1. The Potential of Visual Consulting

Integrating Methods to Get Results

You are about to begin a learning journey into an intersection of three fields that are giving rise to a new way of working we are calling “visual consulting.” One is the field of visualization, and visual facilitation in particular. A second is dialogic practice, as used in consulting. And a third is change consulting, specifically designing and leading change in organizations and communities. What they have in common is an orientation to process thinking and process leadership. Applied in the interests of clients seeking innovation, culture change, alignment on new visions, process transformation, and sustainable results, they come together as “visual consulting.”

Like anyone learning something new, you’ll need to orient to what it will mean for you. What is your interest in visualization? What’s your interest in consulting? And what does this have to do with designing and leading change? Stay with these questions as we begin with a real client story that illustrates the power of visualization in a consulting engagement (Figure 1.1). It contains a number of practices you can add to your tool set right away. Starting with a story will help make the later chapters come alive.

California Drought Calls for Change

In 2013 I, Gisela, joined Ag Innovation Network as director of Water Programs and took on the role of facilitating the California Roundtable on Water & Food Supply (CRWFS). It had 25 members. They were beginning their third year of dialogue identifying top water issues in the state and writing white papers to respond. The program was funded by the California Water Foundation and others. I would be acting as a process consultant/
I knew asking the right questions is the key to good dialogue. I asked, “Given what we are looking at, what key question should the Roundtable take on for this year?”… My question surfaced a deeper question that led to a new focus “What would it take to create connections, re-connections, or effective alignments to address these systemic issues?”

facilitator, with the support and help of Ag Innovations staff. The participants were leaders in big agriculture, small agriculture, science, environment, state and local government, lawyers, regulators, and general water managers from all around the state. They were already a trusting group appreciating the off-the-record safety of the Roundtable, and our commitment to publish only what they consensually agreed upon. Being a diverse group this was the challenge. What was the most pressing issue to focus on this year?

**My Way in to Water Management**

I began by using a tried-and-true group process, being experienced in large system change and a wide variety of organizational development practices and skills with extensive experience in process design and facilitation of dialogue. In spite of some early training in draftsmanship, drawing on the wall is not my forte. This story is about how the visualization I used helped the Roundtable come to significant consensus on a critical issue in our state—water management. It is also a story of how I reached out to David, who is very skilled in visual representation and facilitation, and together we took the work further, and began a professional journey that has convinced us of the power of more deeply blending these fields we are in. We’ll share more stories about our findings as we go along.

**Inviting a Conversation on Issues**

The Roundtable had already developed an explicit group charter. Building on that, as well as individual interviews with all members, I facilitated a series of half-day meetings. In these full-group sessions we sat around tables set in a big “U” shape that suggested everyone was equal. I would create agendas on a flip chart. Confidentiality was key. My first task was to invite a conversation about what key California water issues they had on their mind. “What key question should the Roundtable take on for this year?” was on their mind. Historically this group was best at re-framing issues. An earlier report had argued
for moving from “water conservation” to “stewardship.” A second year they pushed to move from “water storage” to “retention.” To get the group going this time I asked everyone to go around and have each person speak to what they considered to be the top issues and crises. They began to realize how many ways the water system was broken and disconnected.

In a second meeting they broke into small groups and identified the disconnections on sticky notes. We then clustered them on a big wall and identified 18 clusters. The huge wall of disconnections vividly visualized the complexity and extent of the systemic dysfunction. We typed up the clusters into a meeting report that was then fed back to all participants.

Asking the right questions is the key to good dialogue. I asked a lot. My questions and their resulting dialogue then surfaced even deeper questions and eventually a new focus. “What would it take to create connections, re-connections, or effective alignments to address the wide range of systemic issues?” they asked. “What kind of thinking would be needed to generate truly new solutions?” Their inquiry led them to a new learning edge. Thinking about disconnection led to ideas about reconnection and eventually the exploration of a connectivity model. The wall was a doorway for them to look at things systemically. I think that the visualization of issues plus the dialogue worked together to catalyze this new focus.

**Initial Draft Visualizations**

In following sessions we dug deeper into on a system-level depiction of their insights about disconnection, drawing an initial diagram in PowerPoint of what I had heard them say about connectivity. This simple image (Figure 1.2) provided enough visual language for the group to engage more deeply at a systemic level, and is a great example of how visuals work in facilitation. My illustration showed the human systems acting upon the physical

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**A Flawed View of the Water System**

This PowerPoint slide shows my initial depiction of what I heard them talking about as the common view of connectivity, but it was flawed, and that was its value. It reflected and reinforced one of the most fundamental disconnects—the pervasively shared and often unexamined belief about the relationship between human systems and the larger ecosystem—that they are two separate systems, with distinct features and operational dynamics that act upon one another.
**Connectivity Illustrated**

This is my second illustration of the connectivity idea, using nesting as a way to show the human system embedded as part of the ecosystem.

System, in which I included the natural ecosystem. Because they are both physical. I used a very simple action diagram format. BUT it was flawed. The Roundtable participants pushed right back. They saw that it reflected one of the most fundamental disconnects—the pervasively shared and often unexamined belief about the relationship between human systems and the larger ecosystem—that they are two separate systems, with distinct features and operational dynamics.

This two-systems point of view leads us to think that we use our human-created engineering, management, and economic systems to act upon the ecosystem to shape it in order to serve our human systems’ needs, and that this ecosystem in turn impacts the infrastructure we build—i.e. dams and tunnels to bring water to urban areas and agricultural lands, and manage through the ecosystem’s seasonal weather, precipitation, and hydrological cycles, including drought and other global warming impacts. I had reinforced this misconception by showing two separate entities and the interaction arrows (left side of Figure 1.3).

Surfacing that this common belief may be wrong or insufficient, made it even more important that we clarify what is actually part of the human systems and the ecosystems and what the relationship between these two really looks like. I had follow-on conversations with members, and specifically a biologist who encouraged me that the right way to align these would be to put the human system as a subsystem of the ecosystem. This generated a more promising image of connectivity (Figure 1.3).

Note that the incorrect first draft is what precipitated this insight! Accepting this dynamic, of having your first drafts be challenged and considered “wrong,” is a first step in learning...
to be a visual consultant. But it needs to be paired with dialogic practice that challenges and surfaces deeply held assumptions.

**How Dialogue and Generative Images Deepen Insight**

Studies of the importance of dialogic practice in organizational change are emphasizing that meaningful change is always accompanied by a change in people’s conversation. Diagnosis by itself is inadequate. But with inquiry, learning, and hearing all perspectives, a new, coherent narrative can emerge, and this is what shapes the change. Because systemic, transformative change is always an evolving and emergent process, sustained dialogue about possibilities is needed on an ongoing basis. Generative images and metaphors that result in new insights and action often emerge during the dialogue, but we have discovered that they can also be introduced purposefully.

During the Roundtable’s ensuing dialogue on how to depict the system, the imagery evolved further. A water management specialist at the California Water Institute, said that if we look at water as a system we have to look at different uses over time that have led to the current water infrastructure. He provided a simple diagram (Figure 1.4) illustrating three types of water users who compete on water projects—the agricultural interests, the urban interests, and the environmental interests.

I worked it into a Venn diagram with three overlapping circles (Figure 1.5), checked and refined it with the specialist, and shared it with Roundtable members. It showed single-use benefits and the overlap as dual benefits and the center as the “sweet spot” for connectivity projects. This visual was the seed of a depiction of “connected benefits” that serviced not just individual users but the whole.
Tools You Can Use
Let’s step back from our story for a bit to look at the tools I was using that you can already begin to think about putting in your visual consulting toolkit.

- **Written agendas**
- **Circular & “U” shapes** for meeting, visually suggesting equality of the voices
- **Small groups** generating their ideas on sticky notes.
- **A big wall** to post and cluster sticky notes
- **Written reports** afterwards (an Ag Innovations staffer took notes throughout)
- **Visual summaries** in the form of diagrams representing the key ideas
- **Concept graphics** to provide common, systems-level language

These are approaches you can use right from the start in consulting. If you are more experienced you may be realizing that you are already working visually, since most consultants would invariably use PowerPoint and flip charts. The key is being conscious of the impacts.

Involving a Graphics Professional
The CRWFS knew it was heading toward publishing a new report on the connectivity principle they were developing, so our attention was on...
describing and illustrating these emerging ideas in as interesting a way as possible, avoiding visual cliques.

At this point I reached out to David. He has a long history of helping develop conceptual illustrations. He explained to me that there are two kinds of visuals for this kind of purpose. One is detailed enough to be self-explanatory. The other is to create a visual puzzle that pulls out inquiry and asks the viewer to fill in details. He sketched out both possibilities in his journal at the time (Figure 1.6) and then developed two more concepts in detail (Figures 1.7 and 1.8).

When I presented these refined versions to the Roundtable we got it wrong again! Beautiful! They said the detailed image that showed the shift from current perception to a proposed future perception was actually MUCH more complex in reality. Others said the environmental image (Figure 1.8) looked like a state of nature and water cycles that preceded European settlement and that the environment doesn’t actually look that nice anymore. There are not water-related uses shown in the urban picture others said. As David pointed out after I debriefed the meeting with him, over explicit metaphors can run into these kinds of problems by triggering viewer disagreements.

The Roundtable agreed that maybe they shouldn’t use the detailed pictures, but just show what needs to connect and we began to develop the more abstract diagrams (Figures 1.9 and 1.10). These images emerged and were used in the report. Colors were used to indicate the different uses, and intentionally dynamic arrows pointed toward the complexity of each area.

Resolution of a Connectivity Model

This depiction of the human systems embedded in the ecosystems represented the distilled essence of many hours-long dialogue over months. In full color these diagrams really caught the eye.
The From Crisis to Connectivity report is available for download at the Ag Innovations website—http://www.aginnovations.org.

Simply search for “From Crisis to Connectivity” and you can download the report.
Illustrating the History

In parallel with our visualization of connectivity, we worked on looking at the three water uses in California over time: urban, agricultural, and environmental. This visual also clarified the historical progression from single to dual to connected uses and benefits (Figure 1.11)—another breakthrough in how to approach developing systemic solutions.

Humans Think in Maps and Itineraries

David pointed out during our sketching session, that humans want to think about systems and connections and also want to think about time. This divides graphics into two big categories—map-like images and journey or itinerary images. The final full illustration is shown in Figure 1.11. The result of the dialogue using drafts of images crystallized and confirmed for the Roundtable that the human systems need to be seen as a subset of the ecosystem, forming one interrelated system. This visualization of the two systems reduces the contradiction between the two and generates new ways of perceiving solutions.

Patiently Getting Consensus

Getting consensus on the From Crisis to Connectivity report (Figure 1.12) was a breakthrough for the Roundtable. It was an effort to capture the emerging shift in their fundamental thinking about water in California, at the paradigm level.

It is important to appreciate that a critical part of the process of writing the consensual report was dialogic, supported by powerful visuals and careful note taking. The fact that our sustained dialogue led to understanding and alignment among such a diverse group of stakeholders who were often at odds, lent the report unusual credibility.
sustained dialogue led to understanding and alignment among such a diverse group of stakeholders who were often at odds, lent the report unusual credibility. As a result of this alignment, the report has been widely circulated amongst top leaders in the water world in California.

Moving to Implementation and Change
After the report was published, the issue of groundwater was moving to the front of the Roundtable’s attention, as years of drought in California were pulling policy makers toward policies that would respond to the problem. The Roundtable decided to look at specific cases through their new framework. The success we had in using visualization to focus consensus and dialogue in our report led me to reach out again to David and ask if he could support our conversation with visual facilitation. I asked him to help co-facilitate the next meeting.

The challenge in addressing groundwater across sectoral lines stems from the fact that farmers, hydrologists, politicians, regulators, environmentalists, and urban water users all have slightly different conceptions of how it all works. To even engage the issue in a systemic way the roundtable needed to develop some common language. We decided to use mapping to address this problem directly.

The strategy was to draw a picture of the hydrologic cycle, which is well visualized in many sources. David found one online that was at the right level of generality and created the large (4’x8’) framework shown in Figure 1.13.

**The Language of the Hydrologic Cycle**
The CRWFS participants had a rigorous discussion about all this language, identifying and adding sticky notes to the general ones we provided. One of the challenges of cross-sector stakeholder groups is the great diversity in meaning for what sound like common English words.
We decided to intentionally leave off most of the labeling, except for the basic layers. These we put on sticky notes. The session involved having the group as a whole determine which labels were used for which part of the system, seen as an integrated whole, and adding labels we hadn’t uncovered. Our hope was that the hour or so that the group spent wrestling with the map, they would come to an aligned view of the whole system before starting their discussion about what to do in a specific California region. This happened!

The group went on to analyze a Kings Canyon groundwater case and the decision systems around it. This part of the work is confidential. Everyone found the process very helpful.

We shared this story to demonstrate how an internal consultant who is experienced in dialogue, can partner with an experienced, external, visual consultant. The fact that we are both experienced facilitators allowed us to understand each other and work the synergies. Our success with this pairing of dialogue and visualization in the context of change work led us to do other longer term projects where organizational change was the agenda. One of those, the Visioning and Change Alignment Process at the University of California at Merced will provide an integrative case later in the book.

How Can You Begin Developing Visual Consulting Capability?

- **Start with what you know already.** Gisela is not a visual consultant but she understands the power of visual thinking and combining visual tools with dialogue. David came to this integration from the other direction, understanding visual facilitation and then learning more about the power of dialogue. Start where you are.

- **Collaborate.** You may be an experienced change consultant looking for visualization help or a visual practitioner interested in change work. Both fields are well developed as separate fields, as is the field of dialogic practice. We’ve concluded that in change work, separating these fields is a handicap that can be overcome.
with awareness and collaboration. Our consulting work almost always benefits from collaboration, as we will consistently point out as we go along.

- **Take what resonates and practice.** It’s tempting to offer a “paint-by-numbers” set of suggestions, but we know from our experience that this would not create a strong foundation for you. What we can do is share what we have found works in our experience in a way that you can see the potential or the approach, and then invite you to take what resonates and customize it to your circumstances, and skip what isn’t relevant. Practicing using different tools and approaches is essential to your development (SideStory 1.1).

We’ve chosen to focus on the consulting challenge of designing and leading change as the vehicle for this book, knowing that all consulting engagements have an implicit agreement to help change something for the better. We know that what “better” means is, of course, something your client will have a lot to say about, and that there are as many different kinds of “better” as there are different kinds of clients.

But bringing something into existence that wasn’t present before you began consulting is the generic purpose of any consulting engagement. The change arena is one needing critical competency development across the boards as the scale and complexity of our current organizational, community, and environmental challenges increase. We have identified seven challenges of change, the understanding of which will help prepare you for a strong consulting practice. We know from experience that each of the challenges can be met creatively, bringing visualization, dialogic practice, and change methodology together through an understanding of process leadership and its principles and practices.

Now we will turn to looking at the consulting process step by step, beginning with the basics.

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**Summary of Visual Facilitation Tools**

Stepping back again from the story reveals a set of visualization tools and some regarding change and dialogue.

- **Circular & “U” shapes** for meeting, visually suggesting equality of the voices
- **Visualized agendas** on flip charts
- **Small groups** generating their ideas on sticky notes and a big wall to post and cluster them
- **Visual summaries** in the form of diagrams representing the key ideas
- **Written summaries** of verbal conversation
- **Concept graphics** to provide common, systems level language
- **Mapping** on graphic wall templates to get alignment on systemic views and language
- **Exploring cases** with visual facilitation
- **Using explicit versions** to get consensus
- **Continuing dialogue**, sustained long enough to hear all voices and surface underlying beliefs and assumptions
- **Show change over time** through visual histories
- **Consensus-based, well-written, and highly visual final reports**