

# How do digital technologies affect the aesthetics of Japanese calligraphy art and culture?

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## Introduction & Research Questions

In the recent decades, modern calligraphers begin to use different media to create 'digital calligraphy' and collaborate with programmers to produce new experiences. Meanwhile, media artists have been utilising audio-visual media to reinterpret the traditional aesthetics through emerging technologies, such as employing virtual reality technology to write the 'spatial calligraphy'.

Besides, concerning the menace of losing traditional skills, researchers have developed the motion-copying system which can record the calligrapher's movement precisely and reproduce faithfully as the original piece. They intend to use this technology to educate the young generation. However, there are several issues arose:

### Aesthetics –

How can we evaluate these 'traditional arts' created by new media?

### Technology –

Without the mediacy of a real brush and ink, can we express ourselves more directly by using fingers to write calligraphy on screen?

### Social Institution –

How will the new technology of motion-copying system influence the relationships between masters, teachers and students?



Fig.1  
"Finger calligraphy" on iPad by Kinoshita Mariko (Tokyo, 2010)

## Subject & Methodology

The thesis investigates the contemporary practices of Japanese calligraphy art which combines new media technology not only in the artistic creation but also in the educational aspect. This research examines 3 three Japanese artists and artistic group's works (see Aesthetics analysis).

### Historical & Ethnographic research –

→ Asian aesthetics theories  
→ Field studies: Shodō seminar of Bokushinkai (墨心会) in Naples, Italy on February 25-26, 2017  
→ Master interview: Norio Nagayama (永山典男)

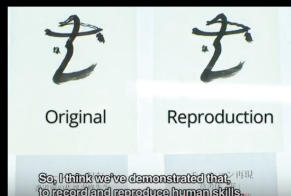


Fig.2  
Motion-copying system, by Katsura Laboratory, Keio University (Tokyo, 2012)

## Literature Review

We witnessed the aesthetics paradigm had shifted from the analogue to the digital. And we have been undergoing the other shift from the physical to the virtual. It is worthwhile to follow the predecessors' thoughts to examine how these emerging technologies will transform the value of traditional arts nowadays.

### Walter Benjamin (1935) –

«The Work of Art in the Age of Mechanical Reproduction»  
· the vanishing of 'aura' of the work of art  
· New technology results in the liquidation of the traditional value of the cultural heritage.

### Fredric Jameson (1991) –

«POSTMODERNISM, or, The Cultural Logic of Late Capitalism»  
· Multi-surfaces (replaced history depths) → Pastiche (Schizophrenic self) → The waning of affect  
· Video Art can clarify the heterogeneity of the new social and economic conjuncture.

### Paul Virilio (Sean Cubitt and Paul Thomas, 2013) –

«The Work of Art in the Age of Mechanical Reproduction»  
· the 'virtual' or 'multimedia democracy': not Representative art, but Presentative Art (Event)

## Aesthetics analysis

In this section, I would give brief introductions of each examined artwork. Then I would discuss the foundation of art through the comparison between traditional works and new media art.

### (1) Metal Sculpture, by Sisyu (紫舟) –

Most Prestigious Jury's Gold Award at Salon SNBA at Carrousel du Louvre in Paris (2014).  
· 2D → 3D: Etched iron calligraphy+ Light/shadow design (emotion)  
· To emancipate Sho from paper & enhance cross-cultural understanding.

### (2) Sound of IKEBANA, by Naoko Tosa (土佐尚子) –

The Projection Mapping [Sound of Ikebana] on the ArtScience Museum facade won the Good Design Award in 2014.  
· 3D → 2D: pigments + sound vibration +high-speed camera (2000f/s)  
· Rinpa painting: gold/silver usage +Tarashikomi technique  
· Ikebana: dynamic Zen \ Utsuroi feeling (the transience of life)  
· Happens by chance \ immersive feature of film.

### (3) ZENetic Computer, by Naoko Tosa (土佐尚子) –

· 'Cultural Computing' as the method to translate culture.  
· Meaning breakdown happens in cross-cultural context (Jameson)  
· Reverse Hierarchy Relationships:  
Artist v.s Audience \ Zen master v.s Pupil

### (4) What a Loving, and Beautiful World, by Sisyu (紫舟) and teamLab (チームラボ) – (2011-2016)

It won the Laval Virtual ReVolution 2012 Architecture/Art/Culture Award in France.  
· Lacan interpreted Saussure: ' Meaning on the new view is generated by the movement from signifier to signifier.' (Jameson)  
· traditional Sho-->digital simulation (0/1)-->signifier 1 (language) → signifier 2 (image) +signifier 3 (sound)-->>>Strengthen the connection between Signifiers and Signified (cross-cultural understanding)  
· Transformation of Interactive Art: Individualised \ Virtualised (city as art form)

	recipient / participant	artefact	interaction
ZENetic computer (2004)	presence	computer, installation	touch screen of the artefact
What a Loving, Beautiful world--2011	presence	indoor projection	touch/pass by the projection
What a Loving, Beautiful world--2016	absence (remote presence)	outdoor projection	download application swipe up screens of phones

### (5) Enso/ Mugenso, by teamLab (チームラボ) –

· Calligraphy is 'cubic image' → Spatial Calligraphy (空書)  
· Enso = the expression of artist (technique+personality)  
= the interpretation of viewer  
· Enriching the meaning of Enso (Egyptian ouroboros+Möbius strip)  
· Showing the 'cubic characteristics' of Sho  
→ new media art of Zen

### (6) Circle, Infinite Circle-VR, by teamLab (チームラボ) –

· ' Circle motif' by programming → recipient is as guest, not co-creator.  
· " The same calligraphy that is viewable one moment can never be seen again" → the vanishing of subject -->No personality, No Shodō.  
· Dilemma of Hypertext Art → the lack of 'the immutability' for connoisseurship \ the lack of objective verdict from a third party.



Fig.3 Circle, Infinity Circle-VR displayed in Fukushima, (Japan, 2017)

## Discussion on Technology : the materiality

According to Hoffmann and Whittmann (2013), through these aspects—the time-specific circumstances, the internal formation, and the plurality, we found that Shodō can be acknowledged as 'a combination of material actions and non-material rules or algorithms about 'how to proceed.'

### I. The Extended Mind – Brush

· Professionalisation of Perception → material action+non-material algorithm  
· " By using the brush, you can liberate something unknown of yourself. It is similar to drink wine. But this unrestrained condition is exactly the state where your energy break out into Sho." —N. Nagayama

### II. The Origin of Dō – Paper

· Learn the sensibility of the materials.  
· " Just like our own life, a sheet of paper has one life. Once you start running your brush on the sheet, you have to go all the way without looking back." —T. Kawao  
· Time capsule → the Yoin (lively grace and dignity) → the Aura

### III. The Relationship between Handwriting & Brain

· An interconnected system : Body+Brain+Emotions (Damasio, 1994)  
· the Plasticity of brain & the Pruning process of neurone → 'Invisible Illiteracy' in Japan & Singapore (Mizukoshi, 2017)  
· The neural activity of children who practice handwriting is far more developed and adult than the other ones. (James and Engelhardt, 2012)



Fig.4  
Children learn calligraphy by Motion-copying system.

## Social Institution analysis : the immateriality--Aura v.s. Education

· Faithfully preserves Aura, in the cost of losing 'Distance' → Feeling the space  
· Observation drawing relates to changes in structures pertaining to fine motor-->>control and procedural memory → Expounding in silence: create interpretations  
· Collaborative relationship (gatekeeper) → crash & disposable tool.  
· The cultivation of personality takes time  
-->>Dalcroze Eurhythmics: Body-functioning influences the mind and vice versa[...] Similarly, by consciously learning new social habits, we can improve our psychophysical existence. The body needs cultivation and habituation.

## Result & Conclusion

1. New media technologies create new perceiving experiences of traditional arts and enhance cross-cultural understanding. However, it is necessary to establish the adequate standard and method to evaluate interactive artworks.
2. The importance of traditional medium (i.e.brush) and pedagogical philosophy (i.e. expound in silence) are not only the irreplaceable core for traditional arts, but also the indispensable part for new media arts to be recognised.
3. Virtualisation technology might generate long-term impact on learning ability by habit. Therefore, how to use technology to preserve traditional skills and integrate in current educational system would be essential for the future studies.

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