macromorphic Discursive occupational norms, revealing distinct communication purposes and goals. Case talk exhibits the masculine. Physician case talkers diagnosed and interpreted patient symptoms, sought the confirmation of other physicians, gave directions, and informed patients of problems but not necessarily next steps. Case talk emphasized thorough, rational thought as a means for solving medical problems.*

*In contrast, comfort talk exemplifies the feminine. Nurse comfort talkers (all female except the nurse in the charge of the ED nurses) engaged in positive talk, asked about feelings, and provided context for the patient. Comfort talk was a vehicle for helping patients understand their circumstances, share their story, and cope with the medical process. It stressed listening and empathy. These communication styles are gendered in that they are (re)produced in and of the historical occupational identity of being a physician or a nurse and the associated communication expectations for those roles.*

Thus far, we have constructed a picture of occupational Discourse that suggests that it is fixed and inescapable. However, although we believe that Discourse is highly pervasive and regulatory, we recognize that the social, created nature of it means that it can be resisted, altered, and reformed. That is, “occupational identities are contrived, and this means they could be otherwise” (Ashcraft, 2013, p. 17; see also Trethewey, 1997). Therefore, our next objective is to explore how we might effectively “interrupt” the Discourse that seems to influence physician and nurse communication patterns—focusing, in our case, on the use of space at EmergiCare. Specifically, we highlight here our normative assumption that because ED professionals engage in complex, knowledge-intensive conversations important to patient care and safety, we should strive to assist them in capitalizing on the diversity of expertise held by physicians *and* nurses, enhancing their collaboration and communication.

### **“Interrupting” Occupational Discourse in Practice**

We want to accompany our recognition of occupational Discourse as present in medical work with consideration of how we can best interrupt Discourse to better understand and improve medical practice. To this end, we take a communication design approach (see also Aakhus & Harrison and Morgan & Mouton in this volume), which offers a useful theoretical framework for intervening in the communicative and material conditions in which organizations emerge (Aakhus & Laureij, 2012; Barbour & Gill, 2014). Design is about the formation of “ideal things out of a cloud of possibilities” (Nelson & Stolterman, 2012, 2012, p. 7), and “transforming something given into something preferred” (Aakhus, 2007, p. 112). In this, communication design attends to what might be learned in the creation or reformation of messages, conversations, systems of interaction, and communication technologies.

The mix of occupational Discourse here characterized by technical complexity, medical uncertainty, and gender, ethnicity/race, and other social identities, must be addressed in making design decisions (even if it is to ignore facets of it). We see this, for instance, in Harrison et al.'s (2011) analysis of the effectiveness of driver licensing bureaus campaigns, where they described the encounter as encompassing a dizzying combination of material and discursive factors: "...the physical layout of [licensing] offices, and includ[ing] activities and interactions such as entering the [licensing] offices, standing in line, reading materials, being greeted, moving from one line to another, and ending with the final interaction with the clerk who completes the desired transactions" (pp. 807-808). Their intervention sought to re-craft the interactivity and messaging of the encounter, where, although not every step could be optimized, the design of the interaction was nonetheless informed by theory, practice, and the exigencies of the moment. Harrison and colleagues exemplify how design requires moving from the universal to the particular by making choices about how communication *could possibly* occur (Nelson & Stolterman, 2012).

Thinking of communication as designed reflects the understanding that people attempt to "do" things with language and interactivity (Aakhus & Laureij, 2012), and in doing so addresses the communication situation as they understand it (Lammers, 2011; O'Keefe & Lambert, 1995). Communicators must grapple with gendered Discourses in particular spaces even if they only seek to ignore it, or endeavor to resist or acquiesce to it. The patterns of communication that are constructed within Discourse over time reflect exigent power differences and material constraints and resources. That is, not all voices involved in the arrangement and performance of work—including regarding participation, identity presentation, turn-taking, communicative topics, and so forth—have equal power. In this sense, being powerful means being able to shape communication and thus influence what knowledge and practices are created in what format

(Aakhus, 2007; Aakhus & Laureij, 2012; Barbour & Gill, 2014). Arguably, occupational Discourse informs the limits of this.

### **Bringing Material Conditions of Work into the Merging of Discourse and Design**

Communication as design invites us to think about the physical space of health organizations like EDs in terms of how the arrangement of space reflects *choices* influenced by relevant and encumbering occupational Discourse (Lammers, 2011). Organizing is corporeal at the same time it is communicative (Ashcraft, 2007; Ashcraft et al., 2009). Our chapter joins efforts to contend with space in communication scholarship (e.g., Vásquez & Cooren, 2013), though we construe our focus more narrowly than the more general project because we are concerned with the physical environments of organizations, defined by Elbach and Pratt (2007) as including:

...all of the material objects and stimuli (e.g., buildings, furnishings, equipment, and ambient conditions such as lighting and air quality) as well as the arrangement of those objects and stimuli (e.g., open-space office plans and flexible team work spaces) that people encounter and interact with in organizational life. (pp. 181-182)

More specifically, Elsbach and Pratt summarized research on the use of space into four streams: (1) enclosures and barriers, (2) adjustable work arrangements, equipment, and furnishing, (3) personalization of work spaces, and (4) nature-like ambience. These dimensions shape possibilities for role performance, for instance, where the positioning and use of rooms, offices, and hallways convey particular sensibilities or identities, “organiz[ing] an ensemble of possibilities (e.g., by a place in which one can move) and interdictions (e.g., by a wall that prevents one from going further)” (De Certeau, 1984, p. 98).

The disposition of occupations is therefore (re)produced and navigated alongside the above dimensions. Space and place can enable and constrain role performances and interactions linked to status and gender (Elsbach & Pratt, 2007; Gill & Larson, 2014), for instance, by locating those with less status in more visible and immovable spaces but supporting flexibility of movement for those with higher status. In the case of medical professionals, physicians typically have freedom of distance and nurses tend to be situated in and around the same space. Busy and continuously moving, nurses “[buzz] around repetitive spatial patterns,” whereas physicians are more likely to be “still – the thinker – or walking purposefully toward a goal – the doer” (Halford & Leonard, 2006, p. 93).

In fact, it may be hard to overstate the importance of the physical spaces in which communication unfolds. In their study of worksite health campaigns, Harrison et al. (2011) argued:

...when looking at the ‘doing of work’ within organizational ‘communities,’ individuals engage in action within a physical space that both limits and facilitates certain types of activities and communication. They do so not in isolation, but through developing working relationships of various degrees of influence with their colleagues, and they communicate and share information through the use of available channels within an organization. These constitute the basic interaction environment of the workplace. (p. 536)

Interest in aesthetics, layout, and arrangement of work spaces has a long history (Becker, 1981; Davis, Leach, & Clegg, 2011), in particular as it relates to human health (Ulrich, 1984), which is not surprising because physical spaces have direct effects on health, safety, and wellbeing (General Services Administration, 2009; National Institute of Building Sciences, 2015).



Recently, office space has received renewed attention as organizations experiment with open space offices and temporary work space assignments (Konnikova, 2014) and attempt to figure out the best way to create work environments conducive to knowledge work (cf. Demarco & Lister, 2013). The physical environment at work is particularly important because of the effects it has and because of the longevity and cost of design choices (Elsbach & Pratt, 2007). This is especially true in healthcare design. Ulrich et al. (2008) argued, “Many hospital settings have not been redesigned, although jobs have been changed, and as a result, hospital environments often increase staff stress and reduce effective care delivery;” however, “a growing and convincing body of evidence suggesting that improved hospital design can make the jobs of staff easier” (p. 145).

### **Features of Physical Environments**

The evidence on *particular work space features* is mixed, limiting the recommendations that may be reasonably made in the design of work spaces such as hospitals and other healthcare settings. Ulrich et al.’s (2008) review of over 600 healthcare design studies found some empirical evidence for the relationships between staff outcomes (e.g., injuries, stress, effectiveness, and satisfaction) and specific aspects of the physical environment (e.g., single-bed rooms, access to daylight and appropriate lighting, views of nature, family zones, carpeting and noise-reducing finishes, ceiling lifts, nursing floor layout, decentralized supplies, and acuity-adaptable rooms); however, strong evidence was only available for the relationship between the presence of ceiling lifts and staff injury reductions. It is likely that rather than there being “one best arrangement,” the effects of physical space are mediated in and through individuals’ perceptions and communicative action. For example, looking at the effects of office location on intentions to make use of ombudsmen, Harrison (2013) found that the location itself had little influence but

that *perceptions* of the location's ability to protect confidentiality were meaningful. Particular individuals and interactions also have distinctive needs and goals for particular spaces. Ulrich et al., for instance, found that whereas dim lighting improved patient-provider communication, bright lighting was associated with reductions in medical error.

### **Underlying Mechanisms**

In light of this complexity, scholars have tried to transcend the mix of findings by conceptualizing the *mechanisms* underlying the effects of particular aspects of the physical environment such as proximity, privacy, or social interference (albeit with mixed results, Elsbach & Pratt, 2007). In Harrison et al.'s (2011) theorization of the effects of physical structure on interaction, they posited that physical space may be related to the density of relationships among organizational members, where organizations are like pinball machines: "The tighter the bumpers, the more the pinball bounces around, comes into contact with other bumpers, and moves into all areas of the board" (p. 537) and proximity increases interaction (see also Monge, Rothman, Eisenberg, Miller, & Kirste, 1985). Although Harrison et al. found that density had no effect on knowledge or attitudes about the campaign intervention, or had unanticipated effects, they nonetheless called for additional study of physical space in organizing, highlighting the difficulty of operationalizing aspects of space design. There are infinite factors to measure and infinite ways to measure them (e.g., numbers of floors, cubicles, break rooms, exercise areas, childcare facilities, nature of workspace [office type], and vending machine areas), and particular office space choices interact in complex ways with other aspects of environment and communication.

### ***Work Space and Interaction as Designed Objects at Emergicare***

*At EmergiCare, **case and comfort talk** mapped onto the physical layout in unsurprising ways. Case talk occurred most often at the physician's station, their "home base." The interaction that occurred here tended to only involve the physicians and in this way, the station "contained" medical expertise. Here, physicians ordered medicines and tests and engaged in consultations with other physicians, exchanging information and confirming and challenging interpretations, gathered around charts or computers. The presence of nurses here was specific and bounded, and here, there was no need for comfort talk. Nurses dropped off forms, and when they did talk with physicians, it was to provide or obtain information.*

*The **nurse's station** was "home base" for the nurses, though nurses were often moving between their station and patients' rooms (Halford & Leonard, 2006). This station was thus largely a site of interaction between nurses to coordinate and confirm care. The nurse's station evidenced more permeable boundaries than the physician's station, as nurses entertained technicians as well as patients and their families here, providing information and comfort talking. Physicians rarely entered this area, and when they did, it was to obtain information.*

*The communicative activity in EmergiCare was highly formatted (e.g., scheduled handoffs, formalized patient intake procedures) but also in flux. Nurse and physician communication intertwined against and in the layout, where these occupational groups were linked to spaces that (re)produced the macromorphic occupational images traced in and onto the distinct spaces.*

### **A Discourse-Design Approach in Practice**

Overall, our contention is that communication design can be useful for bridging concerns involving occupational Discourse, the material conditions of work, and day-to-day interaction. These approaches focus attention to the *context* in which design choices are made and offers

resources for understanding those choices. In practice, the key pitfall to avoid is assuming that it is possible or advisable to optimize space to serve one ideal or interest. Rather, communication design choices involve ongoing trade-offs and balances (Aakhus, 2001; Aakhus & Rumsey, 2010). It is in the analysis of the spatial/communicative arrangements as designed objects reflecting relevant occupational Discourses that the integration becomes visible.

### ***Re(Design) at EmergiCare***

*At EmergiCare we imagined three intentional changes (Nelson & Stolterman, 2012). First, the work of organizing the ED could include physicians as well as nurses. A whiteboard accessible to the entire ED that displays key patient and care information could support de-segregated collaboration. Nurses suggested this intervention (e.g., “a central communication board”). Second, responsibility for the day-to-day organizing of the ED could rotate among nurses and physicians. An ED organizer could track patient status, facilitate visitors, and reflect on communication among patients, nurses, and physicians, helping the ED “see” its own interaction. Third, EmergiCare could consider re-situating the work stations or remove the wall separating them to encourage more impromptu collaboration integrating case and comfort talk. Implementing these recommendations would provide nurses and physicians alike with a more holistic understanding of the work performed by others in and across the ED. Such efforts reflect a communication design intervention. This intervention may challenge long-standing medical images of the male, all-knowing physician and the female, help-mate nurse, and any such effort should begin by recognizing the entrenched and enduring character of such Discourses.*

In other words, the physical environment should be organized to accomplish the functional requirements of work and space in ways that acknowledge, mitigate, and remake the character of occupational Discourse. Not only is design specific to sites of engagement (Nelson

& Stolterman, 2012; Stolterman, Mcatee, Royer, & Thandapani, 2008), but space and place are linked to identity formation, negotiation, and regulation (Gill & Larson, 2014; Vásquez & Cooren, 2013) that reflect status dynamics (Elsbach & Pratt, 2007). Future directions of research should explore the ways in which space influences communication between patients and providers and examine how the gendered occupations of health care roles influence communication.

The physical layout of work environments (e.g., location of patient rooms, hallways, nurse and physician stations) can impede and enhance communication amongst providers. Ulrich et al. (2008) underscored the importance of communication among and between patients, providers and families, but lamented, “it is unfortunate that there is not much research on how the built environment enhances or hinders communication” (p. 137). *For EmergiCare, then, we offered suggestions for (re)designing physician-nurse communication.* Yet, we also acknowledge the difficulty in changing Discourse for practical ends and in this sense, suggest that a Discourse-Design approach be conceived as a long game. Moreover, we recognize that suggestions for change can have the effect of creating more work and require additional effort and commitment, as well as developing novel problems. Executing communication design changes in organizing, as with organizational change in general, is neither simple nor straightforward.

### **Discussion Questions**

1. Imagine that you are trying to improve a communication process in your organization. Who are the key players, and what assumptions do they have about how communication works? How are those assumptions consistent and contradictory? What are the implications of those assumptions for practice?

2. How would you redesign the physical work space at EmergiCare (or in your own organization)? Would simply changing the physical layout change the communication dynamics at play? Why or why not?
3. Reflecting on your own place of work, how do you resist and acquiesce to assumptions of difference, such as gender assumptions, relevant to how and why you work? Put another way, are you expected to enact practices that reflect feminine or masculine ideals? How so? What does this mean for your day-to-day interactions?
4. The next time you visit a healthcare provider, how might you communicate to integrate ease or comfort talk in your next medical encounter? What might be reasons for doing so?

### **Empirical Studies that Elaborate on Key Constructs**

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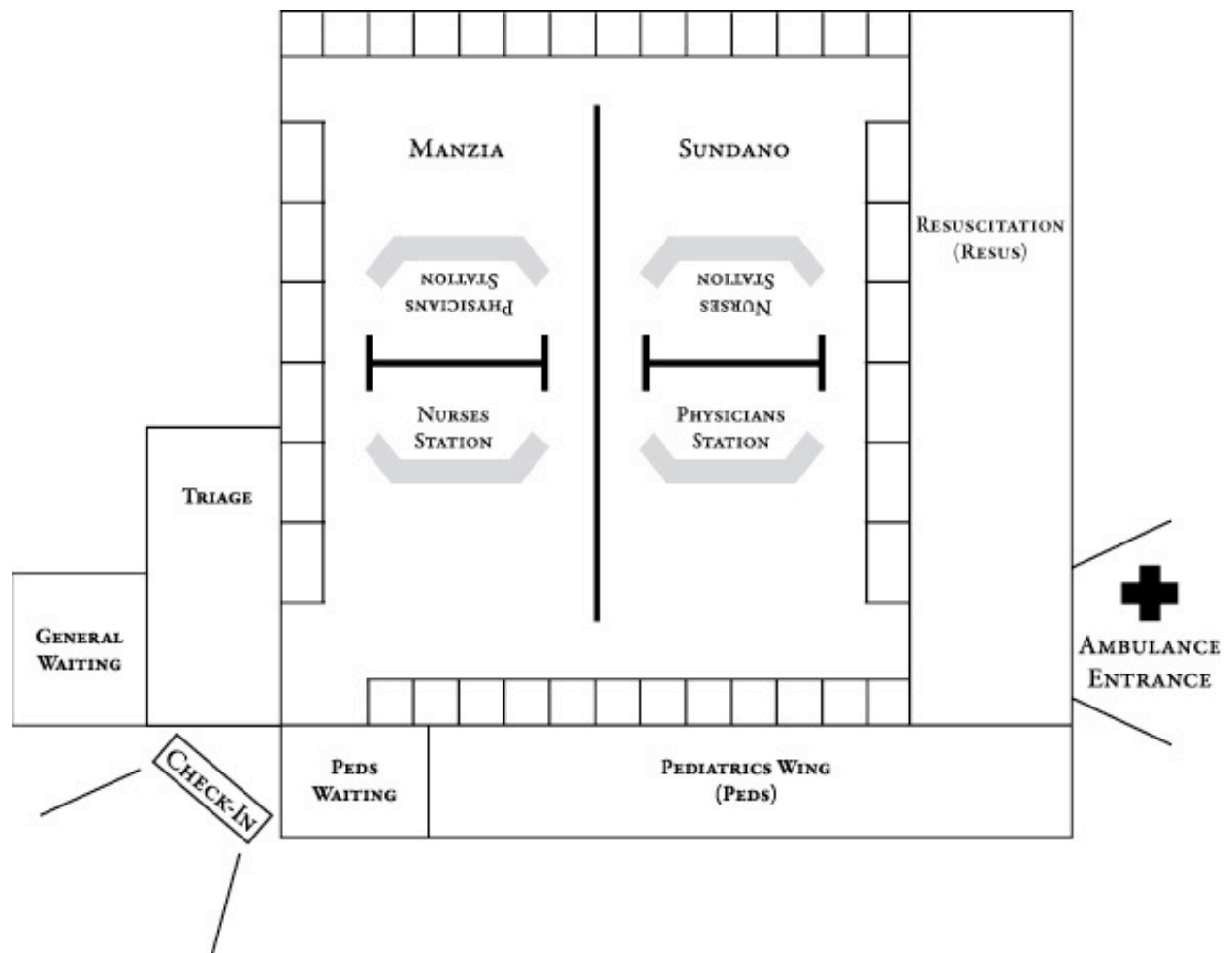


Figure 1. Graphic representation of EmergiCare