



DESIGNING CIVIC CONVERSATIONS

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Things and facilitation in high-stakes and difficult conversations

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Designing Civic Conversations

Things and facilitation in high-stakes and difficult conversations

People have a hard time talking about difficult topics. This work details how spaces and things play an active role in conversation and can help people better direct their conversation toward deeper engagement, sharing and discussing ideas and experiences that pertain to the problem at hand.

Conversations are the medium through which people collaboratively deliberate, or together, make sense of complex situations. Conversation can be defined as two or more people talking together. Within this broad scope exists a special subtype that I call the high-stakes conversation. A high-stakes conversation occurs between an expert and a client when the client is engaged in planning a course of action in a complex situation. High stakes conversations are, in a sense, a new architecture of place that has continually evolving sets of mores for behavior.

This research shows the high-stakes conversation has five essential characteristics. The first, and most significant, is that dialog centers around making a decision of consequence. Additionally, in this dialog: there is no “right” answer, a decision is imminent, participants are characterized by imbalances in knowledge, power, experience and consequence, and decisions are irrevocable.

Another special subtype of conversation, identified by Stone, Patton and Heen (2010), is the difficult conversation. Difficult conversations occur when aspects of the participants’ identity become at stake in the conversation.

Over the course of four years of research and fieldwork I have documented some understandings of how things (images, spaces, objects, and interfaces) can function in facilitative ways in high-stakes and difficult conversations. This work investigates conversation as shaped by deliberative democracy protocols, facilitated by games, in high-stakes and difficult conversational

contexts. Fieldwork principally consisted of planning, designing artifacts for, conducting, and facilitating a variety of meetings on different topics, in different environments, approaching a broad array of problems.

Through this research, I argue that things, the metaphors things evoke, and the systems that surround, play a significant role in constituting the conversational environment – that things are active as facilitators in the conversational field and should be created with respect to that framing to elicit a more convivial, generative experience.

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1

Values and Designed Conversations

Americana, democracy, and this work

Considering participation as a thoroughgoing part of the constitution of democracy in the contemporary United States, we open with one historic, iconic depiction of participation, and discuss how that model is no longer valid. Following that is a brief case study discussing the surfacing of values during the planning process, which is a touchstone that guides this work. This section concludes with a discussion of the upcoming chapters, and sets forth an important caveat for those hoping to plan these events.



Figure 1.1 — Freedom of Speech, Norman Rockwell, 1943

INTRODUCTION

In 1943, in the midst of World War II, the weekly magazine *Saturday Evening Post* printed a series of four images as story illustrations (Murray et al., 1998) visualizing phrases from the 1941 State of the Union address by President Franklin Delano Roosevelt. “Freedom of Speech” shown at left, shows an archetypal depiction of public engagement – a citizen speaking their mind in a civic setting. The three companion images depict the

other freedoms from Roosevelt’s speech: freedom to worship, freedom from want, and freedom from fear (The American Presidency Project, 1941). These images, by the artist Norman Rockwell, were re-published widely by the Office of War Information as posters—a fundraiser for the war effort. This effort made Rockwell’s images the key factor in raising national awareness of Roosevelt’s previously little-regarded framing of the Second World War as jeopardizing the freedoms of the United States (Kimble, 2015).

This iconic depiction of public speech is layered with Rockwell’s particular point of view, and shaped by his New England locale. If we examine Rockwell’s central character of the working man, inky-haired in the blue (blue-collared) zippered pullover, standing with a relaxed confidence, and wearing a worn suede jacket; we notice that his hands are dirtier, rougher, and unadorned compared to the smoother, paler, beringed hand placed prominently in the foreground, or the hand holding the document in the midground. Powerfully positioned at the apex of the triangular construction of the image, the working man is leaning back slightly, lips slightly apart, eyes focused, head inclined as if he was speaking to someone slightly above his direct line of vision. The document in his pocket is a copy of the document held by two other men in the image. The working man has read it, digested it, tucked it safely away, and is now, in a calm sensibility, free to comment upon it without needing to refer to it. Aggregating all the partially obscured text from the two displayed copies of the document cover we can read:

text shown in image	partially reconstructed text
NNUAL REPORT of the P TOWN of ERMONT	ANNUAL REPORT of the ???P TOWN of VERMONT

Table 1.1 — Reconstructed document text in “Freedom of Speech”

Checking the records of the State of Vermont, there is no town or village in Vermont that ends with the letter “P”; however, we do know the type of meeting: a town budget hearing. Coincidentally, I began my journey in designing for civic meetings designing artifacts, environments, and procedures with the 2016 Pittsburgh Capital Budget hearings. And though I personally have a latent sympathy for such depictions of idyllic Americana instilled by a fervently patriotic fourth-grade teacher, a critical reading of this image

reveals both a different kind of America than exists today and a model for civic conversation that has, over time, become ultimately less useful for both citizens and government. This image of public comment as a performance depicts something that in the course of this work I hope to unset.¹ With the fog of historical distance, we might not indict too quickly. Perhaps the small-town culture of 1940s America had different patterns of everyday life that afforded more replete relationships and held space for considered conversation and deliberative discourse outside of civic settings. For many reasons, however, this representation of civic conversation is no longer a viable paradigm in a contemporary democracy.

1.1 THE QUESTIONS AT STAKE

This PhD dissertation investigates several specific types of conversation, attempting to understand conversations as *events* in the context of *processes* resident in *places*. The dissertation asks the question: how can civic conversations be designed, designed for, and designed with, in contemporary contexts? How do civic conversation events shape activity in the network of stakeholders that surrounds and supports the events? How can the design of places and things, in our contemporary contexts, play an active role in helping facilitate conversations, enabling richer civic engagement at the level of the individual and the level of the broader network? Through organizing and facilitating a series of events over three years, I explored these questions from a variety of perspectives, bringing a designer's eyes and sensibilities to a broad array of problems.

The people that come to a community forum in 2017 in Pittsburgh are rather different than the people pictured in Rockwell's idyllic 1940s America. Conducting these meetings on behalf of the City of Pittsburgh and the State of Pennsylvania, with Carnegie Mellon's Program for Deliberative Democracy (PDD), and later with the Art of Democracy (an LLC partnership that spun

¹ Rockwell also painted images with clear and direct portrayals of important civil rights events throughout the 1960s and did not shrink from making powerful statements about the negative effects of racism. In this image, power dynamics are at play. The act of speech is depicted as performance, of the nine people shown in the audience, six are looking toward the working man. The community is shown as monocultural (all participants are white); as male-dominated (of the 10 people in the image, two are women, and of neither woman can we see a full face); as dominated by wealthier individuals—of the five people whose clothing we can see, four of the five are well dressed, with dress shirts (white collars) and with visible jackets; and as dominated by older individuals—except for the glimpse of the young woman to the working man's right, everyone is older than he is.

out of the PDD) and under the auspices of Pennsylvania’s Sunshine Act², meetings were always open to whomever came. The proper terminology for this way of convening participants from a social science perspective would be a *convenience sample*, meaning that no special care was taken to ensure that a sample was substantially demographically similar to the sample population. Throughout this dissertation, however, I will comment upon the demographics of the meetings when they are noticeably divergent. Occasionally, some of the events were able to assemble a significant portion of the entire population. In these cases, different thinking about what constitutes diversity was necessary. The primary approach of this investigation was reflective, phenomenological, and design-oriented rather than positivist.

1.2 SOME DEFINITIONS

Before we get too deeply into this work, I will set forth some key definitions for important terms that will be used throughout the work. While some of these terms may seem clear and obvious to most readers, I would like to share the specific nature of my classifications. These classifications are an attempt to set down the tacit definitions that are in use throughout the Pittsburgh city government with references— where appropriate—to use in other literature this dissertation draws from.

1.2.1 CONVERSATIONS RELATED TO GOALS

A *planning conversation* is one in which two or more people are engaged in dialog to create a plan for some future contingency. A planning conversation involves both considering the questions of the possibilities at play—“Where are we headed?” and/or “Is this where I want to be headed?” (Flores, 2012, p. 37)—as well as prototyping some possible steps toward that goal. A planning conversation does not necessarily ask for commitments, but it could, and it likely does enumerate potential commitments that might be requested.

² Pennsylvania Sunshine Act, 65 Pa.C.S. §§ 701-716 is also known as the *open meetings law* and requires “any prearranged gathering of an agency which is attended or participated in by a quorum of the members of an agency held for the purpose of deliberating agency business or taking official action” to have advance notice given to the public, be open to public viewing, and contain the opportunity for public comment. Further, it is unlawful to prevent anyone from recording the meeting in any form.

A *high-stakes conversation* is one in which two or more people are engaged in a planning conversation that has compelling implications for one or more of the people. This will be discussed at length in Chapter 2.

1.2.2 CONVERSATIONS RELATED TO ACCESS AND PARTICIPATION

A *private conversation* is two or more people engaged in discourse in a place that prohibits participation by preventing access.

A *public conversation* is a two or more people engaged in discourse in a place that entails open participation by people who can access that place. As with private conversations, public conversations need not be a simple binary. There may be groups who are excluded from participation because they lack unfettered access to the place of the conversation, just as there may be people who have privileged access to the place of the conversation. Essentially, a public conversation is characterized by a greater degree of openness and accessibility. Further, the public conversation may be shaped by the performative nature of the experience.

1.2.3 CONVERSATION RELATED TO BOTH GOALS AND ACCESS/PARTICIPATION

A *civic conversation* is two or more people engaged in discourse in a place that entails open participation by people who can access that place. Further, civic conversations are hosted by a government entity for the purpose of soliciting feedback on an issue that is at stake. Civic conversations are a type of planning conversation, but the participants do not necessarily need to prototype steps toward the goal. In civic conversations, typically the decision rests outside of the scope of authority of the participants having the conversation.

1.3 DISCUSSIONS OF VALUES

In the context of this work, one key role of conversations is the surfacing of values. Values may be understood as the underlying principles that motivate beliefs. In this work, values drive construction of what Bruno Latour refers to as “matters of concern” (Latour, 2004). As citizens, as neighbors, or as people merely trying to make our way in the world and shape our communities more in accord with our lives, when we have the conversation, we focus overly upon the matter of concern and neglect voicing the underlying values that shape our beliefs in relation to that matter. Much of this work aims at surfacing the values of participants, and not only surfacing the values of participants as a constituted “public,” but the participants of the process that constitutes that public. To put it more simply, I am not merely interested in surfacing the values of the people who show up to a conversation event, but in also surfacing the values of those who plan and those who design the conversation.

After conducting nearly 40 community meetings of different types over the past three years, one aspect that is central to all these meetings is that questions of values are at play in civic conversations. There are two principal ways that values can be understood in this context. First, there are the values at play that the people attending the meetings hold—a substrate of morals, ethics, and beliefs that people bring with them to the event. Second, there are values at play when constructing a process. These processes are easily manipulatable. Processes might be designed to favor one viewpoint over another, to silence viewpoints, or to exclude particular participants. To offer a more subtle example, questions may frame the issues in polarizing ways that limit nuance in discussion.

1.3.1 VALUES AT WORK

In April of 2015, I was invited to assist with work conducted by Carnegie Mellon University’s Program for Deliberative Democracy. Among other projects, the PDD was conducting work with the City of Pittsburgh to help redesign the the annual capital budget hearings. Past meetings had been contentious and unpleasant for city staff and frequently failed to surface actionable information for the Office of the Mayor.

In a meeting during the planning phase of the 2015 capital budget community forums, the controller for the City of Pittsburgh came to a realization. We had a meeting to discuss the different priorities that were at stake in the budget. The mayor had developed a set of priorities that he hoped to accomplish. We discussed the forums and how we hoped to find out both what people

wanted for themselves and what projects they hoped to have executed in their neighborhoods. We talked about whether the citizens shared and supported the mayor's priorities and the mayor's hope that they did. The conversation covered the specificities of whether we needed to explain where money for projects was coming from. Did citizens need to know if funding was coming from community development block grants, pass-through funding from the federal government that the city administrated, or the main pool of funding that was derived from city residents via taxes?

The city controller, Alex, stopped the conversation. "I think I just realized... the budget is an ethical document. It is a statement of what we value as a city." The group of us hosting the meeting agreed enthusiastically with his insight. This insight moved the planning conversation to questions of values, and we began to structure the meeting format around the set of ethical imperatives that could be contained in the budget. This insight was also a liminal personal point for me, where I saw that the dialog that we were engaged in about the specifics of framing this issue for a public to discuss served both the public and the city staff. The generative inquiry of the design process, mated with the rhetorical inquiry necessary to structure a deliberation, surfaced new understandings as an adjunct of the process.

After a course of several meetings, our team of city staff and CMU doctoral students designed the meeting agenda to help attendees understand and discuss the degree to which they agreed or disagreed with the set of priorities that the mayor had developed to guide the implementation of the budget. Because the capital expenditures varied so much, a specific dollar figure did not necessarily relate the degree to which the administration *cared* about that aspect. Alex's insight into his own work came from engaging in a planning conversation that attempted to surface the values of the administration in relation to engaging residents to give feedback. And engaging residents to give feedback is a value in and of itself.

When voters delegate the power of governance to an administration, that administration assumes the obligation to govern in such a way that reflects the promises made by that administration to the voters. In the mayoral administration as constituted during the time I worked with them (2015–2018), a significant component of that ethic was to be guided by social justice for all people in Pittsburgh and a desire to act in accord with what the citizens (writ large) actually want. The administration approached engaging in this activity from a perspective of wanting to learn from citizens' experiences, wanting to hear what the citizenry actually thought, and a desire to understand how

those thoughts bear upon the day-to-day operation of the city government and the strategic direction that the city government set for the year and for the duration of the mayor's leadership.

As a consultant, my values shaped the realization of the administration's values through these community forums. The other consultants who were part of the Program for Deliberative Democracy and I held a complementary ethic: to facilitate administrations who wish to act ethically—in accordance with the will of the people who their decisions affect.

Those ethical positions manifest as material interventions in the fabric of the city. Symbolic value in the form of money is exchanged for use value in the form of a fire truck or a pothole filler. In the context of the city, these changes have a vector along which action is more facile. It is relatively easier to change money into a fire truck, and the accompanying set of capabilities that manifest in a fire truck, and less easy to change fire trucks into money. Governments extract symbolic value from citizens in the form of money through taxes and fees; they then circulate and maintain that symbolic value in bank accounts, bonds, and other money-storage schemes. Guiding the transformation of the symbolic value into use-value (i.e., practical actions that can be realized, or a set of affordances gained [in the sense that fire trucks afford the extinguishing of fires] by the expenditure of symbolic value), however, is something that entails an ethical imperative.

While the question of the purchase of a fire truck does not seem to be a question of values, the city of Pittsburgh has to submit to fiscal review under the Pennsylvania 2014 Act 47 Recovery Plan for economically distressed cities. Pressure existed (exists) for the city to invest more money in infrastructure, including buildings, roads, and bridges. (McNulty, 2017) The trade-off entailed is when the city does not currently own fire trucks that can navigate the narrow, steep, and winding streets of parts of the city. The construction of these streets means that not all possible fire trucks can drive on all possible streets. Choosing a large fire truck, rather than one with a smaller, narrower design, has significant implications for people who live in less accessible parts of the city.

The graph below, produced by the author for the 2016 Pittsburgh Capital Budget hearings (held in May of 2015), demonstrates the kinds of expenditures with representative projects from the past year that were highly visible and easily identifiable by citizens. These capital budget items were chosen to reflect highly visible, easily identifiable purchases by the city.

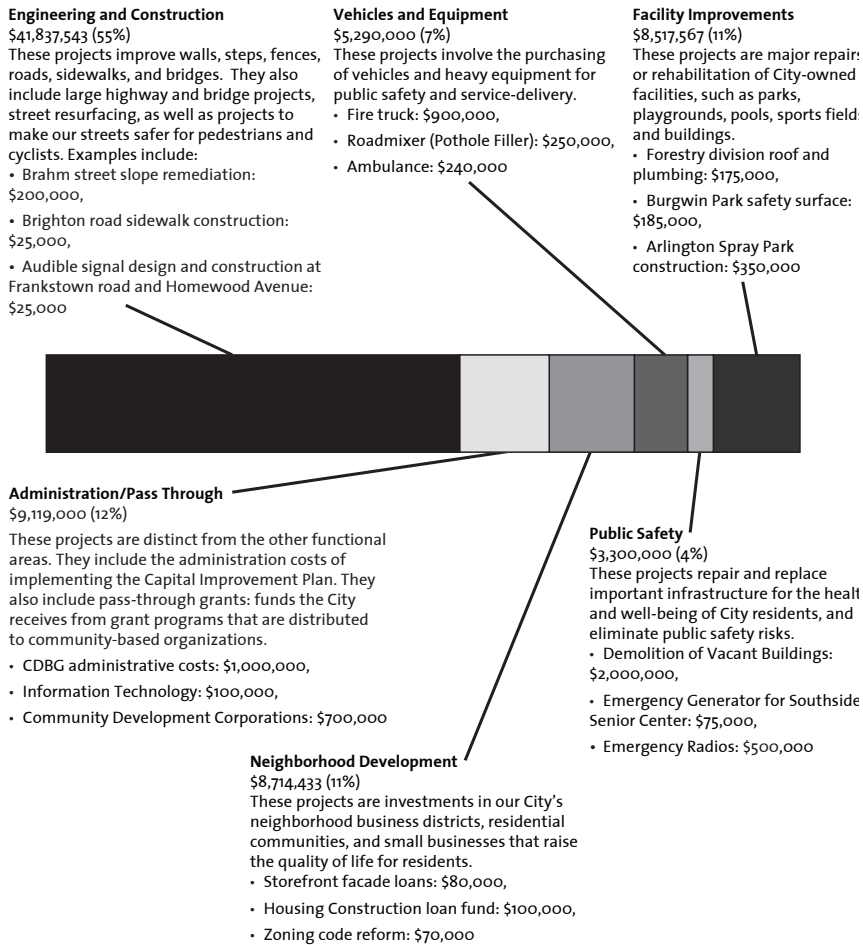


Figure 1.2 — Budget distribution from City of Pittsburgh 2016 Capital Budget Deliberative Community Meetings, May 2015

On a day-to-day basis, individual city staffers might use their own ethics to guide those decisions. “Although we have no budget, few resources, and no agency in this area, should I attempt to help a homeless individual who has reached out to the mayor’s office for help?” “Are the concerns of a citizen regarding a deteriorating retaining wall in his neighborhood worthy of my time and attention as a member of the city government?” “Should I use this approved supplier to order office supplies, use a different supplier, or initiate an inquiry to know where I can have this need fulfilled in a more sustainable way?” Members of the city staff make hundreds of decisions a day implementing ethical priorities. It is simply not practical or desirable to consult the citizenry on all decisions. One

key point of delegation—of assigning the task of governing to a subgroup of the population—is to free up citizens’ lives from needing to think about those issues.

1.3.2 THE ETHICS OF OPENNESS

Yet, understanding when to reach out to the residents of the city for guidance on an issue is an ethical question in and of itself. Asking the question of “does this particular question require more specific citizen guidance?” belies an ethic of the elected official’s administration having an ongoing and immanent responsibility to reflect the will of the people. Conversely, some political administrations within Pennsylvania have chosen to avoid hearing from the people. During the course of this investigation, Senator Patrick Toomey was elected to the United States Senate . A group of citizens, styling themselves as “Tuesdays with Toomey,” repeatedly attempted to share their ethical positions with Senator Toomey by meeting outside Toomey’s Station Square office space at lunchtime on Tuesdays. These citizens found themselves stymied by the Senator, who attempted several material strategies to avoid protesters. Senatorial staff variously delegated the building security to allow entry only to a few delegates from the protesting group, then to prohibit entry to protestors entirely. As the protest activity maintained momentum over months, senatorial staffers began refusing to accept letters and postcards from the protesters. After several months of protesting, Toomey’s staff moved their Pittsburgh office downtown to a less accessible location. While it was stated by the office that the move was to make constituent access more convenient, it was widely believed by protesters that the move was an effort to curtail protests (Mauriello, 2017). Protesters cited the lack of available parking downtown, versus the abundant parking at Station Square, and the lack of outdoor space for protesters to meet downtown, versus the abundant space for protesters to meet at Station Square, as two significant reasons the move made protests more difficult. These material interventions represent one way that the designed environment might be used to shape citizens’ speech.

Additionally, Toomey uses disciplinary structures to limit and control conversation at events where conversation is purportedly the ethic. Toomey’s Town Hall meetings are short, are conducted via Facebook streaming media or via teleconference phone call, and literally “mute” constituents during these conversations: no audio input is accepted from constituents. Questions from constituents must be submitted via a web form or via the mechanism of Facebook comments prior to the event.

One reading of Toomey's approach to public engagement is that he is following the rules of the U.S. Senate. The list of rules that enumerate the responsibilities of a Senator require only that all senators attend when the senate is in session (Rules of the Senate, Rule VI) and vote on legislation, or provide a reason why they will not (Rule XII).³ Senator Toomey could argue that his obligation to receive and act upon public feedback ended on election day—that his selection as an elected official constituted a complete delegation of responsibility to govern from his constituents to him.

Most elected officials, however, make a good-faith effort to solicit ongoing feedback from their constituents. There are any number of policy issues that are complex enough that an elected official would wish to solicit advice from their constituency but that do not rise to the level of legislation that is put before the public. Perhaps an elected official might solicit the input of the residents of an area that might be affected by pending legislation. That official might want to understand the ways in which a particular set of political priorities reflects (or does not reflect) the priorities of the residents of the region to which they are accountable. In a political administration that is more cynical, an elected official may want to hear the priorities of citizenry in order to craft messaging to exploit the constituents' fears or desires in order to further their own agenda.

1.4 THIS WORK

During 2015 May–November, and 2016 February–June, I worked directly with staff in the City of Pittsburgh, the Mayor's office, Management & Budget group, and two groups in the Planning Department: Sustainability & Resilience and the Affordable Housing Task Force. The opportunity for designers to conduct research with city government was both rich and fruitful.

One aspect of the work I undertook in the course of this investigation dealt with engaging a greater system of actors around issues. By framing different opportunities for participation and commitment for mid-level actors (e.g., becoming an ongoing member of a steering committee, being part of a group that frames an inquiry for a television show, having the opportunity for one's community group to be a part of the group that informs city policymaking),

³ Oddly enough, Senate rules have very little to say about senators' obligations at all. Predominantly, Senate rules enumerate the privileges of being a senator, how a senator may act to introduce legislation, participate in committees et cetera, and have a somewhat long list of prohibited acts (and exceptions to those prohibitions).

I developed an understanding of the kinds of engagement that are appealing, to what degree groups want to participate, and some view of what the stakes are for participants.

As argued by John Zimmerman and Jodi Forlizzi, the application of design methods to new kinds of problems can produce knowledge (2008). I would heartily concur that engagement in the rigor, specificity, and situated nature of design processes produces a kind of knowledge that is unique within the academy. Design research can be directed along positivist lines of inquiry and produce results that are localized understandings of a particular phenomenon. I would argue, however, that the specificity and situatedness of design within the multiple contexts where it must succeed (with the accompanying entanglements of obligations to client, user, and material) is where design research is at its most effective and most honest. The understanding derived from engagement in considered, reflective design practice can be redirected into the authorship of new objects, the design process of which may be the site of further research.

This is the path that this investigation followed. Rather than being a process that was architected a priori, developing this research evolved more like a series of moves or gambits. My fieldwork in this project consisted of designing artifacts and engaging with the social systems that used these artifacts over 38 different public events. Further, I taught two courses that bear upon this material: *SpeakLab*, a senior studio where students in small teams researched and constructed an approach to a wicked problem that pertains to Southwestern Pennsylvania, and *Designing Civic Conversations*, where in cooperation with the Mayor's office of the City of Pittsburgh and informed by the Allegheny County Department of Human Services, students conducted outreach efforts sharing information and soliciting feedback on the particular challenges of people experiencing homelessness. Additionally, I developed a game and tested artifact-making as ways to facilitate disclosive conversations using objects.

In Chapter 2, I examine literature on the design of computer technologies for commitment-making as one type of conversational medium, foregrounding a debate upon the ethical and social consequences of encoding human processes in software. I illustrate the implications of this debate through an analysis of the rhetoric surrounding a contemporary example of commitment-making in software. Chapter 3 examines games from the perspective of a game as a material object that facilitates conversation. I discuss a number of games that have conversation or conversational principles at their core and

discuss a tripartite approach to conceiving of the relation between games and conversation. Chapter 3 concludes with a description of the resultant game, as well as an account of the design workshop activities that informed the design. Chapter 4 describes how the planning process influences the convening organization—how the planning process helps to surface the values that the conveners bring to the experience—and discusses how the resultant event can be reframed for the conveners to increase engagement within the convening organization. Chapter 4 concludes with a set of case studies that discuss actual implementations of civic conversations in relation to a civic conversation model that I derived from the high-stakes conversation model detailed in Chapter 2. Chapter 5 discusses the challenge of evaluating conversation events. I center the discussion of evaluation around methods that were attempted during my doctoral studies and detail supplemental approaches that might be productive in future work. Chapter 5 continues with an evaluation of one particular event that was high-stakes, that was problematic from the perspective of the constitution of the event, and that was highly informative as pertains to the agency of the objects at the event. Chapter 6 discusses the evolution of knowledge and findings across the life-cycle of the entire project of this dissertation and its constitutive research. Chapter 6 concludes with broader implications for practitioners and opportunities for further study.

1.4.1 GENERALIZABILITY VERSUS PRECEDENT

This investigation aims to establish a group of precedents that other designers might build upon when engaging in designing for civic and other types of high-stakes conversations. In the course of this work, we learn about the conversations, the contexts of those conversations, and the particular challenges of designing in those contexts. This work, however, does not make sweeping claims to generalizability.

Speaking broadly, design research is difficult to generalize to other contexts. In the seminal work on personas, arguably the most widespread contemporary design research artifact, Alan Cooper, citing Grudin & Pruitt, (2002) discusses the difficulty in generalizing personas developed for one product to other products produced by the same company.

...To be effective, personas must be context-specific: They should focus on the behaviors and goals related to the specific domain of a particular product. Personas, because they are constructed from specific observations of users interacting in specific contexts, cannot easily be reused across products, even when those products form a closely linked suite.

(Cooper et al 2014)

The problem that Cooper notes with personas and products is magnified when attempting to conduct meaningful work with communities and policies. When well done, this work is eminently situated, sensitive to the needs of the various community members, community organizations and mid-level stakeholders. This work is aware of the context of the political moment, the current confluence of personalities that surround the issue, and the

The work was conducted in a specific locale, backed by the perceived power of association with a prestigious university, in collaboration with a sympathetic city government that, to some degree, had earned the trust of the area residents. Additionally, I was fortunate to be able to leverage the relationships within the city government that had already been developed by the Program for Deliberative Democracy.

That being said, aspects of this work are reproducible, that offer precedent can be built upon are: the framework detailed through cases in Chapter 4 and extracted in Chapter 6, and the underlying ethical principles of deliberation, also detailed in Chapter 6. The specific implementation of the framework needs to be redesigned, perhaps even reconceived for each confluence of places, community members and issues. From the work I have detailed in this dissertation, I firmly believe that the success of conversation events is achieved principally through the design of the political situation: engagement of the convening organization and the community participants, and the thoughtfulness, discipline and mindfulness of the conversation designers.

Diagrams and models are used throughout this work. In fact, one of the contributions of this dissertation is a schematic understanding of this set of precedents as cases and models for further work. However, despite the best efforts of design, the best intentions of convening organizations, the greatest degree of earnestness by the participants, conversations are never as clean

or elegant as the models might suggest. Conversations are rife with missed connections, implicature that goes awry, lost threads, misunderstandings, double meanings, unintended offense, irrelevant information. In civic contexts, with the radical differences in the histories that participants bring, it is astonishing that conversation works at all. In 1933, mathematician Alfred Korzybski wrote “the map is *not* the territory, but if correct, has a *similar structure* to the territory” (Korzybski 1994, p 58) The models presented herein aspire to offer a similar structure that can be used to understand the territory of the work done in these projects. Further, and offer designers working with government and community a way to help people that might be affected by a policy surface the stories that matter, learn from their neighbors, and communicate meaning to policy makers.

1.5 LIMITATIONS OF DESIGNED CONVERSATIONS

“Communicative and deliberative approaches work well as ideals and evaluative yardsticks for decision making, but they are quite defenceless in the face of power” (Flyvbjerg et al., 2003, p. 7).

The above quote from economist and geographer Bent Flyvbjerg illustrates one of the limitations of this type of work. Across the literature (Dubberly & Pangaro, 2009; Scharmer, 2009; Bohm, 1991), research indicates that participants must commit to engage in the conversation, and that commitment means engaging in cycles of listening, thinking, and speaking. Power imbalances are unavoidable but can be ameliorated to some degree when the actor in power elects not to exert that power, or when the actor in power is attentive to the needs and desires of the community. What Flyvbjerg is referring to, however, is the problem of actors working around the system of deliberation and conversation, and how power relations in those situations might be ameliorated to some degree. Deliberative approaches require a political system that is open to receive that deliberative information. If powerful office-holders or community interests intend to unsettle the deliberative process, the process itself is not proof against corruption.

1.6 EMOTIONAL VERSUS RATIONAL APPROACHES

This dissertation will not deal with distinctions between emotional thinking and rational thinking. I believe that this is an artificial distinction that limits our sympathy toward thinking approaches that are assigned to the arational camp. If we are content to leave our Cartesian baggage on the platform and follow the thinking of Maturana & Varela (1992), we come to understand that from a biological perspective, and thinking of thought as neural activity, perhaps emotional thinking is merely another type of thinking. To extend Maturana & Varela, we might even consider that in a sense, emotional thinking might be a *more* valid approach to thinking than rational thinking, because a greater degree of the organism's systems are engaged to produce emotional thinking. This work will therefore accord arational and rational thought the same degree of respect.

There is a bit of a debate ongoing in democratic practices between agonism and deliberation. Design practice, following the track of Carl DiSalvo (2012) and Chris LeDantec (2016), has focused mostly on agonism (Mouffe, 2013). Actually, that is not quite right; agonism, not deliberation, has been the most discussed democratic theory in design circles. Yet oddly, deliberation has taken hold nearly everywhere else. While Mouffe accurately portrays the challenges of neoliberalism to a liberal democracy, the argument against Rawlsian/Habermasian (Rawls, 1971; Habermas & Rehg, 1996) deliberation comes about 10 years too late. The drive to consensus that characterized these earlier conceptions of deliberation has moved on to approaches that are sympathetic to a wider range of contributions (Gastil & Levine, 2005; Cavalier, 2011; Nabatchi & Leighninger, 2015).

This is not to say that there are no issues with deliberation. Deliberation hangs its proverbial hat on a predominantly rationalistic point of view. While deliberative approaches might seem to be unable to take into account statements like, "When I hear something like that, I feel afraid.", a central approach in the model of deliberation I used throughout this work asks participants for reasons why; reasons that are arational are nonetheless reasons.

1.7 **APPROACH AND ANTICIPATED CONTRIBUTIONS**

Following a practice-based design research approach, this work investigates the relationship between designed things (images, spaces, objects, and systems) and people engaged in difficult or high-stakes conversations. Placing questions of power relations, rules systems, and structures at the center of the inquiry, the work details the design of two artifacts created to help people better cope in these situations, a number of case studies of deliberative engagements conducted by the author, and a survey of approaches to evaluating conversation events. To develop the artifacts, I conducted a codesign workshop and tested the artifacts in a training experience. The case studies are informed by fieldwork as a reflective practitioner and my own expert knowledge of 20 years of experience designing, teaching design, and supervising and managing design projects.

This work contributes to practice-based research approaches in design by identifying the activity of conversation as a designed and designable process, shapeable by rules and facilitative objects. Through this work, extrapolating from the specificities that design research necessarily entails, I contribute a set of strategies for approaching conversation events and a set of views on how conversation events are shaped by systems and other contexts. I discuss strategies for review and evaluation and review some exemplar work. Last, overall findings are discussed from the point of view of deriving strategies for other practitioners designing to support civic and other public conversations.

2

Problems of Designing for Conversation

The high-stakes conversation,
and the ethics of structuring conversation

This chapter introduces the model of the high-stakes conversation, discussing the five characteristics that typify these types of fraught experiences. Conversation activity can be heterogeneous, complex, and multimodal. Design activity is nearly always interventional in character. When making design interventions in conversation activity—when introducing artifacts or bringing together stakeholders—it is important that intervention is done with an understanding of the ethical implications of design interventions. I discuss a debate among Lucy Suchman, Terry Winograd and Fernando Flores, and others covering the ethical implications of structuring heterogeneous human activity. Following that, I discuss two potential sites for intervention, as well as a suite of potential approaches to intervention.

2.1 INTRODUCTION

Conversations are the medium through which people collaboratively deliberate or, together, make sense of complex situations. These deliberations occur in every knowledge domain. A wide array of academics have researched the deliberative conversations that occur in their own knowledge domain and provided models and best practices for practitioners to engage in those conversations.

Conversations are the medium through which people make commitments to one another. Commitments, regardless of whether the context be business or personal, are an interpersonal act or are a promise/acceptance couplet between two actors. Fernando Flores, in collaboration with academics such as Hubert Dreyfus, Terry Winograd, and Robert Solomon, has documented the ways in which conversations engender commitment and trust.

Conversation theory, pioneered by Gordon Pask, created structured definitions and relations between concepts like agreement, understanding, and consciousness (Pangaro, 1996). Cybernetics is at the foundation of conversation theory, and conversation is a central aspect of design practice and is the goal of designing for communicating. Within, and tangential to the field of design, practitioners and scholars such as Hugh Dubberly and Paul Pangaro (2009), Terry Winograd and Fernando Flores (1986), Jeff Conklin (2006), and Horst Rittel (Kunz & Rittel, 1970) have examined the theoretical underpinnings of conversation—both as a model for designing and as a central concern of cybernetics. Judith Donath (2002), Robert Horn (2001), and Clay Shirky (2009) have designed and/or engaged students to design alternative models and interfaces for conversation.

Historically, conversations have been used as a mark of a kind of intelligence. To pass Alan Turing's Imitation Game (popularly known as the Turing Test for Artificial Intelligence), a computer must be able to successfully masquerade as a human being in conversation. (Turing, 1950) A seamless human <=> computer interaction in a natural language conversation is, in Alan Turing's view, one of the ways that computer software could demonstrate a kind of intelligence. Drawing from Turing, sociologist Harry Collins created the concept of *interactional expertise* (2004, 2009), proposing that there is an expertise in conversing about a domain, mastering the language and the style of discourse of a domain, that is separate from practicing in the domain.

Scholars in many fields—psychology, social science, linguistics, decision science, even theoretical physics—have addressed important questions about how to understand conversation (Grice, 1975), how to engage in collaborative emergent design practice (Kimbell, 2015), how people work toward sense-making in complex problem spaces (Weick, 1995; Kurtz & Snowden, 2003), and how the tools and practices of design can be opened to participation by non-experts (Ehn, 1988). It is nearly too obvious to state: design to facilitate conversation is actually the central premise of communications design; yet, conversation in communication design has been sublimated as a mode of practice. Grooming typography, investigating the modernist grid, even basic

programming hold a more central place in design practice and pedagogy (NASAD, 2017) than close examinations of communicative acts.

In design pedagogy and practice, as well as in other fields with a basis in social science, Claude Shannon and Warren Weaver’s model of communication was widely adopted (Fiske, 1990) as *the* model for communications (Davis, 2012; Hirsch, 2016). Though Shannon and Weaver developed this engineering (signal processing) model to explain the transmission of a signal through a medium, this model has been inappropriately foisted upon communication design and other social science settings. Shannon-Weaver’s model—a technical model for telephony, radio transmissions, et cetera—is misapplied in these disciplines because of its utter lack of human components, a lack of context for the communication. It does not consider the active nature of the listener and does not account for feedback or two-way communication (Hayles 1999, Davis 2012).

The Shannon-Weaver model considers communication primarily from a technical perspective.

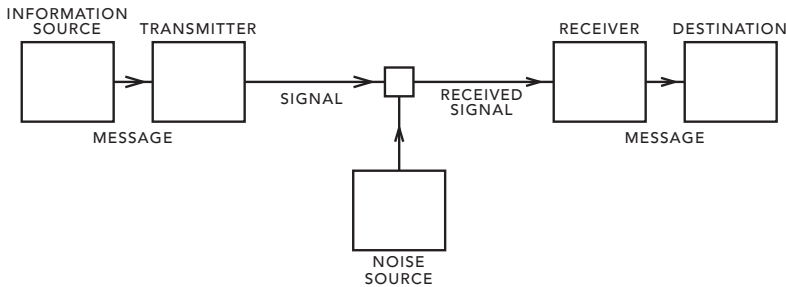


Figure 2.1 – Claude Shannon and Warren Weaver’s Model of Communication (1948)

Communications have never been without consequence, context, and feedback. Communications would not exist without a listener. Conversation (two or more actors enmeshed in loops of saying, listening, and thinking) is an aspect of every communication. Yet communication designers have not fully explored the role that design plays in facilitating conversations, focusing instead on formal presentation and clarity of communication of the content of those conversations. Relatively recent ethnographic understandings, as applied in design practice, have opened windows onto understanding subcultures and represent the first serious attempt in communication design practice to think contextually about the conversation environment.

In the course of this chapter I will: present my topic, describe several approaches to thinking about conversation as a social and cultural object, and trace the conversation about the nature of conversation and situated action in the domain of Computer-Supported Cooperative Work that occurred between Fernando Flores and Terry Winograd, Lucy Suchman, and others. This dialog represents key viewpoints for understanding design for conversation and for understanding design itself. I will examine structuring a conversation from the perspective of the Uber driver's application, as dramatized in Uber's driver training video. Finally, I will propose some possible approaches for materially facilitating conversation in several different domains.

2.2 THE HIGH-STAKES CONVERSATION

Through this research, I propose developing new design practices and coalescing existing practices to understand design's role in facilitating people making sense in high-stakes conversation. In the spirit of marshalling existing knowledge and practice to shape new insights and directions for research, to come to a better understanding of the range of experience, communication design should look to the extremes of experience (Mills et al., 2010). One of these extremes is high-stakes conversations.

Consider the following conversation situations:

A doctor and a prospective liver transplant patient have a conversation to determine whether it is better to accept a suboptimal liver for transplant, or wait and hope that a better organ might be offered before the patient's health deteriorates.

A group of citizens and government officials have a conversation to determine how to renovate a section of neighborhood that is plagued by combined sewer overflow, crime, and derelict buildings.

A design strategist and their client have a conversation to determine how the client can reorient their business toward producing more sustainable products and services.

A financial advisor and their client have a conversation to determine whether to transfer the client's retirement savings from a low-risk, low-margin instrument to a higher-risk instrument with a potentially better rate of return.

These situations are examples of what I define as high-stakes conversations. These conversations have several aspects in common. Acknowledging an intellectual debt to post-normal science (Funtowicz & Ravetz, 2003), I hypothesize that there are five main characteristics that define high-stakes conversations, apart from aspects that are present in all conversations. This hypothesis has been shaped through active engagement in civic and public conversations from June 2015 up to February 2018 and participation in many other less formal conversations in client meetings, the design classroom, and the design studio.

1. There is **no answer that is “right.”**
2. The dialog centers around making a decision that is imminent.
3. Participants are characterized by **imbalance**.
 - Participants typically have an imbalance of knowledge and/or agency relating to the conversation domain (expert vs client).
 - Participants have an imbalanced level of experience in having the conversation (routine vs singular).
 - Participants have an imbalanced level of investment in the outcome.
4. The dialog centers around making a decision that is of **consequence**.
5. Once a decision is made, it is **irrevocable**, or very difficult or costly to revoke.

2.2.1 NO RIGHT ANSWER

In high-stakes conversations, there is frequently no “right” answer. The rightness or wrongness of an answer is highly subjective and may involve deliberations upon several suboptimal approaches. Herbert Simon puts forth the model of *satisficing* (a portmanteau of satisfy and suffice) as a way to make decisions in this environment (Simon, 1996). In the case of satisficing (or bounded rationality), Simon acknowledges that in an environment where the number of variables informing a decision is sufficiently large, the search for the optimal solution involves an unreasonable expenditure of energy. Though Simon does not cite Horst Rittel (nor does Rittel cite Simon, as they seemed unaware of one another’s work), Rittel similarly describes this unbounded expenditure of energy as *no stopping rule* existing in a search

for a solution. Having no stopping rule is an aspect of wicked problems, a specific type of intractable problem encountered in urban planning and other social scenarios (Rittel & Webber, 1973). In cases of satisficing, the stopping rule for a search for a solution becomes the first satisfactory solution reached. It is Simon's contention that an optimal decision is not possible in complex scenarios.

To address when a solution might be satisfactory, we are left with, as Simon further describes, various degrees of satisfaction and various degrees of dissatisfaction, summed up as an *aspiration level* that describes a sufficiently significant degree of satisfaction coupled with a sufficiently insignificant degree of dissatisfaction. Unfortunately, human experience does not submit neatly to metrics applied through binary distinctions like satisfaction and dissatisfaction, nor can we tidily assign a scalar value to the aspiration level of a human experience. Yet, the lack of a right answer is a key contributory factor to a high-stakes conversation.

Another aspect of no "right" answer can be drawn from the writings of Rittel. In a high-stakes conversation, each actor, expert, and client, operates from the *deontic premise*, or the personal statement of what ought-to-be (Rittel, 1972). For Rittel, each person in the conversation acts according to their concept of what a successful solution would be, in the actual sense, but also in the moral and ethical sense. While the deontic premise might be well understood in an idealized sense, in the high-stakes conversation, the deontic premise may be difficult for the actors to determine when the potential for real-world outcomes is well understood. When considering a complex medical situation like treatment for Multiple Sclerosis, there are a number of possible medications, each with an ambiguous range proven efficacy and each with attendant side effects.

2.2.2 IMMINENCE

High-stakes conversations often center around a decision that has a limited window of opportunity within which a decision must be made or center upon a problem or problems that must be addressed within a limited time frame. Imminence creates an additional force in the conversation, an additional element to consider while designing. This experience of time pressure may exert a coercive force upon the actor who must make a decision. Imminence has two additional aspects, that the decision is temporally proximate and that it is likely that the decision must be made.

2.2.3 IMBALANCE

Imbalance is a key characteristic of the high-stakes conversation. Imbalance occurs in myriad ways and influences the nature and content of the discourse. Several imbalances have been documented in the fields of psychology and economics.

While high-stakes conversations can occur in nearly any knowledge domain, they rarely occur in a domain where both participants have deep knowledge of and experience with the domain of the conversation. Frequently, these conversations have a high degree of imbalance of understanding of the knowledge domain: a patient and a doctor in a health care domain, a client and a lawyer in a contract domain, a client and a financial advisor in an investment planning domain are a few examples of this problem. Unlike Rittel's wicked problems, a symmetry of ignorance (Rittel, 1972) is not a factor in a high-stakes conversation in the same sense as it is in a wicked problem. In a high-stakes conversation, typically the domain of the problem is known, perhaps even well understood. Experts can be found, but in a high-stakes conversation, knowing the way forward is befuddling because there are many potential forward paths, with none being clearly optimal.

Frequently paired with the knowledge imbalance as discussed above, there is also an inverse difference in the level of investment in the conversation for the two parties. The person with high investment in the outcome (perversely) has low domain knowledge, but the actor with high domain knowledge comes to the conversation routinely and with low investment.

In the high-stakes conversation, agency is also of importance and is, to a degree, coupled with the imbalance. To understand the role that agency plays in a high-stakes conversation, let us examine several archetypal examples. Consider a conversation between a police officer and a citizen in the context of a traffic stop. This dynamic may fulfil many of the above criteria for a high-stakes conversation. In the traffic stop, there is no answer that is "right," in the sense that there are many possible outcomes from the conversation; imminence, consequence, and revocability are all factors, and the degree of imbalance between the two agents is significant. In this scenario, the police officer has most of the characteristics of the expert, and the citizen has those of the client; however, in the police-citizen conversation, the officer (the expert) is the one who possesses agency. To a far greater extent, the police officer can determine the outcome of the conversation, and the police officer will make the consequent decisions from the conversation. The police-suspect conversation is coercive; mutuality does not exist.

In this study, it is my intent to examine high-stakes conversations where the burden (or privilege) of agency lies with the client.

In a doctor-patient conversation, it may appear that agency is the doctor's, but it is actually the patient who has the decision-making ability. In the doctor-patient relationship, the doctor suggests, requests, or insists, yet it is ultimately incumbent upon the patient whether and how to act. In a lawyer-client conversation, the relationship is perhaps more clear: the client provides decision, direction, support, and information, and the lawyer acts as a knowledgeable proxy for the client. Designers take a quite different role with their clients. Commonly, the designer is assigned an objective and is given a wide latitude with which to pursue that objective. A designer may act at the behest of the client but may pursue explorations, trusting the client to understand and approve.

The economic theory of agency was developed from the initial research on the Principal-Agent problem. In any expert-client relationship, an aspect of the imbalance of expertise in the domain, there may also be present degrees of the Principal-Agent (P-A) problem. The P-A problem occurs when there are two actors in a principal-agent relationship, and as defined by Stephen Ross: "one, designated as the agent, acts for, on behalf of, or as representative for the other, designated the principal, in a particular domain of decision problems" (Ross, 1973). The problem arises when the principal delegates an agent to act in the best interests of the principal, yet the agent is conflicted, and either acts in their own best interest, or acts in a way that reflects a degraded sense of the principal's interest. Because the stakes are high for the principal, and low or nonexistent for the agent, one would think that the agent would have no difficulty acting with the principal's best interest. In real world situations, however, the doctor-patient relationship has been compromised by the payment structure for physicians. The model of fee-for-service in the medical industry monetarily incentivises the physician in the conversation toward advocating that the patient consume more services. Real estate agents frequently suffer from the same conflicted interest. The real estate agent is remunerated when the sale of the real estate is completed. This incentivises the agent to complete the sale and subvert or disregard the interest of the principal they are representing in favor of sale completion. Compensation of the expert is an aspect that needs be considered in the design of a high-stakes conversation situation.

High-stakes conversations are rare events for most people. Because of the rarity with which these occur in most people's lives, it is essential that

the conversation be designed for optimal sense-making by the participants (designing with the foremost consideration for the client or principal). A CEO may have a series of conversations with their board about taking a company public and lead an initial public offering of stock once or twice in their career, but a lawyer or financial advisor who specializes in the IPO process may shepherd several IPOs per year. The rarity of the event is inversely related to the degree of risk entailed. The CEO's risk is bound up to a very high degree with a set of successful conversations and plans associated with the IPO; a consultant's risk is spread across a number of clients.

High-stakes conversations are frequently complicated by strong emotions associated with the content of the conversation (Stone, Patton, & Heen, 2010). A patient awaiting a transplant organ, having a conversation with their physician about whether to accept an organ with a suboptimal profile, may be blinkered by the complex emotional character of that decision. The patient may find difficulty in engaging fully in various modes of thinking. In this case, the patient is in a heightened emotional state, while the physician may be only tangentially affected by the emotional character of the decision or may remain completely aloof.

The following table delineates the different characteristics of the imbalance associated with high-stakes conversations.

	Expert	Client
Pressure of Imminence	L	H
Experience of Consequence	L	H
Imbalance of Knowledge	H	L
Imbalance of Experience	H	L
Imbalance of Emotion	L	H

Table 2.1 – Characteristics of imbalance in high-stakes conversations

2.2.4 CONSEQUENCE & IRREVOCABILITY

High-stakes conversations have consequences. A high-stakes conversation may result in a decision or agreement that sets in motion a chain of events that leads to an outcome that is irrevocable, or is difficult or costly to revoke. (For example, when choosing an exit from a burning building, each step towards a given exit increases the relative distance to every other exit.) Though, I do not consider all conversations of consequence and irrevocability to be high-stakes, and not all conversations of consequence are irrevocable. For example, irrevocability is not a dominant factor in psychotherapeutic conversations or other coaching-type conversations, which may have much at stake for the patient but do not lead to an imminent decision that must be made or a singular event that must be dealt with. Psychotherapeutic conversations have the odd distinction of being both low-stakes and high-stakes at once.

Simply put, consequence means that the conversation deals with a subject that has significant meaning to the client.

2.3 PROPOSED DIAGRAM OF CONVERSATION

The etymology of the word conversation shows it descends from the Latin *conversārī* meaning both to turn oneself about, and to live with.¹ Alternate definitions of conversation etymologically include the idea of spiritual intimacy, sexual intimacy, cohabitation, and business dealings.² Considering these past and current understandings, conversation has been bound up with the idea of being, intimacy, exchange, and congress with other humans. The current understanding has embedded within it these ideas, yet is solely focused upon the idea of talk. Components that remain include a small group, evoking the idea of intimacy.

¹ "converse, v." *OED Online*. Oxford University Press, March 2015. Web. 10 May 2015.

² "conversation, n." *OED Online*. Oxford University Press, March 2015. Web. 10 May 2015.

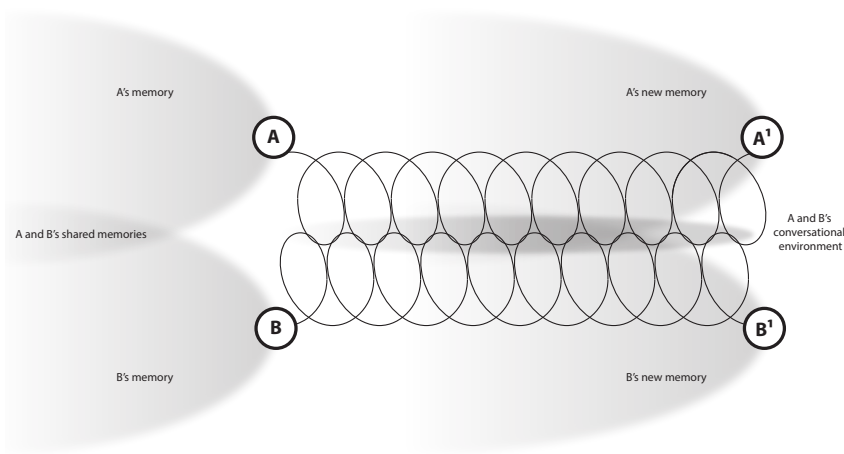


Figure 2.2 – Model of conversation as experienced through memory

In this context, I propose this diagram, (Figure 2.2) derived from the various descriptions of conversation by Gordon Pask (1987) as a way to begin to understand what I am approaching with this work. Below, a conversation between A and B is depicted in the abstract sense. While a conversation may occur between multiple actors, our idealized version shows only two for the sake of graphic simplicity. When contrasted with the Shannon-Weaver model shown earlier, several differences are evident. In conversation, a kind of evolution—or to put it more staidly, learning—takes place. Through that learning, the participants become different individuals. The memories that have been generated by the conversation are incorporated into the brain matter as neurochemical signatures—effectively changing the organism into something it was not before. Additionally, participants, through interaction, might construct memories that are shared. The communication of a conversation is less a passing of a message (like shooting a cylinder through a pneumatic tube), and more the two participants becoming entwined with one another. Each disclosing a bit of self to the other.

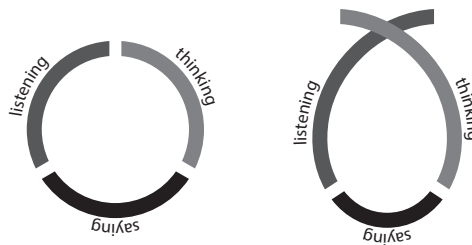


Figure 2.3 – Conversational action loops

The model above proposes that the conversation takes place in a conversational environment, that that environment is composed of both physical things and personal history (as experienced through memory). In our idealized conversation (shown above by a series of turns), but also in any functional conversation, A and B must come to the conversation with a degree of shared memory. At the very least, the shared memory must include a mutual agreement to the meaning of the vocabulary of the conversation. In many more cases, A and B's shared memory will include an understanding of the context of the conversation, a shared culture, and some shared values and beliefs. It is better yet if A and B both recognize that the other actor is not a singular being, but is part of a network of beings that are affected by the outcome of the conversation. The conversation, experienced in *thrownness*, exists only in memory. In this model, each loop is comprised of aspects of listening, thinking, and saying. In any conversation, those aspects are slightly out of phase for each participant: at any simultaneity, each participant will be at a slightly different point in the loop (ideally, listening while the other person is saying).

Key to my work is consideration of the design of the conversational environment. The conversational environment consists of the images, spaces, and objects that surround the conversation. Second, the conversational environment consists of the memories of the participants, both the shared memory and the individual memory. Further, the immediate conversational environment exists in a context of systems, structures, and processes.

In the context of the deliberative democracy projects that I have worked on, the environment of the conversation event is thought of in a rather delimited sense: the people theorized as participants are somewhat divorced from their existence as people. For instance, Burkhalter, Gastil, and Kelshaw (2002) define the behavioral elements of deliberative conversation as follows:

face-to-face public deliberation as (a) a process that involves the careful weighing of information and views, (b) an egalitarian process with adequate speaking opportunities and attentive listening by participants, and (c) dialogue that bridges differences among participants' diverse ways of speaking and knowing. (p. 418)

Further, Burkhalter et al. claim that

- participants must **evaluate solutions and reach decisions** (though decisions need not be shared among participants); and
- group members must attempt to **consider and understand** what each individual says, and give each participant's views **mutual respect**.

But what deliberative democrats fail to recognize in these cerebral approaches to modeling conversation is that the material world is nearly completely left behind. There is little talk of bodies unless they are *deliberative bodies*; the places of deliberation or the tangible components of the interaction receive short shrift, if they are considered at all.

In the case of deliberative democracy protocols, the material elements might consist of the invitation, email, or social media post that informs someone about the meeting; the images and text framed as a pedagogical slideshow; the briefing document that contains complementary information in greater detail; the survey instrument that freezes participants' feedback; and so on. To go further, the material environment consists of the folding tables and chairs, the church basements or dusty union halls, or the community rooms at the local recreation center. To go yet further, the material environment consists of the surrounding neighborhood with its layers of physical infrastructure and the surrounding natural environment. The relatively recently published book *Democracy in Motion* (2012) contains a section promisingly called "Process and Design." Rather than using the term design to indicate the material focus more familiar to design practitioners, the dialog of that section focuses predominantly upon the process for defining issues, and the design of the process of the deliberative event. Engagement with material processes within or outside of the event as described above are either not addressed or are addressed only in the context of running an effective deliberative event. While this is important, at least equally important is the ability of event creators to richly engage with the culture of the organization that convenes the event and the culture of the communities that convene to share their situated knowledge and experience.

To more fully understand the context of community conversations, and to effectively design in those situations, a practitioner needs to re-read the material environment where the conversations are constituted. The environment consists of objects, but consists also of the history of the issue and how that issue manifests in the affected communities.

2.4 THE SUCHMAN–WINOGRAD DEBATE

This debate turns around the introduction of a piece of software, designed and created by Fernando Flores, Terry Winograd and others, known as The Coordinator – a piece of software that structures and tracks commitment among business colleagues. The Coordinator’s functionality and design represented a quite literal interpretation of John Searle’s speech-act theory. First, let us recall the context of The Coordinator and speech-act theory. In 1988 when The Coordinator was proposed, the internet existed but was mainly populated by engineers, scientists, and university faculty. Email software was in its infancy, the Simple Mail Transport Protocol (SMTP) having been introduced in 1982. The dominant software to manage corporate information (that began as a sort of personal information manager, Lotus Notes) did not ship its first release until 1989, and it would not be until 1989 that Tim Berners-Lee would release his proposal to specify the tag-based language to format a world-wide web of linked documents. At this point, online documents were available through the internet using a protocol called “Gopher.” Internet users would use Unix or DOS terminals to check email through applications like Pine. Workflow management and message-based communication happened on paper or through dedicated software systems built for that purpose.

The Gartner Group annually publishes an information visualization called “The Gartner Hype Cycle” (perhaps this is Gartner’s joke on the technology industry?). The Hype Cycle moves through several states, from the initial innovation trigger, ending with the plateau of productivity. In the context of this writing, collaborative workflow management software and email are both mature softwares and have long exited the scope of this graphic along the plateau of productivity. At the point in history that Winograd and Flores were proposing, and Suchman was critiquing, language/action theory and the derived software, The Coordinator, were “On the Rise” only a few years out from the initial “Technology Trigger” and perhaps approaching “The Peak of Inflated Expectations.”

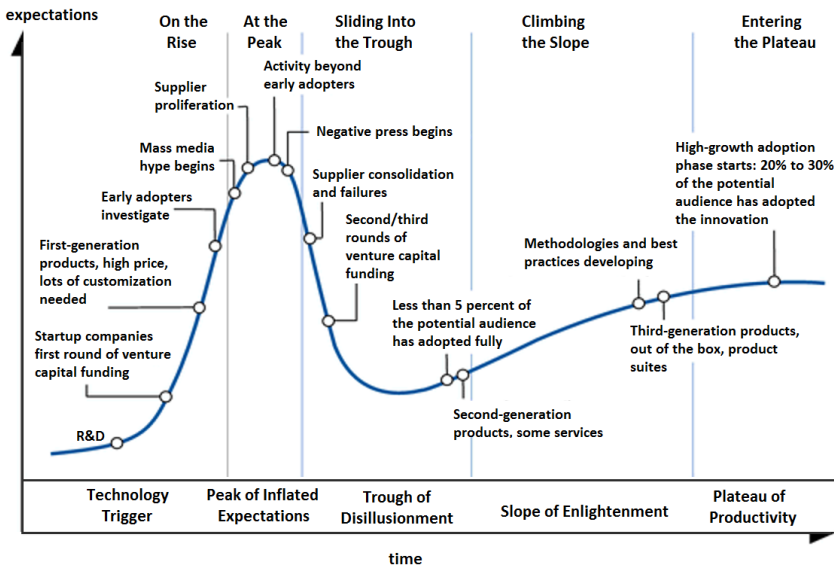


Figure 2.4 — Abstracted representation of the Gartner Hype Cycle, by Wikimedia Commons user NeedCokeNow (CC BY-SA 3.0)

The domain of workflow management tools is highly diversified, with robust, integrated, and flexible project management solutions, CRM applications, and ERP workflow management. As a class of software, workflow management applications are fully mature and serve the function of coordinating computer-supported cooperative work. Due to the ways these applications structure the human conversation, the ensuing social relations and the political relations between employer and employee have been the subject of some intense discussion.

It is this discourse—the tension between a computer system that can exist only (currently) in the state of an algorithmic model and a social system that exists only in a state of replete, messy entanglements—that is at the foundation of any attempt to design for conversation.

The Suchman–Winograd debate turns on the question of what happens when a human process becomes digitized, formalized, and/or reified? Corollaries are: On whose terms does the structuring occur? What hierarchies does the reification serve to reinforce, or to undermine? What new hierarchies are created? This argument is a continuum to a question still at issue, more recently in material culture studies. Science and Technology Studies scholar Jaap Jelsma (extending the concept of moral things from Bruno Latour) proposes the aggregate of our things, buildings, and software become a

socio-technical landscape, (Figure 2.5) where certain actions are facilitated, encouraged, or prevented by the social and/or technical environment where they are contained (Jelsma, 2003). Designers are intimately involved planning the permissible paths that software provides, structuring space through architecture, and determining form and use of objects. Jelsma proposes that these decisions, when reified as things, become a kind of script that acts on the user. One aspect of Suchman's critique of Winograd and Flores, as stated by Graham Button (1995), is a socio-economic critique of power relations in the workplace. While Button does not extend this critique, focusing instead on whether language/action theory provides an adequate account of human behavior, we may look to Jelsma (2003) to understand the degree to which design scripts a user's behavior and consider how a thing may be value-loaded by the designer to induce a certain outcome. The discussion is continued by Design Studies scholar Cameron Tonkinwise (2004) who examines different aspects of the ethical object. Key to the question here is understanding the dimensions of ethics as related to the structuring, or how the design of the thing structures—as Lucy Suchman (1993) put it—“the specificity, heterogeneity and practicality of organizational life” (p. 178).

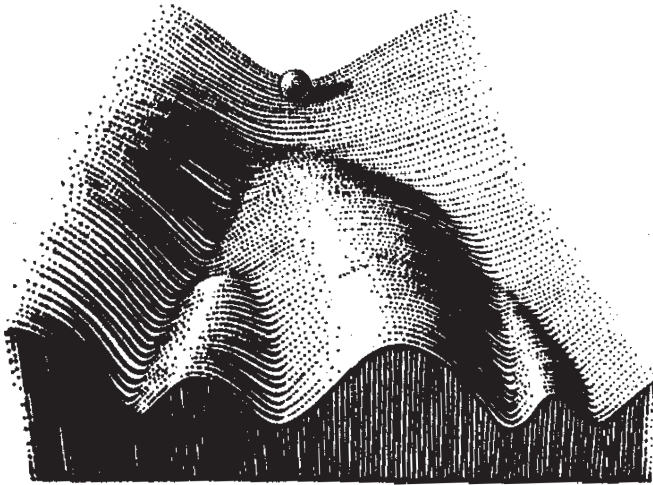


Figure 2.5 –
Proposed by
Jelsma³ (2003)
as a model for the
socio-technical
landscape

In the Suchman–Winograd debate, it is not my intention to stake a position on the battlefield, nor do I wish to chart a course through it or negotiate some kind of rapprochement between the sides. An equivocal position is not necessarily the most productive, but here I would like to delineate my view of the evolution of the debate and articulate a starting position that may be useful for my work.

³ Although Jelsma does not reference the source of the above image, it is from early geneticist C. H. Waddington (1952) describing the epigenetic landscape, a model for differentiation in cell development.

2.4.1 UNDERSTANDING COMPUTERS AND COGNITION: LANGUAGE/ACTION THEORY

2.4.1.1 *Why this debate matters*

Before we get too far into this investigation, I want to be clear of the ethical territory surrounding the shaping of conversation. Shaping conversation is too often done in ways that are less than ethical. Michael Shapiro and Ian Graetz (2005) detail the political conversation in the United States surrounding efforts to repeal the estate tax and discuss the shaping of the conversation. “They (pro-repeal advocates) understood that tax debates are not won by giving the public more information. The trick is giving them the right kind of information from your point of view, shaping the lens through which they come to see the issue at hand” (p. 254). These kinds of actions occur in a wide variety of situations, where organizers of a conversation, hoping for a particular result, design the conversation toward their own ends.

Reshaping the discourse is, as Bela Banathy (1996) terms it, designing a social system, and in designing a social system, no one has the right to impose their will upon another.

In connecting multiple perspectives with the ethics of design we can say that ethical design balances personal moral actions, rational technical inquiry, ethical organizational behavior, and the ethical action of the designers. This notion is consistent with what we said earlier: no one has the right to design social systems for someone else. (p. 188)

Banathy, like Flores, who we will discuss later in this chapter (2.4.2), proposes that we attempt to suspend judgment during dialog and tells us what is at stake.

If members of the group are able to hold all their assumptions in suspension, they can generate shared consciousness. (The root meaning of “consciousness” is “knowing it all together.”) In a dialogue the individual’s and the group’s “knowing it all together” form a subtle higher unity and come together in a harmonious way. (p. 216)

2.4.1.2 Conversation and Agreement

The debate around the conversational organization of workflow management tools begins in the book *Understanding Computers and Cognition* with the creation of language/action theory, proposed by Flores and Winograd as a new direction for the development of computer software generally, and specifically the problems of creating an Artificial Intelligence.

Fernando Flores' underlying perspective is that of a cybernetician. As a young engineer, Flores rose quickly through the Salvador Allende government in Chile and was imprisoned in 1973 when Allende was overthrown by the fascist government of Augusto Pinochet. Released in 1976, Flores worked as a researcher in the Computer Science department at Stanford and completed a PhD in Management at the University of California at Berkeley.

Flores co-authored *Understanding Computers and Cognition* with Terry Winograd. Winograd was (and continues to be) a professor of Computer Science at Stanford University. As a computer scientist, Winograd had a strong interest in language, and in his early career researched ways that computers might understand so-called natural language. Winograd's doctoral dissertation—the research for and implementation of a computer program (SHRDLU)—explored the intersection between natural language and computer language.

Winograd's conversations with Flores and philosopher Hubert Dreyfus, however, convinced him to abandon the project of Artificial Intelligence and the underlying cognitive psychology-based model for AI that he was pursuing. *Understanding Computers and Cognition* proposes an approach to designing computer systems that abandons the cognitive psychology approach of making computers think like human beings. Winograd and Flores propose approaching the design of computer systems from a perspective that is founded in biology and philosophy rather than a misplaced attempt to make computers replicate human behavior.

The approaches proposed in *Understanding Computers and Cognition* place language at the center of the understanding of computer systems and argue that computers are more useful as a communication tool—that the principal activity of computer systems design should be to support human activity rather than to give the machine a kind of agency. In fact, for Winograd and Flores, “Nothing exists except through language” (p. 68).

Winograd and Flores examine commitment and action through *speech acts*. According to J. L. Austin, a speech act is essentially language (using literal meaning, not Grice-ian implicature) in the context of conversation, interpreted as action by people (Austin, 1962). Flores and Winograd's approach to action-oriented conversation runs a parallel track to Austin: "an understanding of language as meaningful acts by speakers in situations of shared activity" (p. 54).

Winograd and Flores pay special attention to a set of commitment-making speech acts. These acts form the foundation for a set of structured commitments that a person could make in a conversation. They are:

- *Assertives* – commit the speaker to something being the case (this I believe)
- *Directives* – attempt to get the hearer to do something (a question is a type of directive, attempts to get the hearer to make an assertion)
- *Commissives* – commit the speaker to do something
- *Expressives* – expresses a psychological state about a situation (apologizing and praising)
- *Declarations* – establish correspondence between the propositional content of speech and reality (pronounce a couple married). (Flores & Winograd, quoting Searle's taxonomy of J. L. Austin's performatives (pp. 58–59))

This taxonomy describes what the speaker can *do* with their utterance, how a person can take action through their language. Flores and Winograd call to attention that these speech acts make sense principally in relation to a *conversational background*. This conversational background may include the containing culture, a shared history of the participants, an understanding of the current situation. When there is a breakdown in the conversation, it is the inappropriateness or un-relation of the background that is often to blame. (Winograd and Flores say that this is when a listener will think the speaker cannot be taken seriously.)

The following diagram, from *Understanding Computers and Cognition*, delineates the abstracted structure for a network of Searle's performative speech acts, directed toward conditions of satisfaction. Winograd and Flores admit that this kind of reductionist, rational approach is antithetical to the approach they are advocating, but the goal of their theorizing is to be able to build

computer systems that accommodate human action. Computer programming architecture itself is dependent upon the existence of abstracted logical structures; therefore, some concession must be made in order to have a functional computer program.

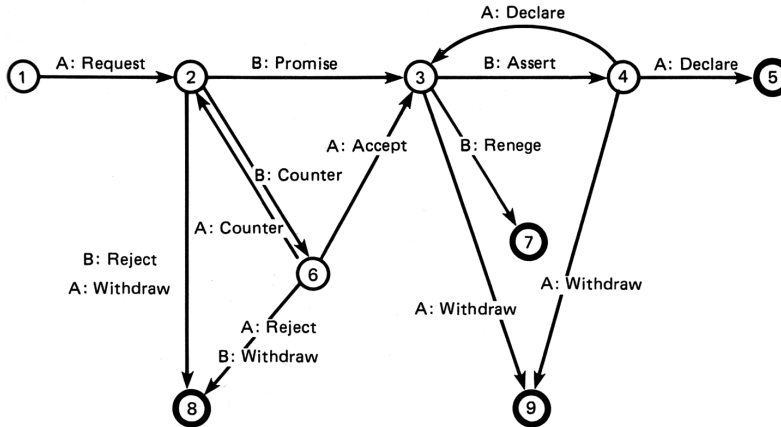


Figure 2.6 – The basic Conversation for Action (Winograd & Flores, 1986, p. 65)

Flores and Winograd detail how, through a series of requests, promises, assertions, and declarations, a pair of actors can move from irresolution to resolution. Through a conversation for action, one actor can create conditions of satisfaction for the other.

In the book, Winograd and Flores detail two approaches for explaining knowledge: Heidegger's and Maturana's. Both of these accounts deny forms of the representation hypothesis as a way to understand cognition. For Heidegger, knowing comes through being; for Maturana, knowing comes through reflexive biological processes. Whether one subscribes to either of these understandings, Winograd and Flores clearly state that symbolic language, while important, is not how knowledge exists for human beings; rather, representation is key to knowledge sharing. Representation is also key to conversation, as it is through the exchange and manipulation of symbols that conversation can occur, that a being can gain access to another being's understandings, perspectives, and approaches. It is through the sharing of symbols that we can communicate and take action based upon those communications. For Winograd and Flores, as is the case for me, language is community property, not personal property.

Yet, it is this challenge of the digitization of inherently non-digital processes that creates the problem for designing software that can behave in ways that are compatible with the specificity, heterogeneity, and practicality of organizational life as social humans. It is the designer's obligation to encode sensitivity to the user's background into a designed solution by developing a rich, historically and culturally informed understanding of the context of the conversation and folding that knowledge into the designed object.

2.4.1.3 Importance of conversation in artificial intelligence

Winograd and Flores also describe the problem of attempting to design systems that simulate a conversation with another person where the two share a background. In Alan Turing's view, the development of seamless human-computer interaction in the medium of natural language conversation is a more useful prospect to explore than the question of whether computers can think (Turing, 1950). The compelling simplicity of Turing's vision of understanding machine ability through conversation led sociologist Harry Collins to propose a taxonomy of expertise to include *interactional expertise*, which can be summarized as the ability to pass as an expert in a certain domain through conversation (Collins & Evans, 2009). Collins' interactional expertise argues against Dreyfus' sense of embodied knowing—that understanding cannot be developed without embodiment. Collins proposes that interactional expertise is achieved when a researcher (like a sociologist or ethnographer) researching a subculture acquires enough of an understanding of the subject domain of their research that they achieve mastery of the language of that expert group. Collins, like Turing, points to the ability to carry on a conversation in a topic area as the key act of fluency of interactional expertise.

Winograd claims that although language is not fundamental to knowing, because language is our main social tool, language is the way to make a command and the way that commitments are negotiated. For Winograd and Flores, therefore, the computer cannot be the expert or behave as an actor in the conversational system, but it can facilitate, structure, and share the communication (p. 77). Meaning and language remain social constructions, but a computer will never be an embodied, social being; therefore, our meaning and our language remain inaccessible to it.⁴

⁴ John Searle (1980) refers to this as the Chinese Room problem of understanding intelligence: a person, with proper instruction in the presentation of sheets of paper with written Chinese could carry on a written conversation by presenting the sheet as instructed without actually knowing Chinese, and thus pass the Turing Test.

Returning to Akrich (1992), computers, as a component of the socio-technical landscape (Jelsma, 2003), can exert a scripting influence upon the people who use them. Through the shaping and manipulation of symbols, the computer becomes part of the conversational environment, or the site for the conversation, rather than being an actor in the conversation.

Moving from irresolution to resolution is *deliberation*, a kind of conversation (p. 149). For Winograd and Flores, deliberative conversation is a guided or facilitated experience that results in action:

1. At some moment in the process of articulating the claims, some *incipient partial proposals can be discerned*, as different people give opinions, suggestions, disparagements, counter-offers, etc. In this conversation, distinctions between means and goals, parts and wholes are discarded in favor of interpretations about possible causal links, potential results, and inconveniences.
2. At some moment, a sedimented opinion about possible courses of action to be evaluated and considered may begin to appear; this is when the process called ‘choosing’ could be considered. However, the name ‘choosing’ is inadequate, because it suggests algorithmic procedures for selecting the course of action. (p. 149, emphasis mine)

Winograd and Flores note that resolution is the exploration of a situation, not the application of habitual means, that it is not possible to algorithmically create resolution. To give an answer for the problem of ‘choosing’ mentioned above, one might turn to anthropologist Annemarie Mol and her investigation of diabetic patients in *The Logic of Care* (2008). Mol contrasts a logic of choice with a logic of care, suggesting that there is a kind of discipline in care, perhaps the kind of discipline that Winograd and Flores hoped to engender with The Coordinator. Perhaps, had Mol’s articulation of care been available to them at the time, Winograd and Flores would have said that The Coordinator exists not to discipline and structure, but to make employees mindful of the ways in which they are communicating and to make and receive commitments in the work situation in a more conscious way.

A further argument that does not acquit The Coordinator, but places it in the category of things that might be resisted, can be found in the introductory pages of Michel de Certeau’s *The Practice of Everyday Life* (1984). de

Certeau introduces the concept of tactical resistance, achieved in “propitious moments” of working around the system. One could imagine that if The Coordinator was a part of the workplace life, that it might become an adjunct to workplace life—a place where only “official” agreements are made. That the heterogeneous experience of workplace life is perhaps not processual in the ways that The Coordinator is concerned with. Resistance manifests because people feel that their voices have been marginalized inside of the official channels of structure (Young, 2000). While voices of resistance are an important component of democratic dialog, and designs of systems of conversation must leave room to accommodate them, designing an intentional set of structures to accommodate resistance is antithetical to the idea of resistance itself. From the perspective of the design of conversation, resistance must always be negotiated. From the perspective of the voices of resistance, as de Certeau tells us, the opportunity to resist must be seized.

2.4.1.4 *The Coordinator*

As an aspect of his exegesis proposing a different approach to artificial intelligence, and new uses for computing, Winograd details the creation of The Coordinator, and expounds upon the underlying theory. (Winograd, 1987) The Coordinator is built using the theoretical principles of the language/action theory proposed in *Understanding Computers and Cognition*. Utilizing Searle’s taxonomy, The Coordinator reifies the different speech acts as structured forms that correspond to the types of speech acts.

As it is described in Winograd’s paper, initiating a conversation in The Coordinator works as follows:

A user initiates a request by selecting a request type from a predetermined list of options. The type of request determines a structured template that will be used to formulate the request. Below is the example request initiation screen.

C O N V E R S E	
OPEN CONVERSATION FOR ACTION	REVIEW / HANDLE
Request	Read new mail
Offer	Missing my response
	Missing other's response
OPEN CONVERSATION FOR POSSIBILITIES	
Declare an opening	My promises/offers
	My requests
ANSWER	Commitments due: 24-May-88
NOTES	Conversation records

Figure 2.7 – Converse menu from The Coordinator, Action Technologies

In a system similar to email usage, in the following request screen the user can choose the recipient, those who will receive copies, as well as a more open tagging and categorization structure. The request itself includes a subject, a free-form text body, as well as three dates to provide structured timing for the request: a respond-by date, a complete-by date, and an alert date.

The recipient of the request reviews received requests through the menu shown below:

SPEAKING IN A CONVERSATION FOR ACTION	
Acknowledge	Promise
Free-Form	Counter-offer
Commit-to-commit	Decline
Interim-report	Report-completion

Figure 2.8 – Menu for responding to a request, Action Technologies

The response screen allows several types of responses; core to the original idea are promise, counter-offer, decline. The key element of The Coordinator system is the conversational metadata about the types of requests that are initiated, the types of responses.

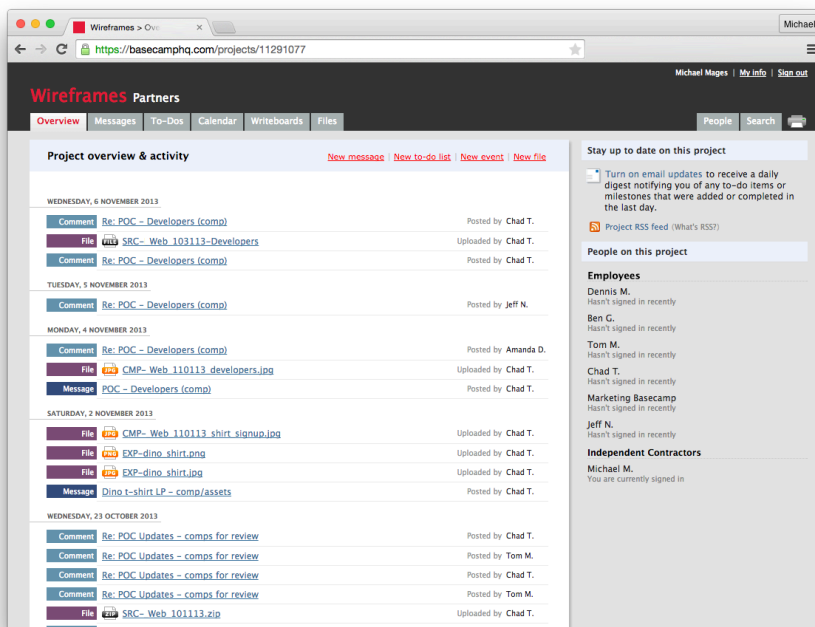


Figure 2.9 – Basecamp HQ project overview screen

While The Coordinator never became a significant part of workflow management, it did engender significant academic dialog around the political aspect of categories, structuring of communication, and the role of digitization of communication processes.

Further, the influence of concepts central to The Coordinator can be seen in a number of workflow-tracking applications. As can be seen in the image of 37 Signals' Basecamp software below, similar features exist for structuring message content and generating metadata: message, to-do list, event, and file are more free-form ways to structure a conversation (Freid, Segura, & Kim, 2014). Similar approaches can be found in other online workflow-tracking softwares like Podio, Trello, Asana,⁵ and others. The introduction of workflow software via Flores and Winograd's offering is a liminal point in the design of information systems, and while all workflow software is not a direct genesis from The Coordinator, the principles, the reifying of speech acts developed by Winograd and Flores are extant across that category of applications and extend more broadly into social networking applications.

5 <https://podio.com/site/features/task-management>; <https://trello.com/tour>; <https://asana.com/product>

2.4.2 CONVERSATIONS FOR ACTION

Independently of Winograd, Fernando Flores wrote *Conversations for Action and Collected Essays* (2012). In this book, Flores delineates several archetypal conversations and components of these conversations that occur in business settings. As this book was collated from essays produced for Flores' clients, there is little pretension that the book is useful in larger contexts. Flores' underlying assumption in *Conversations for Action* is that people are generally trying to act positively, that the system of hierarchy in the workplace is fundamentally benevolent, that the goal of the conversation is known or at least knowable, and yet there are challenges that get in the way of clear communication that people want to ameliorate.

Flores details three types of conversation:

for action—making commitment (reified as The Coordinator)

for possibilities—making shared frame

for moving forward—making characterizations that limit futures

And Flores explains some underlying factors that are present to some degree in all conversations, and can affect participants' engagement:

characterizations—necessary to getting work done, a kind of assessment

moods—when characterizations become assumed and become the underlying context for new assessments

trust—built up over time: composed of sincerity, competence, reliability, engagement

In Flores' approach to conversation, characterizations are assessing-type statements that we make about a person or situation, assigning them to a certain typology. For Flores, making characterizations is a dangerous game. Characterizations about people or groups limit future possibilities for working; however, it is a human act to make characterizations about people and situations. People make characterizations about themselves as well as about others. Flores claims that frequently, people will make characterizations that are not well-grounded. A well-grounded characterization is supported by experience, by a pattern of assertions that one has experienced. Characterizations are a limiting factor for future action. Psychologist Carol Dweck describes characterizations as a type of mindset (Dweck, 2008b), and has done extensive research on the limits for growth and learning potential that mindset can contribute (Dweck, 2008a).

Interestingly, in the realm of characterization/mindset, there is a relatively new product, Crystal, a service that attempts to provide context and shaping for a conversation and communicate a potential email recipient's receptiveness. Crystal creates a set of characterizations by scanning publicly available social media profiles. To consider Flores' and Dweck's approach to characterization/mindset, the use of this application, while purported to be a boon to communication, easing the interaction with a potential partner, is inherently future-limiting. Aside from my concern that, if this software becomes popular, I will be inundated with emoticon-filled emails :-P the provenance of the characterizations offered here is specious and hidden, and the suggestions given are at the specificity level of horoscope writing at best.⁶ Flores states that, through characterizations, we commit to speculations about the future and choose to direct where we will discover future opportunities (p. 55). Basing a conversation upon weakly or poorly grounded characterizations limits the development of future opportunities and domains of action.

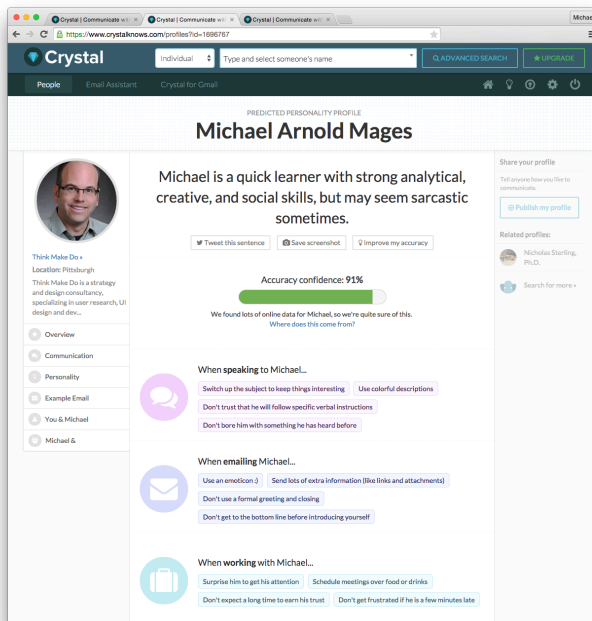


Figure 2.10 — personality analysis from CrystalKnows.com

6 The reader might consider the Forer Effect (Section 3.3.3) as one possible reason why Crystal functions effectively.

2.4.2.1 Moods

For Flores, a history of a type of interaction with an individual or within a context can evolve into moods. A mood is a dominant paradigm of attitude that people expect from themselves in certain situations and consequently, the way that that attitude predisposes people to a certain type of behavior. Moods, like characterizations, predict and limit the nature of future interactions. Flores classifies moods as positive or negative, offers examples of seven positive and seven negative moods, and makes suggestions on the determination of the grounded nature of the mood, or the way of limiting or understanding the impact of the mood in a social context.

A more subtle approach to understanding mood is offered by Pieter Desmet. In addition to the axis of positive and negative valence as noted above by Flores, Desmet offers a second axis of intensity of mood. A designer creating facilitative objects or environments could presume that participants in a civic or high-stakes conversation might not only experience strong emotions, but might experience the subtler influence of moods. Though Desmet defines mood slightly differently than Flores, the net effect of moods is the same for both. Negative moods predispose a participant to more limited exploration (Desmet, 2015, citing Zhang & Jansen, 2009).

The following chart is excerpted from Desmet’s strategies to affect participant mood. All of these strategies are findable as a component of deliberative community meetings. Even prior to knowing of Desmet’s work, I have personally advocated for the first question in a deliberation to allow participants the opportunity to *vent*, as many people who attend come prepared to speak about an issue that is of a particular challenge to them and participate more fully once they have accomplished the planned unloading of their feeling.

Seek RELIEF	Vent	Let off steam; express the feeling; tell people about the feeling; write about the feeling.
	Think positively	Think about happy thing; look on the bright side; focus attention on successes in other areas of life; think about an anticipated pleasurable future event.
Build RESILIENCE	Rationalize	Put feelings in perspective; treat mood in the abstract, as a piece of information; try to understand the feeling.
	Analyze	Analyze situation to determine mood causes; keep a diary to track mood; use biofeedback systems.
	Transform creatively	Expressive writing about the mood; using the mood as the basis for creative expression.

Table 2.2 excerpted from Desmet, 2015

During moderator briefings before an event, I have also discussed the possibility of the strategy of sympathizing with participants that display emotions that both Desmet and Flores might refer to as moods. A moderator's acknowledgement of the existence of underlying irritation from participants frequently helps to abate that irritation. For example: "I can see this issue causes strong feelings in people." Participant cynicism might also be acknowledged, and that acknowledgment then followed by a brief explanation of what will be done with the data generated by the meeting.

For both Flores and Desmet, the individual is the one who must ultimately do the emotional work to lift the mood, but design of conversation events of any type might explicitly offer opportunities for participants to do so.

2.4.2.2 *Listening*

In the design of cooperative work tools, the design of social media interfaces, and the design of communication tools, the ability to speak is made explicit. All the technology of the interface, all the planning, and all the design is devoted to directing the design of the act of speaking. Further, a criticism of language/action theory and Winograd and Flores' model of The Coordinator is that the model privileges only the first utterance in a statement-response couplet (Button, 1994). While this may be important to Winograd and Flores' software design, contemporary considerations should incorporate listening and thinking as aspects of design consideration. When designing a space for public speaking, architects and interior designers privilege speaking over listening. In churches, and to a lesser degree cinemas and public meeting halls, the place for speaking is given vastly more attention, and the places for listening and thinking are given spartan and uniform treatment. The place for speaking may be elevated from the normal floor or may have special furniture that is devoted only to marking places of speaking.

2.4.3 "DO CATEGORIES HAVE POLITICS?"

In an incisive critique of the use and nature of categorization within Flores and Winograd's The Coordinator titled *Do Categories Have Politics?* (1993), anthropologist Lucy Suchman centers on the issue of categorization and brings forth critiques citing Harvey Sacks and Michel Foucault.

Suchman's critique concerns the nature of the categories themselves and the political nature of who constructs those categories. Borrowing from Sacks' writing on teen hotrodders, Suchman says "...the adoption of speech act theory as a foundation for system design, with its emphasis on the encoding

of speakers' intentions into explicit categories, carries with it an agenda of discipline and control over organization members' actions" (p. 178). Suchman points to Michel Foucault's writing on the training of 18th-century soldiers, analogizing the technical workers to Foucault's soldiers' subjected and practiced bodies.

Suchman takes further issue with the underlying model of the conversation for action upon which The Coordinator is based: that the conversation delineated by the model is findable anywhere, a totalizing influence that shuts off the potential for other conversations to exist outside its schema. Suchman's concern here is that the parameterization of the heterogeneity of work life is inadequate to serve the art of collaborative work. Suchman argues that The Coordinator serves only to reproduce and reinforce the dominant paradigm of management upon the social order of the workplace. In this article, Suchman presents The Coordinator as a tool for accountability and accountancy, a way for management to track and measure employee productivity and enforce discipline.

2.4.4 "CATEGORIES, DISCIPLINES, AND SOCIAL COORDINATION"

In a rebuttal, Winograd answers some of Suchman's critique. Winograd explicitly paints the picture of the proletarian struggle that he claims is the subtext to Suchman's critique of language/action theory and The Coordinator (Winograd, 1994). Yet, Winograd claims that Suchman has unjustly subjected language/action theory and The Coordinator to oversimplified dichotomies that deny the richness of the social interactions described by the theory.

Winograd agrees with Suchman's point, claiming accurately, I think, that the nature of designing a framework for use in computer systems necessitates a significant degree of abstraction. The development of software architecture privileges recurrent patterns rather than heterogeneity. Personally speaking, one of the most significant challenges of software design is to create an algorithmic process that supports a wide range of creative acts. Even something as seemingly simple and pro-forma as e-commerce systems (unknown in the days of these papers) inherit wildly radical heterogeneity when they begin to intersect with the systems of multiple overlapping political boundaries that determine sales tax calculation and have to engage with systems to facilitate order picking from inventory, packaging, and shipping. The computer imposes its own discipline upon these acts, as every customer address and tax and shipping profile; every inventory location; and every inventory quantity must

be coded in a structured system. Further, e-commerce software must, at the least, communicate with the software system that manages those inventory locations and quantities, and interface with the bizarre system of multiple, overlapping political and geographic boundaries to calculate sales tax and order shipping based upon the customer's entries.

While aspects of this argument have become less interesting over the years (i.e., that our computer-supported collaborative work will intersect with multiple systems, that accountancy of language actions will produce a deluge of data of commitment requests, and that this will require that hours of work time are spent managing the digital artifacts of those self-same language action commitments), certain questions are still valid ones to ask as we embed our ethics in our soft- and hardware: What happens when human processes are digitized? To what degree is behavior-shaping through technology ethical and desirable? .

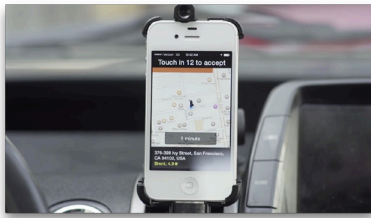
2.4.5 UBER AND THE CONVERSATION FOR ACTION

Let us examine another process, similar to The Coordinator, that may have less benevolence and be more susceptible to Suchman's critique. An hour of leisurely browsing of a website where uber drivers make complaints and offer advice to fellow drivers (uberpeople.net) reveals a plethora of anecdotal evidence of a proletarian struggle against an oppressive bourgeoisie.⁷ Some of the discussion threads read as clear as an indictment of Uber's labor practices as Anna Sewell's accounts of animal abuse in the livery industry in Victorian England.

A person working as an Uber driver is making commitments following the same principles of language/action theory; yet, the provider of the system (Uber) is explicitly seeking to derive as much profit from the livery as possible, create an experience that is high-quality and owned by the organization, isolate the driver from remuneration outside the system while providing only minimal support, and disavowing a committed relationship between the employer and employee.

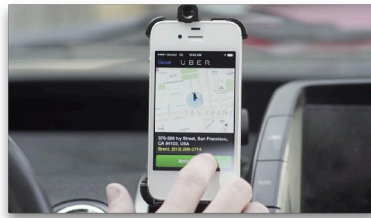
Following is one critical path through the Uber driver's app, as dramatized in their employee training video. In the following scenario, according to the conversation for action model, the customer is A, and the driver, B.

7 This deliberately parallels Winograd's invocation of Marxist rhetoric above.



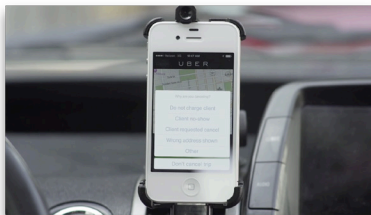
1) A: Request (1→2)

The Uber driver receives a request; however, the software hides the scope of the request. The driver is merely notified of the pickup request. It does not tell the driver the customer's desired destination and assumes the customer is actually ready to be picked up.



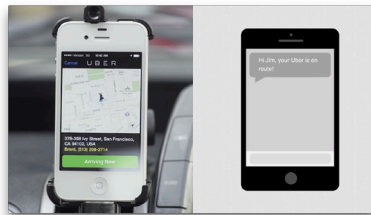
2) B: Promise (2→3)

The Uber driver has the option to not accept the pickup, but unbeknownst to drivers, non-acceptance of too many pickups will result in the driver's exile from the Uber network.



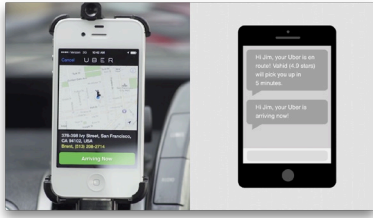
3) B: Reject, A: Withdraw (2→8)

An Uber driver has the option to cancel a pickup after it has been accepted. The driver may cancel, but must provide metadata about the nature of the cancellation. The metadata determines whether the customer will be charged for the cancellation; yet, some customers get a number of free cancellations.



4) B: Assert (3→4)

Once the driver accepts the customer's request, the customer is sent a notification via the Uber application. Once calculated, an estimated arrival time is also sent via the Uber application.



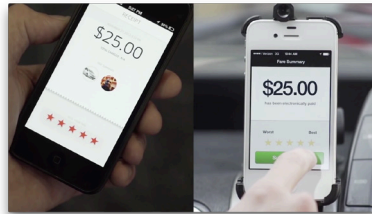
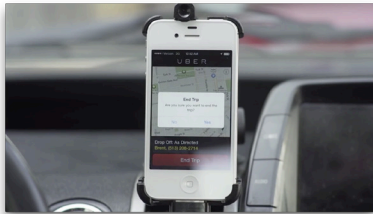
in transit
(not depicted in video, intentionally blank)

5) B: Assert (3→4)

Once the driver has arrived at the pickup point, they click the "Arriving Now" button, which generates a text message to the customer. In the training video, potential drivers are cautioned that the customer may not be ready or even at the pickup point, and the driver should wait, but not call the customer, as customers find calls to be annoying.

6) A: Declare (4→3) or A: Withdraw (4→9)

The Uber training video does not refer to using the application while in transit, except to suggest that the driver may want to purchase supplemental, stand-alone GPS hardware or use Waze or Google Maps. Here, the declare step is invoked when the customer accepts the ride. The customer may also choose to withdraw at this point, paying a \$5 penalty for cancellation.



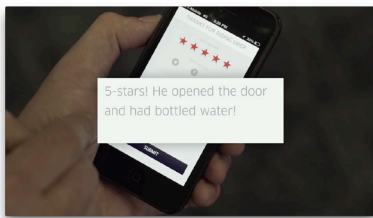
7) B: Assert (3→4)

At the end of the trip, the driver presses the "End Trip" button, which ends the trip and generates a fare payment on the customer's account.

8) A: Declare (4→5)

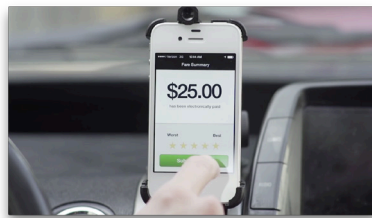
Both the driver and the customer are notified of the full

fare amount, and each have the opportunity to rate the experience of the other. The driver nets 70–80% of the fare, depending upon the number of riders they have fulfilled in the week.



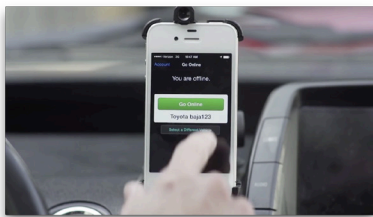
9) A: Declare (4→5)

The customer is shown, rating the driver's execution of the Uber experience.



10) B: Declare not on model

The driver is notified of the amount of the fare, and may submit a passenger rating.



11) B: Offer not on model, or return to 1

The driver signals availability for future customers by pressing "Go Online."

Table 2.3 – Uber driver's application use stages as a Conversation for Agreement

The Uber application violates many of the best practices that Winograd and Flores set forth for the design of applications that support speech acts. The Uber app and the Uber employee training video do their best to obscure responsibility. To quote Flores and Winograd (1986):

Once we recognize the machine as an intermediary, it becomes clear that the commitment inherent in the use of language is made by those who produce the system. In the absence of this perspective it becomes all too easy to make the dangerous mistake of interpreting the machine as making commitments, thereby concealing the source of responsibility for what it does. (p. 155)

Suchman's critique draws out fair points. And Winograd and Flores' language/ action theory is not sufficient to ensure positive acts in the world. For the exploitation to occur, however, the keepers of the system of control and

discipline must be in a position to effectively execute exploitation. Winograd and Flores were not, in the scope of The Coordinator, creators of valuable networks like Uber, Ebay, AirBnB, and Alibaba. These networks have the potential to exert oppressive force upon their employees, customers, and suppliers. Suchman points to Winograd and Flores' The Coordinator as a tool with an agenda of discipline and control, although she does not go so far to call it a paternalistic application. Paternalism entails responsibility for the commanded; yet, the Uber application is not even paternalistic. Uber commands without accountability.

2.5 THE MEDICAL DOMAIN

High-stakes conversations in the medical domain are an interesting possibility for several reasons:

- The medical domain contains structured situations where conversations occur.
- The medical domain contains high-stakes situations.
- There are accessible points of intervention for study.
- The medical domain is based in scientific knowledge yet provides care (a craft-based activity) and engenders an essentially subjective and non-scientific experience.

2.5.1 SHARED DECISION-MAKING AND DECISION AIDS (USE IN CONSULTATION WITH YOUR HEALTH CARE PROVIDER)

Despite much work in medical decision aids and shared decision-making, doctors examining how people make decisions in high-stakes situations have not yet embraced the contextual and situational nature of the decision and have not recognized the key role that conversation plays in the shaping of those decisions. Many of these decision aids assume the role of information provider or assume a decision-making model of optimizing, or bounded rationality. Though a conversation with a provider may be complex, challenging, and emotionally charged, care providers are not trained in communication techniques.

For example, patient-doctor conversations determining the nature and level of end-of-life medical care can be particularly challenging. Dr Angelo Volandes has dedicated the last five years of his practice to creating videos and literature

that have the sole purpose of getting people to broach the conversation with their physician or caregiver and, five years before that, to examining different approaches to providing information to patients near the end of life. Through a series of experiments described in peer-reviewed medical journals, Volandes tested the efficacy of videos as a mode of explanation, with the goal of opening a conversation with the health care provider. Volandes' book *The Conversation* (2015) depicts examples of several conversations and provides a framework for indicating desires and structuring the conversation regarding end-of-life care. For Volandes, the conversation becomes about determining and sharing preferences.

While end-of-life decisions are difficult and challenging, Volandes' *The Conversation* is more about communicating preferences and choosing variations along a path than it is about making a consequential deliberation in a short amount of time.⁸ Volandes attention to conversation as the main mode of deliberation of these decisions is telling, however.

Because of the imminence experienced in high-stakes conversations, Heideggerian *thrownness*, as detailed by Flores and Winograd (1986), becomes a factor, and patients may struggle to reflectively evaluate alternatives. These kinds of planning discussions become extremely difficult, as one attempts to make the plan while one is in the midst of experiencing debilitating aging or disease progression.

In another domain, there are multiple decision aids that address whether or not to routinely take the prostate-specific antigen test. Some people prefer to take the test because of the potential for it to reveal early signs of prostate cancer. Physicians benefit, as the test is a billable item. Insurers prefer that the test be given only when cancer is suspected. The PSA test result is represented by a scalar value, representing the level of antigen in the bloodstream, and is not clearly indicative of prostate cancer. Changes in the number from a known baseline are diagnostic, but a particular isolated value may or may not indicate cancer. While there is robust research in the area of decision aids for routine PSA screenings, choosing or not choosing to undergo routine screening via the PSA test also does not represent a high-stakes decision because it does not meet the qualification of imminence.

A medical situation that provides the opportunity for a high-stakes conversation is a physician-patient conversation regarding assessing a liver for transplant. Together, patient and physician review the historical information about the

8 See also goldstandardsframework.org.uk for a variation of end-of-life care questionnaires.

liver, assess the patient's situation, and choose whether to accept or refuse the offered organ. This conversation meets my definition of a high-stakes conversation. The scope of the choice is well understood, but there are multiple variables that must be considered, including the quality of the organ and the patient's own health and age. Weighing these variables while attempting to assess the risk of the patient's own death waiting for another opportunity is an incredibly fraught experience.

Another example of a high-stakes conversation is the determination of a treatment course for multiple sclerosis. Studies have shown that early detection and treatment is key to delay progression of the disease (Olek, 2018); however, there are widely varying treatment options with varying effectiveness and varying side-effects. Making a treatment decision is not irrevocable, but it is costly to revoke, as nearly all the proffered medications work by building up in a patient's body over time.

2.5.1.1 *Decision aids*

Decision aids most frequently take the physical form of brochures, websites, or videos. Nearly all developers of decision aids state that the decision aid is to be used in consultation with a physician, yet many of these are clearly designed with complete information and guidance, making it possible to use them independently (Elwyn et al., 2010). Even those decision aids, such as the aforementioned videos by Volandes, that earnestly try to maintain a neutral stance will, upon viewing, inspire a decision by the viewer. It is not possible to be confronted with information and not form an opinion regarding the issues. That all decisions be made in consultation with a physician is more likely merely legalese than any conceit that patients cannot make decisions in absence of physicians.

Two evaluative structures exist for decision aids: the International Patient Decision Aids Collaboration (IPDAS), which is a set of quality standards for developing and presenting decision aids, and the Cochrane Handbook for Systematic Reviews of Interventions, which provides guidance on conducting a review of the process of presenting a patient with a decision aid.

The realm of decision aids represents a possible entrée for design into this field, as there already exists a surrounding culture of research and development. Both of these standards provide a framework with which to engage the practice of design facilitated conversation.

2.5.1.2 *Shared decision-making*

Nearly every medical discipline has seen a rise in the practice of shared decision-making. (Elwyn et al., 1999). Traditionally, medicine functioned through a paternalistic decision model (i.e., the physician made all decisions, and the patient's role consisted of consenting to the procedures or tests ordered by the physician) (Charles et al., 1999). Since the 1980s, however, there has been a decrease in paternalistic approaches to health care decision-making and an increase in shared decision-making, where the doctor and patient collaboratively make decisions about the patient's health care. Interesting work has been done on helping to frame risk factors (Edwards et al., 2001), narrative-based care (Launer, 2018), and the role of the physical environment (Stans et al., 2017).

2.5.1.3 *Patient activation*

The Patient Activation Measure is a 22- (or short form 13-) question survey instrument designed to measure the patient's knowledge, skill, and confidence at managing their health and health care (Hibbard et al., 2004). The more activated a patient is, the more presumed agency that patient has to make decisions for their own health.

The literature detailing decision aids, patient activation, and shared decision-making is robust, and these objects and approaches are undeniably part of the medical experience. Yet, physicians are the principal developers of these projects. Physicians are trained in medical school, undergo rigorous apprenticeships during internship and residency, and continually learn and refine the craft of medicine throughout years of practice. Historically, physicians have not been trained as communicators. Although there are new courses on the books at several medical schools that emphasize communication training as a component of the coursework, physicians train to have high competency in the craft of medicine. Physicians' training in patient communication, when it exists, is primarily focused upon a more skilful interrogation: the taking of patient history or the elucidation of symptoms to further the act of diagnosis. Additionally, physician training in communication is typically led by other physicians, not by communicators or designers. Design brings a competency in the craft of visual representation, the skill to create useful reductions of complex data, and user-centered understanding necessary to develop more effective conversation support.

2.6 PUBLIC POLICY DELIBERATIVE DEMOCRACY MODEL

Deliberative Democracy is an approach to governing which supplements traditional definitions of politics as a struggle for power and influence, with a model of debate and deliberation, where the better argument is decisive (Jenssen, 2008). In the practical sense, as in the convenings of which I was a part, citizens are invited to topical meetings that address some issue that pertains to their neighborhood, municipality, or region. These topical meetings begin with a non-partisan pedagogical presentation and have structured agendas that encompass two or three related questions for the participants to discuss. The meeting concludes with each table writing a question that they put to a panel of experts.

Between June 2015 and January 2017 I was involved with Carnegie Mellon University's Program for Deliberative Democracy (PDD), principally to create the sets of documents that provide background for PDD's deliberative sessions. In the summer of 2015, the current project underway under the Metro21 initiative dealt with soliciting public comment regarding urban renewal along the Route 51 corridor in the South Hills section of Pittsburgh, Pennsylvania. At that time, I spoke with Dr. Robert Cavalier, the director of the center, about possibilities to investigate design approaches within the context of the deliberative sessions.

At that point, I began my investigation from the standpoint of developing an understanding of the processes associated with deliberative democracy as it was practiced in constituting conversation space for residents along Route 51. Significant processes where artifacts are a key component are:

- Invitation (who participates, how people are recruited)
- Deliberation (engaging multiple perspectives, goal is to build structures of desirables, not consensus—supported by a material environment)
- Action (focused on connecting deliberation to actions—dependent upon reporting)
- Decision Aids (booklets, websites, software)

I began approaching deliberation from the standpoint of structuring the material environment and designing artifacts that invite, facilitate, and transfer the knowledge surfaced in a deliberative dialog.

2.7 POSSIBLE APPROACHES

Design has much to contribute to the high-stakes conversation. Drawn from the relevant literature in design, the following are some ideas and approaches that I see as relevant.

2.7.1 CHANGE IN FOCUS OF NETWORKS

Environment and medium of the conversation becomes a component in the patient ↔ doctor ↔ nurse triumvirate, but there are more parties to the conversation. Besides relatives and friends who are implicated in health care conversations, present in the room are a congress of artifacts that are potential sites for designing. Design-facilitated conversations are like Bruno Latour's *Aramis* (1996), where the objects and spaces become characters and begin imbuing *the* character of the conversation. Specifically, in the medical realm: aforementioned decision aids teach and speak to the patient in the literal sense of communicating information but should also do so in a social and cultural sense.

The images, spaces, and objects of health care are designed from a primarily functionalist perspective. Reexamining the design of these things from perspectives other than functionalist, examining the design from the standpoint of the thing as character or the thing as setting, creates opportunity to imbue the environment with attitude and posture that embodies the ethic of care and mindfulness.

2.7.2 EXPERIENCE

Key to John Dewey's concept of experience is the relationship between "man and his environment" (Dewey, 1958). For Dewey, experience predicates a relationship of some type be formed between a human and the objects/creatures/people in the environment. In most somatic (real-life) situations that we encounter, a frame of reference for behavior exists; we know what is expected, what actions are permissible and impermissible. High-stakes conversations are, in a sense, a new architecture of place that has continually evolving sets of mores for behavior. Conversational spaces should evoke the nature of the conversations that take place and evoke the relationships between the actors in the space.

2.7.3 REFLECTION

That conversation could act as a facilitator of change within networks is a kind of reflective practice. We attempt to step out of the problems that are causing difficulty within our community and reflect upon the implications of those problems, the stories from our lives that shape our attitudes, values, and beliefs around them. Reflective practice might offer the patient, provider, citizen, government, expert, and client the opportunity to become aware of their own role as part of the process of engagement.

However, Schönian reflective practice is perhaps more difficult during high-stakes conversations. Winograd and Flores recount a contentious corporate meeting as an example of Heideggerian *thrownness*, and this recounting has implications for shifting participants out of a reflective mode and into a mode where “you cannot avoid acting” and where “it is impossible to take time to analyze things explicitly and choose the best course of action” (Winograd & Flores, 1986, p. 34).

2.7.4 TRUST

Solomon and Flores (2001) present trust as an emotional skill in which one can achieve fluency. Distinguishing *authentic trust* from other forms, like simple trust (nonreflective trust) or blind trust, authentic trust is built from a history of successful interactions, and is a characteristic of the self, rather than the other.

Another key idea from Flores and Winograd is the discounting of rationality as the only model for choice-making. Beyond rationality, there is more than irrationality. Behaving according to rules, authority, or intuition are possibilities (Winograd & Flores, 1986). In the case of the medical deliberation, the situation is not a case of search optimization toward a stopping point. For many cases, a solution to be found within a problem space does not exist, but in its place is a gradient of preference on how one may manage and maintain one’s life and care.

2.7.5 REFRAMING AND UNDERSTANDING RISK

Conversations exist in a context that Flores and Winograd characterize as effective coordination of action with others, and for George Lakoff this context is to be understood as a frame. With the use of certain language, frames can be activated, or frames diffused and different frames activated. The frames determine how the participants in the conversation will interpret things

that are said, influence their responses, and structure how the stories of the conversations are told after the experience has passed. In *Weathercocks and Signposts*, Crompton (2008), citing Lakoff, states that it is imperative to center high-stakes environmental messaging on values of the actors involved in the conversation, rather than attempting to create content and positioning targeted toward a demographic or polled value (Crompton, 2008).

A 2002 article “High Stakes Decision Making: Normative, Descriptive and Prescriptive Considerations” by Kunreuther et al. (2002) outlines an allied list of conclusions collated from literature regarding low-probability high-stakes decisions in the domain of business. Kunreuther et al. propose *prescriptive heuristics* as one approach to making risk analysis more concrete. Prescriptive heuristics involve reframing the probability dimension of risk into a more concrete form, such as a one in five chance of an earthquake over the 25-year life of a building, versus a 1 in 100 chance of an earthquake any given year (Kunreuther et al., 2002, quoting Weinstein et al., 1996). Further, multiple studies in literature in medical shared decision-making shows that patients have difficulty understanding risk concepts (Sheridan et al., 2004).

2.7.6 CONVERSATION SPACES

Steve Harrison and Paul Dourish explain the social context of conversation through attention to space versus place—place being constituted as the set of associations and ideas of behavioral appropriateness in spaces. In this work, attention to place has emerged as an important element when the context of the various places are considered. Moving the site of civic discourse out of ceremonial places, like council chambers or the city hall building, and into local places like church basements, recreation centers, or senior centers quite literally moves the civic conversations out of the halls of power and into the territory of the familiar.

Physically, a place is a space which is invested with understandings of behavioural appropriateness, cultural expectations, and expected activities. We are located in “space”, but we act in “place”. Furthermore, “places” are spaces that are valued. The distinction is rather like that between a “house” and a “home”; a house might keep out the wind and the rain, but a home is where we live. (Harrison & Dourish, 1996)

Winston Churchill, Prime Minister of the United Kingdom during World War II, demonstrated a lucid understanding of the intersection of conversation and place. Following the destruction of the House of Commons meeting room, in an address to Parliament, Winston Churchill stated that, “We shape our buildings and afterwards our buildings shape us” (HC Deb, 1943). Churchill followed this statement by outlining a plan for rebuilding the House of Commons essentially as it was originally, stating that the original meeting space had many aspects to its design that made it ideal for British politics.

Churchill and the members of the House of Commons spent some time discussing possible design approaches, though, and whether reproducing the old chambers would be the most effective for planning for a new type of dialog. (HC Deb, 1943).



Figure 2.11 — Photo of the current United Kingdom House of Commons Chambers, courtesy UK Parliament (CC BY-NC-ND 2.0)

The first is that its shape should be oblong and not semi-circular. Here is a very potent factor in our political life. The semi-circular assembly, which appeals to political theorists, enables every individual or every group to move round the centre, adopting various shades of pink according as the weather changes. I am a convinced supporter of the party system in preference to the group system. I have seen many earnest and ardent Parliaments destroyed by the group system. The party system is much favoured by the oblong form of Chamber. It is easy for an individual to move through those insensible gradations from Left to Right but the act of crossing the Floor is one which requires serious consideration.

[...]

It has a collective personality which enjoys the regard of the public and which imposes itself upon the conduct not only of individual Members but of parties. It has a code of its own which everyone knows, and it has means of its own of enforcing those manners and habits which have grown up and have been found to be an essential part of our Parliamentary life.

–Winston Churchill (HC Deb, 1943, col 403)

I believe that we shall emerge out of this fight into a more reasonable age. It may be better to have a circular House. I have often felt that it might be better if Ministers and ex-Ministers did not have to sit and look at each other, almost like dogs on a leash, and that controversy would not be so violent. I do not think there is any merit in violent controversies, and I do not believe that the fights in the House of Commons helped democracy. This House looks quite different from outside from what it does inside. We think it is all very well to have long speeches about nothing and try to put Ministers on the mat, but the people in the country do not see it that way. The people who sit here making rows do not see it as the people see it; they are having a good time making them. I am certain that the Prime Minister is not in touch with the world that is coming, if he thinks that we ought to build a House of Commons exactly like the one we had.

–Viscountess Astor (HC Deb, 1943, col 417)

These cuts show that the underlying argument, presented by Churchill and taken up by the Viscountess Astor and several other members of parliament, that the place, to a greater or lesser degree, shapes the behavior of the occupants prefigures Akrich, Latour, and Jelsma's arguments that we should consider objects determining the social world. (Akrich, 1992; Latour, 1996; Jelsma, 2003) This series of thinkers has examined this idea.

Continuing this line of thought examining the relation between behavior and place, to approach the question "Who acts?" or "What acts?", Emilie Gomart and Maarten Hajer (2003) relate a chronology of experiments observing the mating habits of rats. These psychological experiments, begun in the 1950s, examined the sexual performance of rats during mating. In the first set of experiments, the rats were in small cages, and the female, in estrus, was dropped into the male rats' cage. In these experiments, the female rat exhibited submissive behavior, while the male rat was highly active and exhibited dominant behavior. Gomart and Hajer then turn to later experiments, where the two rats were placed in different, larger cages with a semi-natural environment. In these cages, the female rat showed a highly active role in the encounter. Gomart and Hajer say "as the experimental setting (the cage) is transformed, so is the phenomenon of female rat sexuality" (Gomart & Hajer, 2003). I would take this a step further, and say that the experimental setting actually designed the rats' behavior.

The concept of place is one key understanding oriented toward supporting design for conversation. The context that place provides—salacious bedrooms, adolescent hangouts, halls where revolution is planned and enacted—influences the nature and types of conversations that take place in those spaces. I hypothesize that placeiality has a strong role to play in the shaping of high-stakes conversations. The images, spaces, and objects that are proximate to the high-stakes conversation also, to reference Akrich again, script the behavior of the participants and observers (1992).

Designers continue to only tentatively engage in this type of practice, and they design potentialities for conversations using the same limited and limiting set of patterns, and with the same wrongheaded mindset. In many civic conversation spaces, the space is designed around a performer/audience paradigm. Representing conversations architecturally could take the approach of a designed public space: multifunctional areas where people can gather (Castells & Burkhalter, 2009). Yet, designers continue to trace over the same subsets of metaphor, echoing the Shannon-Weaver, one-way transmission communications model when approaching this type of design problem.

SOME STRATEGIES

There are many spatially-oriented, conservation-oriented projects of interest that have significant material culture aspects:

2.7.6.1 *Situation rooms*



Figure 2.12 — White House Situation Room, December 18, 2009 (Public Domain)

Thinking of Churchill's underground war rooms in WWII London with the wealth of maps, phones, and secretaries, or the technologically sophisticated situation room in the White House, situation rooms are a place where telemetry, data, and video feeds are monitored, and a group of delegates can have a deliberative conversation, make decisions, specify action, and view information about the consequences of those actions. Once the exclusive possession of a nation-state, situation rooms facilitate the deployment of power and produce a compelling illusion of omnipotence.

In a series of installations that are part artwork, part social experiment, part intervention, Pablo de Soto created a series of situation room installations that surveil different aspects of a culture and create a cartography of perceived agency. de Soto's situation rooms offer a unique perspective, normally unavailable to the citizenry.



Figure 2.13 — Citizen Situation Room, hackitectura.net, (Creative Commons license)

de Soto's situation rooms are a critical subversion of the government situation room (Delinikolas, DeSoto, & Dragona, 2013). Occupied by citizens and powered by free and open source softwares, de Soto uses the situation room to create cartographies that are alternatives to the society's dominant paradigm. de Soto's work is an attempt to use the tools of empire to reinscribe the geography with citizen, ethnic, and postcolonial viewpoints. This project opens conversation in the sense that the situation rooms become environments for conversation. Cartographies are a kind of conversation with the geography, lines of language that overlay, structure, and provide a technological interface to the natural world. de Soto facilitates the creation of non-cartesian, non-dualist geographies through these rooms, opening opportunities for post-colonial understandings of space and place.

Situation rooms are susceptible to the aforementioned critique of perpetual updates by Winograd and Flores via Heidegger: that attempting to be reflective in a constant influx of data might be antithetical to engagement in a deliberative space.

2.7.6.2 Argumentation mapping

Mapping is one way for creating a shared visualization of the problem space. One approach to creating a cartography of understanding of design-facilitated conversation is Jeff Conklin's IBIS-based Compendium, an argumentation mapping software that seeks to provide at once both a restructuring of conversation as rational argument, a diffusion of the political power of the various actors in the conversation, and a refocusing of the conversation upon the act of the shared creation of a visual artifact.

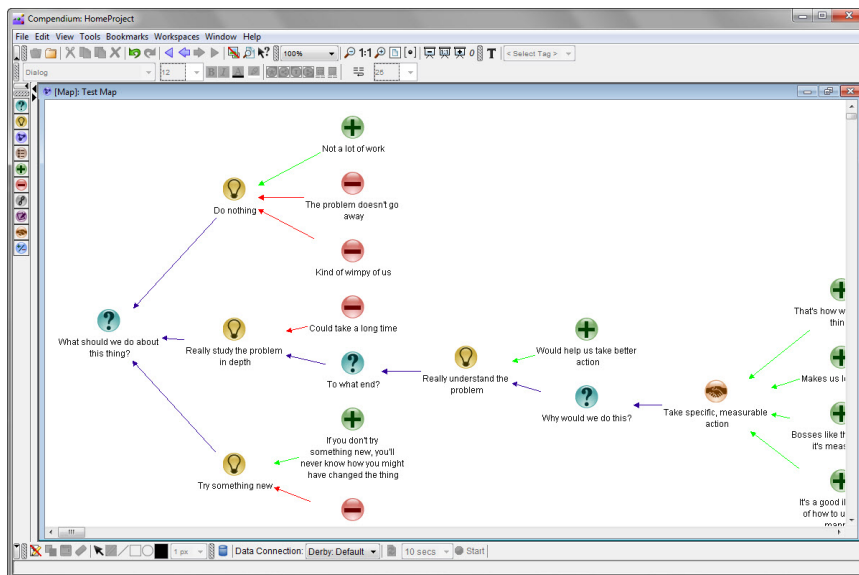


Figure 2.14 – Compendium software by Jeff Conklin & Co.

Conklin, a student of Horst Rittel, created Compendium in an effort to structure the social complexity of arguments about problem spaces, or to ‘defragment’ problem dynamics (Conklin, 2006). Compendium, a descendant of Rittel’s IBIS system (Kunz & Rittel, 1970), can be used to map the hierarchy of ideas that contribute to an argument.

Some approaches to visualizing conversation have attempted to address this problem. Judith Donath details a set of interface innovations for visualizing conversation (Donath, 2002). Despite Donath’s assertions to the contrary, and with the exception of the innovative ChatCircles (Donath & Viégas, 2002; Viégas & Donath, 1999) software created in concert with Fernanda Viégas, none of these interfaces actually represent altered conversational experiences

for the user, but are simply visualizations of a completed conversation. Robert Horn derived a highly structured way to map “social messes” (Horn’s version of Horst Rittel’s wicked problems) as argumentation maps (Horn, 2001). As an interface or visualization to a conversation, Horn’s maps effectively depict the discursive space of a social mess; however, Horn’s argumentation maps as well as the subsequent software Debategraph (Price & Baldwin, n.d.) based upon Horn’s argumentation mapping are ineffective as interfaces for an ongoing dialog.

2.7.6.3 *Holding environment*

Another useful break from approaches of designing for information clarity is to think of the design-facilitated conversation as a kind of *holding environment* for deliberation (Culmsee & Awati, 2012). The concept of the holding environment, first articulated by psychologist Donald W. Winnicott as the environment where an infant is raised by its mother, and later by Robert Kegan as a set of *cultures of embeddedness*, is that environment and mindset where an expert helper or facilitator will provide an environment of understanding, and through the expert’s experience of the client’s problems will aid in the sense-making process for the client (Kegan, 2001).

To return to earlier works, Pablo de Soto’s Situation Room installation designs a cartographic conversation with an environment, as surely as the concert hall is designed to prevent and limit conversation between audience members, assuring that they remain mute and respectful (Small, 1998). Each of these environments functions in a way that shapes the conversations that are had within. To return again to Jeslma’s point regarding behavior shaping, readings of poetry may be had in a Situation Room, but the design of that socio-technical environment provides some paths that are easier to follow. Winograd and Flores (and many others since) have produced theoretically grounded sets of garden pathways that privilege certain acts and facilitate certain outcomes, but as Winograd admits of his own work, within and without those interfaces there remains space for resistance. Suchman and Tonkinwise point out the ethical challenges and ethical capacities of developing those garden pathways, and Suchman (and others) point to the dangers of structuring experiences that discipline and control the users. As shown by the analysis of the Uber drivers app, the potential to discipline and control people, while evading responsibility for those people, is certainly possible, and from my perspective, highly unethical.

It is from this place that I would move forward, mindful of the nature of the socio-technical environment that is created, approaching the design of any theoretical principles to support hybridity, openness, and action.

2.8 CONCLUSION

Conversations are a medium that can be designed. This wide-ranging review of the literature surrounding conversation demonstrates the spectrum of approaches that have been undertaken in an effort to provide a scaffold to conversations in difficult, fraught, or high-stakes situations. The Suchman–Winograd debate provides guidance on how this can be done ethically, while de Certeau and Young help us to understand the role of protest within designed systems. Understanding the environment for conversation as a participatory and procedural space opens opportunity to design in order to structure conversation events toward richer engagement and to create structures that help participants engage with the matters of concern and with each other.

Interventions in the design conversational space and conversational place tend toward the highly theatrical or the ceremonial, where the designers of those places have embedded a transmission model in the very architecture. Opportunity exists to reorient the design of these spaces around listening. Further, the ceremonial character of the places where people are accustomed to speak to government may have a deleterious effect upon participants. Considering the settings' relation to behavior as discussed by Gomart and Hajer and Harrison and Dourish, the performative nature of speaking in public is compounded by designs that cue participants to perform.

High-stakes and difficult conversations are often unpleasant and rare. The act of design is bound up with the act of prototyping, or of acting indirectly (Doblin, 1987). Most design in effect is predicated upon lowering the stakes of a given venture by creating a prototype, or drawing or maquette; however, little opportunity exists for people to prototype their difficult or high-stakes conversations. Creating a library of possible conversational prototypes may offer some familiarity with difficult situations. Design can offer structures and processes by which to create these prototype conversations.

Activity is catalyzed by events. Framing civic conversations as events has potential to foment action in the network of stakeholders who surround a given matter of concern. While that action might be framed as contestation, there are many stakeholders and members of the greater community that share values, and can realize benefits through models of discourse other than contestation. Designing to foster collaboration and conversations that focus on the surfacing of values can lay the groundwork for greater collaboration outside the system of the conversation. And, collaboration is only one of many productive ways forward.

3

Conversation and Games

Ludic space for conversational prototyping

In this chapter, I examine a number of games and game-like activities that serve to structure conversation. Like Winograd and Flores' The Coordinator discussed in Chapter 2, games serve to discipline human activity toward an end—in this case, the end is fun or idle amusement, rather than the negotiation of workplace commitments. This chapter delineates three approaches to *game & conversation*: conversation *with* game objects, conversation *about* game objects, and conversation *facilitated by* objects. The games surveyed are examples of compelling practices in game design as pertains to conversation. Of particular interest to proponents of liberal democracy is the game Nomic, where gameplay is completely encompassed in the manipulation of the rules of the game. Best practices drawn from these games inform the architecture and approach of a game designed by the author through three co-design workshops.

As a component of this research, I created a game-like activity that can be “played” in a number of ways to foster better approaches in difficult conversations. To inform that creation, I spent some time looking at games where conversation is a significant component of the gameplay and discovered significant parallels between conversational activities and game activities. Further, framing a conversation as a component of a game lends some of the special status of “game” to the conversation. This permits difficult

conversations to be held in the ludic space of gameplay, which permits failure or poor execution more readily. In addition to permitting failure, moving a conversation into game space also permits a somewhat less sincere prototyping behavior and venturing attempts or conversational gambits that might not be attempted outside the protective ludic space.

David Parlett, in *The Oxford History of Board Games* (1999), suggests five categories of table game: race games (like Snakes and Ladders, Parcheesi), space games ((read: spatial games) the goal is to get the playing area in a certain configuration, Connect 4, Go), chase games (a large group of pieces attempts to immobilize a smaller, more mobile group like Fox & Geese), displace games (capturing pieces: chess or checkers), and theme games (a catch-all category of mostly more recent games like Monopoly, Risk, Dungeons & Dragons). Theme games are further divided into categories. One of these categories, games of social interaction, is given extremely short shrift in Parlett's taxonomy; yet, that aspect of social interaction shall form the bulk of this chapter. I would point out that the aspect of social interaction is present in all games; even in the most sedate of chess tournaments, there is rich and varied economy of social interaction (Fine, 2015). This component of the investigation will examine games of social interaction, specifically from the standpoint of the game's relationship to conversation.

Parlett notes a trend in the development of physical games. Modern games more frequently have aspects of gameplay that occur off the board, citing Monopoly, where players exchange money, deeds, and cards that never or infrequently touch the board. I suggest that Parlett has neglected a category, an aspect of the evolution of this trend: conversation games, a group of games that are centered around conversation whether as part of the gameplay, facilitated by the game, or tangential to the game. This section will examine games that relate to conversation in a significant way. I propose a system of looking at these games and ones that inspire: conversations with game objects; conversations about game objects; and the most fertile ground, object-facilitated conversations.

Games affect the nature and quality of social interactions by creating a temporary zone of suspension in which social structures are altered. What comes in a neat box with a set of tidy artifacts is actually more feral in nature. The social construct of gaming constructs a hyper-local place where people can operate with rules that are rarefied in some way—rules that define a particular set of transactions that are not a part of everyday life. People playing games are within the space of the game, given permission to engage

in actions that they would not normally, put themselves in situations they would not normally, assume postures that they would not normally, all under the protective mantle of “gameplay.”

As a part of this investigation, I examined games that act as a facilitator or as a catalyst for conversation. Games like this are sometimes known as party games or icebreaker games. Many of these games have trivial or even puerile content. The interesting aspect of games as a component of this study is understanding the functioning of games where a goal of the gameplay is not the accomplishing of the game goals, or even the fun of the low-stakes (or even higher-stakes) competition between the game players. This section examines games where the goal of gameplay is to stimulate conversation between the participants.

Defining what a game is is a rather challenging endeavor. The concept of game has some fuzzy borders, and many definitions have been attempted. In their book *Rules of Play* (2004), Eric Zimmerman and Katie Salen detail eight definitions offered by theorists and philosophers, as well as offer their own. To recount some key approaches to this problem, also traced by Zimmerman and Salen, Bernard Suits, in his delightful book *The Grasshopper* (2014), constructs a definition of game and discusses the satellite concepts of play, and more specifically, role-play. Suits’ inquiry centers around the question of whether or not an activity is purposive (whether it has goals); scripted, rule-based, or improvisatory; or includes bounds or the overcoming of obstacles. Key to Suits’ understanding of the game is the existence of a lusory goal, or a goal that is pursued within the context of the game play. Suits describes the pursuit of that goal through the game as inefficient, and inefficiency as one of the defining aspects of game.

Johan Huizinga teases apart that which is serious from that which is play through an interrogation of these concepts in *Homo Ludens* (1950). What can be drawn from Huizinga that supports this investigation is that, similarly to Dewey, Huizinga sees games as time-bound and having “no contact with any reality outside of itself.” (p. 203) It is this sphere of unreality existing in a time-bound, rule-bound sphere that lends the game power. The concept of the magic circle of the game is powerful and subtle. Behaviors that are inappropriate, excessively intimate, antisocial, or even cruel function acceptably within the magic circle of the gameplay.

Huizinga also discusses role-play in both playful and serious senses: for instance, a magistrate administering justice while costumed in wig and robe,

while seated in a particular setting, holding the prop of a gavel is a quite serious type of role-play. Game implicitly constructs a non-serious space, free of consequence. As Mary Flanagan states, “Csikszentmihalyi and Bennett argue that play works because the magic circle of a game defines its space and makes participation in the action of a game voluntary” (2009, p. 63).

Flanagan also discusses Huizinga’s magic circle in other contexts, specifically Jenny Holzer’s work *For the City* (2005), where subversive texts are projected on city monuments. Flanagan notes that these monumental projections create a temporary space for discussion, a place where implicit societal rules of politeness and avoidance of difficult topics are suspended, and viewers are given permission to engage. By and large, Holzer’s work functions through these kinds of game-like suspensions, by inserting text where text is out of context.

The participatory fiction of separation of the game space from real space permits special behaviors in game space that would be considered inappropriate outside of game space. The importance of this ludic sphere has implications throughout this research. Conversations, especially planning conversations, occur in a possibility space with a certain suspension of rules.

In a dinner conversation with a physician about the boundaries between care and choice as represented by Annemarie Mol (2008), we discussed this suspension. The doctor talked about being engaged with patients in high-stakes planning conversations—conversations where doctor and patient are together planning a treatment approach for cancer. Hospital guidelines of patient care preclude the doctor from making a choice on behalf of the patient. Quoting from the dialog: “In the old days, there was no conversation. Some doctors wouldn’t even tell the patients what they were doing.” Then later in our conversation, “Now the patients are responsible for making their own decisions. But most just ask me what I would do if I were in this situation. And then they do that.” As recounted here, the patient invokes a space of participatory fiction and allows the doctor to give a recommendation without violating the strictures of the system. Again, this play is quite serious.

Eric Zimmerman and Katie Salen also offer a definition of both game and play. For Zimmerman and Salen, “A game is a system in which players engage in an artificial conflict, defined by rules, that results in a quantifiable outcome” (p. 80). While system, players, conflict, rules, and outcomes are perhaps assumed by most people, the aspect of the artificial is where games derive their power. The game exists in the consensual construction of the ludic circle, where actions within that circle are delegated to unreality.

Thinking of conversation, and considering that act in light of some definitions of game, it might be useful to compare conversation and game. As pertains to this investigation, it is perhaps more useful to think about the use-value of conversation in light of the experience of games, rather than examining contrasting theoretical constructs.

Conversation and game share a number of characteristics. Here we will discuss central trends. Outliers are potentially quite interesting (chess played by mail over a number of years or academic conversations that arc over lifetimes, for instance), but in this context, to approach a more broad, locally based understanding, let us examine a more middle-of-the-bell-curve, or federated definition of game and conversation.

	Conversation	Game
rules	Mostly implicit	Mixture of implicit and explicit
boundedness	An experience (Dewey, 1958)	An experience
structure	Turn-taking is the norm	Mostly turn-taking, but some have simultaneous action
repleteness	Unbounded, can be reframed	Bounded by the game field
time scope	Typically > 2 hours	Typically > 2 hours
material support	Everyday objects (shelter, chairs)	Everyday objects (as with conversation) and rarified objects (boards, cards, tokens)

Table 3.1 — Conversation and game compared over several aspects over several aspects

Where the fuzzy edges of game begins to emerge from the greater range of conversation practice, we see a number of subtle changes. Explicit rules are perhaps one of the principal characteristics. Speech alone can become a game through the introduction of rules—riddles, 20 Questions, or other guessing games for instance. While working at Anderson Ranch Arts Center, the interns that worked for me in the Photography department and I would play a game with my introductions of visiting artists. Before I introduced the visiting artists' lecture, the interns would write a word on a slip of paper, and I had to convincingly work that word into the introduction of the artist. If I forgot or otherwise failed to include the word, or if the interns judged

my inclusion unconvincing, the intern who submitted the word “won” and would get the following Friday off from work. With this simple proposal, our group split the speech of the introduction away from presentational speech and toward game. Yet the game was not apparent to those who were outside of our small community.

Speaking on digital life and game, Hubert Dreyfus talks about the repleteness of an experience (2000), meaning the degree to which potential for agency exists. Compared to games, in everyday conversation, as in life, the greatest degree of potential exists. People can elect nearly any action, can say or do nearly anything that does not disrupt the commitment to engage (Dubberly & Pangaro, 2009). But the game experience is more fragile than the conversation. For instance, discussing breaking the explicit rules of the game moves the players out of the game state and into a meta-conversation about game mechanics; yet, talking about the conversation in the conversation is perfectly acceptable. “I don’t want to talk about this now.” or “How do you think this is going?” where “this” refers to *this subject* or *this conversation* is perfectly acceptable. The point of breaking a conversation comes when one or more participants is deliberately misusing the words themselves (Grice, 1975).

Rarified objects that act in supportive ways are a common component of gameplay. These can be a game board or field, specially printed slips of paper, tokens, or nearly any other item. Yet everyday conversation rarely uses these types of special items. Again, exceptions exist, but even those exceptions venture out of situations of everyday speech. Unless it is a difficult situation, the rules for conversation are largely implicit and assumed, and only rarely does conversation have material support. The Mi’kmaq—native to the American Northeast—materialize the right to speak through a tradition of using a *talking stick* during discussions of problems. This is an ordinary or specially carved stick used during political discussions to authorize speech. During the discussion, the individual who wishes to originate discussion about a problem holds the stick and speaks. All other participants must listen. The stick is passed to the next person to speak, who then speaks about the problem without repeating what the previous speakers have said. This continues until all who want to speak have spoken, and the stick is returned to the originating person (Donaldson, 1998, quoting Knockwood, 1992). At the beginning of sessions at the United Nations speeches are structured by a voluntary 15-minute time limit. The speaker’s time at the podium is materialized through the green, yellow, and red lights on the speaker’s podium that indicate when the speaker’s time is nearing its end (Ruder et al., 2017).

While it does not sanction the speech, medical practitioners use decision aids—pamphlets that explain risk factors or aid in planning treatment courses in complex, costly, and/or life-threatening medical situations (Collaboration IPDAS, 2005). But artifacts do not come into play in everyday conversation. If a conversation is facilitated by objects, it is almost invariably a very unusual speaking situation or a game.

One aspect of a shared understanding of games, is games as a competitive endeavor. For many of the definitions of *game*, competition or the opportunity to win is a (*the?*) defining aspect. Game, sans the competitive act, in some definitions is categorized as *play*. This investigation covers games or structured play situations that are engaged in for the purpose of facilitating conversations.



Figure 3.1 — Several Carnegie Mellon University design students play a vintage version of Trivial Pursuit (approx. 1990)

Trivial Pursuit, for instance, has very little traction as a competitive game. While player groups surrounding other games like Monopoly hold annual tournaments, or chess or Go players have elaborate tournament and ranking systems, Trivial Pursuit is more... trivial in that sense. The enjoyment of the gameplay derives more from sharing trivial facts and engaging in the conversations that the facts engender than whether a player successfully answers a number of trivia questions correctly. The game questions are

designed to be mildly provocative—to evoke nostalgic recollections of the time period referenced, perhaps to even provoke collegial arguments, or at least discussion over the veracity of the Trivial Pursuit cards. The game contains all the highly structured elements of a competitive game: the players spend a significant amount of the gameplay rolling dice, moving their pawns, drawing cards, adding pie slices, but the game experience centers around the discussion of the trivial facts brought to light by the gameplay. Though highly structured, the game is a really a thin gloss for provisioning topics of conversation. The turn-taking nature of the gameplay ensures that the conversations do not go on too long—if a particular player is less interested in an aspect, then, like a top-40 pop song, the conversation is over before the urge to tune out becomes overwhelming.

Trivial Pursuit, as an object, is an excellent place to start this discussion. Trivial Pursuit is specifically that kind of game where the objects of the game act in a facilitative role. Strangely enough, as I was thinking about this problem, the problem of objects facilitating conversation, someone left a bag of cast-off board games in the hallway outside my office. Trivial Pursuit was one of those games, and that act set in motion this line of thought—considering how sometimes the object of a game is really not to win, but perhaps to foster enjoyable conversations about some minutiae that have a shared cultural currency. Here, Parlett considers the ongoing development of games where the objects move away from the center of gameplay and behave in a more facilitative role:

Wandering further away from the board, we reach a game like Trivial Pursuit and its derivatives, in which all the real play takes place off the board. The board is almost an irrelevance: it does little more than keep a score, like a Cribbage board. Finally, we reach fantasy games, some of which involve a board as a convenience for keeping track of inter-player relationship, but most of which are boardless role-playing games, overlapping with ‘play’ in its theatrical rather than any other sense of the word. (Parlett, 1999, p. 347)

When considering objects in this space, we look at the relationship between the objects, and the way that the materiality of the game functions in relation to conversation.

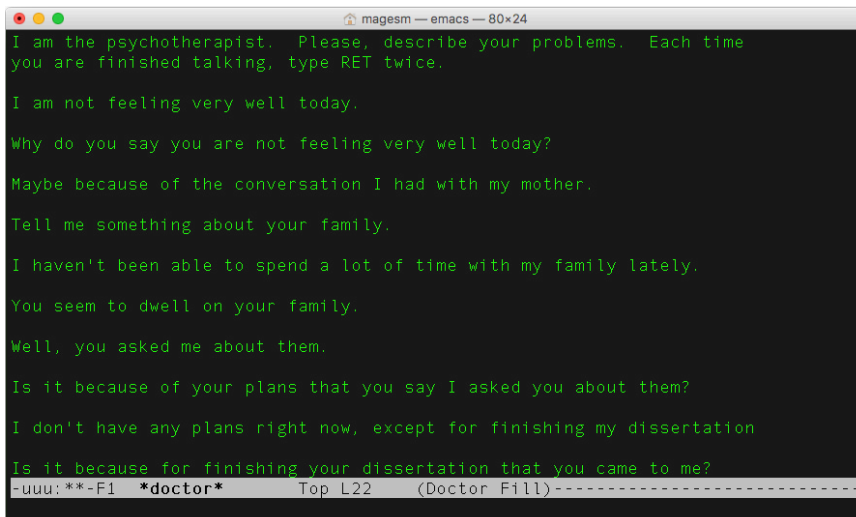
Throughout the rest of this section I will examine three approaches to *game + conversation*. *Conversation with game* objects explores the phenomena of engaging in some kind of meaningful dialog with a game. Here, we explore games that go beyond the button-push that a cyberneticist might posit as the base example of conversation, but seek to circumscribe a set of games that are examples of a natural language conversation. All examples that simulate a conversation between two people are human ⇔ software assemblies. *Conversation about game* objects explores those games that induce conversation by foregrounding player-to-player interaction through manipulation of objects. Here, play is organized around debating the actions, rules, or structures. Players are at once engaged in gameplay and in conversation about the gameplay, which become entangled in a sort of meta-gameplay/conversation. This is subtly different from the Heideggerian concept *vorhanden*—the type of engaged awareness of the object that only occurs when something breaks and the infacility makes the object advance into consciousness (Dourish, 2001). Rather, *conversation about game* objects deal with games that are principally about rule-making and process-organizing. Finally, we enter on the rich area of games and related experiences that evoke object-facilitated conversations. These run a wide range, some with the objects dominating the conversation, more assertive, some with the conversation dominating the experience, and the objects receding or playing a more facilitative or supportive role in the conversation.

3.1 CONVERSATION WITH GAME OBJECTS

The relation that is perhaps the most straightforward is a conversation with game objects. This is most often found in software, where players might directly engage in interaction with game systems. One early example of this type of game would be Joseph Weizenbaum's famed and storied ELIZA software. In the development of this forerunner of Natural Language Processing, Weizenbaum identified five technical challenges of executing a successful Natural Language Conversation with a computer:

1. Identification of the most important keyword in a statement
2. Identification of some minimal keyword context
3. Choice of an appropriate transformation rule, and the creation of the transformation itself
4. Some mechanism to address errors—when either a keyword is not provided, or a keyword cannot be determined
5. Code to facilitate the script writing (Weizenbaum, 1966)

While Weizenbaum did not intend that ELIZA be a game, the algorithmic nature of programming, the scripted turn-taking nature of the interaction, lends quite a game-like aspect to the experience. In Weizenbaum's account of the early experiences with ELIZA, the introduction of the machine to the human framing the machine's output within the context of a (Rogerian)



```
magesm — emacs — 80x24
I am the psychotherapist. Please, describe your problems. Each time
you are finished talking, type RET twice.

I am not feeling very well today.

Why do you say you are not feeling very well today?

Maybe because of the conversation I had with my mother.

Tell me something about your family.

I haven't been able to spend a lot of time with my family lately.

You seem to dwell on your family.

Well, you asked me about them.

Is it because of your plans that you say I asked you about them?

I don't have any plans right now, except for finishing my dissertation

Is it because for finishing your dissertation that you came to me?
-uuu:**-F1 *doctor* Top L22 (Doctor Fill)-----
```

Figure 3.2 — contemporary EMACS port of Joseph Weizenbaum's ELIZA software

psychotherapist is critical to the believability of the experience. The transformations that the ELIZA program performs on user inputs is enough to create a seemingly legitimate reflection of the input statement as an output, but the intelligence in the system is the intelligence of the user only. Like Tom Sawyer enticing Ben to whitewash his fence with an alluring framing, Weizenbaum cleverly delegates the “work” of the interaction—the very creation of artificial intelligence—not by generating brilliant natural language conversations through a rich network of algorithmic transformation, but by cleverly framing a portfolio of responses that would be nonsensical in nearly any other context.

Another low-tech game that made excellent and clever use of framing is the early text-based adventure, progenitor of interactive fiction, ZORK. Penchant for allcaps in naming notwithstanding, the clever framing of the limitations of the game, direction away from intense software mechanics and toward well-written content create a gameplay experience that describes a large and compelling world. Gameplay through the universe can be pleasurably sustained over six hours.

Self-described: “Zork is a game of adventure, danger, and low cunning.” (Blank, Lebling, & Anderson, 1977, introductory in-game leaflet) An early text-based adventure game, Zork places the player self-consciously in conversation with the game engine. The player issues commands using a UNIX-like command line interface (a proto-conversational design), like: “Walk around the house,” “Open the window,” “Go inside.” The game engine typically responds by directly communicating the results of the player’s actions; however, when there is an error state—the game does not recognize a command, or the game recognizes nonsensical player input—the game engine asserts itself, speaking to the player in a direct sense.

The programmers of the game engine, while working within very limited technical capabilities of early systems, anticipated a variety of error states and created memorable conversational-style feedback for those error states. The game engine has two sets of responses: a number of sarcastic pre-programmed responses for nonsensical player actions, like “Wheeee!” or, if your player-character jumps for no reason or attempts to eat something that is not edible, “I don’t think that the _____ would agree with you.” Other errors elicit a more staid error response: “What do you want to _____?” and “What should I do with _____?” (Blank, Lebling, & Anderson, 1977).

Unlike most interfaces today that attempt to adopt the paradigm of a receding, facilitating personality, Zork is actively ironic, sarcastic, mocking, and obstructionist. This personality lends a particular experience to the game and contributes to a multi-level game playing experience: the player has a relationship with the quest itself but also with the game engine.

3.1.1 PROCEDURAL ENVIRONMENTS

Janet Murray (1998) writes about all-digital environments, Zork being one exemplar, as environments that are both procedural and participatory. Procedural environments are centered around structures of rules and models. Participatory environments allow participants to induce reactions from the system. When considering a conversation situation, these are two useful concepts to leverage.

In the context of a designed civic or other conversation event, procedural design approaches things like agenda, structure, and coaching moderators in techniques to redirect wayward participants. If a solid, well-tested, procedural design has been created and successfully implemented, it lends a sense of security and order to a conversation and lends a certain predictability to the event. Participants can plan their responses and know what aspects are forthcoming as well as when time is budgeted to what topic area.

3.1.1.1 *When procedures break*

I moderated and helped to design and host an event in Brentwood, Pennsylvania, convened by the Remaking Cities Institute, May 24, 2016. There were a number of us involved in designing and implementing the event. I was one of three people involved from the Carnegie Mellon University (CMU) Program for Deliberative Democracy (PDD). Additionally there were two architects from the CMU Remaking Cities Institute (RCI) tangentially involved in the planning. The architects had plans to use the data generated from the conversation. We conducted this meeting as part of a study on best practices in public engagement on multi-municipality corridor projects for the Pennsylvania Department of Transportation (PennDOT). The meeting was held in a deliberative format, and collaborating with the architect, the Deliberative Democracy team struggled to form a set of questions around which to structure a meeting. The charge from PennDOT was to write a set of best practices for engaging people. Some of us felt that the best approach to fulfilling this need was to have our team collaboratively author a short document that described these practices. Some of us felt that it would be good to engage corridor residents and ask them to deliberate upon the most effective ways to engage their cohort.

Because CMU academics are not always embedded in the communities we wish to be engaged with, the RCI partnered with a local multi-municipality community development corporation, Economic Development South (EDS), to take the lead on sharing information about this session. The PDD and RCI had partnered with EDS on a number of occasions for prior deliberative discussions about planning development around resident use along Route 51. On this particular occasion, EDS was in the midst of undergoing a turnover in key personnel. Information about this event was shared only with the Executive Director, who considered it a low priority in light of his needs to quickly replace and orient an important new employee.

As a result, very little participant recruiting was done, and the meeting attendance was painfully low. Only four participants from the community attended, and these participants were what I would casually refer to as “hard core” participants, or less casually, people who feel that they have an extremely significant stake in their community and regularly attend and assume a significant role speaking out in community meetings. Because the meeting was so sparsely attended, the RCI and our group from the PDD abandoned the more structured, more designed deliberative democracy format, and reformed the meeting as a roundtable with the architects from the RCI, with myself as facilitator.

One of the participants had attended the aforementioned previous planning and development meetings for Route 51 that were organized and hosted by this same group—the RCI, PDD, including myself. Although this meeting was covering a completely different topic, and was time separated by nearly a year, the participant repeatedly redirected the roundtable conversation back to his dissatisfaction with the development of Route 51. Because we had abandoned the context of the procedural design, the structure of the event became open to any kind of feedback. Because we were the hosts of the previous event, this participant viewed us as a conduit of communication to the governance of the development process.

While this may seem that procedural design disciplines the participants, only permitting “acceptable” inputs, it operates in a subtly different way. Done effectively, procedural design conveys what the potential for action is from a given conversation. Embedded in a good procedural design is a communication of the scope of the power of the event. The disgruntled participant’s feedback about a project that we were no longer engaged in was ultimately futile. Not only was it mere sound and fury, signifying nothing, the window of opportunity for commenting on the year-past project had

passed. The decisions made by the planners were irrevocable, in the sense that materials had been purchased, contractors chosen, plans drawn, some construction completed. It was no longer possible to redirect that effort. Maintaining the procedural design of the public conversation would have been ultimately kinder to that participant, as he spoke under the false impression that his speech could result in a changed act.

3.1.2 PARTICIPATORY ENVIRONMENTS

Participatory environments are an open and responsive architecture in which people can engage. Here I use the word architecture in its broadest sense—meaning not only the space defined by the building itself, but the set of cultural constructs that are organized around the building and the way that particular building is placed or invested with cultural and behavioral understandings of appropriate interactions (Harrison & Dourish, 1996). Returning to ideas of the civic conversation, these might be considered a participatory environment in a similar sense as the types of games elaborated upon here. There are some specifically designed inputs, rule structures and system controls, and known outputs.

Yet the power of the material structure of participatory environments is sometimes obscured from the creators of those architectures. I participated in Priscilla Cheung-Nainby's 2016 workshop at the Design Research Society conference. Cheung-Nainby has developed a relatively process-free method of using bamboo sticks, various strings, and other binding materials and a number of types of paper tags that allow people to construct brainstorming artifacts that are also three-dimensional concept maps, or system maps. The experience is compelling, but Cheung-Nainby's various descriptions of the experience of participation in this format—that participants are “designing by envisioning and enacting participants' collective imagery in physical forms in an iterative cycle of deconstruction, construction, and reconstruction” (Cheung-Nainby et al., 2016) or that “[t]he structural connectedness of ideas and data give rise to the creative emergence of a design concept” (Mulder-Nijkamp & Cheung-Nainby, 2015)—misses perhaps the most fundamental point of the experience: that the process-light co-construction of a three-dimensional representation of a problem space puts the bodies of the participants into a different relationship with the artifacts of the conversation. Participants are not facing the ideation space (whiteboard) or surrounding the ideation space (co-design activities) but are in and around an immersive ideation space.

ZORK also might be referred to as an immersive system in the sense that users are willing to suspend disbelief in gameplay in a more embodied sense than when they reading a novel. When a sequence of events transpires in the game, and players are asked about it, a typical response might be “I was locked in the basement, and had to escape” rather than the more rational and remote “My player character was locked in the basement, and I had to discover the sequence of gameplay that released him” (Murray, 1997).

ELIZA is one progenitor to the research field of interactive fiction, ZORK another, and while a complete review of the genre is not possible or desirable in this context, let us consider one more contemporary example to extend our examination of conversation *with* game objects. Developed at CMU, Michael Mateas’ and Andrew Stern’s interactive fiction *Faade* uses a more complex module-based structure to organize the dialog in the game.

The game is a tripartite conversational interaction. As the player, you may choose your name, and you arrive at an apartment where you meet two non-player characters—your friends Trip and Grace—who invited you over for dinner. As the gameplay develops, it becomes apparent that you entered part way through a conversation between Grace and Trip that was both difficult and painful. Continuing on, it becomes clear that Grace and Trip are talking past one another, blaming one another, and avoiding responsibility for the state of their relationship. As the player character, you may choose to intervene or not, and the things you say may cause Trip to throw you out, either Trip or Grace to leave the apartment declaring the relationship over, Trip or Grace to reveal affairs or other transgressions they have been keeping from their spouse, or both of them to attempt to reconcile.



Figure 3.3 — *Façade*, by Michael Mateas and Andrew Stern (Procedural Arts) (2002a)
<http://www.interactivestory.net/screenshot4.html>

The visual interface of the game is quite simple, even off-puttingly low-fidelity, and the game space consists of only a living room with couch and bar, and a kitchen. The AI has been well thought-through to accommodate different potential paths of gameplay. Rather than working with a branching or networked structure, the AI is organized around a set of modules with subgoals in each module (Mateas & Stern, 2002).

The experience of the game engenders discomfort in the player. The animation is rude, yet the voice recordings that were crafted for the game are extremely convincing. Because the primary way that the gameplay advances is by listening and responding when the non-player characters speak, the player cannot avoid the intensity of the emotion represented in the voices.

The minimal visual cues in the environment and character design are offset by the voice-based cues from the developing narrative—to the degree that the gameplay becomes engaging.

On the user interface side, the player is presented with minimal controls. On the desktop version of the software, the player can position their avatar anywhere throughout the room. The player's movement engenders different

approaches from the non-player characters, Grace and Trip, and can change the gameplay as well. Even standing closer to one character or following one character or another into part of the apartment can change the narrative.

There is a kind of interaction and a potential for the experience of different modules in different psychosocial contexts within the narrative storyline. That said, this game—like all branching or modular narratives—has a limited repleteness in the sense that there are many states that may be invoked through the gameplay where no meaningful response (meaningful to the system) has been fed into the system and it seems the error recovery algorithms cannot cope with the inputs given.

Consider *Façade* as a game where conversation with the game objects is the central part of the experience. While electing a path through the set of modules may not actually be interactive by all definitions, the site of the interaction could be considered to be situated in the mind of the user—like reading a novel, *Façade* evokes an emotional response in the player. Again, as with *ELIZA*, the heavy lifting of constructing an emotional environment is done by the player. While the conversation is with the game objects, in the cases discussed here, the change in the system is the system of the player's thoughts and feelings. The artifact of the game does not undergo any change, but alternatively reveals different aspects of the game experience to the user. One could argue that this action is a *de facto* change in the game, but the total potential of all gameplay is encompassed by the modules or branching structure of the game code.

Another approach to *conversation with* game objects can be found in *The Coming Out Simulator* by Nicky Case (2014). This game is less of a game than it is a variable-enhanced experience of a structured conversation. The developer has shared the brief development document and has released the commented code for the application in the public domain.

The Coming Out Simulator offers the vicarious experience of participating in conversation where a child chooses to reveal his sexual orientation to his parent. Case's game offers little in the way of determination for the player. Throughout the experience the player is given three prewritten choices to advance the story. While these choices appear to have in-game consequences, they do not result in an alteration of the story line. Choices are folded back into the main narrative line—the result of a player's choices are inconsequential, except that key words from the player's choices are reinserted in the dialog at a later point in the game experience. While this does not reflect

any consequence in the gameplay (as regards exposing or hiding different strands of the narrative) it does provide a specific gloss—contributing to the player’s feeling of consequence and interactivity.

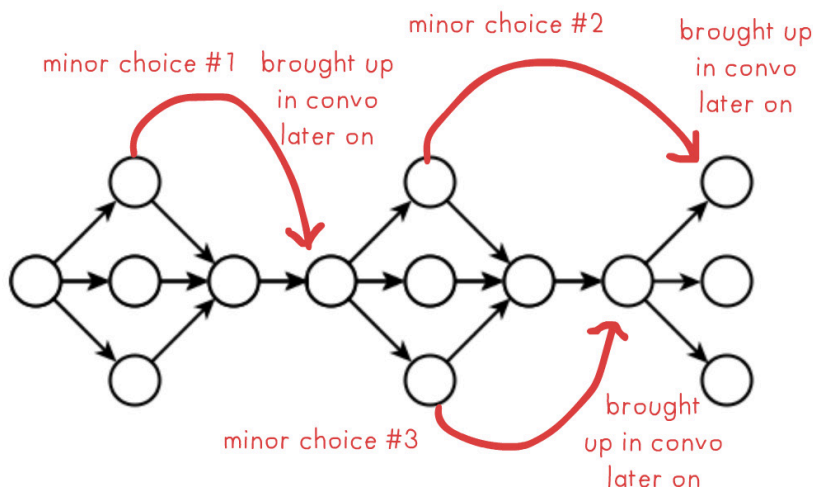


Figure 3.4 — Collaborative diagram of Coming Out Simulator gameplay by Nicky Case and the author.

When thinking about *conversation with game* as a paradigm for interaction, *conversation with* works well to deliver content in an experiential way. With a set of structured content that designers would propose users engage with in a deep and affective way, *conversation with* game objects is a rich paradigm. Even in technically limited situations like The Coming Out Simulator or ZORK, there is a compelling degree of interactivity. That interactivity is represented less by material changes to the game, however, and more by changes in the experiences, and consequently the memories, of the player.

3.2 CONVERSATION ABOUT GAME OBJECTS

“First you take your pawn, well no... First you take a card from the deck, read it, and move your pawn the number of spaces that it says. Oooh, you landed on the slide. So slide your pawn forward to the circle....”¹

While somewhat unusual, and typically avoided, there are a few games where the experience contains a significant aspect of conversation about game objects. Frequently, this kind of foregrounding of the materials of the game (in a Heideggerian sense) occurs only when the experience of the game is somehow broken: perhaps there is a dispute whether a player’s piece occupies one or another spot on the gameboard, whether a projectile hit a higher or lower-scoring area of a target, or when someone is learning the game and needs additional instructions on legal moves or different types of game pieces. In those occasions, the game objects come to the fore, and become the subject of conversation. It is not these conversations about game objects that I am interested in in this investigation, however, but rather the kind of conversations about game objects that are integrated into the gameplay.

Games where a player can manipulate the rules during the course of play could be considered games of dynamic rule-systems.

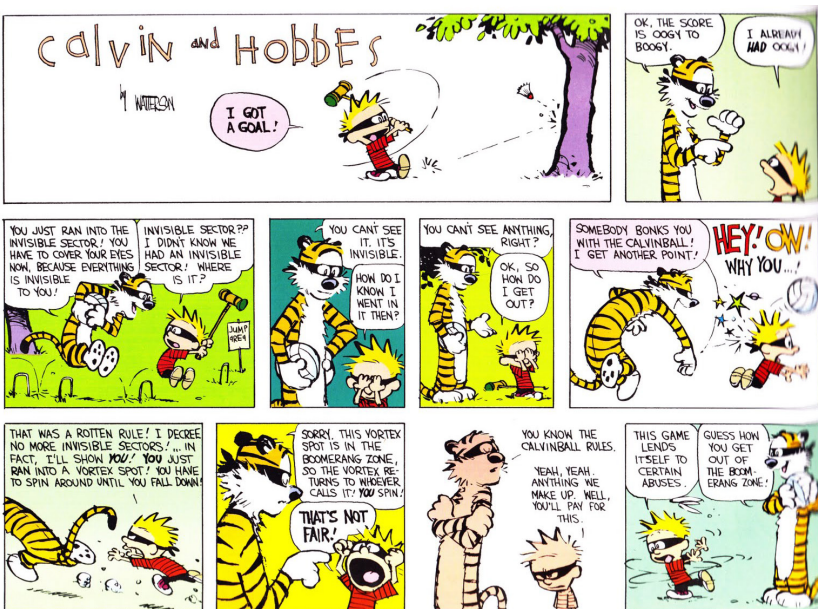


Figure 3.5 – The “rules” of Calvin Ball explained. (Watterson 1992, p34)

Few games have conversations about the game objects themselves as part of the gameplay. But there are some games where the mechanics of the game are manipulable by the players, where the rules themselves are mutable in the course of the gameplay. In popular culture in the U.S., Bill Watterson's cartoon, *Calvin and Hobbes*, dramatizes the nomic game Calvinball, where the only explicit rule is that other than the first rule, no rule may be used twice. If we subscribe to Johan Huizinga's definition of a game, which is, essentially, an experience bounded by time and space, activated by the intent of play, Calvinball would certainly qualify as game. Implicit rules are: there must be a ball, all players wear masks, the game is played on a "field." As depicted in the cartoon, this leads to anarchic play, and perpetual rulemaking and rule countermanding—which really is the purpose of the gameplay. This structure leads to conversation about the game objects; the making, amending, and countermanding of rules; and even about the nature of rulemaking itself. While a game of this type may seem paradoxical, the nature of the one rule "No rule may be used twice" keeps the game in the state of ever-evolving creative play.

The rules being manipulable by the players during the gameplay is not a typical game experience; yet, 1000 Blank White cards is such a game. Played with a large stack of index cards and pens, players write anything they want on the cards (Morehead et al., 2001). The game develops based upon the cards that people draw and write. The game has no predetermined end, no predetermined rules, and no predetermined way of winning. The game is *nomic*; the rules and structure of the game are generated as people create and add cards to the deck. From the website BoardGameGeek: "it is in the spirit of the game to spite and denounce these conventions, as well as to adhere to them religiously" (BoardGameGeek, 2018). The objective of the game is to instigate conversation about the rules, the structure of the game, the images that are drawn.

Although this is not prescriptive, games can be thought of as having a three-part structure:

1. Card creation
2. Game play
3. Card evaluation

During card creation, players will write rules and draw pictures to create a starter deck of cards. When players have decided that a sufficient number of cards has been assembled, cards are dealt to the players and gameplay

begins. Customarily, the player to the left of the dealer goes first, followed by structured turn-taking by other players, but this custom may be altered by the community or by the cards players create. After an amount of play, the game may be ended, and one player declared “the winner” or not. After play, the cards are evaluated and some or most saved for future gameplay. Introducing a new card that is well-regarded is a coup of sorts.

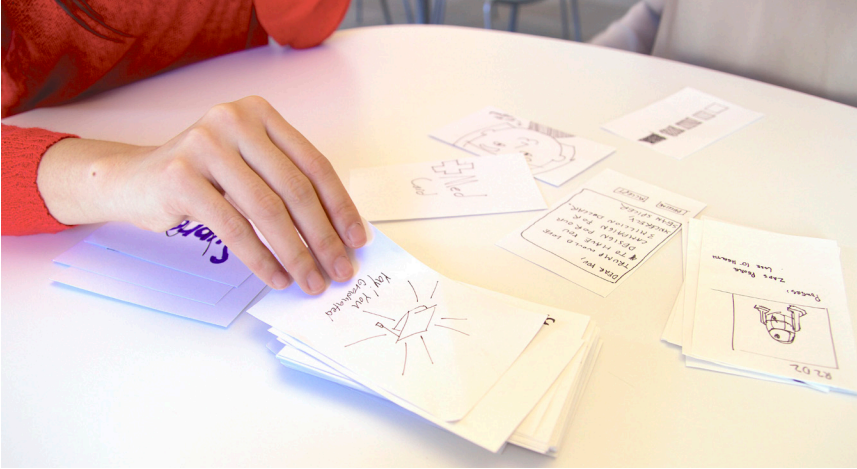


Figure 3.6 – 1000 Blank White Cards created during gameplay

Some typical card-making approaches include: cards that award (or decrement) a player’s points, cards that modify the system of turn-taking for gameplay (skipping turns, losing turns, reversing the order of play), and cards that require players to discard or draw cards.

An interesting aspect of this game is that the materialization of the game assets, rather than being created by a designer, is turned over to the players, and that materialization is truly the locus of play. Players might ask themselves: “How can I materialize this rule in a funny way? In a way that might delight the other players?” Because the rule set is totally fungible, questions of winning or losing are set aside, and the game play becomes about enjoying clever manipulations of the game space. The game becomes not an exploration of the play space defined by the rule set, but a discourse about the rule set itself.

The cards constructed by design students were a mixture of inside jokes, pop culture references, absurd references, and commands to perform various physical activities. These were paired with commands that added or decremented

points, dollars, or ended the game. Most groups that I observed chose to play in a style vaguely similar to the game UNO, where there was a discard pile, a draw pile, and each player held a small hand of cards.

Another interesting aspect of this process is that handing over the structuring of a game to the players is not giving a completely open structure to the players. Players' approaches to 1000 Blank White Cards are structured through the materiality of the cards themselves. Cards and card games evoke links to participants' past understanding of what a card game is. References to other card games like UNO, Crazy Eights, Slapjack, Go Fish, Spoons, as well as references to childlike pastimes and references to social settings where card games are played, become a part of constructing the ruleset for 1000 Blank White Cards.

1000 Blank White Cards is of the same type as the eponymous game Nomic—a game where the players can change the ruleset. Introduced by philosopher Peter Suber, the game Nomic is a game of rule making, rule changing, voting on changes, and debating changes. Nomic has two types of rules, immutable (numbered in the 100s) and mutable (numbered in the 200s) rules. While points are accumulated by each player throwing one die and adding it to their score, Suber says that that mechanism of points accumulation is included only so that it may be amended or changed by the players (Suber, 1990).



Figure 3.7 — the material elements from Nomic

The material elements of Nomic are quite simple: pencil and paper and a single die (six-sided, though not specified in the ruleset, is assumed). The game begins with a set of 29 rules, 16 immutable rules, and 13 mutable rules. Mutable rules may be changed, amended, or repealed. Immutable rules

must be changed to mutable rules first before they are changed. At the start of the game, each player's move consists of a dice throw and a rule change proposition, which will be voted on by all the players. It is not possible to comment definitively on this game beyond the starting conditions, as each gameplay situation is unique.

Suber created the game with the intent that it be a model for examining rule-making activities in legal systems, specifically the activity of amending a ruleset. Suber admits that this is, in fact, an esoteric feature of a legal system, and while this may be true in the context of examining legal systems, it is a key feature of designing systems for public comment—where citizens' views are collected with the goal that those views will guide future change in legislation.

Writing on Nomic, Douglas Hofstadter (1985) extends the concept of hierarchical rule systems to biological systems as well as customs and etiquette. Hofstadter discusses contingency, or what players must do when another player disobeys the rules. For Hofstadter, understanding contingency is key to maintaining the integrity of the game space, which some might think is counterintuitive (p. 76). Considering the game in light of other rule-bound systems, though, a systems design is only as robust as its error-recovery structures. A customer can only understand the depth of an organization's commitment to service when the service fails.

Hofstadter points out that Nomic blurs the distinction between constitutive rules and rules of skill. In Nomic, like Calvinball, play may be arbitrarily extended outside of the game field. While Nomic remains a game and the key aspect of the gameplay is changing the ruleset, Nomic play is structured by implicit rules that exist within the gameplay experience. Unlike most games, Suber goes to some lengths to make the implicit rules explicit, and therefore offer them up for modification. For example, rule 101 (an immutable, or less mutable rule) states that:

"All players must always abide by all the rules then in effect, in the form in which they are then in effect." Tacit understandings of what a game is, however, and Suber's original goals—that people will play this game to explore the nature of amendment—are beyond the reach of the rules, be they mutable or immutable. For example, a rule could be created and made immutable, that the goal of the game is solely for personal enjoyment; however, that activity falls under the original set of goals that Suber created Nomic to fulfill. In short, some higher-level social structures may be out of the reach of the rules of a game with even so broad a reach as Nomic.

Despite evolution, the players remain playing under the same set of goals. Once playing, players cannot opt out of Suber's goals for the game.

Examination of adjusting rulesets through games and gamelike practices might also be a useful approach to understanding the behavior of systems. Donella Meadows cites the manipulation of rules and the power to change the rules as higher-level ways to induce change in the system (Meadows, 1999). Systems of governance, systems of evaluation, and other systems that include hierarchical rulesets, could be modeled with a 1000 Blank White Cards experience or other type of nomic game. In short, conversation about game objects, rather than being a structural curiosity, are an important way to model the kinds of interactions that take place when rule changes are made in system. Far from being an indication of breakage or failure, conversation about the game objects represents an interesting point for investigation.

It should be noted that there are some games, like the card game UNO, that appear to contain game artifacts that execute a move in the game that reminds us of the *conversation about* the game artifacts: manipulating the order of play, the direction in which play progresses, and permitting a player to penalize another player. In UNO, however, these manipulations, which seemingly spring from a conversation about the play, are not actually about the rules of gameplay at all. Rules that manipulate the system in arbitrary ways can be contained within the system, however paradoxical that may be. UNO's cards that cause a player to skip a turn or reverse the order of play are simply one aspect of UNO's rules.

Considering the *conversation about* in light of Nomic and 1000 Blank White Cards, and considering Donella Meadows' leverage points, it becomes clear that Meadows is articulating the degree to which the rules of the system are either mutable or material. As leverage points move toward level 1—the “power to transcend paradigms” (see Table 3.2 for the complete list of leverage points)—the leverage point that Meadows considers to be the most powerful—the manifestation of the leverage point becomes more diffuse.

Most “regular” games operate at Meadows' level 12; gameplay occurs through manipulating a set of game constants into a more desirable configuration. Yet, games like Nomic or 1000 Blank White Cards operate at Meadows' level 5 or 4. Materializing these rules happens through rule sheets, and in society as statutes, laws, or constitutional provisions. Games that center around conversation about the game are conceptually slippery things, and as noted by Suber, are fraught with the potential for paradox—especially when rules countermand other rules.

1	The power to transcend paradigms.	Tacit	immaterial
2	The mindset or paradigm out of which the system—its goals, structure, rules, delays, parameters—arises.		
3	The goals of the system.	Usually unspoken, but articulate-able	
4	The power to add, change, evolve, or self-organize system structure.	Contained in a ruleset, materialized as a hierarchical set of laws	
5	The rules of the system (such as incentives, punishments, constraints).		
6	The structure of information flows (who does and does not have access to information).	Materialized as a network	(mostly) material
7	The gain around driving positive feedback loops.	Materialized within the system itself (as control system or reward system: money, resources, popularity, thermostat, etcetera..)	
8	The strength of negative feedback loops, relative to the impacts they are trying to correct against.		
9	The lengths of delays, relative to the rate of system change.		
10	The structure of material stocks and flows (such as transport networks, population age structures).	Materialized as infrastructure	
11	The sizes of buffers and other stabilizing stocks, relative to their flows.	Materialized as warehouses, reservoirs, streams, forests, oceans, ecosystems...	
12	Constants, parameters, numbers (such as subsidies, taxes, standards).	Standards applied to the material that the system is processing.	

Table 3.2 — Leverage points in a system collated from Meadows (1999) with two rightmost columns by the author.

Conversation about the game is key to developing a prototypical situation where participants can explore, modify, and amend rulesets and come to understand the consequences of these modifications. Like Egon Guba and Yvonne S. Lincoln's *Fourth Generation Evaluation* (1989), *conversation about* is necessary to constitute a system where participants can rectify imbalances in the system. While all games have a degree of conversation about as part of the game experience, Nomic games place conversation about at the center of the experience.

3.3 OBJECT-FACILITATED CONVERSATION

Finally, we move to a class of games where the objects facilitate conversation. These are perhaps the most common and most well-known, the most frequently played, and the least abstract. One way to consider structuring the understanding of objects facilitating the conversation is to consider the degree to which the objects are present in the role of facilitation.



Figure 3.8 – Golden Axe player selection screen (Uchida 1989)

Objects might emerge in a dominating role structuring the interaction. These objects impose their content, their haptics, and perhaps even their worldview upon the user. These objects permit and structure a directed play that is scoped within the playing field. Conversely, some objects recede in an interaction and act in a role

enabling or encouraging behavior, act in a way that highlights the behavior or the interaction as the central aspect of the experience. In the context of a game, some of these objects assume both an important component of the mise en scène of the playing field, and also take on symbolic meaning. Cards can become the player's voice, pawns the player's body. Consider the language that occurs around gameplay in *Sorry!*: “You sent me back to home!” (not, “You sent my pawn back to home!”) or “I can't move!” (not, “My pawn is restricted from moving by the formalism of the gameplay.”). For some players this experience may become visceral as well, a feeling of “stuck-ness.” A game like the arcade video game *Golden Axe* (Uchida, 1989) has player-characters options that include only a hyper-masculine barbarian, a bikini-clad amazon, and a dwarf. If a player wants to use the game, they must put on one of those identities. Less dramatic perhaps are the boards, the dice, and the pawns of a game board; yet, players inhabit those game objects to a degree.

When considering everyday conversations, objects remain an aspect of the setting and act in similar ways. The symbolic role of the objects remains, yet that symbolic role is not foregrounded in the way that it is experienced in gameplay. Games contain experience thresholds where these objects become animated. The pawn in the box is rather less animated than the pawn on

the gameboard. The facilitation of these objects—how they become a part of the player, and the player becomes a part of the object—is a profoundly significant aspect of games. Through that roleplay, the acts are delegated to the game objects and become less consequential to the life of the player.

3.3.1 OBJECT CENTERED, CONTENT DOMINANT

Apples to Apples is a card matching game. It is played in a small group. Players alternatively attempt to win the subjective judgment of the player acting as the judge for a given round of play. The game is played using two types of cards: red cards and green cards.

All players are dealt a number of red cards containing descriptions of persons, places, things, or events. As play progresses, each player, serially, has the opportunity to play the role of judge. When the judge role passes to a player, that player draws a card from the second pile of green cards that each contain a description of a characteristic. All other players, choosing from their hands of red cards, offer a potentially matching person, place, thing, or event for the drawn characteristic.



Figure 3.9 – Material elements of Apples to Apples (Mattel Inc.)

All players submit their cards face down, the judge mixes them and reads each match aloud. As an informal part of the gameplay, players may advocate that the judge choose or eschew a particular match. Apples to Apples cards contain people from US and European pop culture, such as “David Beckham (1975-, soccer player whose ball-bending kicks inspired a movie title and landed him a posh Spice Girl)”; places like “Dog Parks (Where dogs go to scratch and sniff.)”; or things, such as “Twilight (The diffused quality of light that occurs when the sun dips below the horizon. Very flattering for

vampires.)” (Kirby, et al., 2010). These can be matched with descriptors like: “Delicious,” “Xenophobic,” “Old-fashioned.” The player acting as judge awards the best match to a given player.

Because of the limitations of the number of cards a player might have in their hand and the random choice of card selected from the pile, most matches have a significant degree of imprecision. At the mercy of the subjectivity of the judge, the award of a win for a particular round may be the most humorous or the most bizarrely creative rather than the most accurate. The game engenders nonsensical conversations about whether Beyoncé is more depressing than Area 51. Sometimes, players use their personal knowledge of the other judge’s likes, dislikes, personal history, or inside jokes to offer matches that appeal to the sensibilities of that player.

While the game does foster some conversations—and the gameplay offers structure and limits, topical information, and a forum for the discourse—the conversations are centered upon the topics that the cards offer and typically do not venture into the participants personal lives, expose personal attitudes or beliefs, or open discourses on larger issues. For this reason, Apples to Apples plays a more dominant role in the interaction, principally through the content on the cards. Colors and typefaces offer a signal to the players which type of card is which and facilitate the gameplay, but it is largely the game’s content and activities that lead the interaction, not content generated by the players.

The gameplay of Cards Against Humanity (CAH) is nearly identical to Apples to Apples; however, the cards contain quite prurient material. The tagline of the game, imprinted on the black box in white, bold Helvetica Neue is “A party game for horrible people” (Dillon, et al., 2017)—which exposes a bit of the attitude of the designers and writers who constructed this set of potential experiences. In CAH, each player is dealt 10 white cards that contain, similarly to Apples to Apples, references to people, things, events, activities, or concepts. Again, like Apples to Apples, CAH cards contain references to popular culture, but CAH makes those references in a more risky way, including sexual content like “My humps.”; obscure cultural references, like “MechaHitler.”, a level-boss character in Castle Wolfenstein 3-D; excessively visceral content like “A ball of earwax, semen and toenail clippings.”; and many and various references to genitalia.² Prompt cards include “Donald Trump’s first act as president was to outlaw _____.” or “Batman’s guilty

² The punctuational oddity in the preceding sentence is an effort to replicate the sardonic tone of the CAH cards in prose. Examining the included photo, the reader will notice that the cards include punctuation. Sentences, or even a single word are ended with a period, which lends an ironic feel; but infrequently, a question mark, a single or three exclamation points are used.

pleasure is _____.” Answer cards include “Amputees.”, “My vagina.”, or “Picking up girls at the abortion clinic.” (Dillon, et al., 2017). A significant number of the cards contain charged racial content principally negatively directed toward blacks (Strmic-Pawl, 2016).

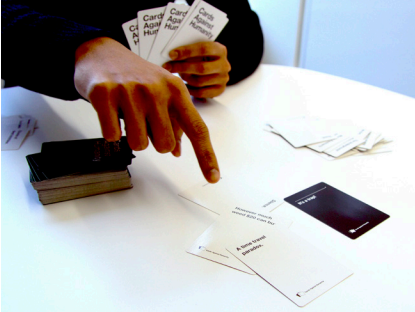


Figure 3.10 — Game elements of Cards Against Humanity (Dillon, et al., 2017)

As reviewers point out, the game is designed to allow the players to flout social norms of politeness through the game (Dean et al., 2015; Brooks, 2016). To state this more directly, it is the materialization of the statements as cards that allow players to delegate racist, sexist, or otherwise socially inappropriate behavior to the game objects. In CAH, the thrill of the gameplay comes from the titillating experience of delegating bad behavior to the objects

of the game. Players are allowed to say taboo things or make controversial statements through the game artifacts and are absolved of responsibility for the inappropriate remarks. “No friends, it is not I who say these things, it is these damned cards. I am merely an innocent bystander.” Similar to Apples to Apples, the gameplay offers the opportunity to argue the point of a player’s specific match over another. While it might be delightfully absurd to advance a rationalization on the point of whether “Skunks” or “Running out of Toilet Paper” is more “Explosive” (Apples to Apples), the experience of CAH is derived primarily from experiencing the (vicarious) feeling of transgression through the medium of the objects. In order to remain remote from this transgression, in the gameplay I experienced, players are sometimes hesitant to advocate for a particular match, and therefore are not enticed to add to the game from their own life experiences or perspectives. The game becomes a recombining and regurgitating of the content provided by the game designers, rather than an exposition of the personalities or humor of the people that play the game.

3.3.2 OBJECT CENTERED, INTERACTION DOMINANT

While games like Apples to Apples and Cards Against Humanity frame the player interaction and structure the resulting conversation largely around the game objects, and frame player speech through the game objects, I would propose that there is a similar class of games that centers the experience around the manipulation of objects; but, rather than the content of those objects dominating the game experience, it becomes the player’s creativity and move-making that

is the essence of the game experience. The aforementioned game 1000 Blank White Cards has aspects of this type. In 1000 Blank White Cards the objects exist only to be manipulatable by the player and provide a platform for player creativity and a set of straw men over which the players can argue.

Thinking about these relationships, Story Cubes is of a similar stripe. The game consists of a set of six cubes with a slightly abstract graphic on each side of the cube. In one mode of play, players roll cubes serially and continue the story using the icon image as an aspect of the story. Positive aspects to this are that the gameplay is immediately understandable: the gameplay progresses quickly, everyone contributes the same type of input, and all participants have a chance at extending the story. While the icon might be incorporated in any way, it takes a degree of proficiency/literacy to incorporate an element. The limitation of including the artifact might seem artificial.

In another mode of play, players roll the cubes as a group, and the story is constructed by the group based upon the six icons that are displayed on the top of the cube. Positive aspects to this are that there is a large degree of flexibility in the way the story is constructed. If some people want to develop a certain aspect of the story, they can request it or simply add it to the developing narrative.

Story Cubes acts as a catalyst to storytelling, offering an open play structure, few rules, simple scaffolding, and flexible yet bounded creativity. The wide-open nature of the iconic and symbolic images depicted on the cubes allows wide latitude for working the picture into the story. Story Cubes ends up being a platform for the creativity and humor of the users. Again, this is because of the openness of the designed system.

Because the gameplay is framed by the explicit goal of storytelling, the gameplay centers around this aspect and has little room for non-directed conversation. Conversation is encouraged as far as the administration of the game, and typically some less directed talk happens, commenting on the evolving story or sequence.

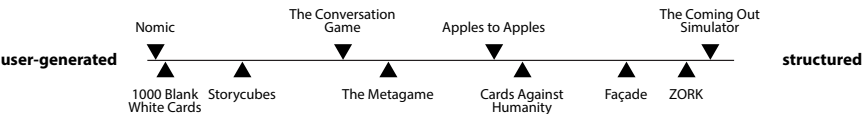


Figure 3.11 — Who generates the conversation in conversation-oriented games?
A spectrum of authorship from user-generated to game-structured

We might consider these games as arrayed on a spectrum, with games that are the most facilitative, that contain the most user-generated content, arrayed towards one end, and the games that are the most structured on the other. Between Story Cubes and the content-dominant games would fall Eric Zimmerman and company's The Metagame. While The Metagame is a card-matching game quite similar in material and play structure to Cards Against Humanity, the structure of the gameplay fosters debate between participants rather than fostering titillating giggling for people who think the word "amputees" has inherent humor. The Metagame comes with a set of rules that offers several options for play and can flexibly be played with groups of three to five people or hundreds of people. In one variant of The Metagame, one player may add a match, and other players can *challenge* the validity of a player's match by supplying a potentially better match. Challengers argue the validity of their match over the played match. Another variant of The Metagame is called "Debate Club" in which each player offers a potential match and must argue for a specified time the validity of the match.

3.3.3 CREATIVE CATALYST

One of the early examples of a game-like experience as a creative catalyst is the Oblique Strategies cards created by Brian Eno and Peter Schmidt. Oblique Strategies is a deck of cards that function as creative prompts when a person is stuck or when someone is trying to generate particularly new ideas or change approaches. When using these cards, the user thinks of the problem or the challenge that is at hand and draws a card at random from the deck. Some of the cards contain statements like "Remove specifics and convert to ambiguities" or "Honor thy error as a hidden intention".³ Part of the experience of using Oblique Strategies is the moment of surprise and confrontation between the card and the user. Turning over the cards, and being confronted by a degree of disruption is the essential element. To quote Eno on the materiality as a function of use:

"I would go into the studio with a list of ideas I wanted to remember. [...] They were difficult to use in a list, because you tended not to be so surprised by them. You would just go to the one that was least disruptive. Whereas I found I put them on cards, and I found if you pulled a card out, and you said

³ Like CAH earlier, Oblique Strategies' designers maintain a rigorous attention to final punctuation of the cards' text. Namely, Oblique Strategies avoids using final punctuation at the end of the card text. If a card contains more than one sentence, periods may be used between them, but the final period is omitted. I noted one Oblique Strategy card that ended with punctuation—a closing parenthesis. While CAH's consistent use of a period after a sentence fragment or even a single word seems sardonic, the lack of the closing punctuation lends a strong tonal flavor, and might imply infinite continuation or the opening of a new possibility space

to yourself ‘I’m going to do whatever this card tells me’, then you would get somewhere interesting, because it would break you out of your rut. It would push you into a kind of behaviour you wouldn’t normally make, and sometimes that was very productive.” (Cocker, 2010)

Considering this aspect of play (solitaire, catalyzing creativity), and thinking of this in terms of conversation, a person comes to the deck of cards with an unspoken question. The deck is treated as an oracle, delivering godly wisdom to the supplicant. Because these cards are designed for such a narrow situation, and the challenges of the creative act often depend upon move-making within an incomplete information field compounded by a lack of clarity in what the final form of the creative work may take, the open ended, almost poetic nature of the statements allow them to function effectively in a wide degree of scenarios. Unlike Cards Against Humanity as described above, the Oblique Strategies cards contain very little in the way of specific direction, but instead rely upon evoking a response from the user’s knowledge and associations. The surprise, and the user’s attempt to resolve the cognitive dissonance introduced by the card’s statement, forwards the creative act. Like ELIZA, Oblique Strategies are functional because of a narrow scoping of possibility. Where ELIZA attempts only to simulate a Rogerian therapist, Oblique Strategies promises only to offer abstract creative direction. Neither of these objects offer the possibility of a more replete conversation, but leverage the intelligence of the user and the clever framing of a limited context to make the object appear smarter than it is. Aleatoric suggestions and manipulated, reflected statements can offer the user access to a reflective mode of thinking.

Oblique Strategies was composed by two creatives for the purposes of solving creative block; they might be thought of as engaging in a time-shifted creative direction conversation with Eno and Schmidt. With the framing given by the instructions card, the replies received are situated in response to the need and are engaged. While ELIZA algorithmically reflects statements back to the user, Oblique Strategies is more of a conversation with an intelligence, albeit deferred.

Considering the Oblique Strategies messages, some of the cards read with the air of the last line of a Zen Koan. “Gardening, not architecture”, “Be less critical more often”, or “Remove specifics and convert to ambiguities” (Eno & Schmidt, 2001): all these can be located as advice on nearly any spectrum. This speaks directly to the functionality of Oblique Strategies as a component of a conversational process and to Eno and Schmidt’s design as thinking

processually and relationally, rather than as constructing objects. While *Oblique Strategies* does not endeavor to carry on a lengthy, complex conversation, it has been created to give effective responses in a specific context.

Some of the cards seem to give highly specific direction, like “Take away the elements in order of apparent non-importance” (Eno & Schmidt, 2001); however, this does require the intervention of the reader to localize the application of the directions to a current work. If one is working on music, elements could be interpreted as: instruments, melodic ideas, harmonizing orchestration, rhythmic embellishments. If one is working on a software application design, the elements might refer to interface elements, available affordances, visual stylings like gradients, colors, outlines, application screen states. Never mind what “apparent non-importance” might be defined as or what the various processes for “taking away” might imply for the so-called different elements. The point is invoking a reassessment of the creative process—a reflection on making.

One way of approaching these cards is to write them off as a kind of linguistic hocus-pocus, much in the way that psychologist Bertram Forer wrote off his students’ interpretations of their horoscope-like personality profiles as fallacious (Forer, 1949). In the experiment that engendered what is now known as “The Barnum Effect” (or eponymously “The Forer Effect”), Forer gave his students a personality test, then returned a week later to class with customized personality profiles for each of the students. Students rated these profiles as being quite accurate, with only one student from the population rating the profile accuracy at 3. All other ratings in the class were 4 or 5 on a five-point scale with 5 being the most accurate. Unbeknownst to the students, all the personality profiles contained the same, relatively generic information: a mix of mostly positive and some mildly negative characteristics. Later experiments found similar faith in the accuracy of horoscope-like writing, so long as the writing remained generally positive.

Personal gullibility does not seem to apply in the case of *Oblique Strategies*, however. The short bits of text offered by the *Oblique Strategies* are alea-toric—curated by Eno and Schmidt, but not random—and they, like ELIZA, rely heavily upon the situational nature of the use of the cards. The point is that *Oblique Strategies* and ELIZA both serve to nudge the participant into a reflective mode of thinking. So gullibility does not seem quite accurate when applied to either ELIZA or to *Oblique Strategies*. Gullibility might be at play in the aforementioned Turing Test though: a computer that passes the Turing Test successfully masquerades as a human in conversation. Yet,

I would stress that the success or failure of a masquerade is not at issue here. What is at issue is whether the interaction facilitates progress toward creative approaches in music, art, or design.

One might point to Levi-Strauss' concept of the free-floating signifier, that a degree of magical thinking must be employed to successfully construct a meaning for these cards as a response. Levi-Strauss (1987) pointed to the free-floating signifier as the "surety of all art, all poetry, every mythic and aesthetic intervention" (p. 63). While the Oblique Strategies are surely, in a sense, poetic, and the content of them a directed aesthetic intervention, the action in Oblique Strategies is slightly different.

Levi-Strauss argued the concept of the free-floating signifier in broad sense—a signifier so devoid of meaning that any symbolic content was a potential attachment point. I would argue, however, that these cards are successful not because of what people using the cards connect after the experience, but because people come to the cards with a some type of bounded precedent or, put more simply, a question in need of an answer. With Oblique Strategies, the bounds are the restriction and structure of the creative-block question. The openness of the pronoun-like quality of the Oblique Strategies statements allows a creative to connect the given direction to concepts that are related to their own creative production. Similarly so with ELIZA, where the bounds are the context of a therapeutic interaction.

The technique of ELIZA and the Oblique Strategies—creating a set of aleatorically presented ambiguous statements to confront a person while they are in a pre-known bounded precedent situation to inspire them to re-think their approach—has some other progeny. In the realm of public policy, the United Kingdom's government Policy Lab has created a set of cards called Change Cards (Policy Lab, 2015) that function in essentially the same way as the Oblique Strategies. The Change Cards are a deck of 45 provocations, divided into six categories for different types of challenges. Not all of the categories have the same number of cards, and the text of some cards are specific to use within the British governmental system. The Change Cards center around broadening the perspective of the person using the card: reframing problems in different ways (different perspectives, different approaches), and considering bringing other resources to bear.

3.3.3.1 *Ludic space and the magic circle*

As previously discussed, games create a special kind of social space—a construction within which the formalism and structure of the game takes precedence over other sets of rules and conventions that may exist in the world surrounding the game space. Katie Salen and Eric Zimmerman (2003), quoting Johan Huizinga (1950) wrote about the *magic circle* of gameplay—a space where the game rules preempt norms of behavior. Similarly, John Dewey (1958) offers a definition of an experience as something bounded in time and space. For Huizinga, games are bounded by time and space, those bounds being established by the act of play, and within the context of the act of play there is a shifted hierarchy of rule-following. In Cards Against Humanity, social conventions may be flouted, even broken within the magic circle of the game. Within this prophylactic magic circle, players may adopt the personalities of fictional characters, may commit fictional crimes as game characters, may unfairly leverage other players in ways that would be unseemly if done outside the game circle.

Games permit behaviors that are otherwise impermissible. For instance, the game Twister allows a set of behaviors that would not be considered appropriate for collegial company outside of the game space. Similarly, CAH makes permissible racism, sexism, ableism, and so on in the context of the game space. While these behaviors are bizarre or unacceptable in polite society, they point to an interesting aspect between people and a set of objects that is tagged with the moniker “game.” While Cards Against Humanity uses this to permit prurient giggling, it points to an important cultural space that games create, or a kind of special agency that games are imbued with. Games allow us to *play* with aspects of our culture and allow people to engage with topics or perform behaviors that are otherwise taboo, or perhaps just difficult to discuss.



Figure 3.12 — My Gift of Grace cards, tokens and booklets

The object *game* imbues participants with a particular kind of temporary agency. Within the context of the game space, participants are permitted to talk about difficult or taboo subjects as a matter of ordinary conversation. The space of the game and its consequence-free nature lighten the apparent stakes of the experience and offer a space where people can talk through challenging issues and can, in conversation, prototype approaches. Gamifying an experience can be one approach that can enable participants to deal with difficult topics. This approach is evident in such games as *Never Have I Ever...* a speech-only game principally played by teenagers, where in the context of gameplay, teens can choose to touch on taboo subjects. Also, the game *My Gift of Grace*⁴, described as “a conversation game for living and dying well,” (Common Practice, 2016) uses a thin gloss of game experience to induce participants to discuss preferences and fill out what is essentially a questionnaire about the person’s preferences for end of life care.

⁴ The game was re-named “hello” to avoid false perception of religious content in the game (“My Gift of Grace is now Hello,” 2016)

3.3.3.2 On oracles

3.3.3.2.1 The *I Ching*, or Chinese Book of Changes

The *I Ching* has several manifestations in contemporary culture. Someone wishing to consult the oracle would create a pair of hexagrams by tossing a set of three coins six times and recording each result. The resultant set of codes represents a sequence of two hexagrams drawn from a list of 64. The book is the key to a set of responses that can be generated through the aleatoric creation of hexagram sets. The hexagrams reference poetic, six-line judgments that are divinatory in nature.

For over a thousand years, the *I Ching* has been used for divination or as a way to make predictions of the future, answer questions, or act as a creative catalyst for action (Smith, 2012).⁵ The *I Ching* could be considered a conversation game, in the sense that a participant might have a conversation with the *I Ching*. Eno and Schmidt based aspects of the experience and design of *Oblique Strategies* partly upon the *I Ching* (O'Brien, 1978). *Oblique Strategies* works within the field of a creative dilemma; the design anticipates that a user approaches the conversation in the context of a project, that the user is at a point needing creative direction or redirection. *Oblique Strategies* leverages the knowledge that Eno and Schmidt accumulated and positions that knowledge at a point where it might be useful to another practitioner.

The *I Ching* sites itself in any predictive dialog, and it must be responsive to a wide variety of inquiry. As with the derivation, *Oblique Strategies*, the *I Ching* assumes an engagement in the process of conversation, and specifically a conversation at a particular point in development. To address the vastly more open field of possibilities for queries to be posed to the *I Ching*, and the nearly infinite potential for context that this offers, the *I Ching* is quite differently constructed than *Oblique Strategies*. Considering the design of the *I Ching* as a conversational object, the responses are longer and more rich and layered. The following excerpt is from the interpretive text for the hexagram consisting of six horizontal lines, Ch'ien / The Creative. The verses are presented in the order they are intended to be read—from the bottom of the hexagram up. The line with the circle is considered the key line of the hexagram.

⁵ As an aside note, it is tangentially interesting that the *I Ching* traveled from China to Europe through cultural conversations with Jesuit missionaries. As the missionaries endeavored to bring the Catholic Bible to the Chinese peoples, the *I Ching* traveled back to Europe as an aspect of the many representations of Asian cultures (Smith, 2012). The migration of the *I Ching* and the corresponding migration of the Catholic Bible could be thought of as a cultural conversation.

Nine at the beginning means:

Hidden dragon. Do not act.

Nine in the second place means:

Dragon appearing in the field.

It furthers one to see the great man.

Nine in the third place means:

All day long the superior man is creatively active.

At nightfall his mind is still beset with cares.

Danger. No blame.

Nine in the fourth place means:

Wavering flight over the depths.

No blame.

○ **NINE IN THE FIFTH PLACE MEANS:**

Flying dragon in the heavens.

It furthers one to see the great man.

Nine at the top means:

Arrogant dragon will have cause to repent.

When all the lines are nines, it means:

There appears a flight of dragons without heads.

Good fortune. (Wilhelm & Baynes, 1967,
collated from the entry Ch'ien / The Creative)

This guide has a complete chapter of descriptive interpretation for each hexagram, plus nearly four-hundred more pages on interpreting hexagrams in different contexts. While bound in this mortal coil, we may not know whether the *I Ching* is a complex, rich, elaborate example of the Forer effect or an opportunity to converse with the infinite. What the *I Ching* does reinforce is the diversity (Ashby, 1957) necessary to address unbounded context.

When comparing interactive conversational narratives like Coming Out Simulator to conversational generators like ZORK, ELIZA, Oblique Strategies, and the *I Ching*, there is a wide variation in the depth of each of these systems to generate meaningful responses. An analogy I once made to describe the concept of bit depth in a digital image may be useful here: these conversational systems are a bit like varied sizes of jars of jelly beans that all dispense one jelly bean. Perhaps there is one jar that holds only two beans of different flavors; there might be other jars that hold 8, 64, 256, or even 16,777,216 beans. No matter how large the jar is, the output you experience is still one bean; however, the potential variety of responses can be vastly different. In

a conversation, the potential for those responses to be delivered intelligently has a rather wide range. In a very small jar the output is quite simple and is structured by its own limitations, and all potential states can be held in mind at once. The large jar may have a much greater potential variety for response generation, but if those responses are delivered randomly, without consideration for the participant, their context, their goals, the conversation palls into meaninglessness.

3.3.3.2.2 Some generative systems that are not conversations

One might argue that things like the Fluxus games, John Cage's various Fontana Mix pieces, or Sol Lewitt's directions for making wall drawings might seem to fall within the scope of creative catalyst games, but that would be a misinterpretation of the idea of the category. The aforementioned works are all directed toward creating a manifestation of a particular artwork.

For instance, one score for Fontana Mix consists of 10 sheets of paper inscribed with various markings and 12 transparencies inscribed with different weighted curvilinear lines. Some transparencies are marked with points. There is an additional transparency with a grid, and one with a straight line. When these papers and transparencies are superimposed, they create a Fontana Mix score. When using the Fontana Mix scoring elements, a musician can produce only iterations of scores for a Fontana Mix performance. When the score is played by a musician with intention, it can only produce performances of Fontana Mix. Despite the stark, organic beauty of its primitive materials and aesthetic, the system is essentially mechanical. The scoring elements set the initial conditions and structure for a Fontana Mix performance. Despite superficial similarities, Fontana Mix is not a conversation game at all, but merely an additional aspect to the enactment of a performance.

3.3.4 ROLE-PLAY

While not a game, per se, play is an analogous concept to game. In some definitions, play can be considered to encompass games, or in other definitions to be encompassed by games (Salen & Zimmerman, 2003). For example, the activity that is done within games is play, or you could consider that gaming is a kind of play. But constructing a lexical structure relating games and play and the constellation of related concepts is not necessary here and has been endeavored by others.

Children will at times engage in role-play, assisted with costumes or other props that allow them to embody a fantasy character. Research on the origins of the practice show children enacting scenarios or role-playing tools that are inaccessible to them: marriage (taboo), or specialized weaponry (forbidden) (Elkonin, 2005). But this activity does not reside within the smaller (or larger) concept of the more goal-directed game. Beyond the material elements of costume and props, a role-play might include pantomime, or a specialized gesture repertoire, or altering one's voice to assume the intended role. In the design studio, the same dramaturgical techniques are used in various capacities, most typically when designers will act out the experience of someone using a design. Faculty will at times use role-play to help students solidify their thinking of the objects they are designing and construct representations of the designed object in use (Fleming, 1998). Role-play in the design studio functions similarly to these early approaches; it allows the designer a route of access to the otherwise inaccessible: the experience of the user or reader of the designed object.

3.3.4.1 *Critique hats and role-play*

Edward de Bono relies on a similar move in his Six Thinking Hats method. Naming the device of the thinking hats allows for a particular kind of bounded role-play in critique and brainstorming. Each of the hats is color-coded (with an relatively easy coding system for Euro-Americans) to represent a particular disposition, type of analysis, or approach toward discussing the issue at stake. To use de Bono's approach in a group setting, a group would agree on an order in which they would "wear" the thinking hats. The meeting facilitator would open and close discussion from the perspective of each "hat," or thinking approach. In de Bono's method, the white hat represents factual thinking or thinking from evidence; the red, emotional thinking; the black hat represents negative thinking; the yellow, positive thinking; the green hat represents creative, or in de Bono's lexicon, lateral thinking; and the blue hat is structured thinking, encompassing mapping, modeling, and diagramming. In his book *Six Thinking Hats* (1999), de Bono writes short personality sketches for use when appropriating the different modes of thinking. As is the case with the fanciful metaphor considering cap or thinking cap, those using de Bono's method do not actually wear physical colored hats (although this might be absurdly amusing). Referencing the metaphor, one would imagine perhaps that considering the hats as material artifacts has a certain allure to the participants, as well. In his book, de Bono

asks participants to “visualize and imagine” donning and removing actual hats as they change their thinking approach (p. 13). Manifesting as costume an approach to thinking gives participants a very concrete way to understand an abstract process and to create some rules for oneself to delineate what kind of conversational contribution is appropriate at a particular point in time. It helps also to structure everyone’s input around a limited set of approaches for critique or brainstorming, so ideas are valued or evaluated along similar lines.

Further considering the important link to this imagined materiality, de Bono is insistent that participants refer to the hats by the color, to offer a level of abstraction between the emotional or conceptual approaches that the hats represent. The purpose, according to de Bono, is to allow participants to engage in thinking approaches that might be embarrassing or publicly discouraged in the participants’ culture. Delegating the role-play of a cold, unemotional, factually based assessment, where all facts are verified, to a “white hat,” or permitting foregrounding intuition or feelings in a professional context by performing the wearing of a “red hat,” allows participants to engage in those modes of thinking by separating the actual type of thinking—delegating to that abstraction, an imagined material object.

The structured role-play that de Bono brings to bear has a focusing effect similar to a well-constructed agenda item. A group might be facing a creative challenge but lack the expertise to construct an agenda or are unsure of the appropriate questions that might be posed to engender a rigorous discussion about the work. While the roles are a relatively simple idea, they have enough structuring force to guide participants’ conversation to relevant comments. de Bono’s roles offer a notion of what kinds of speech are permissible, a framework to guide the conversation, and some limits to what arguments might be made and responded to. The imagined material objects, like costuming or game tokens, lend an air of the social space of play to the resultant interaction, sanctioning creative thought. While de Bono’s thinking hats might seem a bit affected to experienced creative professionals, opening the space of conversation by donning an imagined hat could be a highly useful metaphor for people unused to the risk of creative conversations.

Kinds of role-play are also key parts of design practice. A designer may use written personas in an attempt to role-play within the constellation of need that informs a product design. Personas used in a design context might be considered a structured role-play where the character of that persona is

assigned to a documentary object for the designer to adopt. The design is then tested against that role-play for efficacy, appeal, and fit. The design conversation that encompasses the use of persona, while not game-like, falls clearly within the bounds of role-play.

Similarly, de Bono's role-play bounds a generative discourse in such a way as to attempt to ameliorate arguments between participants—especially in situations where the participants might be “talking past” one another or evaluating a proposed approach to a problem on different merits. By bounding the discourse of the critique, the thinking hats define a landscape of relevant discourse, appropriate conversation in the moment. In his writing, de Bono specifically requests that participants give a performance of a particular type of thinking. This performance is one way of othering the self. And perhaps that othering, that Brechtian break with the self is one way to move someone toward reflective thinking. By seeing the self as other, from looking in from outside, we begin to tease apart the self-as-maker and the other self that is performing the subject of the work. Through de Bono's thinking hats, through Eno's cards, through the experience of the *I Ching*, cleverly materializing a component of a conversation with both enough vague relevance and an apparent alleged connection to the creative problem at hand and with the participants past knowledge, both conscious and subconscious is brought to bear on the problem at hand.

3.3.4.2 *Personas*

Personas as a design tool have a fair and storied history within contemporary design practice. While a full recounting of that history is nearly a dissertation in itself, we will suffice to include just a few key points from that history here.

For the unfamiliar, a persona is, effectively, a detailed character sketch of an archetypal user. Originally detailed as a technique for design practice by Alan Cooper in 1999 in a chapter of the book *The Inmates are Running the Asylum*, Cooper developed the technology over a number of years as an aspect of his professional practice. For Cooper, the character sketch is structured including details like background, the persona's situated goals for using the software on several different time-arcs, the character's emotional needs, and skill levels.

In this 2008 recounting, Cooper details part of the process of developing the technique, how he would use role-played conversations as a design catalyst. In this excerpt, Cooper describes some of the dramaturgy of the experience:

I would engage myself in a dialogue, play-acting a project manager, loosely based on Kathy, requesting functions and behavior from my program. I often found myself deep in those dialogues, speaking aloud, and gesturing with my arms. [...] I found that this play-acting technique was remarkably effective for cutting through complex design questions of functionality and interaction.... (Cooper, 2008)

While role-play in and of itself falls outside of the category of game, structured role-play can be engaged to provide additional perspective and is one way to shift a designer's viewpoint out of well-worn paths of thought. Similar to the oracular Oblique Strategies and the *I Ching*, personas offer a way to defamiliarize the designer's experience of the creative process and facilitate the exploration of alternative viewpoints.

In *Inmates*, Cooper also asserts that, used properly, personas function in such a way as to limit discourse and to direct argument away from the features or visual elements of software and toward the needs of a singular-user archetype. Cooper also claims that by materializing the user as a persona, that unsupported assertions of "users like _____" or "users want _____" are avoided. If a designer wholeheartedly assumes the role of the persona as true, then the bounded nature of role-play precludes behaviors or tastes that are incompatible with the role.

This play, however, like Huizinga's berobed and bewigged judges, is quite serious. Cooper's efforts redirected the efforts of designers over the past decades and is still a prevalent part of design practice today (Kujik & Staats, 2012). The role-play of personas engenders an extremely challenging situation: that the attention of the design team is focused upon a singular (albeit fictional) user, and the corollary, that this purposive focus is driven by market forces.

The combination of these two factors nearly guarantees that the focus of designing will be oriented toward archetypal individuals who are not broadly representative of the diversity of a population. As a technique used in commercially oriented design, the implicit goal is to create products that will be more useful and engaging to a particular user, and thus more desirable, and ultimately, more profitable. Further, designing with personas places the focus upon the experience of a single user, neglecting the needs of the community or systems within which that user is embedded (Arnold-Mages & Onafuwa, 2018).

When considering a how role-play might structure a conversation for complex problem solving, this kind of limitation is critical to avoid. Structuring a role-play toward the examination of pluralistic perspectives, to expand the conversation, to permit a broad range of experiences to be brought to the table creates a richer potential set of approaches. Consider Ashby's Law of Requisite Variety (1957), and assume the persona as a kind of regulator, defining the parameters of the studio conversation. The narrowing of focus around a single prototypical user's needs creates a system of conversation inadequate to meet the complex needs of people approaching contemporary challenges. Ashby tells us that a system must have a regulator that can encompass a broader reality than might be found in the problem field. Personas limit and focus dialog. Thus, despite the role-play aspect, personas are not a creative tool, or even a tool that fosters the expansive creative potential of a dialog, but one that demarcates a structured problem space within which to work, centered on profitability, "stickiness," desirability, or other markers of commercial success.

3.4 THE CONVERSATION GAME

Considering these factors—that these difficult conversations call into question the identity of the participants, and people may be challenged in situations where their concept of identity is interrogated; that transgressive behaviors are more acceptable within the sandbox of the game experience; that saying challenging things can be delegated to objects; that the surprise of the moment of confrontation can provoke creative behavior; and that role-play permits a certain kind of safety—I prototyped a set of cards. These cards act as a moderator and explicitly offer the participant the opportunity to move into a creative, problem-solving mode, and help them understand and interrogate their own role in these situations. Additionally, one of my findings when examining high-stakes conversations is that the gravity of the issue at stake is an aspect that makes these conversations more difficult to engage in thoughtfully. By transforming the experience to a game-like scenario, the stakes are lowered, and the performance of a conversation or an approach is prototyped away from the scenario within which it might be used.



Figure 3.13 — The Conversation Game

In this deck, there are two types of cards: scenario cards and response cards. The scenario cards contain brief descriptions of events in which a person experiencing the event might engage in a difficult conversation—a conversation where one or more of the parties is “at risk” in some way, typically where one of the parties feels vulnerable in relation to an aspect of their own identity (Stone et al., 2000).

One way to use the two types of cards is in a multiplayer matching game, similar to the commercial game Apples to Apples described earlier. Players are dealt a small number of response cards, and scenario cards are shuffled and placed in a small pile.

Scenario cards are then drawn from the pile and read aloud. Each player has the opportunity to choose a response card and play it in response to the scenario. Here, players will articulate a response to the scenario, using their history and experience, and speak through the lens of the response card.

While developing the game, I ran several prototyping sessions with fellow design students. During these prototyping sessions, students were given a set of “ground rules” for the engagement, similar to the ground rules I collaboratively developed for deliberative community events with the City of Pittsburgh. These prototyping events proved more revealing and insightful than the actual tests of the game.

At first, I developed a set of response cards that could be used in the same way as Brian Eno's Oblique Strategies cards. The idea was that, alone or in a small group, people could think of a difficult conversation that they might want to have, draw an approach card, and attempt to use that card as a prompt to role-play, or as a prototypical approach to their problem.

In the first prototyping session, the main goal was to examine several phenomena and how they related to processual conversation that was facilitated by objects. Foremost was the moment of confrontation that Eno spoke of in relation to Oblique Strategies. I was also interested in the phenomenon of people reinterpreting writing with a very open nature, vis a vis the Forer Effect and the *I Ching*, and I wanted to understand if those concepts could be brought to bear in a game. I attempted to leverage these concepts to help the participant evoke a meaningful response; however, I was concerned that the open and vague nature of the writing that I had developed for these cards would end up creating a dull, unengaging experience. Following Eno's suggestion, rather than deal out the response cards and allow choice, we kept the response cards face down, and each designer chose one of the responses after thinking of a difficult conversation that they had been considering having.

One of the designers chose the response card "What if nothing helps, then what?" With noticeable fluctuations in the designers voice, they reported that they had been thinking about opening a difficult conversation with a relative that was engaged in addictive and self-harming behavior. That designer reported that, in that moment, they read that the card gave them the freedom to have the conversation, that attempting intervention might not help, but it was better than the alternative of letting the person continue in that behavior. Another one of the designers who refused to draw an approach card reported that they were afraid to draw a card from the stack after they thought about the difficult conversation. That designer said they were afraid of what the card might say. Another designer chose the card "What have you learned?" Revealing little, that person said that they learned that having these conversations was very difficult and took a lot of effort.

Eno's moment of confrontation, Forer's free-floating signifiers, combined with the high-stakes nature the designers brought with them as bounds worked too well. Working this close to participants' challenges, with real fears and consequences at stake, is engaging in a deeply challenging environment, and not conducive to prototyping, or risk-taking behavior.

In a separate prototyping session, I included scenario cards to lower the stakes for the participants. I saw this addition as future-focused, and a way to allow participants to speak to how they might handle a difficult conversation in a more abstract sense. With a number of people playing the game together, this would give all the participants the opportunity to respond to the same scenario, and the participants could all hear a variety of responses to the situation, which could inform their own approach to a challenging moment. Here, the turn-taking aspects and the material of the game enforced a discipline on the participants, and because the stakes were lower/less personal, all participants responded to the scenario.

Gameplay was more smooth and less dramatic in the second round of prototyping. The participants engaged in light banter throughout, offering mild encouragement and appreciation for some answers, nodding along with others. In this playtesting session, the designers would at times touch cards that others had played, rotating them to see the text more clearly as a person was speaking. Overall, the participants seemed to be engaged throughout, watching and following focus on the person speaking, at times verbally indicating appreciation for each other's contributions. Twice participants related personal stories of similar events they had experienced as those proposed on the cards. The stakes never rose to the level of exposure I witnessed in the first group: no one revealed intensely personal information, and there were not any fearful moments. After one of the testing rounds was over, one of the designers approached me and mentioned how several of the situations reflected some ignorance of Asian culture—that some of the situations discussed parent-adult child relationships where there could potentially be confrontation. In that designer's experience, adult children would never confront parents in any fashion. Thinking about this kind of problem—that the game may represent a certain cultural perspective—is a challenge that may be possible to reduce, but conversely, any game that is perspective-free would lack the context of a community of people who could potentially interpret and use it.

The card deck contains 24 situations with a variety of relationships depicted and a variety of stakes, from discussing end-of-life planning to discussing dirty dishes. These can be paired with 36 question cards that contain various approaches: prompting reflective consideration of the situation, suggesting negotiation, encouraging taking a strategic view, or considering the interpersonal relation between the player and a potential subject for the game. Generally a round of play will include some responses of each type, with the most variety directed toward different types of reflective thinking.

Having done five playtesting sessions with different groups of designers and my own family members, some specifics have emerged. Eno's moment of confrontation can be quite powerful. From the aforementioned designer who refused to draw a card from the prototype deck because they were afraid of what it might tell them, to the occasional facial grimaces or intake of breath when a card is drawn from other playtesters, that moment of confrontation between the card and the problem can be powerful for the player. Humans place great faith in oracles. References to Tarot, my own and other's use in workshops and classes of drawing from a hat, that moment of the draw-and-reveal has an almost religious significance. For playing groups that may be emotionally vulnerable to one another or unwilling or afraid of potential embarrassment, I recommend drawing a small hand of cards and looking for matches. For groups that have more intimate relationships that are characterized by trust, I would recommend dealing out all the question cards to the entire group and using Eno's moment of confrontation between the card and the player as a creative catalyst in approaching the different challenges contained in the situations.

3.5 CONCLUSIONS

- Framing contributes compellingly to the success of a conversational interaction. Scoping of that frame is what makes many "dumb" things quite smart.
- The moment of confrontation or surprise is quite compelling.
- People will do a lot of the "heavy lifting" to connect conversational feedback delivered by chance in response to an inquiry to appropriate actions and outcomes in their life.

One of the most powerful concepts developed throughout this chapter is that of scoping the frame of the game space. ELIZA as a Rogerian therapist, The Coming Out Simulator as a game (not a narrative), Brian Eno's Oblique Strategies, even my own Conversation Game all leverage the limited responsiveness of artifacts and the aleatoric nature of the feedback that the object provides. These games are all successful because of the more limited scope of the frame. Frame ELIZA's nonsensical responses as everyday language, and the Turing test fails. It quickly becomes apparent that we are not speaking with a human, but a radically limited AI. Within the tighter scope of the highly stylized conversation of Rogerian therapy, however, ELIZA can sustain a dialog for some time. When

we turn to the *I Ching*, a user may turn to the artifact/process with a vast frame scope. To provide a satisfying response in that near boundless scope, the *I Ching* must encompass significant diversity in its output.

Frame scoping is also active during role-play and the ludic space of gameplay. Because these behaviors are scoped to being “a role-play” to understand user behavior or “just a game,” participants are more willing to accept unorthodox behaviors. Objects are one important way to understand that frame. Thinking back to Huizinga’s bewigged and berobed judges, at the end of the workday, they can literally divest themselves of their role. If a designer is thoughtful about the user’s anticipated scope of frame, and the resultant set of interactions, they can deliver aleatoric (or even directed) responses that are stunningly compelling.

Eno’s account of the surprise he received when turning over a card is a second key concept that runs throughout this work. This moment of surprise can come from the game itself but also from the actions of other players. Playing 1000 Blank White Cards, I frequently found myself laughing at a particularly apropos joke or being surprised at a turn of events in the game when one of the other players played a card that I had not seen before. This moment of surprise has a brief but powerful dramatic effect.

As any avid consumer of fortune cookies knows, the fortune is always applicable. It may take a moment or two to know how to apply “Alas! The onion you are eating is someone else’s water lily.” but it is not difficult for anyone to find applicable interpretations. Humans are powerfully oriented to recognize stimuli as meaningful pattern (Foster & Kokko, 2009). Considering the Forer effect and the output from the Conversation Game and Oblique Strategies, people will do the work to make aleatorically generated stimuli meaningful. If that stimuli is presented with a cleverly scoped frame, it is all the more compelling.

4

Designing Deliberation

Reframing conversation events for designer, client, and participants

This chapter details the process of planning and designing for deliberative conversation events and how that planning process can surface values previously concealed within the convening organization. The chapter concludes with a number of case studies that bring to light the power conversation events have to activate a network of stakeholders that exists around an issue.

4.1 DESIGNING FOR DELIBERATIVE DEMOCRACY PROJECTS

From January 2015 until March 2018, I worked to support the Program for Deliberative Democracy (PDD) at Carnegie Mellon University (CMU). During that time, we engaged in designing and producing deliberative fora on a variety of topics: the renovation of Route 51—a blighted urban corridor that extends over multiple counties; the City of Pittsburgh Capital Budget; the Resilience plan for the City of Pittsburgh; how to address challenges faced by young black men and boys in urban areas. I used this time to develop an underlying understanding of designed images, spaces, and objects as relates to deliberative discourse, and within this paper, will detail observations and approaches that warrant further study in the context of designing for conversation.

Designers have neglected designing conversationally (Dubberly & Pangaro, 2009), but instead focus upon grooming and styling of the content of communications toward a “universal” aesthetic that privileges simplicity and clarity (Tonkinwise, 2011). Further, designing to support the conversational practice of deliberative democracy requires a certain understanding and discipline that might be leveraged in broader practices of designing to support conversation.

4.1.1 ABOUT THE ACTS: CONVERSATION AND DELIBERATION

Conversation is a key component of human activity and civic life. In the context of governmental practice, conversation and speech-acts are components found everywhere. Debate, deliberation, speech making, negotiation, argument are all conversational acts. Conversation is a key act of governing, the fundamental act of human communication—and a principal way that human beings relate to the material world. The offering that occurs in James J. Gibson’s affordances (1979) could be interpreted as the opening a type of conversation between the user and the object. Architect Louis Kahn advocated conversations with materials as a mode of discovery for designers (Turkle, 2011, quoting Nathaniel Kahn, 2003). The conversational mode of interaction—two or more humans conversing with one another—is the underlying principle for mediated communication technologies like email, text-messaging, social networking, and for proximate communications like meetings and expert consultations.

Conversation theory, pioneered by Gordon Pask, created structured definitions and relations between concepts like agreement, understanding, and consciousness (Pangaro, 1996). Conversation theory has cybernetics at its foundation. It is a central aspect of design practice and encompasses the goals of designing for communicating. Within, and tangential to the field of design, practitioners and scholars such as Hugh Dubberly, Paul Pangaro, Terry Winograd and Fernando Flores, Jeff Conklin, and Horst Rittel have examined the theoretical underpinnings of conversation—both as a model for designing, and as a central concern of cybernetics. Following John Searle, Fernando Flores and Terry Winograd developed Language/Action perspective as a way to structure conversations for action to help participants move from *irresolution* to *resolution* in a conversational situation (Winograd & Flores, 1986).

Conversations are the medium through which people collaboratively *deliberate*, or together, make sense of complex situations. Deliberative conversations occur in every knowledge domain. A wide array of academics have researched the deliberative conversations that occur in their own knowledge domain and have provided models and best practices for practitioners to engage in those conversations. James Fishkin (1991), Robert Cavalier (2011), and Elinor Ostrom

(1990, pp. 88–102) have offered models for democratic deliberation; these models have been operationalized through the work of Carolyn Lukensmeyer (2007, 2017) and others. Deliberative conversation is a particular type of conversation that has the following characteristics:

- Participants are engaged in face-to-face discussion.
- Participants conscientiously raise and respond to competing arguments.
- Participants arrive at considered judgments about solutions to public problems.

(Fishkin, 2008)

Fishkin’s definition of deliberation contains some key words—which we will return to later—that imply how designing to support this format can proceed.

Through the work with the PDD, I, working with Dr. Robert Cavalier (political and pragmatist philosopher, senior faculty at CMU and director of the PDD), Tim Dawson (then a doctoral candidate in CMU’s English/rhetoric program) and Selena Schmidt (a public engagement consultant with the Public Broadcasting System) developed an agenda-based approach to serve as the framework for two series of meetings for different clients. Cavalier had been approached by the City of Pittsburgh to help plan new capital budget hearings. Once the initial development of the framework was complete, the practical work of designing and hosting the specific meetings was delegated to me and Dawson. PDD agreed to host the second set of meetings as part of a study in collaboration with the CMU Remaking Cities Institute (RCI). The goal of the meetings was to develop information for the Pennsylvania Department of Transportation (PennDOT) to guide further development along Route 51. At the time, PennDOT was already engaged with the CMU Robotics Institute to analyze traffic flows and develop algorithms to increase throughput and reduce pollution. As a component of that larger infrastructure, the RCI applied for and received funding to create a master plan to guide development. RCI engaged the PDD through Cavalier to conduct the community engagement efforts along the corridor. Dawson, Schmidt, and I were recruited to support this endeavor. The community meeting format was developed collectively over a series of meetings by the PDD group in consultation with architects from RCI. The PDD group elected to use this format for nearly all subsequent meetings.¹

1 In February 2016, Dawson, Schmidt, and I began consulting independently as a for-profit LLC The Art of Democracy. We continued to use the framework we developed with the Program for Deliberative Democracy for formal meetings throughout our work.

This format is designed to accommodate a larger number of participants at a formal meeting. Over the course of three years conducting meetings in this format, we have hosted between four and 162 participants at a single meeting. Generally speaking, from the perspective of a participant, a deliberative community meeting designed in this framework takes about 2½ hours. This was done for several reasons: it was generally felt that the longer form of meeting (all day, or two days during a weekend) was extremely burdensome for participants, and not practical from the perspective of executing events that were either unfunded or poorly funded. Perhaps most significantly, the time window was chosen because the City of Pittsburgh hosted similar meetings in the past using that time window, and 2½ hours would fit neatly.

To operationalize Fishkin's deliberative characteristics, PDD works with the following structure for each deliberative forum:

1. **Arrival:** participants receive table assignment and briefing documents from event staff.
2. **Informal Greeting:** participants are greeted by the table moderator, and given time to meet other participants and read the briefing document. We strongly encourage the convening organization to set aside part of the budget for a light dinner for the participants. If food is provided, the participants eat at this time.
3. **Pedagogical Introduction:** a nonpartisan "teacher" gives participants a short overview of the topic area(s), what is to be achieved by the deliberation, and an explanation of how data generated by the participants will be used.
4. **Deliberation:** led by the table moderator, participants engage each other in free-form discussion of the agenda issue(s). The briefing document is referred to as a source of additional information.
5. **Question Writing:** led by the table moderator, participants write a question or questions to pose to the expert panel.
6. **Question Asking:** participants pose their questions to the expert panel and receive answers.

7. **Post-event Survey:** participants fill out a survey indicating their opinions on the agenda issues, suggest new agenda issues.
8. **Departure:** event staff thank participants for their time and thoughts. Participants chat informally with each other and expert panelists.

All of the elements above were iteratively and intentionally designed to create a “smooth” experience. The meetings are staffed by a number of volunteer facilitators and registrar(s), an emcee, a member of the convening organization who shares key information about the context of the discussion, and a panel of recruited experts.

This information is offered for background and a richer understanding, as the focus of this chapter will be principally my reflections on the design process that supports these fora and directions for further research. During the development of these fora, I was involved principally as the document designer and collaborated iteratively with the writer (Dawson) to develop briefing materials to support the conversation. This chapter details my personal experience with writing, designing, and developing these critical pieces. Data were collected through participant observation throughout the development and planning process. Further data were collected at public meetings, at a post-event debriefing with the table moderators, and with a post-event debriefing with city, county, and committee representatives. During this process, I observed several aspects where the design process of the creation and iteration of briefing materials impose a kind of discipline on the way organizations understand the issues they deal with, as well as the way the deliberative process is informed and even structured by the design process.

4.1.1.1 Briefing document as a “MacGuffin”

Through the evidence from these cases, I hypothesize that the briefing document serves several critical functions during the event design process and during the implementation of the event. Further, I posit that the design process serves as a mode of discovery for the event organizers.

Designing a deliberative forum begins with the question, “What is it that we want to know from the people we are convening?” One approach to answering this question is that the initiating organization has a plan or concept that they want validated by a representative group of subjects. In this case, the initiating organization wants to use the deliberative forum as a filter that will pass through validated information, goals, or approaches (Fishkin, 2008). In another approach, the organizing group wants to understand how citizens might prioritize a set of goals or actions, as pertains to their local situation. On some occasions, the organizing group has a general concept but no clear questions. Regardless of the approach for engagement, one of the first steps in preparing the content of the forum is to begin composing the briefing document, which contains the background information necessary for the participants to have a legitimate and conscientious discussion of the points at hand.

In the course of the design process, this briefing document becomes a MacGuffin, the object which drives inquiry, prioritization, and the structuring of many other components of the forum. The MacGuffin is a dramatic plot device used in films to introduce tension in the plot and drive action. The reason the character’s behavior is driven by the MacGuffin is usually left unexplained. The device was first introduced by Alfred Hitchcock in his 1934 film *The Man Who Knew Too Much* (Ackroyd, 2016). Following is Ackroyd’s description:

It is, to use a more familiar phrase, the red herring, the device that sends the plot and the characters on their way—such as the attempt to assassinate a foreign leader in this film—but remains of little or no interest to the audience; it is simply an excuse for all the activity on the screen. (Ackroyd, 2016, p. 61)

Dan Hill (2012), brings to design the concept of the MacGuffin as a force at work in design projects. Hill asserts that the development of a relatively unimportant object can drive forward a strategic process:

The MacGuffin helps drive this process through its gravitational pull, through its requirement for rigour. [...] It is a classic

MacGuffin; not especially relevant in itself, but the entire plot cannot exist without it. It is the reason for the entire story, and yet beside the point. The wider story is ultimately more interesting, more affecting. (pp. 55, 57)

The briefing document is used in the forum, but the participants view the briefing document as ephemeral and not a central aspect of their experience. The process of creating the briefing document, however, drives regular meetings with all stakeholders in the project and forces an in-depth examination of the issues and the language used to describe the issues. These issues in turn structure the agenda for the deliberative event and prefigure the questions that are on the exit survey. The briefing document is that thing that, as Hill states, has enough importance that the design team will be compelled to carry it forward, but it will also drive the development process. Though Hill's example of MacGuffin-in-action drives a strategic goal that is largely extrinsic to the design process, the writing and design of the briefing document drives learning and crystallizes a new understanding of the issues within the client organization.

4.1.1.2 *The setting*

Deliberative fora are usually held in transient spaces lacking in ceremonial character. Over the past year, I have organized deliberative fora held in church meeting rooms, civic building meeting rooms, recreation center auxiliary spaces, basements of libraries, and the meeting room at a state-supported residence for low-income retired persons. Churches make a minimal nod in their meeting spaces, decorating toward supporting church-related meetings with evangelical posters and other devotional messages on the walls; otherwise, the rooms where these fora are held offer little more than the bare space in the way of dramaturgical setting. The rooms are designed to economize cost, have an extremely temporary character, have very few if any aspects of place, and (aside from some perfunctory posters at the church) contain no evidence of the hosting organization. Furnishings of these spaces are similarly spartan, disposable, and movable/foldable; walls and flooring are beige or gray, and do not lend any character, or a sense of place. Generally, participants at these events sit in folding chairs, at round or square folding tables. In general, and at the specific meetings, the rooms have none of the ceremonial character that is typically associated with city council chambers, school board meeting rooms, or other stereotypical places where governmental deliberation takes place.

When advocating for the reconstruction of the destroyed British House of Commons in a 1943 session of parliament, Winston Churchill famously said that “we shape our buildings, and thereafter, they shape us” (HC Deb, 1943). Churchill follows this statement with a structured argument detailing how the design of the chamber both reflects and scripts British party politics. Churchill argues that the too-small size of the chamber improves the character of presentations made there; debates in a smaller chamber have a more conversational tone, and the smaller space does not seem echoingly empty when less than the full parliament is in attendance. (See also section 2.7.6 for further discussion.)

In deliberative democracy practice, setting is one aspect that the deliberative forum has only lightly considered. The deliberative community fora that I have hosted take place in settings that are spartan at best. Church basements, dusty union halls, Veterans of Foreign Wars meeting halls with radically leaking ceilings contribute a sense of place, but these spaces are each invested with understandings from different cultural contexts than those associated with the experience of a democratic engagement.

In these meetings, that lack of the ceremonial character of place can work subtly on the people who attend. People who attended sessions I was a part of were conscious that they were engaged in an important activity, yet the casual-yet-structured atmosphere encouraged direct, focused participation, while also providing space for off-topic social interactions. I suggest that the tension and kind of silence that exists in a courtroom, hall of state, or council chambers is a function of the formal character of those spaces as much as it is a function of the social conventions and learned behaviors that accompany those spaces.

4.1.1.3 *Metaphors*

The way that people respond to the prospect of a civic meeting is generally not with bubbling enthusiasm. In fact, the prospect of attending a civic meeting to speak on a topic that we care about may cause the more faint-hearted among us to gird our loins for combat. But attending a deliberative community meeting is a bit different. Rather than finding a signup sheet where a line of nervous, perturbed residents wait in competition with their fellow aspirants to acquire one of the limited number of 3-minute speaking slots, a participant who attends a deliberative community forum is greeted at the registration table. They are offered a briefing document that outlines the main questions that are the proposed topics and directed toward a buffet with sandwiches or pizza. Rather than sitting, waiting, listening to other

residents take their turn at the microphone, mentally practicing what they will say when their turn to speak comes, a deliberative community forum participant has a conversation with neighbors about one or more of the difficult issues that affects their neighborhood.

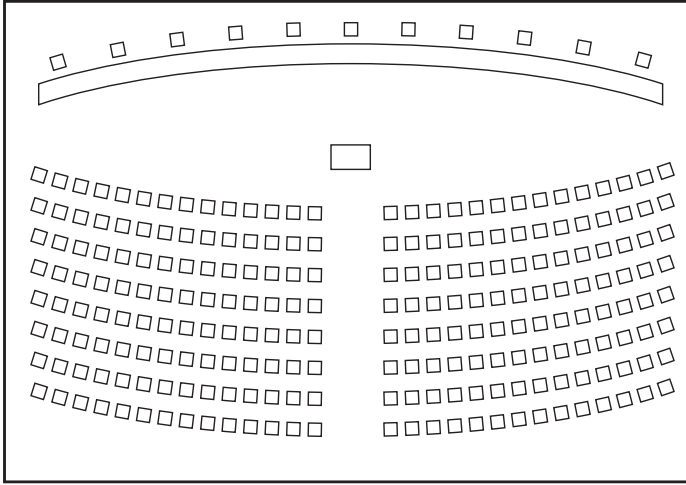


Figure 4.1 – Performance-style seating at city council chambers

Effectively, the metaphors that surround “traditional” 3-minutes-at-a-microphone public comment sessions induce the opposite behavior to what is useful for the situation. The lectern, the microphone, the arrangement of the audience (two audiences, in fact—other residents and the government staff), give strong cues that the space for public comment is a space for performance. The person at the lectern’s voice volume is elevated over all others and is (typically) at the architectural focal point of the room. The other people are either remaining silent and attentive or shouting cheers, encouragement, boos, or heckles. Outside of an actual performance situation, can you imagine any greater number of performance metaphors convened in one experience? People who attend a traditional public comment session are given all the framing cues (Lakoff, 2010) that they are in a performance situation.² And they respond by performing.

² Rich detail can be found regarding the politics and design of musical performance settings in Christopher G. Small’s 1998 publication *Musicking: The Meanings of Performing and Listening*.

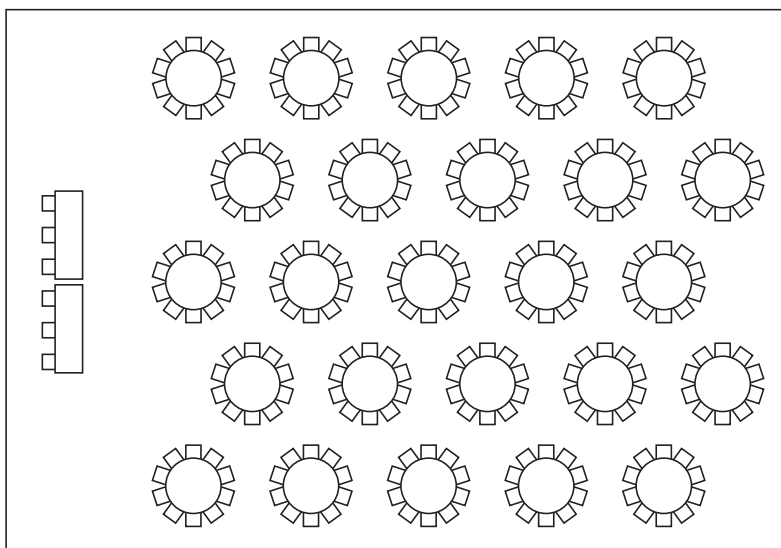


Figure 4.2 – Conversation-style seating at deliberative community meeting

In contrast, the deliberative community meeting is constructed around a different set of framing metaphors. There is no audience, the only “authority” is a reasonable, friendly host (moderator) who cleverly directs the conversation so everyone who wants one gets an opportunity to speak. The goal of the evening is not to communicate what “I want to say” but to discover what the group does not know, where the knowledge gaps exist in this group of neighbors. This set of cues serves to activate a different set of frames—the framing of dinner with neighbors to discuss a difficult problem.

To extend this reasoning, after conducting more than 30 large, formal, deliberative community fora and countless other smaller community gatherings, I believe that this format is successful not because of the democratic theories employed, or the painstaking work preparing effective briefing materials, or the quality of the survey design. True, these elements are important, but deliberative community fora are effective because of the compelling change of metaphor that is used to organize people’s framing. By reframing public participation in this way, and the participatory design work that is being done in other areas, I hope that these metaphors are carried through (Schon, 1984) into other areas of civic life.

Participants’ experiences can be enhanced by thoughtful intervention in the physical environment of the deliberation event. Ertel and Solomon (2014) offer a checklist in their book for designing the material environment.

4.1.2 CHALLENGES FOR DEMOCRACY AND CIVIC CONVERSATION

Decreased perception of the importance of a democratically elected government has created a moment of crisis for proponents of liberal democracy (Foa & Mounk, 2016). The relatively recent rise of factually impoverished, emotionally overabundant political discourse throughout the world manifested in recent elections in the United Kingdom and the United States, and has continued to infect the discourse of several major governments in Europe and the Americas. In spite of this concerning recent history, when examining discourse at the level of the individual, civic engagement events have shown that citizens can be trusted to discuss issues, share reasons, and come to conclusions (Fishkin & Luskin 2005). Yet, the production of civic engagement events frequently neglects the influence of the system of stakeholders and the power of material interventions in facilitating deliberative conversation.

Civic conversation is a key precursor to civic change, and successful civic change requires engagement across a complex network of actors. A civic conversation is a key place for knowledge transfer, a moment where citizens are able to come to an understanding of the needs of the greater community, and a moment where they can articulate the challenges faced by their communities and the needs that these challenges entail. Citizens have the opportunity to hear the needs of their neighbors and perhaps place their own needs in the context of a portfolio of need across the entire community. The moment of the civic conversation is when government actors have the opportunity to collate critical information to guide policy-making and to develop a better understanding of the needs of the communities they serve. This understanding serves as a framework or heuristic to guide the creation and application of policy.

The challenge of a contemporary design practitioner designing civic discourse is to create a conversation that evokes the richness of the lived experience of the participants, while maintaining a reflective distance such that participants are able to share their present needs, their hopes for the future, and what they feel is the narrative that supports the positions that they hold. The civic participation event is the point at which some of that richness can pass into the polity.

Truly, high stakes conversation is a bricolage (de Certeau, 1984, citing Levi-Strauss, 1966): in the civic conversation, participants disclose through conversation the aggregate that is composed of their relationships with their neighbors, their membership in community groups, their specific relationship

to place, their history of experience of place. The opportunity to be seized is to construct their neighbors' views and reconstruct their own views in relation to the question at hand.

Citizens' involvement in civic life, and their ability to articulate need (Max-Neef et al., 1991) in a way that can inform policy creation, is influenced by their experiences with organizations that are more a part of their everyday lives than is the more abstract construction of "government" (Wenger, 1998; Spinosa, Flores, & Dreyfus, 1997). The needs of citizens are aggregated, focused, filtered, and fixed through citizens' involvement in neighborhood associations, community groups, churches, community and economic development corporations, business associations, community-based and corporate news organizations, and the views of political agents at all levels. Some may say that these mid-level actors represent a toxic influence on the political process, that they reorient the dialog toward their own ends. This may be true of some political groups, but most are working with what Spinosa, Flores, and Dreyfus (1997) refer to as a rich awareness of their sustaining practices, or a clear view of how the organization's mission and goals constitute a community interest. As I have found in my work, citizens who attend events on behalf of civic organizations find it difficult to simply regurgitate talking points when events are framed as a conversation with neighbors. The activity of conversation, in and of itself, requires a richness that is not easily reducible to talking points.

So developed, through direct experience and conversations with organizations that are close to their everyday lives, the individual's understanding of civic life and the articulation of their needs intersect with the capacities of public authorities, public agencies, and government entities that provision for those needs. At the scope of municipal government, marshalling these mid-level actors—the trusted organizations—facilitates access to citizens and helps to ensure those citizens are motivated to participate. This set of complementary processes that influence the formation of attitudes, values, beliefs, and policy are a dynamic system, and these event-based participations are a critical point of feedback within that system.

It is design that flows from these conversations that must encompass the spectrum of need that is evoked in the conversation. The approaches of voting or negotiation are organized around a zero-sum game that creates winners and losers, but design that is informed by a spectrum of need, and a spectrum of reasons why, can approach collaboration.

4.1.3 THE HIGH-STAKES CONVERSATION

As a specific approach to these types of challenges, I have identified a particular type of conversation—the high-stakes conversation—that tracks to a degree with most citizen conversations that shape public policy. Without delving too deeply into this model again (please see Chapter 2, The High-stakes Conversation), I will cover the model cursorily here and reference its manifestations in the following cases.

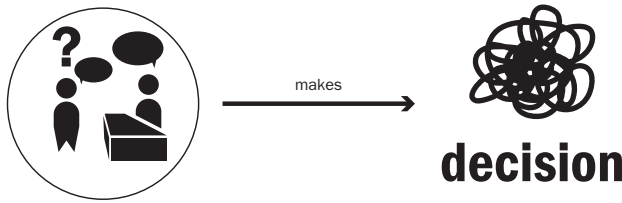


Figure 4.3 — High-stakes conversation. Client and expert have a conversation to make a decision.

4.1.4 MODEL FOR CIVIC CONVERSATION

In the context of this work, the following are the key aspects of a high-stakes conversation, and that frequently manifest in civic conversations:

- The dialog centers around making a decision that is of consequence.
(There is something of value to one or more of the participants at stake.)
- There is no answer that is “right.”
- The dialog centers around making a decision that is imminent.
(Time pressure is a factor.)
- Participants are characterized by imbalance.
 - Participants typically have an imbalanced level of knowledge and/or agency relating to the conversation domain (expert vs client).
 - Participants have an imbalanced level of experience in having the conversation (routine vs singular).
 - Participants have an imbalanced level of investment in the outcome.
- Once a decision is made, it is irrevocable or very difficult or costly to revoke.

Several authors have identified these challenges as aspects of other situations. In the book *Nudge*, Thaler and Sunstein (2008) refer to the challenges specific to solving problems that are faced infrequently, one aspect of imbalance. Game theory and satisficing (Simon, 1996) speak to decision-making with low knowledge of the outcomes. The problem of “no right answer” or making choices between several suboptimal options is addressed in game theory and other texts (Thaler & Sunstein, 2008; Funtowicz & Ravetz, 1993), irrevocability in others (Rittel & Webber, 1973; Fischhoff, 2011). In short, this model addresses humans’ attempt to resolve situations of this type through conversation, speaking with one another in an attempt to find a way forward from a difficult position.

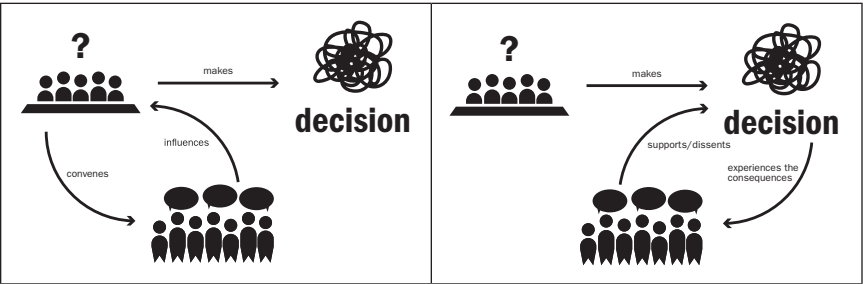


Figure 4.4 – Civic conversation. Council convenes citizens to have a conversation. Council makes the decision; citizens experience the consequences.

The version of the high-stakes conversation that plays out in civic settings shares many aspects with the model of the dyadic high-stakes conversation detailed in Chapter 2. To give one example of a dyadic high-stakes conversation, a counselor may have a conversation with a patient to discuss approaches for improving a troubled relationship. The counselor is acting in good faith, giving their best advice, but is somewhat isolated from the direct experience, and depends upon reading the situation through the lens of the patient’s presentation. The patient is presumably not as skilled or knowledgeable in the domain of interpersonal relationships as the counselor, but the patient bears nearly all the consequences. The patient is responsible for choosing what to do, implementing any action, and reacting to the situation as it develops. If things are “bad” in the relationship, making repairs is an act that must be initiated quickly.

Conversely, municipal government operates within longer time cycles, so imminence may not seem to be as direct an issue; yet, imminence is at play due to governmental budget and legislative cycles. To put it bluntly,

deadlines exist. So, when the opportunity arises to make a change, it must be implemented quickly. One key difference is that the question at stake in a civic conversation resides with the delegates who, presumably, are more expert than citizens. Also, in the dyadic high-stakes conversation, the person who is engaged in the conversation who bears the weight of the decision is most affected by the consequences of that decision. In the civic conversation, however, delegates (who are responsible to govern) are insulated from the consequence of the decision to some degree. Citizens ultimately bear the consequence of the delegates' decision and can only express dissent or support.

Perversely, these high-stakes conversation situations are typically rare for the people who have the most to lose in the situation, and the experts, the city staff or elected officials who have these conversations more frequently, often view the events as a necessary evil.

4.2 CASES FROM DELIBERATIVE DEMOCRACY PRACTICE

The following cases explore the ways these events diverge from the dyadic model of the high-stakes conversation. These deliberative community events—and by extension, all convened conversation events—organize a system of stakeholders around the activity of the event. In addition to designing the physical artifacts that people use and setting up the room pleasantly at best, functionally at least, engagement in the planning process is constitutive of a set of design acts. The choices to include or exclude stakeholders from the planning process, the set of framing questions that will be asked to contextualize each event, the agreed upon reporting that will be done to “freeze” the knowledge generated by the event are all questions of design.

4.2.1 A BRIEF ASIDE REGARDING DEFINITIONS OF RESEARCH

One of the significant challenges of this work has been—beyond doing the work in the first place—coming to an understanding of where design research fits within the academy. My dialogs with CMU's Institutional Research Board's (IRB) representatives, unless the work is clearly derived from qualitative social science practices, have all ended with the verdict that this work does not fall within the IRB's definition of research. The paradigm that the IRB representatives define as knowledge generation leaves out designerly ways

of knowing that go beyond the positivist paradigm for knowledge generation. While the complexity of the social components of this work and the situated nature of the confluence of actors that comprise these systems ensure that they are not reproducible, this work does teach some important lessons for designers who hope to engage in high-stakes conversations in systemic spaces.

4.2.2 THESE PROJECTS AS CASES

As a researcher, I have a different relationship with each of these cases. Not all of them were intended to be case studies at the start, or even research. In the following three projects, each represents a different engagement with a system of actors. The first project, My VA Communities was a commercial project that I was invited to be a part of through connections with earlier work with The Heinz Endowments. I, along with Tim Dawson (PhD candidate in rhetoric in Carnegie Mellon University's English department) and Selena Schmidt (a civic and private sector entrepreneur, consulting with the Public Broadcasting Service in Pittsburgh and Washington DC) organized The Art of Democracy, an LLC to serve an increasing number of commercial requests that came to us through the CMU Program for Deliberative Democracy. Dawson, Schmidt, and I worked collaboratively on a number of projects between 2015 and 2018 as The Art of Democracy. For My VA Communities, we shared responsibility for conducting collaborative client meetings, with all of us being jointly responsible for discovery and dialog with the client. Our primary contact was Megan Andros, the Senior Program Officer for Veterans and Military Families.

The Environmental Charter School (ECS) also solicited the involvement of The Art of Democracy. On this project, I was primarily responsible for interfacing with the administration of the school, conducting the meetings, and ensuring delivery of the iterations of each stage of development. Our primary contact was Kate Dattilo, the Chief Operating Officer of ECS. The working group, comprised of representative teachers, staff, and administrators, was particularly excited about documenting the process of the series of meetings and their results. During the deliberative community forum, I both photographed the event for use by ECS and moderated a table discussion with eight staff members and teachers.

The affordable housing deliberative community conversations were convened by the Affordable Housing Task Force, a group tasked by Pittsburgh City Council to create recommendations that city government would use to organize funding and develop legislative priorities for the city council.

4.2.3 MY VA COMMUNITIES

Thursday, February 4, 2016, 6–8:30 p.m.

Monday, February 8, 2016, 6–8:30 p.m.

Thursday, February 11, 2016, 6–8:30 p.m.

Thursday, June 2, 2016, 10–12:30 p.m.

My VA Communities is a collaboration between the United States Veterans Administration and a regional board of directors tasked to assess veteran's needs in Southwestern Pennsylvania, develop a plan to increase coordination among the region's charitable organizations providing services to veterans, and increase the sense of connectedness between veterans and their communities. Nearly 30 organizations were involved in 2016, with 16 contributing resources and viewpoints.

There are approximately 1,300 not-for-profit organizations working on improving the lives of veterans in Southwestern Pennsylvania. While many of those organizations have positive effects through taking direct action to address veterans' needs, there is no coordination between groups, there is no process to ensure that services are not over- or under-provisioned in certain areas, and there are critical gaps in the aid that organizations provide (Carter & Kidder, 2015).

The goal of this particular engagement was to inform the strategic direction and profile of membership of a Community Engagement Board that is constituted from the Pittsburgh Veterans' community, for the community to advise the VA on best practices for engagement in the region, and to create a formal structure dedicated to coordination between various veteran oriented not-for-profits in the region.

In this particular situation, my two Art of Democracy colleagues and I spent some time discussing approaches with a representative from Army OneSource (a national nonprofit organization providing services to veterans) and a representative from the Heinz Endowments (the organization funding the conversation). Our discussion objectives were to uncover goals and to help frame the events that we would hold from the perspective of learning or discovery rather than engagement. We worked collaboratively to solicit input from diverse stakeholders from different areas of the service sector, from those that provide basic needs to veterans in distress, like food, shelter, and clothing, as well as organizations that provide mental health support, education, and training assistance. Input was gathered through two goal-setting meetings and from semi-structured phone interviews with nonprofit organization leaders.

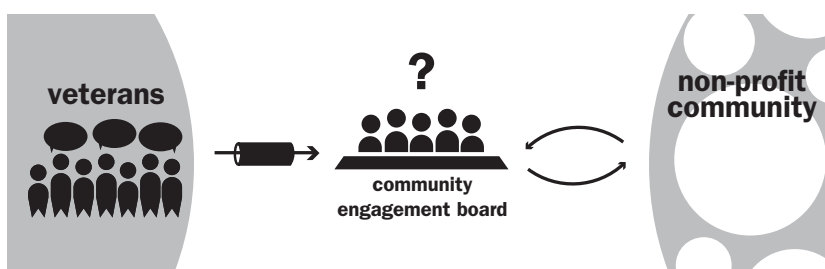


Figure 4.5 – My VA Community conversation. The Community Engagement Board convenes veterans for a better understanding of how to catalyze change within the non-profit community.

The event series would encompass three conversations among veterans and one conversation composed of people who were involved as agents in “helping” professions. The principal challenges of this approach to generating knowledge that show up across this work are freezing the richness of the veterans’ conversations into a survey response and packaging those survey responses as a report that is actionable. I helped to convene the veterans and hold the community meetings, and Dawson, Schmidt and I led the meetings helping the Community Engagement Board to structure and limit the scope of their inquiry.

To aid this approach, rather than just simply asking veterans what they wanted—where the gaps were—we asked veterans to approach the problem from the perspective of the community, to think about what the region provides and try to articulate where it is deficient. Referencing our previous experience with meetings convened by the City for Pittsburgh residents, we had found that this framing provided a wider range of potential responses. Asking participants to speak from their own perspective and that of their communities encouraged participants to speak to issues that their friends or neighbors had experienced, as well as to their own issues.

We found that underemployment, not unemployment, was a key problem for the region, and we discovered the existence of a skill in which better employed veterans had gained literacy: being able to translate military descriptions of responsibilities, skills, and competencies into civilian parlance.

4.2.4 ENVIRONMENTAL CHARTER SCHOOL

Friday, March 18, 2016, 12:30–4:00 p.m.

Tuesday, May 10, 2016, 8:30–11:30 a.m.

The Environmental Charter School is a grades K–8 tuition-free charter school organized in Pittsburgh under the Section 1714-A of Chapter 017A of Pennsylvania’s Public School code. At the time of this writing, The Environmental Charter School was comprised of two campuses—an elementary and middle school—and were actively working to expand to a high-school location. In the few years since its founding in 2008, ECS experienced steady growth, enrolling an increased amount of students every year and hiring new faculty to serve those students. At the inception of the school, administrators adopted a plan, called Competency-based Growth (CBG), for teacher retention, tenure, and promotion that was in use at another charter school in the Pittsburgh area: City Charter High School. While this system worked well initially and provided teachers agency over their career growth, it was time-consuming to implement, made it difficult to forecast budgetary needs for year-to-year, and was not inclusive of all staff. As the school grew, these challenges were exacerbated. While the original goal was to reward teaching excellence and entrepreneurial attitude, administration and faculty began to be concerned that the plan rewarded the ability of faculty to create teaching dossiers in after-work hours.

In March 2016, the Environmental Charter School convened staff, faculty, and administration in a deliberative engagement to redesign their compensation system. The Environmental Charter School engaged people at every level of their organization, as well as human resources and social justice scholars at two regional universities, and representatives from several local and national not-for-profit organizations.

Their existing plan for compensation was self-directed and led by the teachers. It worked well when there were only a handful of teachers, essentially no staff, and few administrators. As the school grew, however, the plan for staff evaluation was never created, and the plan for faculty evaluation and promotion became increasingly difficult to sustain.

The center of the conversation was between the administration, faculty, and staff. The school’s board of directors served in an advisory capacity to this process. The project seemed to be straightforward. Together with the administration, we planned to convene a conversation with the faculty and staff to gather input to use to design a new system for retention, tenure, and

promotion; however, developing an understanding of the complexity of how pay *works* within this organization was something that was not possible to do in one setting.

From the faculty and staff meeting, we collected rich data on employees’ perceptions of how certain types of reward structures encourage or discourage living and working by a set of guiding principles. These guiding principles were ones that the faculty and staff had collaboratively created over several prior years. For instance, one of the principles is to encourage collaboration, so having a structure that competitively rewards “top performers” could be antithetical to the principles of collaboration. Considering fostering community as a guiding principle, promotion decisions ideally would be based upon an evaluation of the teacher or staff member as a “whole person” within the school by diverse members of the community. While this set of beliefs and attitudes developed by deliberating upon different approaches to compensation was valuable, it was not structured enough to serve as the basis for a compensation system.

The administration asked for a diverse group of employees to become part of retention, tenure, and promotion working group tasked to operationalize the set of ethical principles into a system. This group worked collaboratively over several months and authored a plan that was submitted back to the administration, the staff and faculty, and ultimately to the board of directors.

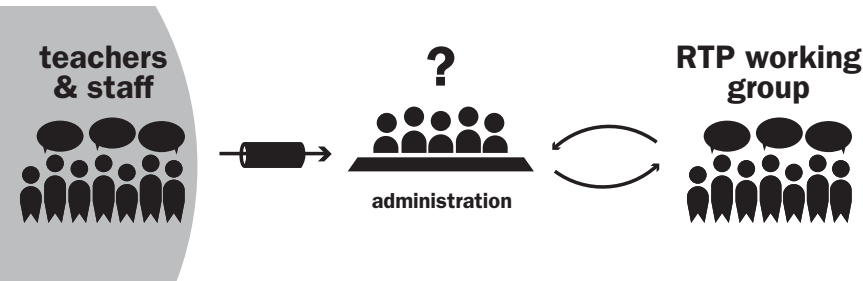


Figure 4.6 – Environmental Charter School Retention Tenure Promotion conversation. Administration convenes the faculty and staff to set priorities for a redesigned compensation plan. This actually led to the creation of a working group that constructed the proposal for the plan that was adopted.

Again, with this situation we helped the administration clarify the approach they wanted to take (they wanted something that would reward innovation, but we came back to the community's ethics and values), helped to convene teachers and staff, helped to create artifacts, brought moderators to help them moderate their discussions, and reported the findings from that process. But the specific situation required more than just reporting out and taking action. The knowledge generated by the first event had to be worked through in a series of conversations afterward. Second, diversity (Ashby, 1957) of the table groups and the working group on many axes (e.g., full time, parttime, different roles, experience levels) were necessary to form the plan effectively. The table I moderated consisted of teachers at a variety of levels in the ECS employee system, a staff member that had been at ECS for only a few weeks, and a staff member that had been a part of the school nearly since its inception. One individual had first been IT support staff, then had become a teacher. Some of the teachers had done quite well under the CBG plan, and some had significant familial or other obligations outside their work day that made promotion under the CBG plan quite difficult. One aspect of diversity was missing. Administrators had convened the conversation but felt they might have an inhibiting effect upon frank discussion at the tables, so administrators participated only as silent observers of the conversations.

Mid-level administrators reported to the executive administration that they felt left out of this discussion. I convened a non-deliberative, generative, dialog examining and commenting on the survey responses later to address this issue.

4.2.5 AFFORDABLE HOUSING TASK FORCE

Monday, March 7, 2016, 6–8:30 p.m.

Tuesday, March 15, 2016, 6–8:30 p.m.

Wednesday, March 23, 2016, 6–8:30 p.m.

Tuesday, March 29, 2016, 6–8:30 p.m.

Tuesday, April 5, 2016, 6–8:30 p.m.

The City of Pittsburgh’s Affordable Housing Task Force convened citizens to determine where areas of greatest need were within the city and what affordable housing solutions citizens wanted to see in their neighborhoods. Participants in the AHTF included city council members, and representatives from 22 area businesses and not-for-profit organizations.

In this particular situation, structurally, it turned out that we had two decision-making boards to consider. City Council convened the Affordable Housing Task Force, which was responsible to provide legislative and budgetary recommendations to City Council, which would ultimately structure the City’s approach to this.

The perverse thing is, in these situations where there is a lot at stake for individuals and many perceived levels where the distribution of responsibility between the levels and the potential for influence at each level is not well understood, you have stakeholders attempting to exert influence at every level and at every step in the process. Some business groups and community groups chose to eschew the public comment process entirely, instead attempting to influence the city council members directly.

Protest groups with differing political goals came to the public meetings in an attempt to make their presence felt in different ways. Some handed out flyers, some distributed signs, some requested that they be allowed to watch the process, and one group identified the survey as a vulnerable point for intervention and created stickers that residents could put on the survey instead of writing a personal narrative. Another group protested the choice of meeting locations, alleging (correctly) that there was not a meeting in a particular neighborhood hit hard by the recent fluctuations in the real estate market. Another group insisted that any notes that were taken by city employees at the meetings be published on the city’s website.

The protocol asked attendees to evaluate the City’s proposed housing priorities and values in relation to attendees’ own needs and the needs of their neighborhoods. In spite of all the above, this was generally successful

in producing unambiguous priorities for the Affordable Housing Task Force. In relation to other priorities, housing rehabilitation and home ownership emerged as key factors from the discussion.

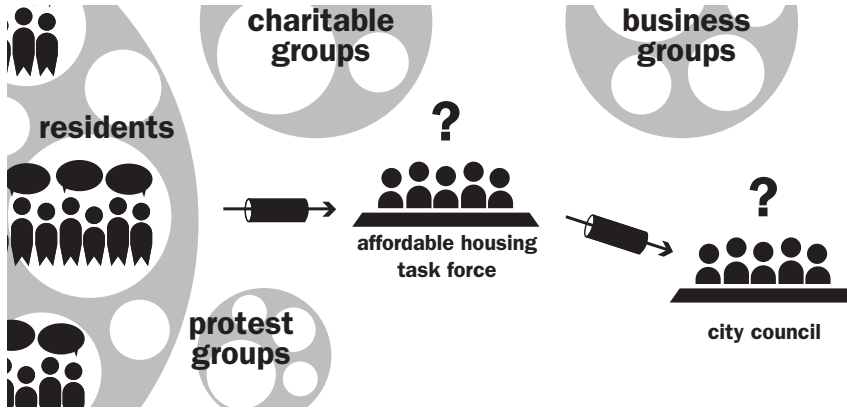


Figure 4.7 — Pittsburgh Affordable Housing Task Force (AHTF) conversations. City Council convenes the AHTF. AHTF convenes citizens to provide input on a set of recommendations for City Council. Other interest groups attempt to influence the process at all levels.

Key things that were learned from this were that protesters should not be regarded as an enemy; these protesters contribute to the variety of the conversation. Protesters, or voices that exist outside of the typical systems of public comment, increase the resilience of the system of public comment and broaden the spectrum of opinion that exists in the room and in the documentation. In these meetings, discourse is very fragile and depends upon the engagement and good faith of the participants. Control cannot be maintained by the conveners or by other means of authority, but people will adhere to a protocol that gives the sense that the process has integrity and that the voices of the participants will be represented faithfully to decision-makers.

4.2.6 CONCLUSIONS ON DELIBERATIVE DEMOCRACY CASES

As this diverse set of research cases shows, a number of factors makes cities fertile ground for employing frameworks for participation and governance that tolerate arational applications within those frames: the rich network of interrelationships in a city, the variety of processes at work, the diversity of people and non-human actors, and the nested networks or systems-within-systems nature of cities.

Deliberative democracy procedures can act as both a filtering and focusing element in high-stakes conversations by bounding the problem at hand, providing relevant information to participants, and creating structures through which that feedback can be processed, so it can be effectively consumed by governmental entities. Considering the different systems that designers work within, and thinking about the tangential systems that a constituted conversation might activate, the civic conversation that assembles a diverse group of residents, that expands each participant's definition of self in relation to others, and that reinforces the intimately relational nature of urban life and of shared goals and values has the potential to inspire action and foster connections throughout the city network.

Deliberative democracy as an engagement that is only sponsored, in a top-down method, however, is insufficient to catalyze social change on a grand scale. Opportunities for designing conversations need to step outside the mode of facilitating the statutory requirements of municipal government and architectural firms doing public works. This enables an expanded, systems-level view of the network that is organized around seemingly intractable issues. Activating that network so that tangible outcomes can be produced is really the next high-stakes project.

THINK!

Conversations on issues that divide us

This section covers three projects completed in the final year of this investigation with WQED, a television station and the local affiliate of the national Public Broadcasting System (PBS). Departing from previous projects that had consequences and implications for participant deliberations, the initial goal of the WQED deliberations was to create content for a television show called *THINK!* Organizing the discourse around content topic areas, however, revealed special opportunities for marshalling mid-level stakeholders enabled by imminence.

4.3 WQED

Developing these shows was an interesting project. The tagline was “To bring people together to talk about the issues that divide us,” and we certainly did that. Working with one of the collaborators from the Program for Deliberative Democracy, Tim Dawson (rhetoric PhD student in English), we planned stakeholder discussions for shows 2 and 3, and then hosted a number of in-person discussion fora. For show 1, the stakeholder discussions were replaced by research and discussions hosted by the League of Women Voters. In my prior projects, these conversations were designed with a particular goal in mind: namely, to evoke the gradient of opinion that exists within the population that attended the conversation, to surface the values of the self-appointed community delegates who attended. This information would be captured as survey data, restructured as a report, and shared with policy-makers or decision-makers in a format that would (presumably) guide policy creation or decision making.

Working with WQED to produce a television show was quite different in a number of ways. While I was working with difficult issues, the goals were entirely different. The goal of these projects was to produce what was ambiguously referred to as “a good television show.” In effect, this meant an hour’s worth of content that would entice viewers to keep watching. WQED staff were concerned with a variety of metrics including: Nielsen

viewership measurements, activity on a custom-built discussion board, activity on social media sites—Twitter, Facebook—before and during the broadcast, and attendance numbers at the community fora and the live broadcast. The shows were taped and later shared on Youtube, so there was a residual value of additional viewership after the live broadcast.

4.3.1 GUNS IN A FREE SOCIETY

The first show relied heavily upon issue research done by the Pittsburgh chapter of the League of Women Voters from October 2013 to October 2014 (Cavalier, 2014) and used data developed in a series of deliberative forums to frame several issues for continued discussion in a public meeting preceding the episode and then in the episode itself. These issues were:

1. Mental Health
 - a. Gun deaths from suicide
 - b. Falsity of links between mental health and gun violence (mentally ill are no more likely to commit violent acts than any other part of the population)
 - c. Gun violence exacts a cost on the mental health of the community
2. Promoting gun safety as a norm
 - a. Safe storage of guns (limiting children's access)
 - b. Limiting access to people in distress (domestic abusers/suicidal people)
 - c. Returning to "Gun Club" ethics of stewardship and safety
3. Economic impact of guns in the community
 - a. Direct costs (medical, equipping law enforcement)
 - b. Indirect costs (securing public buildings, securing neighborhoods)

The framing questions for the discussion were:

- ☐ What should we do about each topic?
- ☐ What should our community groups and public officials do about each topic?

We ran two forums, one in downtown Pittsburgh and one in the suburb of Washington, Pennsylvania. Each forum was characterized by a very different demographic. The downtown forum was dominated by the League of Women Voters' membership, and these members were predominantly advocates of gun control. The Washington forum had a greater percentage of pro-gun participants. A diversity of viewpoints was represented in each forum. Significantly different in this forum than previous I have worked on is that the lighting and video cameras were a strong presence in this forum. It was unlikely a participant could have taken part and not noticed the presence of the cameras.

The meeting in Washington had a lower turnout of approximately 20 people, was not taped, and consequently seemed somewhat less tense. The attendance was also dominated by the League of Women Voters of Washington County. A number of the participants knew each other through this organization, and some attendees knew each other from the region.

While social media performance and viewership was lackluster, the show fostered some connections between the expert panelists. A gun instructor agreed to conduct a series of free classes in association with the Homewood Children's Village in Pittsburgh on how to "safe" a variety of guns.

4.3.2 EQUITY AND OPPORTUNITY

This forum did not have one single partner that supplied robust research. The main question, determined by WQED producers whom Dawson and I advised, was "in what ways does social identity affect access to opportunity in southwestern Pennsylvania?" Because WQED did not have resident expertise in this area, I proposed that we host a deliberative community forum and invite stakeholders, leaders of local nonprofits, and interested people in the government to attend and help set an agenda for discussion at the community meetings and the subsequent television show. Twenty participants attended, and after 90 minutes of moderator-led discussion, 13 of the participants elected to complete a survey prioritizing the approaches to the issues that we had discussed at the community meeting.

Again, the goal of these discussions was to generate context and footage for the television show, rather than to produce an output that was representative of the considered opinions of the group involved in the conversation. However, a related goal of the THINK! programming was to focus on presenting considered discussion on difficult issues that was more broadly representative of the culture of Pittsburgh and the surrounding region.

Producers had noted that footage of the deliberative community meetings from the previous episode had been repetitive images of people talking, and were not visually dynamic. Also, the people that were signing up to attend were primarily leaders in the nonprofit community, people who had leadership roles within the city bureaucracy. To address this to a degree, I proposed that, rather than follow the typical deliberative protocols, two design thinking exercises be used to structure the discussion. *Rose, bud, thorn, seed*, and *stakeholder mapping* exercises were prepared for the participants, in which we asked participants to name acts or things they have noticed in the community that have a positive, nascent, or negative effect on

1. the economic stability of people,
2. their access to participation in decision-making, and
3. how we might build coalitions across boundaries of difference (who are potential partners?).

We then asked participants to map relations between organizations from their perspectives.

While this generated some positive dialog among the participants, there was a wide range of literacy in using design tools and materializing feedback. The moderators, who had moderated a number of sessions using deliberative techniques and had a training session before the event, felt uncomfortable leading the exercise in the new paradigm. In the best situations, a couple of the small group members and a moderator acted as scribes and arranged participants' feedback. In worse situations, one of the moderators felt that opening the dialog to less directed feedback in this way made it seem as if there was little or no structure and attempted to impose structure themselves by qualifying and limiting participants' feedback in unproductive ways. Additionally, collaborator Dawson elected to alter the exercise somewhat as it was running; he induced participants to draw a large flower and use that drawing to position participant feedback on the paper.

Materializing feedback ended up being a net positive for the show; more and longer shots from the community meetings ended up as part of the television broadcast. But from this experience, I discovered that leading inquiry using designerly tools is a learned skill, and my quick, 30-minute briefing before the event was inadequate to provide the requisite skills and knowledge to moderators.

Debriefing the Equity and Opportunity forums, one of the most highly regarded elements was the stakeholder dialogs that helped to set the agenda for the larger community meetings. The program was again regarded as successful, having told the story of the challenges of identity politics as it affects access to economic opportunity. We had told the stories of people who identified with the Islamic community, the LGBT community, the black community. We discussed the challenges of centering the voices of populations that have traditionally been disenfranchised. The challenges of quickly pivoting the volunteer moderators to promote a different type of engagement, however, were significant.

4.3.3 POVERTY IN WESTERN PENNSYLVANIA

Taking forward the best aspects of what we had learned in the THINK! episodes 1 and 2, Dawson and I, now joined by collaborator Selena Schmidt (community evangelist for PBS), planned the third set of discussions for the final episode in the series.

Again, we cast a broad net seeking community partners who were already involved in this dialog on a day-to-day basis, including nonprofit leaders from food banks, other organizations that helped people who have become or were at risk of becoming homeless, and organizations focused on social justice for disenfranchised populations.

The group we (WQED and my collaborators) brought together to help set the agenda had an excellent discussion and surfaced a number of issues that were key to the experience of people experiencing poverty and perceptions of impoverished people by others. One important distinction made was to understand the difference in challenges and needs between those experiencing situational poverty and those experiencing generational poverty.

- The culturally constructed shame of poverty is a key component of the experience of poverty.
- The so-called War on Poverty was not successful, was deliberately abandoned, and became the War on People Experiencing Poverty.
- Pittsburgh's system to help people experiencing poverty is fragmented and unable to deal with the holistic concerns of the population.

- Some poverty in Pittsburgh may escape easy tabulation. Impoverished people might not be visible, may be living in Swissvale, Braddock,³ and may appear middle class.
- A capitalist marketplace survives because of free or low-cost labor. The people experiencing poverty may fulfil that need. Essentially, poverty is the antecedent of slavery.

Armed with a rich background and a set of questions for discussion, and an enthusiastic partner in the Pittsburgh Urban League who had agreed to host our discussions at its annual Thanksgiving Food Distribution, we set out to have one of the richest, most engaged, and successful community meetings of the THINK! series.

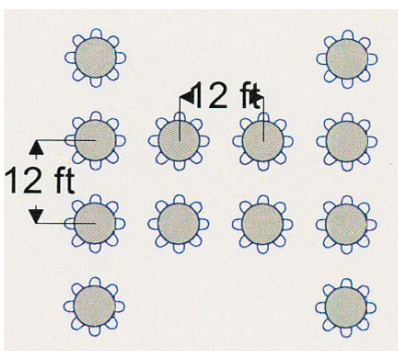


Figure 4.8 — Requested table setup for community forum

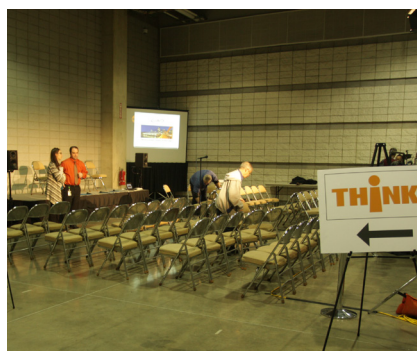


Figure 4.9 — Actual setup for community forum

Unfortunately, the material environment betrayed us. To cut costs, or through misinterpretation, the arrangement of the space was supposed to be set up with round tables or banquet tables with chairs; instead, it was set up as interlocked rows of audience chairs. As the event organizers, Dawson, Schmidt and I typically arrive at least an hour early to deal with any problems at the venue. When we saw this, we began unlocking all the chairs and reforming them into small circles. We were stopped by a group of burly event crewmembers who informed us that no one was allowed to move chairs inside the convention center besides them. The chairs were set up to conform to a pre-planned event specification, and these specific chairs were only allowed to be set up in interlocked rows as per the fire code and best practices for the convention center. After some negotiation, the event

³ These, and other first-ring suburban municipalities that surround Pittsburgh, contain many neighborhoods that, driving through, imply the existence of moderately stable, successful, middle-class residents. However, Pittsburgh, like many “rust belt” urban areas has experienced the loss of many jobs in manufacturing and other industries. As a result, these communities contain a percentage of seniors and families experiencing precarity or poverty.

crew members compromised by turning every alternate row around, so at least participants could face one another. We created the best setup for the two community meetings as could be done in the situation.



Further, Thanksgiving food distribution at the David L. Lawrence Convention Center was not an ideal environment for a considered conversation. While people experiencing poverty were in attendance, they were not focused on participation in this conversation; they were primarily focused toward accessing services and accessing the food that was available at the event. While the event was held in a secluded corner (as secluded as is possible in a room of such massive scale), the ongoing traffic from the food distribution and health stations was a constant source of distraction.

Figure 4.10 — Authorized worker and supervisor rearranging chairs prior to forum.

Additionally, few people had pre-registered to attend the deliberative conversations. I circulated with flyers about the conversation in the lobby and was treated to a first-hand experience of the degree to which people are willing to go to provide for their families. As I mouthed the words of how we, in collaboration with WQED and a number of nonprofits were producing a television show with the goal of increasing understanding and empathy for people experiencing poverty, I was met with negative responses, questions of whether participating in the conversation would allow them to jump ahead in the food line, and pointed inquiries about how much time it would take, and would they have to be on camera.... I had a sinking feeling. The challenge of executing on the well-meaning mission of increasing empathy for people who were in these precarious conditions with people who could help them was very possibly exploiting and leveraging these same people.

In spite of the technical and ethical difficulties, the conversation was held, people surfaced a number of issues, and, most importantly for the success

of WQED, the opportunity was provided to film and interview stakeholders and the participants who were willing to volunteer to be filmed. A number of participants who had experienced poverty and who had personal relationships with one or more of the people involved with the show agreed to be interviewed in a richer fashion. A number of participants agreed to be filmed for the show.

Clear priorities emerged from the conversation. People saw affordable (live-able) housing as the most significant driver of poverty, and Allegheny County as the main institution responsible for addressing concerns of poverty in southwestern Pennsylvania. People felt that individuals, media outlets, and faith-based organizations were most responsible to unset stereotypes about poverty.

4.3.4 CONCLUSIONS ON COMMUNITY CONVERSATIONS

Convening mid-level stakeholders was ultimately the most successful aspect of the THINK! Broadcasts. Like all traditional media, WQED has experienced decline over the past several years. Layoffs and budget cuts in 2015 threatened the organization's ability to maintain community connections. With cuts in staff, many projects that were perceived as less critical to the mission of the organization, like maintaining an active network of community connections, were left understaffed.

Because of the excitement generated in the community around the THINK! broadcasts, participation at the organizational level was relatively easy to secure. The broadcasts afforded resource-strapped nonprofits an opportunity to share their messages and missions and afforded organization executive directors the opportunity to connect with leaders of other organizations that have tangential missions and goals. This, complemented by the time-bounded, lower level of commitment, encouraged participation from a wide range of organizations.

Because of that broader participation and my ethic of seeking representation from a diverse range of organizations, WQED was able to facilitate connections between groups that may not have come in contact otherwise. Perhaps one of the best moments from this was when a gun safety instructor from outer-ring Pittsburgh suburbs offered to run classes on how to "safe" a variety of guns at the Homewood Children's Village. While this connection was unplanned serendipity, the very act of bringing a community together around an issue presents emergent opportunities for collaboration.

5

Approaches to Evaluation

Understanding the role of evaluation in conversation events

This chapter explores the questions: On what terms might we evaluate a conversation event? I explore different models for evaluating the experience and examine evaluation from the perspective of those who dissent. I conduct an evaluation on the Route 51 deliberative community forum discussed in Chapter 4 and discuss how data generated in an evaluation might be used by the convening organization.

5.1 THE CHALLENGES OF EVALUATING CONVERSATION EVENTS

How can we understand and evaluate civic conversations in the context of a systematic body of knowledge? Where is the conversation yardstick by which we can measure the quality, depth, or richness of a conversation? If a resident has the requisite *trust*, is driven to participate through *needs*, and holds *hope* that their participation will result in an outcome, how might we understand the conversation? In the broader context of civic conversations several models have been advanced to help understand the dimensions of the conversational act.

5.1.1 MODELS FOR CONVERSATION

5.1.1.1 *Conversational fields*

The idea of conversational fields is proposed by Otto Scharmer (2009). Scharmer—teaching at MIT, in the Sloan School of Management—comes to conversation informed by a history of research and writing about the fields of economics and management. Scharmer puts forth a rich and broadly based architecture to understand conversation by identifying a hierarchy of conversational fields. Informed by Francisco Varela (Varela, personal interview with Otto Scharmer, January 12, 2000) and the writings of David Bohm (1996), conversational fields approach the understanding of conversations by placing the experience of how pairs or groups of people act in conversation. In fact, Scharmer’s field-based model seems to be broad enough to encompass many other models, including the model of high-stakes conversation.

Scharmer also tracks the negative side of conversation, how acts of speech might be destructive and demoralizing. As we discussed the necessity of earnest engagement, designing a framework for conversation in an egalitarian way in Chapter 2, Scharmer’s taxonomy does not focus solely upon only the positive experiences of conversation. Most of the extant models assume that people engaged in the conversation are working from a place of authenticity. Scharmer does not, and this greater effort toward a comprehensive modeling of conversation lends credibility to Scharmer’s entire structure of conversational fields.

The basis of Scharmer’s ideas for fields of conversation is derived from the ideas of David Bohm (1996), where Bohm discusses the difficulties of engaging in dialog, including specific challenges such as incoherence, fragmentation, and specific catalysts like suspension of judgment, arrangement in a circle, and a lack of goals for the dialog.

Scharmer sees conversations as the living embodiment of social fields, and these social fields are the grounding conditions for a relationship or a set of relationships between a group of actors. Conversational fields are one manifestation of social fields, and can evidence the underlying social field. Scharmer’s model contains fields of conversations:

1. Downloading
talking nice
2. Debate
talking tough
3. Dialogue
reflective inquiry
4. Presencing
essential emergence
5. Strategic Dialog
intentional emergence
6. Brainstorming
creative emergence
7. Bodystorming
creative emergence

Though I do not see Scharmer's fields as exhaustive (Scharmer does), they encompass most of the models I have examined, including my model of the high-stakes conversation. Scharmer's model focuses more upon participants' experience of the conversation, rather than on the goals or what participants might be doing in the conversation. Good-faith negotiation does not seem to be part of this structure, but perhaps it could lie in between talking tough and reflective inquiry. Sales conversations also include elements of reflective inquiry and talking tough, but do not exist within Scharmer's structure.

Scharmer's model is value-laden. It seems, for Scharmer, that there is little point to having a conversation that is not, at a minimum, a dialog, but optimally a presencing conversation. The first two states of conversation are necessary layers that participants must "get through" in order to achieve a state of presencing. In Scharmer's model, *talking nice* leads to dysfunctional relationships; *talking tough* gets viewpoints "on the table" but does not move the conversation forward. *Dialog* is the first field that Scharmer addresses at length. Here, the goal of the conversation is to broaden one's perception of oneself; to understand a broader, more interconnected view of a single world.

If we take conversation fields as a way to understand if an event is successful, and set presencing for a number of people as a marker of success, we are perhaps holding too high an expectation for participants. Presence is emergent, and while I have been a part of city-hosted conversations that have had that moment of (transcendental || sublime || profound) silence after a participant shares particularly compelling information, these moments are dependent upon the willingness of the participants to disclose. Disclosive moments of presencing can be prepared for or encouraged, but not designed.

In the following table, I collate a number of models of conversation in relation to Scharmer's categories. Additionally, from my work and from a close reading of Scharmer's work, I add some additional columns (who is considered?, you will hear) to supplement the understanding of Scharmer's conversational fields in practice. Additionally, I have categorized other conversational models I have found during this work within Scharmer's fields (relation to other models). A table that describes these relationships follows.

title	social experience	profile	who is considered?
collective collapse	disintegrating emergence		
harassing, bullying	aborting emergence	stuck in one truth/view	the self as dominating the other
intrigue and disinformation	poisoning collective sources of conversation and thought	stuck in one world (us/vs them)	the self as deceiving the other
absencing and hubris	collective self-pity or hubris	stuck in one self/will	the self as victim of the other
blaming others	self is separate from the system	stuck in one world (us/vs them)	the self
silencing other views	monoculture	stuck in one truth/view	the self
downloading	talking nice autistic	obedient to social conventions	the other
debate	talking tough adaptive	focused on winning	the self in relation to the other
dialog	reflective inquiry self-reflective	focus on negotiation	the self as a component of the whole
presencing	essential emergence generative	focus on collaboration	emerging future whole
strategic dialog	intentional emergence	collaboration within the context of a system	the system as the site for the whole
brainstorming	creative emergence	creative suggesting of futures	the emerging future whole, composed of the system and its actors
performing	embodied emergence	creative enacting of futures	the emerging future whole, as experienced through bodily action

Table 5.1 — Extensions of Otto Scharmer's classifications of conversation
For reference only. Larger copy of table is supplied in the durable visual record

stages of development	you will hear	relation to other models
	racial slurs, degrading speech, attempts to leverage the other	Hate speech Bullying/Cyberbullying Sexual harassment
	holding back true information, or giving false information	Yellow Journalism Espionage Robin Stern (2007), <i>Gaslighting</i>
	silent “checking out”	Guilt as manipulation Nazi Germany Extractive Practices
	viewpoint of the other is missing	Moralistic judgment
	discourse or questioning is discouraged	Fundamentalism Roger Fischer et al. (2004), <i>BATNA</i>
1. small talk	empty phrases, politeness	Emily Post (1956), <i>Social Etiquette</i> Stone, Patton & Heen (2010), <i>Difficult Conversation</i> Dale Carnegie (2009), <i>How to Win Friends and Influence People</i>
1. exchanging factual information 2. stating differences	exchange of points of view	Spinoza, Flores & Dreyfus (1997 p101), <i>Expedient Speaking</i> Dubberly & Pangaro (2009), <i>Conversation for Agreement</i> Winograd & Flores (1986), <i>Conversation for Action</i> Dubberly & Pangaro (2009), <i>Conversation to Coordinate</i> Roger Fischer et al. (2004), <i>ZOPA</i> Angelo Volandes (2015), <i>End of Life Conversation</i>
1. personal connection 2. sharing and listening to each other 3. inquiry, thinking together	inquiry into viewpoints	James Fishkin (1991), <i>Deliberative Democracy</i> Dubberly & Pangaro (2009), <i>Conversation to Collaborate</i> Donald Schön (1983), <i>Reflective Conversation</i> Fernando Flores (2012), <i>Conversation for Possibilities</i> Roger Fischer et al. (2004), <i>ZOPA</i> David Bohm (1996), <i>Dialog</i> Arnold-Mages (2018), <i>High-Stakes Conversation</i>
1. source connection 2. authentic sharing and listening to each other 3. attending to the deeper space 4. connecting to source, collective flow	co-creating something new	Annemarie Mol (2008), <i>Caring Conversation</i> Stone, Patton & Heen (2010), <i>Learning Conversation</i> Spinoza, Flores & Dreyfus (1997 p100), <i>Principled Speaking</i> Mihalyi Csikszentmihalyi (1990), <i>Flow</i> Otto Scharmer (2009), <i>Theory U presencing conversation</i> Adam Kahane (2007), <i>Mont Fleur Scenario Exercise</i>
	co-creating futures	Chris Ertel (2014), <i>Designing a Strategic Conversation</i>
	generative talk enabling futures	Alex Osborn (1953), <i>Applied Imagination</i>
	[see] enacting the future	Burns et al. Interval Research (1995), <i>Bodystorming</i>

As you can see, most of the models center around the field of *debate*, with a lesser coverage in Scharmer's higher but more diffuse field of presencing. In the more extreme ends of the experience, few examples have been documented. I would surmise that this is because the fields of presencing are more rarely experienced, and consequently, are less valued as a desired state of being during a conversation.

5.1.1.2 *High-stakes conversations as defined in the dissertation*

The high-stakes conversation is covered extensively in Chapter 2, but for the sake of the reader, I will briefly recount it here. Key characteristics are that this conversation

- has something of consequence at stake,
- has no right answer (outcomes are un-knowable, or choice consist of several sub-optimal paths),
- is imbalanced (expert-client),
- is irrevocable (or difficult or costly to revoke), and
- is imminent (there is a deadline by which something must be decided).

As an evaluative tool, this framework points to an evaluation that might examine how well the challenges of the frame are ameliorated. For instance, if irrevocability emerges as a key challenge, support might be effectively rendered through prototyping approaches. If imbalance in experience is a key factor, the degree to which role-play is effective could be explored as an evaluative metric.

5.1.1.3 *Difficult conversations: Stone, Patton, and Heen*

Difficult conversations principally have a structure where there is a divergence between what is thought and what is said. An individual participating in a difficult conversation may find that what they thought may be contraindicated by what is said, or that what they thought may inaccurately reflect what is said. Difficult conversations contain three sub-conversations:

What happened? (key challenge: the situation is more complex than either person can see) In the *What happened?* conversation, participants disagree about what *has* happened or what *will* happen. At times, discussion will center upon who is in possession of "the truth." Discussion may contain allegations or insinuations of who is to blame for the current situation. Participants can be hampered by ascribing particular intentions of other participants.

Feelings conversation (key challenge: the situation is emotionally charged, an aspect of high-stakes) The *Feelings* conversation asks and answers questions about feelings. Participants might be concerned with the validity or appropriateness of their feelings or preoccupied with the other participants' feelings. Participants may not know what to do with the feelings: should they vent, check, or suppress these feelings? It is quite possible to become overwhelmed with emotion.

Identity conversation (the situation threatens our identity) What does the conversation mean to us? Does the conversations reaffirm or deny aspects of our identity?

The goal is to move from the difficult conversation into a learning conversation (reflective conversation (Schön, 1983), or Pask-ian learning (Pask, 1975)), which bypasses the challenging aspects of the three sub-conversations listed above into a situation where participants move to figuring things out together, sharing knowledge in mutuality. This shares some similarities to Gibbs' (1988) experiential learning cycle, in which a participant attempts to explicate an actual description of the experience, their feelings about the experience, an evaluation and analysis of the experience, completing with general conclusions moving to specific conclusions. From this cycle of learning, a participant develops a personal action plan. Key similarities are attention to the experience and accompanying feelings. While Gibbs offers structured steps (enumerating, evaluating, analyzing, drawing conclusions), Stone et al. (2010) suggest that awareness of the three underlying structures of the difficult conversation affords avoidance of the difficult conversation, that people who are aware of these structures can avoid beginning conversations from that place.

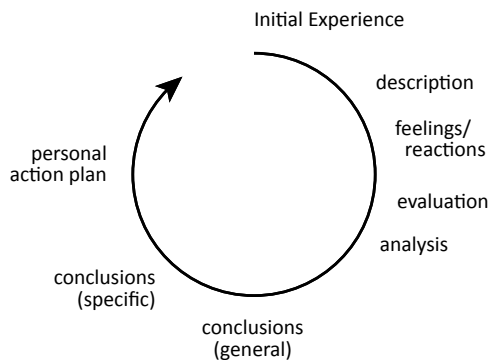


Figure 5.1 — Gibbs, G (1988). *Learning by Doing: A guide to teaching and learning methods*. Oxford: Further Education Unit.

Evaluating a difficult conversation in-action could center around the efficacy with which a participant is able to step away from the difficult nature of the fraught conversation and move to a learning conversation. With difficult conversations, Stone et al., articulate specific steps that may be taken to shift the dialog.

5.1.1.4 *Conversation for action: Winograd & Flores (based on John Searle)*

Winograd and Flores' (1986) conversation for action is perhaps the most straightforward from an evaluation perspective. Minimally, it contains:

1. Request for offer,
2. Promise or acceptance,
3. Declaration of completion, and
4. Declaration of satisfaction.

A clear, unambiguous metric would be: was the conversation for action completed? Completion need not follow through to a delivery on commitment but could cease at an earlier, but mutually satisfactory point. (For example: A makes a counter-offer, which is declined by B.) Another metric might be whether declaration of satisfaction was achieved. Thinking of this model in a broader context, many customer service evaluations are handled in this selfsame way.

5.1.1.5 *Deliberative democracy*

Deliberative conversations are used to discover the landscape of opinion that exists regarding a collectively owned element.

Because a deliberative conversation entails a learning component, one approach to evaluating the conversation could be evaluating the learning that takes place. Fishkin and Luskin have developed deliberative polling as a method to evaluate the results of the deliberation. Deliberative polling works through selecting a random population sample and surveying that population before the deliberation, surveying it again after deliberation, and measuring the degree of change in survey responses from before and after (Fishkin & Luskin, 2005).

5.1.1.6 *Reflective conversation: Donald Schön*

Schön's reflective conversation is one way for an actor to attain perspective on a situation with which they are engaged. For Schön, the quality and effectiveness of reflection is a significant marker of expertise. The reflective conversation is not (principally) a conversation held between two actors, but is a conversation with (and within) a *situation*.

- Conversation is *inquirer* with a *situation*, that must be treated by the inquirer as unique and uncertain.
- *Inquirer* must attempt to impose some *frame* upon the *situation*, while remaining open to back-talk from the situation.
- Must bring to the situation
 - an overarching theory,
 - an appreciative system, and
 - a stance of reflection-in-action.

Reflective conversation might be considered an evaluative method in and of itself. Schön's (1983) reflective conversation includes Model II theory-in-use, in which the participant's private dilemmas and assumptions are subjected to the test of public reflection—where people reflect upon the dilemma/assumption complex as presented by the problem owner. This test can catalyze both individual and organizational learning, but Schön cautions that for organizational learning to be successful, the organization must be in *an organizational predicament*.

5.1.1.7 Liz Sanders' co-design conversations

Liz Sanders discusses the problems that non-designers have in attempting to engage in design dialogs during co-design activities:

One is that too much time is spent on one early idea instead of exploring many possibilities. Another is that it can be difficult to get people to create ideas when they feel that they have insufficient knowledge. A third problem is that people who are brought into co-designing experiences may feel that they are not creative. (Sanders & Westerlund, 2011, p. 1)

While the first and second problems are primary logistical issues that can be overcome with proper planning and effective facilitation, the third challenge—whether participants feel creative—is more difficult to surmount. Unfortunately, Sanders does not provide a clear way to understand or recognize success in co-design practice; rather, the topic of the article is creating co-design spaces that scaffold creative thought by the participants.

The second problem is one with which I have had significant experience. Low domain knowledge might be effectively handled by scoping what is asked of the participants. In a situation where participant domain knowledge is perceived to be low, improved engagement can be found by reframing the question to an area where a broad range of participants can comment (Secko et al., 2009; Burgess, 2014). In the capital budget community forums mentioned in Chapter 1, rather than giving participants play money and asking them to construct a budget themselves, we asked them to comment on their personal and neighborhood dis/agreement with the Mayor's priorities. Participants can be better engaged by moving the discussion of the problem to the site of the participants' expertise. Yet, doing that well or effectively relies upon having a reasonable understanding of who will attend.

5.1.2 BEYOND MODELS FOR CONVERSATION

To concisely recount: considering a high-stakes conversation such as a civic event, the dyadic model of the expert/client expands into a more complex structure. Agency for decision making is owned by elected officials or government staff. The civic conversation exists to provide input on that decision for residents' access to the agency of the elected official or government staff, otherwise understood as influence. Minimally, residents gain the perception of agency. While the decision rests with agents of the government, the stakes of that decision are born in different ways. Residents are at the forefront of people who experience the consequences of decisions.

The question of "who evaluates" these events is one worth some consideration. Typically, it is the convening organization, or agents of the convening organization, who perform an evaluation of the deliberative event. More rarely, a participant or witness will write an evaluation of an event. In the course of my work, I have only encountered these accounts when a participant has what could be termed a "significantly negative experience." Caitlin Luce Christiansen (2017) authored an evaluative account of the public organizational meeting of Indivisible Pittsburgh focused on a conversation that happened after the meeting ended, where two women of color (an attorney and a community activist) confronted a meeting organizer (a CMU faculty member) about the lack of inclusion of people of color in the meeting and the organizational structure of the new organization. The particulars of this account are compellingly written and detail the significant challenge that was experienced by a number of people, a crucial lapse that was made by the organizers of the event. As a tool to improve participant experience from a design perspective, however, this account principally underscores well-understood foundational principles of constructing an inclusive dialog

in a public space. An aggregate of personal accounts serves to construct one aspect or understanding of events.

This is not to say that informal or de-institutionalized evaluative accounts have lower value to the design process. An important consideration when designing to engage with communities that have experienced trauma at the hands of other groups is centering accounts (like Christiansen’s above) that question the trustworthiness of the conveners or the convening organization. For many participants, civic conversations are not one-off events, but are perceived in the continuum of a history of acts by a political administration or other organization. The above account details a broken trust. Trustworthiness of an organization is a compelling aspect. Considering the organization by extending the idea of interpersonal trust, people come to a civic conversation with a history of relationship but also with some hope that positive outcomes will result from the engagement. People from groups that have experienced trauma at the hands of another group may have a deep-seated mistrust of such events. It may take years of successful testing for people to begin to believe that an individual or organization might be trustworthy (Stalvey, 1989).

For a citizen to desire to be a part of a civic conversation and consequently attend implies the existence of three states:

trust (memory)	needs	hopes
past	present	future

Table 5.2 — Temporal orientations of emotional states related to civic participation

Another possible way to evaluate the civic conversation is heuristic: does the event provision for these states of a person? Does the planned experience offer an opportunity to explicate needs that the person is experiencing? Does the event as a process validate that explication by offering the potential for a positive future vision to be realized? Is the event hosted by trusted entities?

Over the three years of fieldwork, I have met only a handful of people who have attended more than one meeting that I have hosted. Even those who have attended multiple meetings have an engagement with the topic, a need that is a part of their present life-moment that intersects with the topic of the meeting in some fashion. Need is a one aspect that contributes to a desire to attend. While experiencing need is not, alone, enough to ensure that someone will attend, need is one compelling factor that drives participation, even in the light of low *trust* and low *hope*.

In his 1991 book *Human Scale Development*, Manfred Max-Neef, a Chilean economist, pens a most compelling and thoroughgoing systemic architecture of human need. Max-Neef's approach understands needs across nine categories of human engagement and four contexts. He suggests various satisfiers that operate across the matrix of 36 contexts/engagement pairings, and describes a number of satisfiers that are synergistic—that meet multiple contexts/engagement pairings. For instance, in the context of *having* (things), only the engagement of *subsistence* deals with material accumulations. One might have a need for symbols of belongingness, values, customs, all of which would fall into a context of *having* and an engagement of *identity*. These civic conversations are synergistic satisfiers in the sense that they offer the experience of satisfiers over several types of engagement of interacting (*understanding, participation*), as well as types of planning (*doing/protection*) and expressing opinions (*doing/participation*). In the course of my fieldwork, I have met the occasional person who comes to civic conversations out of a desire to help their community, to be a positive force in the neighborhood; rich psychosocial needs as characterized by Max-Neef are not usually foremost in a participant's mind when they choose to attend a civic conversation.

The more overt needs that drive attendance are typically tied to a perceived threat to one's neighborhood or business or to the potential for a perceived gain. This is known colloquially as NIMBY (Not In My BackYard) politics, but this solipsistic point of view merely replaces other politics that are inadequate to the challenge of approaching complex, systemic issues. NIMBY politics can be interpreted as a rejection of decision-making by experts (Ravetz, 1999) or as a symptom of "low resolution" within the broader system of civic feedback (Boyer & Hill, 2013). For Boyer and Hill, NIMBYs would like green projects accomplished, but do not want to bear any of the burden of those projects or experience any consequences. In spite of Boyer and Hill's characterization, however, NIMBY-ism should not be viewed as a problem that must be dealt with. It is important to understand that, especially for people attending a civic conversation for the first time, there exists a strong likelihood of attending because of a NIMBY-related need. NIMBY-ism, far from being a potential negative is merely one aspect of viewing an issue that will motivate a person to take action and initiate action through civic conversations. The other side of NIMBY that drives attendance at civic meetings is what I call a "pothole mentality" in which participants think about the issue that they are passionate about (e.g., potholes on the roads that they use regularly, installation of bike lanes) without considering the broader context of that project, or thinking about their needs in light of

the needs of the entire street or neighborhood. Essentially though, these needs—whether they are framed positively or negatively—are what inspire someone to be involved in a civic conversation. Perceiving that the civic conversation might be a site to speak about an issue of concern means that participants are properly connecting their foregrounded, perceived needs to the opportunity to speak back into the system of government.

Evaluation cannot be dissociated from perspective. Evaluation, like any kind of authorship, influences the construction of how the evaluation is framed, how the data that shapes the evaluation are collected, and how the analysis of that data gets done. Whether a conversation goes well or poorly entails a perspective on the conversation, and with a civic conversation, the perspectives contain multitudes. Even within a city, demographics and interest groups belie a complexity and diversity of perspective that is a rich and fecund ground within which new understandings of the city can grow. One might even hope that, through understanding that ground, there is access to some kind of perspective-less *truth*. “This comes with hopes, for instance, that if the white male gaze is joined by female and colored optics, un-biased knowledge becomes possible, and objectivity is reached after all” (Mol, 2002 p. 154).

But explicating that richness, attempting to examine every facet of citizen viewpoint and understand the rich histories and perspectives embedded in the participants, is ultimately a futile act. Touching the depth of experience that is bound up within each individual participant, that informs the construction of each perspective can, in the best of circumstances, be an asymptotic exercise. We can approach but never arrive. However, knowledge creation in the context of the civic conversation need not be thought of in, as Mol calls it, such a paralyzing way. Rather, a design researcher may try to understand the convened group as a singular system at the level of the convening. The effect here is not to blunt the richness of the individuals that make up the group, but to understand the organism of the group in the moment that the group is brought together—to see the group within the context of the event as a particular historical moment and attempt to understand the conversation event and group as a single entity.

To examine another approach, Egon Guba and Yvonna Lincoln propose a rich constructivist evaluation paradigm in *Fourth Generation Evaluation* (1989). According to Guba, four conditions are necessary to start a constructivist evaluation:

1. The study must be pursued in a natural setting (understanding a reality is dependent upon the time and context of the constructors that hold that reality).
2. We cannot frame an evaluative context a priori.
We cannot assume what we must ask.
3. Qualitative information must be collected.
4. Tacit knowledge must be incorporated.

In the context of this examination, Guba's approach fits with mine. Entering into a design situation from the perspective of an engaged learner is conversely a very powerful approach to conducting inquiry. To return to the idea of scoping the frame from Chapter 3, if a designer openly acknowledges their inexperience in certain domains of knowledge, it allows that designer to ask questions that, from an embedded practitioner, might seem challenging, rude, or otherwise inappropriate. Besides the power that assuming no a priori knowledge gives, constructivist evaluation allows the designer to enter into a domain with a high degree of adaptability. Because the designer assumes no prior paradigms of knowledge to work against, they are free to subordinate themselves to the needs of the project.

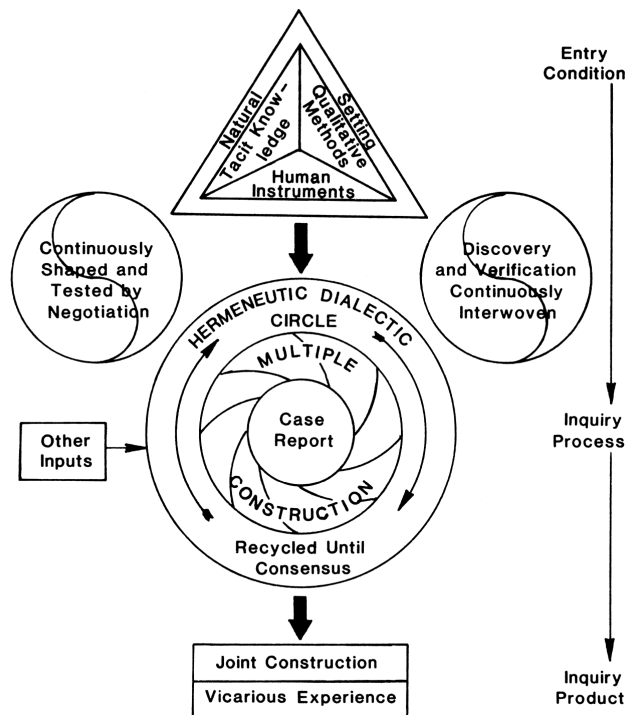


Figure 5.2 – The Methodology of Constructivist Inquiry (Guba & Lincoln, 1989, p. 174)

One significant challenge of this type of knowledge production when working with cities and not-for-profit organizations that desire evidence in particular forms is that this type of evaluation is an emergent process, presupposes nothing, thus no form for evaluation may be constituted in advance. Further, constructivist paradigms of evaluation privilege structures of understanding that tend towards thick descriptions, qualitative analysis. Constructivist paradigms are fundamentally ways of knowing that are not easily reducible to scalar values, and governments hunger for data in the form of scalar values. Perhaps most problematic, Guba and Lincoln's recursive paradigm has no predictable stopping point. Done properly, constructivist evaluation is done when consensus is reached. For Political process that are also political, this can present particular and knotty problems.

5.1.3 SELF-REPORTING SURVEY ELEMENTS AND METRICS

As an agent of the convening organization, constructing an evaluation rubric for use by participants can easily skew data toward positive metrics. This may be done intentionally or unintentionally by the designer of the evaluative instrument. Design researcher Harry Brignull (2010, 2011) identified what he calls dark patterns, or user interface elements that are used exploitatively to steer user input toward favorable outcomes for the owner of the system. Brignull's analysis is primarily directed toward contexts in e-commerce; yet, surveys as an interface element have the same capacity to misdirect user input and perhaps even more severe consequences if that input is misdirected.

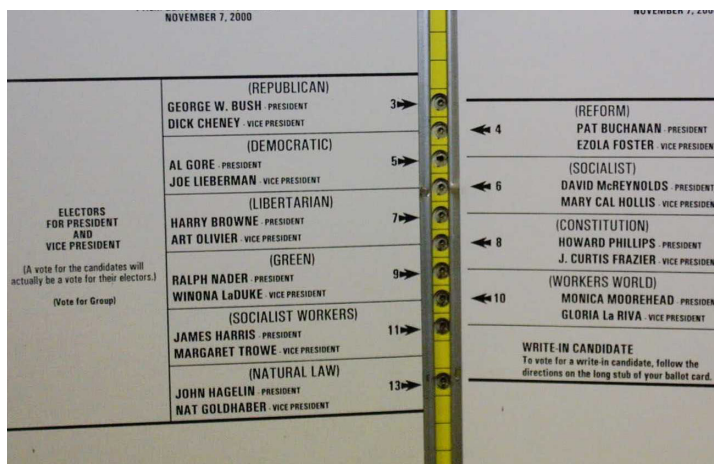


Figure 5.3 – Butterfly ballot from 2000 U.S. presidential election, Palm Beach County, Florida (Public Domain).

Artifacts hold a variety of responsible roles in a conversation. Many times, a failure in responsibility foregrounds the scope of that artifact's responsibility. Perhaps the most significant example of a failed responsibility of artifacts—having broken the conversation—can be found in the 2000 U.S. presidential election in Palm Beach County, Florida. A confusing ballot design was responsible for such a large number of voting errors that it can be conclusively stated that the election results did not reflect the will of the voters.

The promise of a ballot is that it will act as a record of the voter's intention. Like a survey element that passes critical, distilled information from the polity into the governmental systems, a ballot asserts that the intent of the voter will be transparently frozen herein. Perhaps you are familiar with the outcomes of this election: George W. Bush was elected president through an Electoral College victory, while losing the nationwide popular vote. The popular vote gap was quite narrow in several states, but in the critical state of Florida, the vote count was halted and certified at a point in the counting and recounting process when George W. Bush led the Florida popular vote by a margin of 537 votes—a mere .006% of Florida voters. This slim margin of victory was enough to garner then-candidate Bush enough electoral votes in the national count to be awarded the presidency. In the recount, and post-election analysis, much attention centered around Florida's populous Palm Beach County, where a controversial ballot design, known as a "butterfly ballot" caused thousands of voters to erroneously vote for Pat Buchanan.

As a conversational agent that purports to record the intent of a citizen, this particular ballot was a failure. A significant amount of analysis has been done on the election. It has been established by a number of studies that the confusing ballot design a key factor in muting the intention of the polity and electing George W. Bush in error. A sampling of these studies are: a proportional analysis of percentage of vote comparing the percentage of Palm Beach County Buchanan votes on absentee ballots to the percentage on the butterfly ballot found obvious deviations in Palm Beach County and no deviations in other counties (Wand et al., 2001); a regression analysis that reviewed previous statistical studies and compared the demographics of Palm Beach County and expected vote totals to the demographics and vote totals of all other Florida counties (Smith, 2002); and a Canadian study that replicated the butterfly ballot and voting machine, and found that 20 percent of voters intending to vote for a candidate placed in the "Gore" position inadvertently voted for the candidate in the "Buchanan" position (Sinclair et al., 2000).

The things that had promised to sustain these processes, promised to absorb the intention of the voter and anonymously transfer that intention into the body of governance, failed at the outset to afford (Gibson, 1979) a field in which to capture that intent.

In deliberative democracy practice, the process of deliberation relies upon the supportive agency of a few important objects: the invitation, the briefing document, and the survey. Like the tokens of a game, these elements support the process of deliberation by announcing the event, sharing the questions for consideration and information about the the questions, and freezing the results of the participants' discussions so that the understanding developed can be used in the processes of governance.

As in the 2000 presidential election, a lapse in the critical artifact that will record the intentional responses of a participant can easily invalidate the entire process. When cities are earnestly collecting citizen input, more common than intentionally misleading survey elements (e.g. Brignull's dark patterns), is haphazard, amateur survey design. Inconsistent or poorly executed survey element design can blunt the effectiveness of surveys, polluting the response data with the noise of unintentional responses.

For instance, the survey used in the forums that resulted in the hiring of a new Chief of Police for the City of Pittsburgh (shown at left) shows an error in construction: question elements that reverse the direction of the positive vector. Additionally, the top two questions show a four-point Likert-type scale asking participants to rate the helpfulness of different aspects of the event. Studies have shown a degradation in response discrimination and validity when using less than five points (McKelvie, 1978; Krosnik & Fabrigar, 1997).

Lapses in this area are certainly unintentional; however, if designers and conveners understand the survey as an active element that can facilitate and shape the response of survey users, one could also extend that the survey can serve to confuse or obfuscate the interaction between the citizens and the government. While it is not the intention of the developers of this survey to obfuscate the mechanism by which participants can share their views, the effect is the same. This is to say that the utility of the artifacts might be one way that we could construct an evaluation of the conversation. The questions "To what degree are the artifacts faithful to the intent of the user?" and "What behaviors do these artifacts support?" are two possible questions that might be asked of deliberative artifacts in an evaluative context.

How helpful did you find:

increasing positive value →

	Not at All	A Little	Somewhat	Very
The design and organization of the event				
The small group discussions				
The resource panel				

How much did the Community Conversation

increasing positive value →

	Not at All	A Little	Somewhat	Very
Give you an understanding of the important issues involved in selecting a new police chief				
Help you identify priorities and opportunities that you and your community should consider in realizing the vision of Policing in Partnership with the Community				
Cause you to consider points of view that you had not previously considered?				

Following this Community Conversation, will you seek become informed and more engaged in Police and Community?

increasing positive value ←

Definitely Yes	Probably Yes	Probably Not	Definitely Not

Given what you now know, would you have still participated in this Community Conversation?

increasing positive value ←

Definitely Yes	Probably Yes	Probably Not	Definitely Not

Figure 5.4 – Conflicting vectors on Community Conversation survey.

In the processes that have been part of my fieldwork, there are a variety of ways that these elements have been authored. The process that brings these artifacts to life is a very human process, fraught with potential for error. Goals and expectations of the participants need to have some potential promise for realization. Those goals and expectations spring from some need or gap that participants explicate. Finally, without trust in the convening organization to attempt to address the need and realize expectations, the best process design cannot recover.

That being said, to robustly engage in creating a framework that supports heterogeneous engagement, the voices of protest are a key component. Exploring dissonant aspects, hearing the voices of those who perceive the process to

be unjust, accounting for voices of protest who question the legitimacy of the conversation: these actions need to be a part of the evaluation of any conversation that aspires to inclusivity. Let us return to the challenge of engaging the wicked problem: a problem so intractable that coming to an agreement on the definition of the problem represents a key problem. While considering the spectrum of opinion that may exist in a convened population on any given issue, these protest voices lie outside that spectrum. Further, regardless of the qualitative methods used to collect data in these meeting scenarios, there will be unrepresented voices and ineffable data that need to be documented in order to make an assessment of the degree of success of a conversation.

Many different aspects of the conversation event might be subject to evaluation. In this context, a researcher could consider all aspects of the civic conversation to be potentially subject to evaluation. The civic conversation is a complex event with a wide variety of aspects to consider, and the variables in the experience are highly subjective and contextually dependent. The success or failure of any given element can have its own efficacy enhanced or degraded by proximate elements. Truly, to extract an element of the entire conversation assess that aspect and return meaningful results is a challenging endeavor for a number of reasons.

Because so many elements of the civic conversation are interdependent, contextual, and relational, it is not easy to view one element in isolation to generate a positivist perspective. The performance of the briefing document as a foundation for creative thought can be influenced by the participant's reading ability or comprehension, by the mix of collaborators at the event, by the adjunct materials that the participant has to work with. The concepts contained in the briefing document are subject to re-interpretation and representation early in the process by a pedagogical presenter or by comments (perhaps insightful, perhaps misdirected) from other participants. The construction of this document is challenging, and assessing how the document performs to support and catalyze creative conversation is equally challenging.

5.2 EVALUATING DELIBERATIVE COMMUNITY MEETINGS FOR ROUTE 51

Civic conversation might be used to reframe information, to encourage a new framing of an issue to pass into the polity, or to pass to key actors within a community. In the summer of 2015, I was a part of conducting a series of deliberative community events at which conversation centered on the a set of models for urban corridor redesign in the South Pittsburgh area. Four meetings were held throughout the month of July. One meeting was a dialog of experts: city planners, engineers, economic development and real estate professionals. The other three meetings focused on engaging the citizenry. Community participants were asked to share:

1. How do you make use of Route 51 today?
2. What challenges will future development need to address?
3. What kind of development will be best for the future of the Route 51 corridor?

The convening organizations, Metro 21 and the Remaking Cities Institute, hoped to get feedback from residents that allowed residents to speak from the perspective of the system as a whole. They wanted residents to speak from their own perspective as well as that of their neighbors. Conveners hoped that residents could understand the area around Route 51 as a network of systems that were connected to the activity along Route 51. The specific systems at play were the natural environment, the built environment, transportation, and economic activity. Additionally, participants were to consider three use patterns and two conceptual approaches.

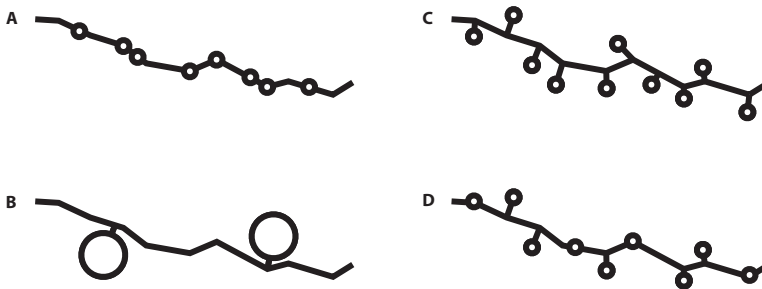


Figure 5.5 – The above use patterns are: A: various centers of activity on Route 51; B: accessible neighborhood centers of activity a short distance off the route; C: two large destination developments; D: uncontrolled development.



Figure 5.6 – The two images above were included in briefing documents to show examples of (A) transit-oriented development, and (B) green boulevards. Images were chosen deliberately to avoid making either choice excessively enticing.

The discussion brought to light many of the practical, day-to-day concerns of the residents. For instance, access to bus stops along Route 51 needed significant improvements. Because nearby neighborhoods were often on hills or plateaus and Route 51 was at the bottom of a steep defile, pedestrian routes from neighborhoods to public transit stops were circuitous or, when more direct, difficult for the elderly to traverse. The number of abandoned buildings along Route 51 was also a significant concern. Additionally, residents were notably concerned about the prospect of the renovation of a nearby deteriorating mall and what that might mean for their neighborhoods.

In preparation for the events, we had discussed many different models that might be useful for people to use in their deliberations. I also created a small system map that showed some of the feedback loops among a variety of systems. These interrelations were the result of some of the challenges that emerged along Route 51: flooding, combined sewer overflow, abandoned buildings, and so on.

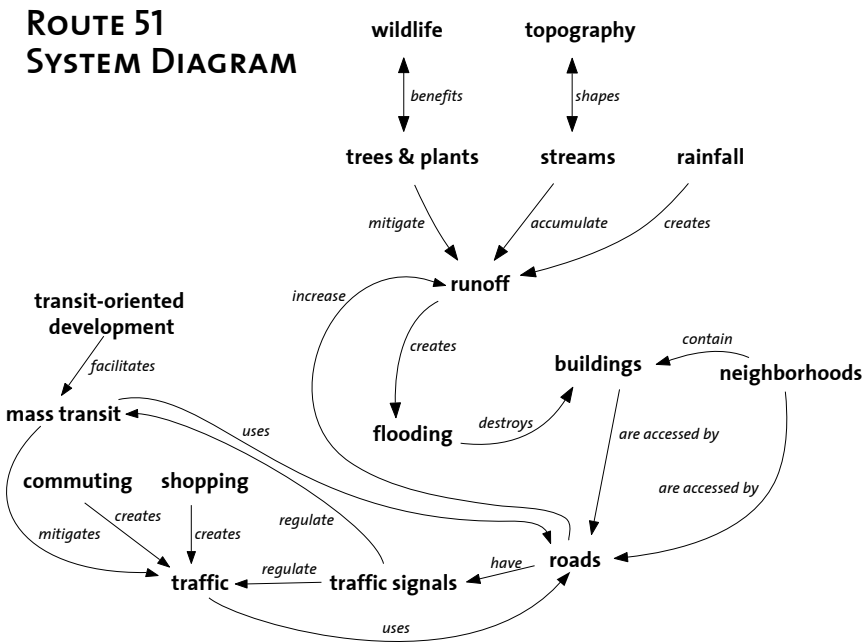


Figure 5.7 — System diagram of development and flooding in the Route 51 corridor.

This early draft map is obviously incomplete and was discarded as the design process developed, but the discarding of it highlights a significant challenge for civic conversations: the time-bounded nature of meeting and the challenge of shifting perspective from individual- and need-oriented to neighborhood- and system-oriented is quite difficult.

Considering the network of systems, thinking about the conceptual approaches was difficult for residents to do in the context of the 90 minutes allotted for discussion. The complexity of this discourse was challenging to residents. During the first deliberation period, “How do you make use of Route 51 today?” residents were supplied with maps and sticky dots. Even though in later exercises, discussion progressed past the map activity, residents continued to refer back to this map, pointing and talking about the different specificities of the parts of Route 51. Residents did not approach the problem systemically, but talked from the perspective of their everyday use of the corridor and identifying intersections that tended to clog up, places where access to a bus stop is particularly difficult, locations where they almost got into an automotive accident, and so on. Although there was a trained human facilitator at the table, the map emerged as an additional, supportive

facilitator of deliberation. The creators of the Group Works pattern deck identify this phenomenon as guerrilla facilitation (GPLP, 2011). As a guerrilla facilitator, the map moved the conversation away from the proposed agenda and toward a more specific, more particular local discussion.

While many might consider the map an inert object, its central position on the table, the prominence of its information, the initial directive to identify places participants used in a variety of ways with colored dots, all enabled the map to proclaim itself and influence or shape the dialog throughout the session. The map continued to be present as participants referred to it in dialogs throughout the session.



Figure 5.8 — Things that mediate conversation. Courtesy of PennDOT and the Remaking Cities Institute (Public Domain).

The image above provides a clear example of this phenomenon. Even though one participant is speaking, all participants are oriented around the map. The dominance of this forceful object remained evident throughout the session. In the context of the mediation of the map, the different models of corridor development were taken hyper-literally. Participants discussed each model and pointed to locations where two large destination developments might be located, then discussed specific locations for each of the neighborhood centers and what the consequences of uncontrolled development might be.

Toward the end of the meeting, I walked up to take a few final photos, and the participants turned to me as one. “Well, we’ve decided.” one of the participants said with a clear sense of accomplishment. Accompanied by various gestures at the map, he stated “We want a transit-oriented development here, this part to be a green boulevard. This section should have neighborhood destinations.”

At this moment, I realized that our group of meeting designers was overtaxing the participants. Because we were all heavily engaged with the project, most of us were highly literate in practices of thinking systemically, thinking about design decisions from the perspective of other people than ourselves, discussing how a design might shape a set of social, economic, and natural processes. From the participants, we were assuming a level of knowledge, a degree of embeddedness in the practices of design, and a facility for perspective-taking that are learned skills we had developed over decades. We had prepared the conversation that *we* would have liked to have had about Route 51, not the conversation that *residents* needed to have. In our zeal, we had overwhelmed the participants with too much information, provided too much context, and essentially asked residents, in 90 minutes, to digest four approaches and two models, to think systemically about the corridor, then to develop a nascent approach to a design plan for the region.

While a good degree of our efforts were essentially misdirected, our first question “How do you make use of Route 51 today?” should have been the center for dialog throughout the evening. We designed the conversation to front-load the participants with all the information they would need to think systemically about the corridor; however, the burden of digesting a number of complex and seemingly unrelated concepts quickly was excessive, especially before context had been set. We could have accomplished the same goals if we had thought about the meeting as an opportunity for discovery of systemic principles. This is a fundamental concept from teaching practice: rather than tell people what they need to learn, provide a scaffolded learning space in which participants are discovering and applying the critical concepts themselves and “making [their] ‘tacit knowledge’ come into play in the design process, not only their formal and explicit competence” (Ehn, 2008).

This somewhat misdirected and challenging experience played a valuable role to help understand the cognitive load (Sweller, 1988) that might be placed upon participants. Rather than focusing upon the somewhat mechanistic task of delivering a quantity of information to allow participants to make expert-level pronouncements in a field they are unfamiliar with, deliberation should focus on surfacing the expertise that participants bring with them.

5.3 CHALLENGES OF EVALUATING DELIBERATION

Evaluating conversation events presents some challenges that, while not insurmountable, offer a variety of ways to understand the experience. John Gastil (2013) enumerates some of the challenges particular to evaluating deliberative events—a specific subset of conversational events:

...a narrow focus on a particular aspect of the event, such as its deliberative quality; the exclusion of attention to important elements of deliberation, such as participant selection and speaking opportunities; an over-reliance on first-person interviews and self-report data; selective vignettes that usually showcase specific participants' positive experiences; particularly compelling moments in an uneven process; the favorable summary judgments of officials or witnesses with no training in ethnography or evaluation; and the optimistic and unsubstantiated attributions of policy or cultural impacts, as proclaimed by public agency staff, columnists, or event organizers. (p. 206)

A significant additional challenge that surfaces when taking a positivist, experimental approach toward understanding conversation events, is that these events are unfolding moment-to-moment. The number of variables that are aspects of the experience of the civic conversation are innumerable. One of those variables is the degree to which the issue at hand impacts the lives of the participants or what the stakes of the discussion might be for various participants. This aspect varies for each participant and is influenced by a myriad of factors, significantly the individual's own relation to the issue at stake.

Many of the situations that can be understood through the lens of the high-stakes or difficult conversations models have to do with the history and contingencies of the participants. For example, an aspect that could contribute to the difficulty of a conversation might be the participants' social identity. Past experience feeling vulnerable because of aspects of social identity can prevent participants from fully engaging in the conversation. High-stakes conversations, by definition, have serious consequences for the client participant. Those consequences are driven by the specificity of the moment of the conversation. For a researcher to artificially create high-stakes situation would be challenging and perhaps unethical. Stakes

cannot be replicated in an experimental situation. Experimental situations by definition are largely stakes-free zones. The attempts of experimenters to exert upon their subjects the kind of pressure and feeling of consequence that is entailed in a high-stakes conversation end up in Human Subjects Research training courses as examples of what not to do.

Because these events have aspects of high-stakes and difficult conversations and deal with collecting data about opinions that bear on an issue of long-term consequence, and because these opinions spring from a complex and heterogeneous community, the conveners of a conversation event that deals with planning long-term projects have no right to be wrong (Rittel & Webber, 1973). Intentionally degrading an aspect of the experience for some participants to create an experimental situation around some variable of the experience has serious consequences for the participants. For many of the events I conducted, a single representative might attend to share the opinions of a church, neighborhood, or community group. Degrading that person's experience for the purpose of generating experimental data can degrade, by proxy, the voice of an entire community. Additionally, many of the events conducted served communities that are distressed in some way. People from these distressed communities may also have a history that has been negatively informed by interaction with research experiences. As a researcher observing these events and constructing approaches based upon these observations, I closely observed the naturally occurring differences between various events.

Over a period of three years, I was involved in planning and conducting a variety of events in different venues on different topics that attracted a variety of participants. At the completion of deliberative events, the City of Pittsburgh collected information from participants by survey and made that data publicly available via the city's website and a variety of reporting formats. Invariably, participants were asked to self-report satisfaction with a variety of aspects of the deliberative process.

During that time, the following elements were cited directly or indirectly in various reports prepared by City of Pittsburgh personnel as evidence of a successful deliberation:

- the number of people engaged through outreach efforts prior to the meeting,
- the raw number of people that attended,
- the perceived amount of diversity of people that attended,

- the participants' self-reported satisfaction levels,
- if the city received actionable information from the participants at the event,
- if the meeting was conducted in an orderly, efficient fashion, and
- the general feeling of success of the city staff that attended the meeting.

While these are not unreasonable metrics for the city to monitor, several of them require a great deal of subjective interpretation to create an account. Many are not recorded in a systematic fashion. Depending upon the city staffer that attends the event, the reports of events may be rather or wildly different.

In community engagement events, institutional evaluation documents nearly always contain the number of people that attended the event. The appeal of collecting attendee numbers is easy to understand: numbers of attendees are easy to collect, the data is very easy to understand, and when considering planning for future meetings, it might be useful to know how much food and how many chairs, tables, moderators, and other elements might be appropriate to provision. Raw numbers of attendees can speak to the success of outreach events that precede the engagement events, but they do not necessarily bear upon the quality of the event itself. Regardless of the metrics selected, this kind of digitization of experience is insufficient to tell the story of a civic conversation.

Another element of data that is frequently collected by cities is the number of touchpoints. In the context of public outreach, a touchpoint might be considered any connection between government and residents: a postcard, an email message, postings on social media, door-to-door solicitation, announcements on public access television or through the newspaper. Again, this kind of monitoring may have value for entities within the city that ensure compliance, but this kind of data is ultimately less useful for designers.

The question: Did the city receive actionable information from the participants at the event? is not an effective question to ask without some kinds of qualification. "Actionable information" could include nearly any aspect. Ceasing to have public engagement meetings is one kind of actionable feedback. Getting a list of locations with potholes to fix is actionable information. For this aspect to be effectively evaluated, however, greater specificity is needed. Perhaps the different aspects of what "actionable information" are is so

well understood throughout the city government that this specificity is not necessary for internal dialogs. For a productive designer/client relationship, however, specifically enumerating the desired data, actions, and outcomes allows the meeting designer to design toward those ends.

Perhaps the challenge of evaluating such a slippery thing as conversation causes practitioners to place less focus upon it. Yet there is no shortage of things to watch out for: what can go wrong in a conversation, or proposing checklists of what to accomplish to ensure success in a session. With the complexity of the conversation event and the multiplicity of factors that compose the staging of a conversation event, setting the initial conditions to promote deeper engagement in the conversation is one of the key functions of an organizer of such events.

In late 2014, strategic conversation practitioners Chris Ertel and Lisa Kay Solomon published a book detailing a rich procedural approach for issue framing, inviting participants, planning the conversation, organizing the space, and thinking about conversation from an experiential perspective. The authors only cursorily address, however, critical questions for a practitioner who is designing these experiences, including the question of how to evaluate the experience. Ertel and Solomon refer regularly to bad experiences. Detailing a client conversation in which the goals were unclear, outcomes poorly defined, and design of the experience unaddressed, Ertel (in a tone that is a bit hyperbolic) imparts the nature of the consequences of poor strategic conversations:

...okay strategic conversations are *not* okay. They carry an immense price. They waste precious time and money—in some settings, well into the hundreds of thousands of dollars. They de-motivate participants and make them wonder if leaders know what they're doing. Worst of all, they can lead to terrible decisions that put careers or entire organizations in jeopardy. (p. 3)

Continuing, they propose five principles for a successful strategic conversation. These principles are not principles at all, however, but a checklist of activities that must be accomplished in the planning phase of the conversation:

1. Define your purpose.
2. Engage multiple perspectives.
3. Frame the issues.
4. Set the scene.
5. Make it an experience. (p. 33)

While this checklist is quite useful and valuable—Ertel and Solomon give many useful and practical suggestions to design the experience—it does little to impart what a successful or high-quality conversation *feels* like. Attempting to articulate markers of a “good” strategic conversation, Ertel and Solomon use product design as a metaphor, specifically referring to the feeling of quality in a successful designed object.

Your reasons are probably a mixture of head and heart factors. Maybe it’s your outdoor barbecue grill. You like its sleek lines, the way it consistently delivers an even heat, and the memories it carries of countless family feasts. While you could sort these factors into separate buckets, your fondness for the grill comes from the total experience of it. The best strategic conversations are like this, too. They engage your head and your gut equally, and you’re not asked to make choices between the two. (p. 128)

But overall, Ertel and Solomon are on the right track. There is an aspect of tacit knowledge that is associated with understanding what a good conversation is. While working on a strategic conversation with the Heinz Foundation, we convened the grantees to better understand the ramifications of moving from a categorical structure of supporting not-for-profits (i.e., early childhood education, performing arts, etc.) to a topical structure (sustainability, creativity, etc.). At one of the first meetings I was asked by the staff at Heinz how to know if a deliberative conversation has been successful. I answered that there were many aspects that we pay attention to when analyzing the level of success of one of these events. We ask participants to report their feelings of satisfaction on the survey instrument, we debrief the table moderators immediately after the event to discover if there were unresolved issues or challenges at any of the tables, but the *feel* of the experience, itself, is a predominant concern. How does the event seem to be going? What is the general atmosphere of the room? And that answer—highly subjective; seemingly polluted with my memories, my frame of reference, my prejudices, attitudes, values and beliefs; and seemingly unsatisfying in an epistemology that only understands truth in a testable, positivist paradigm of knowing—is the central way that a practitioner can estimate if events have been successful. That tacit dimension has remained a key marker for success, and beyond Ertel and Solomon, there are a number references to this in the literature.¹

¹ Tacit knowledge manifests as discussions of *trust* in Flores (2012), and Solomon and Flores (2001), as an aspect of expertise in Collins and Evans (2009), as an aspect of subjectivity in Guba and Lincoln (1989), and as a key way of knowing in design in Schön (1992), and Dubberly and Pangaro (2015), citing Glanville. This list is not exhaustive, and thorough discussions of tacit knowledge in design practice is a complete project in and of itself.

5.3.1 EVOKING THE GRADIENT OF OPINION AND KNOWLEDGE

Approaching designing for a civic conversation holds key differences from other design activities.

Perhaps the most well-known is Michael Polanyi's writings on tacit knowledge. Apprehending both the approach to the problem and the success of the conversation should be approached from the position of understanding that these aspects resist both verbalization and quantification. As Polanyi tells us, knowing what to look for, having a sense of the qualities of an investigation, and understanding how to extend the inquiry are all based upon a tacit understanding of the phenomena at hand (2009). This description is particularly suited to responding to the question of whether a civic conversation is good or not.

As described by Pelle Ehn (2008), the two central values of participatory design are legitimating democratic participation and informing the design process through participants' tacit knowledge. Though this is not participatory design, the civic conversation is a closely related activity. Within the context of the work I have done, the central value of an event is to evoke the gradient of opinion and understanding that exists within the room. Because participants construct their perspective of the issues based upon relations to others' perspectives (Spinoza et al., 1997), this activity is highly relational in character.

5.3.2 OUTCOMES AND FEEDBACK

First, from a political standpoint, the senior citizens seemed to be saying, "There is a relationship between mobility and dignity for older people, and when we are isolated to one side of the street we lose self-respect. Further, the government should help older citizens maintain their independence and dignity." Second, the astute politician is not indifferent to the idea that if the governing body authorizes a traffic signal against the engineer's advice, it invites every neighborhood group to demand traffic control at their intersection regardless of engineering advice. Third, the people demanding the signal probably have never been involved in politics before and a refusal to respond to their request may alienate them from future involvement. From the engineer's perspective, I suspect that there was a "right answer" to the problem, and the engineer

might have asked, “Will the council have the political courage to accept it?” But, as an elected official, I did not see the right answer. I saw a very complicated set of forces and a problem infused with choices about values symbolized by a decision about a traffic light. (Nalbandian, 1994, p. 534)

Another way to think of evaluating these civic conversations is to consider the outcomes of the conversation. If people deliberate and produce clear outcomes, those outcomes are effectively transferred to the government staffers, and if, because of compromises made for the sake of political expediency, the participants’ recommendations are never followed, then participants might legitimately wonder: “What is the point?” Deliberations are generally non-binding and, as discussed in the Environmental Charter School case in chapter 4, may not generate outcomes that are directly actionable.

Yet, outcomes might legitimately be other outcomes besides a direct manifestation in policy. One outcome that has emerged several times from different instances of deliberative community forums is a continued conversation—a conversation that is informed by the perceptions of the participants that initiated dialog in a designed engagement.

In the quote from Nalbandian above, the decision may be to deny the request for the material intervention of the traffic light. The decision may be, in spite of the city engineer’s recommendation, to install the light. In either case, *feedback* (Ashby, 1957) is a key component to an ongoing successful relationship with the community in which the government is embedded. While the design of effective feedback in resident/government communication is another complete research project, it will suffice to say here that feedback would need to be considered, directed, and designed effectively to (possibly) let the senior citizens know: that, based upon the engineer’s advice, that particular intersection is not in need of a traffic signal, or that a traffic signal will be installed, but that this is a special case with extenuating factors beyond the engineer’s advice.

Outcomes may be preferred by some community groups and reviled by other community groups. Regardless, for the governing entity to maintain effective relations with the community, feedback is critical.

5.4 USE-VALUE OF THE DATA GENERATED

The data generated by these conversations has been used in a variety of ways. The trajectory of that data is typically established by the convening organization before the event. When working with the City of Pittsburgh, participants filled out surveys at the end of the event that were a combination of open- and closed-ended questions.

Completing surveys at the end of the event is not the ideal time for this activity. Participants are tired from the event and from the emotional labor of making a personal exegesis of need for themselves and their neighborhoods. Keeping participants in the space by giving them the survey at the end of the event, however, greatly increases the likelihood that they will fill out the survey.

The closed-ended questions were predominantly Likert-type survey responses, which, when tabulated, produce scalar values that depict agreement or disagreement with some assertion or relative idea of importance of some intervention. The open-ended questions were typically transcribed, and a count was made of related responses where these could be found.

To serve the greatest potential number of participants, surveys are supplied on paper for all City of Pittsburgh events. While paper surveys require additional effort to encode digitally, the effort of that labor is borne by the convening organization. Survey data from the meetings is encoded by city employees. Additionally, by using a technology that is as widely understood as mark-making on paper, paper surveys offer the opportunity for participants to “color outside the lines” in a manner of speaking. Participants can speak back into the process by crossing out and rewriting parts of the survey questions, offering commentary on the process itself, or offering corrections of wording or rankings to be more specific to their experience. Digital surveys lock participants out from that kind of dissent.

I suggest that an amount of the scheduled meeting time be allocated at the end of the meeting for participants to fill out the surveys. During two agenda-setting deliberations for WQED, the organizers and I jointly decided to provide participants with a digital survey that would allow them to sort priorities for possible content elements for upcoming shows. In this scenario participants were asked to provide feedback via email after they had left the meeting site. Many participants did not complete the post-event online survey. We had a response rate of less than 50 percent because responses are very difficult to get after releasing participants. In city meetings where the participants filled out the survey at the end of the meeting, a greater percentage

of participants respond—typically between 80 and 95 percent. Participants who elected not to fill out the survey typically were people who left the meeting early. Having the survey completed during the meeting—positioning survey completion as a communal activity—greatly increases response rates.

While specific results of these surveys are not directly relevant to this investigation—other than the self-reported satisfaction numbers of citizens or any complaints about the format or structure of the event—I include a reference to that part of the process because the use-value of that data is quite important. The formal data generated by these meetings—meaning, the data that are considered to be the principal output of these meetings—is legitimized by members of city government in meetings as the public discourse, frozen.

5.5 CONCLUSION

Coming to an effective understanding of evaluation of conversation events is an ongoing process. The success or failure of a conversation event may lie outside of the designer's capability to promote or prevent. Noticing, however, and documenting the evolution of the project throughout the process of design and development, understanding the markers of a successful event when it is concluded, and being open to the tacit experience of the event are important ways to construct an understanding of the process as a whole.

Besides the perspective of the members of the convening or funding organization, it is also crucial to seek evaluation from participants, especially from participants who are marginalized in some way.

As professionals, designers can point to community forums as a more efficient way of processing people, point to the data generated as being produced through valid research methods, and point to the the tacit nature of the quality of the meeting event. Further support can be garnered by asking the participants to self-evaluate. Self-evaluation, however, should be done with the caveat to the convening organization that the participants are not trained in evaluation or observation, and any results based upon participant self-evaluation may be specious or not representative of the feelings of the community at large.

As a future project, I am interested in developing real-time tools for evaluating time-based event experiences. But effective conversation is not reducible to several variables. Scores from scaled evaluation, as is currently in use in my

work, generally echo my feelings after community forums. The moderator debrief also serves to bring forth issues that may have escaped my notice during the duration of the forum.

“Rightsizing” evaluation for the project is also an important consideration. In the office of the Program for Deliberative Democracy, there are a number of boxes full of extensive notes taken by moderators at forums on the issue of abortion. While the richness of the data captured is undeniable, that selfsame richness presents a processing problem: it may never be possible to command enough resources to sufficiently engage with that material.

As a result of this investigation, I remain interested in evaluation of performance and complex systems as an ongoing component of this work.

6

Conclusion

Implications for design, venues where I have shared this work

This chapter recounts findings throughout this process. I discuss the material foundations of civic conversations—how tables and chairs can direct people—the set of metaphors that are at play and the network that can be activated surrounding civic conversations. This chapter concludes with a discussion of models and implications for design practice in this area: how designing plays an active role in facilitating conversations.

Spinoso, Flores, and Dreyfus (1997) argue that humans are at their best when engaged in actively trying to change their world. Active engagement means that humans operate in the disclosive space that opens world to world. Through this work I endeavored to create change through disclosive, conversational spaces for the citizens of Pittsburgh. Considering civic and public conversations as sites for design and approaching designing from the point of facilitation reveal that the material environment that surrounds the event is a richer and broader system than we, at first, might think. Through embedded research designing facilitative objects for these conversations, I have come to understand the varied ways the material environment facilitates at the meeting, and how the intervention of the meeting itself causes an alignment of resources and activities in stakeholders and communities that surround the matter of concern.

Designers hoping to engage in this work must immerse themselves in the discipline of noticing (Mason, 2002). Because so many things in meetings are assumed, it becomes very easy to miss crucial details or patterns that are nascent in the information field. Questioning the underlying assumptions of how things work leads to richer engagement with the experience and to the opportunity to reframe things and events to produce deeper engagement and fuller disclosure from participants. Further, I do not propose that these levels are exhaustive, or complete, but that they are one useful model for structuring understanding of conversation events from a designerly perspective.

Findings from this work can be categorized on three levels: material, metaphorical, and systemic. This kind of categorization is porous, however. Assigning a particular design approach to the levels that are being proposed here does not mean that it has no implications outside of those levels. For instance, stating here that a chair has force at the material and functional level does not mean that it has no force or low force at a metaphorical level.

6.1 MATERIAL FOUNDATIONS

One level of design to consider is the design of material artifacts in an environment. Here we consider design operating at the most foundational, constitutive level: the look and feel (Houde & Hill, 1997), the choice of material, and the arrangement of objects. If we consider the set of understandings developed in chapter 3, this would be analogous to the design of the game boards, the tokens, the cards. If we consider the deliberative community meeting format described in chapter 4, this would manifest as the tables and chairs, the arrangement of the room, whether there are differentiations in the floor levels for different participants (a stage being a common feature of rooms, and a facile location for the expert panel).

Round tables are generally better for deliberative conversation events than long, rectangular banquet tables. If the only available tables are banquet tables, organizers can push two together to make a square, though this is just slightly better for the conversation dynamic than seating eight people at a long rectangular table. Because of the side-by-side seating that the banquet tables afford, banquet tables inevitably divide the table into small subgroups. Lines of sight are difficult to maintain, and when turned to talk to a neighbor at a rectangular banquet table, much of the group is occluded from vision (assuming the standard 114° field of human vision).

Often, participants end up having two discussions, a discussion at each end of the table. Participants who are committed to engaging and who are seated at banquet tables will scoot their chairs out in the middle of the long edge of the table, simulating an ovoid arrangement. But it is difficult for participants to escape the discipline of a rectangular table.

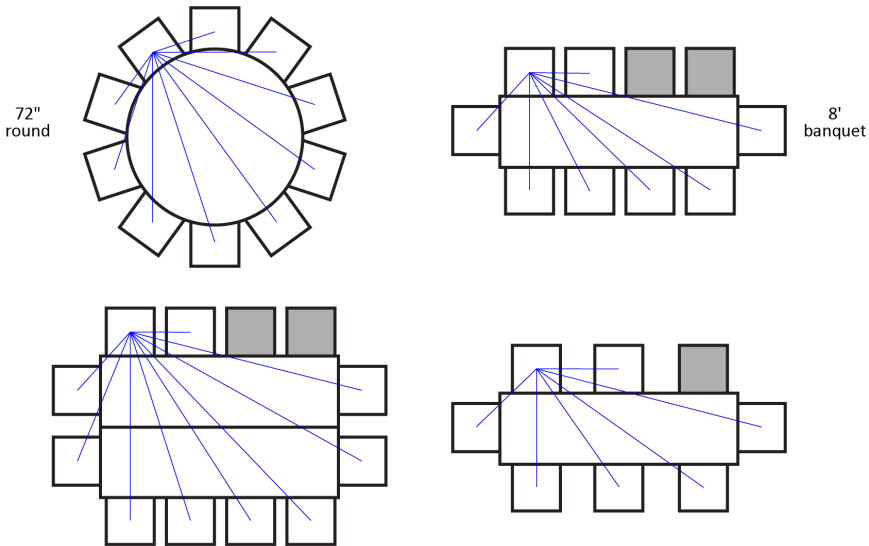


Figure 6.1 – Lines of sight on various types of seating arrangements.

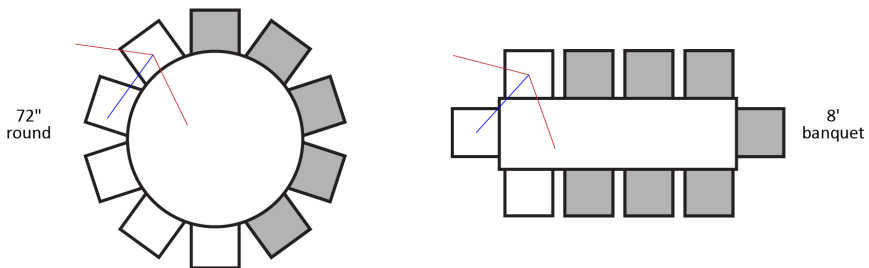


Figure 6.2 – Fields of vision when turned towards another participant on round and rectangular tables.

Microphones also have a strong disciplinary effect. Having only one microphone in the audience, and keeping control of that microphone, has a subduing effect on participants in a plenary session. To keep the question and answer portion of the meeting from running over time, the emcee can hold the microphone while a participant speaks without turning over control of the device. The microphone can also place the participants at risk. For example, the participants might feel unjustly controlled if the moderator uses the microphone to rephrase their question. In this case, if questions are rephrased for concision and clarity, turning to the participant asking the question and asking “Did I get that right?” after the rephrasing helps participants feel that their concerns are heard. At times, a participant speaking overlong, or even an expert speaking overlong can be requested to share the microphone with another individual.

While paper materials are perhaps not the most sustainable, participants who have sufficient visual acuity are able to interpret materials and respond to surveys created with ink on paper. In this contemporary, there is a strong temptation to digitize as much as possible, but the interventions of protesters detailed in chapter 4 show that the openness of simple materials provides a site for dissent and for operating outside of the systems of access and control that are deployed along with a digital solution.

The most effective meetings had a distinct parallel construction between the agenda questions, the briefing document, the pedagogical presentation, and the survey. Essentially, people can participate more effectively when the forum documents share an overarching structure. Participants must know the framework for discussion and know that framework is supported by factual information. At the end of the event, participants are then surveyed on the same information that they have deliberated upon and surveyed in a similar structure as has been present throughout the deliberation. This functional parallelism throughout the event serves as a recurrent structure that eases and stabilizes the interaction.

6.2 METAPHORS

The set of metaphors that structure the environment and the situation that surrounds the conversation play a role in shaping the conversation. Further, deliberative conversations work in part because of the metaphors that are used to organize them.

The aforementioned microphones carry powerful symbolism. On August 15, 2016, then-presidential candidate Bernie Sanders yielded his microphone to two protesters from Black Lives Matter (Merica, 2015) a group that campaigns against systemic racism directed toward black people. At the time, this act was covered extensively in the news media, and then-candidate Donald Trump decried Sanders' move, calling it "weak" (Murphy, 2015). The functionality a microphone has to elevate one's voice is both a functional necessity to help people with low hearing and an idealized, more powerful proxy of one's own voice. When I speak with members of city governments, I use a common trope: "that deliberative community fora ensure that all voices, not just the loudest, get heard." The amplified, electronic power that a microphone has to force people to listen is quite seductive.

Other elements of the material environment have a metaphorical character. Meetings are often held in expedient places such as churches, union halls, Veterans of Foreign Wars or American Legion halls, and senior centers. Metaphor can work in these settings in a number of ways. Familiarity of the meeting site lends a sense of comfort to those who come there to have a conversation and also perhaps lends a sense of urgency: this meeting is so timely, it is so crucial to understand the public's view on this matter, that city staff must use any site available.

The set of metaphors used in a deliberative community forum unset expectations for what a city meeting has been. As discussed in chapter 4, the set of metaphors that frame the conversational event must be carefully considered to reorient the participants toward fuller participation in the event. While encouraging participation is a goal, opportunities for protest and voicing the concerns of marginalized groups must be held open. Here, the design, unlike our Uber driver app from chapter 2, must be held open a degree to permit sites for alternative viewpoints and for unsanctioned ways of speaking into the system. Openings in the design of structure of the conversations for Lucy Suchman's heterogeneity offer a wider potential bandwidth of inputs to the overall system.

I can state conclusively that deliberation works, the deliberative situation works, but not because of the reason the democratic theorists think it works. While these many aspects—the careful structuring of the briefing documents, moderators ongoing inquiry for “reasons why,” selection of effective and relevant experts—are all important. The careful structuring of the rhetoric of the questions and the moderators’ encouragements to give reasons for statements also hold importance, but the principal component that drives deliberative democracy practice is that the practice references sets of behaviors and evokes our rich understandings of how to be convivial (Illich, 1990) with other people and harnesses our cultural knowledge, saying “this is how we have a civil discussion; this is where we come together to talk through our problems.”

Coming together and eating together, eating communally, is an aspect of successful deliberative events. Beyond mere symbolism, the experience of a shared meal is an intimate one. Framed thusly, these community meetings offer a moment of coming together and discussing the challenges of the community. Civic conversations create a special moment for the participants. These events are distinct from everyday life and offer an opportunity for focal practice: a moment of mastery, when we can become skillful and disclosive with one another (Spinosa, Flores, & Dreyfus, 1997).

6.3 THE NETWORK

Surrounding each of these conversation events is a network of stakeholders. This work has some compelling implications for designers working in public engagement, and conducting conversations within that network. Extending the idea of the MacGuffin (Hill, 2012) (see chapter 4), when framing a public conversation as an event, there exists a powerful opportunity to organize the mid-level actors and by proxy, the systems those actors represent, and the larger networks within which they are embedded. The MacGuffin, though it only has the power that the community ascribes to it, has power enough to catalyze action on a broad range of fronts.

Future of Fish is a US-based not-for-profit organization that induces change in commercial fishing practice by initiating community dialog in the commercial fishing industry and incubating technology startups that provide products to address issues of illegal or unethical practices. Connecting the mid-level actors that surround a deliberative event makes space for emergence. The

work done by Future of Fish is nearly exclusively connecting the mid-level actors in a system (Arnold Mages & Onafuwa, 2018). Cheryl Dahle's (founder and executive director of Future of Fish) work is in the network, so to speak, and consists of surfacing collaborative opportunities and then fostering innovation and development between stakeholders. This work supports Dahle's assertion that this network is an important site for action (Future of Fish, 2015). Witnessing the collaborations that arose spontaneously through the WQED THINK! project shows the compelling power of these events (see chapter 4 for the account).

The Environmental Charter School (chapter 4) conversations showed that while the outcome of a deliberative community event can be a statement of values, even a complex and granular statement of values, those values must be interpreted and reified as something the community can use. For ECS, it took harnessing the power and diversity of the network that existed within the organization on an ongoing way to realize the value in their community work.

6.4 ON MODELS

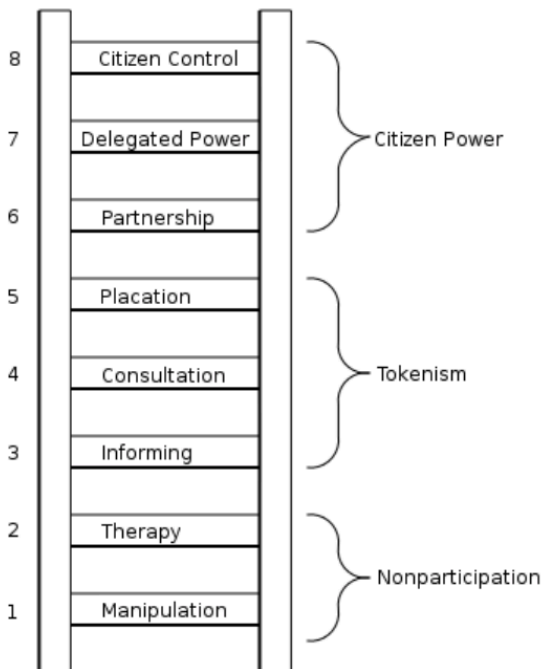


Figure 6.3 — Ladder of participation by Arnstein (1969)

Models are imperfect (Beer, 1966). The high-stakes model fits planning conversations only imperfectly. Some conversations do not have the one, liminal moment where the challenges are brought into focus, where one decision happens. Sometimes, planning conversations are held, but the group affected has no voice in the process. At times, in the case of non-human actors or natural systems, a voice does not exist, and experts are left to advocate for; or worse, exploit those

relationships. In a holistic structure similar to Scharmer's conversational fields (see chapter 5), Sherry Arnstein (1969) offers the ladder of citizen participation (shown at right). As Arnstein tells us, the model juxtaposes powerless citizens with powerful decision-makers; yet, she admits, neither of those are singular populations. Arnstein returns us to the point made in chapter 1 that mechanisms of citizen participation are dependent upon a benevolent government. But not all citizens are powerless, and not all government is dominant.

When Susan Sontag says that all photographs are—to some degree—lies (Sontag, 2001), she is pointing at a similar problem as exists with models. In the same way that a photograph is not the thing photographed, a model is not the thing modeled. Understanding that degree of imperfection that must exist in all models, the exercise in conversation is neither as fraught as the high-stakes nor as engaging as Scharmer's presencing.

6.5 COMPRESSION

Compression is a challenge with these conversations. Evaluative structures that are centered around understandings of the world that are scientifically based, that think that the richness of these events is somehow reducible to principles or methods or algorithms, miss the point of these conversations.

The data of these events, in all their richness, are transitory. The experience of the event exists for the participants and the moderators, then passes into memory, where it becomes a part of the biological elements of the organisms. The imperfect memories of each participant are where the true data of the conversation live. The output gathered on surveys, in notes, even in video is just one kind of representation of the conversation event.

These events are a site where values are surfaced and have the capacity to restructure a model of the system that evoked the conversation. It is not the chain of reporting that does the work of restructuring, however, but the richness of the heterogeneous experiences of the participants and the activity that is catalyzed by these events. As no preflight checklist can ever capture the world of potential events that could happen within an aircraft, no post-event survey can adequately provide a format to capture the richness of the conversation event.

Even the planning process, done well, is contingently contingent. Trying to relate the richness of one of these processes in a report, then again in my own fourth-year review, was met with resistance by the reviewers and audience. Both asked for results they could use, not all this specificity. I would argue that the way of knowing through design is bound up in these specificities, and is irreducible in the sense of being able to pass easily from one system to another. As Michael Polanyi (2009, p. 18) says, we “know more than we can tell.” Mimi Onuoha (2017), speaking at the SPAN conference in Pittsburgh, talks about researchers preferring to collect data that fit their collection methods. To take that further, systems privilege data that fit the way they consume. A set of scored preferences, considered recommendations, a set of guidelines are all possible outcomes of these conversation events, but they do not touch the essential point of the surfacing of values, the disclosing of worlds restructuring systems.

The limitations of the conversation are that it is an *event* in the context of a larger *process*. The Environmental Charter School case (chapter 4) teaches us that while the conversation may be dramatic and compelling, much of the work of implementation or of translating statements of value into a plan for compensation—or, in other projects, a plan for poured concrete, setback regulations, or a program to create and ensure the continued existence of affordable housing—must be carried through with intention, diligence, and an ethic of materializing the charge of values.

Understanding the issue, the local context of the issue, and the rhizomatic tendrils of that issue that extend throughout the community allows event designers to invite actors to participate in conversation. What is of key importance is engaging the network of actors that exists around the issue. Even if other elements of the event fail, something useful will emerge if organizers can bring to the room earnest people who represent a complex and diverse group and who are willing to engage around the issue.

6.6 FRAMEWORK FOR A CIVIC CONVERSATION

This framework is drawn from three years of fieldwork of designing, running, reflecting upon nearly 40 community conversations covering a variety of matters of concern, with government and not-for-profit entities. The framework includes two aspects. A schematic event plan, and a model of important emotional characteristics associated with participation in civic conversations.

This framework is based upon principles of deliberative democracy articulated by James Fishkin, and extended by myself, Robert Cavalier (political and pragmatist philosopher, senior faculty at CMU and director of the PDD), Tim Dawson (then a doctoral candidate in CMU's English/rhetoric program) and Selena Schmidt (a public engagement consultant with the Public Broadcasting System) developed an agenda-based approach to serve as the initial plan for two series of meetings for different organizations.

In my version of civic conversations, (defined in Chapter 1.2.3) which steps away from Fishkin's original deliberative format — where the goal was to make a decision — I introduce two additional characteristics that more closely reflect my view of what actually happens at community conversations, and what information was communicated to actors within the city government. Civic conversations are inherently local and place-based, and civic conversations ought be guided by equity.

6.6.1 WHAT PRECIPITATES A CIVIC CONVERSATION?

When? Principally, a Civic Conversation is needed as a point of intervention when there are issues before a legislative body that are not well suited to legislation. Issues may be **too complex for legislation**; a community might discuss the complexity that surrounds a social or material issue — Rittel's wicked problems (Rittel & Weber 1973). The WQED episode *Guns in a Free Society* Rather than legislation of a single issue, lawmakers may need to gather broad input to **simultaneously set multiple priorities**, for example, when preparing a capital budget. Civic Conversation may also be needed when an issue needs **richer engagement** by the members of a community than policymaking can give. For instance, a community experiencing a collective trauma or collective grief might have a civic conversation to deliberate upon the experience — as an act of healing.

Where? Ideally, the civic conversation occurs at the intersection of an organization's capacity to provide services and the collective need of the community served by the organization. In the context of this dissertation, these organizations have been principally government organizations, but one could envision other possibilities where civic conversations might support policy making in hospitals, universities, social service oriented non-governmental organizations, or even publicly traded, for-profit corporations.

How? The civic conversation is developed from the model of the high-stakes conversation detailed earlier (section 2.2), and is a more complex version of the 2-actor expert/client model presented there. The civic conversation is a convening of multiple actors by a constitutive organization. These convenings evolved a format that may be usefully thought of as 5 steps.

1. Convening of community stakeholders
2. Design of the process of community conversation
3. Recruitment of community members
4. Community conversation
5. Communication of results

Throughout the process of convening a community conversation, equity emerges as an important aspect.

Equity, (not equality) is a key principle to observe. While a full philosophy of equity is not within the scope of this document, equity, in a simple framing, means approaching the design of the event, the framing of the dialog, the design of supporting documentation mindful of the principle of being fair or impartial. Equity also has a second meaning, that of a kind of shared ownership. Thinking of the civic conversation as an extension of the high-stakes conversation, equity as ownership points to who owns the consequences of policy. In the high-stakes conversation, the matter is owned by the party that bears the consequences that are at play in the conversation. In the civic conversation the matter is *owned* by those people within the city that bear the consequences of the policy.

This leads to the question, how to derive this equity? In a complicated community matter with conflicting interests, how might one come to understand what aspects of the community have a stake in the matter at hand. One key step that I enacted through these processes is to first **engage mid-level actors throughout the community**. These are people that are working in a manner tangential to the relevant matter of concern, but perhaps not

deeply involved in it. In the processes of this work, mid-level actors have been church leaders, employees or founders of not-for-profits, people who work with the matter at philanthropic organizations.

To develop an understanding of the matter of concern, and what and who is at risk in the situation, these mid-level actors should be convened to enrich understanding of the issue, inform the agenda for the community conversation, set goals, and anticipate outcomes. Mid-level actors not only have a contextual and situated expertise that informs the framing of the policy problems for the broader community, but also act as conduits to the community.

Once an understanding of the significant aspects of the matter of concern, with the advice and participation of the community, has been surfaced, a **design for the community** conversation can be developed. While it may seem obvious to state, the event needs to be designed to fit the constraints of the situation. The constraints are those that would be present with nearly any design project: budget, time, space. Further constraints include the nature of the topical matter, and the relation of the community with the matter. With time limitations that were extant when working with the city of Pittsburgh, key aspects of the design were predetermined. As detailed in Chapter 4, the underlying scheme of the conversation event operationalizes characteristics of deliberative to support inquiry into the matter of concern. Developing an agenda for conversation in collaboration with mid-level actors, or community stakeholders is a first significant step. Designing the conversation in collaboration with these mid-level actors helps to frame the conversation for the participants.

Recruiting participants is a key third step. The participants who will fill the meeting hall where the civic conversation is held will be referred by the mid-level actors that were part of the initial agenda setting discussions. Among other methods, announcements in various media such as newspapers, television and social media, and traditional campaigning methods such as street advocacy or door-knocking by volunteers can be used to drive attendance, but in the work I have done, the bulk of engaged attendees come directly from relationships developed by the mid-level actors. In conversations where the mid-level actors were uninvolved in helping to recruit participants, few people attended regardless of the density or volume of direct outreach.

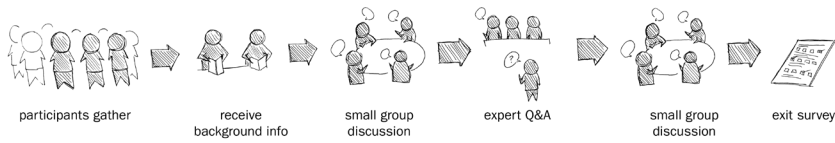
Elements of a Community Deliberative Forum

Figure 6.4 – Elements of a Community Deliberative Forum, produced for the Program for Deliberative Democracy, Carnegie Mellon University

The event of the community conversation, in most cases in this dissertation, a community deliberative forum, is held as detailed in the cases contained in Chapter 4. While this is covered in more detail in Chapter 4, beyond the programmable elements of the event shown above, we should also consider an amount of informal time before and after the event, where the participants have the opportunity to meet and talk with one another, creating or strengthening social bonds in the community.

The final significant component of the civic conversation is **communication of the results** of the conversation into the systems of policymaking. While this is typically done by a report and presentation, the format and structure of that communication should be carefully considered to achieve optimum clarity and impact within the policymaking body. As with any communication design project, consideration of how information might be most effectively consumed and used by the recipients — in this case, policymakers — affects the outcomes of the entire process.

6.6 CIVIC CONVERSATIONS ARE INHERENTLY LOCAL AND PLACE-BASED

In short, while the network might facilitate a set of relationships that are far-flung and time-shifted, municipal governments operate in a world that is circumscribed by the local city limits, imminently material and geographic, and bound up with concerns of provisioning need to community members within a particular geographic region.

In a set of social structures that were more place-based, where relations were structured principally around proximity, matters of concern might have been encountered at the workplace, in the parent-teacher association, again at the bakery or the greengrocers, and again at church. This suite of contiguous but independent institutions engendered more replete relationships based

upon spatial proximity. Essentially, people worked, participated in religious and civic life, engaged with the schools near the neighborhoods where they lived. However, this replete geographically based network has been altered fundamentally, as people identify and spend more of their time participating in social networks that are more transactional (Castells 2012).

Further, from observations in this fieldwork, supplemented by evidence developed by Foa & Mounk (2016) and the US Senate Joint Economic Committee Report on Associational Life in the US (2017), I hypothesize that residents have lost some of the civic literacy that associational life served to exercise and reinforce. Yet, it is within this context that the municipal government must operate. To catalyze these conversations, municipal government is one key, interested actor who can take steps to scaffold civic participation in the decline of these other institutions.

While this middle tier of social relations has begun to deconsolidate due (in part) to the organization of new types of social relation, design can serve to reshape democracy to be more accommodating to participants, as well as support people to reconnect with the local. Frameworks like the one supplied in this dissertation can help city government to begin to take these steps.

6.7 CONTRIBUTIONS TO KNOWLEDGE

Throughout this work I endeavored to make this information more broadly available to people who are outside of the design field, who could leverage the power of these conversation events to improve their work.

For designers, reframing the role of the designer in these meetings is a significant step. Because the cultural contexts and cultural content is a significant component of this practice, it is essential for contextually aware designers to lead the development of these events. From experience in professional practice, designers tacitly understand the difference between advocacy and communication. Bringing that understanding helps to keep the project on a balanced track in the face of multiple, conflicting priorities. Through these events, designers gain the opportunity to apply designerly understandings of structuring the material environment to support a set of behaviors: at the basest level of the supporting document design and table choice, at the mid-level of choice of location and design of participant experience, and at the highest level of engaging the community systems in these discussions.

Ultimately, what designers gain from the experience accumulated in this document is access to a set of memories (see chapter 2, diagram of a conversation) generated by an ongoing design conversation with the systems of the City of Pittsburgh. This work argues that those memories and the patterns that those memories constitute comprise a set of strategies for approaching similar challenges in the future.

Through this work I argue, and attempt to exemplify, that the designer's power in these events is a power of noticing. Noticing during the development of a deliberative community forum allows the designer to shape the discourse to be more inclusive.¹ Further, a designer coming to a robust understanding of the array of evaluative models lends a rigor to the design work and provides a metric against which experiences can be critiqued.

One important aspect of this work centers around the designer's reframing of people's conversation. When people come to a civic or public conversation bearing their matters of concern, the conversation has the potential to be a veritable potluck of matters. Through framing the process with scaffolding documents, framing the experience as a search for what neighbors need to discover about this problem, the designer has the opportunity to help people organize their matters of concern and understand them in the light of the concerns of their neighbors. Ultimately, these meetings represent the potential for opening neighbors' worlds to other worlds through disclosive conversation. The designer is part of the process to design the physical environment, but also to shape the social environment toward inclusive discourse that evokes participants' lived experiences. Through considered research, through engagement in the network of stakeholders that surrounds these issues, designers play an important role that is not taken up by other actors.

For Carnegie Mellon University's School of Design, during the fall semester of 2016, I taught the senior studio SpeakLab. In this course, where the goal was to derive approaches to wicked problems in southwestern Pennsylvania, I shared knowledge gained from this investigation. Students learned techniques of designing successful engagement events, and I led students through the process of pre-event research. We discussed my work with WQED (see chapter 4), and students had the opportunity to be involved by sharing their understanding through participation in the community dialogs and resultant television show. Student groups researched and prototyped information designs approaching the implications of guns in our society, and several groups researched and prototyped approaches for specific challenges to equity and opportunity. One student ended up working in a design capacity

on an ongoing basis with WQED during the rest of their tenure at CMU. All the students gained an understanding of how public conversations can play a role surfacing issues in the community.

Outside of the design sphere, funded jointly by the Program for Deliberative Democracy and the City of Pittsburgh, I designed *A Handbook for Deliberative Community Forums* for internal use by the City of Pittsburgh. The city printed 1,800 copies and has distributed them throughout the city government. The handbook contains a letter from Mayor Peduto testifying to the success of the resident engagement with the Affordable Housing Task Force and the city's work on the Obama White House's My Brother's Keeper initiative.

Along with Selena Schmidt and Tim Dawson, I presented this work as *Redesigning the Town Hall: Deliberative Community Forums* at the National League of Cities City Summit, in Pittsburgh, November 16–19, 2016. Representatives from over 40 cities were in attendance and shared the challenges that they had with sustaining public engagement.

Since deliberative community forums were initiated in 2015, the Office of Management & Budget has continued the practice of using deliberative community forums for the 2017 and 2018 capital budget hearings. The Office of Sustainability & Resilience in the City Planning Department has also used deliberative community forums to examine resilience planning citywide. At the time of this writing, representatives from the Mayor's Office have approached me about convening staff from the Department of Parks and Recreation,² and the Department of Public Safety (police, fire, and other emergency responders) about potential city-wide conversations on homelessness and diversion from economic precarity.

The process of the conversation is bigger than simply having a conversation. And really, the meetings where these conversations are resident are not opportunities for design in the sense that we can design a survey or "cool infographics." These meetings and the conversations that they contain are a way to test how effectively designers can organize human activity.

5

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