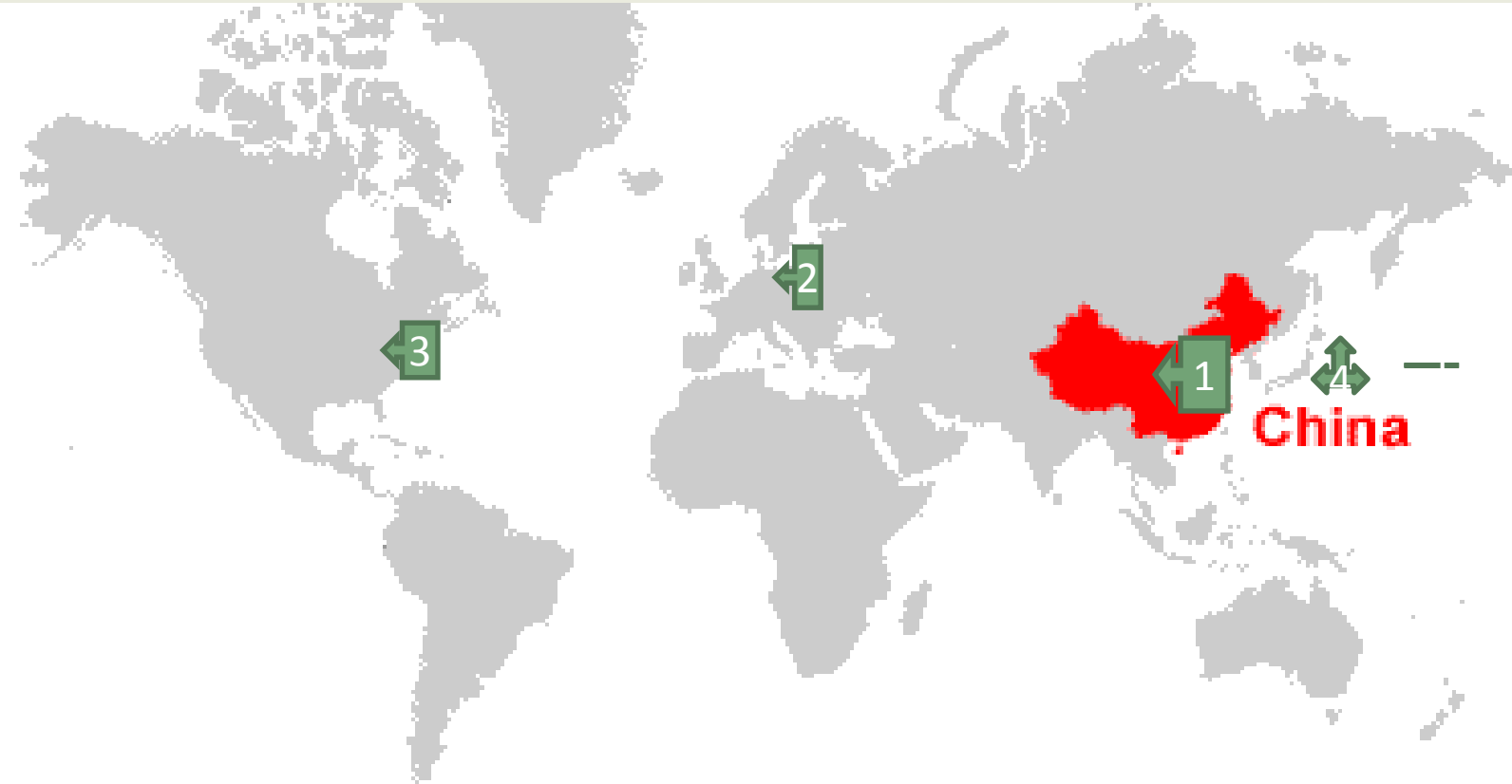


The Ideographic Fallacy: International origins of a cherished idea disproven by experiment

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- * What's the ideographic fallacy?
- * Why did a European idea spread?
 - China ->
 - Europe ->
 - US -> Japan
 - > China?
- * What does science say?

What's an 'ideograph' 表意字?

Also called 'ideogram', 'pictograph'

European word for mistaken ide: characters convey ideas directly, *without any link to spoken Chinese*

Focus on 'unit characters' 人, 羊, 中

stylized versions of ancient pictures for words,
without any phonetic component

3% of modern characters are unit characters

(4% of 说文解字 characters)

High frequency, easy to write, explain

Focus on unit characters makes it harder to learn to read

Most characters combine meaning with sound

- 97% modern characters combine radical 部首 & a phonetic 空, 仙
(90% of oracle bone 甲骨文 characters)
- 33% of modern characters: phonetic is readily usable
- Inconsistent
- Need to know 100's of characters for phonetics to work well
- Pronunciation cues work best on lowest frequency characters eg 碘 'iodine'

'Logograph' a better word

- < 'word' + 'writing' in Greek
- Conveys reality that characters express spoken words or morphemes
- Writing abbreviates speech into standardized but pronounceable languages of 文言文
Standard Written Chinese
- Characters can be pronounced in Cantonese. But grammar, vocabulary, are Standard Written Chinese -- 邊個 vs. 誰

‘Ideogram’ / 表意字 are foreign words. Chinese always said 字!



Xu Shen 許慎

58 BCE – 147 CE



Shuowen dictionary 121 CE

Each entry includes pronunciation.

Developed the 六書 ‘six categories of Chinese characters’ .

But 表意字 is not among them

Xu Shen’s preface: denounces ‘mediocre scholars and crude people’ who attempt to see pictographic significance in every character.

2000+ years Chinese linguistics: focus on phonetics

- Rhyme tables (rime tables) 韻圖

	齒音		舌音		喉音		齒音	
	清濁	清濁	清濁	清濁	清濁	清濁	清濁	清濁
東	○	龍	○	洪	○	烘	○	翁
	○	○	○	○	○	○	○	○
	○	戎	○	隆	○	彤	○	雄
董	○	○	○	○	○	○	○	○
	○	○	○	○	○	○	○	○
	○	○	○	○	○	○	○	○
送	○	弄	○	闕	○	烘	○	甕
	○	○	○	○	○	○	○	○
	○	○	○	○	○	○	○	○
屋	○	祿	○	穀	○	煬	○	屋
	○	○	○	○	○	○	○	○
	○	肉	○	六	○	園	○	畜

	齒音		牙音		舌音		唇音	
	清濁	清濁	清濁	清濁	清濁	清濁	清濁	清濁
內轉第一開	○	○	○	空	○	公	○	同
	○	○	○	○	○	○	○	○
	○	○	○	○	○	○	○	○
東	○	○	○	○	○	○	○	○
	○	○	○	○	○	○	○	○
	○	○	○	○	○	○	○	○
董	○	○	○	○	○	○	○	○
	○	○	○	○	○	○	○	○
	○	○	○	○	○	○	○	○
送	○	○	○	○	○	○	○	○
	○	○	○	○	○	○	○	○
	○	○	○	○	○	○	○	○
屋	○	○	○	○	○	○	○	○
	○	○	○	○	○	○	○	○
	○	○	○	○	○	○	○	○

- Rhyme books 韻書

- Europeans can't understand

Chinese rhymes

- So focus on unit character 'pictures'

2) European origin of 'ideogram'

Italian Matteo Ricci 利馬竇 1552- 1610



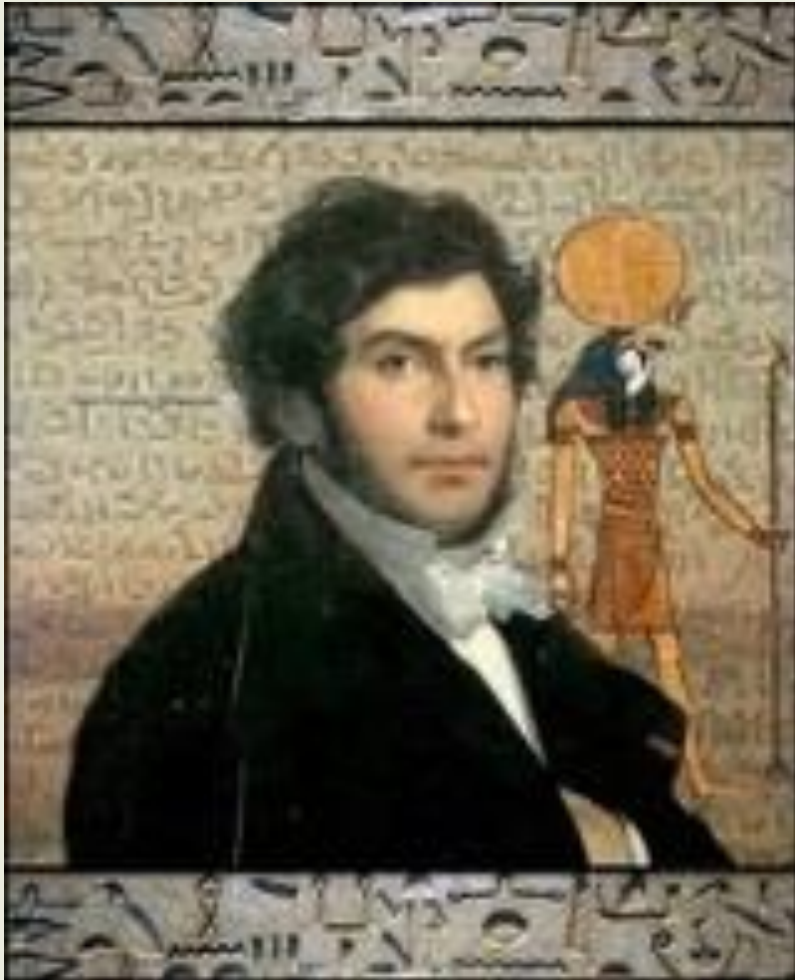
- Missionary to Ming Court
- Knew Chinese well
- Wrote European best seller
- Spread concept of ideogram
(though not the word)
- 'the Chinese paint as many symbols as there are words'
- 'any book in Chinese... would be understood by peoples of Japan, Koreans, [Vietnamese]...
because each written character ...
represents a thing'

European philosophers hoped for 'ideograms' as universal writing

- **Francis Bacon** philosopher, England 1561-1626
- '[characters] express neither letters nor words... but Things or Notions... countries... which understand not one another's language can nevertheless read one another's writing'
- **Gottfried Leibniz** mathematician, Germany 1646 – 1713
Believed Chinese was independent of spoken language
- None knew Chinese. Universal writing didn't work. Lapsed.
- But stereotype of picture writing survived

1822 word 'ideograph' coined

in French form *ideographique*



- By the French archeologist who deciphered Egyptian hieroglyphics

- **Francoise Champollion**

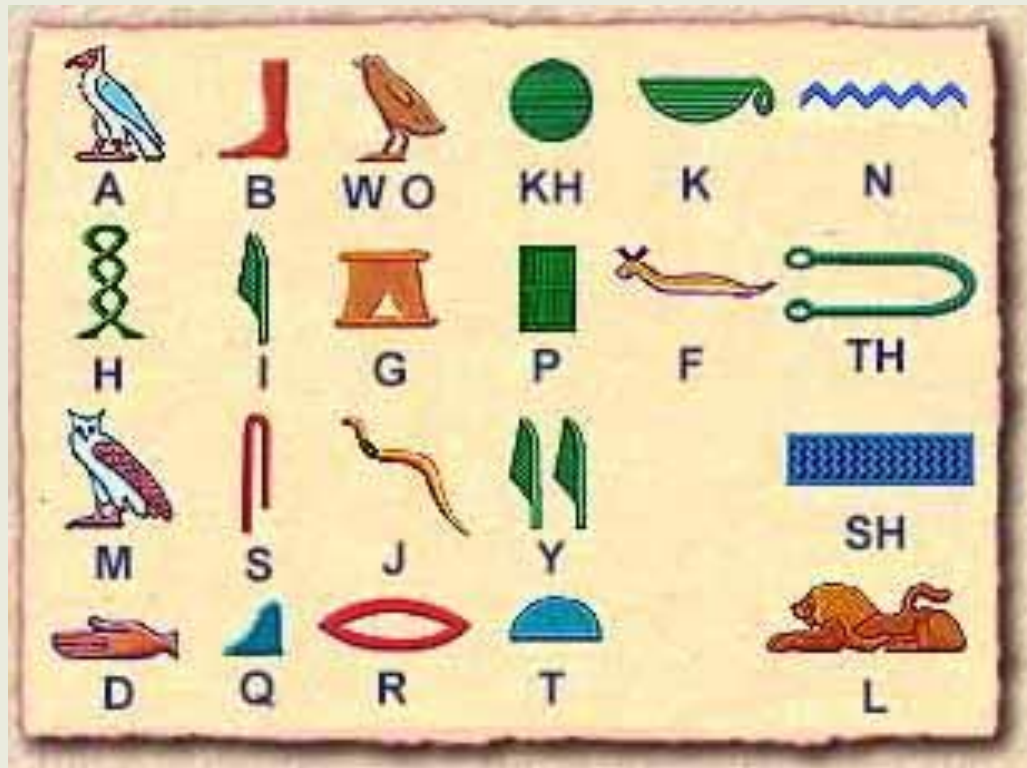
1790-1832

Breakthrough: hieroglyphics are phonetic

Called them the 'Egyptian alphabet of phonetic hieroglyphics'

Egyptians used pictures to symbolize the sound of the word

Used phonetic symbols, supplemented by a semantic indicator.

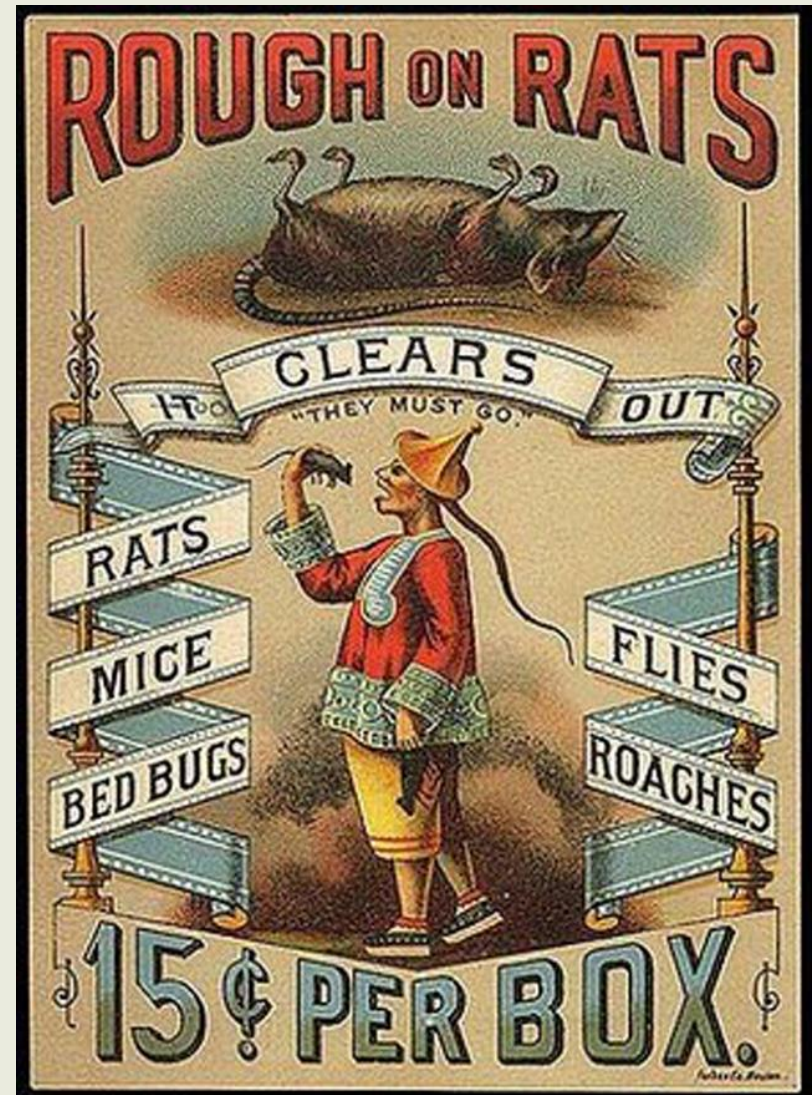


the Chinese 'also use an ideographic script' -
Champollion

Ironic that he meant
phonetic (with a semantic
indicator)

19th century Europeans orientalists negative views of China & characters

- Opium Wars & imperialism
- US bans all Chinese immigration 1882
- ‘Ideograph’ misunderstood as primitive picture writing.
‘The Asiatic thinks with his belly’



1894 word 'ideograph' brought to Japan



- by US scholar of Japan, Ernest Fenollosa
- Japanese scholar Inoue Tetsujirō translates 'ideograph' as 表意字
- Inoue & Fenollosa work closely together to promote Japanese culture.

20th century European cultural politics

Poet Ezra Pound 龐德 publishes Fenollosa



- *The written Chinese character as a medium for poetry (1936)*
- Wildly popular. Still in print.
- European languages ‘thin and cold’
Ideographs ‘have no basis in sound’
‘a vivid shorthand picture of the operations of nature’
‘an accumulation of meaning which a phonetic language can hardly hope to attain’
‘a phonetically based character would “contradict the laws of evolution”’

European modernist ideology

Disillusioned after World War I, excited by ‘ideograph’

- ‘Picture writing’ - utterly different from alphabets
- Stimulates new arts - photography, film-making, modern art & literature

Sigmund Freud 佛洛伊德

Franz Kafka 卡夫卡

Sergei Eisenstein – film maker

Also excited by Egyptian hieroglyphics.

None spoke Chinese, Japanese --- or Egyptian

See Christopher Bush *Ideographic Modernism: China, writing & media*

Oxford 2010

'Ideograph' very popular in Japan

- Meiji Japan creates universal public education in National Language 國語 *kokugo*
- 'Ideograph' was a simple tool to teach reading
- Nationalist / Asian counterweight to western claims of superiority
- Chinese students in Japan, 10x more than in Europe or US
Bring 'ideograph' back to China
- (Language reformers are mostly romanizers)

Nationalist ideology:

1930's Japanese militarists hijack ideograph

漢字文化圈

Japan, China, Taiwan, Korea 大東亞共榮圈



Post-war: Japan & China

- Quieter nationalism. Cultural pride during changing times.
- Chinese civil war continues in political split
complex vs. simplified characters, pinyin.
- Ideograph stands for cultural uniqueness, strength against westernization
- Speculation about 'ideographic cultures' versus 'alphabetic cultures'
- Widely taught in schools
- 100's of articles and books. Many translated into Chinese Ignore modern linguistics, psychology

French post-modernists embrace 'ideograph'

Anti-imperialist, sympathetic to Chinese revolution

Reject bureaucracy
primacy of speech

Reject linguistics,

- Claim alphabets create bureaucracy (!)
- Claim: alphabets cruel, logical, scientific 'male'
- Claim: ideographs & Chinese 'silent'
ideographs created spoken Chinese
'silent opposition to oppression'
feminine 'flowing, blurring like the menstrual flow'
Derrida, Barthes, Foucault, Kristeva...
- Criticism: fixation on 'surface appearance... like an "inscrutable Chinese face"' None of these scholars knows Chinese (says Rey Chow)

US: superior 'alphabetic cultures' inferior 'ideographic' 'orientals'

- Threatened by rise of Japan, defeat in Vietnam

Claim: 'Alphabetic cultures' – male, "right brain", scientific
'Ideographic cultures' -- female, "left brain", emotional

Claim: English speaking infants think in abstract concepts,
Chinese speaking infants in concrete 'stuff'

Easily abused by racists

- 2014: Chinese is a silent language 'which has rid itself of the primacy of the oral principle' (Bachner)

3) Scientific analysis of characters rejects 'ideograph'

Anthropologists:

No link between writing system and social structure

Alphabets used in France – and Rwanda, Nepal (poorest nation in Asia)

China was 'sick man of Asia', now prosperous

Linguists analyze language typology,

Now know: 'universal readers' from Korea, Japan & Vietnam who impressed Matteo Ricci

... learned to read a foreign language: 文言文

They carried characters & 文言文 home to Korea, Japan & Vietnam

Adapted characters for phonetic writing of Korean, Japanese & Vietnamese

Modern analysts, inspired by 六書, do more accurate analysis of

- Unit characters vs. combination characters
- Sub-elements in radicals & phonetics
- Frequency, accessibility to reader, accuracy of cue

Psychologists show how characters are linked to speech

- Strikingly similar brain areas for reading characters and alphabets. Networks coordinate meaning, speech, sound, vision, graphic form
- Very similar reading process for characters & alphabets:
 - All readers read better in context
 - Beginners differ from fluent readers
 - Beginners depend *more* on sound decoding
 - Fluent readers also read very frequent words as wholes, in English too

(e.g. 'through', own name)

Pronunciation cues more important than semantic radicals

Error analysis: most writing errors follow pronunciation

*九菜 for 韭菜 ‘chives’

jǐu cài jǐu cài

Experiments: If the word sounds right, Chinese readers
often ignore a wrong semantic

Where's the mistake?

*揚樹真美

‘the willows are beautiful’.

*揚 樹 真 美

yáng shù zhēn měi

Sounds right.

But written with wrong radical (‘hand’揚)

Should be ‘wood’ 木 : 楊 *yáng* ‘willow’

(cf English *‘I like to eat pairs’ (pears))

Chinese do notice a wrongly pronounced character,
even with a correct radical.

Good speech predicts a good reader

- Chinese kids: adapt to writing system
Less important: ABC's /
individual sounds (phonemes)

More important: awareness of syllables
rhymes
tones
creating compound words

飛 — 》 飛機， 飛碟， 飛盤

Computer scientists

Tried ideographic, meaning-first model for characters

Failed

Success: Chinese word processing, translation, requires starting with spoken words, linked to meanings

Characters linked to words
in additional stage
(every characters gets a number code)



小冰 Xiaoice, Microsoft voice conversations
computer-generated character text replies,
impossible without phonetics

Ideographs and ideology

- 1) 'Ideograph' 表意字 a European idea
- 2) Ideologies adapted it worldwide. Positive & negative uses, in Europe and Asia
- 3) Science links characters to speech

