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A New View on Innovation and Language: Design Culture, Discursive Practices, and Metaphors

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Abstract

Although scholars increasingly look to design culture for governance insights that might make organizations more ethical, they have not fully explored the language and interpretive boundary processes involved with designing. For this qualitative study, we conducted a literature deconstruction, evaluation activity, and role simulation. We applied a metaphors framework to analyze results. Our paper contributes insights about the dominant discursive practices used by designers in multi-constituent situations. The results reveal that architectural designers predominantly use language that is most consistent with the metaphors of lens, voice and performance. In general, filtering and controlling dialogs are very important to Architects who may use language in a manner that limits voice and power sharing. Furthermore, our reconstructed problem statement suggests that multi-constituent team challenges arise from certain decisions that are co-constructed through dynamic team dialogues and discursive practices. Lastly, our paper illustrates an application of the seven metaphors framework as an analytical device for gaining situational insight about intercultural communication. We conclude the paper with critical comments, recommendations for future research, and prescriptions for team communication.

Keywords: Change, design, creativity, innovation, architecture, Architect, buildings, communities, deconstruction, interpretive, narrative, power, reflexive, subcultures, communication, discourse, discursive practices, information, knowledge, transparency.

Introduction

> *We don't understand users; we don't understand clients; we don't understand other people really well. We don't teach students about visualizing and imagining something that does not now exist that would take care of users' needs. We don't teach them about prototyping, giving the product to the consumer and then improving it and improving it some more. We don't do any of that. (Dunne & Martin, 2006: 515)*

A growing number of management, governance, and ethics scholars have voiced concern over corporate fraud and lack of social responsibility during the past few decades. As the quote above implies, a new body of literature posits that

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systemic design thinking or design culture may provide useful insight for the governance of organizations so they are more ethically stakeholder focused (Edgell, 2014; Gharajedaghi, 2011; Hassi & Laakso, 2011; Martin, 2009; Mootee, 2013; Seidel & Fixson, 2013). However, researchers have not fully explored the network relations aspects of language, discursive practices, and interpretive boundary processes involved with designing.

Our overarching aim was to study language as it relates to the governance of ethical innovation, intercultural change, and design processes (Campbell, 2007; Edgell & Vogl, 2013). Furthermore, we strove to better understand how language shapes and forms the interactions between various constituent subcultures involved with design processes. We studied this phenomenon in the context of Architects who create buildings.

Architects are an ideal group to study since they are recognized as being highly innovative while safeguarding the health, safety, and welfare of the public. For example, Architects, have been at the forefront of the sustainability movement which has resulted in institutional developments such as LEED certification incentives and "green" building codes, among others (Circo, 2008; De Lapaz, 2013; Diamond, Opitz, Hicks, Neida, & Herrera, 2006). Architecture, by definition, is interdisciplinary since it encompasses physical sciences, technological sciences and engineering, behavioral sciences, visual arts, humanities, the law and regulation, and health sciences (AIA, 2013; Gharibpour, 2012; Vallero & Brasier, 2008). Of particular interest for our research, considerable literature implies that Architects function through the use of distributed and embedded innovation agency (Garud & Karnøe, 2003). They arrange and work through temporal project governance networks of highly heterogeneous actors before, during, and after the design process. These networks collectively function to facilitate communication, often through the use of boundary objects, and distribute cognition that improves governance and decision-making by reducing the incidences of judgment biases (Liedtka, 2014).

Accordingly, our research is guided by the questions, *Which aspects of language, such as misunderstandings or clarifications, are relevant for effective governance?* and *How do Architects and other constituents use language to arrive at decisions in heterogeneous temporal networks?* To answer these questions, we begin this exploration by first reviewing the literature. Next, we describe our site and delineate our qualitative methods. For this study, we collected and deconstructed research papers (artifacts) about various aspects of architecture. In addition, we conducted and analyzed a role simulation. As the primary feature of this paper, we contribute critical insight about the use of three dominant metaphors in governance situations: *lens, voice, and performance.* Also, we provide recommendations for more effective team governance then conclude with critical comments and additional areas for future research.

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Communication, Discourse, and Discursive Practices

We review scholarship covering topics including communication as a cultural construction, approaches for analyzing discourse, and discursive practices.

Communication. We begin our exploration by referring to the theoretical perspectives proposed by communication scholars who refer to themselves as social constructionist and interpretive researchers (Alvesson & Kärreman, 2007; Burr, 2003; Locke, Golden-Biddle, & Feldman, 2008). These scholars posit that researchers are embedded in the social fabric that they study in contrast to positivist scholars. Perceptions of a given or fixed reality are perhaps only shifting reflections of the evolving language that forms discourses, discursive practices, and dialogues. We chose not to propose any absolute and concrete definitions for communication, culture, and architecture, since any unilateral fixed definition would not necessarily have supported our aim to better understand the complex and nuanced processes that emerge among varied constituents.

Scholars identify four basic assumptions of the social constructionist position (Burr, 2003): hidden assumptions, context, social process, and collective meaning. These scholars adopt a critical stance towards taken-for-granted knowledge or assumptions on the basis that phenomena are not objective, but are known through human experience and perceptions which are largely influenced by language. Furthermore, context in the form of historical and cultural specificity are relevant since language categories, used to classify aspects of phenomena, emerge from the social interaction within groups at particular times and in particular places. Therefore, categories of understanding are situational (Putnam, 2002).

In attempting to understand phenomena, knowledge becomes sustained by social processes. The ways in which realities are interpreted at a given moment are determined by the effectuated and localized conventions of communication. Accordingly, the stability of social life determines the fixedness of knowledge. However, knowledge and social action together establish collective meanings. If social phenomena are constructed by interconnected patterns of communication behaviors within social groups or cultures then they are defined less so by individual acts. Rather they are established more so by complex and organized patterns of ongoing actions arising from networks of humans and technology (Latour, 2005). When knowledge and social action are linked together (Ford & Ogilvie, 1996), actors create knowledge from personal experiences gained in particular social roles. Together with social actions that are often determined by settings such as work surroundings, actors develop unique or particular patterns of communication. These communication patterns are not always understood by representatives of other groups or subcultures and, thus, form cultural boundaries (Fox, 2011).

The literature reveals that scholars often view language as limited or defined by “tongue” or natural languages (e.g., German, English, etc.) (James, 2002). While this view of language has historical significance, national culture may be

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less relevant for yielding insight into constituents involved with governance. Other forms of actor associations such as professional or "functional" alliances with specific legitimized practices, symbols, meanings, and languages become important. This suggests that actors' group identities such as "Architect", "client", or "community" might be more useful for exploring governance in multi-constituent situations.

Furthermore, interpretation variances among profession-specific languages or tongues might be central to conflict and cooperation in teams comprised of differing professionals and non-professionals (Janssens, Lambert, & Steyaert, 2003). Moreover, interpretation models are essential to understanding actor relations among these various possible heterogeneous languages (Elliker, Coetzee, & Kotze, 2013). Although scholars have struggled to robustly explain communication processes in complex networks and organizations, Putnam, Phillips, and Chapman (1996) propose a model of seven communication metaphors for interpreting communication acts and revealing underlying perspectives and assumptions. Accordingly, they identified metaphoric clusters as alternative frames for examining organizational communication genres and correspondences among communication practices and organizational cultures. The seven metaphors are as follows: *conduit* or language as containers and channels; *lens* in which language serves a scanning and filtering purpose; *linkage* wherein language reveals relational bonds and networks; *performance* with a focus on highlighting coordinated actions and narrative productions; *symbol* whereby cultural symbols, rites, and rituals are expressed; *voice* in which power and conflict become apparent; and *discourse* in which conversations and texts are captured (Putnam et al., 1996). Although they do not explicitly define how these perspectives might be useful for research, we discuss this possibility later in the paper.

Other scholars investigate the phenomenon of delivery wherein power and conflict emerge from relations in multi-constituent situations. Due to differing interpretation and translation acts among actors who identify with heterogeneous language-bound subcultures, these constituents produce combinations of counterproductive conflict that ultimately weakens team outcomes and productive novelty generation (Bezrukova, Jehn, & Zanutto, 2001; Dovey, 2014; Foucault & Faubion, 2000; Steyaert & Janssens, 2002).

In summary, the notion of language may be best conceptualized as consisting of two levels, delivery and content. Differences in tongues may be important for gaining insight into delivery whereas Putnam et al.'s (1996) metaphors may be useful for gaining insight into content or meaning. Moreover, interpretation and translation strategies referred to as mechanical, cultural, and political (Callon, 1998; Janssens et al., 2003; Latour, 2005; Van de Ven & Johnson, 2006) may be useful for making multi-constituent situations more robust and achievement capable.

Discourse. Discourse analysis focuses on talk and texts as social practices and on the resources that enable those practices (Potter, 1996). For instance,

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discourse studies of racism are concerned with the way descriptions are arranged in particular contexts to legitimize the blaming of minority groups (Potter & Wetherell, 1988) and with the resources or interpretative repertoires that are available in particular cultural settings for legitimating racist practices (Calas & Smricich, 1999; Nairn & McCreanor, 1991; Wetherell & Potter, 1992).

Discourse analysts (DAs) emphasize issues of stake and accountability, reviewing how people manage pervasive issues of blame and responsibility and study the way descriptions are put together to perform actions and manage accountability (Antaki, 1994; Edwards & Potter, 1993; Gill, 1993; Wodak & Meyer, 2009). For example, Edwards (1994) studies "script formulations" in a set of telephone conversations, showing the way events could be described to present them as regular and routine, to treat them as a characteristic consequence of personal dispositions or, to make them an unusual result of outside pressures. Such descriptions manage questions of fault and provide legitimatization for courses of action. Rather than explain actions as a consequence of cognitive processes, DAs are interested in how mentalist notions are constructed and used in interaction. For example, instead of attempting to explain sexism, in terms of the attitudes of individuals, DAs are concerned with how evaluations are managed in particular interactions, and either linked with or separated from individuals (Ashcraft, 2012; Wetherell, Stiven, & Potter, 1987). DAs suggest that the following considerations are relevant for analyzing discourse: *deviant cases, participants, coherence,* and *evaluation* (Potter, 1996). We explain each below.

Deviant cases. Discourse analysis is most often used to reveal patterns or regularities among collections of communication artifacts produced by actors to document particular phenomenon. The most analytically useful phenomena are cases which seem to go against an established pattern or are deviant in some way and are sometimes referred to as "bright spots" (Heath & Heath, 2010). In this type of work, deviant cases are not necessarily disconfirmations of the pattern (although they could be). Instead their special features may help confirm the genuineness of the pattern (Heritage, 1988; Heritage & Greatbatch, 1986).

Participants. One of the most important elements of conversation analysis is the investigation of participants' understandings. For instance, instead of analysts interpreting that certain talk is a compliment, they focus on participants' reactions. Participants may respond to language acts with an acknowledgement perhaps or deprecation. A common critique of discourse analysis work is that verification of interpretations is not possible. However, Potter (1996) suggests that a close attention to participants' understandings provides some form of verification.

Coherence. An important feature of conversation analysis and increasingly of discourse work is the cumulative effect. Scholars combine studies together to build on the insights of earlier work. For example, work on fact construction builds on the insights about accountability from earlier studies, and its success

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provides a further confirmation of the validity of those studies (Edwards & Potter, 1993). Each new study continuously provides a check on the adequacy of previous studies. Research works that capture aspects or interaction particulars on which others do build are remembered and considered valid. Conversely, other investigations, on which others do not build, are forgotten or not considered valid.

Evaluation. Perhaps the most important and distinctive feature in the validation of discourse work is the presentation of rich and extended materials in a way that allows readers to evaluate adequacy. While this allows assessment of particular interpretations presented in parallel with original materials, more importantly readers are themselves skilled "interactants" with a wide range of cultural competencies. Readers gather heterogeneous information from news sources, network relations, personal feedback, etc. Therefore, readers' evaluations are not merely abstractions of the relations among materials and interpretations, but rather reflect the genuine perceived adequacy of the analysts' claims and explanations.

While we have presented a few of the characteristic strands of discourse work, we have not presented a complete or definite set. New studies, currently in progress, may push back the limits of discourse work and the problematic challenges of discourse analysis by providing new insights on a range of social issues (Breuer, 2000; Elliker et al., 2013; Gibbs, Friese, & Mangabeira, 2002; Mantere & Ketokivi, 2013).

Discursive Practices. As a means for deeply understanding constituents' needs, both material and psychological, designers often embrace discursive and participatory power sharing practices with actors from diverse constituencies that have unique subcultures. In architecture, these typically include clients, contractors, building officials, and other site related constituents such as communities and engineering specialists (see Figure 1). Relational links with clients and contractors are usually strong whereas those with officials and other site constituents are typically weaker.

During immersion, designers not only delineate actual constituents' objectives and potential, but also embrace regulatory regimes such as human health, safety, and welfare constraints. After gleaning insight about task constraints, designers typically engage in cooperative ideation, referred to as charrettes or hackathons (Cardona & Tomancak, 2012). These ideation gatherings are time-constrained, intensive, iterative, and creatively procreant with sketching, prototyping, and collective input from diverse constituents. Researchers use the terms "co-creation", "meta-design", "social creativity", and "distributed innovation agency" to describe these particular discursive practices among designers and varied constituents (Fischer, 2000; Garud & Karnøe, 2003; Noweski et al., 2012). There is agreement among scholars that designers value pluralism with high stakeholder participation (Dunne & Martin, 2006; Kolko, 2010; Noweski et al., 2012).

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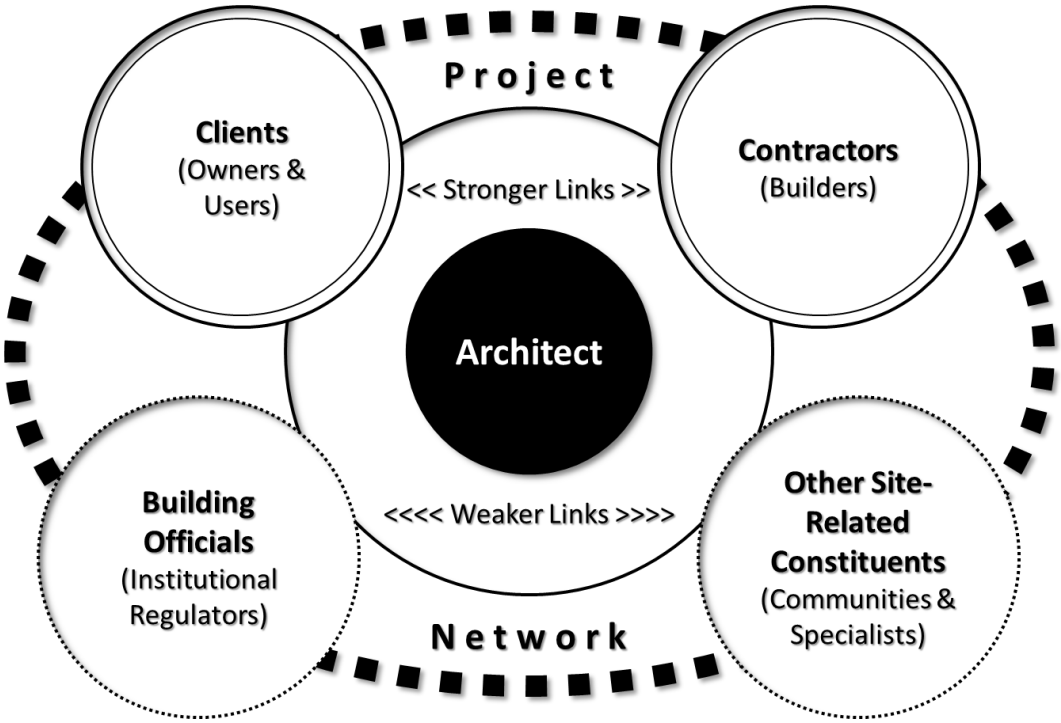

Figure 1. Relational Arrangements for Architectural Design Subcultures.

For project governance, Architects use boundary devices such as charretting to enable fluid exchange, interpretation, and the development of shared understandings (Fenton, 2007; Fox, 2011). However, Architects, upon reaching a degree of consensus, create particular types of artifacts (e.g., sketches, drawings, prototypes, etc.) with clearly defined content that are intended to freeze meanings and particular knowledge. Usually Architects refer to these artifacts throughout the remaining phases of the larger design process with the intent to diffuse stable meanings to other weakly linked actors and communities, perhaps divided by time or power boundaries (Hall-Andersen & Broberg, 2014).

Methods

In this section, we elaborate on our research analysis methods, sites, and collection approaches. Through our research, we aim to identify hidden and contingent assumptions, differences, and categories. We explore various aspects of architecture, communication, and discursive practices by using both narrative deconstruction and discourse analysis of the Potter (1996) variety to analyze research articles and texts from a role play simulation. This research was conducted in three waves.

To identify hidden and contingent assumptions as well as implicit taken-for-granted notions during the first wave, we analyzed and deconstructed seven research papers with regard to our application topic architecture and intercultural communication. The deconstructed texts are as follows: Demkin and AIA (2001); Fischer (2000); Friedman (2003); Heylighen and Verstijnen

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(2003); Luck (2003); Medway and Clark (2003); Stempfle and Badke-Schaub (2002). We conducted the literature deconstruction using prevailing methods (Burr, 2003; Steyaert & Janssens, 2002) and uncovered hidden assumptions which became the foundation for formulating unanswered questions relevant to communication among various constituent subcultures participating in design processes.

During our second wave, we used these questions as described below in the results section to gather independent evaluation from fellow participants in a seminar addressing intercultural change and communication processes. We asked these participants to engage in a partner activity with the aim of analyzing Architects' perspectives. We grouped them into partnerships of two members each then distributed short text samples in the form of publically available dialogues from the Boston Society of Architects (BSA, 2002). Each team was given instructions to read and discuss each text through the lens of only four of the seven metaphors: *conduit, symbol, voice*, and *discourse*. Then each partnership was asked to answer the following three questions: *How do Architects view themselves? How do Architects make sense of their profession? and Does the education of Architects solve problems or create more?* Given time constraints, we decided to limit the investigation to four metaphors that were dominant in our deconstruction of the first wave texts. We used insights from this second wave to inform our interpretation and discussion of the findings from the final wave.

For our third and final wave, we designed, conducted, and analyzed a role play. The simulation, titled "A New Drug Rehabilitation Center", enabled us to observe how various subcultures, in the context of architectural practice, might interact, communicate, and use discursive practices to arrive at important project governance decisions. To infuse the simulation with a degree of "realism" and ensure a reasonable level of fidelity to widely accepted and legitimized norms, behaviors, and practices deployed by Architects, both the simulated Architect's and the moderator's roles were played by two Architects that had several years of design field experience. The role simulation described the following hypothetical situation and characters:

> *The city of St. Gallen's Health Department, headed by Wendy Wu, recently decided to build a new drug rehabilitation center. She formed an agreement with a local land owner and developer, Josef Waegeli, to develop this project. In turn, Josef has retained the famed Architect, Cornelius van Staveren, to design this new exciting building on the last remaining open parcel in the elite Rotmonten district, near the famous University of St. Gallen. Today, Cornelius will present his design for the center at a meeting of the oversight board comprised of Wendy, Josef and Dorothe Saubermann (representative of the local community).*

We randomly assigned the seminar participants to three teams. Team One

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enacted the role simulation while the two others recorded observations. In particular, Team Two was asked to answer the questions, *What is design?* and *Is a formal design process relevant*? Team Three was asked, *Do various design process team participants or subcultures (from diverse backgrounds and perspectives) have different "languages"?* and *If so, how do these "languages" impact team interaction?* After the simulation, observer teams engaged in dialogue to answer respective questions. Also, the role playing team commented on both questions. The entire session lasted 75 minutes. Both the simulation and ensuing discussions were video recorded. A complete transcript of the role simulation dialogues is available by contacting the authors.

To analyze the simulation transcript, we used a three-step-analysis for each metaphor. First we formulated a key observation for the respective metaphor. Then, in a second step, we supported each observation by citing dialogue excerpts. Finally, we formulated unique characteristics and insights for applying those metaphors. However, after our initial observation of the role simulation coupled with feedback from other observers, we noticed a predominance of language that is consistent with the metaphors of *lens, voice* and *performance*. Also the nature of the task, a governance and oversight board meeting with the purpose to authorize the construction of a new drug rehabilitation center in an affluent neighborhood with powerful citizens, influenced our decision to reduce the number of active metaphors. Accordingly, we decided to limit our analyses to the three metaphors noted above.

Results

In this section, we first elaborate on the results from our literature deconstruction and evaluation activity. Next, we discuss our findings from the role simulation.

Analysis of Literature Deconstruction. In total, we deconstructed seven texts, primarily journal research articles, with the specific intent of uncovering hidden assumptions, unanswered questions, and problematic issues that flowed from the assumptions. Our analysis of the deconstructed texts revealed four prevalent hidden assumptions (i.e., meta-assumptions) and unanswered questions. We further investigated each assumption as delineated below.

Assumption 1: "Conduit" and "lens" metaphors are the only forms of recognized communication for project teams. **Is architecture socially constructed?**

Assumption 2: Formal planning (conscious design) process is preferable when compared to emergent (organic or indigenous) "building". **Who benefits from a "formal" design process?**

Assumption 3: Tacit architectural knowledge exists and can be expressed through means such as metaphors. **Does tacit architectural knowledge exist? If so, then where?**

Assumption 4: *The languages of architecture are so unique that "natural language" has less usefulness for creating dialogue between Architects and*

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others. **Can awareness, by all participants, of communication metaphors be useful in the design process?**

The prevalence of these assumptions might indicate that our selected researchers prefer word choices that are consistent with traditional positivistic (e.g., cause, effect, proof, etc.) research views. Furthermore, these works tend to reinforce the notion that Architects through formalized design have individually mastered ways of creating the built environment instead of participating in a co-construction (dialogues) with others.

Analysis of Evaluation Activity. This exercise aimed at uncovering how architects view themselves and their profession. Although limited, these texts, dialogues from various publicly available chats and postings by Architects who were members of the Boston Society of Architects (BSA, 2002), yielded interesting insights. From this activity, participants who reviewed the texts volunteered words or word groups in response to each of three questions as recorded below.

Question 1: How do Architects view themselves? Architects . . . "believe that their genius is not recognized by others"; "are elitists"; "engage in dialogue with other elites"; "have an identity crisis coupled with inconsistent self-view"; "are the creators of society (pioneers)"; and "are the fulfillers of others' dreams". These comments suggest that Architects are highly capable, but misunderstood.

Question 2: How do Architects make sense of their profession? The Architectural Profession . . . "is weak despite its role in creating society"; "is isolated and fosters a defensive posture towards others"; "cannot learn from others"; "has a social and political mission"; and "has unclear limits and thus may suffer from a lack of domain definition and responsibility". These comments suggest that Architectural Profession may have diminished social relevance.

Question 3: Does the education of Architects solve problems or create more? Education forms Architects that are . . . "highly critical"; "thinkers who solve problems"; "highly theoretical and, thus, create more problems"; and "an elite group that is dominated by white men who tend to prefer 'lens' communication perspectives". These comments suggest that education forms Architects that are reluctant to engage in dialogues with others.

What emerged from this exercise was a sense that Architects defensively see themselves and their profession as weak and misrecognized. Feasibly they may have low self-efficacies which lead them to purposefully elude open forms of dialogue with other non-design constituents. Furthermore, Architects through their communication patterns, perhaps derived from historical education practices, may deny themselves valuable discourses with others who might significantly alter their professional and self-perceptions.

Analysis of Role Simulation. As explicated above, we analyzed the role simulation by means of the *lens, voice*, and *performance* metaphors. In general, "… metaphors shape how we see and make sense of the world by orienting our perceptions, conceptualizations, and understanding of one thing in light of

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another." (Putnam et al., 1996: 377) These metaphors serve as perspectives to facilitate understanding of the diverse and multifaceted field of organizational communication. For each of the three metaphors, we provide descriptions, explain primary observations from the simulation, provide supporting dialogues from the transcript, and conclude by delineating key insights.

The Lens Metaphor

An optical lens is a screen that filters, protects, shields, and guides optical radiation or light. Putnam et al. (1996) equates communication in the lens metaphor with filtering processes that search, retrieve, and route information. Organizations, as they appear in this metaphor, are eyes that scan, sift, and relay information. The lens metaphor requires senders and receivers to be active agents in the communication process.

Our primary *lens* observation relates to the potential for communication to be defensive or shielding. By observing participants dialogue through the *lens* perspective, we noticed that participants tended to use language or words and actions to support predetermined perspectives or point-of-views (POVs). Interestingly, actors signified defenses of their held POVs by interrupting current speakers and using words such as "me".

Support for this observation comes from our Architect, Cornelius, as he introduces his initial vision of the drug rehabilitation center. Dorothe, representative of the Rotmonten Purity association, interrupted as follows:

> ***Cornelius van Staveren III****: "Nice to meet you here today, I want to introduce you to my new project for the care center at Rotmonten, and I am really looking forward to the project and I think its gonna be a great project not only for the city and the district of Rotmonten, but also for the entire region of St. Gallen…" (he turns away from the board and turn towards his flip chart where he has a draft of the new building). "I prepared a little sketch where you can see the greatness of my design. We are planning a tower kind of building, which will fit completely into the context of the University …" (Cornelius is getting interrupted by Dorothe Saubermann)*
>
> ***Dorothe Saubermann:*** *"Excuse me, have you taken into consideration that his building blocks the view in Rotmonten…" (Cornelius cuts Dorothe off)*
>
> ***Cornelius van Staveren III:*** *"No, this building is going to be kept transparent. We have a very big experience in this kind of field and [the building] is not going to block the view…" (Dorothe cuts Cornelius off)*

Dorothe listens to all the information concerning the proposed building, the innovative architectural style that would supposedly accentuate Rotmonten's reputation in the broader community. However, she filters the information and focuses only on her interest to not have a drug rehabilitation center on

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Rotmonten. She argues by invoking the sanctity of Rotmonten views. Cornelius acts in a similar manner when he filters Dorothe's concerns regarding the views. His interest is to raise a monument and, thus, he focuses only on the building. In his opinion, the building will allow views since it will be transparent. Both arguments are initiated by interrupting the current speaker, an indicator for the lens metaphor. All the information that would have followed from the current speaker is then rendered less important. It is filtered by means of interrupting the speaker.

The developer, Josef Waegeli, in the continuation of the previous scene, uses a similar language approach:

> ***Dorothe Saubermann**: "But there will be people inside the building, if you know what I mean…"*
> ***Cornelius van Staveren III:** "They will be out of the building as quick as possible, because they will be in such a great health. They won't stay there for very long," (Josef Waegeli taps Dorothe on the shoulder and turns towards her while Cornelius is still talking to Dorothe…)*
> ***Josef Waegeli:** "He will establish an international reputation in Rotmonten. He is one person who pays attention to details and he is very well known for this kind of settings."*

Josef listens to the dialog between Dorothe and Cornelius. Perhaps because Cornelius was not convincing, Josef intervenes by delineating his personal interest. In his statement, he disregards Dorothe's concerns about the community and focuses on the building's innovative design that would supposedly accentuate Rotmonten's community standing. By touching Dorothe's shoulder, he attracts Dorothe's and Cornelius's attention and applies a physical filter or lens to strengthen his speech interruption.

Finally, Wendy Wu uses a similar approach. However, she does not use direct interruptions or physical contact to stress her point of interest. Continuing with the previous scene, Wendy also offers a comment concerning the proposed design:

> *Wendy Wu: "I actually don't understand the building. I mean let's think about this from a practical standpoint. What applications does the tower have for children and young adults who are going through drug rehab?"*

She listens to Cornelius's design proposal and to Dorothe's concerns but she seems to be narrowly interested in the practicality or functionality of the building. She filters or disregards both the presumed innovativeness of the architectural design that would positively accentuate Rotmonten and especially the concerns of Dorothe.

Our key *lens* insight suggests that language involves the use of disruption acts. When our actors interrupt or use word choices including "me", it may signify that they are defending their predetermined POVs. Furthermore, our actors use non-spoken physical contact or gestures (i.e., touch, etc.) to intensify

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the interruption. In these instances, the actors appear to not be receptive to other ideas or dialogues.

The Voice Metaphor

This metaphor addresses power relations by exposing who can speak, when they can speak, and in what ways they may speak. To have a voice is be vested by others with the possibility of speaking or expressing POVs in the context of organizations. However, members of organizations rarely have equal voice. This metaphor therefore focuses "[…] on the ability of members to make their experiences heard and understood; on the existence of an appropriate language of expression; on the availability of occasions to speak; on the willingness of others to listen; and on the values, structures, and practices that suppress voice." (Putnam et al., 1996: 389). Power is defined as a combination of social standing and capacity to use language which persuades or influences others. Power enables voices to be projected and heard.

Our primary *voice* observation relates to the frustration or de-legitimization of contra-POVs through coalition formation. Our actors grant voice to others so that they may overcome minor obstacles by forming temporal alliances against other contradicting positions, POVs, or voices. Support for this observation comes again from Cornelius who uses language to gain Wendy's support, perhaps with the aim of uniting against Dorothe's resistance as follows:

> ***Wendy Wu:*** *"Let's talk a minute about the practicality for us as service providers, as health care providers." (Cornelius approaches Wendy Wu and goes down into a crouching position next to her) "If we have a tower, then either we have to transport the service providers up or down to other levels, or we have to have a stairway, right? So, the majority of the day we will be moving between patients up and down on a vertical axis up and downstairs. Is that really the most practical way to service this population on a minimal risk? If we would put them more of a community center platform, how about that idea?"*
>
> ***Cornelius van Staveren III:*** *(still down) "I think that is a great idea, actually. I think we can redesign part of the building, and we can find a solution so we can get both, an efficient circulation system of the building as well as the aspects of view. It is also more a question of how high the tower is going to be as it is about the scales itself, the proportions…the place."*

Cornelius grants voice to Wendy Wu by giving her the time and possibility to speak and, thus, describe her concerns. He does not interrupt her, but rather listens to her concerns and demonstrates, through language, a willingness to modify his design in return for her agreement to accept the project on Rotmonten. By crouching down next to Wendy, he signifies his willingness to

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cooperate and to build a coalition.

Our key voice insight suggests that discursive power is *temporal, dynamic*, and often *lacks fixedness.* Voice and power seems to not be fixed or permanently ascribed to particular actors, but rather to flow depending on shifting language choices. Our actors overcome minor disagreements and by giving and sharing voice; they use language to build stronger, unified voices that might overcome resistance from Dorothe's lone voice.

The Performance Metaphor

This metaphor focuses on the social interaction embedded in organizational communication. The performance metaphor encompasses the dynamic processes and activities that bring organizational reality to life in communicative and narrative forms. Organizational actors communicate using techniques that are comparable to and perhaps informed by those used by stage actors and artists to persuade audiences. A key feature of this metaphor is social interaction which supports dynamic processes of acting, communicating, reacting, and improvising.

Our primary *performance* observation relates to the legitimization of novel narratives. Our actors rely on language choices that might be considered communicative performances most often to favorably present their own predetermined POV narratives. Support for this observation comes from the previously discussed scene between Cornelius and Wendy. Cornelius seems to recognize that Wendy's opinion is not so distant or removed from his own. Accordingly, he improvises to transform the situation by crouching on the floor next to Wendy then offering her a compromise (e.g., tower height reduction by a few meters) seemingly in order to convince her to build the rehabilitation center.

Cornelius again acts and speaks in a similar manner after the moderator asks the simulation actors to take a board vote on the proposed design. Cornelius uses this moment to present and plead, similar to a lawyer, for his modified design so as to gain board acceptance:

> ***Cornelius van Staveren III:*** *(Cornelius goes to the flip chart and modifies his design with big movements) "Sure. I would say we just have the tower a little lower …… But the shape basically will stay the same with the great roof. So this part of the great construction won't be destroyed. Then we will substitute this vertical circulation by a more moderate circulation and we will keep the view by keeping the building to lets say 5 or 6 stories."*

Also Dorothe uses performance-oriented language several times. First, she acts on behalf of the community in Rotmonten when she comments on the view:

> ***Dorothe Saubermann:*** *"Excuse me, have you taken into consideration that this building blocks the view in*

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Rotmonten…" (Cornelius cuts Dorothe off)

When she recognizes that her argument concerning the view was not heard, she improvises and advocates for the "poor drug addicts" who would be disturbed by aspects of Rotmonten's neighborhood:

> ***Dorothe Saubermann:*** *"Coming back to the view. I am very curious, why did you choose this particular view, I mean why didn't you choose e.g. make the building in a more quite place, where these young people could also have their quiet and they wouldn't have to be in contact with other people e.g. , why not in Appenzell? Why not having them there, they would have a magnificent view and no one would disturb them plus probably the land would also be a lot cheaper."*

Then again later, she switches roles to that of advocate for the Rotmonten community:

> ***Dorothe Saubermann:*** *"I can assure you that any members of Rotmonten Purity, which includes all of the people who live there, are not very eager to socialize with these new neighbors if they enter the area."*

Our key *performance* insight suggests that the use of such language could signify the emergence of *minority perspectives* and *interpretations*. Language and actions that may be associated with "performance" could signify that an actor is presenting a POV that may not be widely shared by the entire group. Furthermore, actors may use performance language to legitimize and make dominant their respective POVs.

Overlapping Metaphors

Several text passages may be analyzed by more than one metaphor. Returning again to the passage where Cornelius crouches next to Wendy:

> ***Cornelius van Staveren III:*** *(still crouched down) "I think that is a great idea, actually. I think we can redesign part of the building, and we can find a solution so we can get both, an efficient circulation system of the building as well as the aspects of view. It is also more a question of how high the tower is going to be as it is about the scales itself, the proportions…the place."*

As discussed elsewhere, this single passage yields many insights and meanings. By applying multiple, overlapping, and perhaps even contradictory perspectives (e.g., the seven metaphors) to a given text, we derive more comprehensive understandings of our actors and their discourses. This technique may be useful for robust decision-making given that it considers multiple understandings and yields additional variations of meanings, novelty, and, thus, more decision options.

Our simulation observations give us new impressions of group communication, especially for teams that deal with creativity, novelty

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generation, and differing constituent subcultures. At the outset of this project, we held the popular and intuitive belief that many team problems flow from misunderstandings, forms of communication error, that occur during group interactions. In this view, team challenges may be solved through a series of measures that clarify (i.e., "conduit and lens" metaphors) intended meanings put forth by various actors. This supposes that actors have consistent and internalized individual beliefs that may be articulated through languages or tongues. In a sense, the problem framed, in this traditional management view, is one of understanding and misunderstanding. However, our new impression is radically different. Through our exploration of language in action, we conclude that a new problem frame is appropriate. *Our reconstructed problem statement suggests that challenges in team or group dynamics flow from certain decisions that are co-constructed through team dialogues.* For example, challenges may stem from decisions that surround voice (i.e., will all affected voices be included even if such a policy reduces or eliminates certainty of an expected outcome?) or lens (i.e., can teams use language that seeks to find, not filter out, useful, albeit unknown or expected, information?) metaphors. Our reconstructed problem frame for group dynamics is now informed and expanded by awareness of the seven metaphors.

Discussion and Conclusions

In this section, we summarize and integrate the results from the three activities. Our observations indicate that dialogic acts of *filtering* and *controlling* are very important to Architects. In the deconstructed architectural literature, we recognize an underlying meta-assumption which indicates that *lensing* is also valued by Architects. In the evaluation activity, our participants view Architects as reluctant to engage in dialogues with other non-architectural subcultures. Accordingly, it seems that Architects filter and control their dialogues through communication avoidance, withdraw, or prevention strategies. In the role simulation, our actors use word choices that evoke the *lens* metaphor to defend their individual perspectives or POVs.

Reviewing the research data through the *voice* metaphor, we recognize that Architects, in general, may use language in a manner that minimizes the sharing of voice with other participating subcultures. Our deconstruction of the application literature supports this position on limited power sharing since it is an underlying or hidden assumption in many articles. The partner activity uses texts dealing with dialogues among various Architects. Interestingly, while the BSA Architects wrote of inviting others to participate in their dialogues, there is no evidence of this sort of activity since none of the texts come from non-architects. The role simulation indicates similar patterns. Although our Architect, Cornelius, listens to the concerns of the other involved subcultures, he reluctantly accepts only a few suggestions for changing the building design. He did not share the sovereignty of creation; he proposes any and all changes. However, the role simulation reveals that others are reluctant to share voice as

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well, especially if they perceive that their perspectives would not be accepted by the broader group.

Analyzing our research data through the *performance* metaphor reveals that our actors tend to use performance-colored language when they aim to persuade others to adopt differing languages and therefore divergent perspectives. Our body of deconstructed literature contains performance-colored language, especially in texts that thematically are about the ceremonial and socially constructed nature of architecture. This includes texts in which Architects seek approvals for certifications, zoning variances, building permits, etc. In the evaluation activity, much of the language used by our participants to discuss the BSA Architects' dialogues (BSA, 2002) seems to also be performance-colored: the "elitist" Architects; the "fulfillers of other's dreams"; and the "creators of society (pioneers)". Finally, the role simulation gives examples of how Architects may use performance-colored language to build coalitions and to convince others to adopt their languages and perspectives.

To communicate our reconceived understandings of the various assumptions that we observed in the reviewed texts, we reconstruct the four primary hidden assumptions. In Table 1, we list the original assumptions and speculate about possible implications of the reconstructed assumptions.

Original Assumptions	***Reconstructed Assumptions***
Assumption 1: Word choices that may be considered "conduit" and/or "lens" metaphors are not the only forms of recognized communication for project teams, but all seven metaphors are recognized communication views for project teams.	**Reconstruction of Assumption 1:** If the researchers/authors of the deconstructed texts had insight into the seven metaphors, would their research questions change and would they analyze communication in a different way?
Assumption 2: Informal planning process is preferable when compared to emergent (organic or indigenous) "building".	**Reconstruction of Assumption 2:** Informal planning processes for emergent (organic or indigenous) "buildings" may lead researchers to new construction techniques or create building that are more satisfying to the community and users.
Assumption 3: Tacit architectural knowledge does not exist.	**Reconstruction of Assumption 3:** Since there is no tacit architectural knowledge (knowledge without language), Architects can further develop insights (i.e., knowledge) about buildings by engaging in dialogues with others.
Assumption 4: The language of architecture is equal to "natural language" and is useful enough for creating dialogue between Architects and others.	**Reconstruction of Assumption 4:** Architects would communicate with others without any interfaces.

Table 1. Reconstructed Assumptions

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A review of our original questions exposes an unintended bias or assumption that issues or challenges arising in groups flow from misunderstandings. Perhaps this bias stems from our own exposure to management education discourses. For example, questions 1, 2 & 3 focus on understanding meanings among various diverse subcultures. However, our role simulation analysis reveals that the constructs of *understandings* and *misunderstandings* are not highly relevant characteristics of group interactions. Instead, actors' languages may be viewed as accumulations of historically derived meanings that make possible the emergence of particular viewpoints. When viewed through metaphorical lenses, these accumulations reveal language choices that flow from prior path associations (discourses) with others. We conclude that there were few misunderstandings, but rather mostly varied discursive language choices that over time, though associations, will shift, meld, and perhaps find resonance with others. Although our original research questions were useful as stimulants for this exploration, they now seem less meaningful. As such, we reconstruct our questions to better reflect our new problem frame:

> *Question 1: How would communication among constituent subcultures in the field of Architecture change if the various embedded actors were aware of the seven metaphors?*
> *Question 2: What types of useful decisions would enable project actors to frame built environment challenges so as to develop new environments that serve the needs of all who might be affected?*
> *Question 3: What types of language choices and descriptions bring about legitimatization of a majority of constituents' voices?*

Our exploratory research contributes insights about the dominant discursive practices used by designers in multi-constituent situations. Our evidence suggests that while all seven metaphors are present, designers predominantly use language that is most consistent with the metaphors of *lens*, *voice* and *performance*. Furthermore, our reconstructed problem statement suggests that multi-constituent team challenges arise from certain decisions that are co-constructed through dynamic team dialogues and discursive practices. Lastly, this paper illustrates an application of the seven metaphors framework as an analytical device for gaining situational insight about intercultural communication.

While our investigation reveals how Architects might use language to govern and develop design project, this highly qualitative and experimental research has limitations. As critics cite, discourse analysis may not produce results that are broadly generalizable. While exploratory analysis is useful for generating meanings and possible explanations, additional empirical examination is needed to verify these explanations and to eventually arrive at a generalizable knowledge. Other scholars might want to corroborate our results by conducting detailed interviews with large numbers of Architects and constituents. In our

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analysis of the simulation, we focused only on three metaphors: lens, voice, and performance. However, it would be interesting to analyze other instances through the perspectives of all seven metaphors. To build upon and verify our particular insights, researchers might want to observe and record actual project interactions throughout the life of multiple architectural projects. This might overcome any biases and inadvertent fidelity issues embodied in our role simulation, and, thus, leading to meaning condensation, saturation, and theory.

Despite these limits, we endeavor to provide useful knowledge for other scholars and practitioners. Leaders and others involved with organizational and project governance, especially in situations with highly heterogeneous constituents, might want to engage stakeholders in a variety of discussions about discursive practices. For example, teams might discuss processes for improving collective information gathering and processing. Perhaps by recognizing that individual actors lack all the information and communication abilities needed for complex and evolving projects, multiple stakeholder voices may be respected and included. Moreover, teams may want to discuss the three questions posed above, especially the seven metaphors, and arrive at consensus about framing the project challenge. Teams may benefit by exploring how each metaphor's perspective might inform early team language choices and, thus, decisions. Lastly, discussions centered on achieving *observation* and *reflection* continuously throughout the life of the project might be useful.

It was our aim to develop a deeper understanding of how language shapes and forms the relationship between various subcultures in the context of Architecture, our application topic. Through the influence of our various discourses, readings, and observations coupled with our own histories, we have gained interesting insights and understandings that reshaped our conceptions of network relations, communication behaviors, and governance. We now have a better understanding of the challenges emerging from fluid and ever-dynamic multi-constituent design situations. Through this project, we have heightened both our appreciation for and sensitivity to the power of tongues.

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