I: Just Imagine
What if Meetings Were Really Fun AND Productive?

IMAGINE

- Visions
- Values
- Actions
- Results
1: Just Imagine

This section provides a high-level overview of visual meetings, so that you can imagine all the different ways they can work for you, and how you can start successfully. Themes begun here reappear in later chapters that begin to explain some of the ways you can build on these fundamentals.

Chapter 1: Visualization Is Worth 80 IQ Points Stories of inventing visual strategies at Apple Computer for agenda management, histories, visions, dialogue support; why point of view is so important; overview of the learning cycle and how visuals support each step; International Forum of Visual Practitioners as a mirror of what is possible.

Chapter 2: Everybody Knows Graphic Language Graphics as an outgrowth of gestural communication; how to begin playing around with graphics; exercises to unlock your ability to draw; how to hang paper; basic shapes and pictographs; thinking about basic formats.

Chapter 3: Four Easy Ways to Get Started Visualizing for your personal note taking and thinking; working with flip charts and napkins in informal situations; using simple graphic templates; getting others to do the drawing.
1. Visualization Is Worth 80 IQ Points
Tapping Energy, Intelligence, & Creativity

Let’s start understanding visual meetings by imagining what is possible when you use active visualization with groups, through the lens of a real story about one of the more creative companies in our times —Apple. I was part of a team that designed and led the Leadership Experience, a flagship program of the fledgling Apple University, in 1985. Inspired by the graphical nature of Apple’s products, we applied many strategies you can easily repeat.

The Apple Leadership Expeditions

One warm afternoon in the summer of that year, some 35 young leaders from what was then called Apple Computer piled off buses at Pajaro Dunes, a conference and condo site on the coast of California south of Silicon Valley. “The Journey is the Reward,” read their T-shirts. Guides were dressed in mountain gear. Inside the rustic main building at Pajaro participants found a basically empty room, two huge piles of furniture draped with white nylon parachutes to look a bit like mountains, and a wall of nine screens. Everyone was invited to sit on the floor and wait in the semidarkness. Their weeklong Leadership Expedition was about to begin. IBM’s PC business was exploding, Apple was entering the fray with the first really graphic computers and they needed their middle managers to take risks and act like leaders. We were focused on having them visualize this possibility, and worked to have the whole meeting communicate this intention.

The nine screens suddenly flashed into life as chest-rocking Dolby sound carried the booming voice of Jim Whittaker, first American to climb K2 (the second tallest mountain in the world) and leader of the first team to include women. “This is the story of our historic climb,” he began over the pulsing sound, now carrying music themes that would transport us to another world high above Nepal. For 15 minutes the multimedia show focused on the theme of the week—that leadership was an expedition, a team event, and required initiative and daring and creativity.
Our design team had worked for weeks with Dorothy Largay and the internal Apple HR team getting ready for this event. We knew, given the creativity, drive, and youth of Apple, that this gathering needed to be unique, and challenge them to the limits of their abilities. It all hinged on a premise, that their perspective on life at work needed to shift from delivering well on orders and requests to getting out front and leading into the unknowns of a new market. We had to shift their internal mental models—their point of view.

Renaming the Leadership Experience the Leadership Expedition and starting with the expedition story of K2 was just the beginning. We reinforced this “frame” with a physical and visual environment that painted a picture of possibility all through the week. We appreciated that theater has long employed imagery and visualization of this sort to move people into new frames of mind. It was in this spirit that after the opening show we said, “Under the parachutes is furniture. Your first task is to create your own base camp right here in the meeting room.”

**Group Graphics**

I was on the Apple team because I had been building a new company around a very different, visual way of facilitating meetings called “Group Graphics.” It was a way of working interactively with visual communication inspired by the way architects and designers work in design sessions, but applied to ordinary meetings. Since 1972 when I first began working this way, I had immersed myself in the power of visualization to transform thinking and group process. I experimented with every possible way interactive imagery could be used by groups in the playful, flexible way that spoken language works.

I couldn’t have been more thrilled than to be asked to work on the Apple project by Ranny Riley, the lead consultant. I was the one who led the creation of the visual environment. I also
graphically facilitated the design team, the open, interactive sessions with participants, and
helped keep everyone oriented with graphic agendas, simple frames of reference for our sessions, and some key visioning activities that would be key anchor points for participants. Let’s continue the story with special attention to these elements.

**Graphical User Interfaces for Meetings**

I was animated by the idea of building a “graphical user interface” for the workshop that was as accessible and compelling as the one Apple was developing for the computer. The things we ended up doing functioned like the frames on a work of visual art. They pointed the viewer toward appropriate ways to understand what was going on, but didn’t fill in the picture. In some cases these frames were metaphors and in others actual graphic templates and frameworks. As much as possible we wanted the participants to do physical and graphical things themselves to anchor the ideas in real experiences.

By having the group itself create its own base camp we got engagement early. (Part II in this book expands on this kind of idea with other suggestions.) As soon as “camp” was set up, and everyone had a chance to eat some dinner, Ranny came forward to orient them to the week, using a giant graphic agenda I had created on the wall of the meeting room. It involved using simple masking tape to create a mountain range, with little posters for our different days and events illustrating different camps along the climb. These all led to the summit, where we spelled out the overarching goal of the expedition—to create a leadership culture capable of “Getting Extraordinary Things Done at Apple.” The graphics on the big agenda matched the graphic agenda handout.

The opening orientation was only the beginning of what we created to sustain the visual support of the Leadership Expedition. Some of the other visual features built in included:

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**GRAPHIC AGENDAS**

At the Apple Leadership Experience we created a huge agenda right on the wall using masking tape and small posters for each day that looked like a mountain climb.
None of these strategies required particular skill in drawing, but all engaged the participants in using imagery in ways that appropriately focused their attention. How is it that simple imagery and metaphors have such an impact? Let’s zoom in and see how this works.

Peak and Valley Drawings

On day two of the Apple Leadership Expedition we invited all the participants to take a different point of view on their own careers. We asked them to use a simple graphic format called a “peak and valley diagram” as each one mapped out his or her career. The exercise involved drawing a line across a piece of paper, and then intuitively making a horizon line that represented the ups and downs in his or her life, and labeling the peaks and valleys. (See the steps-at-a-glance practice on this page.) It didn’t take any graphic talent at all. We asked people to share these drawings as they told the stories of their careers in pairs. I still remember Jean Louis Gassée, the debonair Frenchman who headed Apple’s marketing function, sitting on the front porch of the Pajaro Dune building next to Debbie Coleman, the brilliant, T-shirt-wearing, in-your-face CFO of Apple, and sharing their drawings. In spite of what looked like polar personal styles, the experience left them as allies during much of the rest of their tenure.

1. Begin by drawing a line across a piece of paper, and marking off the years.
2. Using your intuition, begin when you started work and draw the ups and downs in your career.
3. Go back and label the peaks and valleys.
4. Share this with a partner and discuss your insights.
We conducted this graphic history exercise in all the eight subsequent Leadership Expeditions I helped facilitate, and the dozens more run by the Apple team that we trained to take over the process. Invariably people experienced a cascade of insights and connections. We became very used to having people discover that the down periods, or challenges, were often directly related to the up, or peak periods. And I was always fascinated by how the simple shift in perspective from a linear story to the peak and valley story is what sparked these insights. By changing the graphic framework we shifted the point of view! This is a very good example, in addition, of how visual language can resolve seeming contradictions—like seeing the ups and downs of our life as unconnected separate events. Drawing out a lifeline as a peak and valley diagram makes it very clear that life is a flow of events that are deeply interconnected. Take some time to do it yourself!

**Vision Stories**

The crux of the Leadership Expedition was having all the participants create a vision for their own team that they would commit to sharing after the offsite. The process involved:

1. Listening to Dr. Martin Luther King’s “I Have a Dream” speech for inspiration, and identifying the characteristics of a compelling vision.
2. Writing out their own vision for their team, by imagining it was a movie, and creating a storyboard of the main points.
3. Providing a quick training in the evening on how to draw on flip charts—simple pictographs like those that are shared in the next chapter.
4. Asking each person to deliver the vision, using flip charts for support if they wanted, to a small group that would pretend to be their team.
5. Inviting feedback from the “crossfire” team to improve the vision by sharing what was most compelling, and where it seemed to be lacking conviction.
Creating a Shared Frame of Reference

Throughout the Leadership Expedition we invited special quests that were unusually good at story telling and painting a picture of possibilities. The catalytic one was an opening presentation by Alan Kay, a pioneering thinker from Atari, Xerox, and now Apple who conceptualized the first laptop personal computer, the DynaBook. Alan was a living example of the kind of leader we hoped the Apple participants might aspire to be. His views on the power of imagery and visual thinking in human performance were in fact directly shaping Apple’s future in his role as an Apple Fellow. As a trained molecular biologist, accomplished musician, and serious inventor his range and creativity were exceptional. He had everyone’s attention. We also knew that in this event (as in this book) everyone needed to have some sense of possibility and purpose for all the experiences we had arranged to really yield any result.

“We haven’t come close to the kind of systems we are going to build,” Alan began right off. He described the modern computer as an amplifier, working directly through kits of tools and indirectly through agents and networks. (This was way before social networking.) “It’s an architecture where the illusion of the viewer can be directly manipulated.”

We Live in a Hallucination

“We all live inside a hallucination of our own devising,” Alan claimed. He explained that we project what we know onto what we are observing. It is a ‘dream that is constantly being recreated.” Because of this, he concluded, “Point of view is worth 80 IQ points.” By that he meant that the
way you view something (and he meant literally “see”) directly impacts how much information and insight you obtain, and how smart you can be, to a very large extent—symbolized by the 80 IQ points. I’m pretty sure Alan was using the 80 IQ points as a symbol for intelligence and not trying to assert that IQ tests are a true measure of all the different kinds of intelligence we now know are possible. But is it true that visualization makes you smarter, and potentially can make groups smarter? My experience and study says yes.

**Our Point of View and Task Orientation Guide Visual Thinking**

Colin Ware’s work at the Data Visualization Research Lab at the University of New Hampshire reinforces Kay’s premise. Ware and his colleagues have developed an “eye tracker” that fits over the head and allows the research team to see precisely how subjects are detecting patterns in a complex field of information. They present an array of dozens of dots representing Fortune 500 companies. The task is to find which are connected with board of director members serving on both boards. Clicking on a dot reveals the names of the board members. In a more advanced task the participant is asked who in the transportation sector is best connected to those in the finance sector.

What Ware and his team discovered was that everyone went through a common process guided by the task they were given (that very much follows the process of this book).

1. They started by imagining the problem to solve, the task, and getting that clear.
2. They made visual queries to explore the pattern.
3. They stored chunks of information.
4. They then found patterns in the links.

They discovered that people could only hold 2 or 3 chunks of information in visual memory at a time, so they had to query and search a lot. (This is why having actual working displays is
so helpful in visual thinking.) Subjects were generally moving about three eye movements per second. Success in pattern finding was the result of connecting their top down task orientation with the bottom up stimulus from the visual searching around.

Ware is convinced that our task orientation literally drives the way we look at things. In this process we scale up through the layers of our cortex, searching for the patterns that connect. The first level of pattern finding is recognition of the basic visual material as vertical, horizontal, diagonal lines, or dots. A second level is seeing contours and lines, looking for boundaries and similarities. We look at both line and form. We then assess whether those patterns relate to our task focus and maybe at higher levels begin to make value judgements about value and such.

Ware’s research reinforces my experiences in meetings. In many ways we see what we are looking for. People begin with the purpose and outcomes, either explicitly or in their own imagination, then move to exploration and making probes to figure things out. In the visual space this involves scanning. As we store different chunks of information and cluster them we begin to see patterns, and when we find patterns we can then move to actions.

**Visualization Makes Groups Smarter**

The importance of perspective and point of view applies to groups and meetings. If participants share a common purpose they work more effectively. If groups are able to see different patterns in their thinking they get smarter. If they can remember the ideas they come up with they get more productive.

The little visual model on the front of this book illustrates the process by which groups move from imagining what is possible to taking action. Some would call this a cycle of learning. It is
also, as Ware’s research shows, a pattern of how we think visually. Each step involves visualization. Let’s look at them one by one to appreciate what is possible at each step.

**Meetings Start in Our Imagination**

The first step in any learning process in a group is having some spark of purpose. This is an event that happens in the imagination. When people join a meeting they are always trying to imagine what it is supposed to be about. This process starts before the meeting, and is supported by e-mails and other communications. It is the part of the process where people are crafting a personal story about the potential of the gathering, and probably imagining how much they want to invest. What we imagine our task to be frames our perceptions.

It really helps to provide a way for people to have this conversation with themselves, and appropriate imagery invites this. It provides a visual space into which everyone can project the purpose of a meeting—especially in these busy times. If people are confused or can’t imagine much that is productive going on it is much harder to have a productive meeting.

Imagining purpose happens in the privacy of your imagination. There you are pretty free to imagine almost anything, using pictures, words, feelings, or combinations. Our brains are like miniature holodecks, capable of very rich representations. They are limited by our life experiences and exposures, but the fact that we can recombine memories and create new patterns that are wholly imaginary doesn’t make this much of a limitation.

In my experience, visualizing meeting purposes and objectives is one of the most helpful things you can do to make a meeting work. And getting people involved early in talking about
expectations and hoped-for outcomes is even more effective. Because people are free to imagine whatever they want and often do, this investment is the first step in focusing group intelligence. You can’t control thinking, but can guide it. That is why connecting with your own experiences of visual meetings, and using real stories and pictures as catalysts for your imagination, is so important. If you think back to the Apple story, the room setup, graphic agenda, and other visuals all provided a frame for people’s imaginations.

I remember one of my colleagues telling me how she would prepare for a meeting by creating a very abstract pattern with chalks while thinking about the purpose of the gathering she was leading. She would then share this with people at the very start of the meeting, and ask everyone to share what they saw in the picture. Amazing things would come up right from the beginning.

Another colleague and I began a meeting with some generals in the U.S. Army by scattering a variety of interesting photographs around on the floor and asking everyone to pick one that appealed, for whatever reason. Then the meeting began with us standing in a circle and introducing ourselves and sharing what we associated with the image. Again the meeting came alive immediately as people shared things about themselves that couldn’t possibly have been anticipated. Our imagination and in fact our consciousness is at some level a great mystery, and often connected with many more things that we are aware of. Simple imagery can pull this out.

Then We Engage and Explore

The tangible part of meetings starts when people actually engage with each other, and whatever it is they are gathering to work on. This involves playing around and exploring new information and ideas. In fact no one can make connections and see patterns until he or she has some chunks of information to work with!
This is why so many meetings begin with presentations and overviews to bring everyone up to a similar level of familiarity with the topic. But people’s minds are not passive. To think creatively and productively everyone needs to be engaged with more than information. By this I mean paying attention, feeling excited, and actually participating in sharing information, observations, and whatever else is needed. Movement and direct involvement are all part of this stage.

John Dewey, one of America’s most challenging education theorists, believed that discovery-based education would yield the most learning. I spent eight years designing and leading discovery-based learning programs for young leaders in public affairs, and came to believe the same thing.

You can count on having participation and engagement shoot up in a meeting as soon as you begin to let people talk and express themselves, and demonstrate that you are actually listening by writing and drawing what people are saying on large sheets of paper. This kind of graphic note taking is becoming widespread because it so predictably has this effect. I am convinced that it is not the quality of the drawing or writing that has the power, but the experience of being listened to. I suspect people are far more starved for acknowledgment than they let on. If you grasp this idea you will have connected with one of the most important ideas in this book.

My first book on this subject was titled I See What You Mean! A Workbook Guide to Group Graphics. This common phrase expresses the feeling that people associate with making sense of things visually—of connecting, engaging, and getting involved. It’s the most important result you can achieve in the early stages of a group or team.
A Lot of Thinking Is Visual Pattern Finding

When people feel like they have enough information to work with, they begin focusing on finding key patterns relating to whatever purpose they came in with. Some might call this the analysis or sense-making stage. Thinking is a process of finding connections that explain things, solving problems, revealing a design, or setting the criteria for decisions. How many meetings have you been in when people say during a round of expectation gathering, “let’s think out of the box.” The boxes in our minds are the ruts we get in from looking at information the same way all the time. You will discover as you begin to work with visual meetings, that display making, mapping, diagramming, and graphic recording all shift what we can see and can’t see in different ways. Without these tools, groups are very handicapped in thinking about anything that is very complex.

There is a simple experiment you can do to appreciate how much visual patterns affect how well we can think. On the following page I describe a bean experiment that you can try yourself. It involves seeing how many beans you can count given a very short period to look at a plate full of them. Most people can’t be accurate beyond 6 to 7 beans unless they are organized in visual patterns. It should convince you that organizing information on displays is a necessary and powerful tool for thinking about anything more complex than 2 to 3 points.

I am convinced from my own experience that it is impossible to do what is called “systems thinking” without visualization. Chapter 10 explores this in depth. For now think about it in a commonsense sort of way. When you want to understand anything you can’t experience all in one moment, say how a restaurant actually works, or how to improve your business, or solving a marketing problem, then you need to be able to connect different pieces of information experienced
Visualization is worth 80 IQ points. At different times. If you want to think about how things connect and are related you will have to make some kind of display. It may be completely between your ears, in your imagination, but if you want to share it and have a whole group share the same idea, you will end up making some kind of visual display.

This idea seems so obvious to me now I sometimes have trouble understanding why people think that listening to presentation after presentation is a skillful way to learn. I would much rather engage people in cocreating a display where they find their own patterns in the information. That kind of learning sticks. That is what visual thinking is all about. This is why teachers work through ideas step by step on blackboards!

**Taking Vision to Action**

The bottom line for most meetings is having them contribute to making progress and getting results! Visualization becomes important at this step as a guide to seeing how actions play out over time. Roadmaps, game plans, dashboards, progress maps, and cases are all examples of visualization that reflect action over time, and help us think about implementation. I think enacting through visualization is tapping the power of simulation—I was always fascinated by how the simple shift in perspective from a linear story to the peak and valley story is what sparked these insights “conceptual prototyping.” The tools and techniques for this kind of visualizing are also not about drawing ability, but about the process of creating the maps and diagrams. At the point a group is ready to swing into action, if they participate in designing action plans, the chances of having team ownership and followthrough are many times greater than if they are handed assignments. Chapters 15 through 20 will share the visual tools for decision making, project management, action planning, and other forms of enactment.

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**BEAN COUNTING EXPERIMENT**

Conduct a simple experiment with a plate of beans to see how the human brain handles complexity.

1. Put four or five beans at random on the plate and hold it high so a partner can’t see how many are on the plate.
2. Then lower it and raise it quickly, giving your partner only a glance at the plate. At 4 to 5 beans everyone will immediately know how many beans.
3. Now put 8 or 9 on the plate and you will see some variation. Some will say 7. Some will say 8, and so on. Our brains cannot process more than about 6 or 7 bits of information at a time.
4. Now organize the beans in clusters, say, of four each. You can put 16 or 20 on the plate and your partner will know at a glance. This characteristic of our visual perception is behind the practice of keeping outlines and categories to 5 to 7 at each level.)

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**ENACT**

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Visualization Is Worth 80 IQ Points / 15
When you work with visuals the charts provide a way of tracking progress. I remember an engineer from Bechtel Corporation who was in one of our graphic facilitation workshops and had the experience of making a simple graphic action plan for a project, much like the one illustrated on this page. He got so excited he went back to his company, and every week would photocopy his little drawing and use a highlighter to show which parts had been accomplished. The drawing was very simple and unpolished, and for that reason actually stood out from all the other communications. It worked like one of those graphic thermometers in a fund-raising campaign!

The most important thing in enactment is having people remember what they agreed to do, and be able to refer back to documents that trigger that memory. When I first learned to record graphically for groups, I was interested that Interaction Associates called the flip chart displays “group memories.” They asserted, and I concur from experience, that when a group sees its work recorded, their trust in its validity increases, and groups will use those charts as their collective memory. Since remembering what we commit to do in meetings is so critical in implementation, I think any investment in improving retention is a direct link to greater productivity.

Doug Englebart, another one of the legendary pioneers of modern computing (inventing the mouse, windows, and hypertext), had a study group at Stanford Research Institute in the 1970s looking at how to enhance human intellect. One of Englebart’s team, Geoff Ball, wrote a little unpublished paper on Explicit Group Memory. He reported that of all the ideas he and other members of the project were exploring, the use of a common working display made the most difference. They believed that shared computer displays would be the power tools of the future. I took display to mean any kind of visual display, and understood through Geoff’s paper why chalkboards are probably the last tool a teacher would ever give up.
Fast Forward

The summer of 2008 a group of people met in a building that overlooked Chicago’s Millennium Park. This was the 15th annual meeting of the International Forum of Visual Practitioners. These are people who make their living visualizing—literally writing and drawing on the wall. Some were recorders who create visual illustrations of meetings and presentations. Others were graphic facilitators, leading strategy and innovation sessions from the front of the room with graphic templates, whiteboards, and interactive visual media. Some were traditional designers and illustrators who were jumping professions and going “real time,” using their skills for listening and creating. Some were teachers using graphics interactively in their classroom. Others were coaches and consultants just getting involved.

As a pioneer in this way of working, I attended and supported a session on using Visual Thinking for Change Management. My and other sessions offered a symbolic map of what is going on now in this movement many years after those days at Apple. I include these stories here because I hope you will see that this way of working has an enormous range, at least as broad and varied as music, the mother of performing arts. The very simple things you can do right away have a lot of impact, and visual language can expand to symphonic levels with some practice.

- Several sessions explored the use of photographic images and evocative illustrations to support group dialogue. One session reviewed the Center for Creative Leadership’s Visual Explorer kit.

- Ole Qvist Sorenson from Denmark uses Bigger Pictures to support sustainability planning in companies and cross sector meetings all over Europe. He recruited a special group of
PERSONAL NOTES
I took these during our journal workshop at the International Forum of Visual Practitioners.

THE POWERS OF VISUAL MEETINGS
1. Sparking imagination
2. Engaging people actively
3. Thinking BIG PICTURE
4. Supporting group memory and productivity

visual practitioners to participate in visualizing the Copenhagen environmental summit in the fall of 2009.

- Virginia Hamilton, leader of the California Workforce Development Institute, shared how she uses imagery to explore shadow problems and conflict in public sector groups trying to set policy. (My recording of her session is on page 17.)

- John Ward led a workshop on kinesthetic modeling, using clay and model making to think through planning and other problems.

- Regina Rowland, Tomi Nagai-Rothe, and Julie Geisike led a session on visualization for cross-cultural work.

- Several people brought and demonstrated tablet computers they were using for visualizing in virtual meetings.

- I led another session on journaling, reviewing a range of visualization and writing strategies for reflecting on one’s own journey.

If you haven’t heard of visual meetings, graphic facilitation, graphic recording, sketch notes, visual recording, imagineering, storyboarding, visual listening, group graphics, graphic templates, mind mapping, idea mapping, real-time design, or group graphics, don’t despair. Revolutions take time to gather momentum, spreading along for years and then exploding into sight.

You are catching up at just the right time. Let’s go to the next chapter, which is all about how you can reclaim your ability to draw in the simple ways that allow you to use visuals for listening and idea mapping.