The Age of Virtual Reality

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This is the Age of Virtual Reality. Already, its ubiquitous presence represents one of the great achievements of our era. "VR" is proving to be more than video games or the tools for developing critical skills. It is becoming the language of the future. And, both online and offline, we are resonating to this new reality.

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This is the Age of Virtual Reality. Today, we glimpse it in its infancy, yet this new medium is becoming the *lingua franca* of the future. Already, its ubiquitous presence represents one of the great achievements of our era.

Mostly, we find "VR" embedded in today's sensuous technologies. Sensitive cybergeeks and surfing cybersouls wield the powers of graphics and games, and we adorn these digital deities with uninhibited legitimacy. As a result, VR has captured the popular imagination before reaching anything close to maturity, and it will soon take over the economy as television did (Kerckhove.)

Indeed, VR *already* drives the global economy.

But virtual reality is more than video games, war games, flight simulators, or virtual "buildings." It is a language of the future. Whether we surf the Net or not, everyday language both online and offline—resonates to this new reality, for we are breaking with the cultural past and bonding with a virtual presence.

We are becoming cyborgs!—blending cyb(ernetics) with our org(anism).

An Ancient/Future Art Form

Still, we miss this amazing moment when we fail to recognize that VR is an *art form*. In the prophetic hands of today's techno-artist, VR runs exact parallels with past artistic achievements. Like all the arts, VR represents things "not there," and it portrays those things as though they were present. Like all the arts, VR is an intuitive system ruled by forces made sensuous. And like all the arts, VR is a form of serious make-believe.

Or, put another way, all great art is "virtual."

VR goes further, though. Consider the innovations of our cyberspace technicians: Not since the discovery of painted perspective during the Renaissance has spatial imagination been so miraculously transformed. And consider the inspirations of our multimedia gurus. Never has the interface of all the arts been so powerfully combined.

As a result, VR fulfills an old prophecy. The ancient Greek term "technology" meant *the study of art*. And, indeed, VR may prove the highest art form of postmodern culture (Kurzweil; Johnson.) In a similar historic leap, we are now returning to an oral tradition. Like VR, the power of the oral tradition emerges from the art of the narrative, which flows from nonliteral images and the call to participate.

This is not new wisdom, it is neglected wisdom.

The oral tradition has always been about power. In oral cultures, nonliteral imagination, feeling, and power intimately required each other. Unlike today's words—supposedly known only by the brain—oral "words" emerged first from the body, from visceral feelings, from the intuitive heart.

And, unlike today's words which seem only to "supervene" in life-to merely "add to"

life-oral words "intervened" in life-they were said to actually "change life."

With ancient oral cultures, the narrative experience was an aesthetic experience. That is the reason artistic skills were a prophetic necessity and prophetic skills were an artistic necessity. Indeed, early artists were called prophets, and early prophets were called artists (Wikipedia.) Both were creators of comparison and contrast—artists of analogy and affinity—and virtuosos of similarity and similitude. In short, they spoke the language of virtual reality.

Real Or Unreal?

Literal observers complain, of course, that virtual reality "isn't really real," that it "only seems real." Yet, young visionaries reveal an innate affinity with altered worlds—they welcome a dynamic and spontaneous universe—they celebrate the triumph over time and space—and they share a profound passion for something "out there." Consider, as example, their cyberspace world of never-ending openness and epic endlessness, ceaseless patterns and infinite connections, multifaceted viewpoints and multiple interpretations. Indeed, their world is a virtual kaleidoscope where infinity is not only imagined, but *made real*.

Or, consider their other "realities." Their World Wide Web, for example, has become the collective conversation of a new coexistence and the creative collaboration of a new consensus. Indeed, their realm resembles a "global human brain" in which the simultaneous firing of millions of "synapses" creates new patterns of emerging thought.

So is VR real or not? Increasingly, the digital generation sees no difference between virtual and real experience (Kerckhove.) For they experience *vital* virtual realities, *veritable* realities, *hyper*-realities—realities *beyond* realities. And they describe these experiences in "*real-time*" and "*real-life*."

Let us stretch credibility, for a moment, and give them the benefit of the doubt: Let's admit, for example, that profound art sees beyond the limits of a psychological world—looks past both subjectivity and objectivity—and ignores the private property of every creed. Let's remind ourselves that visionary art sees beyond the warmed-over truths of the past—looks past the illnesses of the present—and even points beyond its own artistic senses.

Perhaps that is the reason modern physics requires virtual reality to describe the yet undescribable. Perhaps that's the reason we are shifting from the "exaggerated control" of traditional science to the "controlled exaggeration" of experimental science. And, perhaps that's the reason some scholars claim that even "abstract thought is virtually impossible" without this metaphoric power (Lakoff, Johnson.)

Yes, of course, we admit that virtual reality is not reality itself! But VR may become the most profound *medium* of reality. Its fiction may prove more powerful than "fact." And its vision may verify more facts than fiction. As we move to a language beyond the boundaries of language, this new virtual environment may prove more real than reality itself.

A Quantum Reality?

Consider quantum realities. The new science of quantum physics turns old science upsidedown and affirms what artists have always known. Today, we often speak of quantum leaps sudden and significant changes—never fully understanding that these "leaps" may be between parallel worlds of unpredictable powers (McCarthy.)

What does this new science have to do with virtual reality? In quantum worlds, more matters than matter!

"What else but quantum mechanics," ask researchers, "explains the miraculous event of creativity" (McCrone.) "Since imagination locates itself in time, it must also locate somewhere in space. Somewhere, in other words, it takes on a physical reality" (Lockwood.)

And here is how:

In the odd world of quantum, things exist in a multitude of states until tipped toward a definite outcome by the act of "measurement." In other words, once we look, we change what is seen. That's the reason the imagination—or virtual images—of scientists often foreshadow their physical findings (Penrose; McCrone.)

So what we imagine, then, may happen in parallel worlds. There is an unavoidable bond between the observer and the world observed—between our revealed imagination and the virtual image—which makes observing a quantum event without changing it impossible (McCarthy.)

We create it, and it, in turn, creates us.

Can we imagine a world made of virtual reality?

We must!

Aesthetic Wisdom

Why have most observers never considered the "language" of VR? And, why have even fewer understood how this language works! Though enigmatic and complex, the vernacular of VR remains astonishingly simple: *Things that don't go together are placed side by side, revealing something imagined that seems essentially real.*

To accomplish this, both artist and observer immerse themselves in the interface between the expected and the unexpected—in the juxtaposition between sense and nonsense. It's a halfunveiling, half-vanishing act. It's the language of "concise ambiguity" and "vivid transparency." And the participants become either "conservative daredevils" or "cautious prophets."

They are like football quarterbacks who throw the ball where the receiver is not!

The language of VR may seem uncomfortable to traditional scholars. For in virtual reality, our senses, feelings, and emotions become cognitive extensions of the mind. We have always known that creative innovation and inspired feelings require each other. Amy Lowell wrote, for

example, "Whatever (creativity) is, emotion, apprehended or hidden, is a part of it." And today, the profit motive only deepens that bond. VR is blending the scientific with the sensuous, technology with touch, and the Internet with intimacy.

And, why not? Civilization has long recognized "aesthetic wisdom." There has always been an awesome "truth" beyond our "knee-jerk" senses and base feelings. There has always been a "knowing" in the body, a "felt truth," an "embodied truth." Indeed, "*all* thoughts arise from and are shaped by the body" (Capra.)

Perhaps VR began with the early telephone where people could *be there* with someone a thousand miles away. But future interfaces will produce far more unbelievable sensory realities. In other words, VR will be more than the "trash can" on your "desktop."

Sorcerer's Apprentice?

Yet, there is a warning in this wonderland. For we already face the crisis of "How do we know that we know?" In this world of cut-and-paste reality, certainty has been shattered, and we have virtually nothing left to stand on. Still more alarming, the things we see today are only the ghosts of technologies to come.

Even today, residents of VR resemble nomads, roaming about with no fixed home. Instead, they live in infinity of links. They review their reviewers—comment on their commentators—create shows about shows—read news commentary about news—review movie reviews about movies—follow TV guides about TV. They link, link, link. . . . And their "evidence" becomes a simulation of a simulation of a simulation. . . .

Far more perilous, though, their participation proves less virtuous than imagined. In their Sorcerer's Apprentice world, a malicious make-believe magnifies their epic illusions and empowers their illusory "facts." For them, realizing reality is like trying to recognize their friends and avoid their enemies at a masquerade party.

Obviously, we need a new veracity—a new authenticity—and a new credibility for virtual experience. We need a new way to test, discern, and ground our "evidence." And we need to do this for sanity, if for no other reason! So someone, in this historical moment, needs to hold the ropes on wild horses.

Surely, we can grab hold of this kind of discernment. The very historicity of human experience has been our beacon for centuries. In other words, we already know the right questions: Do we confuse the "oyster for the pearl"—do we mistake the medium for the message? Do we seek emotions for the sake of emotions—"kicks" for the sake of "kicks"? Does our VR experience spring from mere novelty, fad, taste, and style—quickly consumed, and soon forgotten?

In short, does our VR simply smell bad? Does it exude the rampant vanity and selfindulgence of animal-like longings? Does it manipulate us? Help or hurt us? Empower or overpower us?

Hope for the Future

Unfortunately, we cannot answer these questions unless we surrender two illusions: First, "the medium is *not* the message." For the "reality" in virtual reality is realized *through* virtual reality, not *in* virtual reality. It moves outside itself—points beyond itself—speaks apart from itself. In other words, its purpose surpasses its appearance—its meaning exceeds its medium.

In profound VR, we "see" as well as feel.

Second, VR is *not* our invention. Though we take pride in our skills, VR—as an art form—may be for us, but it is neither of us, nor by us. It has its own way of being. A story, for example, cannot be argued with or dismissed like an idea. And, it is hard for the teller of a story to twist it totally out of shape.

Ultimately, though, the beauty in virtual reality gives us hope for an uneasy future. Dostoevsky said, "Beauty will save the world" (Solzhenitsyn.) And Hans Urs von Balthasar explained why:

"Overwhelming beauty points beyond itself" (Balthasar.)

Endnotes

Aleksandr Solzhenitsyn, "Beauty Will Save the World" (Nobel Lecture) *NobelPrize.Org* <u>http://nobelprize.org/nobel_prizes/literature/laureates/1970/solzhenitsyn-lecture.html</u>

Amy Lowell, <u>http://tastymorselsoflife.blogspot.com/2008/11/never-respect-tradition-above-your.html</u>

Derrick de Kerckhove, *The Skin of Culture* (Toronto: Somerville House Publishing, 1995) p. xxi, 93.

Fritjof Capra, *The Hidden Connections: Integrating the Biological, Cognitive, and Social Dimensions of Life into a Science of Sustainability* (New York: Doubleday, 2002) p. 64, 65, 72

George Lakoff and Mark Johnson, *Philosophy in the Flesh: The Embodied Mind and Its Challenge to Western Thought* (New York, NY: Basic Books, 1999) pp. 58, 59.

Hans Urs von Balthasar, The Glory of the Lord: A Theological Aesthetics (Ignatius Press, 1991)

John McCrone, "Quantum states of mind," New Scientist, August 20, 1994, pp. 35, 36.

Kimberly A. McCarthy, "Indeterminacy and Consciousness in the Creative Process: What Quantum Physics Has to Offer," *Creativity Research Journal* Volume 6 (3) 201-219 (1993).

Michael Lockwood, Mind, Brain and the Quantum, reviewed by Stuart Sutherland in *Nature*, Vol 343 Feb. 1, 1990, p. 424.

Ray Kurzweil, *The Age of Spiritual Machines: When Computers Exceed Human Intelligence* (New York: Viking, 1999) p. 16.

Roger Penrose: "Shadows of the Mind: A Search for the Missing Science of Consciousness," quoted in the *New York Times*, Monday, October 31, 1994, by Christopher Lehmann-Haupt [Section C, Page 20, Column 3].

Steven Johnson, Interface Culture: How New Technology Transforms the Way We Create and Communicate (New York: Basic Books, 1997) pp. 54-56, 238-242.

Wikipedia, "Epimenides," <u>http://en.wikipedia.org/wiki/Epimenides</u> See also: I Chronicles 25:1, 7; II Chronicles 29:30; *The Amplified Bible* (Zondervan Publishing House, 1987).