"Literacies versus ideography: potential differences in perception with references to the arts and literature"

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“The Chinese are illiterate,” quipped Marshall McLuhan, “They have no letters”

The hypothesis is that their writing systems are the common origin and format of some recurring differences between East and West cultures. Identifying the features of different practices of art and literature may also reveal significant perceptual biases east and west.

The proposition is to examine features of Chinese, Japanese and Korean cultures that are common knowledge, such as, for example, characteristic pictorial representations, emphasis on calligraphy, specifics of traditional and modern architecture or literature and dependence on technology in Japan and Korea, etc.
Why privilege language media?

Language is the principal medium that penetrates the mind and the sensibility of the user.

The medium that carries language structures both its content and its format, bringing it to the mind in only that format and occupying it completely.

Different writings systems reflecting different languages create different cultures, favoring individualism, or community.

One issue is whether you control language or it controls you.
An epistemological argument

• Its not about what we think, but about how we think
• Writing systems entertain a very intimate relationship with our minds
• The chain of control is:
  • 1. Language shapes writing (monosyllabism)
  • 2. Writing controls language (phonemics)
  • 3. Language controls mind (interiorization)
  • 4. Writing controls mind (spatial biases)
Which one goes upwards?
It depends upon which direction you read
Optical chiasmus

how do we know which way to look

• Distribution and complementarity of the tasks of each hemisphere
• The right hemisphere (RH) seizes the object
• The left hemisphere (LH) analyses it
Operating system of bi-cameral brain organization

- Four interlocked visual hemi-fields

- The vision of both left visual fields (in blue) is controlled by the occipital region of the right hemisphere (Rhs)

- Inversely, the vision of both right visual fields (in red) is controlled by the occipital region of the left hemisphere (Lhs)

- The right hemisphere grabs the whole visible area while the left analyses and sequences it
Why Westerners write horizontally from left to right?

The two left visual fascia are predisposed to look at the context of the signs. The two right ones are destined to analyze the sequence of the text. Fully alphabetical scripts (e.g., Greco-Roman) require prioritizing analysis over holding the total field of vision.
Because it imitates the full sequence of sounds pronounced by the human voice, the Greek script is continuous and for that reason puts sequencing letters above the need to hold them
Relateralizing effects of the Greek alphabet

All phonetic literacies from syllabaries to alphabets favor sequential processing over holding the visual field, so they are written to the right, except Etruscan and Kharosthi in India.

Key exceptions are Hebrew and Arabic because they are phonetic yet written to the left.

WHY?
Exclusive feature of semitic languages

• Vocabulary and grammar are two basic functions of spoken language
• Only in semitic language are they clearly divided functionally
• The vocabulary is supplied by consonantal sounds, the grammar by the vowels
• The vowels in Hebrew or Arabic do not need to be written because all the reader needs to do is to know the context and merely guess between the signs that is, their context that the reader can to
• The absence of vowels between consonants obliges the reader to guess the word from its context, and does not allow to decipher it by simply following a linear sequence
The Hebrew system always needs the context to enable reading the text.
And why does it matter? What cognitive consequences for Westerners?
The recognition/invention of perspective is the result of the right visual field(s), taking over the leadership in vision.
Perpectivism pushed to extreme in...
Vertical, oral culture of the cathedrals

Architecture too tended to follow the model of the line of reading
Taking power over language, time, space and self
The conquest of the self

1. Separation of text from context
2. Separation of reader from text
3. Freeing the reader from the context
4. Taking control of language by writing
5. Silencing language in thought
6. Making the self private
Invention of the linear narrative and private destiny

The three goddesses of destiny: Clotho, Lachesis and Atropos
Image of the literate self

The shift from shame to guilt
The role of Western theatre to introduce guilt

“All the world’s a stage and all men and women are but actors in it”

Shakespeare
Theatre has operated as a cognitive machine

Theatre has separated the actor from the chorus and simultaneously the person from the tribe.
History and fiction furnished Western imagination

The deep internalization of the stage as the new scene of the imaginary happens during reading and is promoted by the proliferation of novels
Desacralizing the body

Violated for science (a sacrilege)
Skinned to reveal its workings
Cut in parts and members
Analyzed and named
Soon to be compared to a machine
Renaissance man
Literate man is the subject of his own private mind and controls language from a point of view.
When questioned about their attitudes and behaviors, people in more individualistic, Western societies tend to value personal success over group achievement, which in turn is also associated with the need for greater self-esteem and the pursuit of personal happiness. But this thirst for self-validation also manifests in overconfidence, with many experiments showing that participants are likely to overestimate their abilities. When asked about their competence, for instance, 94% of American professors claimed they were “better than average”.
This tendency for self-inflation appears to be almost completely absent in a range of studies across East Asia; in fact, in some cases the participants were more likely to underestimate their abilities than to inflate their sense of self-worth.
A meta-analysis of published cross-cultural studies of self-enhancement reveals pervasive and pronounced differences between East Asians and Westerners. Across 91 comparisons, the average cross-cultural effect was $d = .84$. The effect emerged in all 30 methods, except for comparisons of implicit self-esteem. Within cultures, Westerners showed a clear self-serving bias ($d = .87$), whereas East Asians did not ($d = -.01$), with Asian Americans falling in between ($d = .52$). East Asians did self-enhance in the methods that involved comparing themselves to average but were self-critical in other methods. It was hypothesized that this inconsistency could be explained in that these methods are compromised by the “everyone is better than their group’s average effect” (EBTA). Supporting this rationale, studies that were implicated by the EBTA reported significantly larger self-enhancement effect for all cultures compared to other studies. Overall, the evidence converges to show that East Asians do not self-enhance.

http://journals.sagepub.com/doi/abs/10.1177/1088868306294587
Some of the most notable differences revolved around the concepts of “individualism” and “collectivism”; whether you consider yourself to be independent and self-contained, or entwined and interconnected with the other people around you, valuing the group over the individual. Generally speaking - there are many exceptions - people in the West tend to be more individualist, and people from Asian countries like India, Japan or China tend to be more collectivist.
Ideography

• The basic principle for Chinese, Japanese and Korean scripts (and Egyptian, Mayan and others)
• Not words, but images, concepts
• The interpretation is entirely based on context
• Written vertically in columns going from right to left
• Presented on unfolding scrolls
Ideography favours foveal vision

Foveal vs. Peripheral vision
Foveal vision

- The Chinese language being largely monosyllabic with great quantities of homonyms, it cannot be suitably transcribed in phonetic signs, or even syllabaries such as the BoPoMo.
- The ideographic solution was the only one that could deal with homonyms (and unify China in spite of over 90 different languages)
- But, with over 100,000 signs the writing required deeply focused visual strategies
- Hence the need for vertical writing to put the sign at the foveal point of vision
- Mao Zedong decreed in 1956 that Chinese writing should be written horizontally from left to right (that is, exactly contrary to Chinese millennial tradition)
- Did he know that he would change the Chinese psyche itself?
Does reading horizontally slow down Chinese readers?

Around the fixation point only four to five letters are seen with 100% acuity.
It can even change the way that you see

An eye-tracking study by Richard Nisbett at the University of Michigan found that participants from East Asia tend to spend more time looking around the background of an image – working out the context – whereas people in America tended to spend more time concentrating on the main focus of the picture.

Intriguingly, this distinction could also be seen in children’s drawings from Japan and Canada, suggesting that the different ways of seeing emerge at a very young age. And by guiding our attention, this narrow or diverse focus directly determines what we remember of a scene at a later date.

“If we are what we see, and we are attending to different stuff, then we are living in different worlds.” (Joseph Henrich)
With modernity Chinese preference for the verticality of their writing line adapted to the horizontal $\frac{3}{4}$ ratio of the western TV, cinema and video screens.
Vertical versus horizontal

- Attention to shapes, ground
- Iconic signs
- Evoking, suggesting
- Condensing message into key notions
- Polivalence of signs
- Simple grammar guessed by context rather than stated
- Text as art form
- Key shape, the square

- Attention to sequences, figures
- Phonetic signs
- Defining, describing
- Translating modulations of spoken language
- Univocal value of signs
- Complex grammar that defines unambiguously relationships between signs
- Text as information
- Key shape, the rectangle
Text as artform: calligraphy

The rigorous dominance of the square shape
The perfect square is the basis of modern as well as classical Chinese architecture.
Ideograms define the architectural leitmotiv of design in Chinese culture
Japanese Haiku

Linear storytelling only began in Japan after the invention of hiragana (and companion katakana)

I am one who eats his breakfast, gazing at morning glories.

朝顔に我は飯食ふ男かな

asagao ni ware wa meshi ku oto kana

Basho
And what about Korea?

Korean and Japanese languages are polysyllabic so they lend themselves better to phonemic transcription (e.g. *Hunminjeongeum Haerye*).

Korean Hangul was created during the Joseon Dynasty in 1443 by King Sejong the Great.

The principle of Hangul is phonemic; its invention signals the beginning of the age-old relationship of Korean culture with technology, the invention of the opera, and of sophisticated military innovations to support a semi permanent war with Japan.
Hypertextual intelligence
No narrative in Dunhuang caves in China
People in more collectivist societies tend to be more ‘holistic’ in the way they think about problems, focusing more on the relationships and the context of the situation at hand, while people in individualistic societies tend to focus on separate elements, and to consider situations as fixed and unchanging.

As a simple example, imagine that you see a picture of someone tall intimidating someone smaller. Without any additional information, Westerners are more likely to think this behavior reflects something essential and fixed about the big man: he is probably a nasty person. “Whereas if you are thinking holistically, you would think other things might be going on between those people: maybe the big guy is the boss or the father”.

Joseph Henrich
Repetition and juxtaposition
Total surround
AS WAS THE MEDIEVAL STAGE
Western philosophers emphasize freedom and independence, whereas Eastern traditions like Taoism tend to focus on concepts of unity. Confucius, for instance, emphasized the “obligations that obtained between emperor and subject, parent and child, husband and wife, older brother and younger brother, and between friend and friend”. These diverse ways of viewing the world are embedded in the culture’s literature, education, and political institutions, so it is perhaps of little surprise that those ideas have been internalized, influencing some very basic psychological processes.
Something, somewhere went terribly wrong.
The marriage of language with electricity on the wires of the telegraph
Language and its media

1700 generations ago, modern man emerges and starts developing language

Voice
Body
Real-time

300 generations ago, he develops writing

35 generations ago, he develops printing

and then...

2000 Always on / Web
1985 PC / Networking
1970 Fax / Electronics
1955 Television / MassMedia
1940 Radio / Talking films
1925 Telephone / Silent films
1910 Telegraph / Photography
To be continued…
Cognitive trends of alphabetic cultures

• Theatre was the archetype and model of western cognition, distancing the spectator and leading to the formation of the personal point of view
• Writing phonetically abstracting, decontextualizing
• Theorizing and spatializing the world (geometry, symmetry, golden sector, measuring everything)
• Linear narratives introduce causality and private imagination
• Early forms of rationalism