

Graphic shorthand in Asia

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1. Beginning

1) The word of Stenography and 速記 :

The word of Stenography was named by John Willis in 1602.

“速記” is widely used in Sinosphere today. This word, 速記 /Sokki/ for Japanese, /Shokki/ for Korean, /Suji/ for Chinese was named by Fumio YANO 矢野文雄 in 1884.

2) The function of Shorthand

Shorthand is a general term of the activities that translate oral expression into literal expression.

Modern Shorthand systems are based on phonetism and applied abbreviation and Ideograms.

Let's look at Shorthand process.

A Shorthand reporter writes down speech by his or her skill, and then a reporter transcribes and produces Official verbatim record as the Authority.

International Standard Organization (ISO) defines the standard of record keeping. Also, I hope, the World Standard should applied in producing Official spoken record too.

A flow of record producing is consisted of technology of Coding, Decoding and editing skill.

Practically, a reporter concurrently performs Decoding and editing process.

3) Human Factor

In another point of view, Shorthand is a medium, which carries out fixing speech and producing Official literary record. I think an elemental field is consisted of Two Stages. Grapheme is the field of script materials, and Recognition field consists of Phoneme and Semantics.

Human Factor is very important in Shorthand. In other words, Human Factor is Language Power.

A reporter needs to have Language capability highly constructed, which is orthography and so on.

Intelligence should be formed in deep and wide ranges and Liberal Arts.

Also a reporter needs Specialty knowledge enough, for examples, Litigation, Medicine,

and Fashion and so on.

4) Graphic shorthand

Structure of Graphic shorthand system has fundamentally two features.

Graphic shorthand system is composed of;

First, Setting up a method, which is arbitrary, selected the units among possible materials for Shorthand letters.

According to Ferdinand de Saussure, the relation between the visual image and meaning is “arbitrary”. there is no direct connection between the shape and concept.

This idea can be applied in Graphic shorthand too. There is no special relation among meaning, pronunciation and letter,so that many Graphic shorthand systems were born and still exist.

Second, Combination method, which freely set each letter like as a minimal pairs for morpheme. Morpheme is the smallest linguistic unit that has meaning.

Those are major assignment for Shorthand Inventor or Improver.

Also how many letter materials for writing sounds and words should be provided, how to fit language best are the subject for them.

Adoption Shorthand theory to Language will be based on language characteristics and combination of sounds, further more Grammatical characteristics.

In another word, Coding is a Symbolizing system for language by abbreviation.

Basic letter, Vocabulary and Grammatical Idioms should be designed Shorthand theory in harmony.

So, Shorthand theory should integrate the Phoneme = Grapheme = the Word = Meaning Interrelation system for translating oral signal to literal orthography.

2.Graphic Shorthand in Japan

1) WOKOTO Ten ヲコト点 Idea of Positioning

Wokoto Ten(dot) is a system that converts Chinese into Japanese by dotting around a Chinese Character.

In Heian era(8C to 12C), Buddhists learned Buddhist scriptures. In those case students took note on Chinese scripture texts hearing Japanese explanation. It is very tough work for students in writing speed.

The WOKOTO Ten, which records meanings in Japanese language on the original Chinese text came from Sanskrit pronunciation, using positions around Chinese Character. A dot means many words, number shows order. This is an idea of Hieroglyphic speedwriting.

2) Basic letters

The first system Takusari 田鎖式速記 accepted Phoneme idea and designed Consonants and Vowel configuration. But Japanese has only 5 vowels and Open syllable language. It is no good idea to write by phoneme.

Therefore improvers have been changed Basic letter more simple by lengthening strokes or single stroke letters. This strategy of simplification is recognized in China and so on.

3) Shugiin system 衆議院式速記 is one of the highly simplified letters in Japan. The Grapheme shows quite simple lines. The system is in use in the House of Representatives, Shugiin.

Korean has same characteristic phase though, Korean has more vowels than Japanese. Closed Syllabic language by influenced from Chinese, Korean seems to have its world.

(The picture of the first Diet of Japan called Nishiki E . 第一議会の錦絵

4) Geometric system in Japan

Which system is the best for your language among Geometric, Cursive and Half cursive? Such an argument does not mean anything important. The Late Professor Yoshiaki Takebe 武部良明 explained as following.

The reason why the Geometric systems are absolutely popular in Japan does not depend on the superiority of the Geometric letters but the Japanese historical circumstance originated in Takusari system.

Looking abroad, Cursive systems are still very popular in use in Germany and rather widely in the world.

Therefore, superiority of the shorthand system is not decided by any kind of visual letters.

Whether a shorthand system is superior or not depends on a design how to adopt the characteristics of the language.

(1) Takusari system

According to Encyclopedia Britannica, The definition of Geometric system is that the consonants are drawn from simple geometrical forms, straight line and shallow curves. Early Meij era, Koki Takusari 田鎖綱紀 happened to take a look at a shorthand script in a journal “Popular Educator” at Robert Carlyle’ s house in 1870.

At that time, Takusari did not have special interest in shorthand though, he soon devoted himself in developing Japanese shorthand.

But the first shorthand instruction book was “New Writing Method for Parliamentary Proceedings” by Ooi Kuroiwa 黒岩大 and Masu Heki 日置益 in July, 1883.

that referred to American Lindsley system.

Takusari released his system in 19th, September 1882 and began to train 28th October .

(2) Early times

We know there were some shorthand systems, which contributed for Japanese shorthand theory. The most famous one was Graham. Lindsley did not seem to give so important suggestion though, it was the first Japanese system referred to. Gregg is so famous in English shorthand, but it did not give more influence to Japanese theory than Pitman.

Graham system, that is said Graham-Pitman affected Takusari. And Lindsley gave influence to Kuroiwa.

After invention of Takusari system, to increase more high-speed performance has been the most important subject for practical use, Researchers of Graphic shorthand improved vowel signs.

How many syllables can carry on a single stroke? It depends on coding technology.

How can you write elegantly flowing script? It is ergonomics.

How can you read correctly with omitting sounds and word in context? It is decoding technology based on semantics.

In Japan, Shorthand Basic alphabet was progressed from double actions, Semi-double actions and Single action.

There, Geometric Japanese think simple visual appearance is most rationalized basic alphabet.

Some half-cursive theory 半草書派, American Cross system gave suggestions for Japanese system.

First was Stroke and Sign alternative usage, it meant one phoneme has stroke and sign, and a writer applied fittest combination in a phoneme order.

Second was to symbolize vowels in three zone as well as consonants in using zones. It was symbolization theory. It was named eclectic shorthand by the author.

(3) Birth of Japanese Eclectic shorthand

There is a problem so much to fit Japanese language.

Englishman, Edward Gauntlet challenged to apply Pitman theory to Japanese again and succeeded to open a new page.

To reduce graphical load in writing, Gauntlet improved lineability by double lengthening vowel "I" group means vowel "E" group, and double lengthening "A" group to vowel "O" group in 1899. His system is called eclectic shorthand.

This is very good solution in writing syllable fast for Japanese.

Kumasaki system 熊崎式速記 in 1906 and Waseda system 早稲田式速記 followed in 1930 accept this theory.

4) Single stroke theory:

One syllable symbolized by one stroke theory has been the supreme goal for Japanese Shorthand improvers.

Takeda system 武田式速記 1905 is the first Single Stroke theory 単画派 in Japan, never practiced system.

Nakane system 中根式速記 was the first in practical use in Japan, invented in 1914 by Masachika Nakane 中根正親.

But Nakane is not a Single Stroke system in true meaning.

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Today, Gifu prefectural Commercial high school students enjoy this system in their extracurricular activity in National Speed contest.

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(b) Geometric Ellipse idea 正円・楕円幾何派理論：

The definition of ellipse is following; Ellipse has two centers. A triangle made by centers A, B, and a point on a circumference of ellipse has a regular length of three sides. This is Geometrical Ellipse.

Cross system seems to be rather based on a geometrical ellipse than a written ellipse, so that it has curved strokes.

Geometric theory was opened new field.

Minekichi Furukubo 古久保峯吉 and Sukeyuki Yamane 山根祐之 added Geometric Oval, Ellipse figure with perfect circle.

Perfect Single Stroke system began from Kokuji a child system of Nakane .Yamane system is a child of Kokuji.

Appearance of Yamane system is the most simple though; it is very hard to write, because of neglecting ergonomic movement of fingers.

(c) SVSD Kotani system 同母音同方向 小谷式速記 :

Easy to write is one of important conditions for Modern Shorthand.

Kotani system 小谷式速記 was invented new view point by Masakatsu Kotani 小谷征勝 realized the Same Vowel Same Direction policy in allotting grapheme.

He also took script value influenced by Gregg half-cursive theory.

It is not important to take Geometric or Cursive nor Half Cursive but to write correctly, quick and read easy and correctly.

(6) Cursive system in Japan

Cursive theory could not be popular in Japan. A Viscount Kohan Mouri 毛利高範 once studied in Austria and brought new culture to Japan. He learned Faulmann system there.

But there is no cursive writer today.

And Yoshifumi Fukahori 深掘義文 proposed Esperanto cursive system for Japanese.

3.Graphic shorthand in China:

1) Old Scripts of Chinese in shorthand

There is a copy of Shorthand scripts that was taken Chinese sermon on Sunday in Se-tchouan.

According to “Stenografie” by Albert Navarre, The first shorthand activity in China was in Pitman system by English, A.Gregory Ulverston.

The second case, French Dupoye was applied to take down the sermon on Holiday by Etienne-Marie Derouin in Kouei-tchou-fou (Se-tchouan).

Louis Coldre wrote this script in early 20 century.

2) Early times

The photograph is shorthand writers in the early days.

Front row, second person from right is Mr.Cai Zhang 蔡璋 , seems to be with his students.

His father Mr.Cai Xiyong 蔡錫勇 wished to resolve illiteracy problem in 19 century.

He said;

Chinese Character is one of the most beautiful letter and the most complex letter too. But mastering Chinese Character perfectly needs many years. There are 40,000 in a dictionary and still increasing. Note taking is very slow because of many strokes in writing.

Therefore he named his book “Zhuan yin Kuai zi” 傳音快字 , Speed letter.

His son, Cai Zhang 蔡璋 improved father’ s letter for Verbatim reporting in the Parliament in 1912. This was the first “Chinese Shorthand” 中国速記学.

Cai’s system had waited the door open by a knocking.

Cai Xiyong 蔡錫勇 said he referred not Graham system but Lindsley. But consonants of his system seem to refer Pitman family.

Comparing Takusari 田鎖 , Cai Xiyong 蔡 with Pitman,Graham and Lindsley, there are correlation observed among Pitman, Graham , Takusari and Cai Xiyong, but Lindsley is isolated in consonants.

But Takusari and Cai Xiyong adopted consecutive writing in Vowel not positioning by Pitman and Graham.

It is better for Japanese, Vowel has an important role in words, and therefore Takusari did not adopted Positioning vowels.

3) Days of shorthand

Chinese friends published “Hundred History of China Shorthand” in 2000 under Three Chief Editors Mr.Tan Yawei 唐垂偉, Wang Zheng 王正, Ju Zheng Xiu 居正修. The History divided 6 periods of its 100 years.

In the first period, Cai Xiyong 蔡錫勇 invented new phonetic letter system based Pitman in 1896.He designed vowel signs that are consecutively written after consonant stroke. This was the system fitting Chinese language.

Li Jiesan 力捷三 invented “Minqian Kuaizi” not referred Pitman.

Second ,in Early Period, Zhang Cai 張才 invented “Hanwen Kuaizi” 漢文快字 referring Pitman , Consonants and Positioned Vowels. But after he changed to consecutive writing of vowels.

Wan Yi 王怡 developed “Zhongguo Xinshi Sujishu” 中国新式速記術 by changing Pitman a little bit in 1919.He improved his system and established “Jianshi Wan Yi Sujizue” , 3 lengths no heavy and light, one stroke for one syllable, Geometric theory.

In 1944, Kim Zhangfeng 金長風 completed Single stroke for one syllable theory by adopting 5 sizes of strokes ,Geometric theory.

The second, Early Period was the developing ages by Geometric system.

4) Wide spreading period Half-cursive 半草書派：

English shorthand, J.G.Cross invented 1878, and Irish, J.R.Gregg invented in 1888 are the famous Half-cursive theory

Half-cursive system is the combination system of geometric and cursive system, which applied written natural oval circle.

4) Development of Half cursive

Cursive Asian shorthand,. The shorthand letters are drawn from written elliptical and natural circle.

Yoshiaki Takebe said the geometric system and the cursive system combined each other and derived semi cursive system, for example American Gregg system 1888.

Today .the most valuable shorthand Scholar, Tang Yawei 唐聶偉 invented “AI Suji 聶偉速記” in 1938.He has been stills the father of Chinese shorthand.

According to Yan Tingchao 顏廷超, Zhang Zhaoyun 張兆雲 invented a Chinese half-cursive system in 1935.

Following Tang Yawei, Zhang Chao 張潮, Chen Xin 陳新, Pang Ling improved Half-cursive theory.

Liao Regnum 廖人群 invented new half-cursive system in 1985.

Cursive system and Half-cursive system are combined and made a combination system in China. For example, Zhang Bang Yong 張邦永 and Su Wen 蘇文 developed.

Fitting Chinese language more adequately, integrated theory of half cursive, Cursive and Geometric theory are established by some researchers. Su Wen 蘇文 invented first Zonghe system 綜合式 in 1981.Also Liu Tuo 劉拓 invented his novel system.

Almost 45 researchers established 56 systems.

4. Cursive improvement in Asia

Xiexian Pai 斜体派(slant style) is a word by image of the cursive script by Japanese researchers. I think “ Cai Shu for Cursive system. There are two thoughts, one is Geometric and Pai” 草書派 is better he other is Script for designing shorthand letters. In other words, shorthand strokes and signs should be taught in dynamic style, or in inner mind symbol.

Yan Tingchao 顏廷超 learned Geometric system at first, and then studied Russian Cursive system.

He invented first Chinese Cursive system in 1951, referred to GESS(Sokolov).

There was took co-work with Mr.Tang Yawei in 1952 in Cursive system by him.

Yan Tingchao enthusiastically applied Cursive theory into Hunge and Japanese in 1954, 1984.

He wrote China Shorthand History of Development, and wrote other many academic jobs.

My very honorable Mr.Yan Tingchao , he passed away last December, Yang Tingchao ,rest in peace please !

Yan Tingchao wrote the History of Cursive system in his book as followings:

1834 Gabelsberger by Franz Xaver Gabelsberger

1874 Faulmann by Karl Faulmann

1920 Kohan Mouri invented First Japanese cursive system influenced by Faulmann.

1951 GESS was introduced to China.

1952 Yan Tingchao and Tang Yawei released Chinese Cursive system on Monthly Shorthand.

1982 3Y system completed, popularized, adopted and scientificated.唐、顏、閻德勤

1982 Zhen Rongbin established phoneme system.陳榮浜

1963 Zhang Bangyong combined Cursive and Half-cursive theory.張邦永

1953 Yan Tingchao invented Korean Cursive system with Yan Shiliang.嚴世亮

5.Graphic shorthand in Korea

Historically, Japanese Geometrical theory seems to give influence for Korean shorthand systems in those days. Especially, Kumasaki and Waseda system gave some influences. The National Taskforce for training Korean shorthand reporters in the Assembly and developed established The National Assembly of Korea system. The training center was established and began to train in 1969 議會式速記.

But it is very regrettable there is not existed the organization for training, Graphical shorthand training is finished its activity now. The numbers of shorthand writers were 217 in 1973.

This figure is a Hunge shorthand letters in Encyclopedia. I think this letters seem to refer to Waseda system.

Also, the sample of real script of Hunge shorthand system in Encyclopedia.

Some foreigners tried to develop Korean shorthand system; Yan Tingchao studied and designed many shorthand systems. He did very extinguished work and he did good job with Om Seyon 嚴世亮 developed Cursive Hungle shorthand system in 1954

6. Study of Shorthand theory

Many improvers have been challenged Graphic shorthand.

1) 3 phases of theory study

Yan Tingchao explained three phases of Theory study.

The first phase is Phoneme, which consists of Sampling sound or sounds for abbreviation and Alternative letter for easy writing.

The Second phase is Writing operation which means Smooth writing in Two-dimensional movements realized of Three-dimensional movements.

The fourth phase is Grapheme, which consists of Basic letters, Alternative letters and new line, Zoning to place letters, Positioning to dot around letters and cursivation.

Yan Tingchao also mentioned Vowels. Chinese improvers tried Vowel symbolization from position signs to consecutive signs for fitting languages.

2) Writing directions

Shorthand scripts can be written in a few directions, because writing needs swift, correct, and fatigueless.

Most system researchers think it is no doubt horizontal direction and up to down. A is standard way of writing shorthand letters.

But, Chinese Cai Xiyong adapted vertically, right to left writing related the writing way of those days. It is naturally understandable for him to improve Chinese character movement.

On the other hand, Sinosphere has old Chinese style of writing habit; Japanese, Yuko Mimura invented his Vertical writing Mimura system.

Starting pen at left side upper position, a pen is going down vertically. At changing row a pen goes to right line.

Yuko Mimura designed a unique system in 1953. This sample sentence was written by the inventor himself. His phonetic basic alphabet, syllabic letters, is belong to Script theory not but longhand system.

3) Shorthand art

Study in Spelling Shorthand letters

In training Graphic Shorthand skill, 3 points are important, Correct, Speedy and Beautiful writing.

Mr. Tosui Akitsu, who is the Steno Artist by Geometric NAKANE system in Japan, paints this picture.

He is a member of International Contemporary Art Academy Belgium.

The art expresses Sei for Correct, Soku for speed and Bi for beautiful.

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4) Carrier

Carrier is unwritten script. This is important correctly writing and beautiful script.

5) Abbreviation theory

Hideo Sairaiji established 5 abbreviation rules of Shugiin system in his Basic principle of Shugiin system. He explains as followings:

- (1) Simplification means simple and swift.
- (2) Abbreviation means omission shorten.
- (3) Analogy means grouping and deduce.
- (4) Prominent means one stroke conspicuous.
- (5) Fluid means streaming dynamic

6) Formula of abbreviation

Another study of abbreviation formula: $Y=f(x)$ was proposed by Takumyo Mori.

Y is an abbreviation, x is a writing stroke, which is the first stroke, and f is a function.

Writing directions divide into 3 groups, and set each writing zone, upper line and centerline.

Abbreviated stroke is defined by the length of x = the first stroke of the word.

7) Design of shorthand system

In designing shorthand theory, it is important to decide Basic principle and Strategy.

How fast writing, How accurate transcribing, How much Added Value, How easy to master should be described as numerical values.

In normative case, an author would make students to write shorthand letters as exactly as given standard model.

In another case of Realism, an author allows individual managing in writing shorthand letters.

But it is not absolute to systems but it depends on an instructor.

Writing principle it to set writing course on a paper, from upper left to right and so on.

What material is selected Longhand, Geometric figures, part of script and so on.

Composition is possible Basic letter, Abbreviation, Idiom and so on.

8) Tree of shorthand type

Modern Shorthand is composed by two major styles. One is by Human. The other is robot. We have used Pen shorthand and Machine shorthand with our skill. Pen shorthand is called Graphic shorthand, manual shorthand and so on.

☆ Human Executive Shorthand

○ Pen Shorthand

◇ Line writing (Graphic Shorthand)

→ Geometric → Circle

→ Ellipse

→ Scripts → Cursive

→ Half-Cursive

→ Longhand letters

○ Machine Shorthand

→ Stenotype (Electronic Machine Shorthand)

→ Personal Computer

→ Type writer

☆ Shorthand Robot

◇ Voice Recognition

8. Thanks

Viva Stenografia !

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