

Across Time and Place: Calligraphy, Circulations, and the Continuity of Mankind

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Abstract. The conception of cultural circulations in Art History is worthy of investigating the circulations of calligraphy across time and place. Specifically, this article will continue Thomas DaCosta Kaufmann's exploration of the connections between Eastern and Western art forms by examining horizontally the reciprocity of artwork from a global perspective. In particular, It will trace the modern reinterpretations of the calligraphic tradition in the works of Zao Wou-Ki and Joan Miró via artistic styles and practices such as Cubism. In this way, looking beyond global circulation allows people to respond to the underlying connections between calligraphy and Cubism: each represents either Past or Present, East or West. It is argued that comparing these two artistic practices enables people to approach the continuity of Mankind.

Keywords: Zao Wou-Ki · Joan Miró · Calligraphic Tradition · Art History

1 Introduction

The development of Art History across time and place can be seen as a demonstration of the continuity of Mankind, a term that represents the continuous and interconnected development of human civilizations in different generations. Indeed, in Thomas DaCosta Kaufmann's book Circulation in the Global History of Art, Kaufmann argues that the circulation of art produces an interconnected and "ceaseless transformation and adaptation of ideas" [1]. Compared with the belief that art originates from one place/area (the theory of 'diffusion'), Kaufmann expands fields, previously dominated by the study of European and American art, to include "interconnected, international, and multicultural" aspects, which considers different cultures and thinkings to be of the equal importance. Kaufmann's circulatory approach thus enables the art historian to focus on the values of cross-cultural exchanges, rather than classifying these cultures into a hierarchy, dominated by European and American art.

As Aruz comments in the book Art of the First Cities, many artistic artifacts can be studied to decipher and understand a civilization, such as terracotta figurines, sculptures, and clay tablets [2]. In addition, artistic traditions also provide historical insight. This essay uses calligraphy to demonstrate the value of artistic tradition as a tool for understanding individual artists, their civilizations, and the development of Art itself. Calligraphy exemplifies Kaufmann's theory of circulation, because it derives from writing, many traditions of which have developed around the world in conversation with each other. Yet, as an art form, the aesthetic function of calligraphy influenced and was influenced by global cultures - confirming Kaufmann's belief that circulation can be defined by the processes of "cultural mixing, decentering and interchange" [1]. This article focuses on Thomas DaCosta Kaufmann's exploration of the connections between Eastern and Western art forms by examining horizontally "the complex interplay of alterity and reciprocity at work in the relations between cultures". It will explore the uses of the calligraphic tradition in the modern works of Zao Wou-Ki and Joan Miró. Besides that, It will also consider the connections between the past and the present across these cultures. Kaufmann suggests that "[circulatory approaches allow us] to examine how in different times and places the same object or idea could be seen differently," thus introducing ways of viewing artifacts from perspectives based on the respective contemporary societies. This adds to Kaufmann's approach of recovering the "limited and partial perspectives of the historical men and women we study". Thus, It argues that contrasting concepts of calligraphy across the past and the present may also reveal the respective contemporary society's ideas, culture, and attitudes. From another perspective, analyzing calligraphy also enables us to understand the development of modern art movements, such as Cubism, which are influenced by cultural circulations across time and place. By tracing connections globally across the past and the present, we thus expand the horizons of future possibilities in Art and consolidate the concept of the continuity of Mankind.

2 Historical Overview of Calligraphy

With this idea of circulation in mind, my focus turns to a comparative analysis of Eastern and Western writings. The origin of writing systems indicated people's desire to express language by "systems of markings" and symbols. Scholars claimed that the writing originated in ancient Sumer, and then diffused all over the world [3, 4]. The cuneiform script was developed from previous pictographic writing forms in the late fourth millennium BC and was primarily used for accounting. In contrast, a calligraphy is a unique form of writing which is considered a "visual art", because its aesthetic and symbolic function outweighs the narrative function of other writing forms [5]. This essential difference in creative intention distinguishes these two writing forms: the former is primarily used for practical reasons, whereas the latter is more for aesthetics and artistic expression. It can be said that an exchange between the two media (art and writing) took place, as "Art became narrative and writing went beyond accounting to become a comprehensive medium of communication", adding new perspectives with which to view these two writing systems. From another perspective, researchers have explored other possible functions of writing. Egyptologist Rosalie David, for example, comments on this: "The main purpose of writing was not decorative, and it was not originally intended for literary or commercial use. Its most important function was to provide a means by which certain concepts or events could be brought into existence. The Egyptians believed that if "something were committed to writing it could be repeatedly 'made to happen' by means of magic", which demonstrates the underlying role and intention of words created by ancestors [6]. Therefore, it can be said that writing can be seen as a form of narration when playing a quasi-documentary role in history. From this perspective, writing is usually considered a reflection of its corresponding era [7]. In contrast, writing can also be considered from an aesthetic angle. In this case, the piece of writing reveals more about the creator's own personality and ways of seeing, as different creators tend to depict the same subject matter in slightly different ways. Although both calligraphy and Egyptian writing originated with the intention of historical recording and written documents, with the development of civilization, the handwriting was given a new aesthetic value. In essence, it can be therefore argued that calligraphy can be defined as a form of handwriting with artistic meaning and symbolism.

Besides these interactions between art and writing, cross-cultural exchanges have also increased among countries, thus reinforcing the continuity of mankind, and the continuity of human generations. Specifically, some researchers claim that ancient Egyptian writing has influenced many other countries and later generations around the Mediterranean and the world [8, 9]. After early Chinese emperors asserted their power on stone as a calligraphic script, this writing system spread widely in both Korea (around the fourth century) and Japan (in the mid-sixth century), linking to concepts such as Zen philosophy and Asian calligraphy [10]. After this cultural spreading, Asian countries demonstrated their response and reactions [11, 12]. Japan, for example, has developed its form of calligraphy in relation to philosophy in Japan: compared to Chinese calligraphy which has a strong structure and focuses on form, Japanese calligraphy tends to be more flexible and more freely considers its aesthetics and meanings conveyed. However, along with the continuous cultural circulations between China and Japan, these nations' calligraphic styles gradually became more inter-connected and mutually circulatory. Here, the diffusion of writing styles demonstrates a cultural mixing and continuity among different countries, which links to Kaufmann's concept of cultural encounters and confrontations, and the dynamics of transformation and integration. From another perspective, this idea of continuity of mankind is shown by the flowing, interactive writing culture and styles. It is also demonstrated via artists' responses to the phenomenon from later generations over the world, thus driving connections between the past and the present, the Eastern and the Western.

3 Calligraphy Across Time: Wang Xizhi and Zao-Wou-ki

A comparative analysis of the Chinese calligrapher and writer Wang Xizhi and the Chinese-French painter Zao Wou-ki sheds further light on the theme of past and present, in regard to calligraphy. As a respected calligrapher during the Jin dynasty, Wang was well known for his mastery of Chinese calligraphy, whereas Zao was a valued abstract painter from the twentieth century. Both artists were influenced by Taoism, ancient Chinese philosophy, and religion that "instructs believers on how to exist in harmony with the universe." It can be said that Zao Wou-ki reinterprets the innate spirit and philosophy of Taoism, revealing his own ways to approach nature and truth. His profound thinking on it has later been embodied in his abstract artworks. Indeed, similar to the concept of yin and yang, which means "cyclical patterns based on the interaction between polar forces", suggesting that all things are "interconnected and constantly changing",

Zao conveys a sense of underlying harmony in his abstract paintings via the choices of colors and artistic compositions, demonstrating a balanced contrast and battle between activeness and inactiveness; nothingness and wholeness; existence and non-existence [13–15]. Similarly, Wang, named the "Sage of calligraphy" by later historians, also explores Taoist thinking in his calligraphic works such as "Lanting Xu" (Orchid Pavilion Preface), a work of calligraphy written in elegant "semi-cursive script and underpinned by deep philosophical thinking" [12]. Specifically, in this piece of work, Wang shows his mastery of "the zheng (regular) style calligraphy", "the semi-cursive variety" and other calligraphic forms, which are the traditional calligraphy in China. As Wang grew older, he gradually freed himself by using the flowing style of writing, shown by the use of lines, shapes, and the level of force/strength applied to writing the words. Therefore, it enables Wang to unlimitedly express his moods, and his comprehension of the world and its philosophy via his brush and black ink. Although these two artists lived in different centuries, they used different media of art, either calligraphy or an oil painting, to convey and express their re-interpretation of the philosophical innate spirit and their pursuit of nature, truth, nothingness, and wholeness.

4 Zao Wou-ki and Joan Miró

The concepts of interconnected cultural exchanges and circulations are also demonstrated in twentieth-century Paris, the place of cross-cultural "convergence", the center of artistic life, and "the refuge of creation". The importance of Paris in relation to the development of Zao and Miró's artistic practices can also be considered a form of cultural circulation. Indeed, Michele Greet in Kaufmann's collection emphasizes the significance of "mapping" to suggest cultural exchanges between artists, as this sense of "neighborhood and proximity allows scholars new ways of conceptualizing transcultural interactions." Specifically, the location of Paris facilitated Zao Wou-ki and Joan Miró's close friendship, the sharing of interests, and exchanges of their innate intellectual ideas as well as artistic styles. Zao Wou-ki (February 1921 - April 2013) was a Chinese-French painter who moved to Paris to further his artistic studies in 1947, after graduating from the School of Fine Arts in China and holding his first personal exhibition. Joan Miró (April 1893 - December 1983) was a Spanish modern artist who moved to Paris in early 1920 due to his artistic interests in art movements such as Fauvism, Cubism, and Surrealism. Having met in Paris, both Zao and Miró fell in love with this city. Their similar innate thinking and common inspirations, such as the relationship between painting and poetry, and the importance of re-interpretation using Art, drew them closer. For example, similar to Miró's perspective of his work as "a poem that has been put to music by a painter", Zao emphasizes the similarity between painting and poetry, suggesting that "these two forms of expression are, physically, of the same nature", which demonstrates the two artists' shared mentality. Indeed, Zao's embracing viewpoint may have been influenced by engaging with the most successful living painters across Europe and the USA, such as Paul Klee, Henri Matisse, and Pablo Picasso, which helped him to become "an integral part of the artistic intelligentsia during this decade." From another perspective, due to the unprecedented free environment, artistic ideas and ways of thinking were not only

exchanged but also expanded, encouraging new perspectives, and thus developing previously mainly figurative artistic styles into art movements like Modernism, Cubism, and Abstraction.

Besides that, both Miró and Zao's philosophical thinking was influenced by calligraphy. For Miró, Asian calligraphy inspired him to re-ponder the idea of nothingness and the void with the use of ink, and black (Salomé Zelic, 2021). Indeed, Miró expresses how the practice of calligraphy fascinated him, and he described it as "an empty space, an empty horizon, an empty plain" (Miró), which links to the chasing of vastness and void in Taoism. Specifically, Miró, Peinture (Projet pour une tapisserie), 1973-74 is a great example. With the use of oil and wool on wood as the medium, in this painting, Miró conveys a sense of profound emptiness via using free gesturality as well as leaving bold empty space (a symbol of the void). Interestingly, the black oil paint to some extent evokes the calligraphic element of black ink; on the other hand, the free lines, imbued with a level of poetic sensibility, also link to the aesthetic nature of calligraphy. Similarly, Zao was also influenced by calligraphy. After naming him "Wou-ki", which means "no limits" in Chinese, Zao's grandfather, a deep Taoist, taught Zao calligraphy at a very early stage. In the beginning, Zao intentionally avoided containing Chinese elements in his artistic practice to not be called "chinoiseries" based on some Chinese stereotypes. However, as he experienced cross-cultural exchange, Zao was gradually able to expand and re-interpret the Chinese tradition via re-presenting the traditions of calligraphic elements and combining them with his otherwise Western Abstraction. For example, painted in a similar period, Zao's artwork, Sans titre, 1978 represents his reinterpretation of calligraphy after moving to Paris and exploring cross-culture influences. Specifically, used by ink and Indian ink on paper, Zao extracts traditional calligraphy elements in this painting, maintaining the free gesturality of calligraphy. Yet, he applies new drawing techniques, such as adding colors of green in the traditional black and white dominated calligraphic form, as well as erasing the conventional orders of calligraphic lines/forms with different sizes and shapes in his artistic practice, thus revealing his emotional mentality and subjective perceptions. Zao blends these traditional Eastern elements with Western abstraction, demonstrating his contemporary society's increasing globalization, thus confirming Kauffman's circulation theory. Indeed, in his oil painting, 1968, Zao Wou-ki depicts the natural texture by blending multiple colors (red, blue, yellow, black), creating a sense of movement and dynamics. Here, the calligraphic elements, arguably a representation of ancient oracle bones and bronzes of the Shang dynasty, are depicted via ink colors, creating a sense of stability. This ink calligraphic element originates from the center and then spreads out, which deftly connects with the other seemingly moving brushstrokes, thus together establishing a central swirling composition. Here, by applying oracle bone writing, Zao Wou-ki upholds his innate characteristics as an Eastern artist, introducing his representation and interpretation of Chinese calligraphy into his otherwise Western abstract style [15]. In other words, it can be said that Zao deconstructs the obvious established form of a conventional Eastern painting, melting the elements in a more moving, dynamic, and united way - a form of abstraction with the use of dynamic lines as well as in mass and light.

Indeed, after living in this international cross-cultural place in Paris and making international friends, Zao Wou-ki was driven to reconsider the values of his own innate

identities and cultures on a larger scale. It is through this process that the tradition of calligraphy (representing the past) gradually developed into new forms of expression. As the art critic Zelic says, in 1970, Zao returned to the artistic medium of ink that he had previously abandoned for oil paint. Indeed, Zao reveals that "Everybody is bound by a tradition. I am bound by two", which builds an interesting tension between outward embracing and inward exploration, leading him to cross the cultural frontier between East and West in his artistic creation. Indeed, Zao himself demonstrates his viewpoints on the form of lines and symbols in artwork, stating that these symbols are "made up of multiple spaces, a world arose which dazzled" him [3]. Zao's approach to the calligraphic form was especially influenced by the modernist works of Paul Klee during the 1950s, as Zao turned his focus to "semi-scriptural paintings" with Chinese calligraphic oracle bones. For instance, his artwork Bateaux au port, 1952 is composed of various small rectangles and other geometric shapes separated by lines and symbols. Also, this painting is dominated by muted dark colors, such as grey, black and brown, which create mysterious and arguably meditative tones. Moreover, there is a sense of order in Zao's arrangement of the rectangles and circles that form the boats, which is reminiscent of the established order of the strokes and forms used in calligraphy. This freedom in Zao's line, color, and composition indicates his expansion and merging of the frontiers of traditional calligraphy and his established abstract painting styles. Similarly, living in such an international place that embraces mixed ideas and cross-cultural exchanges, Miró's artistic style also started to develop. By considering Miró's art transformation as an individual's progress, the influence of Asian cultures such as Japanese art and calligraphy on Miró is undeniable. Specifically, Miró collected objects and books related to Japanese art, such as Zen, calligraphy, the tea ceremony, and other Asian cultures. His work experience with his pottery friend Josep Llorens also emphasized the influence of these cross-cultural exchanges. For example, Miró's artwork Untitled in 1953 is composed of traditional Asian calligraphy, extracted into subtle and abstract calligraphic elements: the free presentation or reinterpretation of lines and shapes using "black ink" on paper [16]. Besides that, Miró also created artworks related to Japan. His painting Joan Miró and Japan [16, 17] demonstrate his youthful admiration for Japan, shown by the symbolic and deft use of geometric shapes and sizes: the elements in the middle are presented vertically, whereas the others horizontally; some in profile, the others in frontal views. Indeed, it can be said that, in Miró's artwork, we can also identify a form of cultural circulation between Japan and China. This is shown by Miró's focus on both the forms and structure of this artwork (a traditional calligraphic element from China) and the aesthetic value and tastes (a traditional calligraphic element from Japan).

Interestingly, from another perspective, Miró's artworks were also popular in Japan, and Japanese art critics generally considered Miró to be "one of the great masters of modern Spain". These mutual relationships and appreciations further demonstrate the power of cross-cultural circulations. Indeed, Miró's artworks have been frequently exhibited in Japan since the 1930s, a symbol of cross-interactive cultures and ideas. Specifically, Miró's painting Dancer Hearing an Organ Playing in a Gothic Cathedral (1945) owned by the Fukuoka Art Museum is considered to be Miro's "first work displayed in Japan" [17]. Another painting Snail, Woman, Flower, Star (1934) has experienced global circulation and was brought back to Japan (Madrid's Reina Sofia Museum) after "a gap of 56 years". This links to the idea of geographical mapping in Kaufmann's book, as the places where the artworks have been exhibited, indicate the corresponding cultural "circulations of people and ideas" [18, 19]. From another perspective, it can be said that Zao's developmental circulation in relation to his artistic style and focus on his artworks can be seen from what we might call his personal geographical mapping. After being taught by his grandfather about calligraphy as a child and later graduating from the School of Fine Arts in China, Zao moved to Paris and initially wanted to avoid using Chinese elements because he did not want them to be seen as 'chinoiseries.' However, traveling outside of China brought him closer to the essentials of Eastern culture and reminded him of its significance. Indeed, perhaps for Zao, new environments allowed him to find the road, leading back to 'home,' thus demonstrating a more conceptual sense of personal circulation. Therefore, it can be said that whilst cultural circulation inspired Miró to embrace external new ideas and artistic practices, it can also urge other artists like Zao to explore and appreciate cultures internally.

It can be argued that this urge to embrace/explore new possibilities led the two artists to Cubism, a 20th-century modernist art movement that applied a new approach to interpreting reality, representing various perspectives in the same artwork [16]. This in turn drives a connection between the traditional artistic form "calligraphy" and the relatively modern artistic style "Cubism", thus establishing a vivid tension and connection between the past and the present, East and West. It is by linking the past (the tradition of calligraphy) to the artists' experience of intercultural exchange in Paris (the 'present') that we can identify connections between tradition and new art forms - and future possibilities. One connection between calligraphy and Cubism is the mutual focus on line, form, and structure. Miró's Cubist painting The Table, for example, deftly demonstrates the mixed influences of various cultures and styles on his artistic practice [20]. Specifically, it can be said that, in this artwork, Miró applies Cubist ideas by presenting the tables and other elements such as the chicken, the rabbit in profile, and the fish on a dish, from different perspectives, inviting the viewer to extend their previous focus of viewing the painting merely from their perspective [21]. Besides that, possible calligraphic elements are also used, shown by the use of shapes and lines in the background, emphasized by the colors of black and yellow, thus establishing multiple layers, resonating with the multiple perspectives of Cubism. Indeed, it can be said that both art practices highlight the two-dimensional flatness and simplicity by abbreviating the illusion of depth, thus diminishing everything to "geometric outlines, to cubes," as said by the critic Louis Vauxcelles of Miro's artworks [22]. In other words, rather than creating a spatial illusion or linear perspectives based on a three-dimensional form, which arguably links to the aim of imitating nature, these two art practices, to some extent, contain the artists' own subjective perceptions and interpretations. To take a step back, despite the centuries separating the development of calligraphy and Cubism, the different media are arguably driven by similar intentions [23]. Where Cubism chose to depict three-dimensional forms via a visually two-dimensional medium, calligraphy also uses two-dimensional forms for their symbolic function. Both artistic traditions convey subjective interpretations and expressions based on the underlying geometric lines and forms, suggesting a continuity between past and present and different nations. Of course, artistic styles are continuously changing and updating, in response to contemporary society, leaving space for the future unseen art possibilities.

5 Conclusion

In conclusion, this article adopts Kaufmann's concept of cultural exchanges and circulations by examining the influence of calligraphy and artists' responses to the calligraphic tradition, from different periods as well as different regions. It first explored the connection between past and present by comparing Zao and Wang's use of calligraphic elements to demonstrate their innate philosophical thinking. Tracing the influence of calligraphy through Zao and Miró's works demonstrates a continuity of mankind in the re-imaginings of this tradition. Essentially, analyzing writings and calligraphy in different generations can be seen as one of the many ways to explore the development of corresponding civilizations and cultures. Ultimately, the visual connection and circulation between the two symbolic and abstract artistic forms of calligraphy and Cubism may reflect one of the underlying constant goals for human beings: valuing human innate subjective expressions as well as the rational awareness and appreciation of human innate goodness and badness; creativity and bravery, a continuity of mankind. Indeed, similar to the interrelated circulation between writing and art, the essence of these two pairs is the same, as, fundamentally, both media give us the freedom to express the shape of our knowledge, and our own understanding of ourselves, of others, of life, of the world. Last but not least, as Kaufmann emphasizes in his book, it is important to keep in mind that this viewpoint from the twenty-first century is, to some extent, limited and partial in the face of considering the historical men and women.

References

- 1. T. Kaufmann, Circulations in the Global History of Art. Routledge, 2017.
- 2. J. Aruz, B. Kim, and J.M. Evans, eds. Beyond Babylon: art, trade, and diplomacy in the second millennium BC. Metropolitan Museum of Art, 2008.
- 3. M. Walt, et al. No Limits: Zao Wou-Ki. Asia Society, 2016.
- The Art of Calligraphy in Asia | Princeton University Art Museum." Princeton University, The Trustees of Princeton University, retrieved from https://artmuseum.princeton.edu/objectpackage/art-calligraphy-asia/104193.
- J.J. Mark, Ancient Egyptian Writing, World History Encyclopedia, retrieved from https:// www.worldhistory.org#Organization, on 28th July, 2022.
- 6. P. Scoville, Egyptian Hieroglyphs, World History Encyclopedia, retrieved from https://www. worldhistory.org#Organization, on 28th July, 2022.
- D. Clarke, The All-Over Image: Meaning in Abstract Art, Journal of American Studies, vol. 27, no. 3, 1993, pp. 355–75. http://www.jstor.org/stable/27555725.
- Phillips, Zao Wou-Ki's 'Labyrinth of Light', retrieved from https://www.phillips.com/article/ 50690154/zao-wou-ki-william-turner-painting, on 28th July, 2022.
- 9. D. Clarke, Chinese Art and Its Encounter with the World, Hong Kong University Press, 2011. http://www.jstor.org/stable/j.ctt1xwbdj.
- J. Kee, The Curious Case of Contemporary Ink Painting, Art Journal, vol. 69, no. 3, 2010, pp. 88–113. http://www.jstor.org/stable/25800350.

- Zao Wou Ki, Oil Paintings, retrieved from https://www.zaowouki.org/en/the-artist/works/ oils-paintings/, on 28th July, 2022.
- 12. Garry, Lanting Xu (Preface of the Orchid Pavilion) by Wang Xizhi (Running Script), Patrick Siu Chinese Calligraphy & Landscape Painting, 2017.
- Tze-Ki, Hon, Chinese Philosophy of Change (Yijing), Stanford Encyclopedia of Philosophy, Stanford University, 2019.
- 14. F. Perkins, Metaphysics in Chinese Philosophy, Stanford Encyclopedia of Philosophy, Stanford University, 2019.
- L. Raphals, Chinese Philosophy and Chinese Medicine, Stanford Encyclopedia of Philosophy, Stanford University, 2020.
- Tate, All about Cubism, retrieved from https://www.tate.org.uk/art/art-terms/c/cubism/allabout-cubism, on 28th July, 2022.
- 17. Joan Miró and Japan, Tokyo Art Beat, retrieved from https://www.tokyoartbeat.com/en/eve nts/-/2021joan-miro-and-japan, on 28th July, 2022.
- Painting: Joan Miró: | Collection, The National Museum of Western Art, Tokyo, retrieved from https://collection.nmwa.go.jp/en/P.1965-0011.html, on 28th July, 2022.
- 19. Joan Miró and Japan, Bunkamura Museum of Art Tokyo, Art Beat, retrieved from https:// www.tokyoartbeat.com/en/events/-/2021%2Fjoan-miro-and-japan, on 28th July, 2022.
- 20. Joan Miró and Japan: The Museum: Bunkamura, retrieved from https://www.bunkamura.co. jp/english/museum/20220211.html, on 28th July, 2022.
- 21. Joan Miró, Paintings, retrieved from https://www.joanmiropaintings.org/paintings/ on 28th July, 2022.
- Joan Miró, Martin Lawrence Galleries, retrieved from https://martinlawrence.com/pages/ joan-miro, on 28th July, 2022.
- The Guggenheim Museums and Foundation, retrieved from https://www.guggenheim.org/art work/artist/joan-miro-and-josep-llorens-artigas, on 28th July, 2022.

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