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Writing As a Block For Asians

By EMILY EAKIN (NYT) 1458 words

Western theories about Chinese writing have often been tainted by ignorance and prejudice, oscillating between wide-eyed veneration and smug disdain.

Though he could not read Chinese, Leibniz, for example, held it in high repute, dreaming of a universal script -- intelligible to speakers of all languages -- modeled on Chinese characters. By contrast, Hegel dismissed Chinese "hieroglyphics" as primitive. More recently, Ezra Pound, a famous admirer and translator of Chinese poetry, helped spread the still-popular misconception that Chinese characters are simply "ideograms": visual symbols of things and ideas.

Western specialists are better informed today. They now recognize that the writing systems of East Asia, including Chinese, Japanese and Korean, are "syllabaries," in which each character corresponds to a syllable of sound, and in Chinese, at least, a basic unit of meaning (called a morpheme). By contrast, alphabetic systems rely on letters that by themselves are pure abstractions: a single letter represents neither a syllable of sound nor a morpheme. While alphabets tend to be small, syllabaries can be quite large: there are more than 50,000 Chinese characters, though most people can get by with knowing about 5,000.
But a better understanding of Asian writing systems has not stopped Western experts from making grand claims about their virtues and limitations. The latest scholar to venture into such politically sensitive territory is William C. Hannas, a linguist who speaks 12 languages and works as a senior officer at the Foreign Broadcast Information Service, a federal agency in Washington. In a polemical new book, "The Writing on the Wall: How Asian Orthography Curbs Creativity" (University of Pennsylvania Press), Mr. Hannas blames the writing systems of China, Japan and Korea for what he says is East Asia's failure to make significant scientific and technological breakthroughs compared to Western nations.

Mr. Hannas's logic goes like this: because East Asian writing systems lack the abstract features of alphabets, they hamper the kind of analytical and abstract thought necessary for scientific creativity.

The solution he proposes, switching to an alphabet, is hardly novel. It is an idea that has long been debated in countries like China, where using a computer keyboard can be a daunting task and people increasingly fall back on Pinyin, the Romanized Chinese script, for data entry. And few doubt Mr. Hannas's linguistic qualifications. "I don't think there's a single other person on the globe who knows all the relevant languages as well as Bill Hannas," said Victor H. Mair, a professor of Chinese language and literature at the University of Pennsylvania who taught Mr. Hannas in graduate school and is the general editor for the Pennsylvania Press series in which his book appears.

Mr. Hannas insists that he is not criticizing Asians. "I worry that people will misunderstand my claim that Asians are less creative in basic science to mean that Asians are lacking in intellect," he said. "Nothing could be further from the truth."

Even so, some critics flatly reject the notion that Asia has a creativity deficit and say his argument smacks of cultural condescension. "It's not flattering," said Jerome Packard, a professor of Chinese linguistics at the University of Illinois at Urbana-Champaign. "Bill may be right, but I tend not to want to make those statements. They sound demeaning."

To make his case, Mr. Hannas draws on a raft of data about Asian scientific
research practices, technology piracy and graduate study abroad, all intended to show that Asians are brilliant imitators but poor innovators, adept at borrowing and improving on Western science but not so skilled at making advances themselves. He suggests that the "thousands of Western technical terms in East Asian languages" are proof of the "one-sided nature of the East-West science relationship." He argues that Asian immigrants to the West, who work in an alphabetic system, do innovative work. And he cites a Japanese Nobel laureate in medicine, Susumu Tonegawa, who said, "It is very clear that Japan is making money by taking and applying the fruits of science that the West creates at great expense."

Yet Nathan Sivin, a professor of Chinese culture and the history of science at the University of Pennsylvania, said he was not impressed. "That's nonsense," he said. "One Japanese Nobel Prize in the last 10 years is fantastic compared to Portugal or Norway."

Most of the resistance to Mr. Hannas's argument, however, comes from linguists who say he is trying to revive a discredited theory about the connection between language and thought. The idea that the language you speak affects how you think dates back at least to Wittgenstein. But it was most famously associated with two 20th-century American linguists, Edward Sapir and his student, Benjamin Lee Whorf. According to the Sapir-Whorf hypothesis, developed in the 1930's, the mental categories by which people perceive the world are determined by their language, so that people who speak different languages can be expected to think differently.

As evidence, Sapir and Whorf cited variations between English and several Native American languages, claiming, for example, that the Hopi Indians have no concept of time and, famously, that Eskimos have more than half a dozen words for snow.

Versions of the Sapir-Whorf hypothesis were embraced by a number of scholars. In the 1960's, Marshall McLuhan argued that modern technologies like television were causing fundamental changes in the human psyche. And in a 1981 book, "The Linguistic Shaping of Thought: A Study in the Impact of Language on Thinking in China and the West," Alfred H. Bloom, a linguist who is now the president of Swarthmore College, argued that the lack of a subjunctive tense in Chinese made it extremely difficult for native
speakers to explore "counterfactual" conceits (for example: if Gisele were fat, she wouldn't be a supermodel).

When Mr. Bloom tested Chinese and American students on a series of counterfactuals, he found that the Chinese students were typically unable to distinguish between events that really happened and false hypotheticals. The implication, Mr. Bloom argued, is that Chinese is more concrete than English, and, as a consequence, Chinese speakers have more trouble with abstract thought than Americans.

But in recent years, the Sapir-Whorf hypothesis has fallen out of favor as scholars have come under the sway of new approaches stressing the universal aspects of language and cognition. In his 1994 book, "The Language Instinct," Steven Pinker, a cognitive psychologist at M.I.T., points out that Mr. Whorf never studied the tribes he wrote about and got much about Hopi and Eskimo languages wrong. "Contrary to popular belief," Mr. Pinker writes, "the Eskimos do not have more words for snow than do speakers of English." As for Mr. Bloom's work, Mr. Pinker cites three cognitive psychologists who found that his tests contained serious flaws.

Methodological problems very likely mar Mr. Hannas's book as well, Mr. Pinker said in a telephone interview. Unless one studied all the cultures that use syllabaries, he said, it would be impossible to show a connection between the writing system and a psychological phenomenon like creativity. Moreover, argues J. Marshall Unger, a professor of Japanese at Ohio State University, how can you be sure writing -- and not some other cultural feature -- is responsible? As Mr. Unger put it, "Why should learning a particular writing system have a greater impact on how people think than whether they use telephones?"

Mr. Hannas's book aside, there are other signs that cultural explanations for variations in thinking patterns may be making a comeback. In a much-debated new book, "The Geography of Thought: How Asians and Westerners Think Differently . . . and Why," (Free Press), Richard E. Nisbett, a psychologist at the University of Michigan, argues that the way Asians and Westerners perceive the world is hardly the same. Mr. Nisbett ascribes these differences to multiple factors, including education, social
philosophies and the environment. (He chalks up the "relatively slight accomplishments of Japanese science" to the "Confucian respect for elders that funnels support to mediocre older scientists instead of more talented younger ones" and a tendency to avoid debate.)

But he takes pains to say that one culture's mode of perceiving is no better than another: "The cognitive orientations and skills of East Asians and people of European cultures are sufficiently different that it seems highly likely that they would complement and enrich one another in any given setting."

CAPTIONS: Photo: Chinese characters, a Western linguist writes, hinder creative scientific thinking. (Corbis)