

THE TRANSMISSION OF EXPERIENCE
by Bill Lichtenstein
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First, let me just say it. The transmission of experience.

Over a digital fiber cable. Over the internet.

Now there's something new. And you're hearing it here first.

Honestly.

But it's not just the "next big thing."

It is literally the next medium in the age-old progression of forms of communication, from language to the printed word to books to radio to film to TV.

It will change the way we communicate, and the way we live, learn and do business, just as all the other media did that came before it.

Simply because now, for the first time, you can transmit experience.

In the beginning

Consider that, in the beginning there was light. And it was good. In fact, light was a really good idea.

Light allowed us to see things. The sky. The ground. Those around us. Now, I am talking a long time ago. Before TV. Before language. Back when we moved around our world, doing our business, gathering, hunting, whatever it was people did back in those days.

Somewhere along its way, someone needed an objective symbol or sign for something important. Maybe it was an approaching lion. Fresh water. Dangerous terrain.

Out of that need, language was born.

And with it, *the transmission of information*.

Likely someone saw something and they wanted others to know about it. Communication.

Later, symbols evolved. and were recorded for the benefit of others. First on walls of caves. Later, on parchment and other surfaces.

The transmission of ideas was a very powerful thing.

It was a very long time before technology evolved to the point where it could facilitate the mass transmission of symbols (including words) to convey ideas. The earliest dated printed book, the first “mass communication,” is the “Diamond Sutra,” printed in China in 868 AD, and one of the most important sacred works of the Buddhist faith. Later, in 1041 AD, movable clay type was first used, and in 1436, Johannes Gutenberg invented the first printing press with movable type, a design that remained the standard until the 20th century. With these innovations, “mass media,” or the ability to transmit symbols and words, representations of ideas and concepts to the masses, was born.

It seems likely that even as the first bibles were rolling off the Gutenberg Press, there were cynics who failed to grasp the importance of this new technology. But books changed the world by facilitating the transmission of ideas and by preserving them for future generations. Because of printing and books, you can immerse yourself in the thoughts, ideas and views of people who lived a century or even hundreds of years ago. Mark Twain. Ernest Hemingway. Proust. Plato. Books provided both an escape from, and a connection to, the “real world” through looking at symbols (words) on a page, and then using one’s imagination. “If you have a book, you can travel the world,” school teachers are often fond of saying. Reading Hemingway’s “The Sun Also Rises” may not be the same as running with the bulls through the streets of Pamplona, Spain, with a group of American expatriats in the 1920’s. But you certainly the idea, and a sense of what it must have been like.

But, books are limited. They can transmit ideas.

But what about a representation of an actual experience?

At the same time that literature was evolving, so was visual art and visual technologies. From century upon century of representative painting, a new breed of artist emerged in the 19th and 20th centuries, who twisted and bent the rules of art to provoke an emotional and intellectual response on the part of the viewer. In this bold, new use of art, we “feel” the emotional sadness of Picasso’s “Guernica,” reflecting the horror of the Spanish Civil War, as our brain processes the images of flames, and cries of horror. We sense the unbridled exuberance of van Gogh’s “Sunflowers, as the flashes of yellow hit our retina, triggering a pleasant response. And we are intrigued by the mystery and thrill of the modern in the deconstructed confusion which nonetheless tells a coherent story in Duchamp’s “Nude Descending a Staircase, No. 2, 1912.”

At the same time, the medium of photography evolved. Photographs have the power to stir your heart and emotions. A photo can economically convey emotions you can feel, in a way that words can’t. It has been said often that “*one picture*” might equal “*one thousand words*.” By that equation, a single photograph can stir emotions equivalent to two pages of writing.

And if text was good, and a picture better, then actual sounds being transmitted provided even more data and information about an event. Hearing the sound of someone's voice lets you get more out of the interaction. And without sound, consider the difficulty in writing a description of Louis Armstrong's trumpet or Chuck Berry's guitar or the Vienna Boys Choir, to convey their greatness to someone who has never heard them. You might be able to transmit information about them, but to really "get it," you really have it to hear it for yourself.

With the advent of audio technologies over a century ago, telephones and radios proliferated throughout the culture, and suddenly you could, as AT&T used to say, "reach out and touch someone" (or at least you could hear them). Millions began gathering in front of their radios in the 1920's and 30's, to hear broadcasts from far off places. The Waldorf Astoria hotel in New York City on New Years Eve as Guy Lombardo and The Royal Canadians performed "Auld Lang Syne." You could be "front and center" at the New York Philharmonic as Arturo Toscanini conducted, or as Mario Lanza sang opera over the CBS radio network.

The sound may have been scratchy with static and interference, but that didn't matter. Those who heard early radio broadcasts, from Bobby Thompson's home run to win the one-game playoff between the Brooklyn Dodgers and the New York Giants in 1951 (*"the Giants win the pennant, the Giant's win the pennant"*), to President Franklin Roosevelt informing the nation of Pearl Harbor attack which launched the U.S. into World War II (*"we have reached our rendezvous with destiny..."*), say they never forgot what they heard.

For later generations, rock and roll was discovered on the radio. In fact, disc jockey Alan Freed coined the term "rock and roll," in the 1950's, on his radio show on WAKR in Akron, Ohio. Music became portable in a seemingly never-ending (and expensive) parade of media formats, from the original "cylinder recordings," to 78's, LP's (long playing records), 45's, reel-to-reel audio tape, 8-track, audio cassettes, CD's, RealAudio and most recently MP3s. Great composer, like Cole Porter, Leonard Bernstein, John Coltrane, Bob Dylan, the Beatles, Bruce Springsteen, Eminem, or Tupac Shakur, had a life changing impact on the lives of those who heard their music.

If radio gave listeners a sense that "you are there," (the name of Edward R. Murrow's landmark news broadcast for CBS radio news), then film and TV increased that impact exponentially, by adding images to go with the sound.

It has often been said that "text and words go to the brain, but film goes straight to the heart." That's due, in part, to the ability of film, with its combination of images, sound, editing, camerawork, dialog, music and light, to trick the brain into thinking it is seeing something that's not really there. As a result, the emotional system is triggered to feel something, often in a profound way, based on images being projected at 24 frames per second. In fact, in the early days of motion pictures, people were reported to have run from theatres in fear when they viewed projected images of waves at the seashore, thinking the room was flooding. These audiences were unsure of how to process the visual information that was being transmitted to their brains, and it triggered a powerful emotional response.

Over the last 100 years, the process of using film to transmit information and emotion has evolved to a high art. If you consider the work of director Steven Spielberg, or documentary filmmakers Ken and Ric Burns, masters of their craft, you can demonstrate that the careful weaving of sight and sound, image and music, camera move and words, can create a predictably, powerful emotional impact for the viewer.

Television bought “moving pictures” directly into the home, with its new, unbound, power to connect people. The possibilities first became clear to many on November 18, 1951, as legendary newsman Edward R. Murrow hosted a program on CBS television, which featured the transmission of pictures live from the east coast (the Brooklyn Bridge) juxtaposed with live images from the west coast (a shot of the Golden Gate Bridge.) To someone sitting at home, staring at a little 12” glass screen, in the center of a large piece of furniture, it must have seemed like science fiction to be able to see the country, live, from sea to shining sea, right in your living room. Three decades later, the arrival of music videos, and later MTV, had an indelible impact on our culture, as video and popular tunes were melded in new and bold ways. The combination of music and film was not necessarily a new technology, but MTV permanently and inextricably merged the two media in the eyes of the culture, into one, “the music video.” And the power of music videos is clear: if you think hard about a favorite song, and you have happened to have seen the music video, it becomes virtually impossible to separate the two.

Which brings us to date.

Almost.

What may, or may not, be obvious from this tour of technology, is that language, text, books, music, radio, CDs, film and TV are good at transmitting ideas, thoughts, concepts, emotions, and even images of events, across time and space.

However, no media to date has been able to transmit experience.

Experience. Any real life experience.

And that has been a limitation of media.

Until now.

The transmission of experience

Consider, for example, the experience of visiting New York, or Paris, or seeing the Grand Canyon for the first time.

Think about what it was like, and how it felt, being at a game when your favorite team won with a field goal in overtime or with a miracle shot at the buzzer.

Think about the experience of sitting in the audience listening to a favorite performer, or an author whose work may have changed your life, and maybe even having the chance to ask them a question.

Think about experiences that have touched you, or changed you in some way. Maybe wandering through the streets of city for the first time, only to accidentally find a lovely and interesting little shop or very engaging restaurant. Or finding yourself on a dance floor, playing “name that tune” as with someone you just met for the first time, and finding yourself connecting with in an unexpected way.

Those are all experiences.

And one thing that is known about experiences is that they are very hard to convey, very hard to transmit to others who did not share the experience, through any medium previously known.

We have all been in the position of coming back from a fantastic vacation in an incredibly new and different place, with post cards and photos in hand, only to have found that it was nearly impossible to translate the richness of the experience to others. Or trying to convey the wonder of having watched a three year-old child play a piano or make up a song for the very first time. “It was amazing,” we often say to others. “You should have seen it!” But for someone who did not experience it, words often fall flat. So do the snapshots.

The reason is that personal experiences affect us in a profound way. That’s one reason that teachers work so hard to create “experiences” for their students, from hatching chicken eggs to class projects to taking field trips. It is difficult, however, if not impossible, to authentically relay, relate, transmit or replicate an experience to an outside third party, through any known medium, except to describe or depict it in some way, using sound and images.

Otherwise, you “had to be there,” as they say, to “experience it first hand.”

Until now.

For the first time, there is a medium that can transmit an experience over the Internet, over a digital cable, to your computer screen. Mind you, experience is not just another sense. Experience is how we learn. It’s what forms and changes our attitudes and behaviors.

The first “platform” as they say in Internet speak, to facilitate the transmission of experience is called Second Life. It’s a web site that allows you to enter into a 3D virtual world, where you literally can go “through the looking glass” of two dimensional imagery and sound, to see, hear and experience anything that can be dreamed up. It’s based on 3D virtual reality technology that powers video games, but Second Life also incorporates a massive virtual community and real working economy that rival many small nations.

In Second Life, you can (as a 3D version of yourself that you create, called an avatar) walk, drive or fly, through thousands of imaginary lands built by the nearly 600,000 current “residents” whose own “avatars” reside there, as well, in virtual form. In Second Life you can experience the streets of Dublin, Ireland, which are so real that if you know your way around the city, you can walk to the Guinness factory, which is operational, and watch the virtual Guinness bottles on the assembly line. Or experience, as many of us did, the pride of watching hundreds of people walk a course that took hours, to raise \$30,000 (in real money) for the American Cancer Society. (Those who experienced the cancer walk described a jolt of admiration each time someone passed by wearing a sign that said “cancer survivor,” or as we offered our encouragement to someone walking by with a tag that read “lost my mom to breast cancer.”)

You can sit out on a deck, listening to a live musical performance with 50 or 60 people, chatting as the sun sets over the water. Or stumble into a disco at 2AM, filled with beautiful people, flirting and dancing to a loud pulsating beat as smoke and strobe lights create a haze in the room. Or experience what it’s like to walk through a haute couture clothing store, buying “one of these” and “one of those” for your avatar to wear.

3D virtual reality involves not only what we can see and hear, but what we can experience, through our real time interaction within this virtual world. And what makes Second Life particularly powerful is that the graphics are deceptively real, allowing them to facilitate and provoke reminiscent and identifiable experiential feelings normally equated with specific real life experiences.

When that happens, when you get a feeling of an experience you know well and have had before, I would call that a “Second Life moment.”

Second Life moments are not subjective and personal. More often than not, they are the result of careful visual and audio design. They are also predictable, and measurable, just as the careful design of a roller coaster provokes the shouts and screams of a car full of passengers at just the right spot, in a real life amusement park.

A “Second Life moment” is in fact a neurological response to a visual and audio cue, which for lack of a better word, I would call an “experiant.”

An experient, like a sound wave or a light wave, is the basic piece of sensory information being transmitted to the brain, through the eyes and ears, which, in the case of Second Life, tricks the mind into believing that you are experiencing a virtual event as real.

When you are in Second Life, you may be cognizant that you are in your office or living room, looking at your computer screen. But your brain is processing the input differently.

While in Second Life, you might find yourself sitting on a beach as the waves gently roll in, or experience the butterflies in your stomach as you skydive hundreds of feet through the clouds.

What makes Second Life particularly powerful is that it has borrowed the best graphic techniques from the video gaming and animation industries. It has also integrated a social factor, involving a real working economy, with some people earning mid-six figures in real money (\$US) selling everything from real estate to clothes for avatars to cutting-edge designed virtual furniture to offices and homes. Second Life also features a MySpace.com-like ability to form and maintain connections with people there, including real life friends and as well as those you meet “in world,” as they say.

In Second Life, you are also free to just travel throughout the “SL world,” as it is called, to experience what the other nearly 600,000 residents have built. You can also purchase your own 16-acre parcel of land, called a “sim,” and develop it into whatever you want: a Tibetan shrine, a 1970s disco, a clothing emporium, your college dorm room, or anything you can imagine.

One thing to be noted is that the early years of Second Life, from 2004 to 2006, were focused largely on entertainment and diversion, not unlike the early days of many new media. (Consider, for example, that Edison’s early kinescopes, the forerunners of modern film, focused on the risqué and titillating. This included “The Kiss,” a 20-second long short from 1896, which contained a depiction of the first cinematic kiss between a couple, and which became notorious as the first “film production” to be criticized as scandalous, bringing public demands for censorship.)

Likewise, Second Life, not unlike the Internet itself, contains the full range of human and cultural experiences, including a chance to live life on the edge. In-world, as it is called, you can choose to be anything you want, including a different sex or different sexual orientation. You can be tall or short, handsome or beautiful, or strange and fantastic. Young or old. Punk or Goth. Corporate or Fashionista. Experience the world as you would like, white, black or green. And if you can find it in Las Vegas, chances are you can find it in Second Life.

The promise of the medium for social and educational use was also evolving, and in the summer of 2006, Lichtenstein Creative Media, the Peabody Award-winning producers of the national, weekly public radio series, The Infinite Mind, paid for the construction of a 16-acre virtual broadcast center in Second Life, that included recording studios; video screening rooms; audio listening rooms; and an amphitheatre for the taping of broadcasts in front of a live studio audience, who can watch and even ask questions.

On August 3, 2006, LCM produced the first live broadcasts emanating from 3D virtual cyberspace for The Infinite Mind, public radio's most honored and listened to health and science program. Over four nights, host John Hockenberry interviewed The Infinite Mind's guests including singer/songwriter Suzanne Vega, the first major musical artist to appear and perform live in avatar form in Second Life; author Kurt Vonnegut, whose writing has chronicled what happens when mankind runs headlong into technology; Howard Rheingold, the futurist who predicted "virtual communities" well before any of us had heard of Microsoft, and John Maeda, of the MIT Media Lab, the famed think tank where they invited the CD-ROM. The interviews became part of three-one hour The Infinite Mind public radio programs, examining "virtual communities."

One of those who saw Suzanne Vega's "virtual performance" was Mitch Kapor, the chairman of board of directors of Linden Lab, which runs the Second Life platform, and founder of Lotus Development Corporation, and the developer of Lotus 1-2-3.

Kapor says watching Suzanne Vega perform in avatar form was a "spiritual experience," causing him to have a revelation about the potential of the 3D virtual media:

*"I had an **unexpected spiritual experience** two days ago. I was watching on YouTube the video of the Suzanne Vega performance [in Second Life]. What I'm seeing is her avatar, she's playing guitar and there's a live performance going on, I'm hearing it on my headphones because the audio is being streamed, but I'm watching a director cutting between multiple camera angles of a live concert.*

*I'm watching a kind of television broadcast of an event that is simultaneously real and virtual. **And all of a sudden my sense of what was real expanded a million-fold.** A fundamental shift of my awareness happened. Where this is going is toward the full interpenetration of the terrestrial reality made up out of atoms, and virtual realities made up out of bits. It's not a separate thing, **it's not a cartoon, it's not a game, it's a much, much, much, much unimaginably larger reality, and that is powerful."***

Kapor was not alone in his enthusiasm. An August 15, 2006 Wired review about music in Second Life, including Suzanne Vega's performance, began with the words "Move over, MySpace..." something that likely caught the attention of Rupert Murdoch's News Corporation, which just paid \$560 million for the on-line social network site.

At the same time, other social institutions from Harvard Law School to support groups for stroke survivors and people with Asperger's syndrome, have carved out a place for themselves.

The Infinite Mind virtual broadcast complex will remain open and continue to expand this connection between the real and virtual world. More programs are planned. Our ongoing exploration of the human mind, how it works, and how it interacts with the outside world remains a central area of interest, as does how these issues intersect with social, cultural, artistic, scientific, moral, ethical, religious, and even existential issues. That has been the beat of The Infinite Mind for the past decade. And one we will continue.

At the same time, we are seeking to work with web developers, marketers, branding experts, leading design artists, and others, from "in world" and real life, to harness the infinite and unbound possibilities of this new, emerging power of 3D virtual reality, to transmit not only information and emotion, but experience, for corporate, non-profit, government and educational institutions. We believe that the virtual 3D experience is so powerful that it has the potential to transform every aspect of culture and society, much as the original arrival of the Internet did. It's a potential that becomes instantly clear to people, once they experience stepping "through the looking glass."

Now that we are in the 3D virtual world, come and experience it for yourself.

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