Meetings are a mess— and how they got that way

> "Things are the way they are because they got that way."
> —*Quip attributed to Kenneth Boulding*

The hundreds-of-years-dominant paradigm for sessions, conferences, and meetings is *broadcast*: most of the time, one person presents and everyone else listens and watches. Why?

I think there are two principal historic reasons: one shaped by technology, the other by culture.

How technology shapes our system of education

Perhaps you're thinking: *Technology? Isn't technology a relatively recent development? How could technology have influenced how we learned hundreds of years ago?*

To answer these questions, let's take a journey back in time. It'll take a while, but stay with me and I'll shine some light on some rarely examined foundations of our current educational paradigm.

Understandably, we tend to think of technology these days as material devices such as cars, printers, and smartphones or, increasingly, as computer programs: software and apps. But this definition of what is and isn't "technology" is far too narrow.

> "Technology is anything that was invented after you were born."
> —*Alan Kay, at a Hong Kong press conference in the late 1980s*

An older reader will immediately recognize a typewriter (my Ph.D. thesis was typed on one) but a child might stare in puzzlement at a 1945 Smith-Corona Sterling. A device found on a table at a yard sale appears to be a piece of rusty sculpture until a Google search reveals it's a 90-year-old cherry stoner. By Alan Kay's definition, anything made after you became aware is technology. *Anything that's really old, we don't even recognize as technology!*

This worldview exists because human beings are incredibly good at adapting to new circumstances. This ability greatly increases our chances of surviving a hostile and treacherous world. But there's a downside. When we start making changes to our environment by making useful things, what was once new becomes part of our everyday existence. In the process, *what was formerly new becomes largely invisible to our senses*, focused as they are on the new and unexpected. As David Weinberger remarks: "Technology sinks below our consciousness like the eye blinks our brain filters out."[4]

So let's adopt a wider definition of technology and see where it takes us. (I've been influenced here by Kevin Kelly, in his thought-provoking book *What Technology Wants*.)[5]

> "Technology is anything made to solve a problem."
> —*Adrian's definition, a paraphrase of Wikipedia's definition of technology*[6]

This definition is useful because it opens our eyes to technology that we've been using for a very long time.

For example, by this definition, *science* is technology! Science is just a way that we've invented to understand the patterns we notice in the world we live in.

Agriculture is also technology: a set of procedures that solves the problem of having enough food by allowing us to produce it more efficiently.

Science and agriculture are old. Writing is older. Writing allows us to communicate asynchronously with each other.

Writing is technology!

And oldest of all—we don't really know how old—*language* is technology. Every culture, every tribe has its own languages, invented to solve the problem of real-time communication between its members.

These technologies are so old that they are invisible to us. They are part of our culture, the human air we breathe. Language, writing, and science are tools outside our conventional, narrow-scope view of technology. We instantiate these tools using invented conventions: sounds, gestures, and symbols. These sounds, gestures, and symbols, however, are secondary features of these ancient technologies. Ultimately, language, writing, and science are primarily about *human process*.

Human process has become the most invisible technology. It is inexorably and continually built into every one of us by our culture, starting the moment we are born. Our culture teaches us throughout

our life the signs, sounds, and movements that allow us to communicate with others and cope with the world. We are superbly equipped to learn to speak, write, and think before we have any self-awareness of what we are being taught.

> "We seldom realize, for example that our most private thoughts and emotions are not actually our own. For we think in terms of languages and images which we did not invent, but which were given to us by our society." —*Alan Watts*[7]

We are at best minimally aware of the processes we constantly use to learn and make sense of the world and to connect with others. They are like breathing, largely automatic and unconscious. Yet the old process technology that we adopted for practical purposes long before recorded history continues to shape our lives today.

Before language arose, we had no way to transfer what we learned during our all-too-brief lives to our tribe and following generations. "*These plants are safe to eat.*" "*You can make a sharp spearhead from this rock.*" "*Snakes live in that cave.*" All such learning had to be painfully acquired from scratch by every individual. Language allowed parents and tribal elders to pass on valuable knowledge orally, improving survival and quality of life.

Similarly, the later development of writing made it possible to share, physically transfer, and expand a permanent repository of human knowledge. And the evolution of the process methodology of science enabled us to design experiments about our world, codify the patterns we discovered, and turn them into inventions that transform our lives.

Now let's consider the effect of the historical development of language, writing, and science on education. For almost all of human history, language was our dominant mode of communication and our single most important educational tool. If you wanted to learn something, you had to travel to where someone knew what you needed to learn so they could tell it to you. Eventually schools developed: establishments for improving the efficiency of oral communication of information by bringing many students together so they could learn simultaneously from one teacher.

Language reigned supreme for millennia, thus becoming an invisible technology. Only when writing became established was it finally possible for information to be transmitted asynchronously. By that time, the model of the single teacher and multiple students was buried deep in our collective psyche. To a large extent, the book paradigm mirrored the language process, as most books were written by a single expert and absorbed by a much larger number of readers.[8]

Even science started as an individual enterprise—the early study of "natural philosophy" by Socrates, Aristotle, and others used an oral teacher–students model. Although science today is largely an intensely cooperative enterprise, we still see considerable leftovers of the older invisible technologies in its societal organization: prescribed progressions toward mastery of fields, formal paths to tenure, the format of academic meetings, and so on.

What is the impact of these powerful invisible technologies on our educational archetypes? When our culture has been steeped in technologies such as language, writing, and science for millennia, it becomes very difficult for people to consider learning models other than broadcast, even though other models may be far more appropriate today.

The earliest organized religious schools are a few thousand years old, and the oldest non-religious universities were founded almost a thousand years ago. For centuries, oral learning was the predominant modality in schools. It wasn't until the invention of the printing press in the fifteenth century that a significant number of people could learn independently from books and newspapers, which are, of course, broadcast media. While the invention of inexpensive mass-printing revolutionized society, the old broadcast teaching models were sunk so deeply and invisibly into our culture that they persist to this day. When you are taught by broadcast by teachers who were taught by broadcast it is not surprising that, when you are asked to teach, you employ the same methods.

When we are asked as adults to create a meeting, we are thus naturally primed to choose a broadcast paradigm for the "learning" portions. Even when it is brought to our attention, it is still very difficult for an individual to break away from the years of broadcast process to which he was subjected as a child.

The process we've been using for so long inhibits our ability to consider alternatives, but the quantity of "knowledge" that we currently expect adults to possess also plays a role. And this leads to the second reason why meetings are infused with broadcast methodology.

How culture shapes our system of education

For most of human history, learning was predominantly experiential. Life expectancy was low by modern standards and formal education nonexistent. Even after schools became important institutions, curricula were modest and the numbers educated were few. In the Middle Ages, formal education of children was rare; in the fifteenth century only a small percentage of European children learned to read and write, usually as a prerequisite for acceptance as a guild apprentice.

Up until around a hundred years ago, advanced education was only available for a tiny number of students, and the prerequisites for those entering university were laughable by today's standards. Isaac Newton, for example, received no formal mathematics teaching until he entered Trinity College, Cambridge, in 1661.[9] Algebra wasn't routinely taught even at university until the eighteenth century. In the Victorian era, secondary school students were expected to master the "three R's"—reading, writing and 'rithmetic—plus perhaps a few other topics such as needlework (girls only), geography, and history.

The need for jobs has driven education ever since the birth of apprenticeship programs in the Middle East four millennia ago. Apprenticeship remained the dominant model of education until the advent of the Industrial Revolution, which brought a growing need for workers just-enough capable to handle repetitive work, plus some with specialized new trainable skills such as bookkeeping and

shop-work. A period of emphasis on career and technical education ensued. Once formal education became a social and legislative requirement for a majority of children, curricula wars erupted between the conflicting goals of content and pedagogy, and these wars have been with us in some form ever since.

Whatever you think about the relative merits of "traditionalist" and "progressive" approaches to education,[10] the key cultural reason why broadcast methods remain firmly embedded in our children's education is the sheer *quantity* of high-level knowledge that society—for whatever reasons—is determined to cram into young heads during formal education. Foreign languages, advanced mathematics, social studies, health, science, and many other subjects have been added to the spelling, arithmetic, grammar, history, and geography lessons of the past, and the material taught concentrates more on conceptual understanding than memorizing facts. We now require young adults to be exposed to and absorb a staggering diversity and quantity of topics compared to our expectations of the past.

As a result, *there is no way for this added knowledge to be taught experientially in the time available*. It took centuries for some of our brightest minds to formulate the algebra that today we routinely teach to 11-year-olds! While we have probably developed better paths and techniques for sharing this educational content, any increased efficiency in delivery has not kept pace with the massive increase in expected knowledge mastery.

It is this significant cultural imposition that requires us to use primarily broadcast methods to educate our youth. The consequent mistake we make is to assume that the broadcast learning we're all exposed to as children should be extended into adulthood. While receiving specialized adult learning from an expert made sense for human history up until the industrial age, as relevant knowledge increasingly resides in our networks of colleagues and online, we have an urgent need to develop alternative adult learning. Today, most of what we need to learn to do our jobs is based on working informally and creatively with novel problems, and finding solutions that often require just-in-time information from our peers.

Being taught in school, however inefficiently, via lecture about the amazing things humans have created, discovered, and invented indoctrinates us to believe that lecturing is the normal way to learn. That's why we continue to inflict lecturing on conference audiences. It's what we're used to, and sadly we're mostly unfamiliar with alternative and more effective learning modalities that are becoming ever more important in today's world.

This book is my attempt to redress the balance by sharing techniques for adult meetings that reintroduce the experiential, participative learning that dominates our early childhood as we begin to learn to connect with others, navigate our surroundings, speak with those around us, and make sense of our world. We are richly equipped to learn through these modalities and never lose our abilities to do so. In the next chapter we'll explore key benefits we gain by turning attendees into participants.