

The Unstable Characters: Reading of Chinese Text-based Digital Works

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Abstract

Chinese characters consist of “three levels of hierarchical organization: stroke, component, and structure.” [1] This paper suggests that, unlike in works based on alphabetic languages, such structure is significant for analyzing and creating Chinese text-based digital artworks. The ambiguity of semantic meaning at the levels of stroke and component in a Chinese character as well as the culture of traditional calligraphy, which encourages artistic expression on the material level of brush writing, create tension but also potential that influence how we read the characters incorporated in digital artworks, whether as spectacle of visual effects or as a linguistic sign, or both. This paper will investigate the evolution of Chris Homhim Cheung’s artwork series “Shang Da Ren” and will focus on two versions in the series: *No Longer RIGHT* (2011) and *Shang Da Ren* (2013). Although the techniques and basic concepts are almost identical in these two works, changing the context and the textual content in the newer version provides a very different experience for the audience as they read and interact with the work; this highlights the specificity of Chinese text-based artworks.

Introduction

Through analyzing text-based digital artworks, Roberto Simanowski (2011) suggests that not all digital works constructed with words can be defined as digital literature. They can only be considered as such if we can read the “words” in a work of art as individual linguistic units, rather than as simple typographic signs which cannot carry semantic meaning on their own. In the case of digital literature, alphabetic letters form words that function as linguistic units, while in text-based digital visual artworks the letters are merely typographic signs. [2] Simanowski uses the term “postalphabetic” for this kind of text-based digital work which is non-literature. Hence, the main criteria for digital literature is not what it is made of (alphabet as material), but the function of the material (alphabet which functions as alphabet). [3]

In the work *Text Rain* (1999), participants are invited to stand in front of a screen and see their own images being projected on it. At the same time, alphabetic letters begin to rain down on them and land on their heads and shoulders. The participants can interact with the letters in ways such as holding them or letting them drop on the floor. All the letters in this work come from a poem, and the artists consider that relevant to the work. However, as

not only the sentences but even the words are deconstructed, it is impossible for the participants to read or even notice the existence of the poem. Simanowski considers such kinds of artwork to be postalphabetic and non-literature, as even though they are made of alphabetic letters, they have already lost their linguistic value. [4]

Simanowski’s model is important not just because it defines what digital literature or art is, but also because it helps us identify the function of the text in a work and to examine if the text functions as intended (by the author and/or as a premise to fulfill the concept of the work). In *Bit.Fall* (2006), political keywords collected from online media are visualized through a water screen. Apparently, the artwork wants to “question the stability of words through the utmost instability of writing material.” [5] However, even though the audience can read the words, the spectacle of the water screen and the playfulness of placing one’s hand in the water to distort the words invites the audience to view the words “not in order to discover how the text deconstructs its own rhetoric strategy, but to enjoy the spectacular way of its presentation.” [6]

In this case, although the collected keywords carry significant linguistic meaning, the “grammar of interaction” of the artwork makes them hard to comprehend. [7]

Three Levels of Hierarchical Organization

Apparently, Simanowski’s typology is valid for text-based digital works of any alphabetic language. However, it is a pending question whether it can be applied to digital works made with non-alphabetic, logossyllabic texts such as Chinese (including Kanji) and what significance might be revealed by applying this typology.

As a logossyllabic language, a Chinese character contains “three levels of hierarchical organization: stroke, component, and structure. Strokes are simple features such as dots, lines, and curves.” [8] Components are “independent, meaningful parts that are constructed with strokes.” [9] But, unlike strokes, they are “usually equivocal.” [10] The traditional Chinese classification system clearly defines many basic components of characters, known as radicals, a list of which all Chinese dictionaries contain. However, from a modern cognitive

perspective, there is still no definitive theory or method on how to identify or isolate the “meaningful” components in all characters. [11] Because of that, it is arguable whether it is possible to deconstruct Chinese characters in a digital work in the same way words are deconstructed in a letter-based work such as in *Text Rain*, in order to liberate them “from their representational function” and transform them into pure visual objects in an interactive installation, [12] since the components or strokes of a broken character can still be maintained as meaningful parts.

By analyzing the Chinese text-based digital works *No Longer RIGHT* and *Shang Da Ren*, this paper will examine whether the scope of Simanowski’s typology can be extended to logossyllabic text, and will investigate the characteristics of Chinese text-based digital work in comparison to alphabetic works.

No Longer RIGHT



Fig 1. The eight basic strokes © Microwave

No Longer RIGHT (2011), by Chris Cheung Hon Him, is the first of the series which would later be named *Shang Da Ren*. It was exhibited at a busy shopping mall and placed in a spot well-lit by both sunlight and artificial light source. The participants were asked to write eight basic strokes (which theoretically are the basic material for all Chinese characters: Figure 1) by hand on a piece of paper. The second paragraph of the artist’s statement describes how it works after that:

“Basically, handwriting carries and expresses our emotions. *No Longer RIGHT* provides a platform for participant to write and record their handwriting. When the participant finished writing the eight common strokes preset by the artist, the input process is completed. The work will then present and create a passage with the authentic ‘handwriting’ style. Through this artwork, the artist believes that people could recap their feeling of handwriting and how technology changes our daily lives.” [13]

In this work, the created passage is in fact the first paragraph of the same artist statement, which questions whether modern technology can improve our ways of communication. The artist nostalgically pondered why people nowadays seldom use their hands to write since, as he continued in the second paragraph quoted above, handwriting can express our emotions. [14]

The representation of emotion is too abstract to analyze and beyond the scope of this paper, but it is worth noticing the implied connection between handwriting and emotional expression. While, looking at the passage being generated on the display, character by character with the strokes provided by “you,” there is one immediate choice the participant needs to make: to focus on the content of the passage (the artist statement) or to look at the characters as if they are ceramics just being taken out from the kiln. The resulting characters, rather than the passage, seem intended to be the main focus of this installation work, as the artist stated in his technical statement, “Every character is embedded with the personal style of the participants. Or the other way round, the demonstrated script also suggests the unique style of the handwriting.” [15]

Furthermore, not all the generated characters are always comprehensible on the display. If the structure of the character is too complicated and the strokes provided by the participant are too thick or too weird, the computer may generate an unreadable mess reminiscent of a Franz Kline painting stuck in a small square. In this case, the passage may not be easily readable and leave the participant with no choice but to pay attention to the visual characteristics of the results.

If we put this work into the alphabetic/ postalphabetic model, we can consider it to be both literature and art: as living a double life as both literature and installation with its own aesthetic effects. [16] However, it is also obvious that the visual “digital calligraphy” aspect in this work is stronger than the content of the artist statement. Although the statement addresses a valid issue of the digital age, it does not go any further and just repeats again the next time. On the other hand, the game of generating characters is unique, and each time you play, it provides a different result. This phenomenon can be explained by the notion of “text as event,” which Simanowski used to describe the phenomenon of *Bit.Fall*, saying “words are more or less deprived of their linguistic meaning, which limits or liberates respectively the audience engagement with the text to a joyful play or intriguing fascination.” [17]

What makes this situation different from *Bit.Fall* is the actions of turning the text in *No Longer RIGHT* to an event depending on the outcomes of the generated characters. Besides the literary quality of the passage, another factor affecting whether or not one focuses on the linguistic meanings is the degree of compatibility of the structures of the characters within the passage with the generating process. This argument will be explained via a comparison with the improved version of this work, and by showing why this situation could hardly arise with *Bit.Fall* or other alphabet-based works.

Shang Da Ren

Shang Da Ren (2013), the newer version of *No Longer RIGHT*, was exhibited in museum and art spaces in Hong Kong and Taiwan. In this version, the content of the passage had been changed to a twenty-five-word classic

article which shares the title of this work. The article *Shang Da Ren* has been used to teach children calligraphy since ancient times. It is well known to most Hong Kong Chinese speakers, and mainly consists of the most basic characters with very few strokes. Moreover, compared with *No Longer RIGHT*, the exhibition spaces were dimmer, and the generated characters were enlarged and projected on a much bigger, cinematic wide-screen several feet tall. Brushes were also placed on a table between the participants and the screen to mimic the setting of calligraphy practice. This setting is more conducive to the audience paying attention to the structure and style of the characters (Figure 2).

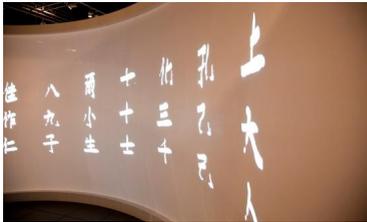


Fig 2. *Shang Da Ren*, 2013, Chris Cheung Hon Him, media installation. © XEX GRP.

Because of these factors, most Chinese audiences could immediately recognize the first three characters of the generated passage, *Shang*, *Da* and *Ren* (literally mean: up, big and man), which also form the title of the article. Much as a Briton would quickly think of *Hamlet* upon seeing “to be or not to be,” the whole generated passage need not to be completely legible for the audience to understand the reference. Thus, the name of the article itself, rather than the content of the article, already signifies the nostalgic feeling of handwriting and pre-digital childhood. Compared with *No Longer RIGHT*, which intended to deliver a similar message, this work is more efficient, as the audience need not to be briefed by the statement. Instead, “briefing” is achieved by the metaphor of the first few characters of the article and the setting. However, this result was achieved not only via the article, but also by virtue of the structures of characters in it.

The first three characters of the article, *Shang*, *Da* and *Ren*, are not only symbolic signs (like all alphabetic words), but as pictograph and ideogram characters simultaneously serve as iconic signs (in the case of *Da* and *Ren*, figures of man) and an indexical sign (*Shang*, pointing up). These kinds of characters usually consist of the fewest number of strokes and deliver the basic concepts of the world. By using these simple characters with the help of a large screen, the words are easily recognizable even if they were distorted by the generative process. Along with the connotation of the article title, the characters’ unnatural shapes and strokes resulting from the generative process also remind the audience of their handwriting education in school. Similar to the previous version of this work, the rest of

the characters in the article were occasionally generated as incomplete characters. Sometimes, only parts of the components or strokes could be seen. By recognizing these meaning-carrying components, one may again be reminded of the childhood writing-learning process of memorizing a character with its separate parts.

The net effect of these factors makes the experience of *Shang Da Ren* more than simply the “joyful play” of generating characters. Due to the symbolic meaning of the title and the simple characters used in the article, it is more effective than *No Longer RIGHT* at inviting the audience to pay attention to the linguistic meanings of the characters and is able to serve as a poetic metaphor evoking nostalgic feelings and childhood memories. Such results are often associated with the aesthetics of good literature.

At this point, it seems the postalphabetic / alphabetic model can be applied to both works mentioned above. However, how to adapt the definition of alphabetic for a character-based language appears to be a much more complicated issue. This unresolved issue does not seem to pose a significant problem in analyzing the postalphabetic/alphabetic phenomenon in both works. However, in order to evaluate the structural differences of the *Shang Da Ren* series in comparison to English text-based digital work, Espen Aarseth’s texton/scripton model will be applied to analyze the flow of information.

The Identical Text/Scriptons

In *Cybertext*, Espen Aarseth (1997) introduced the concepts of “scripton” and “texton” to explain the structural process between static data, algorithm, interaction and outcome in works of participatory text (ergodic literature). [18] Scriptons are “strings as they appear to readers,” and textons are “strings as they exist in the text.” [19] One can consider scriptons as the “verbal signs” a normal audience (ideal reader) can read/see in the work, while textons are the verbal sign data underneath the surface and stored statically in the work. In a digital work, a user inputs data into a program, and then the algorithm calculates and generates results by drawing from the textons. This process is called “traversal function,” and the results are the scriptons. [20]

In the case of *No Longer RIGHT*, the textons of the work are the artist statement stored in the computer, and the scriptons, as what is showed to the audience, are also the statement. Since the “traversal function” of this work merely regenerates the same passage using the strokes provided by the audience, one can argue that the textons and scriptons are the same in this work, as Aarseth’s model only deals with “verbal signs” as information data but not the visual aspects of the scripton.

In the case of the extended version *Shang Da Ren*, the texton content had been changed to the twenty-five-word article. However, since the traversal function did not change in this version, we should also consider the textons and scriptons to be the same in this case.

At this point, it seems to be irrelevant to apply Aarseth’s model to compare these two works, as that

model only deals with textonomy (the study of textual media) rather than textology (the study of textual meaning), and has been described as “blind to content” by Katherine Hayles. [21]

However, if we consider other English postalphabetic works, such as *Text Rain* and *Bit.Fall*, it is always the traversal function that results in the disintegration of the linguistic value of the words. Their traversal functions are like a blender which destroys the semantic meaning of any words (textons) thrown in. There would be almost no difference if we put another poem or book in *Text Rain*, or changed the text from political to academic keywords in *Bit.Fall*. On the other hand, the traversal function of *No Longer RIGHT* and *Shang Da Ren* are identical. However, while *No Longer RIGHT* transformed the text from linguistic sign to visual object, similar to the case of *Bit.Fall*, [22] *Shang Da Ren*, which used the same “engine” as *No Longer RIGHT*, maintained its text and its linguistic value, and even the poetry of literary metaphor and imagery. It is the structure of the characters (textons) in both works, rather than the traversal function, which resulted a different condition of the scriptons, thereby leading the audience to perceive the characters as mere visual representations of their own writing (in the case of *No Longer RIGHT*) or also as linguistic signs simultaneously (*Shang Da Ren*).

Furthermore, the “three levels of hierarchical organization” of Chinese characters also remind us whether a character is a basic semantic unit of the language. If we consider the components or strokes as the potential basic semantic units, then the scriptons and textons are in fact not identical in both of the works. The textons are the strokes and components inside the characters, rather than the characters themselves. Although their traversal function is supposed to place the provided strokes back in the right place, it does not always work perfectly. This imperfection is not a bug but in fact an important aesthetic aspect of both works, since if all strokes were placed correctly and tightly, then the works would merely be boring word-processing machines and not allow participants to “recap their feeling of handwriting.” [23]

Because of that it can be argued that a major difference between alphabetic and logossyllabic text-based digital works is the indivisibility and instability related to singling out the linguistic units within a character. Once the traversal function involves the deconstruction and reconstruction of the strokes or components of characters, it may create unique results in comparison to alphabetic works.

Conclusions

By studying English and Chinese text-based digital artworks, this paper suggests the postalphabetic/alphabetic method can be applied to non-alphabetic languages such as Chinese characters, but the definition of alphabetic (consisting of units carrying semantic meaning that can be read by the audience) can

be a complicated issue. However, by applying this model, we can examine the meaning-making process when one approaches a Chinese digital artwork that consists of unstable characters. Can the strokes or components from unstable/broken/blurred characters still contain any linguistic value? This question is essential for a critic to choose an appropriate approach and aesthetic criteria to judge a work. Furthermore, when Aarseth’s model is applied to works of Chinese text-based digital artworks to, it also shows that characters may not be the basic verbal signs in the flow of information in a cybertext. However, such instances are rare in digital processes, as most works of digital text rely on the Unicode system in which a character is the basic unit, which means any process beneath the level of character is rare and difficult (except for applications of writing recognition). However, such difficulties may also suggest a direction for potential artistic creation.

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