

## **The Asian Contribution**

Chinese Innovations in the Field of Graphic Design or Visual Communication

## **Ancient Chinese Inventions**

- Writing/ Calligraphy
- Paper making
- Block Printing
- Gunpowder
- Compass
- Fireworks

## **Evolution of Writing in China**

- It was said that Cangjie (Tsang Cheh) (2650 BCE), the legendary inventor of Chinese writing, got his ideas from observing animals' footprints and birds' claw marks on the sand as well as other natural phenomena.
  - o ) 以 將 第 工 式 単 3 sun moon mountain water rain wood dog cattle horse

# • Innovations in writing took place independently in China similar to those in Mesopotamia and Egypt.

- Chinese calligraphy, a non alphabetic visual language system.
- Chinese calligraphy's first appearance was believed to be in 1800 to 1200 BCE during Shang Dynasty in the form of *chiakuwen*, or "bone-and-shell" script.

 The earliest Chinese Pictographic, found incised on tortoise shells, flat pieces of bone and other forms of natural surfaces.



Bone and shell

### **Scripts on Tortoise Shells**

- •It's primary use was fortune telling, one could call it a method of communication between the living and the dead, as well as a method of prayer and worship.
- •At that time, people believed in ghosts and practiced divination on important occasions. They inscribed divination words on tortoise shells or animal bones, and painted them red to symbolize good luck or black to symbolize potential disasters.
- •The words were inscribed with knives. Some of them are big, some are small, some are complicated and some are simple, but they are all well defined.

### **Chinese Bronze Script (***chin-wen***)**

- Inscriptions on cast-bronze objects, including food water vessels, musical instruments, weapons, mirrors and coins.
- Ceremonial vessels used to hold food offerings during ancestor worship and vessels inscribed with dedications.



Four handled vessel with chin – wen or bronze script, inscription, 11<sup>th</sup> century b.c Bold, regular strokes of eight – line dedication which itself forms a rectangle in the vessel's bottom. A Chinese bronze "fang zun" ritual wine container, from the Western Zhou Dynasty, dated c. 1000 BC



A Chinese bronze "fang yi" ritual container, from the Western Zhou Dynasty, dated c. 1000 BC.

### **Phases of Chinese Script**

- **Chiaku-wen** (bone-and-shell)—earliest form, used to communicate with gods/ancestors (1300 BCE).
- Chin-wen (bronze script)—inscribed on mirrors, instruments, coins, weapons (1001-1100 BCE).
- Hsiao Chuan (small-seal)—abstract curves and circles (2018 BCE).
- Chen-Shu (regular style)—highest art form in China, painting/calligraphy (608 CE).

Final step in the evolution of Chinese calligraphy. It is considered the highest art form in China. It has been in continuous use for nearly two thousand years.

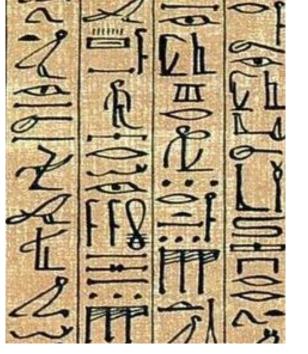
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Zhenshu ("regular style") calligraphy, written by the emperor Huizong (reigned 1100–1125/26), Bei (Northern) Song dynasty, China; in the National Palace Museum, Taipei.*Courtesy of the National Palace Museum, Taipei*  • Chinese Calligraphy is very much like the Egyptian Hieroglyphics, a language purely based on symbolic visuals.

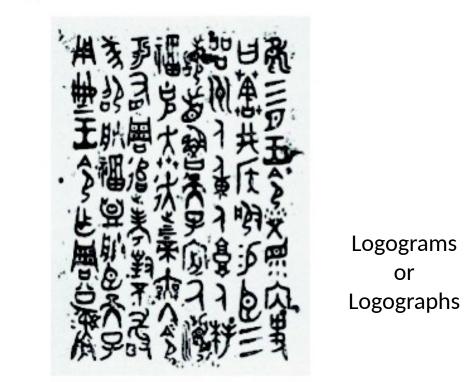
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• Chinese symbols are Logograms.

Ideograms and Phonograms



Papyrus of Ani from the Bridgeman Art Library



Chin-wen bronze script [Philip B. Meggs, Alston W.Purvis, 2012. Megg's History of Graphic Design, pg 51 fig. 3-3]

- The Chinese sacrificed realism for more abstract designs.
- The gathering of characters which change over the time to express feelings, actions, colors, sizes and even types.
- Chinese visual language was not comprised of an alphabet; instead, different shaped lines were used within an imaginary square. These lines were easily deciphered and were depictions of parts of nature.
- They intended on using abstract designs to symbolize feelings, actions, colors, and sizes. These symbols were called logograms; they represented entire words.

- The structure of Chinese calligraphy was comprised of bones, meat, blood, and muscle.
- Thick lines represented heaviness, sadness, anger, deepness, whereas thin lines stood for lightness and exuberance.
- Calligraphy could be lively and energetic or deep and delicate.

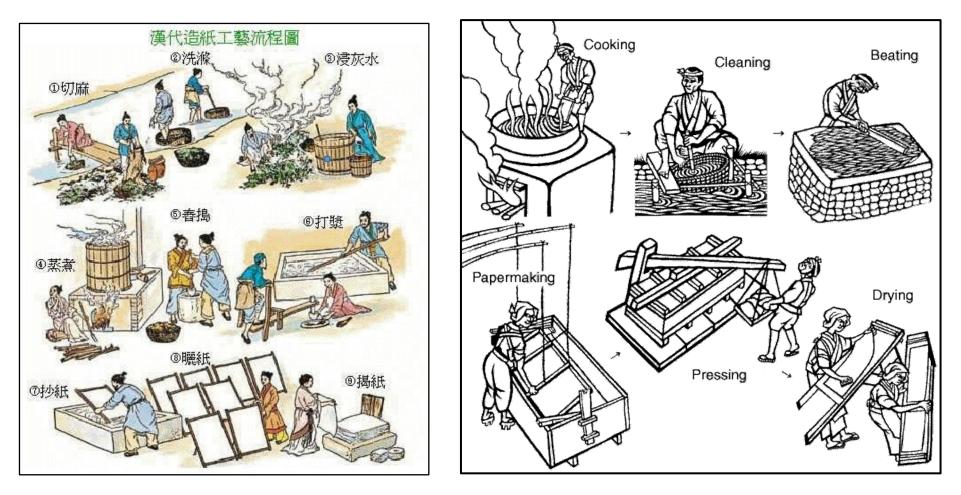
### Invention of Paper by Cai Lun in 105 AD (Han dynasty)

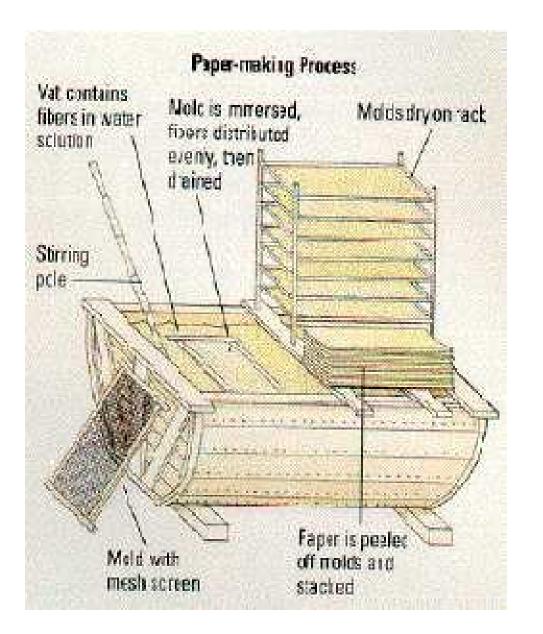
- Before the invention of paper in China, bamboo slats and woven silk cloth were used as writing surfaces.
- However, bamboo book were very bulky and silk book were very expensive.
- Paper was another invention of the Chinese people. Ts'ai Lun (Cai Lun) was the god of papermaking.

- Paper is derived from the Greek word pápyros, the name for the papyrus plant.
- The "paper" from the papyrus plant was first used by the Babylonians and thereafter by the Egyptians (around 3000 B.C.). Also the Greeks and Romans used papyrus, amongst others for contractual obligations.



• The Sumer wrote with cuneiform script on soft clay tablets around 3200 B.C. This is about the same time when the Egyptians used soapstone. Other organic information carriers, besides papyrus, were leather, parchment, wood and bark. Chinese mashed bits of tree bark ,hemp , rags, and a fishnet together. Then he squeezed out the water and hung up the sheets of paper to dry.





Ts'ai Lun process papermaking continued and mechanized in 19th century in england.

- Natural fibers, including mulberry bark, hemp fishnets, and rags, were soaked in a vat of water and beaten into pulp with pounding mortars.
- A vat-man dipped a screen bottomed, frame like mold into the pulp solution.
- Taking just enough onto the mold for the sheet of paper.
- With skill and split second judgment, the vat man raised the mold from the vat while oscillating and shaking it to cross and mesh the fibers. As the water drained.
- The paper was pressed onto a wooden cloth, while it dries.
- The crunched are staked and pressed hung to dry.

https://en.wikibooks.org/wiki/Papermaking/History\_of\_paper

### **Invention of Printing**

- China was the first society in which ordinary people had daily contact with printed images.
- The earliest known form of **printing** as applied to paper was woodblock **printing**, which appeared in China before 220 AD.
- Later developments in **printing** technology include the movable type **invented** by Bi Sheng around 1040 AD and the **printing** press **invented** by Johannes Gutenberg in the 15th century.

- During Dynasty Han third century a.d seals called chops
- Made by carving calligraphic characters into a flat surface of jade, silver, gold or ivory.
- Uses ink such as red paste like to form an impression
- Now known as rubberstamp
- Around 500 A.D. chops came into use upon which the artisan had cut away the negative area surrounding to be printed in red surrounded by white paper.

https://www.prepressure.com/printing/history