Fusion between alphabetic writing and oriental characters writing.

Juan Elías Millas Vera.
juanmillaszgz@gmail.com
Zaragoza (Spain)
April 2023

0. Abstract:

In this paper I am going to introduce some of my own ideas in the philology of the alphabets and their possible adaptation to an Asian character form.

1. Introduction:

First of all, I am not a linguistic expert, in fact, I am not an expert in anything, but I am very interested in mathematics since a long time ago. My interests covers a lot of areas, pure and applied mathematics. One of the most important thing of have a mathematical mind is that you can apply that type of mind to very different situations and problems. The problem that I want to solve in this paper is very simple to explain but very difficult to implement a satisfactory solution. When we think on the equivalences between oriental characters and Latin alphabet we shortly think on the Pinyin system. On that system we found a phonetic equivalence in some representation of the Latin-writers sings. For example with the word you of English language we have nǐ. The fact is that we can adapt Chinese symbols to Latin (or Cyrillic, Greek, Arabic...etc) symbols. In this paper I want to do the inverse way. Let me explain, mathematician have in their minds matrix tools for numbers and variables, I want to apply matrices to linguistic tools.

2. What is a matrix:

A matrix is a set of non-empty (in an artistic point of view) slots in row and columns between two parenthesis. For example 1 by 1 matrix is just a slot: $\begin{bmatrix} A \end{bmatrix}$, a 2 by 1 matrix has this form: $\begin{bmatrix} A & B \end{bmatrix}$ and a 4 by 4 matrix is something like this: $\begin{bmatrix} A & B \\ C & D \end{bmatrix}$.

3. Writing English like Oriental characters:

We are going to define some properties to make it simple:
1. All words (set of letters with complete meaning by itself) will be written between parenthesis. It will not exist spaces in the separation of one word and other.
2.The maxim number of rows in a single character will be 6.
3.By the possibilities every row will have similar number of letters, respecting the syllabus of every existing word. It could be more than one syllabus in one row.
4. Since English is the actual main alphabetic language, and since the largest word in English (Pneumonoultramicroscopicsilicovolcanoconiosis) has 45 letters and 17 syllabus, the biggest matrix possible is 6x11 matrix (With some blank spaces).
5.Single-syllabus words will be write in a 1xn matrix if the word has less than 6 letters and in a nx1 matrix if the word has 6 to 10 letters.

4. Examples in English:

If we want to express in character form the next phrase,
To be, or not to be: that is the question.
We should approximately do the next:

$$
\begin{bmatrix} T \\ o \end{bmatrix}
\begin{bmatrix} b \\ e \end{bmatrix},
\begin{bmatrix} o \\ r \end{bmatrix}
\begin{bmatrix} n \\ o \\ t \end{bmatrix}
\begin{bmatrix} t \\ o \end{bmatrix}
\begin{bmatrix} b \\ e \end{bmatrix}:
\begin{bmatrix} T \\ h \\ a \\ t \end{bmatrix}
\begin{bmatrix} i \\ s \end{bmatrix}
\begin{bmatrix} t \\ h \\ e \end{bmatrix}
\begin{bmatrix} q & u & e & s \\ t & i & o & n \end{bmatrix}.
$$

For example if we want to convert a text like this,

An object at rest remains at rest, and an object in motion remains in motion at constant speed and in a straight line unless acted on by an unbalanced force.

$$
\begin{bmatrix} A \\ n \end{bmatrix}
\begin{bmatrix} o & b \\ j & e & c & t \end{bmatrix}
\begin{bmatrix} a \\ t \end{bmatrix}
\begin{bmatrix} r \\ e \\ s \\ t \end{bmatrix}
\begin{bmatrix} r & e \\ m & a & i & n & s \end{bmatrix}
\begin{bmatrix} a \\ t \end{bmatrix}
\begin{bmatrix} r \\ e \\ s \\ t \end{bmatrix},
\begin{bmatrix} a \\ n \\ d \end{bmatrix}
\begin{bmatrix} a \\ n \end{bmatrix}
\begin{bmatrix} o & b \\ j & e & c & t \end{bmatrix}
$$

$$\begin{bmatrix} i \\ n \end{bmatrix} \begin{bmatrix} m & o \\ t & i & o & n \end{bmatrix} \begin{bmatrix} r & e \\ m & a & i & n & s \end{bmatrix} \begin{bmatrix} i \\ n \end{bmatrix} \begin{bmatrix} m & o \\ t & i & o & n \end{bmatrix} \begin{bmatrix} a \\ t \end{bmatrix} \begin{bmatrix} c & o & n \\ s & t & a & n & t \end{bmatrix}$$

$$\begin{bmatrix} s \\ p \\ e \\ e \\ d \end{bmatrix} \begin{bmatrix} a \\ n \\ d \end{bmatrix} \begin{bmatrix} i \\ n \end{bmatrix} \begin{bmatrix} a \end{bmatrix} \begin{bmatrix} s & t & r & a & i & g & h & t \end{bmatrix} \begin{bmatrix} l \\ i \\ n \\ e \end{bmatrix} \begin{bmatrix} u & n \\ l & e & s & s \end{bmatrix} \begin{bmatrix} a & c \\ t & e & d \end{bmatrix} \begin{bmatrix} b \\ y \end{bmatrix}$$

$$\begin{bmatrix} a \\ n \end{bmatrix} \begin{bmatrix} u & n \\ b & a & l \\ a & n & c & e & d \end{bmatrix} \begin{bmatrix} f \\ o \\ r \\ c \\ e \end{bmatrix}$$

5. Example in Spanish:

Looking for a famous example in Spanish (the other main language of Latin) nothing more attractive that the first lines of The Quixote,
En un lugar de la Mancha, de cuyo nombre no quiero acordarme, no ha mucho que vivía un hidalgo de los de lanza en astillero, adarga antigua, rocín flaco y galgo corredor.

We can express this first line like this,

$$\begin{bmatrix} E \\ n \end{bmatrix} \begin{bmatrix} u \\ n \end{bmatrix} \begin{bmatrix} l & u \\ g & a & r \end{bmatrix} \begin{bmatrix} d \\ e \end{bmatrix} \begin{bmatrix} l \\ a \end{bmatrix} \begin{bmatrix} M & a & n \\ c & h & a \end{bmatrix}, \begin{bmatrix} d \\ e \end{bmatrix} \begin{bmatrix} c & u \\ y & o \end{bmatrix} \begin{bmatrix} n & o & m \\ b & r & e \end{bmatrix} \begin{bmatrix} n \\ o \end{bmatrix} \begin{bmatrix} q & u & i & e \\ r & o \end{bmatrix}$$

$$\begin{bmatrix} a \\ c & o & r \\ d & a & r \\ m & e \end{bmatrix}, \begin{bmatrix} n \\ o \end{bmatrix} \begin{bmatrix} h \\ a \end{bmatrix} \begin{bmatrix} m & u \\ c & h & o \end{bmatrix} \begin{bmatrix} q \\ u \\ e \end{bmatrix} \begin{bmatrix} v & i \\ v & í & a \end{bmatrix} \begin{bmatrix} u \\ n \end{bmatrix} \begin{bmatrix} h & i \\ d & a & l \\ g & o \end{bmatrix} \begin{bmatrix} d \\ e \end{bmatrix} \begin{bmatrix} l \\ o \\ s \end{bmatrix} \begin{bmatrix} d \\ e \end{bmatrix}$$

$$\begin{bmatrix} l & a & n \\ z & a \end{bmatrix} \begin{bmatrix} e \\ n \end{bmatrix} \begin{bmatrix} a & s \\ t & i \\ l & l & e \\ r & o \end{bmatrix}, \begin{bmatrix} a \\ d & a & r \\ g & a \end{bmatrix} \begin{bmatrix} a & n \\ t & i \\ g & u & a \end{bmatrix}, \begin{bmatrix} r & o \\ c & í & n \end{bmatrix} \begin{bmatrix} f & l & a \\ c & o \end{bmatrix} \begin{bmatrix} y \end{bmatrix}$$

$$\begin{bmatrix} g & a & l \\ g & o \end{bmatrix} \begin{bmatrix} c & o \\ r & r & e \\ d & o & r \end{bmatrix}$$

6. Conclusions:

Polishing the technique, deleting some of not necessary spaces and using a small font making the method more related to Asian characters for ex-

ample, maybe it will be a useful tool to bringing the alphabetic symbols to non-alphabetic writers of any parts of the world, maybe it will be a didactic way to understand some part of the voice strokes and familiarize with Latin letters.