



When Script Becomes Icon(ic)

Calligraphic Reconfigurations in East Asian Contemporary Art

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In East Asian culture, script and image are tied very closely together. Genealogically, this can be explained by the fact that in China, visual art evolved from writing: Writing produced calligraphy, and calligraphy evolved to ink painting in turn. Due to this interconnectedness between writing and painting, visual (media) forms of inscription have emerged which escape western categories. They show that the existence of a specific mode of scriptural iconicity must be assumed — worthy of study when “*writing as an intermediary*” is under investigation. Most notably — and contrary to the widespread western prejudice that scriptural definitions of the visual primarily appeal to the intellect and exclude sensory perception as well as sensuality — the human body as a whole is powerfully involved as script (image) producer, as both designer and sign.

The following analysis intends to demonstrate how calligraphy, one of the predominant art forms and practices in Chinese culture, is being reinvented by Chinese contemporary artists Xu Bing and Hung Keung — be it to redefine cultural, linguistic and artistic identity, or be it to translate calligraphic expressions into the digital era of global visual communication. Since the mid-1990s, calligraphy has become the new artistic playground where writing and imaging meet in experimental ways.¹ Given the intermediate between script and image, as linguistically anchored in the formation of logographic writing systems in East Asia,² the

¹ Cf. Luckow, Dirk (ed.): *Secret Signs. Calligraphy in Chinese contemporary art*. Exhibition catalogue, Deichtorhallen Hamburg in cooperation with the Sigg collection and the M+, Hongkong, Köln: Snoeck, 2014; Iezzi, Adriana: “Contemporary Chinese Calligraphy between Tradition and Innovation”. *Journal of Literature and Art Studies*, 2013, 3, 3, pp. 158–179; Wang, Yin – Sun Yan: *Reinventing the Tradition in a New World. The Arts of Gu Wenda, Wang Mansheng, Xu Bing and Zhang Hongtu*. Gettysburg: Gettysburg College, 2004; Zhang, Yiguo: *Calligraphy: The Art of Heart and Soul*. Beijing: Beijing University Press, 1991. Cf. also Billeter, Jean-François: *L’art chinois de l’écriture*. Milano: Skira, 2001.

² Cf. DeFrancis, John: *The Chinese Language. Fact and Fantasy*. Honolulu: University of Hawaii Press, 1984; DeFrancis, John: *Visible Speech. The Diverse Oneness of Writing Systems*. Honolulu: University of Hawaii Press, 1989; Kim, Sungdo: “Iconicity of Korean Writing. A Media Semiotic Approach”. In: *Bild Macht Schrift. Schriftkulturen in bildkritischer Perspektive*. Eds. Antonio Loprieno – Birgit Mersmann – Carsten Knigge-Salis. Weilerswist: Velbrück, 2011, pp. 171–198.

transition of logographic writing to the medium of the computer as a digital visual writing space³ seems natural. It is therefore not surprising that when digital technologies were appropriated by contemporary media art, East Asian artists often experimented with writing, typography and character design.

Before starting with the in-depth analysis, some theoretical explanations about the applied concept of *script iconics* and its relevance for the visual study of Chinese script culture in contemporary art are required.

Script Iconicity as an Intermedial Approach

From the perspective of image and art studies, the concept of *Schriftbildlichkeit* (notational iconicity⁴), which was developed by the philosopher Sybille Krämer in the context of cultural-technical research on “Bild – Schrift – Zahl” (image, writing, number),⁵ shows itself to be only partially inter- or transmedial. As the concept of *Schriftbildlichkeit* directly inscribes autonomous imagery into the medium of writing, it proposes an intra-medial model of inclusion that remains referenced to the mono-medial contextual framework of script, even if it intends to break up this framework in its relation to language. Under this premise, the concept of scriptural imagery is restricted to being a property of writing, even if the frame of meaning of what should be defined as writing is enormously expanded, thus legitimizing various forms of a cultural technique of writing. Medial boundaries as well as inter- and transmedial transitions between writing and image are, however, excluded. Regardless of the inherent pictoriality of writing, which is a self-evident given, more far-reaching questions arise: When does a picture become writing? When does writing become an image? What are the iconic elements and potentials of writing? Can these be generalized at all, or do they not have to be determined much more specifically with regard to the particularity of the writing system used? What function does typeface graphics assume in the image?

With my proposal for establishing the term of *script iconics*,⁶ I have tried to provide answers to these questions. Terminologically shaped as a complement to script linguistics, it should include the latter and at the same time transcend it in a transdisciplinary way. As an independent branch of transdisciplinary image studies, the aim of *script iconics* is a comprehensive, cross-cultural and cross-media research of image phenomena of writing in history and in the present. Its

³ Cf. Bolter, Jay David: *Writing Space: Computers, Hypertexts and the Remediation of Print*. Mahwah, NJ: Lawrence Erlbaum, 2001.

⁴ This is the English term used by the DFG Research Training group for the translation of *Schriftbildlichkeit*.

⁵ Krämer, Sybille – Horst Bredekamp (eds.): *Bild – Schrift – Zahl*. München: Fink, 2003; Krämer, Sybille – Eva Cancik-Kirschbaum – Rainer Totzke (eds.): *Schriftbildlichkeit. Wahrnehmbarkeit, Materialität und Operativität von Notationen*. Berlin: Akademie Verlag, 2012.

⁶ Mersmann, Birgit: *Schriftikonik. Bildphänomene der Schrift in kultur- und medienkomparativer Perspektive*. Paderborn: Fink, 2015.

main focus is on the systematic analysis of typeface imagery as a specific aesthetic form, media function, and cultural practice of written graphic iconicity. The project of *script iconics* attempts to close the gap between grammatology and iconology, between the study of writing and imaging.

The term of “iconics”, used to designate the newly coined field of written image theory, seems particularly suitable for occupying the interface between grammatology and iconology because of its complex references to the current scientific terminology of existing research fields and categories. Thus, the analysis of the iconic is closely linked with the field of semiotics and linguistics as well as with the field of art and image studies. Starting from the icon as a type of pictorial sign first specified in more detail by Charles Sanders Peirce, iconicity has firmly established itself as an independent object of investigation in semiotics and linguistics. As a special case of sign-referential motivation or motivatability, iconicity, by its definition, goes beyond mere representational pictoriality and thus offers an adequate starting point for the study of the script iconic, in which pictorial and written characters interact. There are also semantic and conceptual links to iconography and iconology, which have established themselves as methods of art history. Furthermore, iconology has also been used as a technical term for the newly founded images studies (*Bildwissenschaften*).⁷

In the establishment of *script iconics*, the media and cultural-comparative perspective plays a central role. The focus of the cultural-comparative approach is on the comparison of Occidental and East Asian grammatology as the most widely divergent poles of difference in writing systems, but it is to be supplemented by further grammatological comparisons between writing cultures. The media-comparative approach is expressed in the analysis of the written image as a media-chiastic image phenomenon: Thus, the investigation of the iconicity of writing is complemented by the examination of the written image. This is precisely the starting point for dealing with calligraphic reconfigurations in contemporary Chinese art.

Prior to the specific case studies, it is important to briefly explain what the iconic potential of Chinese writing/characters is from the perspective of the script-iconic approach.

In contrast to alphabet writing, in which graphism was systemically subordinated to phonism, Chinese writing is characterized by an orally and phonologically independent, i. e. autonomous graphism. Phonetic references are never phonographically determined; they are secondarily assigned to the graphism of the writing. Chinese characters, whether *Han-ze* or *Kanji*, cannot be read as the graphic representation of a sound figure, as is the case with alphabetical letter

⁷ Cf. Mitchell, William John Thomas: *Iconology. Image, Text, Ideology*. Chicago: Chicago University Press, 1987.

characters. They lack what is commonly referred to as a representative secondary function, namely the ability to graphically represent the system units of oral language in their medial difference. The autonomous graphism that is inherent in the Chinese writing system expresses itself in a specific written-graphic character status. The Chinese character — also termed *sinogram* — is not representative of a signified, it is this signified. The operative act of representation is basically meaningless for the Chinese character. The character always represents only itself, in its figurational autonomy of visible presence. It possesses meaning only as a graphic mark, as an inscription. The reason for this graphic autonomy status of the character lies in the logographic organization of the Chinese writing system, which has survived to the present day despite the enormous efficiency pressure coming from competing writing systems. Historically, Chinese writing has never evolved from a logographic to a logosyllabic system. Among the writing systems of the world that have been developed and actively used in the history of civilization, it is the only writing system that operates purely logographically.

A characteristic of the Chinese character type is that by its graphic configuration it exclusively represents the semantic value, i. e. the dimension of meaning. In addition to its common definition as a logogram, it is therefore also called a *semantogram*. Only in very few cases, however, is the semantic meaning accessible purely graphically via the iconic display mode. The number of so-called pictographic signs in Chinese (*xiàng xíng* = original images) is very limited, as is the number of ideographic signs (*zhǐ shì* = symbolic images), whether in simple or composite form. In addition, the graphic form of the characters categorized as “images” in Chinese is based on a diagrammatic iconicity, whose schematism of representation is conventional and therefore requires an iconographic interpretation acquired through practical learning.

The autonomous graphism of the Chinese character system is responsible for the fact that the same written form and shape, i. e. the particular script of Chinese, has the potential to represent different individual languages graphically without causing immediate changes in the written (character) image. Different oral expressions from the different languages and dialects of China and Japan can be assigned to a single, shape-identical character. This script-systemic independency of particular languages has given Chinese script the reputation of being a universal semantographic writing system.

Since the meaning of the characters is generated restrictively via graphic differentiation, the Chinese character system has also developed a greater graphic variance in character design than the alphabetical character system. This is reflected on different levels of the writing system as a notation system. Thus, a character can be written in different ways, i. e. it can be written down graphically in different ways, without losing its main meaning due to the variance of its writing style.

Rather, the differentiating notational system provides semantic nuances or associations of meaning that complement the main meaning. In addition, the autonomous typeface graphism of Chinese characters is structured in a more complex way than the heteronomous alphabetical typefaces. This is redeemed by the construction of a complex structure of arrangement and connection. Already with regard to the definition of what is considered a stroke, i. e. the smallest graphic-inscriptive unit, the multiplicity and complexity of graphic distinction becomes apparent. It is not only the external graphic form — which can be described as a drawn line with a starting and end point — that determines what is a stroke unit according to the Chinese understanding of characters, but also the writing process as an act of graphic representation. Thus, the definition of the stroke is oriented to the performative notation of the calligraphic brushstroke: Stroke is what is written or graphically notated without the brush (the original writing instrument in China) being put down, even if the line changes direction and forms its own figurations. According to this derivation, the 22 basic strokes can be divided into two classes: First, line forms in which the writing instrument does not change direction (6 basic lines), and second, line forms in which the writing instrument changes direction without stopping (16 line forms). Autonomous graphism thus includes performative graphism.

On a next higher level of the graphic system structure of writing, the arrangement of the strokes into characters follows. It is subject to a clearly defined stroke syntax based on iconic positionality as well as proportionality. Thus, there are clear graphic rules of composition that precisely define the order and positioning of the strokes within a two-dimensional image space, whose inscription space is conceived as an imaginary square.

It follows from the above that in the Chinese character system, semantic differentiation is primarily marked by autonomous graphism. Due to a multi-layered graphic parameterization and complex internal character structuring, an independent stroke syntax and grammar evolves, which builds up characters and creates links between meanings. The Chinese script-systemic iconicity can therefore be summarized as a semantically motivated, diagrammatographic iconicity. Against this script-systemic background, the significance of the use of Chinese script/calligraphy in the work of the contemporary media artists Xu Bing and Hung Keung can now be analyzed.

Xu Bing's Script Art: Icon Writing as Global Intermediary

The work of the contemporary Chinese “script” artist Xu Bing is a case in point through which to study the role of writing as intermediary in globalized artistic

contexts.⁸ It allows the reflection on the digital and global turn in the visual arts and media cultures — the transition from “the late age of print”⁹ to the digital age, and the transcultural code-switching between different (art) languages and writing cultures in a globalizing art world. The installations *Your Surname Please* (1998) and *Book from the Ground* (ongoing project since 2003) represent the turning points of these transitions, marking what Xu Bing himself has described as adaptations to the digital “pictographic age.”¹⁰ For understanding the artistic attempts to replace linguistic translation by icon(ic) transcription, one has to look at the back catalogue of experiments with writing within Xu Bing’s oeuvre. The later digital experiments in the transcoding of written language can be read as digital remediations (and thus hyperwriting) of the analogue square word calligraphy invented and designed by the artist after his move to the United States in 1990.

A Case Study of Transference (Fig. 1), the artist’s first performance organized by the Han Mo Arts Center in Beijing in 1994, engages with the complexity of linguistic, cultural and visual media translation with an ironic twist.¹¹ Into a pen strewn with open books in many languages, the artist placed a male and a female pig that it was hoped would copulate. The artist and his assistants had imprinted the pigs’ skin with orderly rows of invented Chinese characters on the female and invented English words on the male. Whilst the possibility existed that the pigs would not mate, they did in fact mate repeatedly. Since the pigs had been transformed into vehicles of culture by the imprinting of letters and characters onto their bodies, their sexual union became a symbol of cultural transference. The western Anglophone and the Chinese culture unify in the image of copulating pigs. The male West passes his cultural heritage on to the receptive, female China.

⁸ On the writing art of Xu Bing, cf. Erickson, Britta: *Words Without Meaning, Meaning Without Words: The Art of Xu Bing*. Washington, D.C.: Seattle, 2001; Silbergeld, Jerome – Dora C.Y. Ching (eds.): *Persistence/Transformation. Text as Image in the Art of Xu Bing*. Princeton: Princeton University Press, 2006; Guile, Carolyn C.: *Reading Spaces. The Art of Xu Bing*. Hamilton, NY: Colgate University, 2009.

⁹ This is the title of Striplas, Ted: *The Late Age of Print. Everyday Book Culture from Consumerism to Control*. New York: Columbia University Press, 2009. In the late 1980s, when Xu Bing was still living in China, his script works playfully experimented with the (typo)graphic design of Chinese characters, using the logographic writing system to demonstrate from a particular Chinese perspective the excess and hyperbolism of the print/ing culture and its erosion of meaning in the late age of print.

¹⁰ Bing, Xu: “Regarding Book from the Ground”. *Moma* (2007): http://www.moma.org/interactives/exhibitions/2007/automatic_update/subs_wrapper.php?section=xubing_interview.html (inactive link, last access 2015). This version of the text is slightly different from the later one of the same title published in: *The Book About Xu Bing’s ‘Book from the Ground’*. Ed. Mathieu Borysevicz. Cambridge, Massachusetts: MIT Press, 2014, pp. 37–135. For this reason, the two text versions of 2007 and 2014 are used for citation.

¹¹ Since 2017, the video documentation of the performance has been on permanent show at the Guggenheim Museum New York. When it was first presented in the museum, it caused a controversy over animal rights.



Fig. 1: Xu Bing, *A Case Study of Transference*, 1993–1994, performance and video with two live pigs inked with false English and Chinese characters, discarded books, barriers. Installation view at Han Mo Arts Center, Beijing, 1994. © Xu Bing Studio

The union of the text bodies suggests Chinglish as a transcultural language of understanding. Alternatively, should we see the performed sexual act as a rape, a domination of Chinese culture by the western Anglophone culture?

On closer inspection, the union between the cultures turns out to be a farce and a fiction. The linguistic signs are already fragmented intra-culturally, they appear as pure script and phonetic images that in fact negate a message-oriented conventional transference of meaning. The significance and imprinting power of script is evaded by imprinting texts that are composed of freely invented Chinese characters and made-up English words. The newly configured Chinese characters derive from the *Book from the Sky* (1987–1991) for which the artist had engraved

four thousand arbitrarily composed characters into small squares of wood, thus producing print letters or — more precisely — print characters as text modules.¹² The resulting printed characters looked surprisingly un-printed, reminiscent of graphical, handwritten calligraphy, thus giving an ironic twist to printing as a means of typographic writing standardization. What remains is the materiality of the characters, the corporeality of script beyond its educational mission. The pigs do not care about script culture, their instinct is not held back by the superficial layering, i. e. the texts imprinted onto their flesh, nor by their cultured surroundings, the book-strewn pen. They perform transculturally in the sense of living bodies of flesh and blood beyond cultural prescriptions.

Beside the fact that by compositional reconfigurations the Chinese characters are reduced to pure “visual writing”, completely devoid of semantic meaning, there are also political implications involved in this topographical reorganization and (e)vac(u)ation of the Chinese writing system. It is not only a gesture critical of the fundamental reconstruction — and simplifying reduction — of tradition-generated Chinese characters under the banner of Mao’s Cultural Revolution, the prohibition of reading and writing sparked by fear of intellectual subversions and political upheavals against the system in power, but also a general critique of writing reforms, including new character design, used as a political instrument of empowerment and national unification throughout Chinese history.¹³

After the *Book from the Sky* was exhibited in Beijing in 1989, Xu Bing was labeled by the Chinese communist government as a bourgeois liberal. Reacting to this official denunciation by the Chinese state, Xu Bing eventually emigrated to the United States in 1990. The subsequent linguistic switch from Chinese to English led to an artistic confrontation between the interacting writing systems; it was — ironically — (re)solved with the help of the so-called Square Word Calligraphy, an advanced development of pseudo-characters for transgressing

¹² For detailed information about the production of *Book from the Sky*, cf. Mersmann, Birgit: “‘A Book from the Sky’. Xu Bings himmlische Kunst der Schrift im Spiegel chinesischer Kulturgeschichte und globaler Gegenwartskunst”. In: *Kanon Kunstgeschichte. Einführung in Werke, Methoden und Epochen*. Bd. IV Gegenwart. Eds. Kristin Marek – Martin Schulz. Paderborn: Fink, 2015, pp. 215–234; Erickson, Britta: “Mistrust of Language and the *Book from the Sky*”. In: Erickson, *Words Without Meaning*, pp. 33–46.

¹³ As a child during Mao’s Cultural Revolution, Xu Bing was selected by his school to create calligraphic propaganda posters and banners for the government. Compare Xu Bing’s comment on the relation between cultural revolution and revolt against language, between writing and thinking: “Mao’s transformation of culture was meant to ‘touch people to their very souls.’ Most deeply rooted was his transformation of language, because the Chinese language directly influences the methods of thinking and understanding of all Chinese people. To strike at the written word is to strike at the very essence of the culture. Any doctoring of the written word becomes in itself a transformation of the most inherent portion of a person’s thinking. My experience with the written word has allowed me to understand this.” Bing, Xu: “The Living Word”. In: Erickson, *Word Without Meaning*, pp. 13–14.



Fig. 2: Xu Bing, *Art for the People*, 1999. Dye sublimation on dacron polyester, 36 x 9 ft (1097.3 x 273.4 cm). Installation view at the entrance of the Museum of Modern Art, New York. © Xu Bing Studio

script-linguistic barriers.¹⁴ By inventing so-called “square words” — a term referring to the imaginary square in the midst of which the Chinese character positions itself — the transference of meaning is foiled. The artist introduced a new variant of writing that visually represented English words written in the Roman alphabet in the spatial configuration and calligraphic style of Chinese characters (Fig. 2). Due to its topographical writing mode adjusted to Chinese logographic writing, the new graphic, Roman-alphabetic writing gains the overall appearance of Chinese character writing, thus confronting viewers of alphabetical writing cultures who are not familiar with Chinese writing with what at first-glance appear to be unreadable characters. Once their attention is drawn to the fact that they are

¹⁴ Bing, Xu: *An Introduction to Square Word Calligraphy*. Brooklyn: Xu Bing, 2001. Cf. also Erickson, “Language as Intellectual Game”. In: Erickson, *Words Without Meaning*, pp. 47–58.

facing alphabetical writing, they usually very easily figure out the individual letters of each character configuration as building blocks of words. Working from the use value of traditional calligraphy, Xu Bing encourages the application of his newly invented Square Word Calligraphy by common people who are interested in calligraphy as an artistic technique of visual writing, teaching it in classroom workshops.

In the personal view of the artist, the square word calligraphy serves as an ambiguous means of expression to both adapt to the new linguistic environment in the United States and to save parts of the Chinese language and culture increasingly put under pressure by the dominance of English as a global lingua franca. From a writing-theoretical point of view, the square word calligraphy figures as an iconic transcription that merges two different writing systems and cultures on the graphical level, thus cross-breeding to create transcultural writing as a form of trans(lated)-writing. Specifically, iconic transcription refers to the topographical inscription of alphabetical writing into Chinese logographic writing, its visuo-spatial composition and configuration of characters. The writing result is a hybrid writing, disturbing in as much as it marks the graphic borderline between readability and illegibility.

The installation series *Living Word* (2001–2011) expands on the model of the square word calligraphy, translating it from the two-dimensionality of the written page (or scroll) into the three-dimensionality of life-like animated script. Word definitions found in the Oxford English Dictionary are transcribed into square word calligrams following the typeface re-configuration technique described above. This time, even the graphic image of the signified is integrated into the iconic transcription of alphabetical letters into Chinese characters. The chain of “transcriptural” graphic signs visualizes the written language transition from phonography via ideography to pictography, thus pointing to the future of writing in a post-phonetic, pictographic digital age. In the installation *Living Word 2*, for instance, the graphic letter-sign for “bird” is transformed into the abstract drawing of a bird; materialized as a paper bird in the script mobile, it appears to break free while ascending to the sky. Through means of iconic sign transcription, the moving of the characters and typefaces becomes literal — a performative gesture of the life-like embodiment of nature in writing, as reflected in the title.

Your Surname, Please (Fig. 3), a mixed media installation from 1998, displays the first digitized version of the square word calligraphy. As with most of Xu Bing’s artistic works, it is a project in progress. Accordingly, it exists in various versions and at different places. At the Fukuoka Asian Art Museum in Japan, it has found a permanent showroom. Originally, the work was created for the Spanish island of Las Palmas. Using his square word calligraphy for producing New English Calligraphy, the artist wrote down the — statistically most common — surnames



Fig. 3: Xu Bing, *Your Surname, Please*. 1999. Installation view at Fukuoka Asian Art Museum, Japan. © Xu Bing Studio

of the island's inhabitants, displayed the calligrams on a wall and scanned them digitally. The audience was invited to search for their surname in the computer database, print out a copy of their calligraphed surname and take it home. The installation reflects in its construction the multi-layered process of “trans-writing”, showcasing the panels of calligraphy, computers, printers, desks and chairs. In later versions of *Your Surname, Please* the potential for (inter)active participation in the trans-writing process was more pronounced, enabling viewers to type in their names in English letters on the keyboards of the computer stations and then become visual witnesses of how their typewriting was gradually transformed, or more precisely, transcribed into calligraphic pseudo-Chinese characters. Like in the first conceptual design of the work, they could then print out their “character” names. The product of this particular writing configuration is a new visual, topographical reading that adapts Roman-alphabetic readers to logographic reading and writing. Meanwhile, approximately 3000 surnames (among them also those of famous personalities and families, including Clinton, Gore, Roosevelt, Reagan, Singh, Garibaldi) are digitally transcoded as square word calligrams, immediately retrievable from the database by the input of typing and ready for animated transcription. The additional digital animation of the script as



Fig. 4: Xu Bing, *Book from the Ground*, 2012. © Xu Bing Studio

a new element of the English square word calligraphy, technically realized by programming the intermediate stages of Xu Bing's character writings, allows the movement between different writing systems to be visualized. It illustrates the fluent transition of code switching as iconic transcription and thus demonstrates the digital decomposition of differences and oppositions of both the writing design and production of meaning. Even on the media level of writing involved in the *Surname* project, these transitive fluctuations become manifest. Viewed from the user perspective, typewriting is switched to handwriting, and handwriting turned into printing via the computer as intermedium. Considered from the producer perspective, handwriting is transposed into digital machine writing, thereby facilitating the visual transcodings between typewriting and handwriting. In terms of the final outcome of the multimedia transcription, it is — quite paradoxically — the handwriting that is revived and preserved through the digitization of script translation.

With *Book from the Ground*¹⁵(Fig. 4), Xu Bing's large-scale design project of shaping a new system of trans-linguistic and transcultural writing enters into a new pictographic stage. It can be called a Babel project since it constructs an icon-language for global communication. The story of Mr. Black — a white-collar city bachelor whose daily 24-hour life is described in the graphic novel entitled *From Point to Point* — is written in a language of icons. From a script-linguistic view, it would be properly defined as “iconic writing”, because its visual symbols contain no equivalents in spoken language. Although the *Book from the Ground* is an artistic project dedicated to rebuilding the destroyed “Tower of Babel”, its creator Xu Bing is very serious and ambitious about its humanistic communicative goal, namely the design of a universal writing system that can be comprehended globally regardless of the linguistic and cultural background, including the educational level, of its “readers”. Given this objective, the artist puts his project in line with the numerous historical attempts to create a universal script. He makes particular reference to the French philosopher Jean Douet who in “A Proposal to the King for a Universal Language” (1627), was one of the first language theoreticians to recognize the potential of the system of image recognition in Chinese character writing as a basic model for the design of a universal language.

In contemporary society, marked by the “ubiquity of the Internet and the convenience of even faster transglobal communication and information sharing”¹⁶, the limitations of spoken and written inter-language communication represent a significant burden. In the view of Xu Bing, “the age-old human desire for a ‘universal script’ has become a critical need. This predicament requires a new form of communication better adapted to the circumstances of globalization. Today, the implications of the Tower of Babel can, all the more powerfully, be felt.”¹⁷

What is the special feature of Xu Bing's universal script design for global visual communication as created in *Book from the Ground*? On what basis and systemic principles is his universal icon/ic writing built? The extremely clever strategy of the artist was to not (presume to) invent a new universal script, as most of his historical predecessors had aimed at, but rather to construct it from pre-existing signage, symbols and icons that function as visual transmitters of conventionalized, shared meaning. The prehistory of the project shows clearly that it did not evolve from character creation, but from the collection of signs and symbols that “are already in use and have the ability to be easily recognized.”¹⁸ Interested in image recognition as a primary means of communication, Xu Bing began collect-

¹⁵ The most recent publication is found in Bing, Xu: *Book from the Ground. From Point to Point*. North Adams, Massachusetts: MASS MoCA/Cambridge, Massachusetts: MIT Press, 2018.

¹⁶ Bing 2014, p. 41.

¹⁷ Bing 2014, p. 40.

¹⁸ Bing 2014, p. 43.

ing airline safety cards which provided a variety of icons amounting to the comprehensibility of a universal language. He continued to expand his collection in 2003 when he saw icons on a chewing gum packet that explained how to throw it away after consumption, visualizing the message: “Please wrap the used gum and dispose of it into a trash bin.”¹⁹ He realized that “in addition to single icons used to explain something simple, several icons together can be used to narrate a longer story.”²⁰ From that moment on, he began to systematically and incessantly collect symbols and icons. Whenever he saw a symbol or icon of communicative relevance, he took a photo or cut it out, and then pasted it into a booklet that functioned as a sort of dictionary of symbols. He collected logos, icons and insignia from across the globe and began researching the symbols of specialized fields such as mathematics, chemistry, physics, drafting, musical composition, choreography and corporate branding. The main goal of this investigative collection was to understand the core design elements and habits of visual communication. The main idea of the *Book from the Ground* is to constantly add new symbols in order to keep pace with the discovery or coinage of new icons. Usually, the discovered symbols and icons are graphically synthesized so that they appear as unicode signs. Nevertheless, the full spectrum of visual signs from signage, logo(gram)s, symbols, insignia, icons and pictograms is present. The variety of visual sign types is not restricted to one standard category; it is only graphically harmonized to guarantee consistent recognition and readability. In order to extend the scope of pictographic meaning production, Xu Bing sometimes relies on the principles of Chinese character-construction such as the visuo-spatial composition of more than one character in an imaginary square used to configure a new word (or) concept. Just as the Chinese character-construction of “forest” is constructed by doubling the character for wood, three car icons stacked together signify “bottleneck”. A repetition of these composed signs based on multiplication along the pictographic writing line expresses a gridlock.

Point to Point, the first story of *Book from the Ground*, was written directly with icons, after a first attempt to translate a Chinese (written) language draft for an amateur novel into icons had failed due to the difficulty of transferring the structural complexity of the language system. Also the complexity of the narrative had to be reduced, resulting in a simple 24-hour story about the daily life of a contemporary person living and working in a city — that of “Mr Black, from his waking up in the morning, going to the toilet, to his rushing to work, dealing with his demanding boss, drinking with friends, and surfing the internet in search of a girlfriend.”²¹ Although the content, message and thoughtfulness of the story is restricted, the global outreach of the book is almost limitless, since it can be read

¹⁹ Bing 2014, p. 37.

²⁰ Bing 2014, p. 37.

²¹ Bing 2014, p. 135.

and understood by everybody “without the need of translation.”²² For Xu Bing, “the limitations of the book lie in your life experience, not in your educational level or geographic location.”²³ It is the shared visual, physical and emotional experiences that allow for competent icon-reading.

Due to its linguistically non-translational foundation, the iconic writing system compiled for *Book from the Ground* can be turned into a global translation instrument. After writing a book to be universally understandable, Xu Bing has reprogrammed his self-composed universal icon-script system as a translation tool, facilitating the translation of written language into the pictogram system. He developed a “font library” computer program that enables users to type English or Chinese sentences and see them instantaneously translated into the new iconic writing.²⁴ Currently, this font library program is limited to English and Chinese, but in the future, it should include other major languages, thus rendering possible global communication through a trans-linguistic visual code. Xu Bing comments on this icon-translation potential of a universal script as follows:

“[...] after our currently un-finished computer program is perfected, writers of every language will be placed on equal footing. To a certain extent, this software will function as a point of transfer between dissimilar languages. This early result should not be minimized because it has limitless potential to expand into even larger arenas. The relationship between our new language and other, preexisting languages resembles the relationship between Mandarin and the many Chinese dialects: disparate pronunciations refer to identical characters. English cannot become a ‘global language,’ as its relationship with other languages is one of mutual exclusivity. As the use of English expands, other languages are lost. Michael Evamy states, ‘for now, the world’s peoples must either be addressed in their own language, or by non-verbal means.’ In that respect, a pictographic language not reliant upon phonics has a special advantage.”²⁵

The installation of *Book from the Ground* in the exhibition space²⁶ reflects this aspect of language-independent icon communication. Two computers equipped with Icon Chat Software are set up, facing each other. They are separated by a wall of frosted glass that double-functions as language barrier and language translator. It displays a written iconic dialogue in the graphic style of Xu Bing’s universal pictographic writing. The chat users take opposite seats. They are separated by the frosted-glass partition, but at the same time they are placed very close to each

²² Bing 2014, p. 135.

²³ Bing 2014, p. 135.

²⁴ The “font library” translation program sometimes produces bizarre, unexpected results. These reveal the imperfections of the program development and the lapses of mistranslation.

²⁵ Bing 2007, n.p.

²⁶ The icon chat installation of *Book from the Ground* was first exhibited at the Museum of Modern Art in New York in 2007 as part of the exhibition *Automatic Update*.

other, thus evoking the feeling of telepresence. When the users want to communicate, they type in an English or Chinese sentence, as in web-chatting. Pressing the return key activates the instantaneous translation of the given sentence into the pictographic symbol language shaped by Xu Bing. Through this interactive arrangement, the installation demonstrates how global e-communication develops into icon/ic writing.

The translation program is a crucial element of *Book from the Ground*, since it does not only establish the interactive act of messaging, but also serves as a means to familiarize users of diverse languages with the new pictographic writing system, so that in the future — this is one of the aims of the artist — it might be applied independent of individual spoken languages. As utopian as the artistic *Book from the Ground* project might look from the historical perspective of failed attempts to shape a universal script for common usage, it signals an iconic turn of writing in general and the related writing cultures, particularly in the face of digital media culture.

Another important aspect of the new icon writing system is that it directly expresses and communicates the demand for corporate image design in the global economy and consumer society. According to Xu Bing, the new pictographic communication system “draws its strengths from political and economic factors [...]. It is rooted in the market rules of the global economy and world politics. Capital has become the new global language of power, but it must still undergo large-scale unification before it can more effectively control commerce.”²⁷ While drawing image-reading inspiration from the global visual language of internationally-operating corporations, the symbol translation tool of *Book from the Ground* itself represents a branding tool for visual marketing and global product communication in an iconified living environment. The new “grounding” book expresses both a serious act of immersion into digitally commodified icon(ic) communication as well as an ironic comment on the neoliberalist currency and global power of corporate images in the 21st century economy.

In the work of Xu Bing, the artistic case studies of global transference were triggered by his personal experience of migration — his linguistic, cultural and artistic displacement and confusion. The particularity of his Chinese art language and artistic context had to be transculturally extended in order to address the new American and international art audience and market. In order to create contact zones with art viewers, curators, dealers and buyers all over the world, he prolonged the calligraphic literati tradition of Chinese writing-art into the 21st century by transforming it into a universal iconic script that serves the purpose of global visual communication and linguo-iconic translation. The icon-logos, as designed for *Book from the Ground* as a new system of communication, are coined

²⁷ Bing 2014, p. 44.

as a new lingua franca and transcultural currency for the global translation of the art of writing. As an add-on, the icon-script is developed into a translation tool allowing for language-image translation and human digital communication beyond linguistic translation.²⁸ With this practical software application, Xu Bing has found a way of medially translating Chinese writing culture into the pictographic age of global digital communication.

Digital *Script Iconics*. Hung Keung's Animated Visualization of Calligraphy in *Dao Gives Birth to One* (2009–2012)

Previous definitions of scriptural iconicity are still strongly rooted in the idea of an analogous writing and print culture of the Gutenberg era. Characteristic for them is above all the spatial-relational determination of scriptural iconicity, in particular the emphasis on the two-dimensionality of the material writing surface as an inscription field for the disjunctive symbol markings in connection with the graphism of character production. It is therefore more than questionable whether they are capable of grasping the forms, functions and practices of script imagery in digital screen culture. Sybille Krämer recognizes in her brief outlook on digital writing that it confronts the limits of the notion of typeface pictoriality based on spatial relations; however, she tends to negate the emergence of a new media form and cultural technique of scriptural iconicity in digital space.²⁹ I would like to contradict this view, since writing — as digital writing — is experiencing an unprecedented iconization. Regarding the numerous visualizations of writing that started in parallel with the digitalization of writing/texts, a reference to Jay David Bolter's study *Writing Space. The Computer, Hypertext, and the History of Writing* from 1991 might be sufficient. The author states that in the digital screen space opened by new visualization techniques, the hypermodal, network-forming logic of writing can dynamically unfold in space and time, thus producing new epistemologies. Digital typefaces must therefore be identified as a particular type of typefaces. Their fundamental conceptualization is still pending.

The Hong Kong artist Hung Keung was one of the first to experiment with digital calligraphic animations of Chinese characters. His interactive installation *Bloated City/Skinny Language*, dating from the years 2006–2008 (Fig. 5), reflects the technological advancements in the field of interactive computer animation. The work presents itself as an allegory on the “new” China, driven by modernization and economic growth. The transitional experience of a transforming society and culture is staged as a change from the old to the new China, tradition to refor-

²⁸ On the translational dimension of Xu Bing's icon-writing, cf. also Lee, Tong King: “Visuality and translation in contemporary Chinese literary art: Xu Bing's *A Book from the Sky* and *A Book from the Ground*”. *Asian Pacific. Translation and Intercultural Studies*, 3.1, 2014, pp. 43–62.

²⁹ Krämer, Sybille: “Schriftbildlichkeit oder: Über eine (fast) vergessene Dimension der Schrift”. In: *Bild – Schrift – Zahl*. Eds. Sybille Krämer – Horst Bredekamp. München: Fink, 2008, p. 174.



Fig. 5: Hung Keung, *Bloated City / Skinny Language*, 2007, interactive installation. © Hung Keung

mation, between static and dynamic. This transformation process is mediated through the medium of Chinese writing, with a particular focus on its internal history of reformation in the course of Maoist modernization politics: the redesign of the traditional complex Chinese characters into simplified, graphically reduced characters. The oppositions and tensions between preservation and change, continuity and discontinuity can be sensed directly in the interactive and immersive space of writing. The viewers, standing and moving in front of the screen installation, is recorded in real-time. They are confronted with their self-image in live action, overrun by animated Chinese characters that move like insects. It was a central motivation of the artist to make the viewer's body experience the contradictions between move-on and stand-still, approaching and distancing. Like new China, the new writing is on the move. In form of a body-sensory experience, Hung Keung's installation expresses the new mobility and visual interaction capacity of writing, of "characters on the move." But the situation of writing is characterized by a paradox. The bodily performed withdrawal from writing, here from the rich Chinese writing tradition, results in a virtual-real revival of writing. Contrary to Camille Utterback's interactive script installation *Textrain*, in which the viewer is animated to carefully, almost erotically play with writing by catching letters "raining" over the screen and thus forming text particles, the characters of *Bloated City/Skinny Language* show off a very aggressive behaviour. The script unfolds an enormous power within itself, an insect-like life of its own; it captures the body in communication with it, draws a textile web around it, inscribes it. The entanglement and imprisonment of Chinese writing becomes the symbol of a society which is caught in the dilemma between tradition and renewal, continuity and change. Thus, the moving power of the characters also implies a critique of writing: not to forget the cultural heritage of Chinese writing and its related writing culture over the rapid societal transformations in the age of digital globalization.



Fig. 6: Hung Keung, *Dao Gives Birth to One*, 2009–2012, interactive installation. © Hung Keung

In Hung Keung’s interactive script project *Dao Gives Birth To One* (Fig. 6) which was created in a total of three different versions between 2009 and 2012, Daoism as a philosophy of time and space is linked with the new digital media philosophy of script creation. The focus of the project is the visualization of the Dao principle using digital motion images of Chinese writing: “The philosophy of Dao reflects how Chinese people interpret the concept of the universe. There are different explanations [of how] Dao gives birth to one, one gives birth to two, two gives birth to three [...] I wanted to visualize this.” And the artist continues: “In the past, people would present their thoughts by writing them down. In this contemporary world, we can’t write as well as people could in the past, but maybe we can visualize our thoughts.”³⁰ It is precisely this intention that the artist implements through the visualization of writing as a recording medium. The creation of a novel interface between traditional Daoist philosophy and digital type creation is intended to contribute to the digital expansion of the concepts of time and space. Written images appear on three levels, layered on top of each other, from the immersive space of the computer screen to the exhibition space as presentation space. This includes: a) the level of character generation and modelling, b) the

³⁰ Cit. following Art Radar: “Words in Art: New media artist Hung Keung’s war on Simplified Chinese”. *Artradar Journal*: <https://web.archive.org/web/20200621175542/https://artradarjournal.com/2011/03/09/words-in-art-new-media-artist-hung-keungs-war-on-simplified-chinese/> Archived June 21 2020 (last viewed 14. 04. 2020).

level of the image sequence of the digital scroll composed of twelve screens, on which the character generation is visualized according to Daoist principles, and c) the level of the viewer's interaction with the written images in the exhibition space.

Hung interprets the philosophical concept of the Dao as a script-forming principle. Chapter 42 of the *Dao De Jing* describes how the Dao acts as the primordial creative force of nature and sets in motion life cycles of creation and decay:

“The Way produces one, one produces two. The two produce the three and the three produce all things.”³¹

In the Daoist idea, the multiplicity of life is produced by multiplying unity. Hung's typeface animation *Dao Gives Birth to One* is based on the analogy between the Daoist life-creation principle and the writing principle of Chinese simple and compound characters, which is represented in one of the first Chinese dictionaries, the *Shuowen Jiezi*. The Chinese character for one, the yi (一), is the first word or logogram listed in the *Shuowen Jiezi*. It is explained by the remark that the One is at the great beginning of the way (Dao) and that by its division heaven and earth and thus the world of ten thousand things and living beings were created. It is this principle of creation that Hung adapts for his digitally animated visualization of Chinese script-genesis. Using a software program developed by himself, he designs so-called Flying Animated Chinese Characters (FACC), which, as in classical calligraphy, are composed of brushstrokes. From the one, the horizontal stroke, which floats lonely through the universe of the virtual (screen) space, two strokes are created by human touch; a further interaction leads to the doubling of the strokes, then to their quadruplication and further multiplications. In the course of (re)production, simple characters assemble into compound characters: they multiply exponentially until they populate the universe as tens of thousands of characters and dive back into the nothingness of the black screen through compression.

New in the virtual creation of Chinese writing was the realization of a three- and four-dimensional experience of character perception with the help of digital technology. The introduction of the time dimension as the fourth script dimension was achieved by sequencing the font-formation images. The process of character generation in the production mode of the calligraphic brushstroke was broken down into a sequence of a certain stroke guidance and stroke combination. The example of the animation sequence of the Chinese character for “horse” (*ma*) (Fig. 7) visualizes on the real-time axis of ordering how the character is built up from

³¹ Cit. following A. Charles Muller's English translation of *Daode Jing* (1991), AC Muller: <http://www.acmuller.net/con-dao/daodejing.html#div-43> (last viewed 08. 02. 2021).

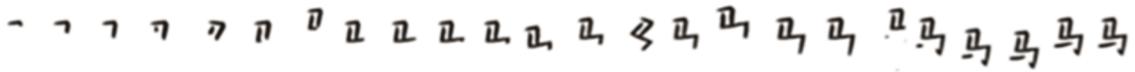


Fig.7: Animation sequence of the Chinese character *ma* (horse), study by Hung Keung for *Dao Gives Birth to One*. © Hung Keung

strokes in a processual and performative manner, i. e. in the execution of its temporal development. This makes the growth process of character formation visible as a temporal process. On the one hand, a comprehensive three-dimensional experience of character perception was achieved through the three-dimensional modelling of the individual strokes as components of the visual sign formation. In modelling the individual strokes, the artist attached particular importance to the stroke volume, the stroke dynamics, the texture and the play of light and shadow. The example of the Chinese character *yue* for “moon” shows how Hung Keung designs the line combinations using the 3D software from Studio Max in a spatial grid of coordinates. In a further step, the three-dimensionally modelled characters were animated in three-dimensional space. The animation sequence of the Chinese character for “mouth” (*kou*) manifests how the character is rotated once in space around its own axis. This allows a panoramic view of 360 degrees. The innovative element of the digital character creation design thus consists in the four-dimensional, time-spatial visualization. Hung Keung also distinguishes his own innovative achievement from earlier typeface animation experiments in digital art. He criticizes *Text Rain*, an interactive installation by Camille Utterback created in 1999, as well as Lee Lee Nam’s digital interactive folding screen installation *Korean 8-fold Screen* (2007) for failing to enable a spatio-temporal experience of typeface imagery despite its animation. In his view, the character images remain tethered to the two-dimensionality of the writing surface, even if bodies interactively play with them.³²

Hung Keung is concerned with the technological development of a new moving image technique of writing that interactively unites space and time into a participatory space-time experience. He sees the best prerequisites for this in the constitution of Chinese writing, its stroke performance and spatially staggered configuration. He points out, for example, that already during the early Tang Dynasty some Chinese characters were treated more as three-dimensional figures than as flat characters.³³ Digital techniques of character visualization can bring these historical dimensions to light and revive them.³⁴

³² Keung, Hung: “How the traditional Chinese of time and space can be applied through digital moving images”. *TypoDay*, (2013): http://www.typoday.in/2013/spk_papers13/hung-keung-typographyday2013.pdf, pp. 10–11 (last viewed 01. 09. 2020).

³³ Hung 2013, p. 9.

³⁴ Cf. also Keung, Hung – Jean M. Ippolito: “Time-Space Alterations: A New Media Abstraction of Traditional Chinese Painting and Calligraphy Aesthetics”. *Leonardo*, 35, 1, 2020, pp. 25–30.

However, the four-dimensionality of the script-image is not limited to the genesis of character formation, it is extended to the entire space of perception and reception of the exhibition project. By using digital technology, Hung Keung aims at transforming the two-dimensional surface, on which writing traditionally appears, into a four-dimensional virtual space that reinterprets the Daoist concept of emptiness, from which the fullness of life emerges and in which it also disappears. To this end, he translates the video installation aesthetic of the Black Box into a scroll aesthetic of the Yellow Box. He adapted the scroll as a script-related media format to visualize interactive script perception as a genetic mode of script transformation in space and time. Twelve digital video screens were connected to create a long scroll format. On each individual screen, different character animation sequences can be seen, so that there are always new narrative combinatorial connections between the individual sequences of the screens. The visual material is based on video recordings made by the artist in his studio. He invited various people to physically interact with the “flying” Chinese characters (FACC) he designed. With the camera, he focused on individual body parts such as face, shoulder, elbow, chest, etc. The characters were then placed on the screen. From the film material, he compiled twelve video sequences, all of which differed in running time. The first video lasted three minutes, the second eight minutes, the eighth twenty-one minutes and the twelfth five minutes. Due to the different loop lengths, the overall picture of the video-screen scroll showed varied character interaction combinatorics. This configuration was intended to influence the viewers’ reception and interaction behaviours in such a way that they could come and go freely, in analogy to the characters that appeared and disappeared; additionally, each visitor could observe the character interactions in his or her personal time mode. It was also a question of being able to perceive the long scroll video projection from different angles of view setting — close-up or distant views, top views or bottom views — as well as in different temporal phases.

This perceptual aesthetic approach correlates with that of the classical image scroll in the East Asian image and writing tradition. The scroll, which is usually several meters long, requires sectional unfolding in order to observe the individual scenes and thus be able to spin a narrative thread. Storytelling unfolds as a series of multiple individual images or scenes in a temporally proceeding and sequentially split spatial order. The image scroll is thus per se a literary media format, combining discursivity and iconicity to moments of spatio-temporal compaction. It is precisely in this media function that Hung Keung makes use of the scroll for visualizing the creation of Chinese writing. Of central importance is the interaction between writing and the human body. It is already laid out in the history of Chinese character creation, because according to Daoist cosmology man was created as a mediator between heaven and earth. Only by the interaction of man with the (written) signs from heaven, the creation on earth is set in motion.

The visualization project incorporated the role of the observer into the overall concept from the very beginning. The immersion in and emersion from the virtual scroll space of the exhibition played an important part. Accordingly, the space was not designed as a black box, but as a tunnel with two open ends, which could be entered and left on both sides, thus symbolizing the cyclic nature of the character journey as a traveling through the genesis of Chinese writing. In order to create a rimless, open pictorial space, the twelve monitors were not hung on the wall, but fixed directly to the floor. In one version of the work, they even covered the entire wall surface. Two modes of perception were included: a rather meditative viewer behavior of distanced internalization and an interactive participation behavior in the physical handling of the characters. One could become part of the virtual typeface space oneself and enter into a playful physical dialogue with the Chinese character creations. This integration strategy is an equally important instrument for creating a four-dimensional writing experience not only on the level of the video screen, but also in the exhibition space. The video space of the screens in interaction with the surrounding space of the exhibition installation forms an intermediary space through which viewers can immerse themselves into the artwork and interact with the characters.

Writing as Iconic Intermediary. Toward a Media- and Culture-Comparative *Script Iconics*

What does all this mean for the project of *script iconics* as a field of research in visual art and media studies? Scriptural iconicity is not simply given in writing. It has developed its own pictorial media formats in the past and present, which differ greatly in terms of their aesthetic form and the cultural-technical handling of them. Just as writing in general cannot be defined since it always appears in a particular form of media, cultural and communicative context dependency, scriptural pictoriality cannot be generalized as a medium, symbol and cultural technique. This becomes particularly clear, as shown, when looking at iconic writing potentials in semantographic grammatology traditions such as Chinese writing culture. There, it is the pictorial power of writing itself that also influences the definition of the image. Under the premise of a media co-presence, it is therefore necessary to speak of a scriptural formation of the image or of the image as inscription, analogous to the iconicity of writing. The pictorial power of writing and the scriptural power of imaging thus stand in a reciprocal media condition and exchange relationship. The media format of the scroll, shared by image representations and written records, is only an expression of these writing-image interactions. Thus, there is a need for re-situating the research on the image of writing in a culture- and media-comparative perspective that also considers referential relations between the image of writing, the image of thought and the world views.

Birgit Mersmann

As described above, it is imperative that a theory of script-image includes philosophical and ideological perspectives if it does not want to freeze into an auto-referential discourse of self-reflection. As a graphic design form, the script-image is also always a cultural technique that contributes to the formation and transformation of knowledge. As a vivid form of a “recognized seeing”, it brings abstract thinking and worldviewing to insightful representation. It is therefore hardly surprising that in the age of digital visualization, the use of written images is experiencing an enormous upsurge and also an epistemological reevaluation.

Sources of Illustrations

Fig. 1–4: © Xu Bing Studio — Fig. 5–7: © Hung Keung