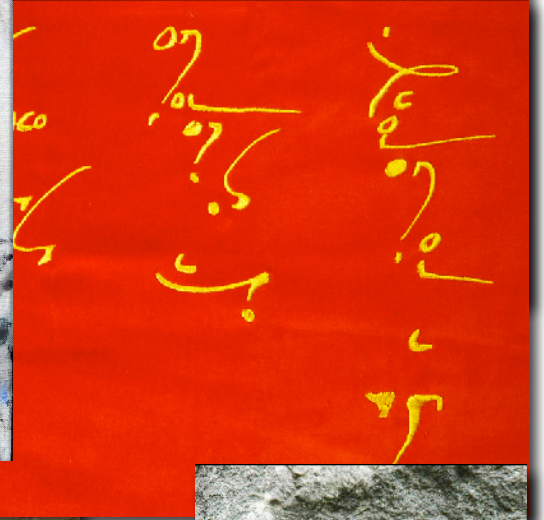
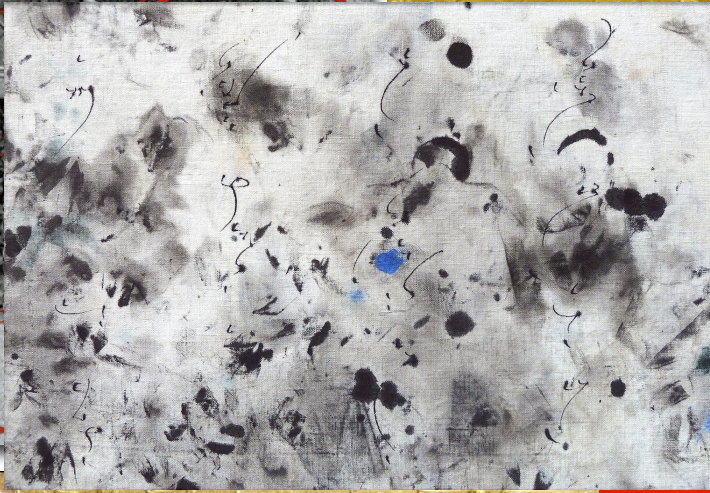


El ian Script

Variations & Evolution



by C.C. El ian





Variations & Evolution of Elian Script . (PDF=56+ MB)

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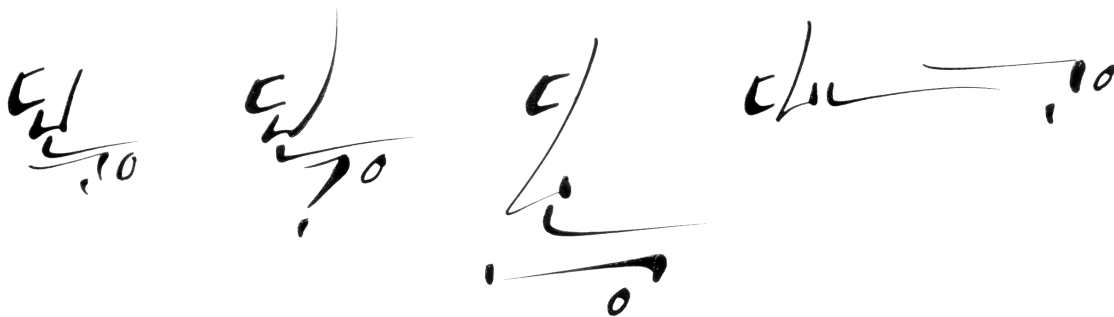
www.ccelian.com

The *Elian* script is a Latin alphabetical writing system constructed out of the same formal elements as those used by Asian scripts (Chinese, Japanese, Korean,) namely: lines and dots. As such, the same calligraphic expression found in these scripts is possible while writing in English, French, Italian, or any Latin alphabet based language. The *Elian* script system takes only a few minutes of instruction before a person can start writing with it. Its



1. Left: Horse in Mandarin, Right: Horse in *Elian* script.

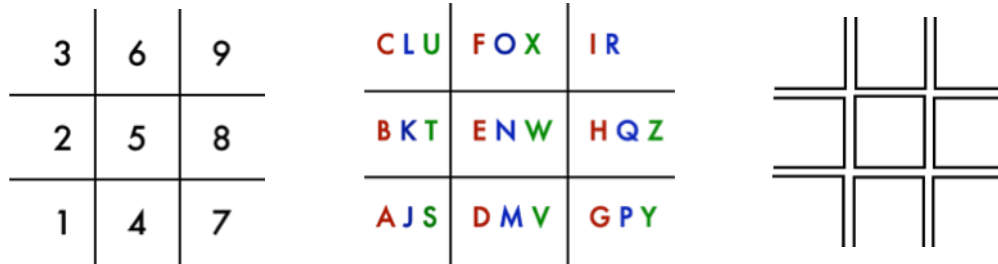
complexity comes from the quality of the writer's lines and the compositions of words. Although Asian logograms can vary as to line styles (bold, square, modulated, etc,) just as do Latin alphabetical font styles, they cannot differ as to number of strokes and their relationship to one another anymore than Latin alphabet words can be written on more than one baseline—except as a special effect. On the other hand, *Elian* script's structural principles allow for many different compositions of the same word. The variables at play are based upon differences in line ratios and number of baselines, which can go up to as many as there are letters to a given word. As an example, Figure 2 shows the other ways that the word "Horse," can be composed in English in *Elian* script. The variations shown are by no means exhaustive.



2. Variations possible for the word *Horse* in *Elian* script

First is a brief orientation as to the elements involved in this script, then a description of how an Asian calligraphic correspondence is possible, followed by a detailed clarification of the structural principles involved. The key elements of the *Elian* script are as follows:

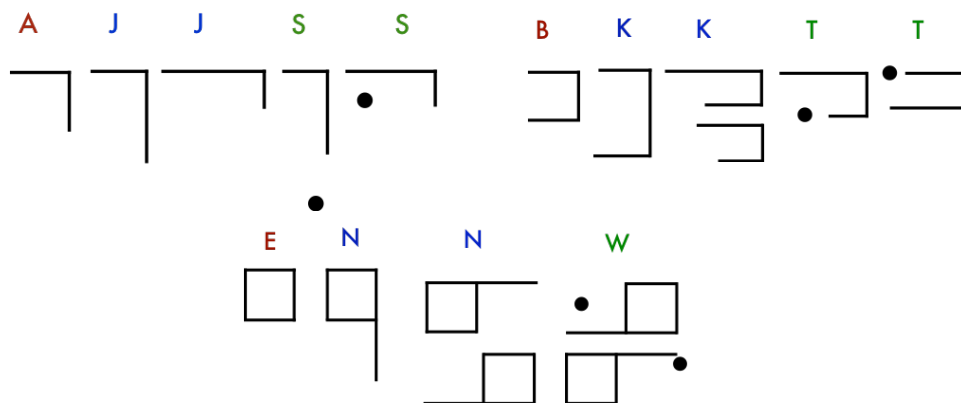
- A nine-square grid
- The 26-letter Latin alphabet
- Three compositional principles, which are:
 - 1) Clarity of line ratios: equal or unequal to one another;
 - 2) Unambiguous dot association for third cycle letters;
 - 3) Baseline sequence is left to right, then top to bottom; number of baselines possible equals number of letters in a given word.



The alphabet's 26 letters are placed within a nine-square grid. The result is three letters per box in 1-8, two for box 9. For illustrative purposes, the letters are coloured according to which cycle they occur (1st - red, 2nd - blue, 3rd - green).

The alphabet's codification within a box is now a given; to spell words we only show the line segments of a box that is associated with its given alphabetical letter. Each of the nine boxes has a unique shape; by creating three different forms for the lines of each box we have 27 different possible shapes—one more than needed for our Latin alphabet.

The first alphabetical cycle has box lines of **equal** length; the second cycle letter's lines are **unequal**: one (any one,) **longer** than the other; for the third cycle letter, the line lengths are **unequal** and there is a **dot** added. Below: the states for boxes 1, 2 and 5.



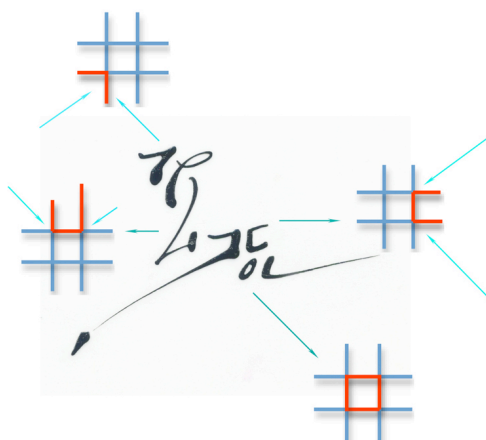
The center box is unique in that it is bounded on four sides. Still, the rules of line extensions and dot association with the third cycle letter remain the same. In actual writing, the rigidity of the rectilinear shapes disappears; they're only the blueprint for relationships and ratios. With this system it is possible to write words, especially those above 5 letters long, whose compositional variations for each are in the hundreds, if not thousands.

At first impression this script looks completely exotic; during exhibitions of works in *Elian* script I've had people from China or Japan ask what Asian language I was writing in. The answer is always "I'm writing in English." All of the forms in this script are derived from ratio variations of the box lines comprising the nine-square grid; the red box sections in Figure 3 correspond to the encoded letterforms for the word "Another".



3. The word *Another* in *Elian* script and corresponding grid locations.

Although the nine square grid is made of right angled lines, the writing itself is intended to be supremely fluid. As mentioned, the grid is a blueprint only of line relationships and letter correspondence for each box, not as with a Latin font, a shape to replicate. The actual written words will have angles different from the 90° of the grid. Figure 4 illustrates that if the angle between two lines varies this does not alter the fact, in any way, that the lines still connect at the meeting points particular to a given box, or in the case of the center box, are an enclosed space for the letters "e," "n," and "w."



4. The word *Another* in *Elian* script and corresponding grid meeting points.

The structural nature of any writing system is independent of the language that it represents. The reason that *Eliau* script can formulate words with as much calligraphic range as any Asian writing system is because the various logograms that are used with these systems are also made of lines and dots. The visual character specific to Asian calligraphy, what I call its "line jazz," does not come from the Asian languages encoded in their calligraphy but from their writing systems' graphic elements, again: pure lines and dots – most particularly with Chinese logograms, which have been variously adopted and adapted by other Asian cultures. Cultural emphasis on a brush as the primary writing instrument has also helped the expressive nature of this system since lines drawn with a brush have a far more liquid motion to them.

"In painting and calligraphy, most forms are composed of a combination of dots and lines¹."

Chinese characters (logograms,) and their transmigrated versions in Japan, do not primarily represent sounds that can be extracted in parts as with alphabetical systems such as Latin letters. Instead, they represent the existence of a thing by way of a graphic design (a logo, as it were,) made of line and dot relationships. Sometimes several logograms are needed to express a single object, situation, or concept. "Woman-Son" is the set of characters for the single word "good" in English. The ampersand (&) in English is an example of a western logogram, as are the many picture icons on a computer's menu bar: a printer for "print," an anchor for anchoring objects. In those instances too, the logograms don't spell a word, they represent its utterance.



5. The word Good–Woman and Son–in Chinese.

The correspondence of logogram to specific subject matter means that there needs to be as many logograms as representation of things. No surprise, then, that there are tens of thousands of Chinese logograms available for use. The average literate Chinese person needs to know about 3,000 of them, and at least 5,000 for the upper ends of literacy.

Given that a logogram has only a minimal indication for its sound and the rest is an abstract composition—its roots sometimes a pictograph, a drawing of the object that it indicates—it's easy to see how a grouping of lines and dots can readily phase into an abstract expressionistic drawing. The latter, and Chinese writing, which is usually denominated as *calligraphy* without distinction as to its mundane uses, have a short way to go before they are one and the same activity. The key aspect of their shared line elements is that they have the option to move through space in a virtually unhindered

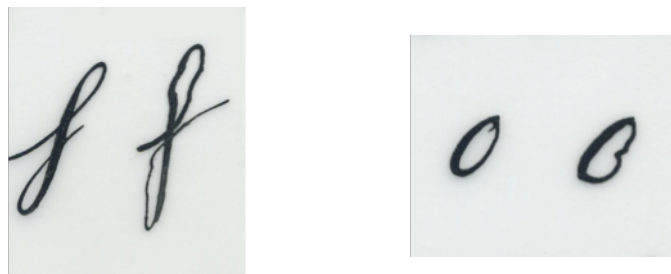
fashion once writing enters its calligraphic potential. Provided that the line relationships have enough space in which to move around one another, this easy transmutation from one graphic identity to the other holds true for any writing system comprised of lines and dots. A Westerner who wants to experience the calligraphic nature of such a system can learn one of the Asian scripts, or *Elian* script; the graphic dynamics will be the same.

The Latin alphabet, on the other hand, is designed to represent the basic phonemes, the sound elements of a given language, with distinctly delineated, often looped, graphic symbols for each major sound. These symbols are like parts of an engine with different sequences and modifications representing different sounds that correspond - as do most writing systems - to the spoken language. The small number of symbols needed to represent an expressed language means that there is a far smaller investment required for literacy in alphabetized cultures than in logographic ones. This fact has significant implications for how each kind of culture develops both technologically and politically.

Though various cultural and historical forces, among others, determine the evolving shape of a writing system once its currency is established, it is the writer who must accept the writing system's structural requirements and expressive nature. At that point the dynamics acting upon a given writing system's visual potential come from several directions and range from pure functionality to abstraction as art.

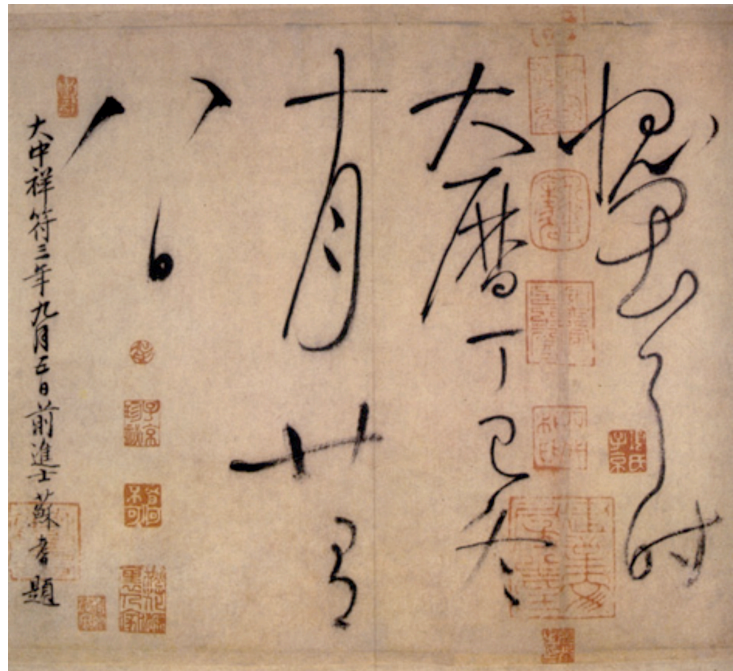
One of a writing system's main dynamics is the physical character of the elements' shapes themselves. Consider that if you were in a forest you could readily write Chinese characters with pieces of twigs or grass by simply laying them in their appropriate ratios and relationships. In fact, the inspiration for many Chinese strokes is directly based upon the essence of plant and animal forms and postures. However, in order to write the Latin alphabet you would have to make sure that the loops of some letters did not come undone by using restraining material.

The very nature of a loop requires tensile strength that is contained at a meeting point; a circular or enclosed form cannot either collapse upon itself or trail off and still look strong.



This point highlights the graphological nature of all marks on a surface, be they made by person or machine. The expressed force of a line or shape cannot help but reiterate the energy, skill and overall tone of its maker; a weak writer cannot make a strong line. The sparser the letterform, the more responsive the writing instrument, the more naked the writer's state, and the most expressively revealing form of all is an unconstrained line made with an inked brush.

"The quality of a calligraphy comes from the quality of the lines and the compositions that they form. By following their character, the character of the calligrapher is inferred. It is graphology in the pure sense of the word."



6. Huaisu - Appx. 735-800 AD.
Autobiographical essay.
Collection of the National
Palace Museum, Taipei.

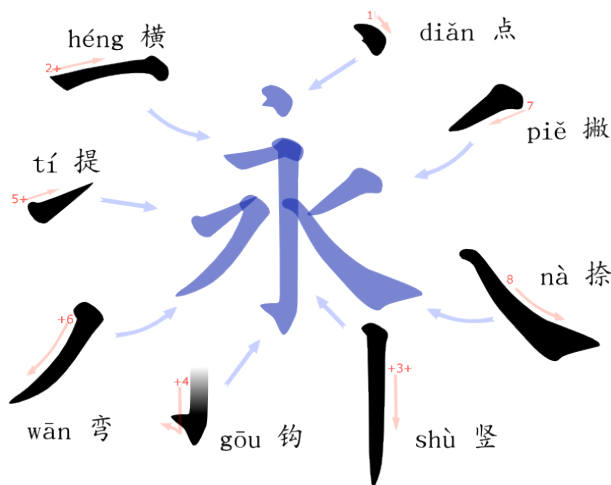
.²

The Romanization of Chinese Mandarin into *Hanyu Pinyin*,³ a transliteration of its sounds into a 27-letter Latin alphabet, means that a Chinese calligrapher writing in this *pinyin* will need to use the same font styles and calligraphic elements as a Western calligrapher.



mǎ - **mǎ** - *mǎ* - =Horse - **horse** -

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
a b c d e f g h i j k l m n o p q r s t u v w x y z



Conversely, a Western calligrapher writing English in a system that uses solely lines and dots will be working with the same calligraphic elements as the Asian calligrapher.

Writing systems are like musical instruments and, similarly, the tonalities that can emerge depend in great part upon their structures and material. The fact remains that certain motions in space are more accessible while writing in one system

versus another. The brush in Chinese writing has been a standard tool for the average literate, but it has never been the tool with Latin alphabets for anyone but an artist, a calligrapher. What is it that precludes the brush as the standard tool for writing the Latin alphabet in daily use as it has been with Chinese characters? The answer to that highlights the different natures of these two major writing systems.

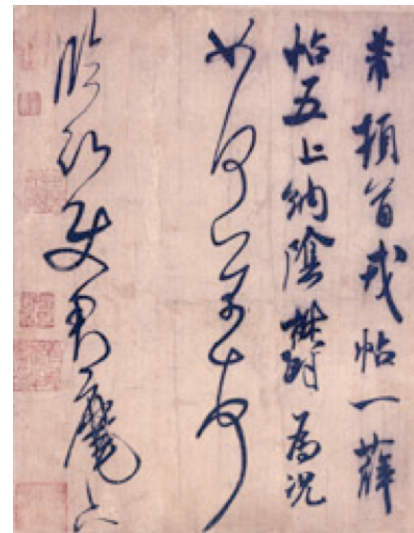
Another determinative force upon a writing system's calligraphic range, culturally speaking, is the extent to which, within the cultural mainstream, the art potentialities of the system are accorded equal status with its functional aspects. Different cultures stress to varying degrees the value of function over that of art; though none that I'm aware of, ever eschews function for art where its writing system is concerned—if anything, the trend is going in the other direction. 21st century China is increasingly aware of the limitations to both literacy and technological expediency that its writing system imposes.

Western cultures, by which I mean European and American, tend to strongly emphasize functionality in writing and the art of writing is reserved for special occasions. In the meantime, writing has to pass through many filters before its writer is considered credible. For example, alphabetical systems have spelling as one filter of operational functionality – there is no excellence in style that can trump unconventional spelling, even though "correct" spelling is itself based on majority convention¹. Staying along a single baseline – except for design effect– is another determinant of valid expression, as is adequate legibility.

Elegance

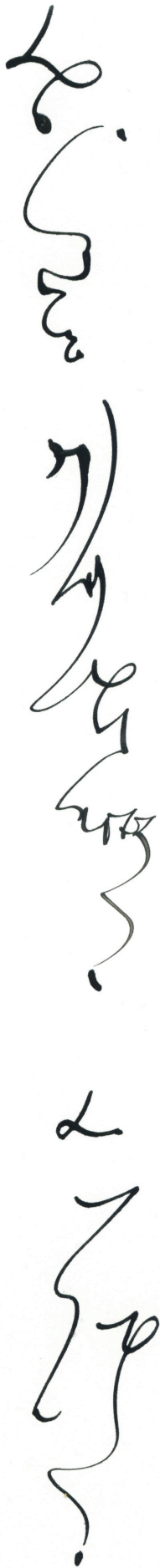
Consistency

All's well



7. Mi Fu 米芾 1051-1107

¹ I checked with Jack Bovil, Chair of the *Spelling Society* who wrote back: "While I am not a lexicographer and therefore not a professional concerned with dictionaries, I have found that each dictionary in English varies slightly as to spelling, and of course as to use (possible meanings). Hence what is correct depends on the reader. Generally the spell checkers distinguish between American and British spellings and some go as far as to distinguish Indian (sub-continent) and Australian spellings.



With logographic systems, however, such as Chinese or Japanese, both heavily based on lines in relation to one another, there is greater tolerance for ambiguity. For one thing, the many homonyms in Chinese languages which rely a great deal on varying voice tones, mean that additional clarification is often needed, usually with recourse to describing the logogram specific to the intended meaning by writing it in the air. For another, Asian culture is based upon effective group dynamics. Ambiguity is resolved by an increased effort on the part of both the receiver of communication and its sender.

Illegibility is also appreciated and highly valued as true calligraphy in writing as with the "cursive" or "grass" script in Chinese, or the Zen texts in Japanese, which are completely indecipherable to the unpracticed.

*Elia*n script, however, dispenses with many of the restrictions found in both the Latin alphabet and Chinese or Japanese writing systems. As you will see, there is no need for the individual letters to maintain a consistent ratio of their elements, nor is it mandatory to stay along a single baseline. This script also can expand into illegibility along the lines of cursive Chinese and Japanese calligraphy mentioned above.

The process for cursive calligraphy, though seemingly with the destination of creating a virtually indecipherable line, is unique among writing styles. In several ways, it is amongst the most exhilarating of them because it offers the freedom, finally, from having to make conventional sense. This particular calligraphic process combines both a conceptual and graphic ride that consists of the word one has in mind, along with the abandonment of deliberateness. How one handles that ride is clear from the resultant expressive quality of the line.

However, to move outside of the box, one first needs a box. An abstract line across a page has no conceptual protagonist; as a result there are fewer existential dimensions involved and so reduced expression except for motion for its own sake. On the other hand, the fact that there *is* a specific word at play creates real tension between the beginning and the end of cursive calligraphy. Imagine for yourself the inner feeling involved when you write an abstract expressionistic line across a paper for its own sake, and then when you write a specific word across a page as an abstracted expression. The

8. *In the moonlight I saw...*
Cursive style *Elia*n script.
Poem by Patrick M. Hayden.

sensations are completely different.

Figure 9 shows the word "Wherever" written formally in *Eliau* script to the left, then written loosely and rapidly—that is to say, cursively—in four examples. The loose forms show remarkable consistency of shape for an abstracted line, and can do so because there is an actual tension from beginning to end based upon the formal reality of a specific word. This kind of constant path is not possible with an open-ended line because there is no real event involved from start to finish, just the idea of a line abstraction.



9. *Wherever* in *Eliau* script: formal; cursive.
(R.) *Cursive script* in Chinese, formal and cursive.

Eliau script does not provide model forms, as do fonts, beyond the blueprint of line relationships, or even fixed line ratios found in Asian logograms or syllabic characters. This means that each word's letters and overall composition must be created anew as the word is being written. This freedom of composition does retain a foothold on familiar ground since the same spelling rules remain of left to right letter sequence, one letter following another, even if they end up nestled in one another.

Add up all of these factors: the option to increase baselines, to select which line is lengthened and for how long, where to place the dot, the degree of angles between lines, and it's obvious that many variables must be decided by the writer. This doesn't include the additional variables of writing instrument or line quality, which increase the total even more. The system itself provides only principles, not conforming rules. The more letters to a word, the more variables come into play.

What makes this script's variables all the more interesting is that they are not executed outside of the system's usual structural state, but inherent to it. The minimal constraints on the writer's motion through the field of the writing space, the lack of a standard line ratios beyond the basics of "shorter than," or "longer than," the simple directive that it must be clear to which lines a dot belongs, these added to the choice of how many baselines to create—one baseline option per letter in a given word— means that there is extraordinary freedom with *Eliau* script for a writer to move across the page, and therefore within themselves.

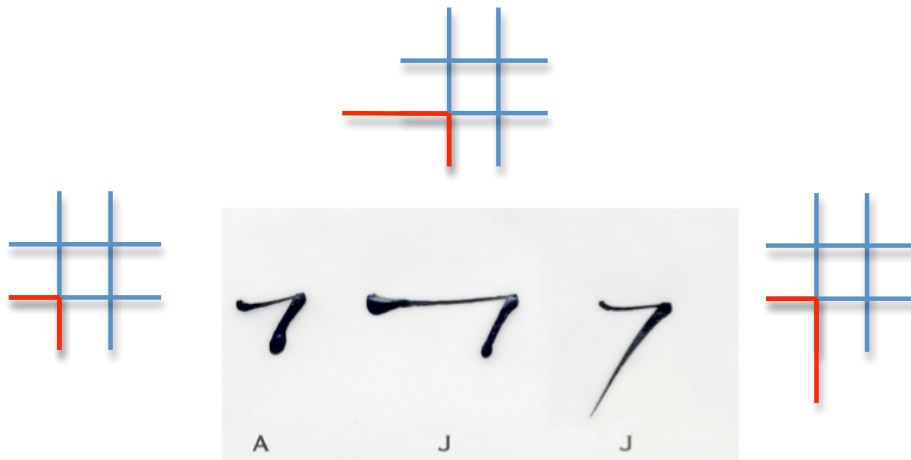
COMPOSITIONAL VARIABLES

The compositional variables of the *Elian* Script define how letter coordinates are formed and sequenced. Three structural principles provide all the necessary parameters and leave to the writer the ultimate composition of each word. Few in number, these directives are nonetheless specific; they address what every writing system must: a set of mandatory graphic elements, the valid proportions of the letter/character shapes, and directionality.

- 1) Clarity of line ratios: equal, versus unequal, to one another.
- 2) Unambiguous dot association for 3rd cycle letters: to what set does it belong?
- 3) Baseline sequence is left to right, then top to bottom; from 1 to n , the number of possible baselines equals the number of letters in a given word.

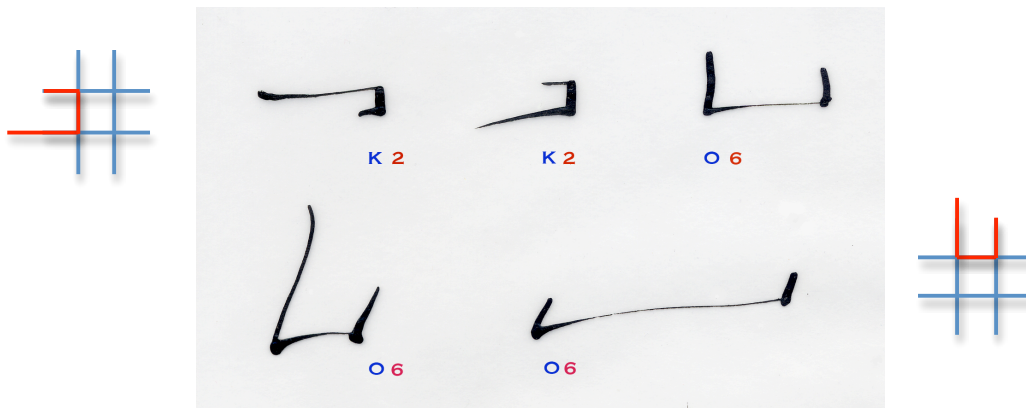
PRINCIPLE 1: CLARITY OF LINE RATIOS: EQUAL VERSUS UNEQUAL.

The words with minimal variations are single first cycle letters such as "a", "i," "c," etc., which have as their main variable the angle between connecting lines. Figure 10 shows the letters "A" and "J," with "A" having the simplest modification whereas "J"—as a letter of the second alphabetical cycle—forces the question of which side is to be lengthened.



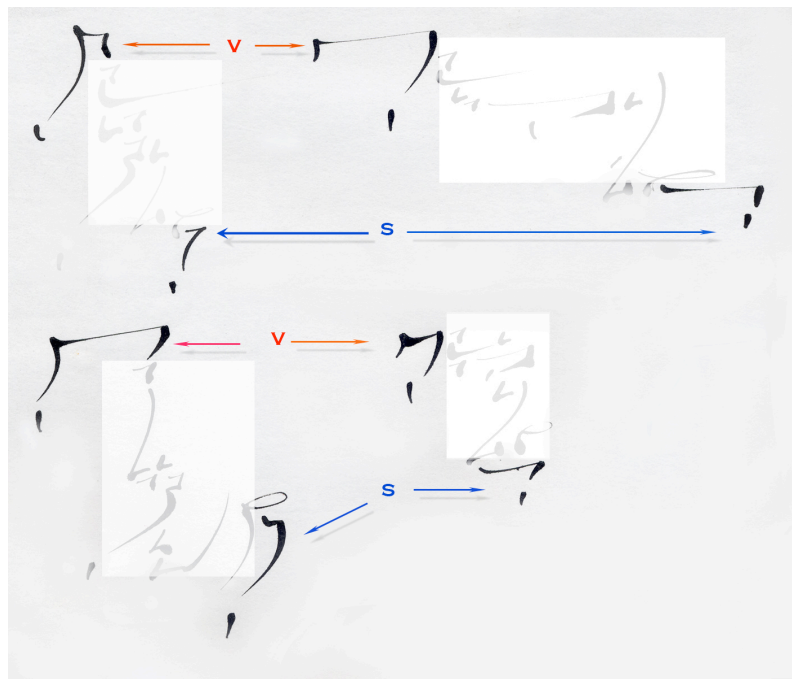
**10. The letters "A" and "J" with corresponding grid locations.
For second cycle letters, which line side is lengthened is immaterial.**

Figure 11 has examples of letter coordinates for boxes two and six ("K" and "O".) You can see that it doesn't matter which of the lines is extended; the result is always one line longer than the other. Without ambiguity then, these lines can only represent a letter of the second alphabetical cycle.



11. The letters of boxes 2 and 6: "K" and "O," and their corresponding grid locations.

Figure 12 illustrates the third cycle letters of "V" and "S", the beginning and end letters of the word "Variations." Again, it doesn't matter which side is lengthened, though the issue of dot placement now comes into play.



12. The letters "V" and "S" at the beginning and end of the word *Variations*.

Elian script uses the term "dot" in the same way as it is used in Chinese writing:

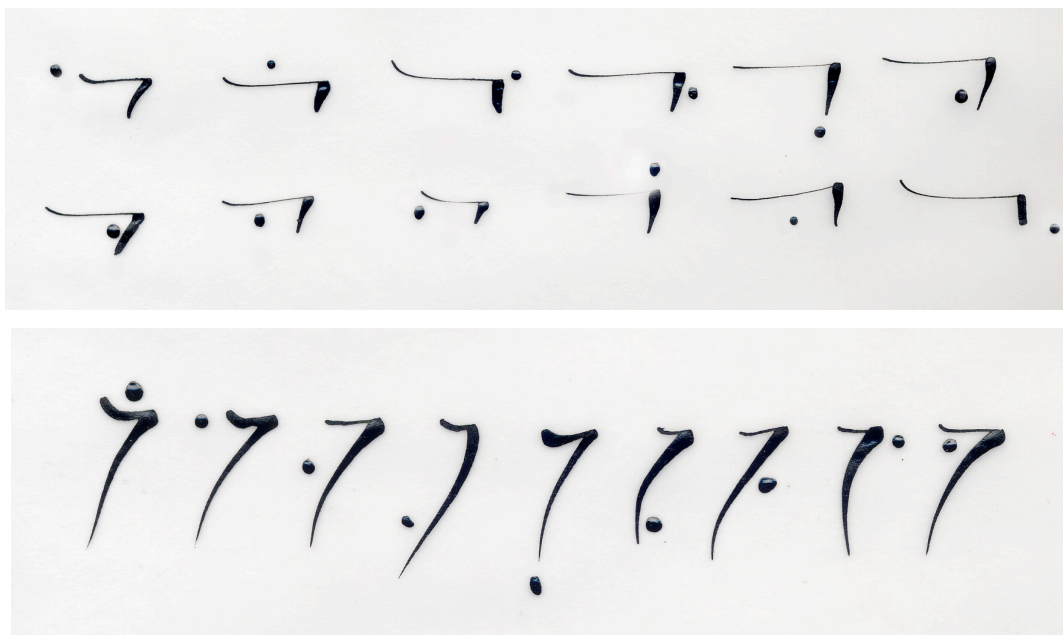
"In calligraphy it is obvious that the characters are all composed of dots and lines. Dots are not circular in shape as in the West, but vary by thickness, and their 'tails' indicate direction of movement in the structure of the character."⁴

Each third cycle letter has a dot associated to it to differentiate itself from second cycle letters. Unlike accents or diacritic marks, the placement of a third cycle mark is not specified, only that it be associated to its correct set of line coordinates. The illustration in figure 13 shows a shaded area within which a dot could naturally be associated with the letter coordinates, for example the blue +. The red + is borderline. That said, if the calligrapher can make the composition work, the dot distances have very wide latitude.



13. The letter "S" and shaded area for possible dot

In Figure 14 all variations of dot placement indicate the letter "S" without any one locating the correct model for dot placement or side lengthened, which in the process of writing words leads to the second principle below.



14. Examples of dot placements for the letter "S"

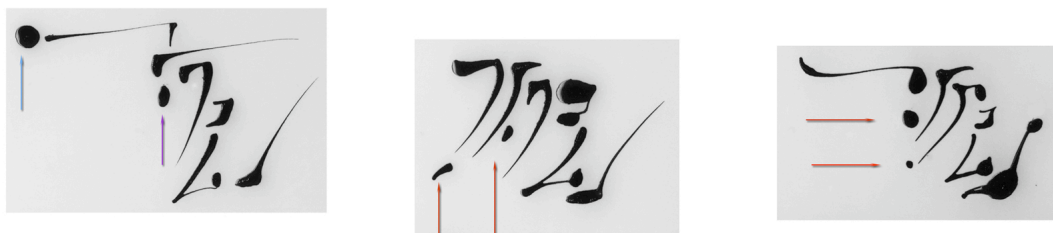
PRINCIPLE 2: UNAMBIGUOUS DOT PLACEMENT FOR THIRD CYCLE LETTERS

Sometimes a word has adjoining letters of both the second and third cycle, as in the word "to." If the mark is placed ambiguously between these two letters, it is not clear to which letter coordinate a mark belongs—although interpreting one or the other of the choices will usually make clear the intended word ("KX" versus "TO.") However this ambiguity is an inelegant scenario readily avoided by clarity of mark association, as illustrated in Figure 15. As with Chinese, there are no capital letters, *per se*.



15. The word *To*. Ambiguous dot association in example on the left.

Figure 16 shows the word "Symbol." An ambiguous dot here hinders significantly recognition of the intended word. Only the first arrow in blue avoids the ambiguity of mark to coordinate association; the orange arrows indicate dots that could belong to one set of coordinates or the other, either an "S" or a "Y". The purple arrow in the first example, left, shows a borderline placement—technically close enough to the intended "Y" so as not to turn the "M" next to it into a "V."



SYMBOL

16. The word *Symbol* with ambiguous dot placement (red arrows.)



In Figure 17, the word "Write" doesn't have to be anywhere near as particular to dot placement as *Symbol* because the "R" of box 9 doesn't have a third letter in it. A dot near that lengthened quadrant can only be an "R" regardless and so, must belong to the other letter nearby, in this case the "W".

17. The word *Write* without dot ambiguity for "W" and "R."

PRINCIPLE 3: THE DIRECTION OF WRITING IS LEFT TO RIGHT, THEN TOP TO BOTTOM

The final set of variables is that of baselines. The system does not specify what number of baselines is the model or "correct" number; there is no requirement that all of the letters sit on only one. The decision is made, almost on the fly, when writing. The number of possible baselines is equal to the number of letters in a word. Figure 18 shows the word "Top," and its three possible baselines, one for each letter. The spelling of words requires going from left to right, but the motion can descend (or not,) with each new letter.



18. The word *Top* and its three possible baseline zones.

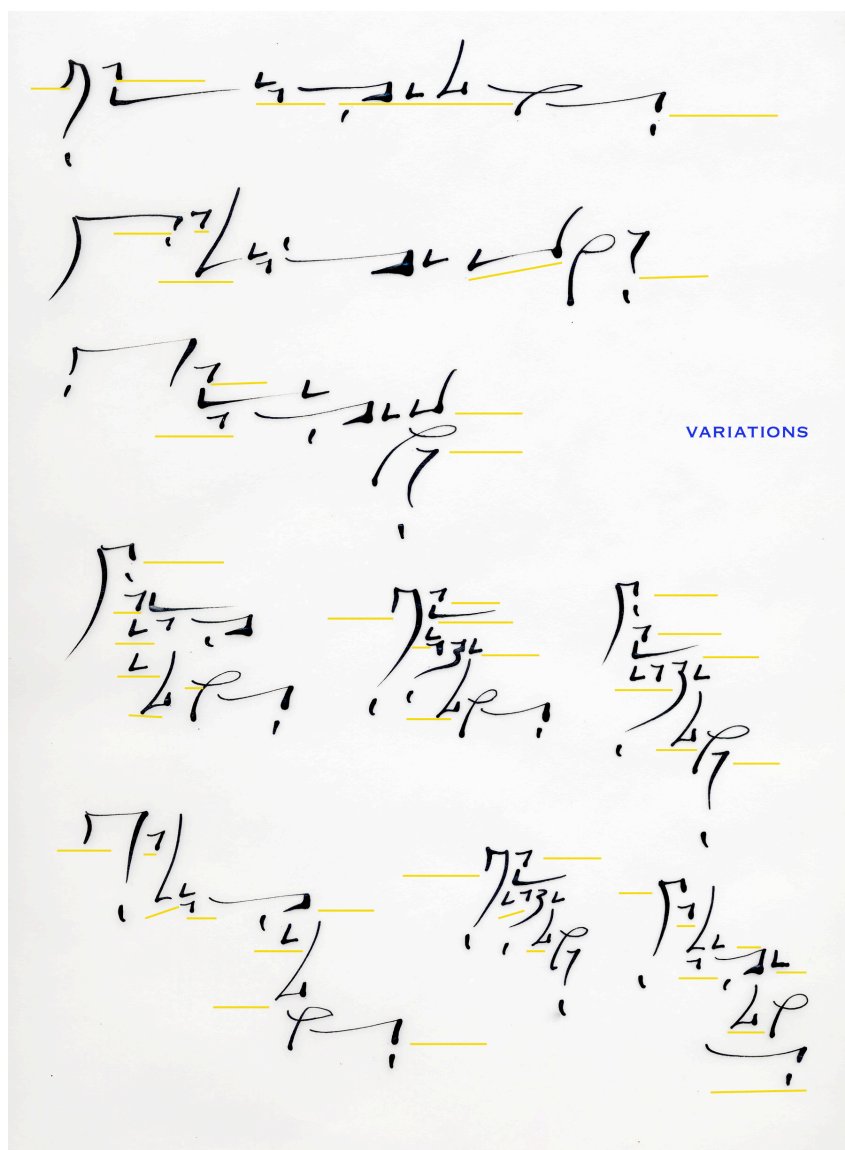


Figure 19 shows the word "Variations" several times with yellow lines to indicate the various baselines that appear. The greater the number of letters, the harder it is to prevent variations among the structural elements. In fact, the system requires the exercise of its variables, which is in great part its dynamism. Word and sentence compositions tend to create themselves in new ways each time that they are written. A calligrapher can still exercise a preferred composition, which is an additional option to the spontaneous writing. Cursive writing, however, can only be done as a unique event.

The examples shown here with this particular word by no means exhausts the number that are possible. If one were to exercise each unique

19. The word *Variations* and its multiple baselines (yellow.)

composition, the number would be very large, as demonstrated with the 13-letter word “Compositional” in Figure 20

C = ANGLES ARE VARIABLE BUT COULD BE CONSIDERED STYLISTIC CHOICES SO I WON'T ASSIGN A NUMBER OF VARIABLES TO FIRST CYCLE LETTERS.

O = 3 POSSIBLE SIDES LENGTHENED

M = 3 POSSIBLE SIDES LENGTHENED

P = 2 POSSIBLE SIDES LENGTHENED

O = 3 POSSIBLE SIDES LENGTHENED

S = 2 POSSIBLE SIDES LENGTHENED
MARK FOR "S" = 4- "4" IS FOR BASIC CARDINAL DIRECTIONS.

I - SAME AS FOR "C"

T = 3 POSSIBLE SIDES LENGTHENED
MARK = 4

I - SAME AS FOR "C"

O = 3 POSSIBLE SIDES LENGTHENED

N = 4 (SAME REASONING AS FOR THE MARK)

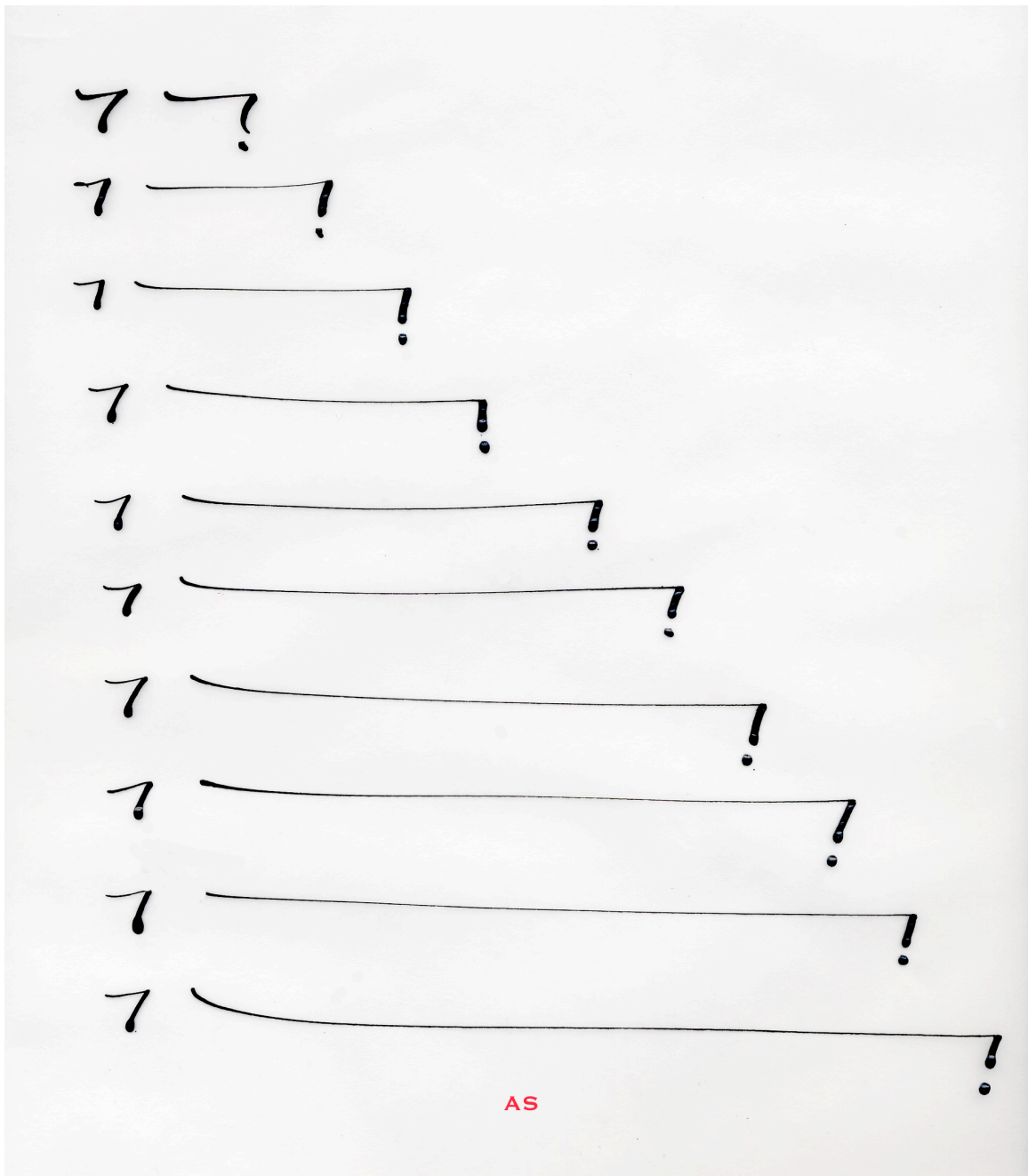
A = SAME AS "C" AND "I"

L = 2 POSSIBLE SIDES LENGTHENED

VARIATIONS POSSIBLE
 $3 \times 3 \times 2 \times 3 \times 2 \times 4 \times 3 \times 4 \times 3 \times 4 \times 2 \times 13$
 (# OF LETTERS & BASELINES) = 1,617,408

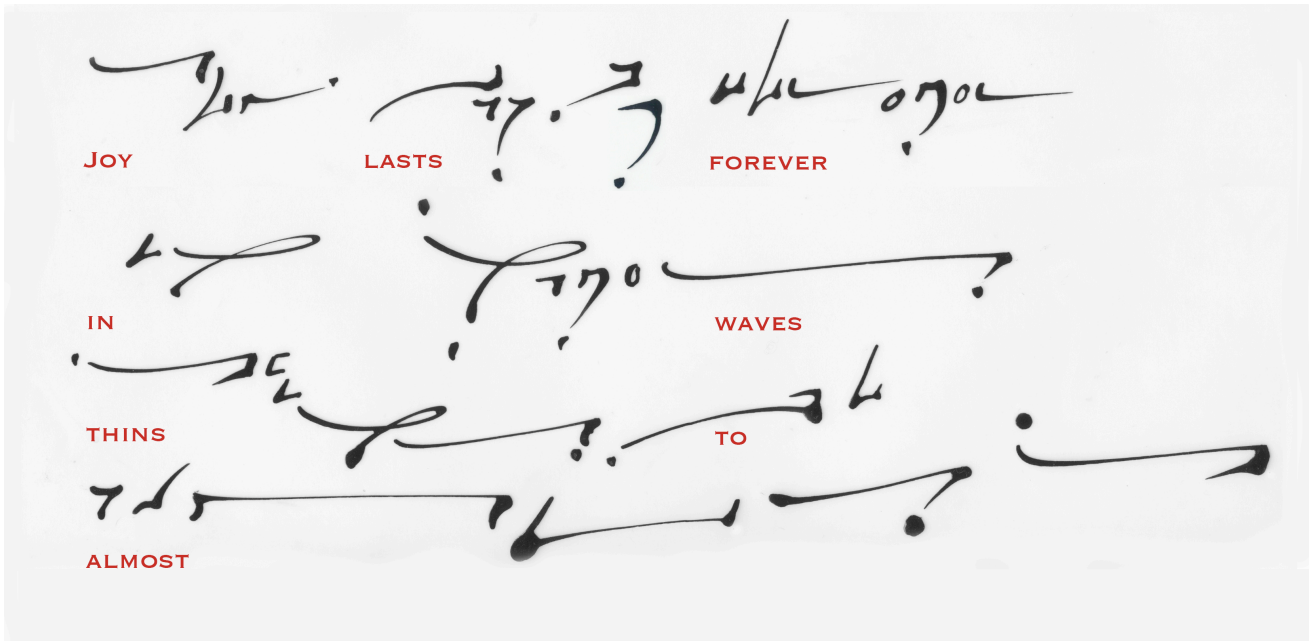
20. *Compositional*: the number of its variables. This does not include different line lengths.

That so many variations are possible does not mean all compositions will be aesthetic. In practice, there will be fewer options, although that still leaves a huge number. The beauty of this system is that all of the variations are consistent with it and not modifications of a standard style. Rather, they are an exercise of the system's expressive potential. In this respect it has far greater freedom of graphic motion than either the Latin alphabet or Asian logograms. Figure 21 is an illustration of how far line lengths can go—at least as far as I can make them—in this case with the word "As".



21. The word As. Examples of possible line lengths.

Although I tend to stack letters, the system allows for linear sequencing. In Figure 21, an extract from the poem "Joy" by Patrick M. Hayden. You'll note that the last word "almost" takes up the entire line. It can't be helped; once the writing begins it tends to take on a life of its own.

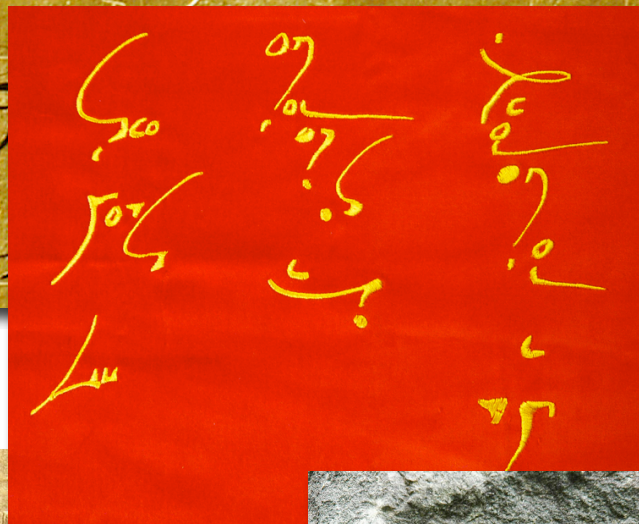
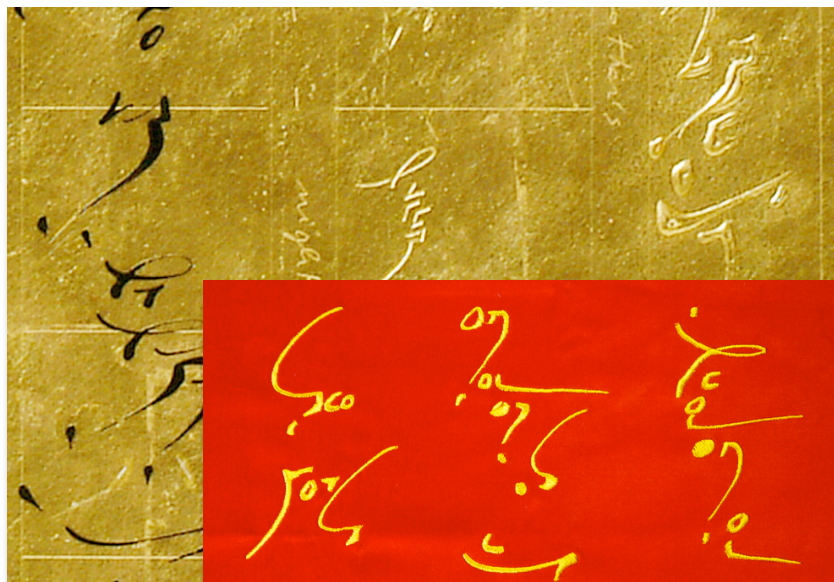
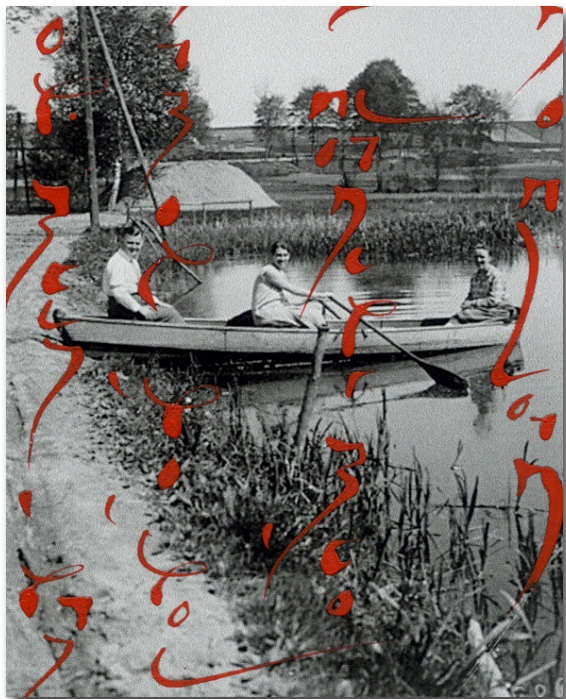


22. Writing that takes place primarily on a single baseline.

Elian script is intended for use by others and beyond my own purposes. I've been gratified to receive letters from those who use it, as well as to see its dissemination by chats and forum via the Internet. This system derives its form so much from the expression of its lines that each writer can make it their own, and do so in ways that surpass what I've been able to do.

My own deeper interest with this writing system is the study of words and how they relate to concepts. Although it is subject for another treatise, suffice it to say that it is a great advantage in the study of languages and word concepts to have a non-standard, and simple, writing system from where one can gain perspective by stepping outside of the system of study.

23. Next page: *Elian* script, sampling of works—Clockwise: Gouache on photo, ink and 23k gold on gold leaf, embroidered thread on red velvet, ink and engraved stone, ink on paper, gouache on photo, engraved stone, ink on paper, 23k gold on gold.



¹ Da-Wei, Kwo, *Chinese Brushwork in Chinese Calligraphy and Painting*. Dover Publications, Inc. New York, 1981. P. 62.

² From author's notes at the *Symposium on Chinese Calligraphy*, Seattle /Asian Art Museum, April 2001.

³<http://en.wikipedia.org/wiki/Pinyin> - Author of image: Michelet

⁴ Da-Wei, Kwo, *Chinese Brushwork in Chinese Calligraphy and Painting*. Dover Publications, Inc. New York, 1981. , P. 63.

Quotation on graphology next to Figure 6 from author's notes at the *Symposium on Chinese Calligraphy*, Seattle /Asian Art Museum, April 2001.

Chinese logograms with "JS" on left created by *Jan Suan*.

Illustration showing the eight basic Chinese strokes from Wikipedia commons.

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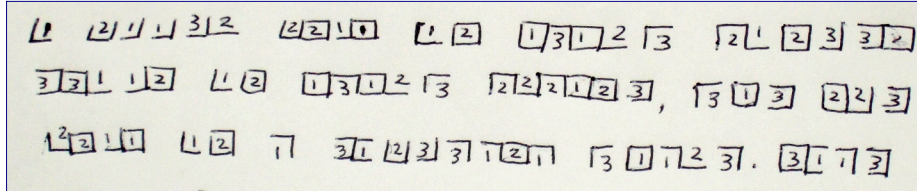
ccelian@ccelian.com

www.ccelian.com

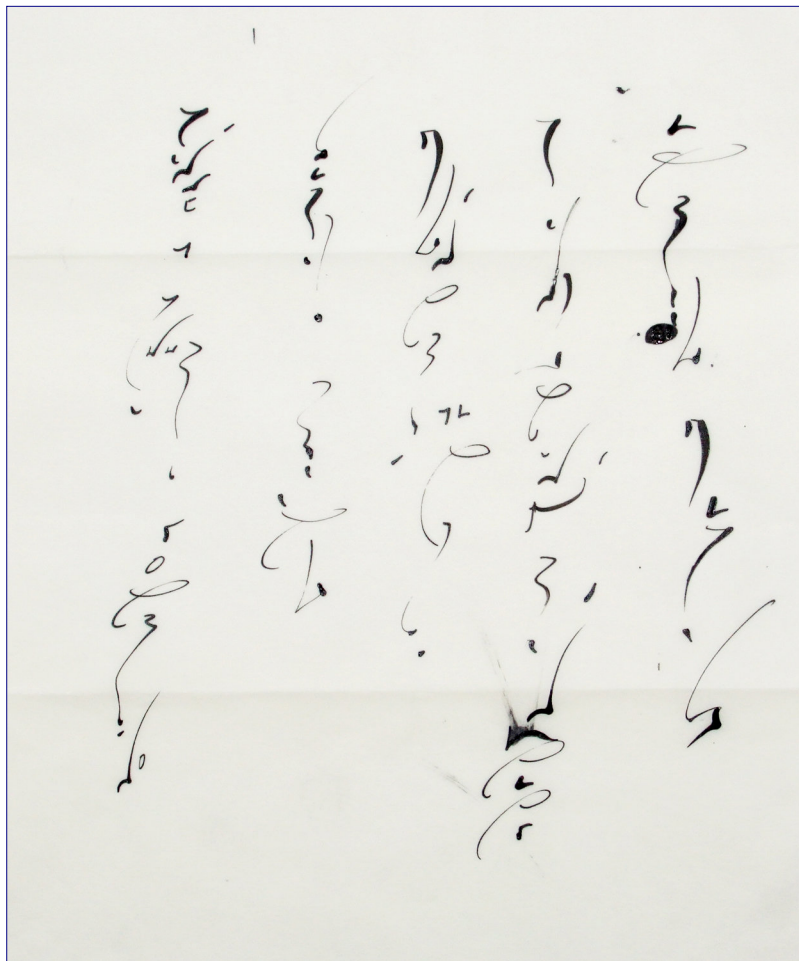
EVOLUTION OF THE ELIAN SCRIPT

From Code to Calligraphic Writing System.

How this:



Evolved into this...



Then into this:

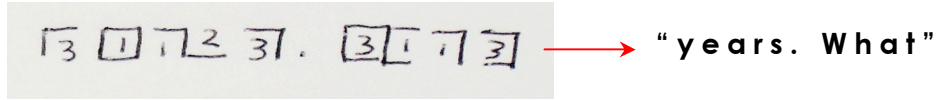


The Elian Script was originally intended to differentiate, at a glance, unfinished notebook writings from those still in progress. Before developing this system I used the letters of the Cyrillic alphabet as sheer phonetic elements: "Tuscany" would thus be written "ТСКАНН". The more I wrote phonetically in Cyrillic, however, the more my spelling in English deteriorated - "ТСКАНН" back to English would be written "Tskani;" I needed something else.

Soon after, I came across the numbered nine-square grid (page 3). It occurred to me that each of the nine boxes had a unique configuration, and that with the addition of a numeral, "1", "2", or "3", it was possible to have a coded form for each of the 26 letters of the Latin alphabet. At first I used this grid simply as a code since its initial form had no calligraphic aspects to it. Only when modification led to modification did the potential for calligraphy emerge.

2Below is an outline of the code's structure, followed by a series of illustrations that show its formal evolution from code to calligraphic writing system¹.

The starting point of the Elian Script was a one-to-one code written in the same sequence as the letters that it codified:

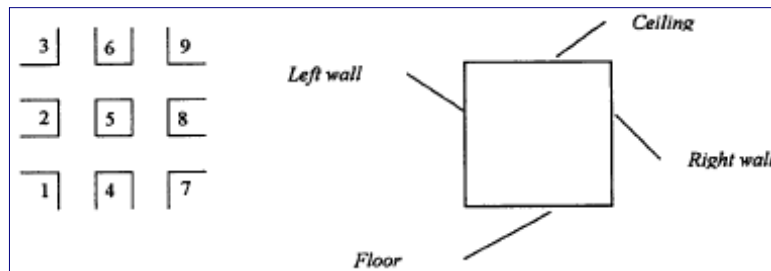


The boxes above with a numeral from 1-3 in them each refer to one specific letter out of a possible three, in keeping with the system shown below:

3	6	9	C	F	I	L	O	R	U	X	
2	5	8	B	E	H	K	N	Q	T	W	Z
1	4	7	A	D	G	J	M	P	S	V	Y

C, L	F, O	I, R
U	X	
B, K	E, N	H, Q
T	W	Z
A, J	D, M	G, P
S	V	Y

Each box inside the nine-square grid is unique in shape, such that a set of box coordinates can refer to only one of the nine boxes².



This correspondence of number to box shape is the original code. At that point it served as a code is intended to do, namely "A system of symbols, letters, or words given certain arbitrary meanings, used for transmitting messages requiring secrecy or brevity".

Each subsequent modification to the shape of the code was intended to maintain the system (box shape + number = specific letter) all the while stretching the limits, and always for the sake of speed and flow—common motivations in the transformation of many writing systems³. The entire process of change was nearly imperceptible because each modification was needed to make the next alteration possible. Only in hindsight was I struck by the contrast between the beginning and the final appearances of this writing system.

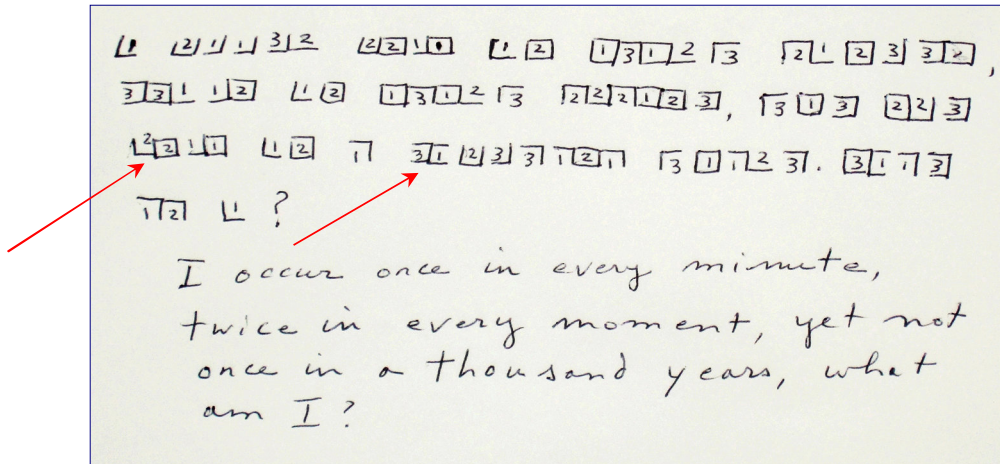
I periodically edited notes into new notebooks and threw out the old ones. As a result only a few examples of the original writings at each stage of this system's development remain.

¹ This review of the graphic aspects of the Elian script puts aside the fascinating subject of writing systems themselves: what constitutes them, how they differ from or are similar to codes, how they become mainstream, and a slew of other reflections.

² Although the specific enumeration above is used, the first box could just as well have started at any corner and gone in any sequential direction. The essential thing is to stay with the enumeration decided upon.

³ Cuneiform and hieroglyphics are two examples. Professor Robert Fradkin's website at the University of Maryland has elegant animated representations of the evolution of many writing systems, <http://www.wam.umd.edu/~rfradkin/alphapage.html>.

Though it is a matter only of recreating the form at various stages, I can't replicate the same tonality of line as there was in the original texts and so I've chosen to use only actual samples.

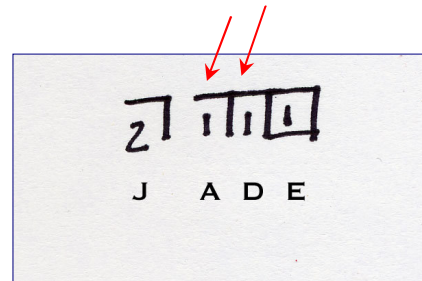
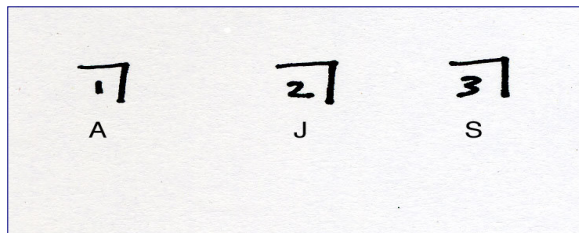


Above - 1 - Earliest Version - Ca. 1980

Numbers are placed in boxes.

Arrows point to use of common walls for words "once" and "thousand"⁴.

In the illustrations immediately below the shape of the boxes and each numeral within them indicates which of the three possible letters is represented: "1" represents the first letter in alphabetical order in that box, "A."; "2" for the second letter in the same box, "J," and "3" for "S" the third letter in alphabetical order in that box, as shown below.

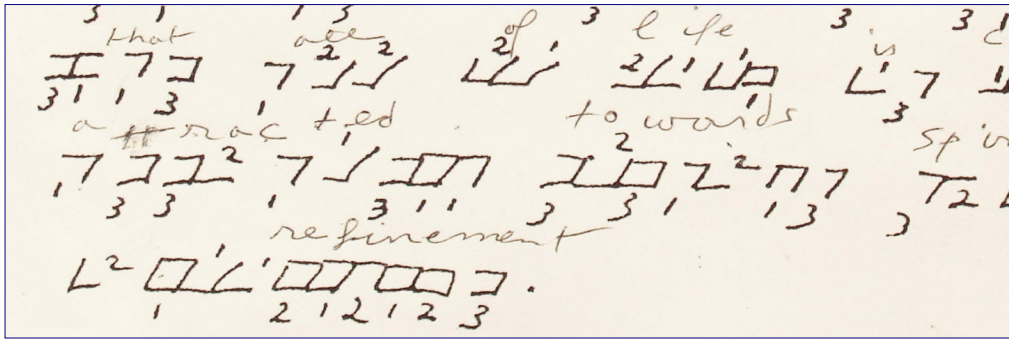


3	6	9	C	F	I	L	O	R	U	X	
2	5	8	B	E	H	K	N	Q	T	W	Z
1	4	7	A	D	G	J	M	P	S	V	Y

C, L	F, O	I, R
U	X	
B, K	E, N	H, Q
T	W	Z
A, J	D, M	G, P
S	V	Y

The arrows point to where "a" and "d" share a common wall. It was faster to write if I connected the walls. Later I saw that this linear joining was a prejudice inculcated by the structure of Western alphabetical writing systems and eventually discarded this composition. Its removal was the key to the calligraphic developments that then followed.

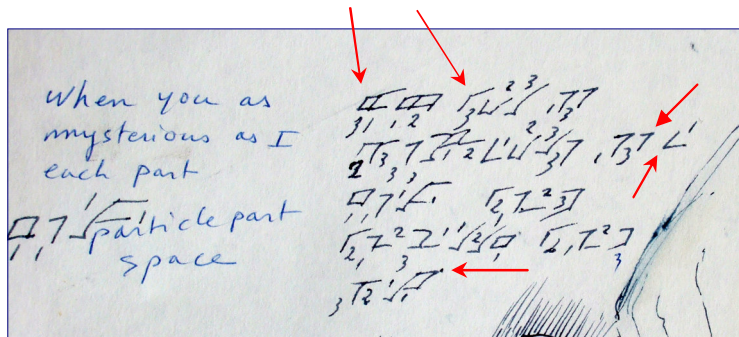
⁴ The answer to the riddle is: the letter "m".



Above - 2 Numbers eventually migrated outside the boxes. Ca. 1982

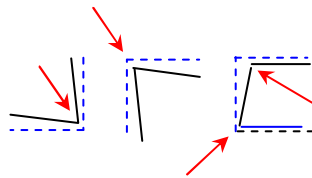
There is still an effort to keep to the square form and common walls are still used

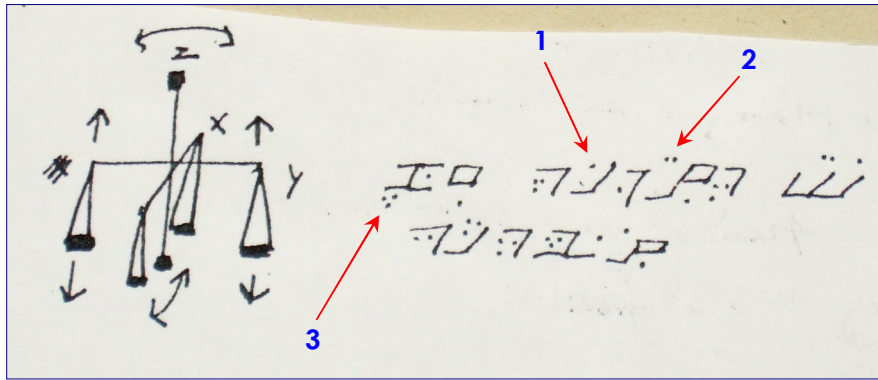
Within a short time the sides of the boxes became slanted, probably because there is naturally a rightward slant to my writing in the Latin version. By taking the path of least resistance the pace of writing increased. The numerals are now placed well outside of their respective boxes without losing their association to them. The writing was made much easier without the need to fit numerals into boxes and doing so didn't make any difference to the clarity of the system. This last condition dictated whether or not any modification would stay.



Above - 3 Lines lengthen for increased speed of writing. Ca. 1983

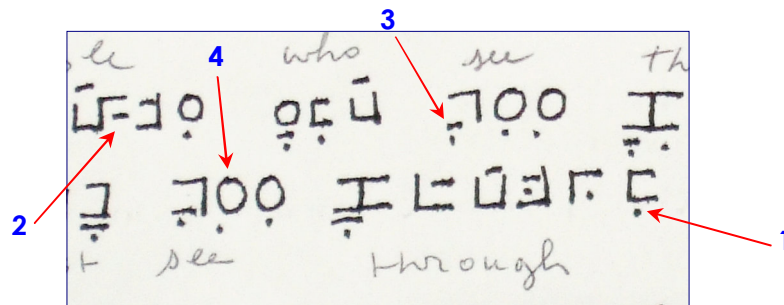
Now that I had habituated to the slanted lines, they readily lengthened. The numerals plus the junctures of the lines, within their angular range below 180 degrees, do the work of box and letter specificity, making it inconsequential whether or not the box lines are rectilinear. When snapped to the grid all slanted lines amount to the same information; what is determinative is the location of the point where the lines meet and how many meeting points there are to a given box.





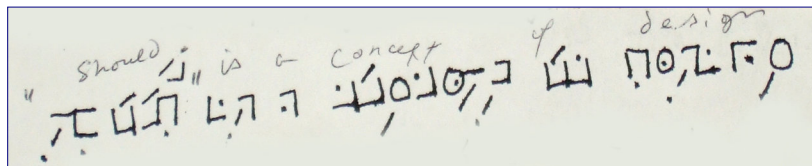
Above - 4 - Numerals are replaced by equal number of dots - Late 1983

Given that the highest numeral used was a 3, it was a lot faster to replace numerals with an equal number of dots.



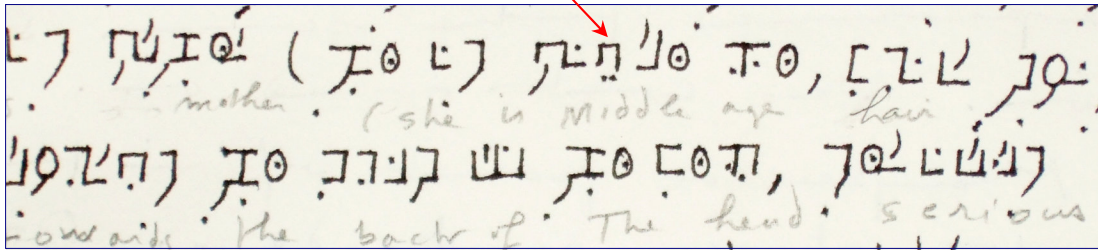
Above - 5 - Two dots for the 2nd cycle are combined into a dash. 1984

Inspired by the tendency for doubled ink dots to seep one into the other, I realized rather quickly that I could blend the two dots into a dash. This was a net gain in speed and ease of writing. The enumerations now consisted of a dot (1), a dash (2), and a dash plus a dot ($2 + 1 = 3$). The square form of box 5 now becomes a circle since the vital characteristic of that box is complete enclosure (\rightarrow 4) — a circle is much faster to form than is a square. As evident in the above illustration, I reverted briefly to equal length lines and right angles as a hedge against confusion while in the early stages of using the new element of dashes.



Above - 6 - Dashes become slanted Ca. 1984

As it was earlier with the lines demarking the sides of a given box, the dashes for the letters of the second and third cycles began to slant. This made the writing process far more fluid.



Above - 7 - Dashes connect to boxes for 2nd cycle -

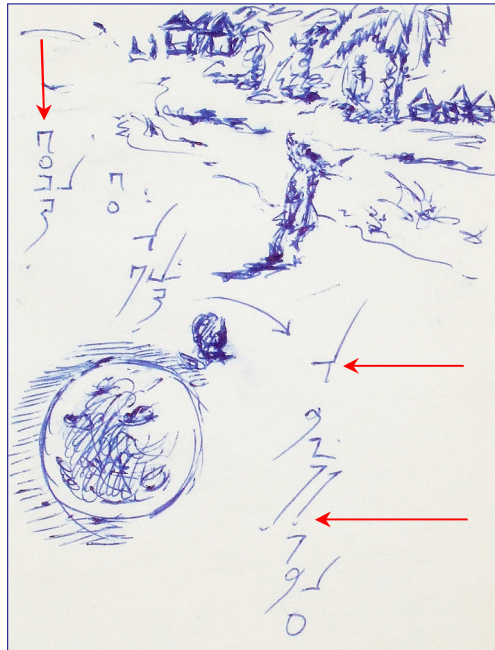
Two dots here now mean doubling of a letter instead of a 2nd cycle letter.

(Note the double "d" of the word "middle" in the top line {arrow}.)

This abbreviation was soon discarded. 1985

The additional action of lifting the pen to make the dash is now circumvented by lengthening any one of the lines that made up the parameters of a given box and its 2nd cycle, e.g. attaching the dash to the box. At this time the boxes of the first cycle still contain a dot because I hadn't yet realized that I could simply make those lines of equal length and still avoid ambiguity between boxes for letters of the first cycle and those for the second.

The dash was now used for a letter of the second cycle and the double dots could be used for something else. As indicated in the caption, for a while I used these double dots to indicate the doubling of a letter. This element seemed too arbitrary, so I discarded it.



Above - 8 - Dot for 1st cycle starts to be replaced by equal box line lengths.

Lengthened line used for 2nd cycle and dot added to it for 3rd cycle (arrows.)

Letter composition starts to stack.

(Writing is in French: ". "le début de la mort > la naissance,"

"the beginning of death > birth". Ca. 1986



Above - 9 - Stacking of letters due to limited writing space.

Accents are added to first cycle letters.

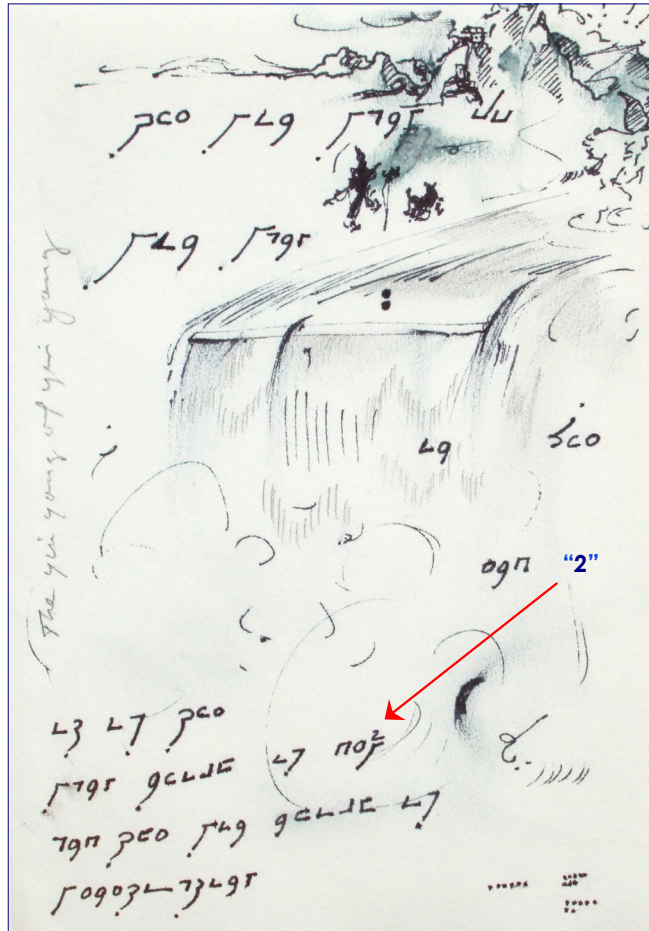
(Writing in French: "le passé du passé -n{ la création de la nuit"}
"the past's past - {the creation of night'}.) Ca. 1986

With the specification of equal line lengths for the first cycle box, the dot disappears. In the above example the "a" in both instances of the French word "passé" are not equal in length because these notes were rapidly made during a live storytelling performance in Paris on an, approximately, 3.25" x 2" notebook. However, I was aware that they were intended to represent first cycle letters because I had just discovered this option and was quite thrilled about it, as with all of the transmutations. At this stage of the code (and I still thought of it as one,) I was not as concerned then as I was later that it be a tight system since it was still for my private notes.

In the above example, which was done on the same day as that in illustration 8, I was aware of the importance of making the lines of equal length for the first cycle letters to avoid ambiguity, but it still required a deliberate effort to do so. Forming the boxes of the second cycle letters, however, was very easy because of the reduced need for concentration. Now that the dash was attached to the box line itself, the detached dash was available to add to first cycle letters to indicate accents, a necessary detail in French. This was workable with first cycle boxes but not second cycle ones since the dash there in addition to the lengthened line would indicate third cycle letters. Fortunately most accents in French occur with first cycle letters (a, e, i,) and when they don't it is with the vowel "o" in its distinctive circumflex shape (^) or with a "u" which can take an accent in addition to the dash for a third cycle letter without creating ambiguity.

Over time I've come up with modifications to write words whose elements go beyond those needed for English, but that language is still my primary focus. As with many writing systems, different languages will take on an existing one and adapt it to their own needs.

The size of the above notebooks (3.35" x 2") left me with little space for both text and drawings so I found myself spontaneously stacking letters. To my way of perceiving the notes there was no loss of legibility. I would naturally move my eye from left to write and then top to bottom. This movement is nothing more than a straight line let loose to meander across a field and not an action of scrambling the word; the letter sequence remains preserved.

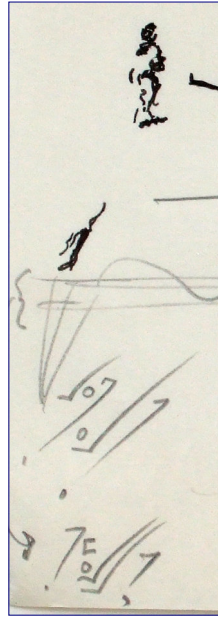


Above - 10 - Common walls no longer used.

The arrow points to the numeral "2" that was placed above the coordinates for the letter "e" to spell "deep." This technique was soon dropped.

Ca. 1987

When necessary I would stack the letters of a word to fit them into the space available, however, I still thought that a linear sequence of writing was the way it *should* be. A year after I began to stack letters I continued to write along a single baseline. By 1987 I began to detach the lines of a given box from those of the neighboring one and discarded common walls. The stacking of letters had loosened each letter from its habitual linear bond and I now saw each letter as an individual element in need of its own distinction.



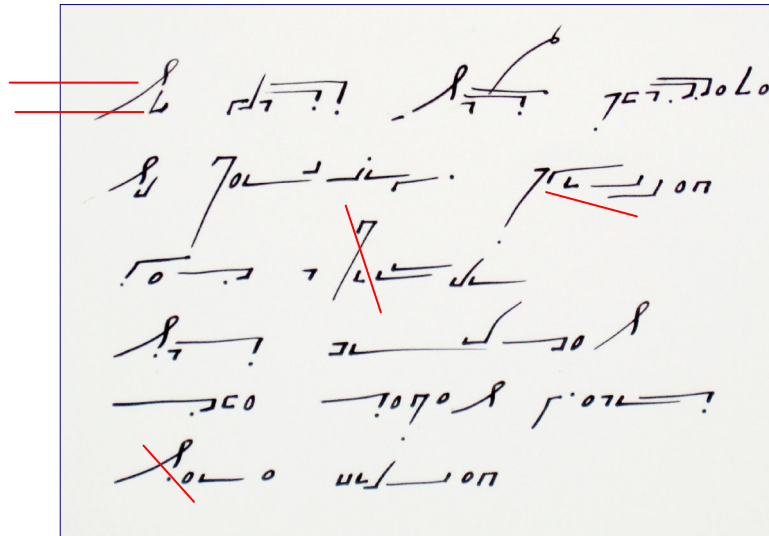
*Above - 11 - Letter sequence stacks more readily with discard of common walls.
Ca.1987-1988*

After 1987 I began to stack letters even when there was room to move across the page. Here is where I let go of the Latin script's straight baseline imperative and discovered a new freedom available within my own system. The more I stacked the letters of words the more I realized that the choice of several baselines meant a word could be composed in different ways, all without loss of legibility

By now I really had to make line lengths equal if I wanted to indicate letters of the first cycle, otherwise I would be confused between whether or not I meant to write a letter of the first cycle or one of the second. The additional focus required by the letters of the first cycle made the loosened restraint for letters of the second cycle all the more vivid which led me to make lengthened lines of the second and third cycle with that much more verve.

The introduction of variable baselines was not only a compositional shift but also a conceptual one. When I reviewed this writing system's evolution I noticed a distinct paradigm shift as I retraced the emergence of descending baselines. The bonds between the letters of a word melted away; each letter tumbled loose and took on an individual presence such that a word revealed itself as an assembly of parts and no longer a solid unit.

The greater use of letter stacking inspired exploration of the compositional possibilities and created two self-sustaining options: to write all in a straight line (as below) or to stack, which could also include letters that traveled along the same baseline. This exploration was somewhat casual because I was still not seeing this writing system as anything more than a private means of recording language. That there might be interesting compositional and visual aspects to it were still peripheral observations.

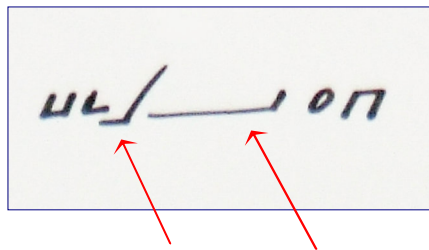


*Above - 12 - Calligraphic aspect emerges.
Drifting baselines naturally occurs (red lines) Ca.1989*

The three basic rules of this system were now firmly established: unambiguous line ratio (equal versus unequal,) writing direction: left to right then top to bottom, and clarity of dash association with its proper box coordinates.

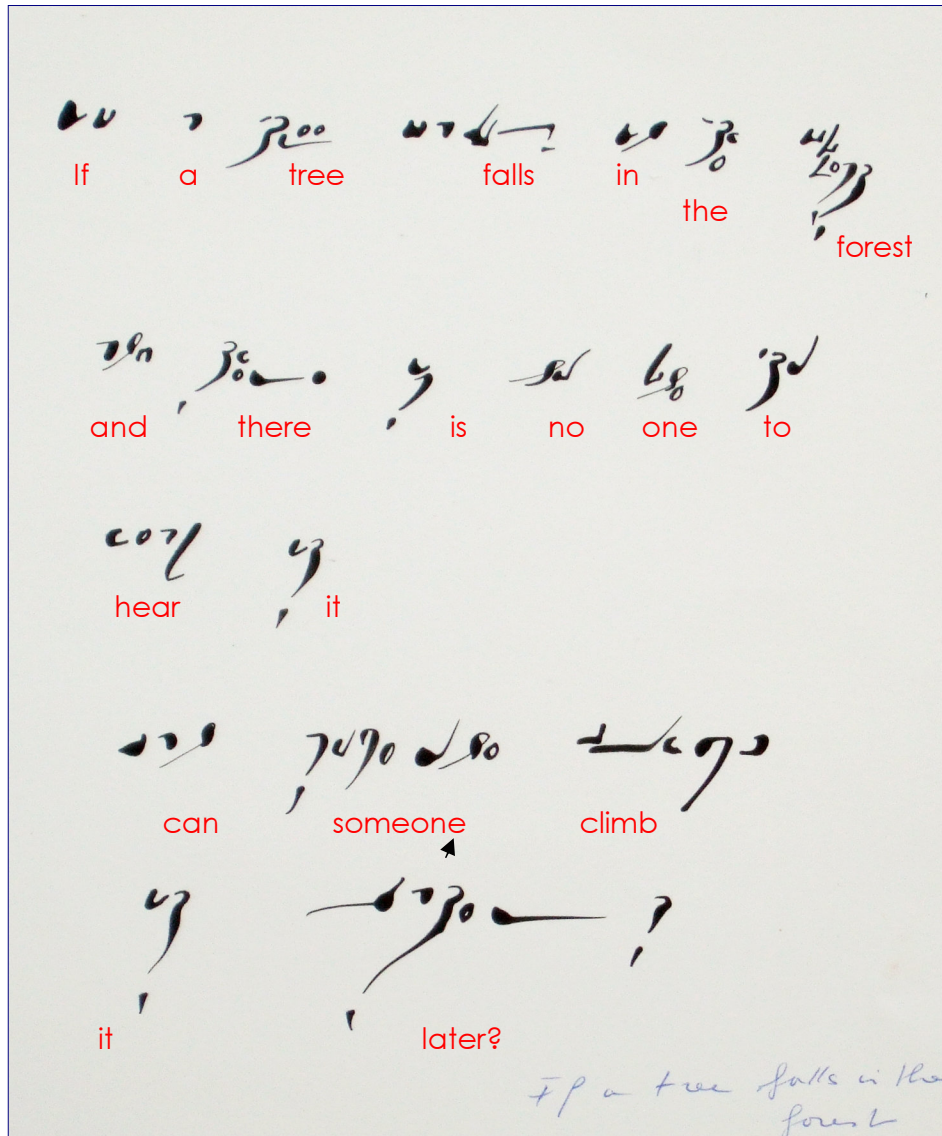
It was at this point that other aspects of the system came out that until then I was too involved in following the system itself to notice. The above example is among the first where I played with the sweep of the lines' lengths. Even though I was moving across the page as if along a single baseline there was a spontaneous nestling of the letters. It now required a deliberate effort on my part to write all of the letters along a single and consistent baseline and I rarely felt like writing that way.

The system also permitted any one of a box's lines to be lengthened for the second or third cycles (**12a** below) and also the angles of the connected lines to vary. When I added those variables to the option of shifting baselines it was clear that the greater the number of letters in a word, the greater the different ways in which that word could be composed⁵.



Above - 12a - The two variations of the 2nd cycle letter "L" in the word "will.")

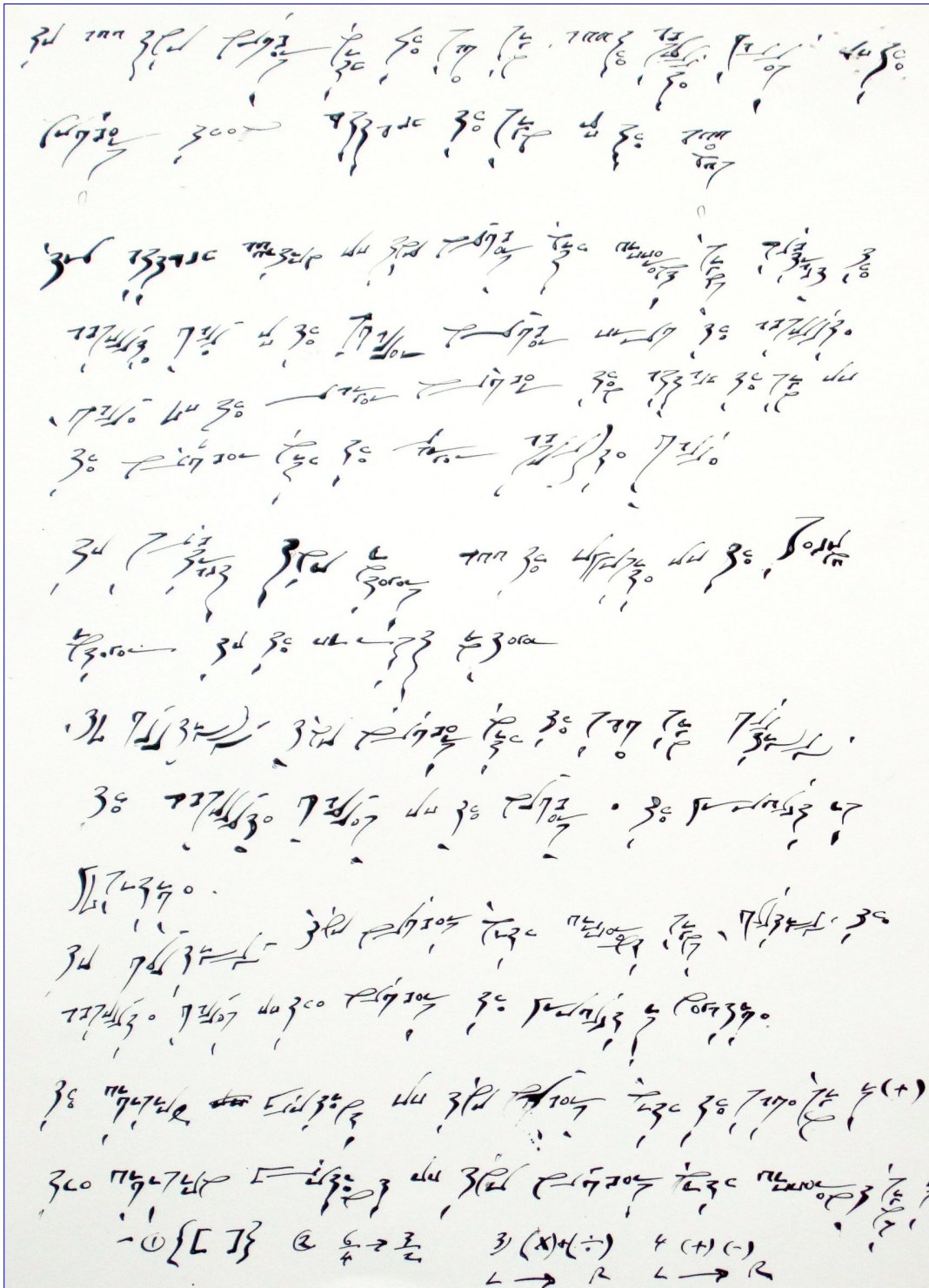
⁵ A separate installment will be published eventually detailing compositional variations.



Above -13 - Calligraphic element becomes inherent.

Ca. 1991

Once the calligraphic aspect of the system appeared, I deliberately sought out calligraphic writing materials to explore styles of lines (in the above instance quill and pen nibs with Indian ink.) At this point the element of drawing entered that of writing. Not only was the style of line expressive, but each line did not need to conform to any other line, as would be the case with a typography. The overall concern was one of compositional balance rather than conformity, much as it would be with an Asian or Middle Eastern calligraphy.

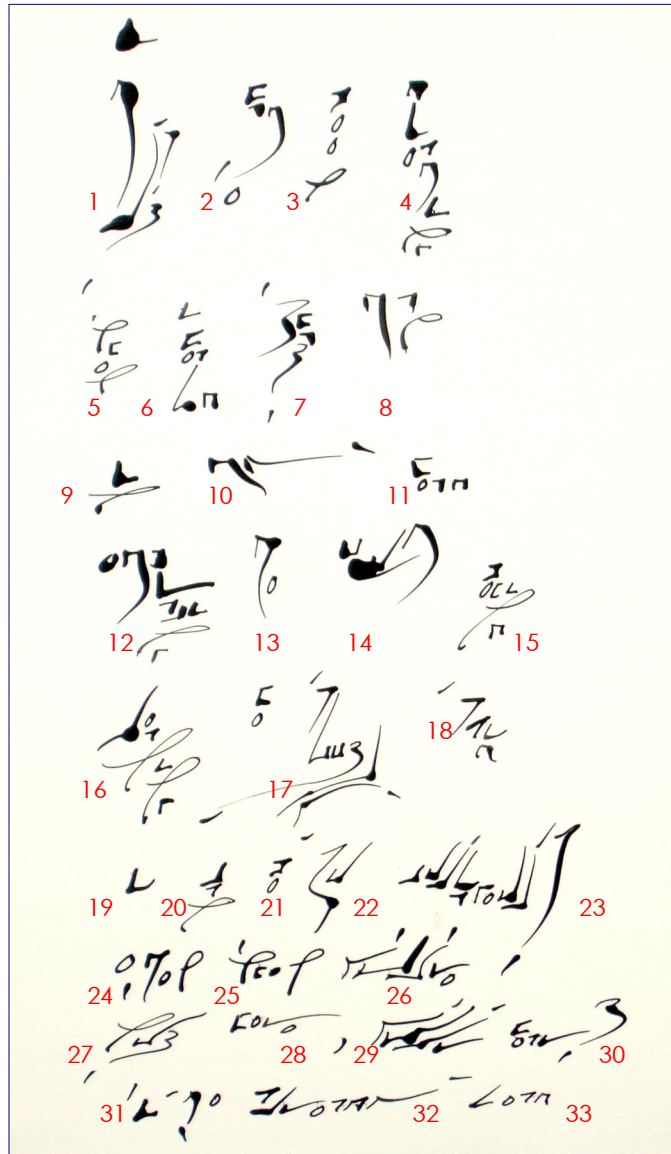


Above - 14 - Stacking of letters becomes preferred composition.

Ca. 1993

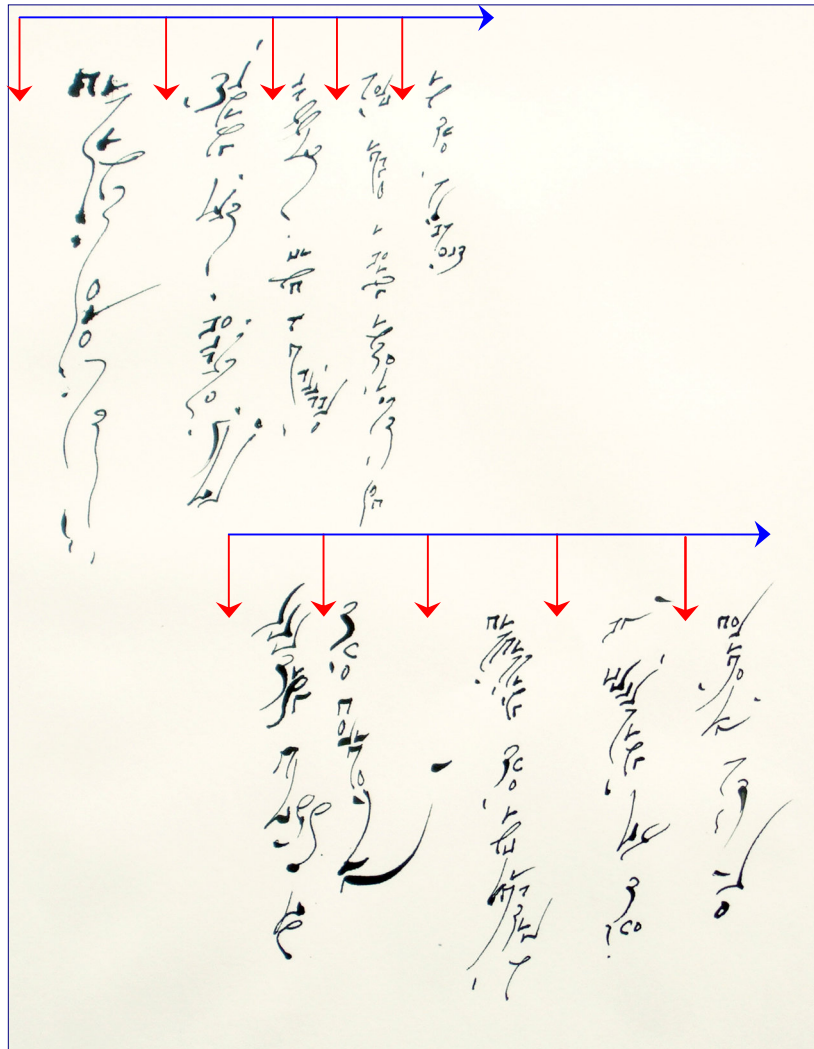
By the time of the text in illustration 14, I had been stacking the letters of words for years and was completely liberated from the gravitational pull of a writing system formed by moving

along a single baseline. This illustration is a text version of basic algebraic formulae. Its standard form is written in numerals and mathematical symbols.



Above -15 - Stacking, with word direction from left to right - Ca. 1994

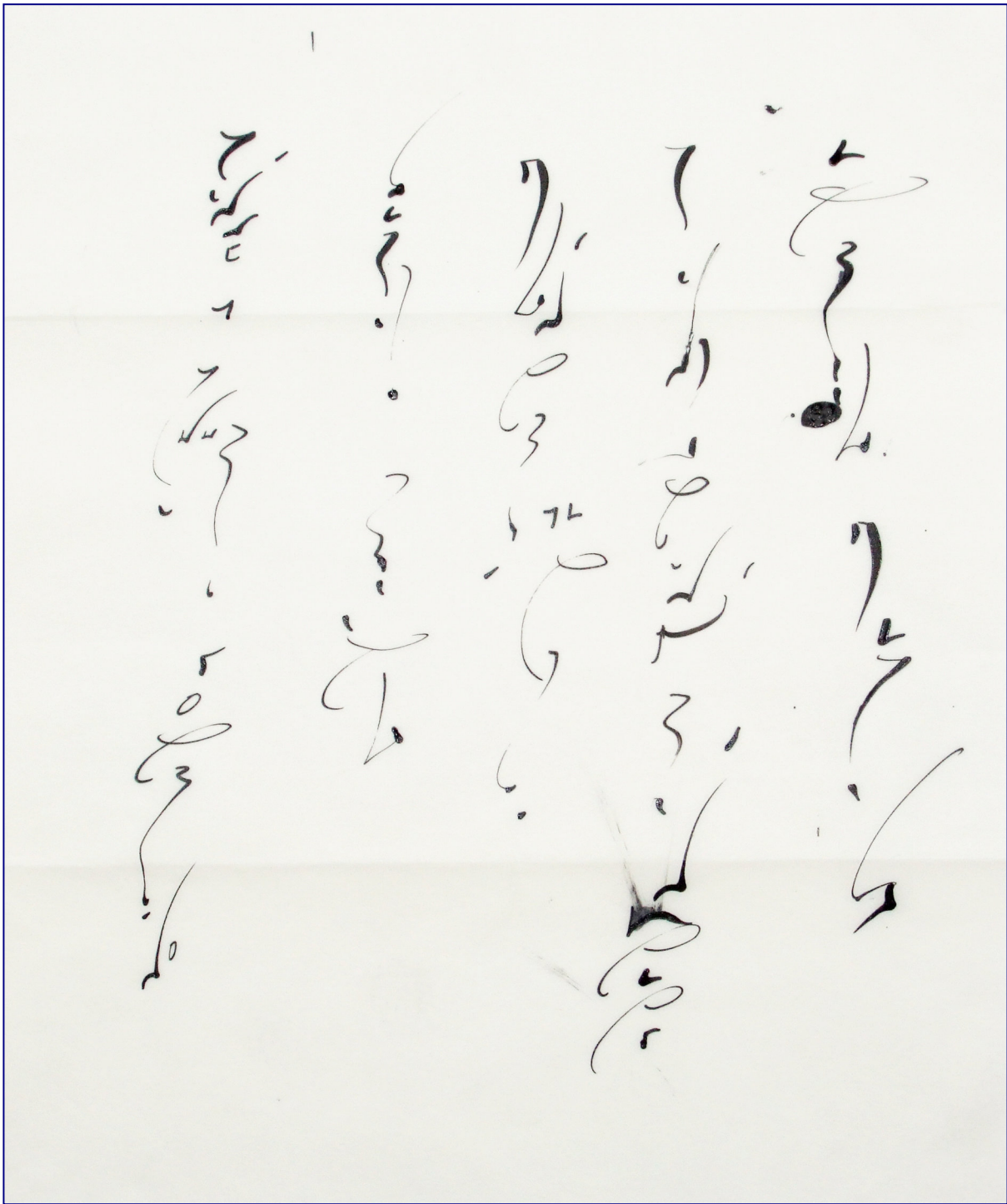
Illustration 15 is an early example of composing words on the page with an attempt to explore the expressive potential of this script. The word sequence is left to right. Though this writing still holds in places to the linearity of the Latin writing systems, the lack of an absolute bond between letters within a word is taken for granted.



Above - 16 - Stacking of letters with words moving from top to bottom - Ca. 1993

This writing system allows for multi-directional word sequence. They can be written from left to write or top to bottom. Even though a little reading makes apparent the selected direction, by placing instructive arrows (see 16) I could have indicated which direction is at play, except that I almost always write by preference from left to right, then top to bottom. On occasion I'll write across the page. It is only convention that makes for a direction to be the so-called right one. Practice of reading in one direction or another reveals none that is inherently easier — ease comes from familiarity of usage.

The illustration below is going in an expressive direction with reduced concern as to legibility, and the one following it has entered that zone of nearly illegible expressive lines, even though I can still read the spelling of the words.



Above - 17 - Stacking with words top to bottom - as well as loosening of line. 2000



Above - 18 - Further loosening of line. 2002

The shifting baselines and variables of line length and dash placement mean that there is no fixed composition or linear sequence of letters readily recognizable as a unique word or ideogram (as there is in Chinese or with the Latin alphabet.) With the Elian script the variable baselines and compositions necessitate the perception of each box and the cycle represented—

e.g. the letter intended. The test of this system's reliability is whether or not writings from many years ago are legible upon their re-reading. I don't know at first sight what word a composition represents since the composition of all words beyond those of three letters, is too variable; I must look at a word and realize almost each time anew what letters are indicated.

Upon reviewing older notebooks I had the novel experience of first noticing the beginning of the word, that is, which letter or two was represented and then my gaze would go to the end of the word where I would also notice the last one or two letters and decipher them. In virtually all instances the middle letters would not need to be read because the whole word would appear somewhat as suddenly as popcorn released from its kernel.

It may be that the mind computes what word could possibly begin and end with those letters already deciphered then factors in the context to arrive at a likely candidate. Recently I received from Rose Folsom, editor of *Letter Arts Review*, the results of a study on how spelling affects comprehension. The results mirrored my own experience: as long as the first and last letters of a word are in their correct place the middle letters can be scrambled without reducing comprehension.

I cdnuolt blveiee taht I cluod aulactly uesdnatnrd waht I was rdanieg. The phaonmneal pweor of the hmuan mnid. Aoccdrnig to rscheearch taem at Cmabrigde Uinervtisy, it deosn't mtttaer in waht oredr the ltteers ina wrod are, the olny iprmoatnt tihng is taht the frist and lsat ltteer be inthe rghit pclae. The rset can be a taotl mses and you can sitll raed itwouthit a porbelm. Tih isbcuseae the huamn mnid deos not raed ervey lteterby istlef, but the wrod as a wlohe. Such acdonition is arppoiatly cllaedTypoglycemia .

This phenomenon is remarkable, though it has the unstated premise that the standard spelling of the words needs to be known for the phenomenon to have its effect.



The overleaf illustrates the full sequence of transformations in the Elian Script.



1

that all 2nd 2nd 2nd
 a # noc + ed + 0
 requirement

3

5

should "is" is a concept
 by the laws of

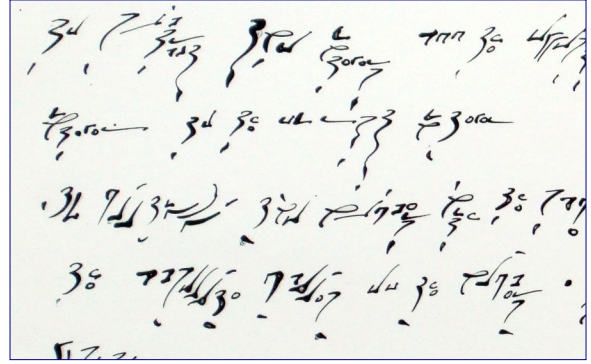
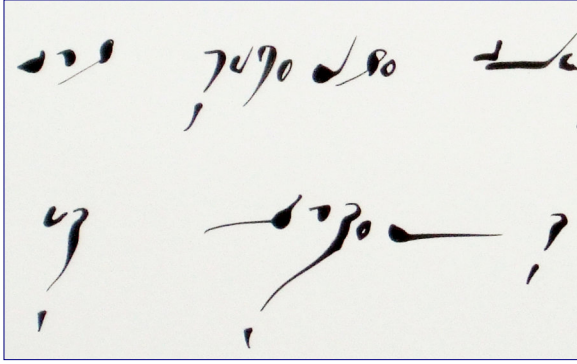
7

8

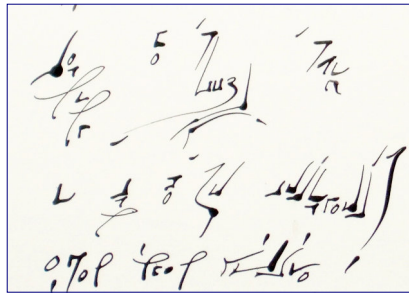
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12

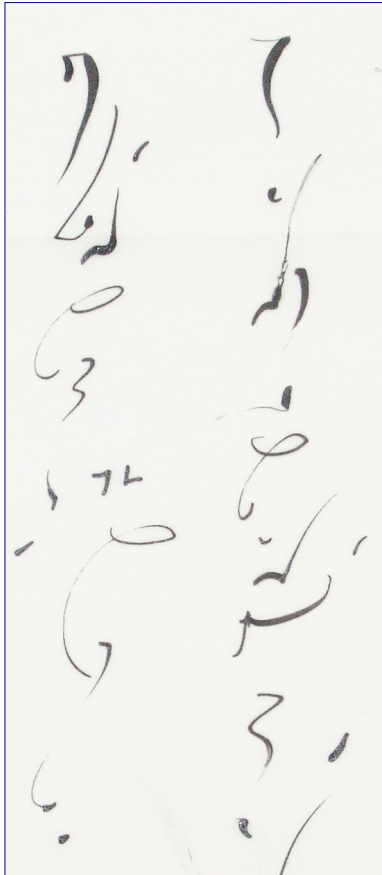
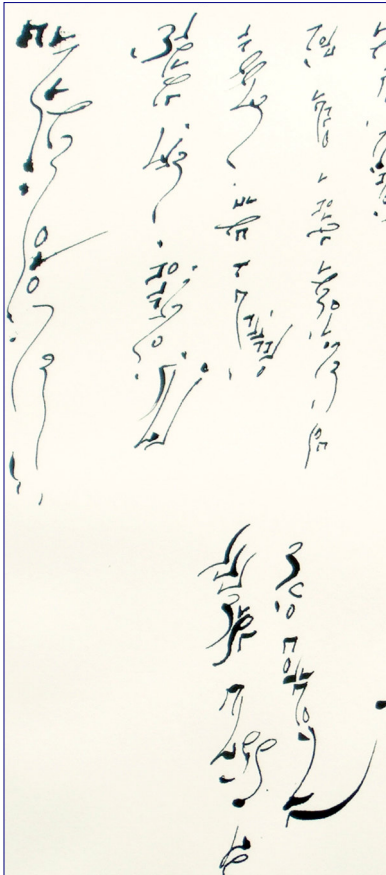
13



15

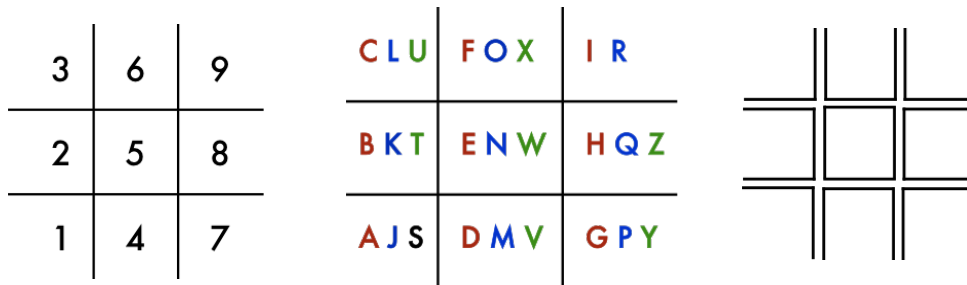


16



The recipe for the *Eliau* script is as follows:

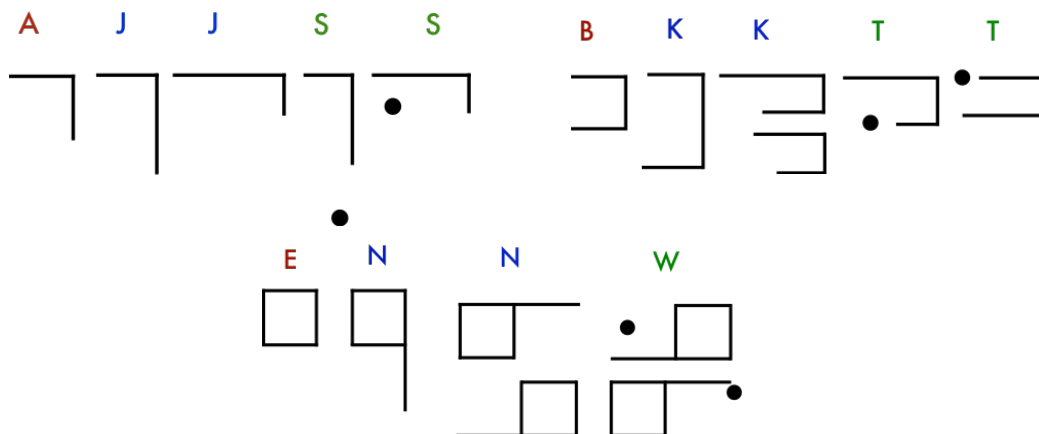
- A nine-square grid
- The 26-letter Latin alphabet
- Three compositional principles:
 - 1) Clarity of line ratios: equal or unequal to one another;
 - 2) Unambiguous accent association;
 - 3) Baseline sequence is left to right , and top to bottom.



The alphabet's 26 letters are placed within a nine-square grid. At the end of this process there are three letters per box 1-8, two for box 9. For illustrative purposes, the letters are coloured according to which cycle they occur (1st - red, 2nd - blue, 3rd - green).

The alphabet's codification within a box is now a given; to spell words we only concentrate on the line segments of a box. Each box has a unique shape; by creating three different forms for the lines of each box we have 27 different possible box shapes.

The first alphabetical cycle has equal length box's lines; for a second cycle letter, one line is longer than the other—it doesn't matter which one. For the third cycle letter, the line lengths are unequal *and* there is an accent mark added. Below: the states for boxes 1, 2 and 5.



The center box is unique in that it is bounded on four sides. Still, the rules of line extensions and accent to the third cycle letter remain the same. In actual writing, the rigidity of the rectilinear shapes disappears; they are only the blueprint for relationships and ratios. With this system it is possible to write words whose compositional variations are in the thousands.