Attempting a History of (New) Media Arts for Hong Kong: Archaeology, Literacy and Education for Artists

Lai Chiu-han Linda

1. Overview

On 26 October to 2 December, 1979, a solo show titled “Tsai’s Cybernetic Art Exhibition” featured the works of Tsai Wenying (Cai Wenying, born 1928 in Xiamen, Fujian Province) at the Hong Kong Museum of Art, then known as the City Hall Higher Block Galleries (Plate 1). This is arguably one of the earliest documented electronic art events in Hong Kong. A year later, in 1980, Tsai built an electronic fountain for Landmark in Central. Twenty-nine years have gone by, at the other end of the historical trajectory in 2008, the two-month long “Digitalogue”, curated by Ellen Pau as part of the Hong Kong Museum of Art’s “Hong Kong Art: Open Dialogue” exhibition series (2008-9), attempted a broad survey of local media art’s diversity and tendencies. Her story, which covers only roughly the past twelve years, has not included Tsai’s isolated attempts, or many local trial responses in the 1980s and 1990s to the international trend of multimedia deployment in contemporary art.

In between the presumed “monumental” events of 1979 and 2008, Videotage was founded in 1986 by some core members of Zuni Icosahedrons to focus on media art, and Microwave Media Art Festival in 1996 as Videotage’s annual showcase for exemplary international and local media art works. For the 1980s, one notes the mixed media events initiated by Danny Yung, Choi Yan-chi, Leung Ping-kwan and their contemporaries, which speak of how media art first took abode in the relatively maturing spaces of theatre, dance, painting, literature and installation art. May Fung and Ellen Pau were two key individual players: they were both active artists as well as educators outside the educational system proper. In 2005, withstanding many comments on its not drawing distinctions between media art and film / video in its resource allocation, the Arts Development Council (ADC) issued a competitive grant, “Creative New Media Projects,” as a proactive measure to support new media as a potent area for development. The incentive managed to identify more recent players—groups, researchers and artists—who interpreted new media art in different directions. The four awardees were: “Project Big Bang” (Art and Culture Outreach Limited), “Right Click: Open Source Project” (Gulldy), “The Writing Machine Collective 2nd edition,” and “Grow Your Own Animation” (Microwave). In the last two years, the Leisure and Cultural Services Department (LCSD) also collaborated with the Microwave twice on two public events outside the annual festival: “Body Movie” (2007) and “A-glow-glow” (2008). After ten years of its 1st edition, the Independent Film & Video Award (IFVA) by Hong Kong Arts Centre (HKAC) finally included a Single-screen-based Interactive Media Category starting 2005-6, and, after a lot of queries, removed “single-screenbased” from its title for the 2008-9 edition. More new-comers are joining the list from diverse non-media-art-specific backgrounds: Osage (Kwun Tong), a commercial incentive, has hired a separate curator for new media art; the Bloomberg Emerging Artists program, which is a general-category art...
competition, has had artists in interactive digital work for final winner for two consecutive editions. Within the visual art community, while the eclectic deployment of various digital media forms has been a growingly widespread practice since the 1980s, the effort to understand media art as a unique domain of art with its conceptual history remains low. In my observation, the Visual Art Centre has had a surprisingly diverse program on media art in the past two years, and yet many interesting events, such as Cedric Maridet’s sound work, the “New media @ Hong Kong Visual Arts Centre” and other art video programs, have gone unnoticed, partly due to the lack of publicity.

On the educational side, Hong Kong Baptist University’s Digital Graphic Communication stream (first intake of students in 1994) was the first UGC-funded undergraduate program to develop artistry and literacy on a computer-based platform. With a focus on computer graphics, they perceived their role to be training people based on the need of the industries. Hands-on competence with computer software was its curriculum’s key concern—although its staff had wished they needed not follow the trend on the market alone. While Digital Graphic Communication is one of three units within the Communication Studies Department, City University’s School of Creative Media (SCM), founded 1998, was UGC’s first mandated hub for new media art professionals. A decade has gone by, while SCM has all the factors to be the territory’s leading media arts and new media education centre in terms of faculty capabilities, research interest, equipment, curriculum experiments and educational philosophy, its potential and promise have not yet been fairly communicated to the local community. Publicity’s overt emphasis on the School’s achievements in filmmaking, and a mission statement that strangely highlights story-telling, continue to cloud its faculty team’s many years of effort to engage in pioneer issues in the yet evolving field of new media creation. Outside the UGC institutions, the Arts School, founded in 2003, has the only curriculum addressing media art and related theories in its various Applied and Media Arts programs.

A key motive of this essay is to recount the many players and their pursuits within the twenty-nine-year span, to gain insight into the local art community’s perception of what media art is, the kind of exemplary works they have in mind, and what makes media art what it is in Hong Kong. With such a reading, I want to outline the many issues that would lead to an elaborate agenda for the crafting of an informed history of local media art. Rather than providing a comprehensive interpretive history (story), I take this piece of writing as an opportunity to generate a situated discussion to show the many missing research projects that need to be in place before a sensibly adequate account can be formed for critical usage. As someone much concerned with writing such a history for Hong Kong, I have attended to many fragments of events, loose literature and discourses in formation, and felt that any attempt for an overview should begin with what Michel Foucault called “archaeology”—the activities to “unearth”, to return to broader terrains to locate the dispersive traces of media art before it became an identifiable institution. This hinges on a rigorous effort to describe, to recount, and stock-take what happened, before discursive formation. I cite as many events as I have come across to create a list of observable fragments for more archaeological work in future, while the brief commentaries I provide for each event are meant to invoke questions for further verification.
In the Foucauldian sense of the term, historiography is the location of integrated theories from multiple disciplines. To describe media art activities, one is inevitably confronted with the task of providing at least a working definition of the term media art, or best a trajectory of the performative functions of the term in critical discourses—that is, in what occasions would the term media art be used, for what purposes, on whose behalf, by what inclusions and exclusions, and to what effect. While historiography is arguably the very location where competing theories are to be negotiated, the urgency of a possible media art history for Hong Kong is the work of “archaeology.” In putting together a list of relevant activities that will form the story, one is necessarily also tackling the question of what media art is, and how possibly one may arrive at a working definition.

A substantial portion of the source material I use for this essay comes from an unpublished ADC research commissioned in 2000 on the development of electronic arts in Hong Kong, for which I was the field research coordinator and writer of some key portions of the final report.11 Due to various circumstantial reasons, the report has never been published, and a lot of the field research data has not been subject to full interpretation, which is partly why I want to retrieve them here and re-examine their significance. Also with the hindsight of an eight-year gap, a lot of data that meant little at that time now begins to make sense.

2. Working Definitions: Media Art, Electronic Art, New Media Art, Digitality

In the unpublished ADC research (completed February 2001) mentioned above, a key discovery was that the lack of a clear parameter of media art and the lack of a shared vocabulary had hindered the formation of any intelligent agenda. As well, many ongoing conversations and creative endeavors of individual artists remained private concerns, whereas some common definitions could have provided a more rational framework that would bring these instances together for a stronger platform. The situation does not seem to have improved much, considering how seven years later, in an open forum on digital art for the exhibition “Digitalogue” (2008), the question of “what is digital art” was raised, and the responses from the curator and the Hong Kong Museum of Art representative were no more than evasive. The need to have sound working definitions in order to work effectively is obvious, albeit the obligation for any concerned artists / curators to delve into some conceptual depth of the art form they work with.

What is so distinct about media art? One way would be to look at how it is different from non-media art. Given the consensus that the computer is the common factor marking works that qualify for new media art, would it be more productive to study new media art as an independent category? Why had the term “electronic art” been used at one point and what does it suggest? How does the notion of “digitality” fit into all of this? Naming is a purposeful, often political, activity. Assigning a (new) name is to problematize existing paradigms, and to isolate a unique set of problems for critical engagement. Rather than nailing down some essential properties, it would be more productive to sort out why a certain term has been created, to encompass what specific content, in what context, and in opposition to what existing practices. At the end of this section, I hope to lay down some basic parameters that would facilitate the quest for a workable agenda for media art literacy and media art education. The former concerns both developing the
sensibility and receptiveness of an ordinary person to what media art encompasses, the latter expertise training for someone to be an artist.

In what can be observed as the “history” of media art in Hong Kong, the terms “video art,” “media art,” “digital art,” and “electronic art” have been loosely used interchangeably. In this discussion, I propose to use the term “media art” as the broad umbrella for all the other terms to refer to the diverse range of works in question, and I shall explain why I do so in the next section. I also suggest we should take “new media art” as a part of media art with its own distinctive, whereas, apparently contradictory to what is said, many media art works are not new media art if the latter is aligned with computational art. “Digitality” is a prime characteristic of “new media”. “Electronic art” is often used interchangeably with “media art,” but they have very different emphasis: the former highlights the impact of technology in art, whereas the latter highlights the nature, process and character of mediation between representation and the represented, or more broadly, between the materials put in and the final form a work takes. In other words, these terms, which in everyday usage are collapsible, signify very different aspects of a pervasive cultural phenomenon since mechanical processes became the entire or part of the artistic processes. As a result of this, each term may call upon a different genealogy of its own—that is, the story of its debatable beginnings and exemplary works may vary.

**Media Art…Mediation as the Site of Creation**

The prime factor in media art is the presence of a mechanical medium whose working process, subject to the design of scientific understanding, is only partially known to the artist and the appreciator. This can be traditional photography, in which the chemical process of light on film itself embodies the magic of the work that is partly the result of a play on (scientifically explainable) “chance.” Radio (sound) art is a kind of media art, as the transmission of encoded wave signals, the decoding process, and the final broadcast delivers only a resemblance of the original physical sound but not the sound itself, plus the encoding/decoding process can be intervened and manipulated. Analogue video and cassette recorder have inspired many artists because the magnetic tape provides unprecedented convenience for playback and all kinds of manipulation. The term “media art” therefore highlights mediation: how long, how much, how complex, how transparent the transformation is from what is to be represented to the final representation, and how the manipulation of the process itself becomes the location of artistic innovation.

Rudolf Frieling and Dieter Daniels provide a handy description based on a lowest common denominator of everything called media art, “Media art can only be conveyed by multimedia.” What I propose here is that the term “media art” is most appropriate when our historical analysis and artistic experimentation concern the study of the intricacies of the mediation process and the creative potentials of the elements of such processes.

My position points back to why in many discussions on media art, Walter Benjamin’s “The Work of Art in the Age of Mechanical Reproduction” remains a seminal text. Differentiating photography and cinema from traditional art forms such as painting, sculpture and architecture, Benjamin’s key thesis is to qualify a major shift in human
creative history due to the factor of mediation. Precisely because photography and cinema are mechanically reproducible, artistic aura is no longer embodied in single authorship and the “original” work, but in the inventive manipulation of the mechanical process: in photography it would be the manipulation of the camera’s devices, film developing and printing, and in cinema, mise-en-scene and editing as well. The fact of mediation and mechanical reproduction brought in qualitative changes in notions of authorship, artistry, appreciation, and artistic judgement. Indeed, media art began with photography and cinema—though they were neither electronic nor digital in the beginning. In short, Benjamin suggests that artistic media since photography underwent radical transformation due to the reproducibility and transportability of the work of art.

In my view, there are at least three key turning points in the history of media art vis-à-vis the properties of mediation. The first was the advent of photography which Benjamin had talked about: how the birth of photography revolutionizes our views as to what art is, and what it can be. The second turning point, I propose, was the popularization of radio and television as well as other analogue recording devices, which began in the late 1920s and early 1930s through the 1970s. This shift is the result of the perfection of broadcast mechanism, whereby one-to-many-points transmission was made possible, leading to the reorganization of social relations and aesthetic practices due to the emergence of the (imaginable) “mass” congregating around new channels of discourses. Craze and anxiety for the ideational aspect of communication has been a key feature of this shift. As well, similar to the replicability of photographs, tapes (cassette tapes, video tapes) possess a replayable quality, and its signals are manipulatable. These are aspects that have opened up countless new creative possibilities. Some of the innovative media art endeavors were results of this new era. Here, I think of three examples which both happen to be sound arts: the experimental radio programs broadcast to the ordinary household in Germany, Pierre Schaeffer’s experiments with cassette tapes based on the philosophy of phenomenological reduction, and Gary Hill’s Mediation (a reworked version of Soundings) (1979-86).

The third shift is computing as an artistic medium, (which is different from using computers in art-making,) traceable to the 1950s. This development has brought about a number of new directions in artistic experiments. First, computation constitutes new modes of rationality and problemsolving, embodied in notions of algorithm, database, data structure and so on. Second, the significance of “digitization”—in layman terms related to the compression of data, modularity and transcoding of information from different mediums, and the facilitation of storage and processing of augmented quantities of content—is the key area of creative research, indicating a new species of raw material for artistic manipulation. Third, (the workings of) computers afford our imagination of unseen but theoretically possible systems, virtual worlds and new connectivity. A longer discussion will follow in the section on “new media.”

In Hector Rodriguez’s public lecture, “Media art education,” he highlights the intricacies of technical mediation in non-traditional art forms (since photography) via the notion of the “black box.” He emphasizes the use of a single term as the effort to define the field of media art has fundamentally been marked by disagreement, and what is needed is clarity and precise focus. In this sense, “black box” is not an essential or a delimiting concept, but a category of
problematization: it begs us to reconsider what we must expect of an artist, how policies should be set, and what kind of art education we should provide if black-boxing has been one of the ruling features of non-traditional art. The “black box” is hidden, but it is not really just a “box,” or a packed-up machinic device. The “black box,” in Rodriguez’s views, is a relationship prescribed by the presence of a machine. A black box could be imagined to have one or several input plus output terminals; it has an internal mechanism that connects input to output. A black box is designed for a user: input results in some kind of output, but the user does not need to know about the internal mechanism. Such a “black box” relation is particularly essential to technological art and /or media art. A traditional camera is a black box. A text-book such as David Bordwell’s *Film Art* is meant for users of a black box. Interface design is the designer’s moderation on behalf of the viewer by creating desirable image of the system which is a black box: the key concern is in designing the user’s experience, and not encouraging co-authorship of the user and the author. In Bruno Latour’s terms, the more efficient a machine runs, the less a user knows. Thus, it is important to re-examine what media art schools are doing as the tendency is to move more and more into teaching artists to be users. The situation becomes more critical as the trend is growing whereby machine / tool designers wrap everything into a blackbox system.

The black box embodies problematic relations as well as room for innovative endeavors. Rodriguez thus cited Michael Snow and Vasulka as examples of artists who have created their own black boxes; and Nam Jun-paik and Stan Brakhage who created unacceptable input into the black-box without destroying it. In terms of art education, one may take it both ways as well: to focus on teaching competent users of black boxes, or to engage art students in opening up, or probing into part of the, if not the entire, black box. Art educators may also engage colleagues from various disciplines to tackle the issue of black-boxing as a social fact, a technical problem, as well as an ethical dilemma. One polemic conclusion he draws from his argumentation is the following imperative: all new media artists should learn programming, open the black box!

In Rodriguez’s language, the history of media art—if ever to invoke this term—is the history of black-boxing. This means that even though paintings and sculptures are also artistic mediums, the term “media art” applies only to those in which the mediation process has become significantly enigmatic, or “blackboxed,” that it re-defines the status of art, creative strategizing, aesthetic standards and modes of audience participation, which arguably began with photography.

“Black-boxing” takes on a negative rhetoric, calling our attention to the question of technical competence that many still want to avoid in new media, whereas Linda Lai, in her own talk of the same lecture series, highlighted media art’s unique contribution to art education and education in general. Media art, with many innovations assisted by technology, not only stretches our imagination, which arts in general do, but enables us to see what is seeable but unattended, and hear what is audible but not heard. Media art stretches our senses, enriches our perceptual experience, and opens up new modes of cognition. She cited Stan Brakhage’s experimental films *Cat’s Cradle* (1959) and *Mothlight* (1963) as examples, to show how such works are often seeing games, moving beyond story and realism, and extending the range of
perceptual experience, to articulate a fascination with technology. Or Michel Chion's *Requiem: Dies Irae* (1973), in which found and everyday sounds force themselves into a new source of creation, demanding a very different listening mode beyond that of the pitch-based paradigm of music. Or a web-based art piece, *Archaeology of the Apple* (http://aisforapple.net/main.htm). This work combines divergent thinking and lateral thinking. It plays with the power of a single unit growing in multiplicity, which is a humanistic, analogical adaptation of morphology in biology, a key source of inspiration for generative arts. The work, high structural and procedural, is not so much about representing the world, but the demonstration of new ways to think of the world and what is / was in it. Such an attempt to generate knowledge that is the result of new rationality made possible by technology is also prominent in Harun Farocki's *Deep Play* (2007), on the World Cup Final, 9 July, 2006 between France and Italy, presented at Documenta 12 (Kassel 2007). Farocki employs available techniques from a broad range of disciplines—Laban notational system [dance] plus Ascensio Match Expert's computational analysis software (by one of the motion analysis developers), surveillance footage, dynamic-analytical diagrams, graphs and computer simulations—to rise above the “human” point of view that is adopted in editing and broadcasting a soccer match. Instead, his 12-screen computational video installation on the match challenges the normal reception of the domestic viewer in his / her couch through a single-channel, turning an interpreted account (with expertise commentary) into multiple data sets and analytic visualization without a unified view.

**Electronic Art...**

The use of the term “electronic art” invokes specifically the presence of science and technology in art. The productiveness of the term lies in its power to raise questions about the possible integration and collaboration of art and technology.

In his article “Electronic Art: An Overview,” Hector Rodriguez writes, “Electronic art includes the use of television monitors, video cameras, synthesized music, digitally processed images, virtual environments, and all forms of computer art (CD-ROM, web sites, computer animation). This is an obviously diverse area of artistic work, about which few general conclusions can be made.”

A term is more what it is associated with than for any essential meanings. In Rodriguez’s view, “the interconnection of art and technology is not an intrinsically electronic phenomenon.” It has pervaded the development of film art. The activities of documentary filmmakers are responses to the growth of inexpensive and flexible technology such as synchronized sound equipments in the 1950s and 1960s, and the invention of video as a cheaper and more portable alternative to 16mm cinema in the 1970s and 1980s. While video was immediately picked up and turned into a new creative medium, the computer developed slowly as an artistic medium during the 1960s and 1970s. “Few major fine artists rushed to use the computer, partly because computers were obviously expensive and difficult to master. Many early practitioners of computer art were in various ways attached to large organizations and were either computer scientists with little artistic preparation, or artists working closely with programmers.” Rodriguez’s key players’ list therefore includes people who worked at Bell Laboratories, such as
A milestone event in which new technologies and artistic creativity were integrated was “The Machine as Seen at the End of the Mechanical Era” in 1968. The showcased works either made statements about technology or employed machines in the process of production and display, and many exhibits had video and computer art as integral elements. In the 1980s, computers became more affordable and user-friendly, and many artists such as David Hockney, Keith Haring and Andy Warhol began cautiously to employ them in the creative process, while others, such as Otto Piene, Norman Ballard and Joy Wulke, invented new use of computers to control outdoor lights and laser display. By the 1990s, the art world had widely recognized the computer as an important creative medium. Many singular as well as regular festivals on art and technology were born, from the negatively received 1991 “Image World” exhibition at the Whitney Museum of Art in New York, the 1994 “Interactive Media Festival in Los Angeles,” to the annual Ars Electronica in Linz, Austria, adding to the lists of main venues for media art such as Austria’s Prix Ars Electronica (since 1987) and Germany’s European Media Art Festival (since 1988). Fine artists of international caliber like Gary Hill, Bill Viola and Laurie Anderson fully embraced the computer as a legitimate medium of expression. And since the launching of the worldwide web in 1989, on-line art expanded. Virtual reality became a new territory for technical and creative research. Whereas the annual conference in the United States, SIGGRAPH (the Special Interest Group on Computer Graphics and Interactive Techniques) was founded back in 1969 when computer-based art first emerged, in Europe, the founding of ZKM (Center for Art and Media Technology) in 1989 in Karlsruhe, Germany, and its final opening in 1997, articulated its own historical discourse and genealogy of media art via the narrative of its permanent exhibition.

One key note running through the story here is this: the story of electronic art is the story of the infiltration of science and technology into art-making indicated by the availability and accessibility of technology to those outside that circle. The productiveness of the term is this: once we invoke it in the discussion of a work, we would have to address questions of how art and technology work together. In this regard, I find “digital art” and “computational art” to be terminological extensions of “electronic art.”

New Media, New Media Art...

It has been established in previous sections that the term “new media art” is mainly designated to those media art works that explore the computer as an artistic medium. I would avoid getting entangled in questions such as how new is “new” and so on. Interested readers may consult Lev Manovich who has engaged in this issue. Citing Marshall McLuhan, he outlines the pattern of convergence of existing mediums every time a “new” medium emerges, thus culminating in a kind of metahistory of the “evolution” of the media. Janet H. Murray, in clarifying the confusing use of the term “new,” points out the emergence of a single medium, the computer. To her, this single medium demands more refined examination than just the recognition of its novelty. To achieve this purpose, she supports the effort to establish the genealogy of the computer as an expressive medium.
In my view, Murray and Manovich’s dual introductions to MIT’s 2003 anthology on new media provide an insightful picture of the qualitative distinctive of the new media, conveyed in the genealogy they each construct. Murray’s genealogy begins with two visionary characters: a storyteller-librarian, Jorge Luis Borges, and a soldier-scientist, Vannevar Bush. Murray cites Borges’ short story, *The Garden of Forking Paths* (1945), in which the story-teller, discontented with the restrictions of the traditional book form and the library, envisioned the possibility of a complex, composite object that is a “book-garden-maze” in one entity. The work, in her analysis, grows out of Borges’ quest for new ways our mind conceives knowledge. Equally fascinating Murray is the soldier-scientist Bush, who, confronted on a daily basis by the need for an effective recall system for the bulk of military information to which he had access, envisioned a “desk-library-machine” (1941) that would embody the meticulous procedures of retrieval.

With Borges and Bush, Murray generates her two key metaphors for new media embodied in the following two groups of operators—the storytellers and the engineers, who are equally concerned with effective navigation through a labyrinthine world of facts and events in which they could have easily got lost:

“The engineers draw upon cultural metaphors and analogies to express the magnitude of the change, the shape of the as yet unseen medium. The storytellers and theorists build imaginary landscapes of information, writing stories and essays that later become blueprints for actual systems.”

Murray sees the two different but complimentary sets of anticipation and the conjuncture of two traditions, pointing to future modes of epistemology, which find realization in the computer:

*The two traditions come together most energetically in collaborations focused on new structures of learning in which exploration of the computer is motivated by a desire to foster the exploratory processes of the mind itself.*

*Gradually, the braided collaboration gives rise to an emergent form, a new medium of human expression.*

Murray’s account of the new media has two lines of succession. To Borges, she adds William Burroughs and the Oulipo (group for potential literature). To Bush, she adds Douglas Engelbart and the Xerox PARC collaborators. It is in Alan Turing and Norbert Wiener where Murray finds the consummation of the two sets of desires: they both focus on the potential of the computer for symbolic representation, and in capturing complex interactive systems.

Manovich’s introduction to the anthology is less genealogical, yet the key conceptual figures he cites have a strong affinity to those on Murray’s list. He cites William Burroughs and the Oulipo, and alludes to Deleuze and Guattari’s idea of “rhizome”; the latter in particular is an attempt to envision a new world with complex connectivity as in Borges’ idea of a labyrinth. Manovich is also more interested in looking at new media as part of a sociological field of culture, tracing not just the emergence of ideas, but when and how long it took the necessary institutional apparatus to mature to turn ideas into concrete, systematic
programs for development. The maturation of SIGGRAPH in the US, the founding dates of ZKM in Karlsruhe (1989), the New Media Institute in Frankfurt (1990) and ISEA (Inter-Society for the Electronic Arts) in Holland (1990) are, in his view, marking the actual take-off of new media art even though seminal thinking could be dated back to a few decades earlier. Manovich thus cites his famous eight propositions of new media, some of which are descriptive, some projective, and some utopic. His four-decade analysis of the emergence of new media studies also testifies to an approach that examines the many cultural forces at work—resources devoted to scientific research, on-going parallel lines of artistic and thought development, development in big business and military matters and so on.

With Murray and Manovich's discourse in mind, I want to emphasize that the use of the term “new media” at once invokes epistemological issues and an inter-disciplinary paradigm. For the former, it takes us into consideration what kind of new vision of the world we are examining. Based on salient features of the computer platform—mediation, convergence, modularity, digitality and so on, the “new” world we envision highlights point-to-point, multi-directional connectivity. Information flow and processing is not just paths and channels of transmission, but the formation of a world with organic and dynamic internal relations. This “new” world invites us to embrace the complex, the changing, and the indeterminate; it breaks down the hierarchical boundaries between memory and history, the past and the present, thought and action, perception and information, embodying new potentials for community formation, resistance and revolution. In this “new” world, collective media and personal media converge, posing to us new questions on the maintenance of personal autonomy, subjectivities, consumer status and citizenship.

While (new) media art is often also shaped by tendencies in the fine arts, philosophy and other humanities, the idea of a “new world” as a labyrinth has been most impregnating. On the structural level, such works call upon rigorous principles of processuality and proceduralism. In terms of technical strategy, new media art works, if they are not fully multi-sensory, often embody a visual-sensory sphere, and are lifelike. As such, the role of imaging goes through various levels of spatialization: from lens-based, framed, and screened images, to virtual and spatial entities as well as purely computed (or virtually generated) images. These works also highlight live moments in which narration and performance form the core experience. Based on these criteria, many have argued that a so-called “new media” art work need not be executed on the computer to achieve the new world experience.

The following remains important inspiration for researchers and experimenters of “new media art” for the future: a world that is defined by (multi-directional flow of) information structure and (modes of) knowledge-production; a world envisioned as a huge data system affording unlimited retrieval for new relations to be discovered; a world that is finite and yet infinite, embodying all creative possibilities in the employment of information. Works created in the name of “new media” should be visionary in new, possible as well as virtual worlds. As such, Hector Rodriguez demands that new media is not just to be understood as “computer-based artistic activities,” but the computer as an artistic medium. He would therefore add the imperative that any...
attempt to explore such worlds cannot be independent of a good understanding of digitality and an adequately sound knowledge of some programming languages.

As an inter-disciplinary paradigm, new media art requires us to think out of the box, to look at all related social-cultural arenas.

3. Archaeology: Gathering the Fragments

The Polemic “First” Case: Tsai Wen-ying’s Brief Appearance

The earliest noted public appearance of electronic art in the territory was “Tsai’s Cybernetic Art Exhibition,” which opened on 25 October 1979. It was also an earliest instance demonstrating to the local audience the possibilities for experiments with the dialogue between science / technology and art. Tsai is not a local artist, but his presence might have marked the territory’s first exposure to electronic art. More importantly, Tsai’s background does suggest some basic qualification required of an artist who is in full engagement with technology. The thought that potential new media artists are probably to be located in the science disciplines and not in fine arts is discomforting, but something that the local media art community has to open up for consideration. Tsai’s background is revealing, and it is worth taking a closer look at his biographical profile.

In 1950, at the age of twenty-two, Tsai immigrated to the United States from Shanghai where he received his undergraduate education and lived since 1939. A major in mechanical engineering at Michigan University and a professional in engineering design, Tsai took up drawing classes after a long break from the Chinese ink landscape drawing he had as a child. In 1953, he started his career as an engineer in New York, and spent his evening hours studying fine arts at the well known Art Students League starting 1956 for four years. It should be an exciting moment to be in New York: Abstract Expressionism at its peak, and Pop Art, Op Art and Kinetic Art rising trends. In 1963, Tsai received a John Hay Whitney scholarship to devote himself to a whole year of art-making. That year, he made a major decision—to leave the engineering profession to concentrate on art. Tsai emerged in the 1960s for his renowned Cybernetic Sculpture and his achievement in Kinetic Art, often compared to Tinguely. His first group of cybernetic sculpture was published in 1966, in which he demonstrated the wonder of engineering theories in the creative process of sculpture-making. In this work series, electronic devices created varied frequencies, which made a group of long, thin glass fibers and stainless steel rods vibrate. A complex sensor system was created: while the physical sculpture moved in response to visitors’ clapping, talking and music, stroboscopic lights responded to the vibration of the physical sculpture, creating a finely orchestrated automatic visual performance of a dancing sculpture.

In Chinese-language reportage, Tsai was also associated with various terms including “cybernetic sculpture”, “kinetic art,” or nicknamed China’s first “electronic sculptor.” Cybernetic sculpture remained Tsai’s creative focus in the 1960s and 1970s, a time when dialogues between technology and art became a key concern in art experimentation. In 1968, Tsai held his first solo on cybernetic sculpture, and was then invited to MIT’s Advanced Visual Studies Center to research and create works with other artists and scientists with similar
interests. From then on, his works were presented both as sculpture and performance, sometimes involving more conventional performers like dancers and musicians. Into the 1970s, he even brought in other physical matters such as streaming water into his cybernetic works. In that decade, his works were shown across the United States and Canada, as well as in major art centers in Europe. In an interview with the Houston Chronicle, which Choi Yan-chi quoted, he explained his intention to move beyond the use value of technology to achieve the refinement of human sentiments. Science and technology may care only about the material life of human beings, he said, but art allows us to perceive known forms in the unknown.\textsuperscript{26} Around 1979 and 1980, in the period of Post-Mao open-door China, he visited the country and introduced a lot of films on art and technology to the Chinese community. Cybernetic art became popular together with hologram art in the late 1970s and early 1980s.

As for Tsai's solo in Hong Kong back in 1979, a total of twelve works, created between 1971 and 1979, were shown. One report gives us an aura of the event: “Each work comprises of many stainless steel rods. They vibrate regularly at about 20 to 30 times per second. Due to the illumination of flashing lights, audience has the impression the steel rods are moving irregularly… When the speed of the flashes synchronizes with the vibration frequency of the rods, the latter looks like a static, harmonious curve line…”\textsuperscript{27} “Tsai’s Cybernetic Art Exhibition” was presented by the then Hong Kong Urban Council as part of the Asian Arts Festival. According to local veteran artist, Choi Yan-chi, at that time he was not very happy with the City Hall administration's bureaucratic arrangement of the exhibition venue, and never returned to Hong Kong for another exhibition—although his works continued to appear in Singapore and Taiwan.\textsuperscript{28}

In 1980, though, Tsai did return to Hong Kong with an electronic installation piece to mark the grand opening of Landmark in Central. Commissioned for one million Hongkong dollars, the work, situated in the centre of the lobby, was a fountain that worked with a sound-sensor system. But the piece lived only for about two years due to complaints for the noise it gave out from the many retail tenants in the mall—thus ended Hongkong people’s first brief encounter with electronic art in the public space. “Hong Kong was not ready,” Choi concluded in retrospect. Neither the marriage of technology and art nor the idea of art in the public space with commercial sponsorship found a welcoming public. It also seems that Tsai’s brief visits had not inspired immediately any significant response from within the local art community, at least not until 1983, when “The Hong Kong International Video Art Exhibition,” the first collective attempt to explore media art, co-presented by the HKAC, Goethe Institute, and Zuni Icosahedrons, opened in December.

In local artists’ perception, media art has a much stronger affinity with cinema, fine arts and the performing arts, whereas the more technological source of media art is often left out due to inadequate knowledge. In Hector Rodriguez’s public lecture on media art education, he also points out the predominance of cinema in Hong Kong’s cultural history and film studies background in media art programs have hindered us from thinking out of the box. Who are competent new media artists and where to locate them remain key questions for curators and art educators. Inevitably, the hiring of more experts in sciences who also have an interest in art
in art programs should be a growing fact. In this context, the case of Tsai Wen-ying implies the need to radically reconceive a new educational system that would break down the humanities-versus-science segregation.

The long held illusion of artists and scientists “collaborating” should be critically examined: how possible, what kind of collaboration, and what kind of hierarchy? Back in 1979, when reflecting upon Tsai Wen-ying’s achievement, a reviewer writes, “Many automated or electronic artists—without Tsai’s technical background and immersion—have to rely on the support of other technical personnel in executing their works, and not always in full realization. But Tsai doesn’t have this problem or difficulty. He can perfectly realize what he envisions…”

To round up my discussion of this isolated case of Tsai Wen-ying, it would be relevant to assemble a list of local personnel who have a science background engaging in art-making. Active mainly in the 1990s was IT professional Sydney Pun whose undergraduate study was a mix of art (major in History & Theory of Art) and technology (minor in computing) at the University of Kent, Canterbury, England. I also recall the Body Brush (2001), by Horace H.S. Ip, a computer scientist, currently School of Creative Media’s Acting Dean, with artist Young Hay. There is Wong Chung-yu, with an M.Phil. in Computer Science, then an M.A. in Digital Arts, who, after his first appearance in the Hong Kong Art Biennial 2003 with digital projection, The Garden of Eden, has continuously churned out works of digital interaction such as The Ways of the World (2005), Spiritual Water (2007) and Sodom (2007). In “Digitalogue,” Ellen Pau has deliberately included the work of Fung Kaihung, medical doctor and specialist in diagnostic radiology, which is based on science and engineering visualization. Artists with a degree in the sciences from the show also include Henry Chu (engineering degree, now in design), Mike Wong and Bryan Chung, both computer science major engaged in art education for many years, Nelson Chu, and Francis Lam. A new species of scholar-artist specific to new media issues is also emerging from among local artists. Kenny K. N. Chow, with his undergraduate background in computer science, now lecturer at the Hong Kong Polytechnic University, received his art training in School of Creative Media’s MFA program, and is now pursuing his theoretical training in a Ph.D. program in digital art at Georgia Institute of Technology. His recent essay, “Operating Text and Transcending Machine,” published in Leonardo, proposes an interdisciplinary view on media works. Hector Rodriguez is the unusual case of a Ph.D. in the humanities who is a self-taught competent programmer. Young artists who also have basic competence in programming and other technical skills are on the rise, many of them graduates of the School of Creative Media, such as Stephen Tsui and Eric Siu.

I am fully aware that so far I have left out many names often associated with local media art, such as Jamsen Law, Jimmy Choi, Hung Keung, Anson Mak and so on. My roll-call in the last paragraph is mainly to make one simple point: if we ever want to attempt an in-depth history of local media art in Hong Kong, we should first ask who the players are and, more importantly, where to locate them, and the locations we have left out. Here, I am suggesting we should step outside of the circle of usual suspects to re-form a new group of subjects for further field
research, and I propose a special community in which programming, code-writing, and expertise training in at least one area of science, form the basis of their artistic literacy.

**Goethe Institut-HK**

Three key players of media art in the 1980s are the Goethe Institut-HK (GI-HK), Zuni Icosahedron and the HKAC. The Hong Kong International Video Art Exhibition (1983), which they co-organized, screened video works from Germany, France, England, Japan, Canada, and the United States. The video series was also accompanied by a three-week intensive video workshop series for local artists hosted by Barbara Hamman from Germany. Numerous local artists interviewed referred to the series as “very significant workshops in the local media art history.” Among the workshop participants was Ellen Pau, Hong Kong’s first-generation electronic artist, also Videotage’s Artistic Director for many years. The next heavily cited event came twelve years later in 1995, “Arts and Electronics,” also a co-presentation of the HKAC and the GI-HK.

GI-HK may not have had the most prolific or systematic program on media art, but the various events they organized were often on cutting-edge media art types of the time, ranging from experimental video to web-based art and multi-media real-time performance. In addition to the two events mentioned above, GI-HK also organized the “Super 8 Workshop” in April 1987, hosted by Ellen Pau, May Fung and Wong Chi-fai. In October 1989, GI-HK collaborated with the HKAC and the Hong Kong Academy for Performing Arts (HKAPA) on the Hartmut Jabn Workshop. Participating local artists included Ellen Pau, May Fung, Wong Chi-fai, Yau Ching, Chan Tin-shing, Beacon Cheng, Jimmy Choi, and Kwan Pun-leung. Since then, the institute had played a key role in involving local artists in their media art programs. In 1995, the exhibition “Next Stop” featured the works for David Lui, Ku Chiu-ping, Holly Lee and Lee Ka-sing. In April 1996, “The Great Movement” featured Ellen Pau and Dick Wong’s video installation and dance performance.

In the 1990s in general, GI-HK also played a key role in showcasing media artists from Germany. For example, in August 1994, the institute collaborated with HKAC on the screening series “Video Art 1976-1990, the German Contribution”, with Ellen Pau and Yau Ching conducting after-screening discussion. In 1995, the institute featured the works of Carvien Shiu, a German-based artist from Hong Kong, and in 1998, “Current Media Art & Media Art Action,” featured works by German artists in an exhibition plus seminar.

Beginning in 1997, the institute introduced computer-based projects. The “Internet Art Project 1997 by Carvien Shiu” showed a realtime interactive computer project by the artist. In the same year, another computer project was presented, “My Space Your Place,” a live interactive performance on the World Wide Web. More web projects came that year. “Web Wise, Art Sites, Multi-media Arts from Germany and Britain,” an exhibition showcasing British and German on-line and off-line projects and some CD-ROM and disk projects, was co-organized with the Center for the Arts at the Hong Kong University of Science and Technology (HKUST). That same year, GI-HK also organized a digital art exhibition, “The Blue Rider in the Lenbachhaus, Munich,” and published *User Weekly* and *DPI (Digital Photo Imaging)*.
The next key event was the European Media Festival Osnabruck in November 1998, jointly presented by the GI-HK and the HKAC. In addition to exhibitions, the institute also organized educational programs such as the European Media Art Tour. The 1st edition, European Media Art Tour 1999 / 2000, took place in April-June 2000, and has been a continuous project. In June of the same year, the institute also co-presented a lecture on multi-media by Ralf Sausmikat, titled “From Analogue Dreams to Digital Visions.” Same year in November to December, the institute co-sponsored with HKADC, HK Institute of Contemporary Culture and the LCSD the “Festival of Vision—Berlin in Hong Kong,” a multi-art festival involving dancers, video artists, musicians and video-jockeys from Berlin and Hong Kong.

Few would disagree that Germany remains a major centre for media art and close integration of art and technology. There is definitely a much stronger role the GI-HK can play in the local community to make possible stronger dialogues, education, and channeling of resources from Europe to nourish a more mature environment for new media practices.

**Zuni, Videotage + Microwave Festivals**

While Zuni Icosahedron had involved in some of the earliest traceable media art events in the early 1980s, the most important local incentive was Videotage, formed by a fraction of Zuni, including May Fung, Ellen Pau and Comyn Mo, as a separate interdisciplinary artist collective in 1985.

Videotage the group from its very beginning has had a distinct film and video orientation rather than situated itself within the lineage of contemporary art or performing arts. Its earliest activities were all collaborations or associations with the Phoenix Cine Club. In June 1986, Phoenix Cine Club organized a screening event to feature Videotage, with works by Jim Shum, Neco Lo, Wong Chi-fai and David Som. A year later, in June 1987, Phoenix Cine Club and HKAC organized a screening series titled “Videotage IV.” Videotage was also a curator for a special screening program on video art in Hong Kong at the Taiwan National Film Archive, Taibei, in December 1988. Videotage artists May Fung, Ellen Pau and others were also featured in the screening event, “Videotage 1989,” in the Hong Kong Fringe Festival presented by Zuni Icosahedron in January. In June the same year, Zuni and Videotage co-curated a video installation event, “Zuni movement—present continuous tense”. Videotage was featured once again in the 1990 version of the Hong Kong Fringe Festival, in a screening program titled “Videotage—the Year Living Dangerously” in January. In August that year, May Fung and Ellen Pau participated in a video screening and installation called “August Swirl—Videotage,” curated by Yau Ching for the City Contemporary Dance Company. Ellen Pau and May Fung continued to be Videotage’s two key figures in the 1990s. Ellen Pau curated a screening program for the 1991 edition of the Hong Kong Fringe Festival, called “Videotage 91’ Deep Dish and the Others”, whereas May Fung curated the screening “Videotage—Poetry & Thoughts” for the Fringe Club in January 1993. Starting mid-1990s, a key activity of Videotage was to run workshops to promote media art making, for example, the Independent Video Production Workshop, a joint...
event with the HKAC, was run by Ellen Pau and Bobby Shum in February 1994, which was later repeated in September to November.

In 1997, Videotage published \textit{VTEXT}, a bilingual magazine on the development of video, media and new technological art forms with review essays. \textit{VTEXT} was intended to be an annual publication, but it did not happen as planned. Between January and April, a \textit{VTEXT} Artist-in-Residence program was organized with Wang Jun-jieh hosting a workshop series. Wang’s own works were featured in a multi-media exhibition titled “Neon Urlaub,” presented by Videotage at the GI-HK in April. The year 1997 seems to be a key turning point in Videotage’s history. The second Microwave, renamed “Microwave Festival” from the 1996 edition, “Microwave Video Festival”, was held with a CD-ROM Exhibition plus a series of talks on multimedia art and the impact of digital media on art. International guests included Steve Hawley (UK), Kathy High (USA) and Mike Leggett (Australia). The next edition, Microwave Festival 98 was curated by Videotage and presented by the Urban Council with a conference component, featuring international artists such as Kate Craig (Canada), Eder Santos (Brazil), Beth Jackson (Australia), and Hsu Cheng-ren (Taiwan). In the fourth Microwave, January 2000, international artists included Scott Rankin (US), Solange Farkas (Brazil), Mike Stubbs (UK) and Hawn Rowe (US). In the fifth Microwave, September 2001, the installation exhibition was sponsored by ADC. The festival also included seminars on the future of media arts, and with John Di Stefano from New Zealand as residency artist. In January of the same year, Videotage curated a program on Gary Hill’s works, called “Hill(scape).” Hill was invited in person to Hong Kong. In addition to screenings of his video works, he did a live multi-media performance plus installation exhibition.

Microwave’s annual exhibition not only continued to showcase important media artists from around the world, but a full list of its yearly themes and features represents the perception of the key issues in media art, such as an emphasis on narrativity in 2003, gaming and play in 2005 (Plate 5), expanded animation in 2006, and light as a visual creative component in 2007. For a while, Microwave Festival had been renamed the Microwave International Media Art Festival. In 2006, Microwave underwent re-branding and has since then been renamed Microwave International New Media Art Festival. Along with re-branding, Microwave became independent of Videotage. However, the re-branding was no more than an image-refurbishment exercise and saw no visionary evolvement. What is worse is that with the re-branding exercise, the web-sites for all previous versions of Microwave were gone. One of the biggest and richest archives embodying the theoretical learning of media art and attempts for local media art literacy thus disappears for good. What a pity! The lack of resources to have a proper full-time team with sound knowledge in media art suggests little hope for this very meaningful project to evolve and take more impactful leadership. Electronic arts festivals have been founded in Beijing and Shanghai to become regular events with abundant resources. Where is Hong Kong going to stand? As for Videotage, the years since 2000 saw a major shift in role, from organizing media art programs to artist residency with the intention to turn Videotage into a hub for young artists to articulate their talents, to exchange and to research. In my view, Videotage’s biggest potential contribution to the local art community should be its library and archival collection. Many new programs can be developed in reference to its archive and an intelligent reading of what it has.
But the lack of a system to make sense of what it has minimizes access for interested researchers, and there is inadequate understanding, or appreciation, of the value and potential of what it has. Archiving is intensive collecting, but not only. Archiving is both an inventive and critical event. As Michel Foucault also says, the archive is “not simply an institution, but rather the law of what can be said, the system of statements, or rules of practice, that give shape to what can and cannot be said.”

**IFVA’s Single-screen-based Interactive Media Category (2005-2008)**

As suggested a few times in this essay, the evolvement of media art in Hong Kong has a strong film orientation, a factor that has been both enabling and delimiting. The launching of the 1st edition of Independent Film & Video Award (IFVA) in 1995 signified the confluence of many years of disparate attempt to examine cinema not just as a story-telling vehicle, but for its potentials as a unique creative medium, which is also a quest for experimental space outside commercial cinema. IFVA’s many precedents include the Film Guard (1971), and The Phoenix Cine Club (1974), the Hong Kong Independent Short Film Exhibition (co-organized by the Urban Council and Film Guard), later renamed the Experimental Film Exhibition (co-organized by the Urban Council and the Phoenix Cine Club until 1984 and resumed in 1992 by the Urban Council), and the HKAC’s Hong Kong Independent Video Award (1992). In its 10th edition, also nine years after Microwave Festival was in place, the IFVA finally caught up: the “screen” is no longer just a conceptual category in cinema, but increasingly a physical platform where new methods of digital imaging and interactivity are experimented. The Single-screen-based Interactive Media Category was added in 2005 in addition to the three regular categories.

In its 4th edition (2008-9), the removal of the qualifier “single-screen-based” suggests the organizer’s recognition of the eclectic sources of influence in media art creation. In his juror’s review, Bryan Chung, who has been juror for the category since 2005, describes the many debates raised among the organizer and the jurors every year regarding the single-screen as a qualifying standard to solicit interactive media works. Chung explains that the keyword screen “excludes the media artworks that [work with] devices, robotics, kinetic sculptures and interactive installations without any screen.” In his view, there are many other mechanical devices that function like a screen but are themselves not screens. Quoting his own experience as a media art educator, he says, “From my teaching experience, students often prefer to work on platforms with a bigger screen,” and that probably explains why mobile environments such as cell phone or personal digital assistant (PDA) have not drawn equal amount of enthusiasm. In my reading, Chung’s comments refer directly to the predominant influence of cinema as a barrier.

The 1st edition (2005-6), which in Chung’s view had the richest content and was the most diverse in form, showed the importance of cinema and other existing expressive media as a source of adaptation for their interactive experiments: they “invested lots of efforts to develop content material in ‘old’ media like illustration, text, moving images and interactivity was introduced to provide navigational facilities,” and “interactive narratives and cinematic experience were common in this year’s works”.

---

Hong Kong Visual Arts Yearbook 2007 -- Essays
The 2nd and 3rd editions, in Chung’s view, were declining in diversity and variety. “I could … experience the diminishing richness of ‘content’ in subsequent years.” In the 2nd edition, many submitted works used “motion detection as the main input mechanism” and there was a “significant increase in using custom software.” The latter factor also coincided with the trend to free users from the mouse and the keyboard, one implication of which was the attempt to hide the work of the computer and deliver the impression that the body alone was the interface, Chung observed. Such effort to instill the illusion of the absence of the machine and of interface device is, in Hector Rodriguez’s language, a black-boxing effect. In the third year (2007-2008), the main interactive device turned out to be the “interactive table”: the adoption of sampled content (as opposed to self-produced content) “from external sources in the internet” was a key feature. That is, the “network” becomes the medium.” “Information visualization” (or sonification) remained a persistent project type for that year. There is also a strong demonstration of digitality as a platform for transcoding, whereby a piece of digital information changes “from one medium type into another through mathematical means,” as a result of which “synesthesia,” the mixing of senses, can be achieved.

IFVA’s interactive media category is a small but focused event. It has the power to show to interested historians and curators who the players are, especially the emerging talents, and what kind of self-directed concerns they are following, how they make sense of what new media is about, and their modes of adaptation. A close year-to-year study like what Chung’s done would be crucial basic documents to collect in order that many years down the road a broader analytical historical reading may form. Now that IFVA has let go of the shackle of the “screen” in its call for submission, what would be the next phase of liberation? In my view, it is time we reconsidered whether “interactivity” as a criterion is as delimiting as the “screen.” The name of the event does imply an interpretation of what media art is about, whether the IFVA organizers are aware of it or not. Or else, “interactivity” can be positively kept as the event’s focus, but then the organizers need more in-depth understanding of what “interactivity” implies. They also need to create more intelligent criteria in their submission guidelines to proactively encourage critical exploration of “interactivity.”

*The Writing Machine Collective*

The Writing Machine Collective (WMC) has so far published three exhibitions. The 1st edition, WMC_e1 (2004), was an attempt to solicit attention for how coding can be the conjuncture of literature, machine and visual creation. Looking back, a large part of the research process was about clarifying concepts for our intellectual curiosity, and at the same time looking for handy solutions for technical realization from among existing software packages. The process revealed gradually the gap between theoretical learning and artworkmaking. WMC_e2 (2007) explored writing as multiple sites of cultural engagement, and an expanded notion of writing within the technical parameters in new media (Plate 7). As part of our conceptual experiment, the idea of writing was explored via diversity in user-interfaces—writing as a generative process, a performance, a bodily event, and so on. “Writing” and “machine” were explored independently as ideas and as practices. WMC_e2 also deliberately explored the problems of displaying computer-based art works. A three-month-long virtual exhibition plus
open call for submission was also tried out, with some unexpected warm responses from the international generative art community. WMC_e3 (2008), part of Digitalogue, focused on writing as a digital art. Although there were only five works in WMC_3, they suggested a significant take-off from questions of definition and genealogy. They upheld the centrality of the codes and code-writing in new media, and subsequently forced us to open up once again the idea of art beyond the object of aesthetic judgment. In this sense, all the works on physical display were not the ultimate art works, but a tentative object articulating only some of the many tangential relations a display might bear to the coding process.

A key feature of the WMC is its research based orientation and explicit theoretical engagement with new media issues. The following list of key words demonstrates the group’s rigor in following closely existing literature on the new media paradigm:

Cyber-text over hyper-text, poetry over narrative, syntax over semantics, writing systems as the creation of codes and symbols, writing as inscription versus writing as performance, computing as an artistic medium, algorithm as a thought process, machine as space, as process, and as an organism, user interface, compression, dictionary, data structure, information theory, codification…37

The diverse issues raised by existing literature on new media art have been purposefully extracted for artistic experiment in the various editions. In the fourth year of its existence, the WMC assumes programming literacy as a core mission, and code-writing at the core of creative activities. With three exhibitions or showcases completed, WMC has gained some basic experience in dialoguing with the contemporary art community and reviewed questions of community-building. It remains the collective’s main aesthetic issues to find adequate forms to present the processoriented character of computational, codebase creative works, or, in Rodriguez’s terms, to open up the “black box” of the creative processes. To examine digitality philosophically in non-digital works with an interdisciplinary vision, which WMC_e2 (2007) explored, would remain on the group’s programmingoriented agenda.

The formation of the WMC began with two small university grants that Linda Lai received in 2002 to dig into issues of emergence, complexity, and algorithmic principles in art-making. The funded project gathered a group of young local researchers, artists, and those equipped with basic software skills to experiment with language, literature, especially poetry, via code-based programming. The original team included Linda Lai, Theresa Junko Mikuriya, Ray Chan (Chan Chi-hang) and Keith Lam (Lam Yan-kit). Currently, core members who are involved in planning WMC’s future agenda include Linda Lai, Justin Wong, Janice Leung, Hector Rodriguez, Yvonne Lau, Morgan Wong, Hamlet Lin and Kenny Chow. A total of 35 artists have participated in the three editions.
of exhibitions, with eleven artists participated in more than one edition. In all issues, WMC has sustained maximum attempt for documentation. In addition to basic information on the official WMC web-site, a digital catalogue in CD / DVD-rom form was published for each edition, providing a broader view of relevant concepts and discussions.

Though determined to seek out more young artists who can join its circle of creation, WMC is not ashamed to admit that almost all of its members and participating artists have (had) a connection to the School of Creative Media. A plain reason for that is the funding background in its initial phase of formation; as well, the School is indeed a key training field for new media artists in Hong Kong. As a matter of fact, when ADC’s Creative New Media Project selection panel interviewed Linda Lai and Justin Wong, a key issue brought up concerned how the collective could move beyond the SCM circle. A fair request it was, Lai and Wong felt that it was a limitation they were committed to overcome but would take some years. Moreover, I also contend that serious research-based creation is perhaps only possible with the backup of academic institutions. With this in mind, WMC’s SCM orientation can be understood as a positive factor rather than a reality to avoid. Indeed, WMC had made a great effort to host all of its artists’ talks and forum in the Cattle Depot, its twelve-hour workshop in interactive fiction at the Polytechnic University, and its full-day eight-hour game and animation workshop for children on a Saturday at DBS’s Primary School Session.

The Unpublished Research

The commissioned research, “Development of Electronic Media Art” (2000-2001), was meant to ultimately make recommendations to the ADC what could be done in Hong Kong to promote electronic arts. The use of the term had created a lot of disagreement in the process of the research. Whether or not it was the best term, I now gather from hindsight that it was more an opportunity to arouse discussion on the growing presence of technology in art. (For a rational discussion of the term, see an earlier section of this essay.) In the planning process of the project, the field research team decided that it was important to tap the “perception” of the subject matter among the different groups of key players—for their perceived reality would reveal the discursive effects at work, what the mature factors were, and what was lacking. The key players’ perception could have played a role in shaping local media art development even if they were not very conscious of it. About twenty interviews were conducted with representatives who are the “potentate” (government, funding bodies and educational institutions), another twenty from the “expert” group (art organizations and cultural bodies), and over thirty from the “people” (i.e. artists).

During the two field interview phases of the research project, an article titled “Electronic Art: An Overview” was written up by literature research coordinator, Hector Rodriguez, to generate an informed discussion. The piece, which has seventeen manuscript pages, was circulated to some of the interview subjects to solicit their views. However, there was very little productive or serious engagement generated with this exercise (—partly, too, because the essay was too difficult for some of the field interviewers). Exception was Ellen Pau, who was familiar with many of the key events cited in the essay, such as the Bell Lab, Witney Museum of Art’s “Image World” exhibition and so on. Choreographer Yuri Ng, who readily adopted digital tools to his dance
theatre projects, admitted he knew little about the cited events, but drew his inspiration from artists in Japan who very readily incorporated electronics into their work. Although musician Samuel Lo did not respond to the essay, he was one of the few interviewed artists who had demonstrated he had grappled with the implication of new technology in the context of his own artistic creation. He saw four new ways to create music: to replace traditional instruments with electronic ones, to generate sound from the computer, to process human voice and instrumental music on the computer, and to alter vocal music through microphone pick-up and computer effects.

While there was not much enthusiasm to clarify terms and definitions, most interviewees were mainly concerned with the lack of resources and the problem of an impoverished macro environment to allow media art to prosper compared to Europe and the US. As well, most artists felt their turn to electronic media was driven by the urge to develop new experiences via newer media forms, and required no additional persuasion. Some believed that, from an evolutionary point of view, all arts should be electronic arts one way or others, whereas a few art groups thought they would get involved in art with technological deployment no matter whether there was a stated policy by the ADC.

One interesting finding is how quite a lot of electronic art workshops and events were part of the promotion activities of many big software providers. For example, the First International Computer Exhibition held in 1985, held annually until 1996 (inclusive), emerged partly for the promotion of computer use. In 1986-87, some computer dealers offered a one-off computer art series, mainly tailored towards local graphic designers. The Mac User Group (1985-1994) was an organization to promote the use of Macintosh computers with membership from all walks of life. In 1988, the Mac World (Hong Kong) Expo was first held at the Hong Kong Convention Centre (until 1996 inclusive), to introduce the latest hardware and software. The 1989 edition included both competitions and exhibitions. In 1990, the first MacArt Centest was held. More Macintosh initiatives were launched: in 1992, MdN (Macintosh Designers’ Network, renamed IdN in 1994), an English version of a Japanese magazine focusing on Asian regions, began distribution in Hong Kong. The magazine promoted the use of computer technology in creative design, and organized exhibitions with the MdN International Design Award. The first IdN Design Competition was held in 1993 (see http://www.idnawards.com.hk) and many pioneering digital artists had taken part and received awards over the years. In 1993 as well, Desktop Times (renamed Digital Times in 2000) was published, which later on included animation, web-page design, overseas exhibitions and works of local artists. This phenomenon coincides with what many interviewed subjects also pointed out: the hardware environment was promising—computer application is widespread, facilities highly available, and no one would deny the importance of technology. So it seems what was seriously lacking was serious integration and dialogue between art and technology. It would be useful to find out more from participants in these events. As for the non-commercial side, the HKAC had been home for the short-lived Computer Art Club (1992-94). “Plugged Art” was organized by this group in 1994 at the Arts Centre, a large scale competition and exhibition of computer works by the group’s members. Other non-commercial groups worth further research include David Lui & Tix Group, formed by Lui and his students from the Tsing Yi Technical College, and the Hong Kong Digital
Artist Association (HKDAA), whose many founding members were designers, photographers, cartoonists and journalists, such as Ku Chiu-ping, Holly Lee, Lee Ka-sing, David Lui, Hair Ng and so on. The official submitted report for this research concludes with four key remarks, which I have adapted for this essay in the following:

(1) The general lack of rigorous attempts to learn about electronic arts and other related terms from existing literature means the lack of a shared vocabulary for rational negotiation, set aside a visionary projection for a future.

(2) Society in general is ready for new media, and funding has become more available than before, but the macro-environment is far from mature: sharper vision in education and more focused research are in need; long-term planning is lacking, neither in preserving what has been done (existing works) nor in presenting them to the public in an organized manner; and art administrators are not always literate enough in matters of art and technology to make reasonable decisions.

(3) Audience development is an imperative to raise the general media literacy of the public. Not only should art education (education for artists) be radically re-examined, but also media literacy (the role and value of art in education in general) is an imperative, beginning in secondary schooling, if not earlier.

(4) ADC should take proactive measures to facilitate the many urgent issues (above) to be solved, such as through more refined categorization of media art forms, special grants that would steer research, discovery and experimentation in artmaking, and collaborate with universities to conduct more specific rather than generic, background research in new media.

The report has proposed a few areas that urgently require policy clarification:
* the meaning of “digitality”
* collaborations between artists and scientists
* technoeconomic context: the term was coined by scholars like Roy Ascott to describe an emerging dialogue between the fine arts, advanced technologies, and consciousness research, which underpins one of the most promising areas of cultural activity in the age of the new media. Tehnoetic research has two arms: consciousness research and new technologies.
* technological limitations
* high cost and sources of financial support
* stylistic diversity
* public spheres on the net
* interaction with traditional culture

The final report also included a three-phase development plan recommended for ADC’s implementation.

**Phase I—Cyber Archive**: a web-based archival space for the documentation of all local works and events related to media art in general. This is to facilitate a continuous compilation of
material that could form a history of media art in Hong Kong. The archive may need a basic office space and, as part of its regular operation, organize seminars and courses that would make use of its collection.

**Phase II**—**Annual New Media Arts Festival**: a visible event with competitive categories and award presentation to encourage the pursuit of excellence and an experimental spirit, and where local artists gather to present their works to the general public. This should logically be the occasion for forums and symposia on new media art, an opportunity to turn research projects into public education. Over time, this would provide an impetus to ensure the development of adequately equipped venues for media art events.

**Phase III**—**the Hong Kong Media Arts Centre (HKMAC)**: with a cyber archive to ensure systematic preservation of local media art works, and a high-profile annual festival to encourage sustained artistic creation in place, the HKMAC should have the dual status as a gallery / exhibition space and a space for media arts research, a model based on ZKM in Karlsruhe, Germany.

The recommendation, back then in 2001, also suggested a humble trial beginning of Phase I using disused factory space in Kwun Tong.

Looking in retrospect, the HKAC, the Hong Kong Museum of Art, the GI-HK, and especially Videotage, could have been good partners for the ADC. Microwave Festival is close to what was proposed for Phase II, but the lack of a full-time staff team with properly trained professionals, theorists and historians make it difficult for Microwave to rise above its perennial struggles with resources and administrative nightmares. Instead of issuing annual funds to Microwave or other like incentives, the ADC could have played a higher-level mediator in helping such a festival to grow independent, giving professional consultation on fundraising and feasible business models. Shanghai and Beijing have both developed their annual electronic arts festival. How should be enable and multiply what we have already got in Hong Kong? As for the dreamed up HKMAC, with the M+ project in West Kowloon evolving the way it had on a balance-of-interest principle and with an inferiority complex to just catch up with what the West has got, I see very little chance for it to come into place.

**4. A Tentative Agenda for an Interpretive History**

*Being There, and Again…: Ethnomethodologies and Problematization*

The second section of this essay, which focuses on assembling found facts and documents, is a response-in-action to the Foucauldian notion of archaeology and genealogy. In Foucault’s view, to dig up, to assemble, is no neutral act, but a mode of problematization. Familiar Cultural Studies terminology will translate Foucault’s concept of historiography onto an ethnomethodological paradigm. I propose in the following some key questions with which to formulate future research for more in-depth interpretive studies of the development of media art in Hong Kong.42

(I) More “archaeology”: to go back to the many locations
Descriptive and analytical—
• close reading of programs, events and curatorial and administrative models of the Microwave Festivals, Videotage, GI-HK, and HKAC: what paradigm, who are the overseas and local experts?
• a new list of artists for in-depth interview, especially those with a science background.
• differentiate between those artists who use digital tools and those who study digitality and computing as an artist medium:
  compare their work mode, educational background, and kinds of struggle in their creative work, their profession (where to find the artists), exposure to programming, how to move into art (those with a science background): Where are the artists and who are the artists.
• different university and tertiary educational programs addressing media art: emphasis, scope, philosophy.

Critical—
• where "media art" has been imagined...for what particular ideal, to overcome what kind of limits and boundaries?
• where "media art" has been defined...for whom, in what crisis, for what urgency?
• where "media art" works have been created...to see what notions individual works substantiate or how they grow beyond types.
• where "media art" was / is anticipated...in whose interest, for what purpose, with what actions and agendas?
• where "media art" was / is commodified...to what effect?
• where "media art" was / is valorized...for what objectives, at what cost?
• where "media art" has been questioned...in what aspects, against what measures, due to what circumstances, and by what accusations?
• where "media art" has been violated and forbidden...against what measures, due to what circumstances, by what accusations, in whose benefit?
• where "media art" was / is absent or excluded...deliberately? and resulting from what kind of common sense, instrumental reason, and what discursive practice?

(II) Ethnography: the importance of field observation
The basic conditions of ethnography are:
being there (continuous presence), observing, and documenting
• social processes (formalization of relations and abstract reasoning);
• rituals (everyday rituals unique to the group, proceduralism, situations that lead to the formalization of relations and abstract reasoning);
• exchange mechanisms (interactionism emphasized);
• self-narration (self-perception and self-directed myths);
• at this point, there is the need to conduct thorough research on education sector, where artists are trained and research conducted;
• how media artists conduct their everyday life (a holistic perspective that assumes artistic activities are not confined to the moments of art-work production);
• how a media art student learns, spends leisure time, spends money, etc. (everyday
(III) Ideologies and power interest: to go back to the many locations where “media art” is turned into forms of instrumental reasons…
- to go back to the many locations where “media art” is the formation of subjectivities;
- to go back to the many locations where “media art” is the back-stage;
- to go back to the many locations where “media art” is the front-stage;
- to go back to the many locations where “media art” is the function of power;
- to go back to the many locations where “media art” is the articulation of resistance.

(V) Media Archaeology:
Media archaeology concerns the historical dynamics that forms the basis of the convergence and differentiation of the various media. It is a project that critically examines norms of media practice, established historical discourses, and theorization of media configuration.

Projecting the Future
I. HKMAC (see the last section of the part of the unpublished report in this essay).
II. A revised feasible model for a properly financed annual media art festival.
III. Education: artist training and media art literacy–Some key areas require translation into in-depth studies:
   Ø what kind of training in art should be provided to science students;
   Ø how to teach programming to artists;
   Ø a university-level curriculum that combines and accommodates students from art and science backgrounds;
   Ø feasibility studies on abolishing the segregation between art and science subjects on secondary school level;
   Ø lobbying for a holistic view of art education for secondary school: recent revision of visual art subject for secondary schools has surprisingly provided both a utilitarian and humanistic argument for art education, but few young people would benefit from this visionary agenda considering how few students would actually take up visual art in their public examination.

To end this essay, I would like to quote from the unpublished ADC research, whereby by Rodriguez proposed a few important criteria particularly for (new) media art education:

1) Media art is shaped not only by technologies, but also by tendencies in the fine arts and philosophy.
   “In practice, a person’s thorough knowledge of new technologies seldom suffices to generate innovative creative work. The practitioner must also have some understanding of art history and theory.”
2) It is virtually important that education in the new technologies should be integrated with education in creative and critical thinking. This means the artistic development of new media technologies should not proceed in isolation from the fine arts.

3) The following areas of characteristics of the historical development of new media should be considered for inclusion in a comprehensive curriculum for new media art:
   • geometric abstraction
   • new realism
   • artificial life forms
   • manipulating photographs
   • collage
   • multilinear art and interactivity
   • performances and installations
   • virtual reality
   • simultaneous live connections across diverse locations (networking)

4) A curriculum appropriate for the practice of new media art should also have the following qualities:
   • interdisciplinary: The curriculum should be broadly interdisciplinary. Courses should draw on a wide variety of fields of study, such as anthropology, art history, mathematics, psychology, physics, philosophy, and literature. The bridging of different fields of study can be realized in two ways: one is to organize a course around themes rather than academic subjects, to integrate various areas into a single course, thus showing students the value of crossing disciplinary boundaries; and the other is to offer more intensive introductory courses in “non-art” subjects.
   • flexible and exploratory (research-oriented): research-oriented approach gears towards whole-person development, and this is to ensure the teaching of relevant skills without destroying the individuality of the students.
   • socially aware.
   • relatively independent from practical pressures.

Lai Chiu-han Linda is Assistant Professor of School of Creative Media, City University of Hong Kong

Abbreviations
ADC - Arts Development Council
GI-HK - Goethe Institut-HK
HKAC - Hong Kong Arts Centre
HKAPA - Hong Kong Academy for Performing Arts
HKDAA - Hong Kong Digital Artist Association
HKUST - Hong Kong University of Science & Technology
IFVA - Independent Film & Video Award
2 This is based on field interview with Choi Yan-chi in summer 2000. See note 11.
3 Key personnel of the project included May Fung, Ng Tsz-kwan and Amy Cheung.
4 Gulldy was founded by Keith Lam, Ray Chan, Yip Man-wah, Ron Lam and others. 5 The Writing Machine Collective (WMC) was founded by Linda Lai. The first WMC exhibition took place in June-July 2004. Current core members are Linda Lai, Justin Wong, Hector Rodriguez, Janice Leung, Yvonne Lau and Morgan Wong. For a detailed account of the collective, see essay, “What is The Writing Machine Collective (WMC)?—Many Beginnings,” in Glow in the Dark—Spotting Art. Noise. Media in Hong Kong (2008), co-published by Asia One and Videotage in conjunction with Hong Kong Museum of Art’s “Digitalogue” exhibition 2008.
6 The proposal was written by Hector Rodriguez; the applicants were Hector Rodriguez and Fion Ng on behalf of the Microwave International Media Art Festival 2006.
7 Cedric Maridet is from France, now living in Hong Kong. He received the Media Art Award for his video installation in the Hong Kong Art Biennial 2005. He is currently a Ph.D. student at the School of Creative Media focusing on sound art.
8 This is based on an interview with the staff of the Digital Graphic Communication in 2000. See note 11.
9 Hong Kong Baptist University’s School of Communication comprises three departments—Cinema & Television, Communication Studies, and Journalism. Within the Department of Communication Studies, there are three study options—Organizational Communication (formerly Applied Communication Studies), Public Relations & Advertising, and Digital Graphic Communication.
10 In the ADC commissioned research “Report on Inter-disciplinary Arts in Hong Kong” (2006) by Law Nga-wing and Tsang Kin-wah, the School of Creative Media’s Critical Intermedia (one of the three B.A. study areas) is described as the only educational curriculum that is self conscious of a multi-disciplinary approach and the experimentation of multiple media. See p. 15 as well as footnote 12 in the report.
11 “Development of Electronic Media Art” was an ADCcommissioned research awarded to Christine Choy, then Director of the SCM, with five other members of the SCM teaching staff involved. Field research proceeded in June 2000 in two phases, and the final report was submitted in February 2001. The interview targets were defined as three groups: the “potentate,” those who have authority or are decision makers; the “expert,” those who have special knowledge about a subject; and the “people,” those who have experiences in life that allow them to give direct testimony on the effects of the potentate’s actions and on matters of the expert’s studies. The “potentate” included government bodies and educational institutions, the “expert” art and cultural groups and galleries, and the “people” mainly individual artists. A total of forty-nine interviews were conducted.
13 The discussion on three key shifts was first presented in Linda Lai’s public lecture, “Developing Media Art Literacy?”, on 5 July at the Hong Kong Museum of Art, as part of a lecture series for the exhibition “Digitalogue” (15 May-20 July, 2008).
14 This view is most elaborate in ideological criticism in communication studies. The general assumption is that whoever has access and controls mass communication channels is in power, and whose ideas and values will dominate. An often quoted classical example is Hitler’s first broadcast speech to the German people, as a result of which Nazism spread and Hitler’s power consolidated.
15 One historical source for experimental radio programs is the Festival for New Music founded in 1921. After the Second World War in 1950, the Festival began cooperation with South-West German Radio, which brought in new program contents, not only the repertoire of New Musicians such as Boulez, Stockhausen, Cage and Xenakis, but new forms of radio plays, music films and so on. See also Martin Shingler, “Some Recurring Features of European Avant-Garde Radio,” Journal of Radio & Audio Media,
Hong Kong Visual Arts Yearbook 2007 -- Essays

volume 7, issue 1, May 2000, pp. 196-212. The article identifies some of the dominant features of European avant-garde radio from the late 1920s to the 1990s, especially in Britain and Germany. These features include montage, the irrational language technique of glossolalia and sound distortion.

16 Hector Rodriguez’s public lecture, “Media Art Education,” delivered on 12 July 2008, was last of the lecture series of Hong Kong Museum of Art’s “Digitalogue” exhibition. The next two paragraphs in the main text are summary paraphrase of his key ideas in that lecture.


18 This unpublished article was written for the field interview of the “Development of Electronic Media Art” research project (see note 11). The piece, which has seventeen manuscript pages, was circulated to some of the interview subjects to solicit their views and to ensure a productive discussion.


20 Ibid., p. 4.


22 Ibid., pp. 16-23.

23 Ibid., pp. 23-25.

24 Ibid., p. 13.

25 This is a key thesis advanced in Hector Rodriguez’s work, Kinematograph, created as part of the Writing Machine Collective 3rd edition, in Digitalogue, Hong Kong Museum of Art, May-July 2008. See his artist statement, and his lecture on July 12 2008.


27 “Cai Wenying donggan yishu zhan,” pp. 16.

28 This is based on field interview with Choi Yan-chi in summer 2000.


32 See note 11.

33 In Foucault’s terms, archives are depositories for the “indefinite accumulation of time” and knowledge. In this sense, archives are natural results of intense collecting activities. See his essay, “Of Other Spaces”; trans. Jay Miskowiec; Diacritics 16, Spring 1986, pp. 22-27. (The essay is originally in French, titled “Des Espaces Autres,” in Architecture-Mouvement- Continuité, October 1984.)

34 Michel Foucault, Archaeology of Knowledge and Discourse on Language (New York: Pantheon, 1982), pp. 79-134. 35 The cinema club Film Guard was founded in 1971 by Cheung Kin, Cheung Leung and Lee Yiu-ming to promote alternative filmmaking. In 1972-3, the group organized a 8mm experimental film festival to encourage local participation in alternative filmmaking. A similar event was organized in 1974. In the following year, Film Guard co-organized another experimental film series with the Urban Council, with a 2nd edition in 1976. In the 3rd edition in 1977, Phoenix Cine Club also joined as a co-presenter. See Law Kar, An Overview of Hong Kong’s New Wave Cinema,” in Esther C. M. Yau, ed., At Full Speed: Hong Kong Cinema in a Borderless World (Minneapolis: University of Minnesota Press, 2001), p. 40. See also a Chineselanguage article by Zhang Xiaolan on independent cinema, titled “Duli diywei—wei shenme duli? Ruhe duli?” (http://thefreemedia.com/index.php/ articles/6343).

36 See Bryan Chung, “Reflections on 3 Years of Interaction” in ifva Moving the Images, Proceedings for the 13th Hong Kong Independent Short Film & Video Awards, 2008, pp. 51-52.

37 A shorter version of the list and the core content of this section was first detailed in an essay for Digitalogue. See opening paragraph of Linda Lai, “What is the Writing Machine Collective (WMC)?—Many Beginnings,” for the book Glow in the Dark—Spotting Art, Noise, Media in Hong Kong, as part of the HK Museum of Arts’ “Digitalogue” project (May-Jul 2008); to be published and presented at the Frankfurt Book Fair in October 2008.
38 See Note 11.
39 For some ideas of the main events and personnel named in Rodriguez’s essay, please refer to earlier section of this essay “Electronic Arts.”
40 Many examples are cited in the Hong Kong Heritage Museum’s CD-Rom, Art + 01 (2000).
42 The agenda proposed here was originally part of my presentation, titled “Being There, and Again…: Genealogy, Archaeology” in the session “Art Historical Writing in Hong Kong,” of the Round-table Symposium, “HistoriCITY: Art Historical Writing on / in Hong Kong,” organized by the Hong Kong Museum of Art and Asia Art Archive, 29 September 2007.
43 There are both humanistic arguments about the important role of art in the holistic development of a person, and utilitarian arguments about how art helps to create a harmoniously progressing society (my paraphrases).