

55th Alfred Korzybski Memorial Lecture The Alphabet Versus The Goddess: The Conflict Between Word & Image

Leonard Shlain

A child learns a novel bit of information. A set of neurons fires in his or her brain. With each reinforcement of the lesson, the same neurons fire again. The surrounding neurons, sensitized to the discharges of the first set, also begin to join in what becomes an ever-magnifying electrochemical chorus. Learned information becomes “burned” into neuronal pathways. Such is the manner by which we acquire knowledge that will endure throughout our lives. Conversely, what we fail to learn causes the withering of whole tracts of other neurons as a result of their disuse. For example, a preschooler can learn a second language with ease if taught at the right time. The same individual having to learn that second language many years later in college will find it a far more difficult task.

But what effect does the *kind* of learning have on the larger organization of the human brain? Separating our species from virtually all others, we have two highly specialized brain hemispheres. Each lobe is designed to handle essentially different types of information. The left lobe in over 90% of people is the seat of language that is perceived in a linear stream. We call this careful sequencing grammar and syntax, without which strings of words would be incoherent. The majority of other linear, sequential mental processes such as logic, reason, algebra, causality, and arithmetic also reside principally in the left hemisphere. In general, the main functions of the left proceed linearly — one thing after another — in time. It is as if evolution designed the left hemisphere as a new sense organ charged with perceiving sequential time.

The right hemisphere, in contrast, is non-verbal, yet it contributes a global awareness to events often endowing them with emotion and meaning. In general, the right perceives the world holistically and simultaneously. It responds to body language, the voice’s inflection, facial expression and is expert at grasping gestalts. It takes in whole images in a glance. The right’s primary functions are visual-spatial. We rely on it to read a map, figure out mazes, and discern faces all-at-once. Evolution assigned the right hemisphere to perceive space and complement the left’s temporal skills.

But this dichotomy also can be applied to the sexual duality. Addressing right-handers (who comprise 92% of the population), each man and each woman is a composite of both a feminine side and a masculine one. Many of the modules located in the brain that are necessary to care for children too young to use verbal language reside principally in the right hemisphere and the strategy, planning, and cooperation necessary to hunt and kill large mammals reside principally in the left hemisphere.

Learned Information Becomes “Burned” into Neuronal Pathways

In general, the right hemisphere of *both* men and women can be said to be the seat of their feminine side and the left hemisphere of both men and women is where their masculine side resides. Every culture in the world acknowledges these differences in their myths, customs and culture. The left side of the body controlled by the right brain is considered female and the right side controlled by the left brain is considered male. For example, Tories are called “right wingers” by their adversaries and are generally for discipline, fiscal responsibility, and arms. Labour is called “leftist” by its adversaries and is more supportive of welfare, childcare, and the rights of women. Left is “sinister” and human “rights” are laudable. The same distinctions hold throughout history. William Blake wrote, “Time & Space are Real Beings, a Male & a Female. Time is a Man and Space is a Woman”.

All humans are born with the innate capability to learn the grammar of the first language he or she hears. And every human is born with an innate ability to read the body language, gestures, and facial expressions of others. Evolution did not, however, prepare humans in the same way for the immense innovation called literacy. The invention of writing approximately five thousand years

ago, followed by the improved system called the alphabet 3500 years later, was on equal par with fire, the wheel and agriculture. Alphabets, the most abstract, linear, sequential, reductionist forms of writing, mimic the features of the left hemisphere. Marshall McLuhan, the 1960s media theorist once wrote, "The medium is the message". Literacy, unlike orality which requires the use of both verbal and non-verbal cues, depends primarily on the use of only the left hemisphere.

Western culture, with its unique monotheistic religions, dualistic philosophies, and distinctive perspectivist art, advanced science, and written legal codes, I propose, is the direct result of changes occurring in the brains of the users of alphabets.

While alphabet literacy has been an incontestable boon to humankind, women's rights and images have suffered under regimes newly informed by alphabet literacy. It is the central thesis of *The Alphabet Versus the Goddess* that alphabet literacy, a form of information transfer that reinforces the left hemisphere of both men and women while denigrating the role of the right hemisphere of both men and women, caused the dominance of masculine thinking in the culture at large. This led to the downfall of goddesses, women losing important rights, and property passing not through the mother's line but instead through the father's line.

Alphabets, the Most Abstract, Linear, Sequential, Reductionist Forms of Writing, Mimic the Features of the Left Hemisphere

The Israelite adoption of the West's first alphabetic sacred book introduced the Rule of Law and monotheism, but it was accompanied by an abomination of images and the goddess, and a curtailing of women's property rights. Literate Athens was misogynist and patriarchal, compared to Sparta that left to posterity not a single literary work. Yet Spartan women enjoyed extraordinary rights.

Women enjoyed real power in the new Christian religion founded on the oral sayings of Jesus and watched it disappear following the transcription of Jesus' spoken words into a sacred alphabetic text by the "Patriarchs". Despite all the detail the gospel writers supplied about Jesus, none included even a sentence describing Jesus' appearance. Like Yahweh and Allah, Jesus did not have an image. To know Him, one had to read His written words.

The central cause of the Dark Ages that followed the fall of Rome was the loss of literacy in 99% of the European population. It was during this period that the astonishing ascendancy of Mary occurred. Her image soon dominated the European landscape. This was also a time when abbesses headed monasteries, the Chivalric Code and courtly love honored women, and the Church revered its female Christian mystics. In the time of illiteracy, right hemispheric modes of love, intuition, mysticism, romance and mother worship were in evidence.

Gutenberg's invention of the printing press in 1454 caused literacy rates to soar. The primary motive driving literacy was people's desire to read the New Testament. Since the Scripture stresses love, kindness, and forgiveness, it would follow that the period following the printing press should have been characterized by these three traits. Rather, the printing press spawned the Protestant Reformation, which stressed reforms that included reading Scriptures, destroying images, and jettisoning Mary.

The outbreak of fierce religious wars among kinsmen was unprecedented. Neighbors burned neighbors at the stake. This sadistic carnage occurred in the same period that historians call the Age of Reason. Perhaps the steep rise of literacy in European society reinforced its left hemisphere at the expense of its right.

While the literate countries were bestowing on posterity the works of Galileo, Shakespeare, Newton, and Bach, the men suffered a psychosis so extreme they believed their women were so dangerous they must be murdered. The witch-hunts were the most virulent in those countries experiencing the steepest rise in literacy rates. Russia remained largely illiterate throughout this period and also suffered no witch hunts.

The Printing Press Spawned the Protestant Reformation

A colossal shift I call the Iconic Revolution began in the 19th century. The invention of photography and the discovery of electromagnetism combined to bring us film, television, computers, graphic advertising and the Internet; all of which are based on images. The increasing

reliance on right brain pattern recognition instead of left brain linear sequencing has moved culture toward equilibrium between the two hemispheres, between masculine and feminine, between word and image. Since the advent of television, women are reclaiming rights that they formally exercised. Women are serving as priestesses once again and literate cultures saturated with image information are once again embracing feminine values. The medium is the message. Perhaps, the thug who mugged the goddess was the invention of literacy.

Leonard Shlain is the author of *Art and Physics*, *Alphabet Vs. the Goddess*, and *Sex, Time and Power*, and is currently completing a book entitled *Leonardo's Brain*. Dr. Shlain holds the position of Chairman of Laparoscopic surgery at the California Pacific Medical Center in San Francisco and is an Associate Professor of Surgery at UCSF. This lecture was previously published in *ETC: A Review of General Semantics* Vol. 65, No. 2, pp. 110-113.