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Public Policy Research Funding Scheme
Policy Innovation and Co-ordination Office (PICO)

**THE DEVELOPMENT OF A NEW MEDIA EXPERTISE IN THE
CREATIVE ECONOMY OF HONG KONG**

新媒體的專業知識在香港創意經濟的發展

[Project number: 2016.A1.045.16D]

Final Report

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(1) Executive summary

Abstract

Since the government of the Hong Kong Special Administrative Region (HKSAR) has embarked on the ‘creative turn’ bandwagon, following Richard Florida’s controversial ‘Rise of the creative class’ (2004), it has put into place a series of measures aimed at diversifying its economy by fostering cultural and creative industries (CCI). Technology-based creativity is considered as one of the main pillars of this new strategy, causing an inflation of projects referring to ‘creative media’, ‘new media’ and so on. This research seeks to describe the development of new media expertise in the context of the creative economy in Hong Kong: taking the new media artists’ skills as a starting point, we will examine their modes of acquisition, development, and integration into the creative economy. This research aims to provide an overview of the realities, challenges, mechanisms, and obstacles to the transfer of new media expertise into the cultural and creative economy of Hong Kong. We adopted a mixed methodology relying on four different methods: desk research, a questionnaire, in-depth interviews with artists and stakeholders, and direct observation of new media arts events (exhibitions, performances, workshops, conferences, and roundtables...) in order to address the following questions:

- What is new media expertise in the context of Hong Kong according to the practitioners?
- How is this expertise created and maintained?
- How is it transferred to the creative economy?
- How can this transfer be improved?

Summary of findings

- To review the current definitions of new media arts expertise in the field of new media art theory

Despite the debates surrounding the ‘newness’ of new media art, its characteristics and boundaries, new media art usually refers to practices involving the use of computation

and/or electronics, where the medium is more than a mere tool but is adapted and transformed by the user. New media art is situated at the junction of art-science-technology. Its practices are defined, sustained, and legitimized by the new media art world. However, the term ‘new media art’ has declined in the literature, substituted either with the larger ensemble of ‘media arts’ or with more precise categories (algorithmic art etc.).

- To review the existing postsecondary curriculum dedicated to new media arts in Hong Kong

Although the curriculums which are dedicated to a strict conception of new media practices are scarce, several post-secondary programs teach skills which may be useful for a broader conception of new media practices. They can be distinguished by their position along the spectra of: ‘new media arts-creative industry’, ‘arts-technology’, ‘general education-vocational training’. The online survey showed the predominance of graduates from the School of Creative Media, which was confirmed by the interviews. The stakeholders we interviewed also highlighted some differences between UGC-funded programs regarding (new) media arts.

- To establish a working definition of new media art expertise in the context of Hong Kong creative economy

New media art rarely appears in official statistics, yet it underlies several statistical categories pertaining to the cultural and creative industries. In the art world, the term ‘media arts’ is more commonly used, often in conjunction with ‘Film’. The stakeholders usually define new media art as ‘an art form that is related to science and technology’, as an art form that aims to ‘explore new expressions through technology itself or through the medium itself’. Technology is a central feature of new media arts but the majority of respondents consider that ‘developing a new idea or a new concept, a new way to look at things’ is the most important aspect of their practice. New media arts involve a ‘new media thinking’, i.e. willingness to work with technology creatively, and a conception of the world as a cyberworld. The stakeholders emphasise the transformative use of technology: transforming technology itself and transforming how we relate to the world.

- To perform an ethnography of the integration of new media art expertise by new media art graduates in sectors of the creative economy in Hong Kong where the impact of this expertise is the most salient

The research found that tech-creatives are in demand in the creative economy. New media art graduates often try and combine their artistic practices (and eventually revenues) with other income-generating occupations. The online survey indicated that new media graduates, at least often, used their technological skills in the workplace. Academia is one of the main sources of stable income. Creative entrepreneurship is also quite common, often combined with cultural entrepreneurship; the former enables the artists to earn their living while applying and developing their skills and arts practices, while the latter enables the stakeholders to support other artists, nurture talent and promote awareness for art-and-technology skills in the society at large. The different modes of support provided in the art world (structures of support, mentors, exhibitions, competitions, and awards) contribute to the integration of new media skills in the creative economy in several ways: by providing a space for experimentation which lacks in commercial settings, by building competencies in related skills (logistics, spatial design, etc.), and by representing Hong Kong creativity in international events and so on.

- To identify the factors of competitiveness of the integration of a new media art expertise in those sectors of the creative economy where this expertise is the most salient

The cross-fertilization of art and creative economies (**creative entrepreneurship, use of artistic projects in commercial settings**..) is the main driving force of the integration of a new media art expertise in the creative economy. A vibrant art scene contributes to a more innovative creative economy, while an economy which is open to the creativity of new media artists provides them with opportunities to implement and develop their skills. The density of the (new) media art world (supporting organizations, mentors, festivals, exhibitions...), the increasing number of outreach educational programmes on the creative uses of technologies, the growing number of public events displaying media arts are positive factors which contribute to the integration of a new media art expertise in the economy and in the society.

However, some challenges hinder the full deployment of this virtuous cycle (few opportunities for large-scale innovative commercial projects, fewer promotional activities for new media art-related projects overseas...).

Layman summary of policy implications and recommendations

Following our findings, we recommend:

- a broader definition of innovation and computer-related practice, acknowledging the value added by media artists in the creative economy;
- providing more support (space and funding) for artistic and innovative business initiatives;
- allowing for more flexible uses of UGC-funded equipment and premises to enable universities to play a central role in creative production and sharing by hosting regular events involving alumni, stakeholders in the arts sector as well as in the business sector, and the society at large;
- supporting students with more original personal trajectories (e.g. support for gap years before, during and after university studies);
- allocating 1% of public and private development contracts to arts in the public space;
- expanding media art events in all areas of Hong Kong, for example in partnership with the Leisure and Cultural Services Department;
- providing space and allowing for creative use of space;
- opening up Science Park, InnoCentre and Cyberport to young creatives with more diverse creative practices; this might imply loosening restrictions on the use of such spaces;
- providing more direct support for young artists and creative companies
- multiplying the channels of communication between small and large organizations;
- ensuring more equitable funding between large and smaller arts and creative organizations;
- setting up a permanent space dedicated to media arts (resource centre, exhibitions, outreach educational programmes, residency schemes, exchange programmes...), in tandem with artists and arts stakeholders, and publicizing all media arts events in Hong Kong on its website;
- diversifying award categories.

(1) Executive summary 主要總結

Abstract 摘要

跟隨理查德佛羅里達(Richard Florida) 具爭議性的「創意階層的崛起」 (2004)，香港特別行政區（香港特區）政府走進「創意轉向」的潮流。政府通過培育文化和創意產業（CCI）實施了一系列旨在實現多樣化經濟發展的措施。建基於科技的創意被認為是這個策略的主要支柱之一，它引起很多涉及「創意媒體」，「新媒體」等項目。

本研究旨在描述香港創意經濟背景下新媒體專業知識的發展：以新媒體藝術家的技能為出發點，我們將研究他們的技能獲取及發展和融入創意經濟的模式。本研究旨在提供一個關於新媒體專業知識轉移至香港文化及創意經濟的現實、挑戰、機制及障礙的概述。我們採取混合方法論，並依靠四種不同的方式：桌面研究、問卷調查、對藝術家和利益相關者的深入訪談，以及直接觀察新媒體藝術活動（展覽、表演、研討會、會議和圓桌會議等）以解決以下問題：

對從業者來說，香港的新媒體專業知識是什麼？

這些專業知識如何創建和維持的？

它是如何轉移到創意經濟的？

這種轉移可以如何改善？

Summary of findings 調查結果摘要

- 回顧新媒體藝術理論領域中新媒體藝術專業知識的現有定義

儘管新媒體藝術的辯論圍繞著當中的「新」、特徵和界限，但新媒體藝術通常指涉的是使用電腦和/或電子的實踐，其中媒介不僅僅是一種工具，而是通過使用者進行調整和轉換。新媒體藝術處於藝術、科學、科技之間的交匯點。它的實踐由新媒體藝術的世界定義、維持和合法化。然而，「新媒體藝術」一詞在文獻中有所下降，取而代之的是更大的標籤「媒體藝術」或更加精確的類別（如算法藝術等）。

- 檢討香港新媒體藝術的現有高等教育課程

雖然致力於新媒體實踐的課程缺乏，但是幾個大專課程教授的技能對更廣泛的新媒體實踐概念起上作用。他們可以通過以下各種方式來區分：“新媒體藝術－創意產業”，“藝術技術”，“普通教育－職業培訓”。線上調查顯示，創意媒體學院的畢業生占主導地位，並且通過訪談證實了這一點。我們採訪的利益相關者也強調了大學教育資助委員會對於新媒體藝術及媒體藝術課程之間的差異。

- 在香港創意經濟背景底下建立新媒體藝術專長的可行的定義

新媒體藝術很少出現在官方統計數據中，但它是與文化和創意產業有關的幾個統計類別的基礎。在藝術界當中，「媒體藝術」這個術語更為常用，它通常與「電影」結合使用。當中利益相關者通常將新媒體藝術定義為「與科學和科技相關的藝術形式」，作為旨在「通過科技本身或通過媒介本身探索新表達方式」的藝術形式。科技是新媒體藝術中的核心特徵，但大多數受訪者認為「發展新想法、新概念、新的觀察事物的方式」是他們實踐中最重要的一環。新媒體藝術涉及一種「新媒體思維」，即是一種意願，創意地使用科技，將世界（和世界的概念）作為一個虛擬世界。

- 在香港創意經濟界別中施行一種民族志研究，探討受這些專業知識影響的新媒體藝術畢業生如何整合新媒體藝術專業。

本研究發現，創意經濟中技術創意是非常需要的。新媒體藝術畢業生經常嘗試將他們的藝術實踐（以及最終的收入）與其他帶來收入的職業結合起來。在線上調查發現，新媒體畢業生至少經常在工作場所使用他們的技術技能。在學術界工作是他們穩定收入的主要來源之一。創意性的創業也很常見，經常與文化創業結合起來；前者使藝術家能夠在應用和發展他們的技能和藝術實踐的同時以作謀生；而後者使利益相關者能夠支持其他藝術家，培養人才並提高整個社會對藝術科技術的技能的認識。藝術界提供的不同支持模式（如支持、指導、展覽，競賽和獎項的結構）的以多種方式將新媒體技能融入創意經濟作出貢獻：在商業環境之外提供可作實驗的空間、建立相關技能（物流，空間設計等）的能力、幫助在國際場合中香港的創意活動等等。

- 識別在創意經濟各個領域中融入新媒體藝術專業知識的競爭力因素

藝術與創意經濟的交叉融合是新媒體藝術專業知識融入創意經濟的主要動力。充滿活力的藝術場景有助於更為創新經濟，而一個對新媒體藝術家的創意開放的經濟為他們提供了施展和發展技能的機會。（新）媒體藝術世界的密度（如支持組織、導師、節日、展覽等）、越來越多關於科技創新用途的拓展教育方案、越來越多的公共活動展示媒體藝術是促進新媒體藝術專業知識融入創意經濟和社會的積極因素。

然而，一些挑戰阻礙了這種良性循環的全面部署（缺乏大規模創新商業項目的機會、對海外新媒體藝術相關項目的宣傳活動比較少.....）。

Layman summary of policy implications and recommendations

關於政策啟示和建議的一般性總結：

根據我們的發現，我們建議：

一個更廣泛關於創新、電腦相關實踐、承認媒體藝術家在創意經濟中的增值的定義；

為藝術和創新業務計劃提供更多支持（空間和資金）；

允許更靈活地使用大學教育資助委員會的設備和校舍，通過舉辦有關校友、藝術界的利益相關者以及商界和整個社會的定期活動使大學能夠扮演創意製作和分享核心角色。

支持具有更多個人軌跡的學生（例如支持大學學習之前、期間和之後的差距年）；

將1%的公共和私人開發合同分配給公共空間的藝術品；

擴大香港各地的媒體藝術活動，例如與康樂及文化事務署合作；

提供空間並允許創造性地利用空間；

向具有更多不同創意實踐的年輕創意人士開放科學園、創新中心和數碼港。這可能意味著放寬對這些空間使用的限制；

為年輕藝術家和創意公司提供更直接的支持

增加小型和大型組織之間的溝通渠道；

確保大小藝術和創意組織之間更有公平的資助；

與藝術家和藝術界利益相關者共同建立一個致力於媒體藝術的永久空間（資源中心、展覽、外展教育計劃、駐留計劃、交流計劃等等），並在其網站上宣傳香港的所有關於媒體藝術活動。

將獎項類別多元化

(2) Introduction

The policy of the government of the Hong Kong Special Administrative Region (HKSAR) in the cultural and creative sector is part of an overall strategy to strengthen its position as one of the best performing economies in Asia. Three developments have underlined this strategy. First of all, there is a consensus that HK needs to diversify its economic pillars away from its core industries (finance, tourism, trade, manufacture and shipping). In 2016, the Honorary Martin Liao warned: *‘the Global Competitiveness Report 2015-2016 published by the World Economic Forum (the Forum Report) has showed that, among the 140 economies covered by this Report, although Hong Kong’s overall ranking in 2015-2016 in the Global Competitiveness Index has maintained its 7th place attained in the previous year, her ranking in innovation is only 27th, which is clearly on the low side and shows a downward trend. Meanwhile, Hong Kong’s ranking in financial market development has dropped from the first to the third place’*¹. This comment summarises the anxiety felt among Hong Kong leaders and the realization that a diversification of the economy is necessary if Hong Kong is to remain a world-class competitive economy.

Second, HK’s position in the Chinese region has been challenged by fast growing, innovation-driven cities such as Shenzhen. In 2016, for the second year in a row Shenzhen was ranked first Chinese economy by Beijing’s Chinese Academy of Social Sciences (CASS). In 2018, according to CASS, Shenzhen reached the top-five most competitive economies in the world behind New York, Los Angeles, Singapore and London, while Hong Kong was placed 11th. However, Hong Kong was ranked 6th in sustainable competitiveness, whereas Shenzhen slipped to the 48th place². The rankings highlight Shenzhen’s fast growth, propelled by innovation.

¹ Legislative Council (2016), ‘Enhancing Hong Kong’s competitiveness’. January 20. Online: <https://www.info.gov.hk/gia/general/201601/20/P201601200324.htm>

² Su Xinqi (2018). Hong Kong still China’s most competitive city, but Greater Bay Area has a long way to go, study shows. South China Morning Post (29 October). <https://www.scmp.com/news/hong-kong/hong-kong-economy/article/2170594/hong-kong-still-chinas-most-competitive-city>

Third, Hong Kong's strategy towards cultural and creative industries echoes a quasi-worldwide 'creative turn' in national and urban policy that stresses the contribution of knowledge- and creativity-sectors to economic growth. Although the concept of a 'creative city' is not new (it can be traced back to the 1980s, at least), it received a renewed attention in 2000 with the publication of Charles Landry's *The Creative City*. However, arguably, one of most influential (and debated) proponents of the 'creative turn' is Richard Florida and his seminal book *The Rise of the creative class* (2004). Florida argues that, in times of intensifying international competition and rapid technological changes, States should strive to attract the 'creative class' in order to boost their economy and gain competitive advantage over those States (or cities) that fail to do so. In Florida's theory of human capital (2003), the artists belong to a 'super-creative core' (Charrieras et al. 2018) that 'produce[s] new forms of designs that are transferable and useful' (Florida, 2003, p. 8). The virtuous cycle relies on the cities' ability to attract the international, cosmopolitan creative class by fostering a creative-friendly environment. From the onset, Florida's thesis has been criticized by several authors (Healy 2002, Peck 2005, Pratt 2008 to name a few). Eventually, Florida himself admitted that he had not predicted the negative effects of his proposal (2017) and that there were 'more losers than winners in America's new economic geography' and that 'on close inspection, talent clustering provides little in the way of trickle-down benefits (Florida 2013).'

However, his thesis still has some lasting structural effects on public policies and, more importantly, it has drawn attention to the economic contributions of so-called creative and cultural industries (CCI). Even though clusters may not be as beneficial to the society as a whole as initially proclaimed by Florida, Potts & Cunningham (2008) claim that CCIs may have two significant positive effects. First of all, the sector of CCIs may be a 'growth "driver"' (p.237) – i.e. 'it powers the growth of other sectors' (p.238) by 'introduc[ing] novel ideas into the economy that then percolate to other sectors' or by 'facilitat[ing] the adoption and retention of new ideas or technologies in other sectors' (p.237). The second positive effect of CCIs on the economy is based on the 'innovation model' where '[r]ather than thinking of the creative industries as an economic subset 'driving' growth in the whole economy (as in the previous model), the creative industries may not be well characterized as an industry *per se*, but rather as an element of the *innovation system* of the whole economy (p.238, emphasis in original)'. According to this model, the CCIs are a 'higher-order system that operates

on the economic system' (*ibidem*, emphasis in original). By 'originat[ing] and coordinat[ing] change in the knowledge base of the economy (...) (the creative industries) have crucial, not marginal, policy significance (*ibidem*).'

This research examines one of the aspects of the CCI which may exhibit both qualities: new media expertise. For the purpose of this research, we define new media art as the transformative use of computing technologies (transforming the technologies and transforming how we relate to the world) which explores the social, political and aesthetic affordances of these tools. Therefore, new media can be considered a 'higher-order system that operates *on* the economic system (Potts & Cunningham 2008, p.238)'. This research seeks to describe how new media expertise is developed, maintained and transferred into the general economy and the society at large, thereby 'facilitat[ing] the adoption and retention of new ideas or technologies in other sectors (Potts & Cunningham 2008, p.237)'.

To this end, we will 1) review the definitions of new media art, 2) review the postsecondary curriculums dedicated to new media art, 3) provide a working a definition of new media art in Hong Kong, 4) identify the modes of integration of new media expertise within the creative economy, 5) identify the factors of competitiveness of this integration, and 6) formulate policy recommendations.

Definitions:

The cultural economy is a broad category encompassing different activities. It has been defined as 'an economic system for the production, distribution and consumption of cultural goods and services through market as well as non-market mechanisms' (Anheier & Isar 2008, p.3³)

Cultural industries: Markusen et al. (2008) summarise Hesmondhalgh's definition of cultural industries – which borrows from Raymond Williams (1981, p.11) concept of 'signifying system'- as "the signifying system" through which a social order is communicated, reproduced, experienced, and explored. Cultural industries, then, are

³ Anheier, H.K. & Isar, Y.R. (2008), 'Introducing the Cultures and Globalization Series and the Cultural Economy', in Helmut K. Anheier and Yudhishtir R. Isa eds. *The Cultures and Globalization Series 2: The Cultural Economy*.

directly involved in the production of social meaning in the form of texts and symbols (Markusen et al. 2008, p.27)⁴.

Creative industries: Although the definition of creative industries tends to evolve, the Hong Kong Ideas Centre defines creative industries as ‘industries that deal with the creation, production and distribution of goods and services that use creativity and intellectual property as primary inputs (Hong Kong Ideas Centre 2009, p.24).’

⁴ Markusen, A., Wassall, G.H., DeNatale, D., & Cohen, R. (2008) ‘Defining the creative economy: industrial and occupational approaches’. *Economic Development Quarterly*, Vol.22, No.1, February. 24-45. DOI: 10.1177/0891242407311862

(3) Objectives of the study

This study aims to:

- To review the current definitions of new media arts expertise in the field of new media art theory
- to review the existing postsecondary curriculum dedicated to new media arts in Hong Kong
- to establish a working definition of new media art expertise in the context of Hong Kong creative economy
- to perform an ethnography of the integration of new media art expertise by new media art graduates in sectors of the creative economy in Hong Kong where the impact of this expertise is the most salient
- to identify the factors of competitiveness of the integration of a new media art expertise in those sectors of the creative economy
- to formulate policy recommendations to further enhance the competitiveness of the expertise in new media arts in those sectors

These objectives will be achieved by answering the following questions:

- What is a new media expertise and who defines it?
- What practices, technologies, approaches to technology are considered as new media arts
- In which contexts are these practices developed and actualized?
- What are the enablers and obstacles to the development of new media art expertise

(4) **Research methodology**

For the purpose of this research, we used a mix of methods intended in a complementary way: desk research, an online questionnaire, in-depth interviews, direct observation and roundtables organised along a series of workshops. While the desk research provided with contextual data, the online survey gave the basic structure of discussion for the interviews. The direct observation of new media arts-related events and places offered an immersive understanding of the ecology of new media arts in Hong Kong. Each method is used to shed different lights on the chapters below.

Desk research

The purpose of the desk research was three-fold: 1) to provide preliminary data on potential new media artists in Hong Kong, and to recruit potential respondents for an online survey; 2) to identify relevant curricula on new media arts; 3) to provide relevant contextual data (government policies, structures of support and so on. The desk research sought, first of all, to identify the people who consider themselves or are considered as new media artists by using keywords related to new media arts, such as ‘interactive’ ‘design’ ‘internet art’ etc. We researched artist profiles online (interviews, awards, works, websites) in order to identify the artists who, either considered themselves as a new media artist or are considered so by others.

The first target group for our research was composed:

- The jurors and winners of media arts competitions and awards (IFVA, ADC);
- Exhibitors at media art events (Microwave festival, ISEA 2016, and so on);
- Participants to other, non-recurrent media art events (group and solo exhibitions and performances...);
- Members of media art collectives and groupings (Writing Machine Collective...);

- Creative media art school alumni who received awards in art and technology related competitions.

The sample was extended to include artists who do not use the ‘new media art’ nor ‘media art’ categories to describe their art works but who referred to technologies or practices which may be related to new media art. Some databases were also screened for new media art-related practices (e.g. the Hong Kong Art Archive, maintained by the University of Hong Kong). The outcome of this search was a database of 150 Hong Kong artists⁵.

The desk research also sought to map out the existing curricula related to new media arts. In order to do so, we reviewed the curricula available in Hong Kong post-secondary institutions in order to identify new media art expertise trainings. We examined the curricula of the 8 UGC-funded universities - City University of Hong Kong, Hong Kong Baptist University, Lingnan University (LU), the Chinese University of Hong Kong (CUHK), the Education University of Hong Kong (EdUHK), the Hong Kong Polytechnic University (PolyU), the Hong Kong University of Science and Technology (HKUST), the University of Hong Kong (HKU) – the self-financed institutions - the Hang Seng University of Hong Kong, Hong Kong Shue Yan University, Caritas Institute of Higher Education, Centennial College, Chu Hai College of Higher Education, Gratia Christian College, HKCT Institute of Higher Education, Hong Kong Nang Yan College of Higher Education, Technological and Higher Education Institute of Hong Kong under the Vocational Training Council, The Open University of Hong Kong, and Tung Wah College – as well as the Home Affairs Bureau funded Hong Kong Academy for Performing Arts (HKAPA).

The desk research phase was also extended in order to keep track of recent policy developments on arts funding, creative industries. Several documents were quite instructive, including:

⁵ Including some who are currently living abroad. Obviously, this list cannot be exhaustive: each year, cohorts of would-be artists graduate from arts or creative schools. Furthermore, artist websites may not adjust to the changes in their subsequent practices. The way artists consider themselves may be changing as well, as they progressively learn to define themselves. Some of them may also decide to take a break or stop their art career altogether. One of our interviewees estimated that fewer than 30 artists were actually active (Interview with A8)

- The Hong Kong Special Administrative Region Government Budget Speech ‘Arts and Culture’: <https://www.budget.gov.hk/2018/eng/budget27.html>
- The Hong Kong Special Administrative Region Government ‘Briefing for Legislative Council’, March 1, 2018, <https://www.budget.gov.hk/2018/eng/pdf/2018-19%20Budget%20Presentation.pdf>
- Legislative Council Panel on Information Technology and Broadcasting, ‘Funding proposal for the CreateSmart Initiative’ For discussion on 8 January 2018, LC Paper No. CB(4)429/17-18(05), <https://www.legco.gov.hk/yr17-18/english/panels/itb/papers/itb20180108cb4-429-5-e.pdf>
- Legislative Council Panel on Information Technology and Broadcasting, ‘Report on the work of Create Hong Kong and Hong Kong Design Centre’ For discussion on 9 July 2018, LC Paper No. CB(4)1337/17-18(01), <https://www.legco.gov.hk/yr17-18/english/panels/itb/papers/itb20180709cb4-1337-1-e.pdf>
- Hong Kong Monthly Digest of Statistics, ‘The cultural and creative industries in Hong Kong: Feature article’ June 2018, <https://www.statistics.gov.hk/pub/B71806FA2018XXXXBo100.pdf>
- Legislative Council Panel on Information Technology and Broadcasting, ‘Updated Background brief on the work of Create Hong Kong and Hong Kong Design Centre’, 9 July 2018, LC Paper No. CB(4)1337/17-18, <https://www.legco.gov.hk/yr17-18/english/panels/itb/papers/itb20180709cb4-1337-2-e.pdf>

Online survey

We created a detailed questionnaire of 62 questions covering different aspects of new media artists’ living experiences: 1) training (past, ongoing, future; places of training; modes of enduring practices); 2) technologies (knowledge, use in artistic practice and beyond); 3) social networks; 4) incomes; 5) support; 6) cultural consumption practices and 7) places (of practice, training, exhibition and sales, of information, and support). The respondents were asked about their academic background, areas of practice, sources of inspiration and practice objectives, number of exhibitions and performances, places of art sales, grants received,

archive practices, place of practice, degree of insertion (and interest) in the 'milieu' (do they work alone? Who do they turn to when they have to deal with a problem? Who are their main references, mentors, collaborators in the 'milieu'? Do they attend other artists' events? etc.), their cultural practice, modes of socialization, modes of communication and information gathering, income sources and range, technical skills and their frequency of use in their artistic practice and daily jobs, as well as their perception of the evolution of the artistic context in Hong Kong (is it easier to receive grants, to find a studio, to exhibit their works etc.). Some questions were designed in an easily quantifiable way (place of training, income range, list of technical skills, their frequency of use and degree of expertise...) while others were left open for the respondents' interpretation and most accurate answer (mentors, most visited places...).

The purpose of the questionnaire was to draw up a profile of new media artists in Hong Kong and to understand how they embody a specific mode of integration of new media art expertise in the creative economy of Hong Kong. It was designed to provide ample information about the income-generating activities of new media artists, the use of their artistic abilities and technical knowledge in such activities. It also aimed to understand how these artists navigated their milieu as well as the obstacles they faced, and to map their social (the people they associate themselves with) and spatial trajectory (the different places of their practices, their job, their cultural activities...). As the number and forms of questions suggest, the survey was designed as a semi-qualitative survey, which also invited the respondents to write their thoughts on a certain number of issues. For example, even though we supplied a list of areas of practice generally understood as related to media art⁶, the respondents were also given the opportunity to add their own answers. This approach was chosen over a more rigid framework which may have forced the profiles into pre-determined grids, while still providing us with points of comparison and bases for generalization.

The survey was created with Qualtrics software. It was sent out to the list of 150 new media artists identified during the preliminary desk research, first via the Qualtrics website, then as an anonymous link by email, and via artists' personal

⁶ We used partly the categories supplied by the website <http://www.rchoetzlein.com/website/what-is-new-media-art/>

websites to the same list as well. An invitation was sent to the whole list of the alumni of the School of Creative Media (SCM), and finally via social media (Facebook) as a public announcement and also in private messages to individual artists from the list of 150 artists identified during the desk research. Reminders were subsequently sent out via Qualtrics and by email. The response rate through private messages via social media remained much higher, whereas the group message sent to alumni recorded a significantly lower response rate. This low rate was to be expected since our study was not about the work experience of the whole population of SCM alumni but focused on a fraction of this audience, i.e. those who identify themselves as new media art experts. Despite the length of the questionnaire, we were confident that those who felt the most involved would still want to have their concerns considered. The response rate was 38 fully or partially completed and validated surveys⁷. Although the number of artists who practice new media arts - notably because an artist's practice may not be consistent and uninterrupted- we can assume that the respondents are representative of the new media art community in Hong Kong: only one respondent specified that they did not consider themselves as a new media artist.

The questionnaire was then processed via the same software to sort out the commonalities and differences between artist profiles and experiences. The profiles of the questionnaire respondents are summarized below.

Profile of questionnaire participants:

Demographics: At the time of the reporting, 37 artists have filled out the online survey. The majority were male (58%), aged 20 to 40 years old (75%). Their graduation years ranged from 1985 to 2018, with a majority graduating after 2000.

Artistic activity: More than 70% of the respondents reported 10 years of activity or less, whereas 23.53% had more than 15 years of experience. 71% are solo art practitioners, and half of the respondents carry out their artistic practice at home.

Categories of practices: The respondents inscribed their practices in multiple areas, namely multimedia art (23), video art (19), filmmaking (19), mixed media (18), photography (16), interactive art (14), kinetic art (12), sculpture (11),

⁷ Of the 41 initial surveys, 2 survey were not filled out and 1 more was a duplicate (the respondent completed two surveys and left two email addresses with different domains). The number of responses also varied from one question to the next.

mechanically-driven art (11), directly interactive art (10), internet art (9), non-linear editing (9), algorithmic art (8), indirect interactive art (8), web design (8), graphic design (8), painting (8), drawing (8), sound art (4) etc.

Fig.1. Q7 - Please, tick the relevant art fields in which your own practice is currently situated or was previously situated (including art forms studied during your curriculum as long as it became part of your own practice)

#	Answer	%	Count
1	1. Drawing: Art using drawing tools (graphite, chalk, ink, pencil)	2.92%	8
2	2. Painting: Art using coloured pigments applied to a surface	2.92%	8
3	3. Sculpture: Art using a combination of physical materials in 3D space	4.01%	11
4	4. Printmaking: Art created by pressing ink onto a surface	0.36%	1
5	4.1. Relief Printing: Ink rests on the top of the surface (woodcut, wood engraving, linocut)	0.36%	1
6	4.2. Intaglio: Ink goes into grooves made in the surface (engraving, etching, mezzotint, aquatint)	0.00%	0
7	4.3. Planographic: Ink is selectively applied by treating the surface (lithography, monotyping)	0.00%	0
8	4.4. Stencil: Ink is pressed around pre-cut shapes (screen-printing, pochoir)	1.09%	3
9	5. Photograph: Art created using a photographic process	5.84%	16
10	6. Filmmaking: Art which to present a sequence of images	6.93%	19
11	6.1. Pre-Film: Special techniques for presenting temporal images	1.82%	5
12	6.2. Film Based: Filmmaking with a photographic process	2.92%	8
13	7. Video Art: Art using broadcasting, television or video as the medium	6.93%	19
14	8. Kinetic Art: Art driven by physical motion (closely related to Sculpture)	4.38%	12
15	8.1. Naturally-Driven Art: Kinetic art using natural forces (wind, air)	1.09%	3
16	8.2. Mechanically-Driven Art: Kinetic art using motors	4.01%	11
17	8.3. Puppetry: Kinetic art using human-interaction to create motion in objects	0.00%	0
18	8.4. Performance Art: Kinetic art using the human body as the medium	2.55%	7
19	9. Mixed Media: Art which uses a combination of traditional media together	6.57%	18

20	9.1. Graphic Design: Art using cut shapes, drawing and type to create visuals	2.92%	8
21	9.2. Photomontage: Combination of drawing and photography	0.73%	2
22	10. Multimedia Art: Art which uses digital versions of traditional media	8.39%	23
23	10.1. Non-Linear Editing: Art of filmmaking using digital video	3.28%	9
24	10.2. Digital Painting: Art of painting using digital tools (e.g. photoshop)	2.55%	7
25	10.3. Web Design: Art of graphic design using web page as canvas	2.92%	8
26	10.4. Interface Design: Art of graphic design to create software interfaces	1.82%	5
27	11. Computer Graphics: Art using computer modelling and rendering to create virtual scenes	1.46%	4
28	12. Interactive Art: Art involving human-interaction	5.11%	14
29	12.1. Indirect Interactive: Art in which cameras and detectors passively record human motion	2.92%	8
30	12.2. Directly Interactive: Art in which direct manipulation is required of the viewer	3.65%	10
31	13. Internet Art: Art using the internet, or web site, as medium	3.28%	9
32	14. Information Art: Art using databases and social or statistical information as a source.	1.82%	5
33	15. Algorithmic Art: Art using a mathematical formula or algorithm as the source of form or structure.	2.92%	8
34	16. Other(s) (please specify)	1.46%	4
	Total	100%	274
16. Other(s) (please specify) - Text			
Conceptual			
music and sound			
Sound Art			
Sound art and music			

Note: multiple answers were allowed for this question

In depth interviews and direct observation

Profiles of the interviewees:

At the time of writing this report, 21 semi-structured interviews lasting between 1 hour and two hours and thirty minutes long each were done with artists, educators and stakeholders in Hong Kong new media art scene. The interviews were conducted in English. As the table below shows, most of the participants had multiple activities, with varying combinations of artist/academic/cultural entrepreneur/business profiles. Only two of the interviewees participated in the questionnaire as well⁸. The interviewees included new media artists representing different generations of practice, different academic backgrounds, forms of practice, conceptions of new media art and different positions within the so-called ‘creative economy’ of Hong Kong. All the practicing artists interviewed have been recognised as representatives of their genres by their peers. All of the interviews were conducted face-to-face, and most of them were done *in situ*, which enabled us to directly observe the conditions of the interviewees’ practices.

The interviewees were asked about their artistic practice, their employment experiences, their use of creative technologies and solutions in a business setting, their achievements, objectives and aspiration, and their projects. The questions aimed at understanding in detail the pillars of new media art practices, their supporting ecology, as well as the conditions of a successful implementation of these creative practices in the creative economy of Hong Kong.

The interviews were transcribed in full – resulting in 500 pages (150,000 words) of transcriptions which constitute the foundation of our qualitative analysis. They were coded with the software ATLAS.ti, highlighting the following themes to be developed in this report.

⁸ Even though most of the questionnaires were accessed via the anonymous link we sent, the respondents had the option of leaving us their email for a follow-up on the research and 19 of them eventually did. We also checked for similarities between the anonymous questionnaires and the profiles of our interviewees but found no match.

One code was dedicated to the local definitions of new media art: Defining New Media Art – local

Some codes referred to regional or international experiences and comparisons mentioned by the interviewees: Art training – International; Canada; Japan; Perception of Mainland; Shenzhen.

Another category referred to training: Associate degrees; CUHK; EdUHK; HKBU; IVE; PolyU; SCM; STEM; Training comparison; Conceptions of ideal art training; Evolution of training.

Another group of codes is dedicated to the ecology: Art Basel; Art support – maecena; Art support – organizations and individuals; Competitions; Ecology; Exhibitions; Fo Tan; Foo Tak Building; Microwave; New art market; Sónar; Vibrant art scene; Videotage

A fifth category isolated the trajectories, practices, mentalities and projects of new media artists: Art collectives and collaborations; Art practices and multiple activities; Artist trajectories; Creative entrepreneurship; Experimental mentality; Maker spaces

A sixth category focused on the local environment, i.e. the business environment of creative companies as well as the arts-society relationship: Art and the society; Local Environment; Creative industries.

And finally, a category of codes were created for government-related issues: Art support – public funding; Recommendations.

The interviewees can be categorized as follows:

Table 1: Profile of interviewees

	Artist	Education	Art Support / cultural entrepreneur	Creative company
A1		x		
A2	x	x		
A3		x		

A4	x	x		
A5	x	x		
A6	x	x	x	
A7	x			x
A8		x	x	
A9			x	
A10	x	x		x
A11	x		x	
A12	x	x		x
A13	x			x
A14	x			x
A15	x	x		x
A16			x	
A17		x	x	
A18			x	
A19		x		x
A20	x	x		
A21	x	x	x	

Direct observation

In addition to in situ interviews, we also carried out direct observation of a host of new media arts events in 2017-2018 including but not limited to:

- IFVA festival (March 2017, 2018);
- Microwave Festival (October 2017, October-November 2018);
- Sónar Hong Kong (April 2017, with participation by Hong Kong collective XCEED, Hong Kong based artist Max Hattler, international artists such as Daito Manabe, including hands-on introductory workshops to computing

devices; March 2018 with exhibitions by Hong Kong creative company IOIO Creative, artists Pauline Yau, and a variety of technical new media-related workshops)

- events organised by selected galleries such as: Para Site (e.g. ‘From Whence the waves came’ exhibition by Law Yuk-Mui at Para Site in March 2018), Osage Gallery (‘Post-Industrial Landscapes 5.0: Urban Scan’ at Osage Gallery, co-organised by Architectural Association and the School of Creative media, City University of Hong Kong); Blindspot Gallery (‘Happily Ever After – a summer group exhibition of 10 art graduates in 2017, in July-August 2017; ‘Leung Chi Wo: Something There and Never Here’ in January 2018); Karin Weber Gallery (e.g. ‘The Other Story’ group exhibition curated by Ying Kwok in September-November 2018)
- Art Basel (2017 and 2018)
- Lumières Hong Kong public art festival (November 2017)
- The New Arts Power Festival presented by the Hong Kong Arts Development Council and funded by the Hong Kong Jockey Club Charities Club; the festival notably showcased works and performances as well as outreach programmes by respected Hong Kong media and sound artists such as Samson Young (December 2018) and Gaybird.
- ‘18 Scenes in a Cage’ Performance led by artist Gaybird, organised by the Hong Kong Visual Arts Centre (March 2018)
- events organised by the Floating Projects and the Writing Machine Collective (e.g. ‘Hidden Variables: forking paths of visuality and technology’ exhibition and artist guided tour by artist Hector Rodriguez at the Sheung Wan Civic Centre in September 2018);
- Public art and artist talks by new media artists: the ‘Augmented Reality Public Art Initiative – International Symposium on Augmented Reality Public Art and Public Lecture Theory and Practice of AR Art’ with Tamiko Thiel, Ellen Pau and Chris Cheung Hon-Him, co-presented by the Leisure and Cultural Services Department and the School of Humanities and Social Science of Hang Seng Management College in March 2018);
- Events organised by new media art schools such as: ‘Algorithmic Art: Shuffling Space and Time’, a multi-event symposium including talks, seminars, and exhibitions organised by the School of Creative media, City University of Hong

Kong in December 2018-January 2019; ‘Guest Lecture 2.0: Nature Becomes Media’ by artist Scott Hessels at CREATE! Information Space, Run Run Shaw Library; Tamas Waliczky’s ‘Cameras’ exhibition at the Run Run Shaw Creative Media Centre in February-March 2018; ‘Transient Inflections: A selection of works from the SCM Creative media Show 2017’; ‘On the Road: Young Media Artists in China’ exhibition at the Run Run Shaw Creative Media Centre in March-April 2018;

- ‘Cultural Masseur: Dragonix Multi-Arts Festival’ organised by the Hong Kong Arts Centre in June-July 2018, including a site-specific performance designed by Roy Szeto, Leo Cheung, XPLORE, Tony Ip and the participation of students of the Hong Kong Academy for Performing Arts and the City University of Hong Kong at the Run Run Shaw Creative Media Centre in July 2018.
- School graduation shows etc.
- Fotan Open Studios (January 2017 and 2018)
- Foo Tak Art X ACO Exhibition (April-May 2018)

Furthermore, we organised a series of workshops dedicated to new media art graduates over the summer of 2018. The workshops were punctuated by roundtables during which four international artists shared their practices and insights about new media. The themes explored during these workshops related to the use of new technologies for artistic practices for (Arduino, TouchDesigner and Roundabout Art; The Aesthetics of Learning Machines; Alternative technologies for the city; Motion capture). They were led by internationally-renowned artists (Alexis Mailles, Rodolfo Segrera aka fito_segrera, Gordan Savicic, and Andrew Crowe) and attended by students and alumni of the School of Creative media. Details about the roundtables can be found in Appendix 1.

The purpose of the direct observation was not only to grasp the practices of Hong Kong new media experts but also to identify the people and places composing the ecology of the new media art world⁹.

⁹ A preliminary comment from this direct observation is the diversity of events and outreach programmes aimed at publicizing the works and practices of new media artists: exhibitions, performances, artist talks, guided tours, school programmes, conferences, symposia, many of which are free of charge. They are testament to the willingness of artists to share their works and demystify new media arts for the general public as well as a testament of the interest of the public for these practices.

Limitations and challenges

Online survey: We expected to receive a higher response rate from the graduates of the School of Creative Media since it is generally understood that they account for a major portion of new media artists in Hong Kong. However, the sample of responses to the questionnaire might also be skewed toward an over-representation of this population owing to an easier access to these graduates for the researchers, despite our attempts to involve a more diverse population - we sent out the questionnaire to colleagues in other universities as well so that they could forward it to their students involved in new media arts.

The size of the sample for the online questionnaire might seem small for generalizations compared with other studies; however, when we combine them with the in-depth interviews, we are pretty confident that we managed to reach the majority of the most central/famous active artists and stakeholders in the new media art scene¹⁰.

On timing. In some respect, this study is timely. First of all, the new media arts sector is undergoing some changes: for example, the curriculum of Academy of Visual Arts is undergoing some changes, established actors such as Videotage are considering significant shifts in their activities, a new generation of media art stars is emerging and is connecting their artistic practice with their business endeavours as well as a social mission. On the government side, a new policy in favour of young artists was announced while a new funding for the CreateSmart Initiative (CSI) was approved early 2018.

In other respects, one might say that it is too soon to assess the effects of the some supporting programmes. New media art is still considered as a rather opaque art form and not a mass entertainment. According to a survey on arts participation and consumption, the 'Film and Media Arts' category was ranked 8th out of 11 art and culture forms in terms of attendance, with 71.5% of non-participants declaring that they were uninterested (Consumer Search Hong Kong Ltd. 2018, p.13). Particularly, among the 'mature segment', it was believed that 'Film and Media Arts' activities were

¹⁰ The data from the questionnaire were retrieved on July 8th, 2018 but the questionnaire is still open and, at the time of reporting, a few more completed questionnaires have been recorded.

for young people (75.4%) and that these art forms were ‘too abstract and too difficult to comprehend’ (53.9%) (p.24). Attitudes are changing, notably because more and more school children are taught about technologies associated with media arts for example through STEM education; these learning experiences may be either active or passive (for example by attending new media exhibition tours during Microwave or IFVA festivals or at galleries such as Osage, Empty Gallery).

(5) Research results/findings

Objective 1: to review the current definitions of new media art

New media art

Locating new media arts: A plurality of practices anchored in arts, technologies, sciences, and aiming to transform how we relate to the world (economy, politics, media)

Oliver Grau considers new media art as ‘*a comprehensive term that encompasses art forms that are either produced, modified, and transmitted by means of new media/digital technologies or, in a broader sense, make use of “new” and emerging technologies that originate from a scientific, military, or industrial context (Grau 2016).*’ Manovich insists on the processes of convergence which characterize the emergence of ‘new’ technologies. He locates the emergence of ‘*new media*’ at the ‘*convergence of two separate historical trajectories: computing and media technologies*’, which results in ‘*the translation of all existing media into numerical data accessible through computers (Manovich 2001, p.20)*’. Manovich’s definition underlines the central role of computation in new media art.

New media arts can lead to commercial applications and industrial innovation (Fourmentraux 2012). One of the differences between arts and its application in the creative and cultural industries resides in the degree of control exercised by the artist (Donovan et al., 2006). More generally, the uses of a ‘new media expertise’ to the creative and cultural industries requires a shift in the perspectives of these industries: ‘*As we become a knowledge economy, we will all recognise that people are our competitive edge - artists can be the key to innovation and creativity in industry and science because of their ability to ‘see’ things differently. It is this ability to think beyond the square that has provided the competitive edge so evident in many of our successful knowledge companies today, and is the source of continuing advantage of the future*’ (Toohey, 1999, p. 4-5).

An intrinsically hybrid practice, new media arts include a variety of practices such as interactive installation, telorobotics and virtual reality internet art (Hope & Ryan,

2014). New media art can be associated with other artistic practices, such as visual arts, performance art (Salter, 2010). They are situated at the intersection of:

- the art system with the figure of the technological artist,
 - the scientific and industrial research with the figure of the scientist-artists
 - and political-cultural media activism with the figure of the activist-artists
- (Catricalà 2015, Bolognini, 2008)

Tribe et al. (2006) emphasise the transformative potentialities of ‘new’ technologies in the cultural and political spheres by defining new media art as *‘projects that make use of emerging media technologies and are concerned with the cultural, political and aesthetic possibilities of these tools’* (Tribe et al., 2006, p.6). Shanken (2016) extends this idea by attributing to new media a higher-order structuring effect on the ‘modes of knowledge production, perception, and interaction’. For Shanken *‘New media not only offers expanded possibilities for art, but also valuable insights into the aesthetic applications and social implications of science and technology. At its best, it does so in a meta-critical way. In other words, it deploys technology in a manner that self-reflexively demonstrates how new media is deeply imbricated in modes of knowledge production, perception, and interaction, and is thus inextricable from corresponding epistemological and ontological transformations’* (pp.463-464).

By questioning technology, its rationality, as well as its value for the society¹¹, a new media artist can be considered as a ‘critical engineer’ (J. Oliver, G. Savicic, D. Vasiliev, 2011) who adopts a political and reflexive approach to technologies: *‘the characteristics of new media art do not simply show the function of technology, but also critique and creatively explore those functions as meaning-making systems within human systems of communication.’* (Liao, 2008, p. 87).

Key concepts of new media arts

The definitions of new media arts often depend on who defines them (curators, artists or scholars). Contrary to curator Susan Morris (2001) who attributes several characteristics to new media arts– *‘fluidity, intangibility, “liveness”, variability,*

¹¹ See the classical paper of Snow (1993) and the work of Born and Barry (Born & Barry, 2010) for a study of the art-science relation in the field of new media arts

replicability, connectivity, interactivity, computability, and chance (Morris 2001, p.9)', - the new media theorist Lev Manovich points out that most of these characteristics are not exclusive to new media. Instead, he claims that new media's defining principles can be summed up in five categories: '*numerical representation, modularity, automation, variability, and cultural transcoding* (Manovich 2001, p.20)'. According to him, the key to understanding new media lies in its programmability rather than in its use for distribution and display. In contrast, Steve Dietz argues that the distinctive features of new medium are interactivity, connectivity and computability (Dietz 1999).

Tribe et al. (op.cit.) assert that '*New Media art is not defined by the technologies (...); on the contrary, by deploying these technologies for critical and experimental purposes, New Media artists redefine them as art media* (Tribe et al. op.cit., p.7)'. This is consistent with the general conception that the use of new media does not equate with new media art. For the same reason, new media art differs from digital art. Furthermore, as Goebel notes, '*new media*' cannot be reduced to 'digital technology' for two reasons: '*One is, that analog electrical technology did change the paradigm of time-based art already a long time ago - and the introduction of formal and technical parameters implemented with electricity into the arts (gates, on-off, chaotic behavior, feedback, projection of images, loudspeakers etc.) is the basis for all digital technology and has had similar revolutionary consequences for the arts as digital technology during the past 50 years. And the second reason is that all digital signals have to be converted to analog signals before our senses/we can perceive them - we cannot create sense without this conversion* (Goebel quoted in Graham 2005)¹²'.

From Media Arts to New Media Arts

For Tribe et al. (2006), new media art combines practices which are associated with art and technology, on the one hand (i.e., involving computers, electronics, robotics, bio art, up and coming technologies which are not related to media), and media art, on the other hand (i.e. practices involving media *stricto sensu*: television, video and satellite art, experimental films, as well as other forms of art involving technologies

¹² Graham, B. (2005). Taxonomies of New Media Art – Real World Namings. *Museums and the Web*. Online: <https://www.museumsandtheweb.com/mw2005/papers/graham/graham.html>

which can no longer be considered as new). They emphasise the affiliation of new media arts to 20th Century avant-garde and experimental artistic movements and their technics, such as Dadaism, pop art, conceptualism or video art. They suggest the following typology:

New media arts	
Art and technology	Media art
Computer, electronics, robotic, genomic and biological art Up and coming technologies Not media related	Television, video and satellite art, experimental films and other forms of art that make use of technologies that were no longer considered as new or emerging by the 1990s
New media arts: Art and technology+ Media art	
New media art uses: The internet, social media, video and computer gaming, surveillance systems, mobile telephony, wearable technology and GPS (Global Positioning Systems) devices	

Donovan et al (2006) prefer to use the term ‘Media arts’ as a global term ‘encompass[ing] *participatory and location-based work, screen- based art, sound art, networked media, projection work, mobile or portable work, software and database generated art, artificial intelligence, wearable computing, bio-art, nanotech, robotics, interactive and immersive environments, art/science and technology practices, and augmented, mixed and virtual realities. It can inhabit traditional presenting spaces such as theatres, museums and galleries, but also non-institutional spaces ranging from online environments and networks to public spaces and remote communities*’ (Donovan, Miller, & Lally, 2006, p. 9). Linda Lai adds that ‘media art’ ‘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 (Lai 2008, p.144).’ However, not all artistic mediums produce ‘media art’: quoting Hector Rodriguez, Linda Lai emphasises that ‘media art’ ‘*applies only to those in which the mediation process has become*

significantly enigmatic, or “black-boxed”, that it re-defines the status of art, creative strategizing, aesthetic standards and modes of audience participation, which arguably began with photography (Lai 2008, p.147).’

As a subcategory of media art, new media art emphasises the use of computing media and their effects on the artworks produced. For Linda Lai, the term ‘new media art’ implies *‘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’* (Lai 2008, p.145). This view is shared by Christiane Paul who states that, despite the variety of genres in new media art, ‘A lowest common denominator for defining new media art seems to be that it is computational and based on algorithms’ (Christiane Paul 2008 (New Media in the White Cube and beyond, p.3). According to its proponents, new media art refers to ‘those media art works that explore the computer as an artistic medium’ (Lai 2008, p.149) and not just as tool for art-making. The presence of a computing device is central to new media art: it enforces *‘new modes of rationality and problem solving’*, ‘digitization’ offers *‘a new species of raw material for artistic manipulation’* and stretches the artist’s imagination towards new, *‘virtual worlds and new connectivity’* (ibidem). The features of the computer (‘mediation, convergence, modularity, digitality and so on’) bring about a ‘new world’, ‘breaking 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’ (Lai 2008, p.151).

Far from being a mere digitalization of existing practices, new media expertise covers a wide range of hybrid creative practices where computer technologies are at the core of the creative process instead of being simply a tool: *‘One of the basic but crucial distinctions made here is that between art that uses digital technologies as a tool for the creation of traditional art objects – such as photograph, print, culture or music – and art that employs these technologies as its very own medium, being produced, stored, and presented exclusively in the digital format and making use of its interactive or participatory features’* (Paul, 2004, p. 8).

According to Lister et al. (2009), *‘the term ‘new media’ emerged to capture a sense that quite rapidly from the late 1980s on, the world of media and communications began to look quite different and this difference was not restricted to any one sector or element of that world (...) (p.10)’*. They claim that ‘new media’ embodies: ‘new

textual experiences', 'new ways of representing the world', 'new relationships between subjects (users and consumers) and media technologies', 'new experiences of the relationship between embodiment, identity and community', 'new conceptions of the biological body's relationship to technological media' and 'new patterns of organisation and production (pp.12-13)'. For Oliver Grau, the 'new' is meant to stress the *'difference – or différance- with art practices that make use of traditional, in other words, “old”, visual media* (Grau 2016)'.

The limits of the new

The term 'new' has exposed the art it describes to criticisms, to such extent that new media art has more often been subsumed in the more encompassing category of 'media arts' or broken down into more consensual categories (algorithmic art, VR/AR, sound art, computer animation, bio-art etc.). Bassett (2015) explains that the term 'new media' has been rejected 'because it implies an outworn concentration on novelty (the new) at the expense of the embedded and increasingly heterogeneous operations of media technologies of all kinds, embedded in, and continuous with, many other things (Bassett 2015, p.136). Media archaeologists have demonstrated that 'new' media art can be traced back, at least to the 1950s (depending on the authors): as Wendy Chun wrote, *'although the term “new media” has been used since the 1960s, it rose (and arguably fell) with dotcom mania, cyberspace, and interactive television* (Chun 2006, p.1)'. Chun emphasises the political and commercial instrumentalization of the term; she asserts that the 'newness' attributed to new media has more to do with political and commercial propaganda which reframed existing technologies (Chun 2006, p.3). Quaranta claims that new media art is more accurately defined by the milieu legitimizing and sustaining it than by a fixed set of practices.

Furthermore, the term 'new' already dooms the genre, since newness is time-bound, as what was once new will eventually become part of the tradition: some authors claim that the mainstream use of media erases the relevance of a 'new' media art category while others deny the disruptive effects of computational process. Andersen & Pold advocate a shift from 'new media' to 'new aesthetics', stressing that: *'What is new today is definitely not the affordance of computational processes and computer interfaces. In fact, such phenomena no longer seem to induce any disruption at all,*

and even their conformity does not seem to be new (Andersen & Pold 2015, pp.274-275)’.

In practice, after a boom in scholarly interest in the 1990s, the use of term ‘new media art’ has waned substantially since the 2000s. The ‘new media’ fall from grace was acknowledged, for example, by Sarah Cook and Steve Dietz who curated an exhibition named ‘The Art Formerly Known As New Media’ in 2005. More than a rejection of the term, however, the exhibition sought to challenge the medium-centric reading of new media artworks and emphasise the meanings inscribed in them, to shift the focus onto the contents and meanings of the artworks instead of prolonging the debate on the newness of the medium. However, the proposed alternatives (algorithmic art...) have not gained the same traction beyond the art world yet, especially in its interaction with the public or with funding organizations. Just as Quaranta (2013) has argued that the new media art is what its art world defines as such, therefore acknowledging the structuring effects of the term, what matters in this public policy report is to describe the different instantiations of new media art in context of Hong Kong.

This research is dedicated to the development of a new media expertise in the creative economy of Hong Kong: how this expertise is created, how it is maintained, how it is transferred from the artistic scene to the creative economy.

Conclusion

New media art is generally understood to define a plurality of practices anchored in arts, technologies, sciences, and aiming to transform how we relate to the world (economy, politics, media). In practice, the use of the term has waned these past few years, following heated debates about its relevance and the agenda underlying its promotion. However, it remains relevant because it refers to specific practices involving the use of computing devices and because it has had a structuring effect on the art world and in government support policies for the arts and education sectors.

Objective 2: to review the existing postsecondary new media art curriculum in Hong Kong

This chapter is organized as follows: we will first review the findings from the desk research on the curricula associated with new media. Then we will outline the responses from the online survey to identify the academic trajectories of the respondents; these will be complemented with some results from the research which preceded the mailing of the survey. We will conclude the chapter with the findings from interviews, which highlight the interviewees' perceptions of the training on new media arts in Hong Kong.

Caveat

Attempting to map the academic curriculum related to new media art expertise is fraught with problems. As the catalogue of courses related to creative industries published by the Working Family and Student Financial Assistance agency (WDSFAA) shows, programs are constantly evolving, course lists are regularly updated¹³, for instance to reflect new issues in practices of new media. Some programs are discontinued altogether. Therefore, any tentative mapping of the curriculum related to new media art expertise can only be temporary.

The findings below are a snapshot of the curricula at this point in space and time. Two limitations arise: first of all, they do not account for the evolution of the training in time. One aspect deserving a more fine-grained analysis is the evolution of the curriculum over the years. The interviews enabled us to understand the singularity of each artist's trajectory, and how this singularity was also determined by the curriculum and resources available at the time of their studies. Similarly, the research does not dwell upon the evolution of specialized staff in these institutions, evolution which influences the shape of curricula.

Secondly, our study does not provide information about the circulations between UGC-funded universities. We failed to identify the students who took advantage of the possibility for students enrolled in a UGC-funded program to take courses in another

¹³ Working Family and Student Financial Assistance agency (WDSFAA): https://www.wfsfaa.gov.hk/cef/download/CREATIVE_INDUSTRIES.pdf

UGC-funded university. In practice, this means that when the participants of the questionnaire replied that they learned a certain technology at the university, they could not clarify if this university was different from the one they were enrolled in. This practice breaks down a little bit the clear distinctions between universities.

New Media arts curriculums: Findings from desk research

We carried out a desk research on the curricula available in Hong Kong post-secondary institutions in order to identify new media art expertise trainings. We examined the curricula of the 8 UGC-funded universities - City University of Hong Kong, Hong Kong Baptist University, Lingnan University (LU), the Chinese University of Hong Kong (CUHK), the Education University of Hong Kong (EdUHK), the Hong Kong Polytechnic University (PolyU), the Hong Kong University of Science and Technology (HKUST), the University of Hong Kong (HKU) – the self-financed institutions - the Hang Seng University of Hong Kong, Hong Kong Shue Yan University, Caritas Institute of Higher Education, Centennial College, Chu Hai College of Higher Education, Gratia Christian College, HKCT Institute of Higher Education, Hong Kong Nang Yan College of Higher Education, Technological and Higher Education Institute of Hong Kong under the Vocational Training Council, The Open University of Hong Kong, and Tung Wah College – as well as the Home Affairs Bureau funded Hong Kong Academy for Performing Arts (HKAPA).

General findings from desk research

Historically, the Digital Graphic Communication stream by the Hong Kong Baptist University created in 1994 was the first curriculum dedicated to new media arts. Since then, the number of academic programs catering to the use of technologies for design and artistic purposes has ballooned. However, the programs which correspond to a strict definition of new media expertise are rare. In fact, the only degree which both identifies itself as a ‘new media’ curriculum and clearly spells out a definition of new media consistent with the aforementioned definition is the Bachelor of Arts and Science in New Media, of the School of Creative Media (SCM, CityU): ‘First of all, “new media” is defined to include any practice that uses computation and/or electronics, such as for instance software/generative art, robotic art, or physical computing. In this

context, “new media” is distinguished from “creative media” insofar as the latter involves the use of pre-existing digital tools such as software packages), whereas new media involves the creation of one’s own resources. (...) The second aspect of new media art emphasises a strong transdisciplinarity. It is not restricted to the two disciplines of Creative Media and Computer Science. Instead, the BAS draws on a variety of fields, including biology, chemistry, physics, mathematics, computer sciences, robotics, humanities, and social science.¹⁴ This degree caters to students who are equally interested in experimentations of practices at the intersection of Arts, technologies and science, whereas the other two undergraduate degrees offered at SCM stress either the artistic dimensions of creative media (B.A. Creative Media) or the computer scientific aspect thereof (B.Sc. Creative Media).

There are several lines of distinction between the programs which may contribute or consider themselves as contributing to the development of new media expertise.

- **General education – vocational training:**

Generally speaking, UGC-funded offer a full range of undergraduate and postgraduate degrees: e.g. the School of Creative Media offers 3 undergraduate programs with their specific mix of arts-technology courses, i.e. a Bachelor of Arts in Creative Media (BACM), a Bachelor of Science in Creative Media (BScCM), and a Bachelor of Arts and Science in New media (BASNM), 3 Master’s degrees, i.e. Master of Arts Creative Media (MACM), Master of Fine Arts in Creative Media (MFACM), and a Master of Philosophy in Creative Media (MPhil), and a PhD program. These university programs are also comprehensive since they combine theoretical, conceptual and critical courses along with hands-on, practical courses. The course lists of the undergraduate programs at the SCM, for example, detail a large variety of choices: critical theory & practices (hacktivism and tactical media; micro-narratives; relational aesthetics and participatory media; culture society and new technologies... In other universities, even though the expression ‘new media’ is rarely used, several schools provide some training which either might be useful

¹⁴ School of Creative Media, *Bachelor of Arts and Science Curriculum*, Online: [http://www.scm.cityu.edu.hk/uploads/resources/article/141_CIR%20for%20BAS%20\(2018%20&%20thereafter\)_Nov%202018.pdf](http://www.scm.cityu.edu.hk/uploads/resources/article/141_CIR%20for%20BAS%20(2018%20&%20thereafter)_Nov%202018.pdf)

in producing new media arts, or are tailored to the practices of a broader conception of ‘media arts’ or ‘creative media’. The PolyU School of Design, for example, offers several programs focusing on the design of media user experience: top-up degrees in Digital Media and Interactive Media, Master of Science in Multimedia & Entertainment Technology, Master of Design in Interaction Design. The Hong Kong Baptist University Academy of Visual Arts (AVA) undergraduate and post-graduate programs in Visual Arts also offer a concentration in ‘Studio & Media Arts’ including courses such as installation art, interactive art etc. Among the institutions which are member of the Vocational Training Council, the Technological and Higher Education Institute of Hong Kong (THEi) also delivers a 4-year B.Sc. in Multimedia Technology and Innovation. In the vocational training network, the majority diplomas which are related to ‘new media’ are 2-year or 1-year programs focusing on technical skills. The Hong Kong Design Institute (HKDI) proposes some short programs on specific technologies, such as the Professional Diploma in Creative Media Illustration with courses such as 3ds Max / V-Ray; Aerial Shooting, Ableton Live, Pro Tools, and Design thinking. The HKDI also awards a Professional Certificate in New Media Illustration which offers 90 hours of courses in motion graphics storytelling, 2D and 3D motion graphics design, visualisation media and so on.

- **Arts – Technology spectrum:**

The initial mission of a particular school informs its definition of ‘new media’. Art degrees which incorporate new technologies may contribute to the diversity of media expertise. Even though the CUHK Department of Fine Arts is better known for its classical arts education, it provides a strong conceptual training suitable for all ranges of media. At the opposite end of an ‘arts-technology’ spectrum, the graduates of the Polytechnic University’s School of Design and the Hong Kong University of Science and Technology benefit from a curriculum devised to hone technical skills. The City University of Hong Kong School of Creative Media and the Hong Kong Baptist University Academy of Visual Arts are broadly situated more or less in the middle of the spectrum. It is important to distinguish between the three undergraduate degrees offered by SCM: The Bachelor of Arts in Creative Media (BACM) would probably be located closer to the arts mid-spectrum, while

the Bachelor of Science in Creative Media would edge closer to the technology end of the spectrum, with the Bachelor of Art and Science in New Media standing at the exact intersection between arts, technology and science. An analysis of the list of IFVA winners shows that a preponderance of graduates from the School of Creative Media Bachelor of Arts in Creative Media.

- **New media art – creative industry spectrum:**

There has been a substantial increase in educational programs associated with creative industries these past ten years¹⁵. Even though some of them may explicitly mention ‘media arts’ or ‘new media’, a survey of their programs suggests different orientations on a ‘new media art – creative industries’ spectrum, between the innovative uses of technology for artistic and experimental purposes and the application of the prescribed uses for commercial purposes (without transforming the technology). For example, the PolyU School of Professional Education and Executive Development (SPEED) BA (Honours) in Applied and Media Arts, which aims at providing ‘a creative, experimental and interdisciplinary study of applied and media arts’, offers more marketing-oriented courses (e.g. Business Communication in Chinese, Consumer Behaviour; Information Graphic, Branding Design...) than experimental media arts *per se*. *A contrario*, the B.Sc. in Digital Entertainment delivered by the Caritas Institute of Higher Education seems to put a strong emphasis on creative programming and not only on ‘entertainment’. It offers a variety of courses including: Creative Design, Data Structures & Algorithms; Creative Coding; Interfacing the Perceptual World; and Ubiquitous Computing. Furthermore, the notion of ‘new media’ can assume a very different meaning from ‘new media art’ owing to the mission of the department: for example, the Master of Science in New Media offered by the School of Journalism and Communication of the Chinese University of Hong Kong understands new media as ‘computer-mediated communication’¹⁶. In this case, ‘new media’ refers to the use of new technologies of communication. On a new media art – creative industry spectrum, it is definitely situated closer to the latter, as its objectives show: ‘The

¹⁵ Working Family and Student Financial Assistance agency (WDSFAA): https://www.wfsfaa.gov.hk/cef/download/CREATIVE_INDUSTRIES.pdf

¹⁶ Chinese University of Hong Kong, School of Journalism and Communication, ‘Master of Science in New Media’. http://pg.com.cuhk.edu.hk/pgp_nm/

curriculum gives students an overview of new media from an entrepreneurial management perspective with emphasis on the business and management aspects of the technology as well as the conception, design and development of multimedia applications and content (*ibidem*). The Hong Kong University SPACE Community College's Higher Diploma in New Media and Communication shares the same focus. The Hong Kong Baptist University School of Communication offers a concentration in 'Animation and Media Arts' as part of the 'Film' major; it focuses on theoretical training, and collaborates with the HKBU Academy of Film to provide a content-production B.A. in Creative writing for Film, Television and New Media.

- **'Cores and Electives' structure:**

The 'core-elective' structure offers some flexibility for students to specialize in their areas of interest. For example, for the Hong Kong Baptist University Academy of Visual Arts (AVA) Bachelor of Art in Visual Arts (BAVA), the students can choose a concentration in 'Studio & Media Arts' to study Installation Art, Sound, Media art etc. For other programs, however, the electives are the degree: for example, the Savannah College of Art and Design (SCAD) offers quite a large number of degrees identified by the electives the students take on top of their core curriculum such as: Bachelor of Fine Arts (BFA) programs in Animation, in Interactive Design and Game Development, in UX Design, in Visual Effects, in Graphic Design, an MA in Interactive Design and Game Development, a MFA in Design and Game and an MFA in Graphic Design and Visual Experience.

- **Articulation between associate degrees/higher degrees and Bachelor degrees:**

While higher diplomas have existed for 40 years, associate degrees were created in 2000 in order to increase the opportunities for higher education in Hong Kong¹⁷. If higher diplomas are expected to be stand-alone vocational diplomas, associate degrees are intended to provide a more general education which would enable students to apply for a year-3 enrolment in a Bachelor's Degree. UGC-funded and self-financing institutions also started offering top-up degrees to

¹⁷ Task Force on Review of Self-financing Post-secondary Education (2018) 'Consultation Document', June

accommodate these sub-degree students: e.g. the PolyU School of Design offers three top-up degrees in Digital Media, Interactive Media and Social Design. Some sub-degree courses seem to be articulated mostly with in-house Bachelor degrees: the higher diploma in Fine Art offered by the Hong Kong Art School (HKAS) is articulated with the HKAS BA in Fine Art, while the Higher Diploma in Creative Culture and Media Practice of the Open University of Hong Kong (OUHK) Li Ka Shing Institute of Professional and Continuing Education (LiPACE) is articulated with the OUHK's B.A. in Creative Writing and Film Arts and B.F.A in Cinematic Design and Photographic Digital Art. In contrast, most of the associate degrees issued by UGC-funded institutions allow for an articulation with UGC-funded Bachelor degrees. The subvented higher diplomas offered by the Hong Kong Design Institute also belong to this category.

- **Sound studies:**

Sound arts occupy a special place among new media arts practices. The institutions which devote a whole curriculum to music usually include aspects of electronic music and music technology. The Hong Kong Academy for Performing Arts' music curriculum offers a special stream for composition and electronic music and a Master of Music. The Department of Music of the Chinese University of Hong Kong provides courses in music information technology and electronic music in its BA in Music. The Education University of Hong Kong delivers a BA (Honours) in Creative Arts and Culture with a specialization in Music.

The undergraduate programs of several universities also teach courses on sound: e.g. 'Sound – the Basics' at HKBU AVA, 'Sound Design' and 'Sound Design and Technology' at PolyU School of Design. The syllabi of the School of Creative Media list several sound courses including: digital sound and computer music, audio recording arts; sound design for cinema; sonic arts & the history of sounds and noise; live sound production; and sound spatialization.

A few higher diplomas are specialised on music and sound: the Hong Kong Design Institute's Higher Diploma in Digital Music and Media is presented as 'a unique programme in Hong Kong that integrates education and training in both music production and audio technology for media production', which, 'aims to develop a new breed of music, sound and audio talents; designers; and production specialists

who can work across different media and entertainment industry sectors'¹⁸. The Open University of Hong Kong Li Ka Shing Institute of Professional and Continuing Education delivers a Higher Diploma in Popular Music and Music Production, which includes courses such as computer music and sonic art, and applied music technology and composition.

It is important to apprehend each curriculum within the general context of the department or school: the available staff and their background (is the new media art curriculum isolated from the other programmes provided at the school? Are there any interactions or possible synergies between the programmes?), the general orientation of the department (art, design, computer science...), the teaching philosophy (experimentation, conceptual focus...).

- **Non-academic training:**

Most of the artist-run entities (creative companies, maker spaces, incubators...) offer different practical classes teaching some aspects of new media art skills for either artists or the general public. These usually take the form of hands-on workshops on specific technologies (Arduino, TouchDesigner etc.). Lab by Dimension Plus, Dim Sum Labs, MakerBay Foundation, XPLORE, Videotage to name a few, are some of entities committed to this vision of training the general public. Some of them are also actively engaged in providing vocational training for artists through residency and exchange programmes (e.g. *Fuse* is a media-art residency programme offered by Videotage bringing together foreign and local artists, researchers and curators¹⁹). Contemporary Musiking, a non-profit organisation created by artist Samson Young and supported by the HKADC, offers a range of educational programmes: it has started organising a sound art summer school for high school students, professional development workshops for artists, as well as an exchange programme.

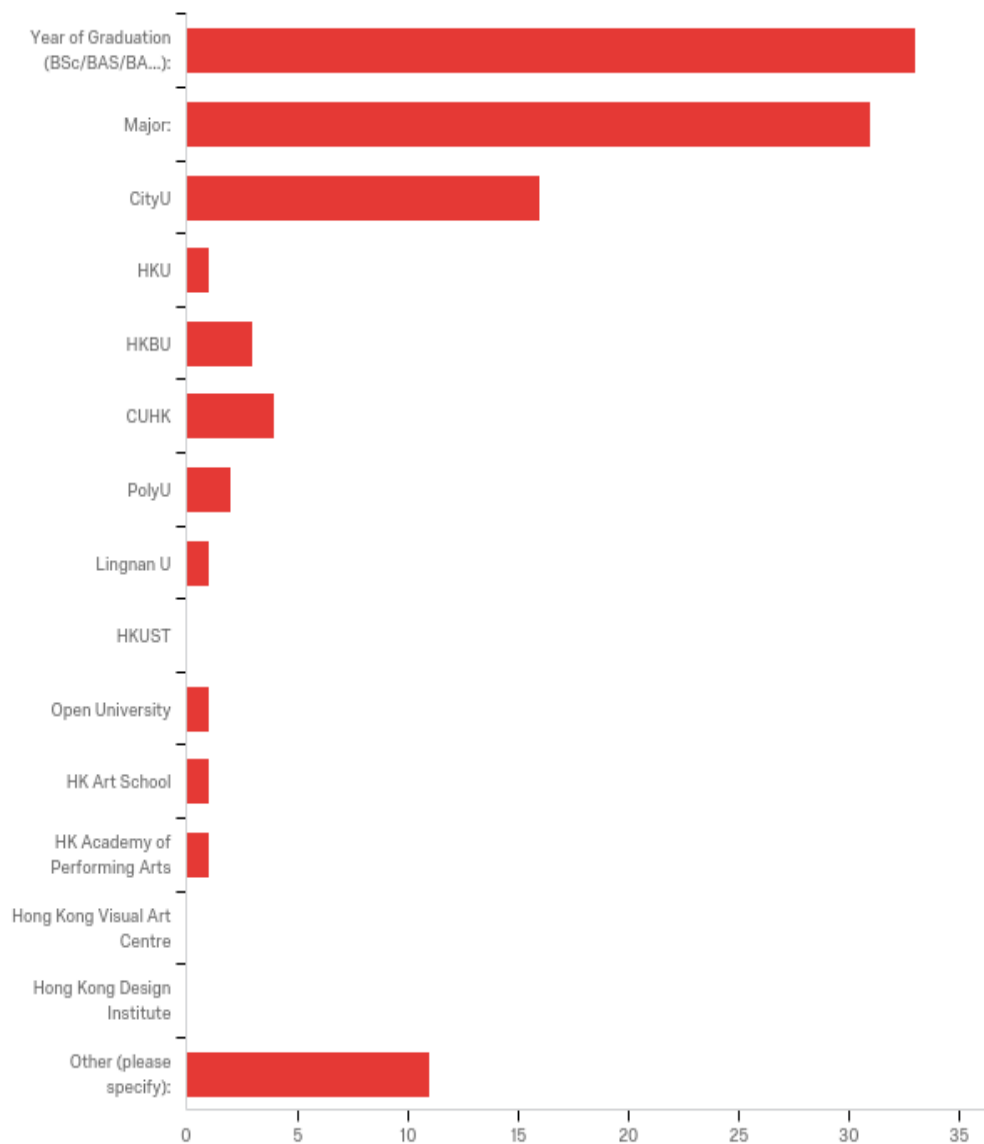
¹⁸ Hong Kong Design Institute
http://www.hkdi.edu.hk/en/programmes/programme.php?programmes_id=28

¹⁹ <https://videotage.wixsite.com/fuseresidencyprogram>

A total of 36 respondents answered to the question regarding their undergraduate backgrounds. Half of the local graduates graduated from the City University of Hong Kong (16)²⁰. Ten other respondents graduated from other local universities: the Chinese University of Hong Kong (4), the Hong Kong Baptist University (3) the Hong Kong Polytechnic University (2), the University of Hong Kong (1), Lingnan University (1), the Open University of Hong Kong (1), the Hong Kong Art School (1) and the Hong Kong Academy for Performing arts (1). Two graduates from City University and two graduates from the Hong Kong Baptist University also reported having an undergraduate degree from foreign universities. Finally, six respondents graduated from foreign universities. Their areas of undergraduate study included: creative media, digital media, computer science, information systems, cinema, visual arts and music composition.

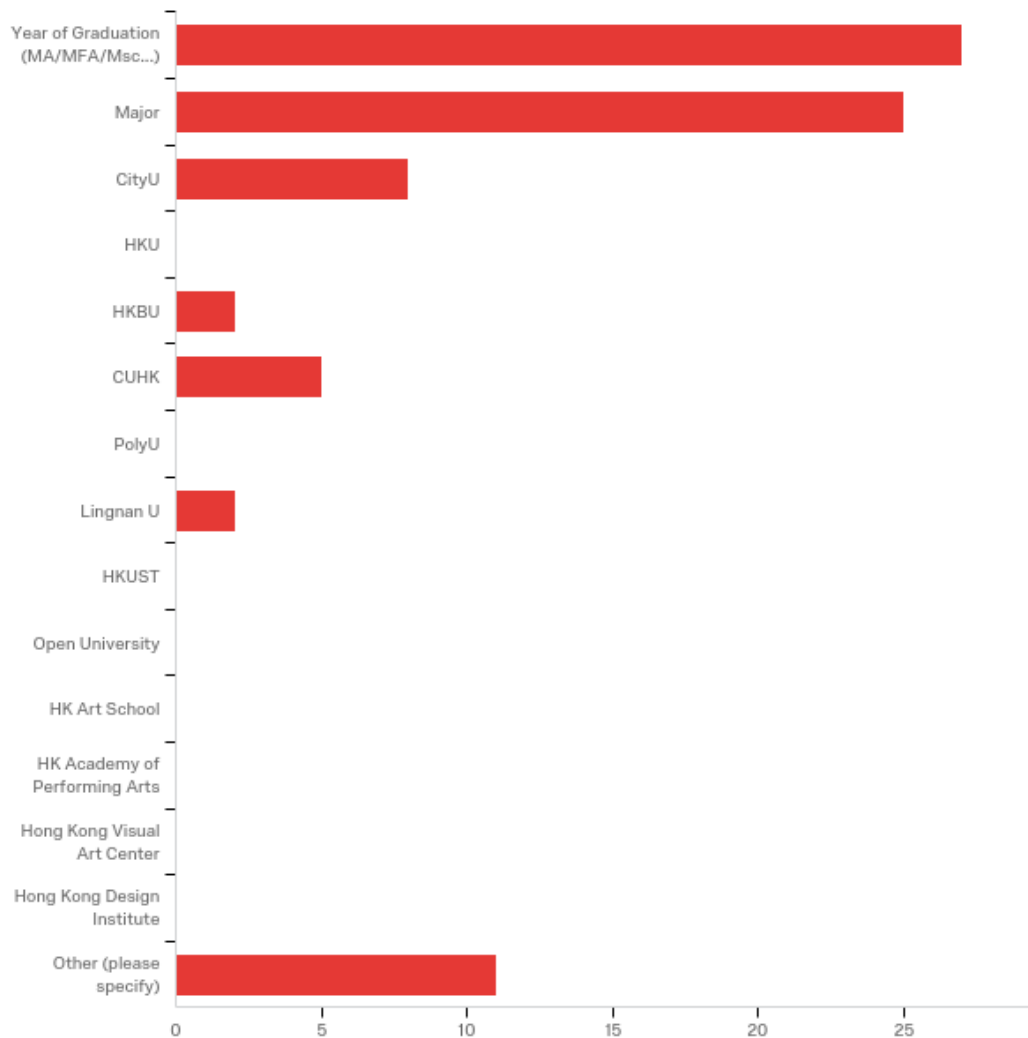
²⁰ Of the 150 names listed in our preliminary research table, 40 had a degree from the School of Creative Media (Bachelor, Master or PhD), 11 had studied at Chinese University.

Fig.2. Q1 - Bachelor's degree training (multiple choices possible)



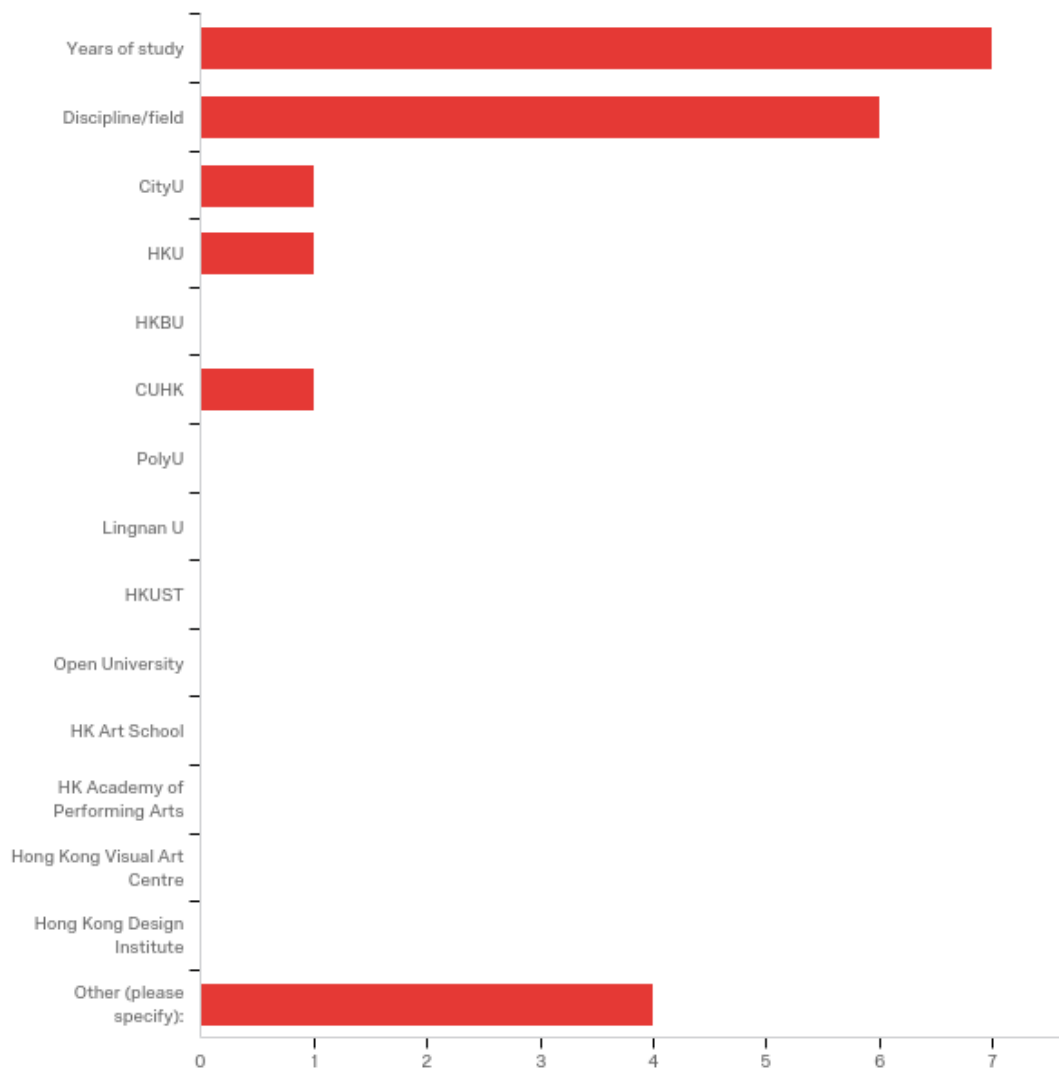
Fewer respondents (28) held a Master level degree, mainly from CityU (8), CUHK (5), HKBU (2) and Lingnan University (2); the remaining respondents (11) obtained their master's degrees from foreign universities. Their specialties spanned different subjects associated with new media art and visual arts: creative media, media cultures, media and technology, automation and computer-aided engineering or interactive multimedia, film, video and computer animation, filmmaking, Fine Arts, and lighting. Other subjects included cultural studies, and educational psychology.

Fig. 3. Q2 - Master's level training (multiple choices possible)



An even smaller sample (7) had obtained, or were pursuing, a PhD, at City University (1), University of Hong Kong (1), Chinese University (1) or overseas (4), in different areas such as robotics, electronic arts, software studies, Fine Art, and education.

Fig.4. Q3 - PhD Training (multiple choices possible)



With all the limitations previously mentioned in mind, these figures show that City University, and especially the School of Creative Media, is the main *alma mater* for new media artists who have studied in Hong Kong: the 16 City University graduates obtained their degree after 2001. As a comparison, half of the respondents who graduated from the Chinese University of Hong Kong obtained their degree before 2000. Nevertheless, several universities have trained artists who consider themselves or are considered as new media artists, which suggests that the pathways to a new media art practice can be diverse.

The findings also show that despite the perceived diversity of new media art practices, the subjects studied by these artists provide a rather coherent understanding of such practices.

Coinciding with the diversification of the course offers (associate degrees, etc.), the share of locally-taught undergraduate profiles has increased markedly since the early 2000s. However, Hong Kong artists still attend a postgraduate programme abroad (11 Master's degrees, 4 doctoral programs in the sample of survey respondents). This international profile endures in their artistic practice: about 48% of the residency schemes they have participated in were located overseas (Japan, Taiwan, South Korea, France, Germany, Sweden, Switzerland, Scotland, Canada and U.S.). Furthermore, a vast majority of respondents (78%) have attended artistic events overseas in the past 3 years.

Academic background: complementary findings from desk research

In order to overcome the limitations of the online survey (smaller sample, potential over-representation of some universities), we used the findings from the preliminary desk research on artists' profiles as a complementary data source. The purpose of this analysis was to identify trainings which were not listed in the responses to the survey. Apart from the degrees mentioned in the online survey, the following degrees appeared in the profiles of artists identified with new media arts available online²¹ (personal websites, etc.):

- Subdegrees: Associate of Science in Creative and Interactive Media Production (CityU Community College); Associate Degree of Arts in Media Technology (CityU Community College); Higher Diploma in Commercial Design (CUHK School of Continuing and Professional Studies - SCPS); Art therapy: Professional theory and practice (CUHK School of Continuing and Professional Studies - SCPS); Higher diploma in Fine Art (Hong Kong Art School); Higher Diploma in Computer Games and Animation (Hong Kong Institute of Vocational Education:); Diploma in Graphic Communication (HKU SPACE Community College); Higher diploma in photography (visual communication) (HKU SPACE Community College); Certificate in Foundation Art and Design

²¹ Some programmes may have been discontinued or renamed since the artists' graduation

(HKU SPACE Community College); Professional Certificate in Commercial Comic Creation (Open University of Hong Kong); Higher Diploma in Multimedia Design & Technology (PolyU School of Design); Higher Diploma Scheme in Fashion and Textiles studies (PolyU Institute of Textiles & Clothing); Diploma in design (PolyU School of Design); Associate degree in Design (visual communication) (PolyU Community College); Art specialist course (printmaking) (Visual Arts Centre).

- Undergraduate programs: BA in English literature and Art history (HKU); BFA Theatre Sound Design and Music Recording (HKAPA);
- Postgraduate programs: Master of Arts in the fields of Literature and Cultural studies (HKU); MA in Landscape architecture (HKU); MA music composition and electro-acoustic music (HKAPA); MSc. In Multimedia and Entertainment Technology (PolyU School of Design); MDes interaction design (PolyU School of Design).

In a context where subdegrees, especially associate degrees, have come under increasing scrutiny²², the desk research shows the importance of associate degrees, higher diplomas and certificates in the trajectories of new media artists. A close examination of the profiles of well-known young artists shows a combination of associate degree-undergraduate degree (for example, ‘Associate Degree of Arts in Media Technology’ followed by a BA in creative media at the School of Creative Media). As more and more students graduate from universities each year, the minimum threshold of employability increases. According to a recent survey of 5 sectors of the digital entertainment industry (Comics, Computer Animation, Digital Effect, Game, and Interaction Design) by the Hong Kong Digital Entertainment Association, ‘more than 80% of companies had employees with bachelor’s degrees (2018: 81.4%; 2015: 84%)’ (HKDEA 2018, p.8).

Academic training: findings from interviews

Arguably, university programmes alone may not explain the expertise gained by the students. Because external or individual factors come into play (personal trajectories

²² Task Force on Review of Self-financing Post-secondary Education (2018) *op.cit.*

etc.), graduates from the same universities embody different combinations of knowledge. Some interviewees for example stressed the advantages of having an associate degree before entering the university (A10, A12, A13...), while others pointed out that more mature and experienced art students may benefit more of a particular training than others because they are purpose-driven (A5, A3).

Thirdly, even though some universities provide more technological training than others, many artists rely on themselves to learn or master the tools they need for their practices. Our interviewees agreed that it would be impossible to teach everything related to new media in a single curriculum: lack of time (A10), rapidly changing technologies (A5), impossibility for universities to plan well ahead what kind of curriculum might be needed in a ten-years' time given those constraints (A18).

More generally, the people we interviewed thought that university curricula could not and should not try to teach 'everything'; these interviewees believed that universities should strive to provide the necessary practical, theoretical, conceptual and attitudinal (e.g. learning to work collaboratively) foundations upon which the students could build in the future (A4, A5,...). According to them, university training should help students know where to find the information they need, who to ask, how to express their needs and work in a collaborative environment. For other interviewees, what matters is that students are given enough space and -material and intellectual-resources to experiment (A3, A5, A14).

Finally, the artists' attitudes to technologies can be explained by factors beyond their training. In Hong Kong, the different generations of artists were shaped, not only by their training and their personal histories but also by the general socio-economic and political context (availability of space, social attitudes towards arts, political struggles) (A8).

General perceptions of curriculums

Notwithstanding these comments, there is a consensus that the creation of SCM has had a very positive impact (A1, A2, A8, A9, A18...). Its creation was qualified by all interviewees as a game changer (A1, A2, A8, A9, A18...). The School of Creative Media (SCM) is considered as a school which prepares well for jobs connecting arts and technology. For one interviewee, the creation of SCM and AVA has brought about a

diversification of the forms of new media practices in Hong Kong (A8). Most observers agree that there are enough options nowadays for anyone who are interesting in studying creative media.

Furthermore, there seems to be a clear understanding of the distinctions between the different kinds of training. Usually, PolyU graduates are considered as being very precise in their technical and design skills, whereas Chinese University students are more conceptual, with SCM and Baptist University graduates displaying different degrees of technical and artistic skills (A13, A15). SCM students are considered as having good technical skills in their art practice (A8) as well as in their work experiences (A12, A15), being very good at solving technical problems (A9) and showing a marked interest in understanding the mechanics of other media artworks (A8). They are considered as being readily employable in the creative economy (A8). Another observer of the new media art scene noticed some attitudinal differences between students from PolyU and students from SCM for example: ‘Students from PolyU are more design oriented, they don’t go for concept (...) Based on my observations, PolyU students, they’re not that into media art (...) PolyU students enter the area, they will look into lots of graphic design, and communication stuff instead of the artwork itself (...) they do not ask questions about the artwork itself. But SCM students, they ask a lot of questions related to whether technical or conceptual aspects’ (A8).

Recommendations

The large number of training opportunities pertaining to creative technologies shows an interest from potential trainees in learning these skills and an interest from training institutions in developing this market. As the recent report of the Hong Kong Digital Entertainment Association (HKDEA 2018) shows, there is a need across creative industries for such skills. Furthermore, the interviews have shown that the UGC-funded programs have quite a good reputation. However, a better understanding of the position of each curriculum is necessary. This is particularly important within the UGC system where duplication of funds is a sensitive issue. Furthermore, in order to encourage cooperation between universities, it is important that they develop their competencies distinctively and that they communicate better on their specific

contributions to the academic ecology. These distinctions should be made more explicit.

Objective 3: to establish a working definition of new media art expertise in the context of Hong Kong creative economy

In this chapter, we will study the different conceptions of new media art according to the different stakeholders. Our desk research will try to locate new media art expertise in public documents, in statistics on arts and the cultural and creative industries (CCI). We will then proceed to describe how the central actors in the (new) media art scene define it. These findings rely on our direct observation and interviews with artists and cultural entrepreneurs. This research shows that, although artists and stakeholders share an understanding of new media arts, in practice the expression ‘new media art’ is marginally used. Instead, the larger category of ‘media arts’ or some finer categories such as algorithmic art prevail.

Media arts and statistics: findings from desk research

New media arts are not considered as a separate category in statistical records. Instead, the expression ‘media arts’ is applied by all public organizations. However, the diversity of technologies, skills and practices of ‘media arts’ seems to pose challenges in terms of statistical representation. The Arts Participation and Consumption Survey (2018) for example, classifies ‘Media arts’ in the same category as ‘Film’, a strategy which may be explained by the historical influence of Film on media art practices in Hong Kong (Lai 2008²³), but creates a confusion when one needs to single out the uniqueness and diversity of media arts. The report on the Art and Cultural Sector amalgamates all the practices which do not fall under ‘Dance’, ‘Music’, ‘Xiqu’, ‘Theatre’, ‘Variety & Pop Show and others’ etc. into a single category of ‘Non-performing arts’, which includes organizations such as Bhaktive Danta Books Limited, China (Hong Kong) Painting Calligraphy for the Aged Study Association,

²³ LAI, Linda (2008) ‘Attempting a history of (new) media arts for Hong Kong : archaeology, literacy and education for artists’ 香港視覺藝術年鑑 2007: Hong Kong Visual Arts Yearbook . ed. / 陳育強; 莫家良. Vol. 2007 香港 : 香港中文大學藝術系, 2008. p. 141-183.
<http://www.arts.cuhk.edu.hk/~fadept/Yearbook/YearbookEssays/2007/2007LindaLaiEng.pdf>

Hong Kong Drama/Theatre and Education Forum, as well as Videotage, the New Media art association. Such treatment may be predicated on the relative marginality of media arts as compared to other, more traditional artforms, but it also reinforces such assumption instead of problematizing it.

The difficulty of statistical processing of (new) media art skills may also be explained by their applicability in different areas of the economy: here, the issue is not their assumed marginality but their pervasiveness. This is obvious in the Hong Kong Monthly Digest of Statistics for the Cultural and Creative Industries (June 2018)²⁴: media art skills may actually be used in practically all of the sectors. For example, a ‘software, computer games and interactive media’ category ‘covers publishing and distributive trades of software and computer games; information technology service activities (e.g. designing and development of computer games, software, websites and network systems); Internet and other telecommunications activities; as well as web portals, data processing, hosting and related activities’ (p.9). Another category was created for ‘Design’ and includes ‘interior and furniture design; multi-media, visual and graphic design; fashion and accessories design (including jewellery design); as well as industrial design’ (p.10). A third category for ‘Film, video and music’ includes ‘motion picture, video and television programme production activities; sound recording and music publishing activities; photographic activities; reproduction of recorded media; manufacture of musical instruments; as well as wholesale, retail and renting of music and video recordings’ (p.8). And, finally, a fourth category ‘Performing arts’ ‘covers creative and performing arts activities (e.g. orchestras, ballet and concert show groups, stage designers, theatrical producers, etc.); creative artists; musicians and writers; as well as performing arts venue operation (e.g. theatres for live performance) in the private sector’ (p.8). The wide range of applications is testament to the permeability of all sectors of the cultural and creative industries to technologies and applications associated with media arts, and, consequently the potential pervasiveness of social and economic benefits of media art skills.

Table 2: Performance of CCI component domains in 2016

²⁴ Hong Kong Special Administrative Region Census and Statistics Department, ‘The Cultural and Creative Industries in Hong Kong’, Hong Kong Monthly Digest of Statistics, June 2018

Sector of the cultural and creative industries	Total employment	Percentage of total employment in CCI	Value added (in billion HKD)	Percentage of total value added of CCI
Art, antiques and crafts	18 120	8.5%	\$8.0	7.3%
Cultural education and library, archive and museum services	11 870	5.6%	\$1.4	1.3%
Performing arts	5 390	2.5%	\$1.3	1.2%
Film, video and music	14 840	7.0%	\$3.7	3.4%
Television and radio	6 860	3.2%	\$6.5	5.9%
Publishing	39 090	18.4%	\$12.5	11.4%
Software, computer games and interactive media	57 550	27.0%	\$48.3	44.1%
Design	16 350	7.7%	\$4.2	3.9%
Architecture	15 940	7.5%	\$11.8	10.8%
Advertising	18 480	8.7%	\$9.2	8.4%
Amusement services	8 320	3.9%	\$2.7	2.4%
Total	213 880	100%	\$109.6	100%

Source: Hong Kong Monthly Digest of Statistics, June 2018

Another source of information about the integration of new media art skills in the creative economy of Hong Kong is the survey of ‘digital entertainment industries’ by the Hong Kong Digital Entertainment Association. The association has published two market reports (2015 and 2018) on the market trends and business performances of 5 different industries, namely comics, computer animation, digital effect, game and interaction design. The reports provide a quite clear representation of the current state and challenges faced by industries where media art graduates might be employed. The Annex 1 of its most recent survey (HKDEA 2018a) shows that, with the exception of ‘comics’, most of these digital entertainment industries are affected by the emergence of new technologies such as: Augmented Reality (AR), Virtual Reality (VR), wearable device, motion sensing (pp.55, 73, 110). The survey annex shows that these industries are at the junction of the worlds of art and creative industries. For example, the ‘computer animation’, the ‘digital effect’ and ‘game’ industries use exhibitions as a mode of promotion (pp.54, 72, 91), whereas the interaction design companies list consultancy for ‘museums’ as one of their main activities (p.103). Although one cannot presume that new media art skills are applied in all these instances, one can fairly

assume that these digital entertainment industries are sensitive to new technologies and that they blur the lines between the worlds of art and creative industries.

(New) Media art as defined by stakeholders: findings from desk research and direct observation

The history, structure and the relatively small size of the (new) media art scene favour a flexible, more pragmatic definition of (new) media arts. The Hong Kong Arts Development Council has used a separate ‘Media Arts’ category for its annual awards since 2010, but continues to combine ‘Film’ with ‘Media Arts’ examiners in a single category, distinct from ‘Visual Arts’. Furthermore, some prominent (new) media artists are listed as examiners under the ‘Visual Arts’ category. The transdisciplinary practices of media artists seems to question previous modes of classification.

Sometimes, how artists define their artworks has more to do with practical issues than the art process per se: as the jury transcripts of the IFVA show, this definition may be subject to negotiation. For example, an artist decided to compete in the ‘media art’ section of the festival because he wanted his works to be shown in a gallery instead of a theatre²⁵. This case highlights the interplay between artists, stakeholders and gatekeepers in defining ‘media arts’.

Reflecting the early connection of media arts in Hong Kong to Film, media art has historically been associated and statistically processed with Film. This filiation is obvious in the successive denominations of the ‘media art’ category of the Incubator for Film and Visual media in Asia or IFVA – formerly known as the ‘Hong Kong Independent Short Film and Video Awards’: the ‘media art’ category used to be labelled ‘Single-Screen-Based Interactive Media, then Interactive Media. The current distinction allows enough flexibility for the artists to choose their competition category, leaving the jury to discuss on the merits of the artist’s choice. The jurors have enough latitude to apply their own criteria to determine the standards of a good media artwork. For example, following the preliminary discussion between the jurors attending the the 15th IFVA Interactive Media category jury meeting, Linda Lai summed up: *‘User experience is an important consideration. Mainstream applications are often very simple, with instant input and output. Of course, there are different*

²⁵ The 21st IFVA Media Art Category Jury Meeting Transcript, http://ifva.com/2015/lib/pdf/21st_Transcript_MA_en.pdf

understandings of what is mainstream, one of which is how the software is designed. Another point to consider is the complexity of the interactivity. All these elements make up the interactive experience. Sometimes the experience just involves very simple input and output and the end result is enjoyable. Other times the interactivity is complex, but the experience is superficial. The point [Teresa Kwong] raised about independent spirit is important. We should consider that in addition to the complexity and sustainability of user experience (including its technical aspect), how the works define interactivity, and the creativity of the interface²⁶. Media art works are usually judged by their artistic value, their technical qualities, their ‘independent spirit and creativity’²⁷ and conceptual approach. Even though the interpretation of these elements may vary - for example, the notion of interactivity has sparked some heated debates²⁸, the notion of independent spirit and creativity, i.e. the transformative use of technologies (when artist build their own tools or tweak existing technologies) has been deemed one defining criterion of the media arts category.

This is the focus of the Microwave International New Media Arts Festival²⁹. Microwave has been striving to question how (new) media art addresses social, environment, ethical and philosophical questions by showcasing a variety of experimental uses of technologies from around the world and in Hong Kong. Microwave answers the question ‘what is new media art’ by showing its diverse forms and insisting on the new issues raised by new technologies as well as the new ways humans can regain its power instead of become enslaved by them. In previous years, Microwave’s curatorial themes ranged from surveillance, urban ecology, space, time (‘live’ and ‘now’) to the environment etc. In 2018, it questioned the possible uses of the blockchain technology for the arts and society at large and the issue of trust in a technology-intensive society.

²⁶ The 15th IFVA Interactive Media Category Jury Meeting:

http://www.ifva.com/2011/lib/pdf/transcript/en/15th-Transcript_IM_en.pdf

²⁷ The expression was used by Teresa Kwong during the 15th jury meeting. Bryan Chung defined it as ‘how far away from the corporate use of those media’ during the 16th jury meeting. The 16th IFVA Interactive Media Category Jury Meeting Transcript:

http://www.ifva.com/2011/lib/pdf/transcript/en/16th-Transcript_IM_en.pdf

²⁸ See for example the debate between Frédéric Lichtenstein, NG Tsz-kwan and Bryan Chung about the interactivity of the piece ‘Stolen Times for Sale’ in the 14th IFVA Interactive Media Category Jury’s Meeting Transcript: http://www.ifva.com/lib/uploads/index/application_20180628_wKm8U.pdf.

²⁹ The first Microwave festival was initiated by Videotage in 1996. The festival became independent in 2006. Apart from the annual festival, Microwave organizes different educational outreach programmes throughout the year and supports local artists.

A newcomer in the field of media art events, the ‘Art Machines: International Symposium on Computational Media Art’ initiated by the School of Creative Media gathered scholars and artists from around the world for a series of lectures, workshops, seminars, and exhibitions by local and international artists. The exhibition hosted by the Hong Kong City Hall and curated by Linda Lai was particularly insightful and might provide a model for future initiatives. The exhibition showcased works by well-established Hong Kong artists (Bryan Chung Wai-ching, Adam Hui Wai-keung, Ng Tsz-kwan, Janice To Tsz-sum, Tung Wing Hong, Angela Su, Kenny Wong Chi-chuen, and the collective Dream Team L306D) Hong Kong-based artists (Daniel C. Howe, Hector Rodriguez, Cédric Maridet), and international artists (Toshio Iwai, Kim Yunchul, Tsai Wen-ying, Elena Knox & Katsumi Watanabe). For each artwork, the exhibition provided information about the artistic process and the archaeology of the main techniques used. Moreover, an 8-meter long interactive data-visualization of the archaeology of media arts created by Linda Lai with Winsome Wong, Fung Wing-lam and Tobias Tang was projected on a wall, revealing the origins and links between different technologies. Finally, the catalogue of the exhibition recounted all the information about the artists’ works, archaeological notes and definitions of the words of computational media art. The exhibition was a remarkable educational demonstration of what ‘computational media art’ means and its archaeology.

International (new) media art competitions and festivals:

The Japan Media Art festival shifted from a distinction between Digital Art (Non-Interactive Art) and Digital Art (Interactive Art) to a 4-category scheme which grants a special place to video games (within the ‘Entertainment’ section) and ‘Manga’ (whether they are published online or on paper) and is open to sound works:

- ‘Art’: ‘Interactive art, media installations, video works, video installations, graphic art (illustrations, photography, computer graphics, etc.)’, internet art, media performances etc.’ The Hong Kong media artist and HKBU professor Bryan Chung Wai-ching won the ‘Grand Prize’ in this category 2015 with his work ‘50 Shades of Grey’.
- ‘Entertainment’: ‘games (‘video games, online games, etc.’), video / sound works (‘music videos, independent and advertising videos, etc.’), multimedia

productions (including ‘special effects videos, performances, projections’), gadgets, electronic devices, websites (including ‘web promotions, open source projects’), application software, etc.’;

- ‘Animation’: ‘Animated feature films, animated short films, animated series, etc.’;
- and ‘Manga’: Comics published in book form, comics published in a magazine (including works still being serialized), comics published online (for computer or mobile devices), self-published comics, etc.³⁰

It is quite common for international media art festivals to propose different categories from one year to the next. The international media art festival Ars Electronica (Linz, Austria) has often re-adjusted its categories each year. This year’s categories distinguish between ‘Computer animation’, ‘Digital Musics and Sonic Art’, ‘AI and Artificial life’. They will reward young creatives and professionals, and the ‘visionary pioneers of Media Art’. The first categories announced for 2020 are Interactive Art and ‘Digital Communities’, which rewards the ‘Digital Communities’, who ‘regardless of whether their background is social or artistic – give rise to group action and interaction, engender constructive contexts and social capital, and promote social innovation as well as cultural and environmental sustainability’³¹: Arduino, Codecheck, ubu.com and CodeTree are some of the former recipients of the ‘digital communities’ award. The Hong Kong based artists Tamas Waliczky and Maurice Benayoun, both professors at the School of Creative Media are recipients of Golden Nica awards, while MakerBay founder Cesar Harada received the [the next idea] voestalpine Art and Technology Grant.

The Lumen Prize for Art and Technology proposes yet different classifications. In 2018, while the Grand Prize was given to ‘The Butcher’s son’ by Mario Klingemann, - a ‘neural network’s interpretation of the human form’³²-, other awards were attributed to works in ‘Still Image’, ‘Moving Image’, ‘3D/Interactive’, ‘VR/AR’, ‘BCS AI’. Furthermore, three non-medium specific categories were granted: The Meural Student Award (an open competition for full-time students), the People’s Choice

³⁰ Source: Japan Media Arts Festival Entry Guidelines: <http://festival.j-mediaarts.jp/en/entry/entry-guidelines/>)

³¹ <https://ars.electronica.art/prix/en/categories/digital-communities/>

³² Source: The Lumen Prize 2018 Winners: <https://lumenprize.com/edition/2018-winners/>

Award, and the new Rapoport Award for Women in Art & Tech. Some outstanding Hong Kong artists³³ were among the Lumen award winners these past few years: the art collective XCEED created by Chris Cheung Hon-him won the 'Creative Coding Award' in 2015 with 'RadianceScape', while the 2018 3D/Interactive award went to GayBird for his work 'Fidgety (in between up and down)'.

In another category, some international festival and symposia, such as Mutek and ISEA, offer a range of activities from conferences to juried exhibitions and performances. The International Symposium of Electronic Art (ISEA) organized by ISEA International (formerly known as International Society for the Electronics Arts) is an annual international event bringing together new media art scholars, practitioners and organizations. The 2016 ISEA was organized in Hong Kong by the School of Creative Media and involved the participation of the main stakeholders in the new media artworld (Microwave, XCEED...).

MUTEK festival, the International festival of digital creativity and electronic music³⁴ was launched in Montreal in 2000 and extended to different parts of the globe since 2007 (Barcelona, Buenos Aires, Mexico, Dubai, San Francisco and Tokyo). Among the multidisciplinary media art festivals, MUTEK provides a significant arena for sound works. It also organizes hands-on workshops on different technologies, conferences and tours, and has created its own record label.

Defining (new) media art in Hong Kong: findings from interviews

There seems to be a contradiction between the interest for anything named 'new media' and the apparent impossibility to define it. Defining new media art was a challenge for a majority of interviewees; even some people who are considered as new media artists seemed uncomfortable with this expression, mostly because of other people's perceptions of it. As Quaranta remarks: 'The expression "New Media Art" (...) is deemed inadequate even by those who use it' (Quaranta 2013, p.17). This label might feel like a straightjacket for artists who do not wish to be defined by their medium only, or who are tempted to escape the caricature of a technologist creating playful artworks. Some artists prefer a less 'gimmicky' (A12) identification, for example as an artist who

³³ And graduates from the School of Creative Media

³⁴ MUTEK: <http://www.mutek.org/en>

uses a specific tool (A14), or by the objectives they strive to achieve through their practices (A13, A21). What is crucial for artists is to be understood by other stakeholders or the audience.

Despite the ‘gimmicky’ connotation of the term, the interviewees volunteered the following definitions of new media art as: ‘an art form that is related to science and technology’ (A8), as an art form that aims to ‘explore new expressions through technology itself or through the medium itself’ (A12). Another interviewee emphasised the ‘digitality’ of the ‘idea’ underlying the artwork (A9), a conception that refers to the computational logics of new media tools. These conceptions stress the centrality of the transformative approach to technology and a willingness to surpass its limitations, to break down barriers.

Technologies and experimental ethos: findings from interviews

The interviewees insisted that practising new media is not necessarily about the number of software or technologies one can master, nor is it defined by the use of the latest technology for its own sake: as artists, they insisted on creating their own mix or their own device, not only because the tools that they need to achieve the desired effects may not be available but also because innovating instead of copying and being restricted by current technologies is ingrained in the mindset of media artists. For some of them, the drive to experiment implies always choosing the most unlikely options: *‘if I try to put two ideas together and at the beginning it feels like it will work already, probably I won’t do that, I will try something else (...) when you put two ideas together and then you start finding examples that people did before, (...) that’s not really interesting’* (A10). This innovative mindset seems to be particularly ingrained in the training at the School of Creative Media: *‘the school always encourages you to bring things that you learn from different courses into the course you are learning now, you try to put things that may seemingly not belong together in the first place, but just try and see what comes out of it. That’s the spirit in the school always. It’s very much like somehow it’s about how unlikely you put the two things together and you do that’* (A14).

Experimenting with technology, old or new, is certainly a significant and defining aspect of their practice. This approach emphasises the process of discovering and generating innovative processes and innovative works. As one artist, talking about an

open source software, puts it: *'you get to experiment with the inner mechanics of the software, which is important for artists'* (A14). Besides, the conception of becoming an 'active participant' instead of being a mere 'user' (A3) is an important part of the new media artist ethos.

In most cases, what artists seem to consider as their defining characteristic is the mentality (A10), the 'curiosity (A13), the desire to experiment, to break boundaries, 'expanding the dimensions from 2D to 4D' and deconstructing disciplines' (A4) 'seeing the world as a cyberworld' (A11). This can be defined as a 'new media thinking' (A11), i.e. a willingness to work with technology creatively (and a conception of) the world as a cyberworld (A11).

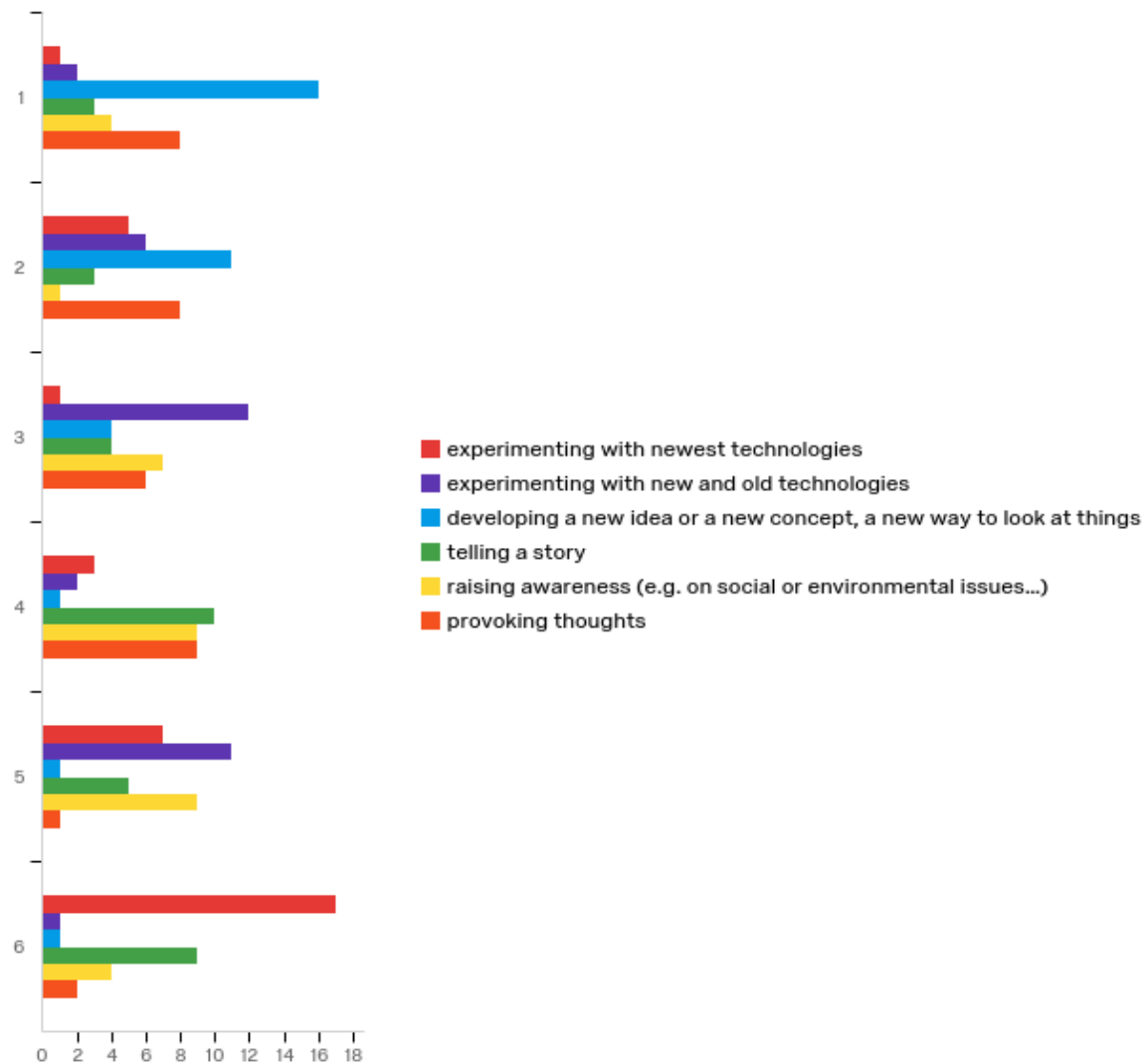
Therefore, new media art does not only transform technology; ideally, it may result in transforming the way we relate to the world. Some practitioners and stakeholders have emphasised potentially transformative contributions of new media art to the society. They point out that new media art should aim for a 'higher' purpose than the mere experimentation with technologies: using technology to create a better society, for example, or in the words of an interviewee 'a creative practice that is helping or that is contributing to the human society' (A11). For Linda Lai (2008), (new) media art practices should lead to a change of perception – and action- about the world: *'researchers and experimenters of "new media art"' should aspire to '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 (p.151)'.*

Of technology and experimental ethos: findings from online survey

What is the attitude of Hong Kong new media artists towards technology? Is 'new' media art synonym of 'new' technology? How does it relate to concepts and ideas in their practices? According to the online survey, only a minority of the questionnaire respondents considered 'experimenting with the newest technologies' as their main objective: about half of the sample ranked this aspect last in importance out of 5 choices. In contrast, 'developing a new idea or a new concept, a new way to look at

things' was ranked either first (47.06%) or second (32.35%) by a majority of respondents.

Fig.5. Q9 - Please rank the following according to their importance in your artistic practice:



Furthermore, the questionnaires suggest that new media artists keep developing their technological skills outside the framework of academic training: while more CityU and foreign-taught graduates were initiated to more media art-related technologies during their university years, all the respondents reported that they were self-taught in all the technologies they use. Furthermore, the large majority of the respondents declared that they intended to learn more technologies and software in the near future. This

proportion was higher among CityU and PolyU graduates, which confirms the strong interest for technologies of the students attracted to these universities³⁵.

Conclusion

Our research identified the main actors which define new media arts in the context of Hong Kong creative economy. We have shown that the expression ‘media arts’ was preferred to ‘new media arts’. We have also established that the (new) media art practices were either associated with other categories in the statistics, or they were difficult to isolate within business records because of their pervasiveness. However, we outlined the main definitions given by the stakeholders. They emphasised the centrality of the transformative approach to technology and a willingness to surpass its limitations, to break down barriers. Therefore, (new) media expertise refers to the experimental use of (computing) technologies across different fields of knowledge and aiming at transforming our relation to the world.

³⁵ However, in one case, a respondent vowed to never do any programming in the future.

Objective 4: to perform an ethnography of the integration of new media art expertise by new media art graduates in sectors of the creative economy in Hong Kong where the impact of this expertise is the most salient

In this chapter, we will examine the places where new media artists develop and apply their skills. We will report the responses to the online survey regarding the skills required in their income-generating activities. We will study the contributions of academia as a major source of stable income for artists. Mainly based on direct observation and interviews, the subsequent sections will examine the roles of several contexts which have contributed particularly to the integration of new media art expertise by new media art graduates in sectors of the creative economy: creative companies, cultural entrepreneurship, exhibitions and competitions/awards.

(New) media artworld

Referring to Howard Becker's concept of art worlds, Quaranta claims that the use of the term 'new media art' does not refer to particular practices. Instead it is defined by its context, by the 'art world' which brings it into existence and sustains it: 'to produce a work, artists need materials, tools, support. And for something to exist as a "work of art" there has to be someone to appreciate it and a philosophical system that justifies it as art (Quaranta 2013, p.37)'. Becker defines an art world as 'the people and organizations who produce those events and objects that world defines as art' (Becker 1976, p.703). Conventions, resources and networks combine to create a specific artworld. Becker demonstrates that the production of an artwork requires the availability of production materials, sources of funding (public or private, jobs,), channels of distribution, supporting activities (e.g. logistics); yet these are not enough. As Becker (1982) writes: 'Someone must respond to the work once it is done, have an emotional or intellectual reaction to it, "see something in it," appreciate it' (Becker 1982, p.4). Furthermore, someone must give a meaning to the artwork, i.e., provide 'a kind of aesthetic argument, a philosophical justification which identifies what is being made as art, as good art, and explains how art does something that needs to be one for people and society' (*ibidem*). Training and education are also an important pillar of the art world. Finally, the art world requires some sort of stability: 'The state, pursuing its interest in the ends for which people are mobilized for collective action, must allow the production of the objects and events which are the art, and may provide some

support itself' (*idem*, p.5). However, Becker insists that the forms taken by these elements of art worlds may differ from one context to another or through time. Similarly, choosing an artist career off the beaten track may affect the production, distribution and appreciation of one's art work.

Becker advises that, in order to study a specific art world, one should 'not start by defining art and then looking for the people who produce the objects we have thus isolated. Instead, we look for groups of people who cooperate to produce things that they, at least, call art; having found them, we look for all the other people who are necessary to that production, gradually building up as complete a picture as we can of the entire cooperating network that radiates out from the works in question.' (Becker 1976, p.704). This proposition guides our research.

Therefore, a new media artworld is composed of all the individuals and institutions which sustain it: education and training facilities, critics and legitimizing gatekeepers, sources of funding, audience etc. Together, this artworld defines what they consider as acceptable new media art. What is interesting about this approach is that it helps explain how new media art practices emerge and endure in certain contexts. This aspect makes the case of Hong Kong new media art scene particularly interesting with its dense network of supporting organizations, competitions, awards, places of training and diffusion etc., all combining to define who is a new media artist. Therefore, for example, artists who would not use the term '(new) media art' to describe their practices, may end up in the '(new) media art' category of a competition if their artworks are considered as a better fit for that category, or win an award as a (new) media artist if they have been nominated in that category by someone else (although the nomination must be backed by the artist portfolio afterwards). Therefore, to understand the development of a new media art expertise in Hong Kong, we need to look at the art scene, the ecology which sustains it.

Integration of new media art expertise into the workplace: findings from the online survey

Which skills are required in the income-generating activities of new media artists? The findings from the online survey indicate a cross-fertilisation between the artistic practice and the larger creative economy concerning the use of technologies. About 75% of the respondents of our questionnaire declared using the same technologies in

the workplace and in their art practice. More than 70% of the respondents declared that they always (39%) or often (32%) applied their technical skills in their day job. Among the technical skills required in their workplace, programming and graphic design were the most frequent answers; ‘creativity’, ‘research’ ‘critical thinking’ and presentation skills (writing, public speaking) were also considered as useful skills.

Fig.6. Q49 - Which technical skills are required in your ‘day’ job? Please list:

Which technical skills are required in your ‘day’ job? Please list:
digital fabrication, metal work, graphic design
graphic design
Industrial designs and engineering in lighting design
computer software
creativity, craftsmanship
Theories and practices in teaching and research
academic research (technical), coding, media technologies, electronics, robotics
Photoshop, Illustrator, Premiere Pro, After Effects
Programming, Physical computing, Various software, etc.
organising, craft, drawing, account, service
programming, media design, interactive design
Video Editing, Graphic Design
presentation, public speaking, producing
PS, AI, 3D software, AE
Artwork production, exhibition setup
writing, coordination
Photography, lecturing, presentation, software
being systematic, not too stupid

programming and writing skills
Research skill, sound design/ compositional skill
computer problem solving, camera skills and audio skills
drawing / craft / photography
web developer, web design, debugging, Adobe Illustrator, Adobe photoshop, design sense, sound editing
music
Critical thinking, knowledge of contemporary art

Number of respondents: 25

Which technologies do they use in their everyday activities? Even though the majority of the respondents ‘rarely’ or ‘never’ used most of the technologies listed in the questionnaire, some of them either ‘always’/‘often’/‘sometimes’ used several of them including: Photoshop (9/14/5), Illustrator (8/11/8), InDesign (3/6/9), Painter (2/1/4), Unity3D (2/2/3), Dreamweaver (1/3/6), HTML/CSS/Javascript/PHP (4/4/6), C++ (1/3/2), Processing (2/3/6), Open Frameworks (1/3/2), 3DS Max (2/2/2), Arduino (3/7/7), Premiere Pro (8/9/5), Final Cut Pro (8/8/5), DaVinci Resolve (2/1/0), After Effects (4/8/4), Cinema 4D (2/2/1), Ableton Live (3/1/2), Logic Pro (3/2/1), MaxMSP (2/4/3), Unreal (1/0/2), Max Jitter (0/2/7), Perl (0/1/0), Java (1/1/3), GLSL (0/1/0), p5.js (1/0/3), TouchDesigner (0/2/1), Rhino 3D (1/0/2), Grasshopper (0/1/0), Fusion (1/0/2), OSC (1/1/4), 3D printing (0/3/4). Some respondents also added kinect (4), RealSense (1), LeapMotion (1) and Wiimote (1).

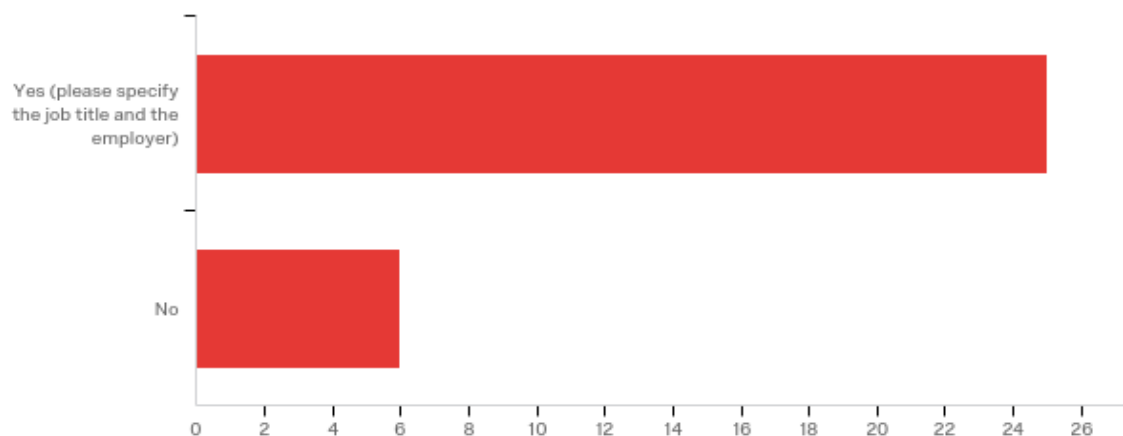
A number of artists expressed interest in learning new technologies such as: Unity3D (7 respondents), Rhino 3D (6) Blender (5), Real time motion capture (5)Arduino (4), Max Jitter (4), Unreal (3), Vvvv (3), C++ (3), Python (3), After Effects (3), MaxMSP (3), 3DS Max (2), Grasshopper (2), Cinema 4D (2), 3D printing (2), Stereographic Projection (2), InDesign (1), Cry Engine (1), as well as Resolume avenue, HTML/CSS/Javascript/PHP, GLSL, p5.js, Processing, Open Frameworks, TouchDesigner, Fusion, Ableton Live, Logic Pro, and machine learning (1). Some

respondents (8) also use traditional media such as LED lighting and wood, or are interested in developing this kind of training (carpentry).

Academia as a catalyst of the transfer of new media expertise in the creative economy of Hong Kong: findings from online survey

Out of choice or necessity (e.g. cost), 80.65% of respondents declared having another employment next to their art practice. A majority of respondents (60%) also agreed with the proposition ‘I would like to have a day job that can be useful for my art practice’, instead of dedicating their time solely to the arts practice (22%).

Fig.7. Q44 - Apart from your art practice, do you have a 'day' job?

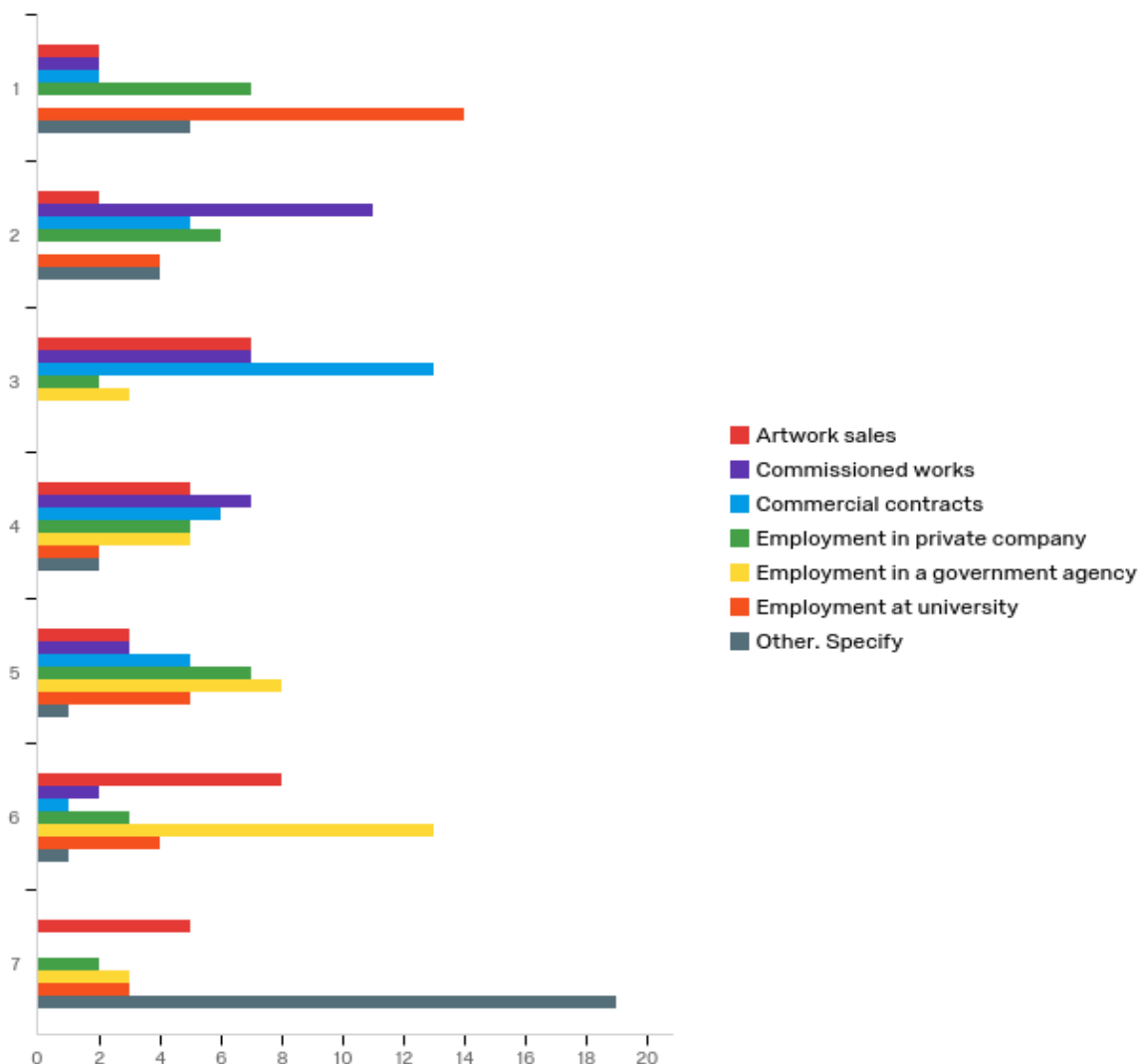


Universities have been a considerable source of stable income for new media artists while also providing practical resources for the pursuit of their artistic careers. Employment at universities is considered by the majority of our interviewees as the best option to complement a media art practice. As a matter of fact, almost 44% of the questionnaire respondents cited employment at the university as their first source of income (lecturer, technical officer or assistant, researcher, professor or PhD student) making it the single largest proportion of first-ranked income. In contrast, employment in a private company was a first source of income for 21.88% of the respondents. They usually occupy positions associated with creativity: designers, web

developers, creative directors, directors of innovation. About half of the 24 respondents who provided details about their current occupation work in universities (CityU, HKBU, the Open University of Hong Kong...) either as lecturers, technical assistants, assistant professors., while the other half were either employed in marketing, communication or design positions in private companies.

Commercial contracts were ranked as 3rd source of income by 40.63%. Commissioned works were ranked as a second largest income by 34.38% of respondents, and ranked 3rd by 21.88% of respondents.

Fig.8. Q42 - Please rank the following sources of income:



The interviews confirm the findings from the survey. All our interviewees seem to agree that: *‘to survive in this city is difficult as an artist, you don’t have that time to just be a full-time artist not even one month, you always have to do commercial’* (A11). Having multiple activities seems to be the norm rather than the exception; these involve a combination of teaching, research and participation in collaborative art projects (A10, A13, A14, A19...).

The university is deemed a favourable environment for an artist to thrive because it provides: ideal conditions to experiment (available logistical, material and spatial resources) (A5, A21), a stimulating environment for research (colleagues, mentors...) and for social connections (forging lasting friendships among like-minded artists) (A13, A14, A12), a framework to share technical and theoretical knowledge, and more funding opportunities (research grants, research contracts...). It is quite common for newly graduated artists to work as a research assistant under the guidance of well-established artists who act as mentors and help them improve their skills and practices (A10, A12, A13, A14...). One of the interviewees also mentioned that some students who studied design in vocational schools considered complementing their training with a diploma in teaching because they were afraid wages in the field of design would be lower than in education (A4).

8400 communications, Anima Technologies, cccdi Ltd., emotionlab.tv, Concrete Lab, Dimension +, Innov+media Lab (imhk lab), IOIO Creative, Pill & Pillow, VJ Zero, N7, Ware, XCEPT and XPLORE, yU+co.[lab]... *‘Oh, there are a lot of start-ups nowadays’* (A8). This comment sums up the perception that creative entrepreneurship has boomed over the past few years. (New) media artists have been at the forefront of this trend.

For some of our interviewees, setting up companies that combine artistic exploration, experimentation of solutions and commercial projects *‘seems to be the more typical*

way of doing' in Hong Kong (A10). By enabling a transfer of skills between the arts and creative industries, creative companies can influence the adoption of new technologies in the general economy. Even though some interviewees stressed the conservatism of Hong Kong businesses (A19, A15), this kind of companies might, progressively, help open up mainstream businesses – and economy- to more innovative practices. Some interviewees admitted that separation between artworks and commercial materials have become more blurred, pointing out the fact that some interactive media artworks were almost the same as some commercial installations (A7).

Cases:

Some of the most renowned creative companies are: yU+co.[lab], managed by Ng Tsz Kwan – a former graduate from Department of Fine Arts of the Chinese University of Hong Kong, and XCEPT (formerly XCEED) and XPLORE, created by Chris Cheung Hon-him (a graduate of the School of Creative Media of the City University of Hong Kong). They are considered as successful adaptations of artistic skills into commercial enterprises. Both continue pursuing successful artistic careers while managing teams of creative and participating in outreach programmes.

yU+co.[lab] employs graduates from PolyU, CityU, Chinese University - Fine Arts, and Baptist University. A local branch of a U.S.-based company founded by Garson Yu, yU+co.[lab] employs about 70 people in the region. Its clients are mainly land developers, museums and government agencies³⁶. This experience-design company often creates large-scale installations which are designed as theatrical, flexi-dimensional experiences. The management style relies on creating synergies between students from different and hybrid backgrounds. yU+co.[lab] has served as a launching pad for other media artists to start their own companies. For example, Samuel Yip, co-founder and director of Ware Limited, used to work as a senior designer at yU+co.[lab].

Some entrepreneurs opt to create two separate entities: a private entity for commercial purposes, and a social enterprise for non-for-profit activities (e.g. training programs, social inclusion programs etc.). For example, Chris Cheung Hon-him has created

³⁶ <https://yucolab.com/en/home/#clients>

XCEPT (formerly XCEED), which is presented as ‘a hybrid innovative studio, crafting unique experience at the junction of art, technology, design & culture³⁷.’ Their work called ‘Prismverse’ has received several international awards and accolades³⁸, including the Best of Golden Pin Design Award (Taipei) in the Integration Design category in 2018³⁹. Cheung Hon-him also founded XPLOR, a Research & Development laboratory, which also organizes educational programs for children. Both structures employ mostly SCM graduates-artists but with different specialties. One of our interviewees observed that this kind of organization enabled individual artists to grow and offered them enough flexibility to create their own works, outside the company’s brand (A8).

The Japanese ecology:

The Japanese ecology has been cited as an example by several stakeholders (A8, A12, A17...). The model of artist-led entrepreneurship is inspired by companies such as TeamLab (Japan) and Rhizomatiks (Japan), which was established in 2006, with the objective of *‘foster[ing] collaboration between media art, industry and businesses, has just created three new divisions (research, architecture and design⁴⁰’*. These companies benefit from a dynamic local media art scene. Japan, for example, is the most mature media art scene in Asia: apart from the acclaimed Japan Media Arts festival – which awardees’ works are also exhibited in other international festivals-, the MORI Art Museum - founded by a real estate developer - ensures that citizens have access to new media art all year long. Moreover, media art events are not limited to major cities; instead, they are held all across the territory. Furthermore, big corporations such as Sony commission innovative art works. In general, and partly owing to the powerful conglomerate specialised in electronics in Japan, media art is more visible and integrated into the social and economic fabric. (A12).

In Hong Kong, some interviewees felt that the major businesses are less prone to commission young artists (A12, A13, A16). Although Hong Kong companies have shown interest in hiring ‘tech based creatives’, i.e. a creative who can work with technologies (A8), senior management and clients may have a narrower concept of

³⁷ <http://xcept.hk>

³⁸ <http://xcept.hk/prismverse/>

³⁹ <https://www.facebook.com/xcept.hk/>

⁴⁰ <https://rhizomatiks.com/en/>

what new media is (A8, A15). Some observers noted that the corporate clients' aversion to risk reduced the creative companies' margins for innovation (A7, A8). As one observer notes: *'how to balance commercial and art, because in agencies your working partners, your colleagues, your boss and even your clients, all do not have a concept of new media. What they know is technology nowadays are really hot, and then everybody likes it, so let's do it. But (...) a lot of stuff that are proposed in commercial agency for me it's old stuff already, but for them it's really new, because they are talking to the general public. They can't be that cutting edge. A little bit new is already enough (A8)'*. Another interviewee talks about a 'transition period' for the acceptance of art skills in marketing and advertising businesses: *'there's more and more advertising agency or company that consider this as important skills, but at the same time I think maybe it's still in a transition period, that they still believe in the traditional marketing, so maybe the major budget might just go to those traditional advertising and then may not be able to allocate too much funding to this kind of creative (...). So, some of them might move up to Mainland China to seek for more opportunity because at least the companies they could pay, they could offer a good pay for their artwork. (A9).'*

Supporting a more inclusive creative economy for a more inclusive society: findings from interviews and direct observation

Some art collectives and artist-run organizations (Videotage, XPLOR, Contemporary Musiking...) and maker spaces (Dim Sum Labs, Lab by Dimension Plus, and MakerBay Foundation...), also contribute to the promotion of new media art skills in the society at large by organizing outreach and educational programs. They organise workshops which aim to educate the public by developing a more knowledgeable use of technology: *'we have a mission to teach how to make good use of the platform rather than addicted to the platform'* (A12). They seek democratise creative skills (A4) and to give a more hands-on experience of some very practical skills (A19). Most of these initiatives combine learning technological skills and a 'return of the material' (A4, A5,...), i.e. a more tangible application of technologies. The proliferation of maker spaces symbolises this return of 'craftmanship' (A19, A16). These outreach programmes foster the children's playful creativity (A12) and promote the social and economic inclusion of the underprivileged (A6, A19), minorities (A17) and the

marginalized (A4). They also constitute direct mechanisms of media art skill transfer (A12).

Integration of new media art expertise in the creative economy - cultural entrepreneurship: findings from direct observation

Cultural entrepreneurship has been a driving force of the milieu of media arts in Hong Kong since its earliest hours. Enduring structures such as Videotage, Microwave Festival, as well as experimental theatre Zuni Icosahedron, are indebted to the relentless activism of individual artists such as Ellen Pau, May Fung or Danny Yung. Floating Projects and the Writing Machine Collective, Microwave Festival, IFVA, Videotage, Soundpocket, Foo Tak Building (which is not limited to media art-related practices) are all founded and/or managed by artists. These structures and individuals fulfil crucial functions of support for arts practices.

Foo Tak Building offers affordable studio space and more freedom of use for artists in need, for generally up to two years, until they become established or successful. The Art and Culture Outreach (ACO), which manages the building, also tries to foster a sense of community among artists; in this sense, they can be considered as a vertical artist village. Several of the most active media artists are former or current tenants of Foo Tak Building: Ng Tsz-kwan, Samson Young, Chris Lau, Steve Hui aka Nerve, Hung Keung, Fiona Lee, Chloe Cheuk, Kenny Wong Chi-chuen, Jess Lau, Law Yuk-mui to name a few.

Soundpocket offers an artist support programme for young artists (within two years of graduation) which includes financial, practical, networking and moral support; they also provide a residency exchange programme with Experimental Sound Studio (ESS) in Chicago and Art Center Ongoing in Tokyo. A significant number of Hong Kong and international artists have benefitted from their program (Chloe Cheuk, Fiona Lee, Samson Cheung Choi-sang, Dave Chow Yui-wang, Jasper Fung, Steve Hui aka Nerve, Edwin Lo...).

Floating Projects provides a space of experimentation and exhibition for a community of practitioners and researchers, driven by the Writing Machine Collective. Some of the pillars of the media art scene are members of the collective (Linda Lai, Jolene Mok,

Lee Kai-chung, Wong Chun Hoi, Andy Li San-kit...). A café area encourages networking and exchanges between artists.

Microwave Festival is the main international event dedicated new media arts; created in 1996 by Videotage before emancipating itself ten years later, Microwave aims to highlight the diversity of this field and to address the issues raised by media arts. They also help curate Hong Kong artists overseas (Keith Lam, Ellen Pau, Lam Miu-ling, Samson Young, Chris Cheung Hon-him, Kingsley Ng, Gaybird, to name a few). They have organized different outreach programs in order to educate the public on the diversity of new media arts: conferences, workshops, public tours, performances and so on.

The Incubator for Film and Visual Media in Asia (formerly the Hong Kong Independent Short Film and Video Awards) or IFVA has grown from showcasing local media artworks, often from recent graduates, to being a platform for Asian artworks. The IFVA awards have contributed to launching the careers of young artists and have enabled more established artists to receive a greater exposure as well.

Videotage, which was founded in 1986, ambitions to become ‘one of the most fundamental new media art institutions in the Greater China region⁴¹’. Acting as a repository of video art works, Videotage also organizes cultural exchange programmes and a residency program. Videotage has always been involved in cultivating artistic skills in the young public. Videotage also ambitions to bring major art fairs such as Loop Barcelona to Hong Kong.

About sound arts: aside from Floating Projects (transdisciplinary practices) and Soundpocket, a few places and events are dedicated to sound arts such as Twenty Alpha (Steve Hui aka Nerve) at Foo Tak Building. Although the scene is very active (‘Noise to Signal’ series organized by Dennis Wong aka Sin:Ned...), it remains relatively at the margins at mainstream art world (for example, there is HKADC award for sound arts).

Integration of new media art expertise in the creative economy - cultural entrepreneurship: findings from interviews

⁴¹ <http://videotage.org.hk/web/subpage.php?mid=35>

All the participants to this study hailed the role played by these supporting organizations and individuals. As one interviewee sums up: *'the community is still very small and artists, like young artists especially but old artists as well, I think we all need curatorial and emotional support. I mean one can be so anxious as an artist worrying this and that, that if there's no community, it's very hard for them to survive. And the market is so strong and the institutions are so big that sometimes they feel they are monstrous or something, so it's important to have these kind of connections'* (A17).

The main function of these organizations is to build a community and support individual artists. For example, speaking about Soundpocket, one interviewee noted: *'they do a lot of support and nurturing, and researching on artists, for artists, and they have a lot of intensive cultural exchange between artists in HK and artists from outside. So, a lot of new young artists, they get a chance to travel abroad to show their work, to (...) work with Japanese sound artists, with artists in Chicago so they really... have kind of life changing experience for the first time* (A16)'. Another IFVA alumnus summed up IFVA's role as a long-term partnership with artists: *'they know you and eventually, maybe, they have some festival and then they will invite you to join. I think IFVA has a more friendly approach: once you join the competition, you are part of a family* (A13)'.

Together, these organizations weave a network of support, which success is measured by the growing number of artists or the expanding fields of application. The individuals engaged in this network are tied by informal relations, informal clusters of affinity which are mostly visible on social media.

Integration of new media artists in the artistic milieu - the role of individual artists and stakeholders: findings from the online survey

For most of the respondents, the support of individuals and structures in the community is essential. When asked about three most important people in their artistic career, the respondents mentioned: fellow artists (e.g. Jolene Mok, Jaffa Lam, DJ Sniff, Kenny Wong Chi-chuen, Wong Chin-hoi), internationally renowned artists (Jeffrey Shaw, Jean Claude Eloy), curators (e.g. Nuria Kramer who used to manage Connecting Space), gallery owners (e.g. Agnès Lin from Osage), festival directors (e.g. Joel Kwong, programme director of Microwave Festival).

The respondents seem to have particularly been influenced by some those who have influenced the ‘milieu’ through the multiple roles they have taken: artist, scholar, member of the Writing Machine Collective and founder of the BAS in New Media Dr Hector Rodriguez; independent curator, educator and author Yang Yeung from Soundpocket; independent curator and producer Orlean Lai from orleanlaiproject; and artist, scholar and independent curator Linda Lai from Floating Projects and the Writing Machine Collective.

Furthermore, some places are directly associated with new media arts by the respondents. When asked about the new media art shows and performances they attend on their free time, the respondents mentioned: Videotage, Microwave, IFVA, the French May and the CityU School of Creative Media.

The Hong Kong Arts Development Council (HKADC): findings from interviews and direct observation

The HKADC has been a major funding organization for artists, including for young artists. The organization also supports a large number of art organizations and events (e.g. New Arts Power). The HKADC also offers some studios for rent in Wong Chuk Hang (Artspace)⁴² and Kwun Tong, which are open to diverse practices, including new media. The majority of interviewees were also quite positive about work of the Council, one interviewee lauding the helpfulness and availability of the organization’s staff (A1). However, some interviewees hinted that the council might be too underfunded and understaffed to cater to the needs of a growing art population and the challenges of a maturing art scene (A11, A7).

Sponsors and partners of new media art: findings from desk research

Art sponsorship is essential to a vibrant art scene. It enables the provision of artistic events at a lower cost for the public and it symbolizes the link between corporations, artists, and the society. The ‘Survey on Arts Sponsorship (2011)’ found that 90% of the participating sponsors considered the objective ‘to enhance the quality of the arts and

⁴² <http://artspace.hk/?lang=en>

culture of Hong Kong’ as a ‘very important’ or ‘important’ factor (p.8). They also considered the following government incentives as ‘very important’ or ‘important’:

Table 3: Arts sponsorship and government incentives

Incentives	Distribution of the percentages of respondents who regard the incentive as very important/important
Encourage people to participate so as to increase the audience	94.8%
Formulate a clear long term policy for arts and culture	89.5%
Give commendations to organizations that contribute to the arts and culture sector	86.8%
Provide information to the arts sector to help them understand the operations of corporations and foundations	84.2%
Increase funding for the arts groups, to strengthen their administrative abilities	84.2%
Promote the development of cultural creative industries for better integration of the arts and business activities	84.2%
Provide tax incentives	81.5%

Source: Lingnan University Kwan Fong Cultural Research and Development Programme (2011). *Survey on Sponsorship in Arts and Culture: Executive Summary*. (August). P.8 Online: http://www.hkadc.org.hk/wp-content/uploads/Executive_Summary_English.pdf

Contrary to commercial events such as Sónar, which charge a rather expensive entrance fee, the major new media art events are free of charge and yet require a significant investment. Therefore, the role of sponsors and partners is essential. The support of foreign consulates is crucial for any international event. The Leisure and Cultural Services Department, the Hong Kong Arts Development Council and the Goethe-Institut Hong Kong have been dependable partners for Microwave and IFVA. The Hong Kong Jockey Club Charities Trust is a major partner for IFVA, Lumières Hong Kong and New Arts Power (for example, it supported Kingsley Ng’s work ‘After the Deluge’ set in the Tai Hang Tung Stormwater Storage Tank in January 2018).

Microwave Festival has also partnered with local education institutions (especially the School of Creative Media of the City University of Hong Kong, but also the Hong Kong Design Institute, the Chinese University of Hong Kong, the HKICC Lee Shau Kee School of Creativity and the Savannah College of Art and Design), and with equipment companies (EPSON, ASUS).

Exhibitions and festivals also rely increasingly on creative companies for their spatial design and technical direction (e.g. Ware for Microwave, XCEPT/XCEED and Cubic Space for IFVA...).

Lumières Hong Kong, which is also a large-scale free, public art event is presented as a major touristic event as well. Therefore, its sponsors and partners reach across the fields of art, tourism and technology and involve several government branches: the government of the Hong Kong Special Administrative Region of the People's Republic of China, the Hong Kong Jockey Club Charities Trust, CLP, AMTD, the LCSD, the Art Promotion Office, the Home Affairs Bureau, the Hong Kong Tourism Board and the Lyon Festival of Lights, to name a few⁴³.

Other organizations have supported the media arts milieu. The Hong Kong Visual Arts Centre, Asia Society, Osage Art Foundation to name a few, as well as galleries such as Osage, XXX Gallery, Gagosian, K11, Edouard Malingue, and Empty Gallery. These organizations also support the new media art scene by building up audiences and expanding the society's knowledge about art and technology through educational outreach and training programmes. The Hong Kong Visual Arts Centre frequently hosts art talks, including by influential new media artists (Gaybird, Linda Lai, Chris Cheung Hon-him, to name a few), as well as new media art workshops (e.g. 'To Program the Beauty in My Heart' with Wong Chung-yu in December 2018-January 2019). Organizations such as Osage Art Foundation are actively committed to increasing awareness for the arts by the general, and especially the young public.

Exhibitions – building an audience: findings from interviews and direct observation

In order to develop, a new media art expertise needs an audience, if possible, a sophisticated one. This is why the outreach activities mentioned above are so important for the media arts expansion in the whole creative economy of Hong Kong.

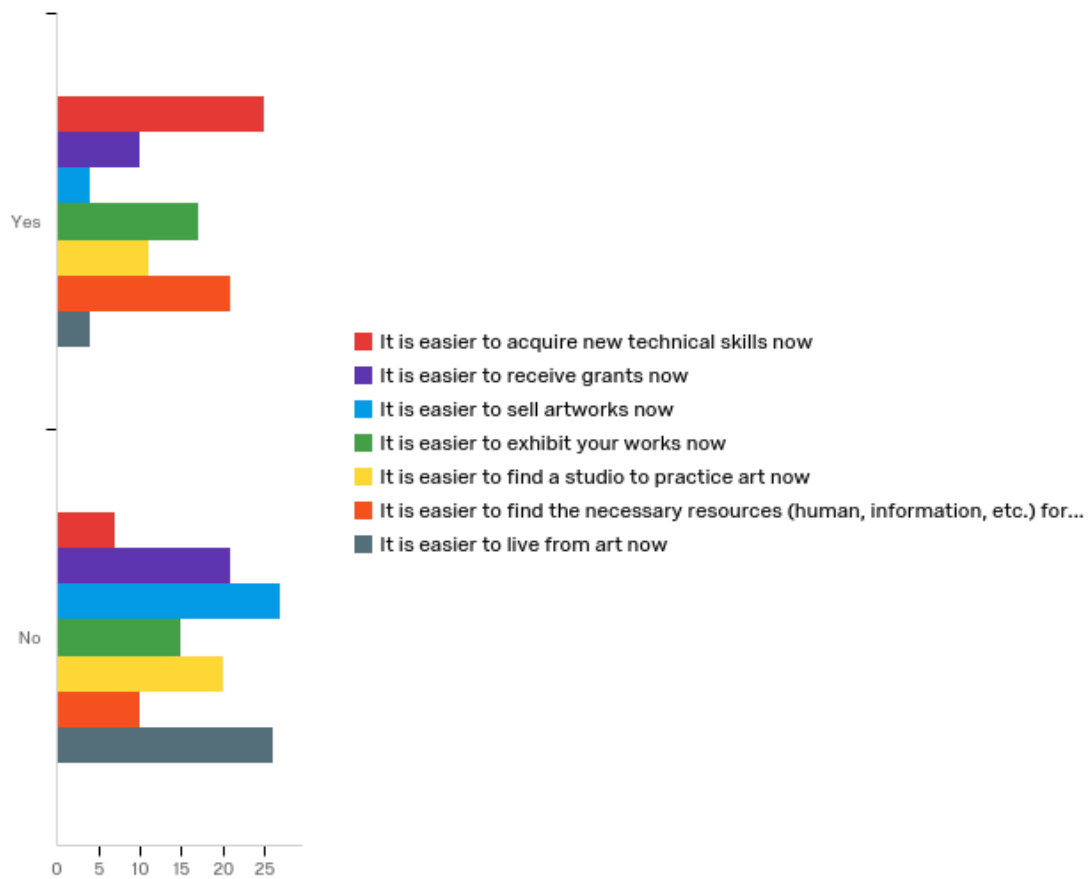
⁴³ Lumières Hong Kong: <https://www.lumiereshk.com/about/>

They aim to build a more tech-educated public – and society. One artist has noticed some positive changes in the recent years: *‘I start to feel like people start asking different things. At first people asked like ‘what is this doing?’ then they will ask about the technique more or the idea, but eventually people ask more about the idea ‘why are you doing this’, you know, more about the relationship. I think people start to know how to ask questions. I think that people are getting more interested, as like, this technology thing is already part of their lives. (A13)’*. But in general, artists still struggle to have their works appreciated because of a lack of knowledge on the intricacies of their process. Most interviewees mentioned that, even though the public may know about new media art, the lack of *‘sophisticated or advanced audience is still a problem here’* (A11). For artists, this sometimes implies some compromises, for example presenting their work in a more ‘instagrammable’ fashion: *‘I even heard someone say ‘instagrammable’, like something is ‘instagrammable’ then it’s good, like there’s a new metric kind of (A10)’*. In sound art, it may come down to easy comments such as: *‘The volume should be higher’, or, this is too noisy’* (A17). As one artist sums up: *‘maybe they know this kind of art form is for interaction or for selfie, more than to understand what’s behind, in the beauties of technology (A12)’*.

It should be acknowledged that these attempts to build a bigger audience constitute a significant investment in time and resources for these artists and stakeholders. One commentator admitted: *‘With education, they are very happy to be involved in workshops if they are invited, but you know HK is a city where everybody is so busy, everybody has to make a living, and most artists cannot survive as an artist, they have to teach, they have a job. So, it is, of course, missing. And then it depends on the level of support from the government for artists (A18).’*

Exhibitions: findings from online survey

Fig.9. Q57 - Then and Now. Would you agree with the following statements?



A majority of respondents agreed with the statements: ‘it is easier to acquire new technical skills now’, ‘it is easier to exhibit your works now’, and ‘it is easier to find the necessary resources for your artistic practices’. In contrast, more respondents disagreed with statements related to arts as an income-generating activity such as: ‘it is easier to receive grants now’, ‘it is easier to sell artworks now’ and ‘it is easier to live from art now’.

Fig.10. Q10 - How many exhibitions/performances have you had in the past ten years IN Hong Kong:

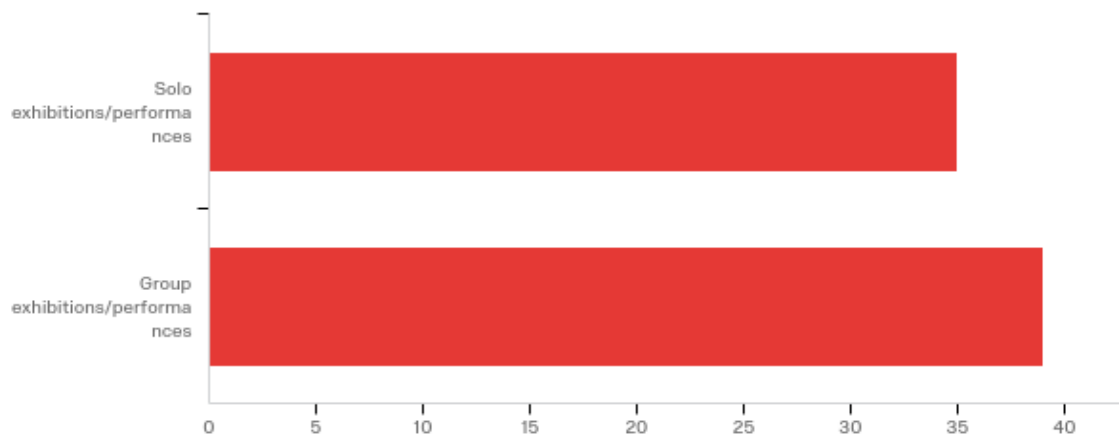
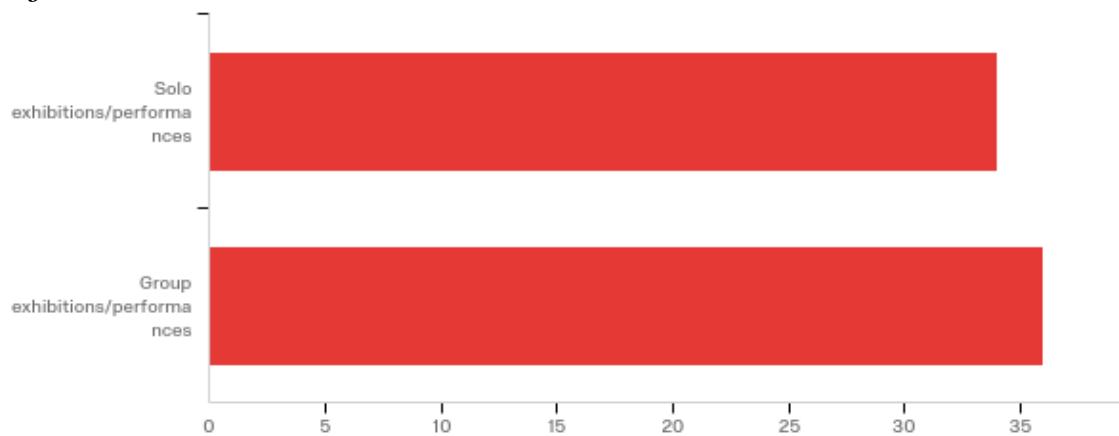
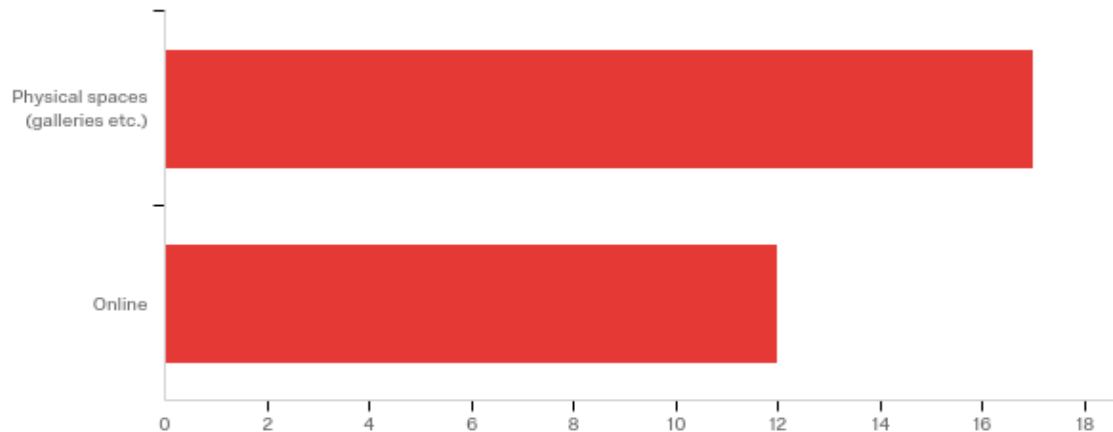


Fig.11. Q11 - How many exhibitions/performances have you had in the past ten years outside Hong Kong:



The majority of exhibitions and performances were group exhibitions, both in Hong Kong and overseas. Furthermore, exhibitions provided more opportunities to sell artworks than digital spaces. The majority of sales are still made in physical spaces (galleries etc.) (62.50%).

Fig.12. Q12 - Where do you make the most sales?



Even though a majority (53%) of respondents think that there are more exhibition opportunities nowadays, 65.63% still consider that, based on their experience, it is not easy to find an exhibition place in Hong Kong: the high cost of space (and lack of financial support) is considered as the main obstacle. Other obstacles are: the short period of exhibition, the lack of autonomy when approached by an organizer, issues regarding the size, scale, storage, display of artworks as well as the interest of commissioners – especially for installation art and sculptures-, and finally the difficulty of joining existing networks for a group exhibition. Almost 9 artists out of 10 consider that it is not easier to sell artworks and live from art now.

These findings highlight the importance of offering exhibition opportunities for new media artists. They also hint at the importance of networks, which determine opportunities for artists to participate in group exhibitions.

Exhibitions: findings from interviews and direct observation

Our direct observation and the interviews are consistent with the survey results about the increasing exhibition opportunities for new media artists. Being well connected with the milieu increases the chance to participate in group exhibitions. Exhibitions perform several functions: they constitute a source of income for artists, an opportunity to improve their artistic practice, to reach and increase their audience, and they help sustain a variety of technical and logistical expertise. Exhibitions give opportunities to explore artistic practices further and increase the chance for peer recognition (awards, grants...). They also help improve the professionalism and

contribute to the development of related skills such as experiential design, logistics, marketing and curation. Creative companies founded by artists have progressively assisted in organising significant exhibitions: N7 was in charge of the branding design of the exhibition ‘Algorithmic Art: Shuffling Space and Time’ at City Hall curated by artist and scholar Linda Lai in December 2018-January 2019, XCEPT (formerly known as XCEED) has been creating spatial designs for the IFVA exhibitions, and yU+co.[lab] provided installation engineering for Gaybird’s crossmedia performance as part of the New Arts Power programme. Similarly, some of the interns who helped set up Hong Kong’s exhibitions at the Venice Biennale over the past years are graduates from the School of Creative Media trained in new media arts (Emily Ng, Chan Hei Man, Dennis Man Wing Leung, Dicky Yeung Pak Hong)⁴⁴.

Art Basel: findings from interviews

The transition from Art Hong Kong to Art Basel in 2013 has epitomized the significance of Hong Kong’s role as a contemporary art hub in Asia. However, the interviewees had some mixed feelings about Art Basel. Some artists thought that it was ‘distant’ (A16). One interviewee mentioned that, because of the high cost of participating or even attending to Art Basel, the question ‘to join or not to join Art Basel’ was mainly a matter of priorities: *‘it’s a good platform, I think, for a lot of established galleries but for young galleries it’s very expensive. And usually young artists, we cannot sustain. And for me, when you weigh it, is the money better put in this project or is it better put in 4 days in Art Basel? One has to think’* (A16). Another commentator added that the art collectors who attend Art Basel seem more interested in the works of Mainland Chinese artists than Hong Kong artists (A1). Generally, the interviewees feel that Art Basel hasn’t had a direct effect on Hong Kong artists (A1, A16, A18).

However, they admitted that it may contribute indirectly to the local art scene in some way. Along with the ‘creative turn’ in the government’s policy, flagship events such as Art Basel may have reduced the bias against arts-related jobs in the society. Therefore, Hong Kong parents may be more willing to enrol their children in creative and cultural

⁴⁴ West Kowloon Blog : <https://blog.westkowloon.hk/contributors/>

industry-related programs. Art Basel may also inspire local artists thanks to the prime quality exhibitions. The interviewees were favourable towards the job creations and the development of a whole ecology of arts-related logistics surrounding such events, making Hong Kong a regional hub for art transactions, therefore reinforcing Hong Kong's nodal position as a platform of exchanges. One interviewee acknowledged: *'even though I'm not really interested in it, for all those kinds of big things happening in HK, definitely it will bring economically to HK, because people will come to HK, HK becomes a logistic place for art transmission, you know, security, all kinds of finance things, it's a very complicated system when you transport some artwork from one place to another: packaging, all kinds of jobs, for arts, many. So, it's important in this sense. And also, it makes HK famous (A16)'*. The commentators, however, seemed unsure of the lasting effects of such events; these would require more channels for trickle-down effects (Charrieras et al 2018).

In general, opinions were more positive regarding the light festival *Lumières Hong Kong*, because it brought local and international artworks, including new media, to the general public, free of charge. *Lumières Hong Kong* was sponsored by the French Consulate General to Hong Kong and Macau and the Hong Kong Jockey Club Charities Trust, and included outreach programs as well. It turned out to be a popular success⁴⁵.

Art Basel: findings from direct observation and desk research

An analysis of the art sales concluded during Art Basel Hong Kong 2018 shows that Art Basel favours collectable art from renowned international artists (Botero, Miró, Rauschenberg...) and artists from Mainland China (Lu Xijian, Wang Guofeng, Zao Wou-ki, Zheng Chongbin...)⁴⁶. The local galleries which take part in the event usually exhibit foreign, and Mainland Chinese artists: for example, Gagosian presented works by Nam June Paik, Anish Kapoor, and Takashi Murakami, whereas Empty Gallery will present works by New York artist Tishan Hsu for its first Art Basel presence in 2019⁴⁷. In some cases, even though galleries may represent Hong Kong media artists and help them exhibit their works internationally, they usually choose to showcase either

⁴⁵ GROGAN, Hannah (4 July), 'Lumières Hong Kong announces 2018 return, adds Tai Kwun to venues', *Perspective*, <http://www.perspectiveglobal.com/lifestyle/lumieres-hong-kong-2018/>

⁴⁶ Sussman, AL (2018). What sold at Art Basel in Hong Kong, <https://www.artsy.net/article/artsy-editorial-sold-art-basel-hong-kong-03-31-18>

⁴⁷ <https://emptygallery.com/fairs/art-basel-hong-kong-2019/>

international names or Mainland artists at Art Basel: e.g. Pearl Lam Galleries has promoted media artist Kenny Wong Chi-chuen's career in Hong Kong and overseas but their Art Basel catalogue was composed of 'international artists including American artist Robert Motherwell (b. 1915–d. 1991); Australian artist Dale Frank (b. 1959); British artist Antony Micallef (b. 1975); Chinese artists Huang Yuanqing (b. 1963), Liu Wentao (b. 1973), Su Xiaobai (b. 1949), Zhou Yangming (b. 1971), and Zhu Jinshi (b. 1954); Italian sculptor Arcangelo Sassolino (b. 1967); and Korean artists Chun Kwang Young (b. 1944) and Kim Tschang-Yeul (b. 1929)⁴⁸). Their exhibition included installations by Mainland Chinese artist Zhu Jinshi.

Nevertheless, several contemporary Hong Kong artists have participated in Art Basel (Hung Fai, Man Fung-yi, Chow Chun-fai, Andrew Luk, Ivy Ma...). The members of the contemporary art centre Para Site have repeatedly taken part in Art Basel: Leung Chi Wo, Leung Mee Ping (both founders of Para Site), Law Yuk-mui (in 2018) etc. Samson Young is regularly featured at Art Basel. After Osage Gallery presented contemporary artist Lee Kit as the first Hong Kong artist in Art Statements at Art Basel in 2011, his international career really took off and he eventually represented Hong Kong at the Venice Biennale in 2013. This year, Videotage will be at Art Basel to present historical video works by prominent media artists (Comyn Mo Man Yu, Ernest Fung, May Fung, Wong Chi Gai, Yau Ching, Ellen Pau, Hung Keung, Danny Yeung). However, so far, all this presence has been not translated into a positive reputation in the media art world.

The mixed reputation of Art Basel (and art fairs in general) among artists who endorse a more experimental approach may also be explained by the pressure for more saleable art. In a recent article about a group of young Academy of Visual Arts graduates who decided to stick to an artistic practice rather than seek a career in teaching, design or marketing, Enid Tsui recounts the key moment when the group of graduates '*joined a dozen or so other emerging artists in enjoying a workspace in the Foo Tak Building at a heavily discounted rent and enjoy the benefit of being part of a lively, stimulating community* (E. Tsui, Jan 2018)'. This article points out that the pressure for saleable arts constrains the artists' practices, by subjecting them to trends which have little to

⁴⁸ Pearl Lam Galleries (2018), 'Pearl Lam Galleries' participation in Art Basel in Hong Kong 2018 coincides with the Galleries' opening of March Exhibitions and H Queens space' (14 March). https://www.pearllam.com/wp-content/blogs.dir/1/files_mf/1521783950Pearl_Lam_Galleries_March_Events_Press_Release_EN_180321_R.pdf

do with their aesthetic practice. Apple Wong, one of the artists interviewed in this paper, relates: *‘At the beginning, I was offered a lot of opportunity to exhibit in galleries, in art fairs. In fact, there was a fair bit of pressure on me to produce the sort of work that sold early on. But I have pulled back. I don’t like the fact that some buyers are simply looking for affordable art to fill walls in a new hotel. I don’t like the fact that I would have to create more colourful images in order to sell. I want to do whatever I feel like’*⁴⁹. Even though this comment does not refer to new media arts specifically, it is consonant with the views of stakeholders we interviewed.

This chapter has shown that (new) media arts contribute to the creative media in different ways: through their art practices, through their income-generating activities, by setting up their own creative companies (therefore creating jobs for other creatives, contributing to improve the creativity of commercial projects and representing Hong Kong know-how overseas). They are supported by a dense network of supporting organizations and individuals.

Recommendations

It is important to consider different ways to acknowledge the various practices and categories pertaining to (new) media arts as well as the diverse contributions of the whole ecology, the role of specific organizations and individuals which support the development of art practices. Therefore, we recommend:

- that the HKADC offer awards to collaborative works in addition to individual prizes. As we mentioned earlier, new media art projects are transdisciplinary. Even though some artists are solo practitioners, many large-scale projects require collaborations. In this case, the award should benefit all the team members;
- that the HKADC offer an award to individual stakeholders (mentors, and so on) for their contribution to the art scene. The HKADC used to hand an individual award in the ‘Arts promotion’ category (2012). This practice could be renewed;

⁴⁹Enid TSUI (2018). ‘How to become an artist in Hong Kong, city short on space to work and big on making money from art?’, 19 January 2018, South China Morning Post, <http://www.scmp.com/magazines/post-magazine/arts-music/article/2128674/how-become-artist-hong-kong-city-short-space-work>

- that the HKADC offer an award for ‘best curatorial statement’. This would acknowledge the essential role of curators in providing additional conceptual frame to the artist’s work and contributing to the appreciation of the arts;
- that the HKADC offer an award for sound arts. The current ‘music’ category does not include sound arts. Some elements of sound may be present in the works of the recipients of the ‘media arts’ award but ‘sound arts’ per se are a distinct category of practices. This distinctness should be acknowledged;
- the creation of a ‘media arts’ specific system of awards, in addition to the HKADC awards. This would be similar to what exists in other art fields: for example, the Hong Kong Dance Awards, established by the Hong Kong Dance Alliance, honour ‘choreographers, dancers, directors, dance companies, independent dancers and dance organizations, educators, educational institutions, community and youth groups; lighting, costume, and sound designers, composers, dance photographers, critics, producers, sponsors, presenters, activists, advocates, and patrons⁵⁰’. The categories for the Dance Awards are more detailed than the HKADC awards and cover: ‘outstanding choreography’, ‘emerging choreographer’, ‘outstanding large venue production’, ‘outstanding small venue production’, ‘outstanding lighting and/or visual design’, ‘outstanding music composition and/or sound design’, ‘outstanding dance education’, ‘outstanding services to dance’ and so on. A similar distribution could be identified for media arts (e.g.. outstanding innovative use of technology, outstanding interactive art, outstanding performance, outstanding outreach programme, etc.). These awards would highlight the diversity of skills and practices in (new) media arts and help the public understanding this diversity. The management of these awards could be handled by an existing organizations (e.g. Microwave...) or to a new organization developed in the following point;
- the creation of a permanent ‘media arts centre’. As other examples overseas have shown, having a space where media arts are shown all year long is a major attribute of all creative cities. This centre would serve as a resource centre, providing documentation and exhibitions on the history of development of media arts practices locally and internationally. It would organize discussions,

⁵⁰ Hong Kong Dance Alliance, *About Hong Kong Dance Awards*, http://www.hkdanceall.org/?a=group&id=award_about

sharing sessions, debates on theoretical, practical and social issues regarding media arts in partnerships with different stakeholders such as universities, private sectors (technology, creative companies...), funding organizations, grassroots actors etc. It would organize workshops and cultural exchanges as well as residency programmes for local and international artists. Its main function is to become a permanent point of reference for anyone curious about media arts. The projection created for the exhibition 'Algorithmic Art' exhibition curated by Linda Lai at the Hong Kong City Hall and which traced the historical linkages and development of technologies could be permanently showcased here. New media artists should be involved in decisions regarding its inception and management. Such a space would solve a practical question for Hong Kong: (lack of space of course and-) lack of time (for example to attend festivals, which can only last for a couple of weeks);

- the creation of a mentorship research fund within the UGC system to enable young graduates to perfect their expertise in new media under the guidance of an professional artist working in academia. This fund could be combined with other business-oriented vocational programmes if the graduate plans to set up their own businesses;
- the strengthening of training institutions' capacity to act as a catalyst for the transfer of new media expertise to the creative economy and the society as a whole. This involves: more flexibility in the use of their resources (equipment, facilities...) by alumni and for outreach educational programmes, providing support to initiatives aiming at optimising the use of these resources (for example via summer workshops such as the 'Summer School Series' organized at the School of Creative Media and focused on the transmission of new technological skills); and fostering discussions and experimentations on the latest creative tools within art and creative departments and with representatives of the business environment and the society;
- promoting equal access to higher education by creating incentives for UGC-funded programmes to accept more atypical profiles.

Objective 5: to identify the factors of competitiveness of the integration of a new media art expertise in those sectors of the creative economy where this integration is the most salient

This final chapter builds on the findings from the previous chapter, which highlights the contributions of a vibrant art scene to the dynamism of the creative and cultural industries. The chapter will be introduced with the findings of our desk research on the perceived factors of competitiveness of digital entertainment companies doing business in Hong Kong. Subsequently, we will outline the findings from our interviews with the stakeholders on the opportunities and challenges to the development of new media art expertise and their integration into the creative economy.

Entrepreneurship: findings from desk research

As we previously mentioned, the integration of new media art expertise in the creative economy relies on the entrepreneurship drive which has resulted in the multiplication of creative companies these past few years. The survey on Digital Entertainment Industries shows that most creative companies in the studied sectors (especially computer animation, digital effect, game and interaction design) have been founded after 2011 (HKDEA 2018b, p.7). The survey also identifies the following comparative advantages of their respective markets in Hong Kong: “Freedom of Creation and Publication”, “Simple Tax System” and “Possesses International Vision”. The main hindrances to doing business in Hong Kong were: “Insufficient Support from the Government” (76.1%), “High Rental Costs” (76.1%), and the small size of the market hampers the development of these businesses (HKDEA 2018b, p.10).

The aforementioned creative companies in this study have tackled these challenges in several ways: first of all, these companies have turned to the international market. Their creative works have received accolades overseas. Furthermore, they have built up on a cross-pollination between art practices and creative works to gain a distinctiveness in the creative economy.

The importance of peer and official recognition: findings from direct observation and interviews

As the previous chapter shows, a successful integration of new media art expertise into the creative economy requires an endurance of these skills after the artists graduate. Exhibitions, structures of support, mentors and collaborators play a key role in this

respect. Most interviewees also have underlined the importance of some form of recognition to help artists maintain their practices (A5, A10). Peer and official recognition are instrumental in providing incentives for artists to improve their skills and practices. Even though competitions and awards are not the single method of recognition for an artist, a cross-examination of the lists of IFVA and the HKADC awardees in the media arts category shows that the recipients of the HKADC 'best young artist' and best artist awards in the media arts category previously won an IFVA award (Kingsley Ng, Hung Keung, Chris Cheung Hon-him, Kenny Wong Chi-chuen, Law Yuk-mui, Phoebe Hui Fong-wah, Cédric Maridet...). This link is not surprising since the HKADC awards are based on nominations, which must be substantiated notably by previous awards received by artist. These awards marked the beginning of brilliant careers. Therefore, the role of early-career competitions such as IFVA should not be underestimated: they give artists an opportunity for future peer and official recognition and contribute to the renewal of the milieu⁵¹.

The importance of peer and official recognition - open competitions: findings from desk research

Open competitions can contribute to levelling the playing field. The lack of open calls and transparency in the selection process of certain prestigious international festival or art fairs is criticized as well by certain interviewees. The HKADC used to send open invitations to local art organizations and individuals to submit proposals for Hong Kong's participation in the Venice Biennale; however, since 2013, the Hong Kong Arts Development Council has partnered exclusively with M+ West Kowloon Cultural District to select the artist and the curator who take part in the Venice Art Biennale. Practically, M+ recommends an artist, and the HKADC's Venice Art Biennale Working Group endorses the proposed name. According to this new partnership, M+ is in charge of the curatorial and production aspects of the exhibition, which *'will include appointing artists to create the artwork, publicity for the exhibition and its promotion, and making improvements to the current exhibition venue'*, whereas the HKADC *'will provide assistance to M+ and liaise with the Venice Biennale Office*

⁵¹ To some extent, graduation shows organised in art and design schools often provide the first stepping stone in an artist career: in the past years, the works presented at IFVA were first created as graduation projects at the School of Creative Media, for example.

(HKADC 2012)⁵². The first two editions co-presented by M+ and the HKADC (2013 and 2015) were curated by M+ staff. In 2017, Samson Young's exhibition was curated by a local guest curator, Ms. Kwok Ying, '*in an effort to nurture local curators through providing experience in a major international setting*⁵³ (HKADC 2016)'. For the 2019 edition, the selected artist is Shirley Tse (HK/Los Angeles) and the guest curator is Christina Li (HK/Amsterdam).

Table 4: Hong Kong artists at the Venice Art Biennale

Year	Artist(s)	Project title	Curator(s)
2001	Ho Siu Kee, Leung Chi-wo, Ellen Pau	Magic at Street Level	Tsong-zung Chang
2003	Group exhibition by 11 artists	Navigating the Dot	Para/Site
2005	Kurt Chan Yuk Keung, Stanley Wong (another mountainman)	Investigation of a Journey to the West	Sabrina Fung
2007	Hiram To, Amy Cheung, Map Office	Star Fairy	Norman Jackson Ford
2009	Tozer Pak Sheung Chuen	Making (Perfect) World	Tobias Berger (Para/Site)
2011	Kwok Mang Ho, aka Frog King	Frogtopia. Hongkornucopia	Benny Chia (Fringe Club), with Wong Shun-kit and Tsang Tak-ping
2013	Lee Kit	You (you)	Lars Nittve (M+ director), with Yung Ma (assistant curator M+)
2015	Tsang Kin-wah	The Infinite Nothing, Hong Kong in Venice	Doryun Chong (Chief curator M+) with Stella Fong (Lead curator M+)
2017	Samson Young	Songs for Disaster Relief	Guest curator: Ying Kwok. Consulting curator: Doryun Chong (M+)
2019	Shirley Tse		Christina Li

⁵² HKADC (2012). Participation in the Venice Biennale 2013 Open Forum Statement by Chairman of the HKADC, (3 October). Online: <http://www.hkadc.org.hk/?p=7521&lang=en>

⁵³ (HKADC 2016). HKADC to Collaborate with M+, West Kowloon Cultural District at 57th Venice Art Biennale Artist Samson Young and Curator Ying Kwok Selected as Hong Kong's Submission for Participation (14 July). Online: <http://www.hkadc.org.hk/?p=14927&lang=en>

The main advantage of this new partnership is a significant increase in funding. The report on ‘Consolidating Hong Kong’s experience of participation in the Venice Biennale’ (2016), prepared by Tobias Berger and Elaine Ng, found: ‘*Only when M+ contributed a substantial further amount to the exhibitions, the budgets for 2013 and 2015 became adequate* (Berger & Ng 2016, p.5)⁵⁴’. However, this decision drew criticism from the beginning, local artists and curators feeling left out. Berger & Ng’s report also found that most local artists and curators who took part in their study ‘*agreed that there was no ideal solution but considered the open call should be resumed while HKADC needs to work together with an institution*’. They added that ‘*a selection panel with experienced art professionals involved was also suggested*’ (ibidem).

The importance of peer and official recognition - open competitions: findings from interviews

This view was echoed by our interviewees: ‘*M+ has the power to choose whoever artist they bring to the Venice Biennale, but before then it was open call (...) there are many artists who are not chosen or they are disqualified even to just apply for showcase in Venice Biennale* (A16)’. The process of applying for a prestigious festival is seen as beneficial in and of itself, even though the artist is not selected: it helps artists focus on developing their research and practice with a clear objective. Therefore, denying this opportunity is perceived negatively. Moreover, it reinforces the discrepancy between a few well-known artists and the majority of emerging artists.

The issue of space: findings from interviews

A general understanding of new media arts as pertaining to practices happening only in the digital realm can downplay the need of physical spaces for a lot of new media art practices mixing physical and virtual dimension. For instance, setting up a new media art installation and spatializing the artwork usually require large physical space

⁵⁴ Berger, T. & Ng, E. (2016). ‘Consolidating Hong Kong’s Experience of Participating in the Venice Biennale – Review of the Future Strategy in Promoting Hong Kong Visual Arts Overseas (Executive Summary)’. Report Commissioned by the Hong Kong Arts Development Council (January). Online: http://www.hkadc.org.hk/wp-content/uploads/ResourceCentre_ResearchReport/20160714/VB%20Study_Executive%20Summary_Eng.pdf

to test the artwork before setting it up in an exhibition space – as well as sufficient time to set up their works before the exhibition begins. This has been named as one of the main challenges for artists doing large-scale installations and interactive art.

Indeed, the range of practices involved in new media arts is broad and the need for spaces can be critical for multi-disciplinary teams working on new media art projects. These teams, composed of artists, engineers, architects, designers, need some physical spaces fitted for a variety of physical crafting to develop innovative projects that wouldn't fit in a work-for-hire context: *'So if you think, there's a whole big part of demographics, people like designers, architects, many engineers, artists, (...) they need machines, they need a place where they can hammer on a table, they need to be able to drill, they need to make a mistake, you know it's not the end of the world. So, all these people, all this part of the population and we're talking about thousands of people every year that graduate from architecture school, that graduate at fashion design or that graduate as mechanical engineer, they have literally nowhere to go except to work for somebody else (A19).'*

One interviewee recommended: *'the government needs to provide space, like laboratories, hackerspaces, you know spaces where people go turn up and play with stuff' (A5)*. These physical spaces necessary to the development of innovative new media art crafting practices, are, according to some of the interviewees, the missing link in the creative ecology of Hong Kong: *'Hong Kong has to, I think, provide space. I think the government needs to, instead of like relying on just empty spaces, they have to set up some big spaces where there is cheap rent, where students can come and go (...), if the creative and cultural industries are to be really developed, which they should do because there is investment in galleries, museums and the university is putting money into this in terms of education' (A5)*.

Science Park offers spaces dedicated to projects geared toward art and sciences. But the use of space is biased toward certain practices like robotics. Some interviewees feel that Science Park is marketing-driven (A6). Furthermore, the spaces available at Science Park are constrained by tight regulations regarding the types of materials the entrepreneurs can bring. Also, the headcount for each project must be fixed at the beginning of the project whereas some projects involve a significant fluctuations in personnel depending on the stage of production. Some of the interviewees feel that Science Park studios are not flexible enough for their own practice (A19).

InnoCentre is also open to young creative entrepreneurs. But some interviewees felt a lack of support in this centre (marketing, help in business development), hindering the development of the young creative entrepreneur (A16).

Therefore, the issue of space must also accommodate a more diversified category of activities. An interviewee cited the example of the UK where district councils provide flexible space for intermedia creative practices or hackerspaces with a flexible mode of access and open to a large range of practices, thus enabling the creation of a robust ecology for hybrid creative practices involving digital technologies and physical crafting (A5).

In the light of the scarcity of studio spaces in Hong Kong for new media practices, the exhibition spaces might offer an -imperfect- alternative for the artists to develop their practice and test their equipment in appropriate spaces. But they are too few and the exhibition time is too short to enable sufficient exposure for the artists. In general, artists in our questionnaire mentioned having insufficient time to set up their works when they have an exhibition because of the tight schedule and budget of the exhibiting space. Audiences also have too little time to have access to these new media arts works (A12). Their feedbacks to the artists are thus limited. The issue of limited exposure and reduced interaction with the public also concerns festivals: Microwave and IFVA only lasts a couple of weeks. However, as mentioned previously, these festivals also organize events in the public space (e.g. the IFVA Carnival). However, there still lacks a continued presence of new media arts in the public space, as well as a permanent dedicated structure.

Government support for young artists: findings from desk research and interviews

Despite the efforts of the Hong Kong S.A.R. government to support the arts and the development of creative industries over the past ten years, some interviewees complained about a perceived lack of knowledge of new media arts. Some interviewees expressed the feeling that there is a lack of understanding of new media art and its potential contributions to the economy (A16). The case of Korea, which government sent students to study new media arts in the United States as early as in the 1980s, is presented as a counterexample. This governmental voluntarism explains, according to the interviewee, the current level of technological development in Korea. Globally, the

developments in the field of new media arts in Korea add wealth to the country as a whole.

This lack of knowledge is believed to be particularly detrimental to young people, who may not be able to achieve their full potentialities: support for young artists and creatives should be the main focus of a cultural policy. This should start by opening up spaces such as Cyberport and Science Park to more young creatives willing to explore innovative and artistic practices, a sort of incubator with cheap rents where they can experiment things outside a strict short term commercial ('quick-buck'⁵⁵) logic: *'Let [young artists] have sufficient resources, reasonable ones (...) [P]rovide them with a good environment and then creativity will come'* (A16). The artists' dependence on rare sources of funding tends to force them to 'please everyone', which results in 'kitsch' works (A16) since artists become bounded by the normative expectations of audiences and benefactors. This may cause a lack of originality, which, by extension is detrimental to the development of a more mature creative and cultural sector.

The lack of private funding worsens the situation. Only a few organisations are willing to help (A13). Private funding is minimal and can be irregular: one interviewee recounted how some private financiers withdrew their support before the project was completed (A1). Therefore, besides project grants or grants to attend festivals outside of Hong Kong, there is not enough reliable and regular financial support, especially for emerging artists, in Hong Kong.

Adding to the lack of resources, there is a perception that funding bodies tend to favour well-established artists, and that the lack of grants for young artists will be felt even more as the number of aspiring artist-graduates increases (A16). The new media art festivals in Hong Kong are competition-based, requiring the artist to develop the artwork alone, without support, before submitting it to the festival: *'This is far from enough for the young artists to grow in HK'* (A12). In this context, applying for residencies abroad or applying for a cultural exchange overseas might help young artists: *'not long after graduation I got recognition from outside. I got recognition from Japan Festival, from Austria festival and both festivals are big and somehow, they give me the recognition that I can try to hang on to it a little longer for me to try till something else comes up. I think, probably even without recognition I'd still be doing it, but I don't know, I'm not sure. Maybe'* (A10). Some artists even commented

⁵⁵ A19

that it might be easier to receive grants from foreign institutions (A12, A16). Therefore, it is important that they are aware of these options, that they are able to apply and receive enough support to prepare.

Perceptions of Mainland China

Some artist-entrepreneurs from Hong Kong have been active in the Mainland (exhibitions, workshops, commercial contracts...) where there are more business opportunities and fewer constraints, even though it requires some cautious adjustment (A12, A13, A15, A19). Several factors contribute to this development: significant public funding and willingness (e.g. 'Today Art Museum' in Beijing), availability of space (which literally leaves more room for large-scale experimentation), availability of private investors who are willing to take risks, less stringent regulations (for example regarding the use of space) (A15), existence of manufacturing hubs such as Shenzhen, cheaper rents (A1), and increasing number of artists and curators who were trained in the best Chinese and international universities (A9). Some interviewees called for a strategy to tap into the capacities of Shenzhen (cheaper rents, maker activities), while strengthening the Hong Kong model of protection for Intellectual Property, for example (A19, A1, A15).

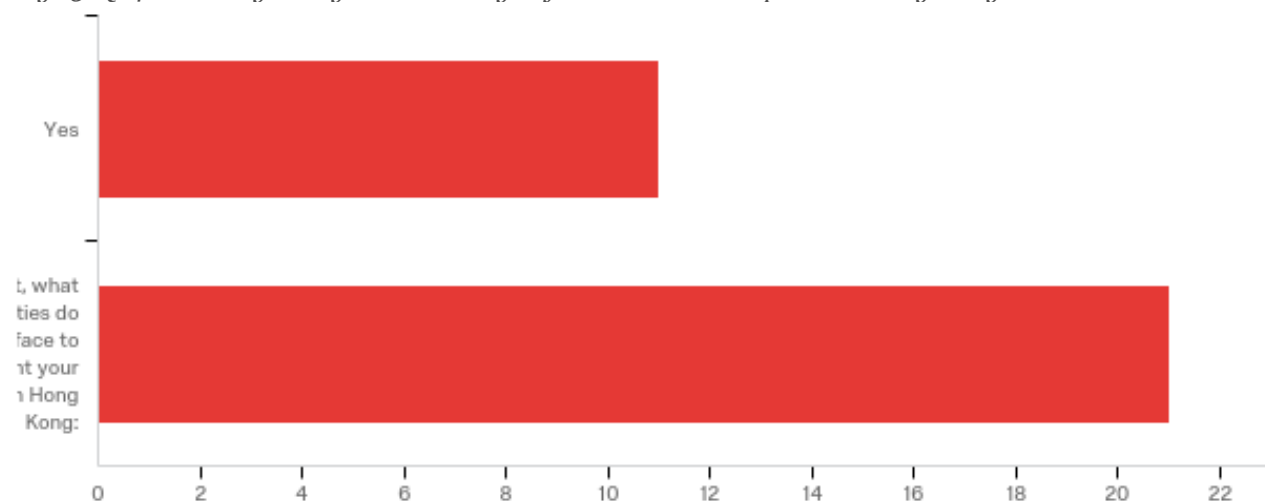
Obstacles: findings from desk research

Lack of information about events: this aspect causes a shortfall in terms of audience. The survey on arts consumption and participation found that 27.2% of the people who do not attend 'Film and Media Arts' events were 'interested but uninformed' (p.13). As our questionnaires show, and as our interviews confirmed, the main channel of information on new media art events is social media, especially Facebook. This can be explained notably by the convenience of reaching out to a captive audience at no cost. But for those outside the milieu, finding this information is not always straightforward. Social media is not mass media.

Obstacles: findings from the online survey

To the question ‘what difficulties do you face to present your work in Hong Kong?’, the survey respondents mentioned mostly rental costs, the absence of open calls, and the lack of space.

Fig.13. Q14 - Would you say that it is easy to find an exhibition place in Hong Kong:



#	Answer	%	Count
1	Yes	34.38%	11
2	No. If not, what difficulties do you face to present your work in Hong Kong:	65.63%	21
	Total	100%	32

If not, what difficulties do you face to present your work in Hong Kong...

No. If not, what difficulties do you face to present your work in Hong Kong:
Installation art and sculptures are not very easy to sell in HK, therefore commercial galleries are not likely to show. Non-profit art spaces are very few.
venues rent and no initiation on exhibition
Competitions
renting
storage is more difficult
base on the cost
Lack of financial support
Not sure
Lack of non commercial space

Do not know how to get chosen from curator, no open calls
Money
Scale, Size
All boring event
There are not a lot of venues in Hong Kong, and hence we like the idea of opening up unusual spaces for artistic interventions
periods are short
It is not too hard to find a place but it is normally approached by an organiser and there is less autonomy in this approach.
rent and resource support in setting up the space and making the site specific setup
mostly related to place's scheduling and budget.
Hard to get into the network to find a chance for group exhibition
Just not "in" with the local scene. And that's ok.
opportunity

According to these responses, the main obstacles to the development of artistic practices are:

- Lack of space: lack of affordable studio for their practice. For example, in our questionnaire, some artists mentioned that they were never able to afford renting a studio, others could only do so once or in residencies, mostly overseas, while a third category had to move from one location to another (sometimes up to 10 times over the course of few years).
- Short period to access and exhibition spaces and to show their works: tight schedules to set up and showcase their works.
- Lack of financial support, in numbers and amounts - only 53% of the respondents had received grants – and in flexibility (grants are mostly project-based and therefore not suitable for a medium and long-term planning). Public actors have acknowledged the drawbacks of project-based grants in their funding schemes. For example, in the latest allocation of funds for the CreateSmart Initiative (CSI), the CSI Vetting Committee advocated a relaxation of funding conditions: ‘past experiences have shown that the traditional, usual

project - based funding model can be restrictive and may inhibit longer - term planning (...)’⁵⁶ (p.8).

Obstacles: findings from interviews

As we mentioned previously, the majority of new media artists use their art skills in the workplace, and would like to have a job that can be useful for their career in the arts. In order to enable this cross-pollination of art and larger ‘creative economy’, some obstacles need to be addressed so that art practices can develop, unhampered, and that they can benefit the ‘creative economy’ at large.

The main obstacles to art practices as identified by the interviewees were:

- Lack of opportunities for experimentation (access/place/space/timing/budget): creatives need resources and support to experiment new ideas and with new technologies. Some artists complained that commercial galleries and spaces were not inclined to task risks on less known artists and therefore only exhibited the works of a few renowned artists (A4, A7). Others pointed out the lack of autonomy to do what they wanted when they are approached by organizers. The stakeholders have complained that the pressure to please has resulted in ‘tacky’, uninteresting works (A16, A11).
- Lack of access channels for outsiders: some artists felt that it was not easy to find information about the milieu, exhibition opportunities or to enter the local networks. This issue was raised by participants to the questionnaire and interviews alike (A4, A20). The following statement was shared by some interviewees: ‘I think it’s really open to very specific group of people and not to the general public’ (A4).
- Lack of press coverage: how to find the necessary information? Some interviewees noticed that media arts-related events and new media artist

⁵⁶ In this case, however, the main beneficiaries of the new flexible approach are the Hong Kong Design Centre and the Hong Kong Trade Development Council, which have been major participants of the CreateSmart Initiative. Legislative Council Panel on Information Technology and Broadcasting, *Funding proposal for the CreateSmart Initiative*, LC Paper No. CB(4)429/17-18(05), 8 January 2018

profiles were not covered by mass media (A11). This may be caused by a lack of knowledgeable discourse to explain and critique practices which are considered as ‘too technical’ (A18). However, it is essential that these practices become more visible to the general public so that they become part of the larger cultural landscape and inspire others to develop similar skills.

- Lack of ‘open call’ competitions: one interviewee complained *‘I haven’t seen any, like that kind of promotional advertisement that’s open for professionals. Mostly for student competition (A4).’* Most events (festivals...) are competition-based but they are scarce. This has at least two consequences: first, artists must rely on themselves to develop their projects for these competitions (A12), and secondly, they have few opportunities to showcase their works. Some interviewees, for example, lamented the absence of an open call procedure for artists to represent Hong Kong at the Venice Biennale since the creation of the M+ West Kowloon Authority (A16). This limitation might create a winner-takes-all situation, a hierarchy between a few famous artists who might benefit from the support of the government and galleries, and the rest of the artists who will be left with fewer and fewer opportunities. Even though competitions are not the panacea for all artists, they often help artists focus on a project and advance their practice with a goal-oriented mindset (A16).
- Lack of less commercial-oriented international events showing diverse cutting-edge international works and where Hong Kong artists and international artists can share experiences. For example, Sónar was considered by some artists as too commercial (A16...).
- Lack of private foundations supporting media art practices. One interviewee cited the example of the Bloomberg Emerging Artists Programme (A9). This residency programme for young artists was launched at the Hong Kong Youth Arts Foundation for the first time in 2007 but was shelved after 2013. It offered invaluable support to then-emerging artists such as Samson Young, Christopher Lau, Phoebe Hui etc., by giving about \$20,000HK of monthly income, about \$10,000 in material, and provided for production and exhibition equipment and facilities.

The main obstacles to a smooth transfer of artistic skills to the ‘creative economy’ as perceived by the participants were:

- The risk aversion of investors and commercial agencies (A8, A15, A16, A19). In spite of the government’s ‘Matching funds’ policy which encourages private companies to support public-funded art and culture organizations, a recent report found that venture capitals and investors in general remained unwilling to invest in creative start-ups⁵⁷. For those companies which carry out marketing projects in Hong Kong, this risk aversion often translates into either a more common, fad-like, conception of newness which only benefits fashionable technologies (in which case everyone ends up using the same tools at the same time), or a difficulty to persuade their clients to do something that has not been done by others (A8). These companies, for example, believed that Mainland China-based clients were more daring (A15).
- A narrow conception of technology-related creativity and a general lack of knowledge on new media art: the interviewees shared the perception that the public in general, and the senior management were not knowledgeable about new media (A6, A8). They felt that tech-creativity and innovation was still conflated with information technology (IT); as one interviewee points out *‘any successful company in IT has interdisciplinarity: they have designers, they have scientist that can write new algorithms, they have artists who can think out of the box and create new strategies or create, reinvent the aesthetics of the products’* (A19). The creative companies that we researched were either run by or employed a significant number of artists.
- Family pressure and competitive mindset which neglects ‘play’ or ‘fun’. There is a widespread consensus among the participants that family pressure is counter-productive (A16, A14).

⁵⁷ Legislative Council, ‘Updated background brief on the work of Create Hong Kong and Hong Kong Design Centre’ Panel on Information Technology and Broadcasting, Meeting on 9 July 2018, LC Paper No. CB(4)1337/17-18(02), p.7

- General tropism in favour of white-collar jobs and against more hands-on experiences: one interviewee felt that family pressure in favour of white-collar jobs resulted in discouraging young people from carrying out more practical experimentations (A19).

Strengths: findings from interviews

The Hong Kong art and cultural sector has qualitative advantages that can be built upon to create a stronger, more inclusive and diverse creative economy and society. All the interviewees stressed the importance of safeguarding Hong Kong's specificities, including: protection of Intellectual Property (A9), rule of law (A15, A19...), freedom of speech and artistic expression (A16), openness and cosmopolitanism (A4, A5, A20).

Strengths: findings from desk research

As mentioned previously, the respondents to the research conducted by the Hong Kong Digital Entertainment Association (2018) consider that the main strengths of Hong Kong are: "Freedom of Creation and Publication", "Simple Tax System" and "Possesses International Vision". In addition to these business-related aspects, the art field also possesses specific strengths which could benefit the creative industries⁵⁸:

The major strengths of the arts and cultural sector in Hong Kong according to the report on the capacity of civil society in Hong Kong (2015-16):

- 'There are artists, art administrators, educators, and practitioners in the field who are committed in the arts and cultural development in Hong Kong. Many ardent practitioners in the arts circle know each other well and form collaborations and partnerships.
- There is a younger generation of artists who are innovative and willing to explore new forms of artistic expressions in Hong Kong.
- As an economically developed city with a strong tradition of generosity in donation, Hong Kong has untapped potential for philanthropy, fund raising, and volunteering in the arts and cultural sector.
- As a global city, Hong Kong can be a unique cultural melting pot with distinct historical and geographical advantages to develop into a cosmopolitan arts hub.
- Freedom of expression (but noting potential threats such as political intervention and self-censorship), an increasingly well-educated population, and a supportive atmosphere are all favourable factors.' (p.102)

Source: Centre for Civil Society and Governance, Department of Politics and Public Administration, The University of Hong Kong, 'Report on the capacity of civil society in Hong Kong: The Arts and Cultural Sector' 2015-16, https://ccsg.hku.hk/files/ACNPO_report.pdf

⁵⁸ Centre for Civil Society and Governance, Department of Politics and Public Administration, The University of Hong Kong, 'Report on the capacity of civil society in Hong Kong: The Arts and Cultural Sector' 2015-16, https://ccsg.hku.hk/files/ACNPO_report.pdf

Recommendations

This chapter has shown that in spite of the main advantages of doing business in Hong Kong ('freedom of creation and publication', 'simple tax system', 'possessed international vision'), the creative industries are still hampered by 'insufficient support from the government', high rental costs' and a small market. Besides these general characteristics, the creative companies which business rely on innovative uses of technologies are faced with risk aversion, lack of knowledge on alternative uses of technology, lack of direct support for small structures. Furthermore, in order to accelerate the transfer of innovative practices from the art scene to the general economy, it is important that to increase the general public's awareness for new media arts by: improving the public outreach, foster the acceptance of new media practices by all actors of the economy including incubator programmes, potential sponsors, and educators. Therefore, we recommend the following:

- A wider definition of creative, computer-related industries (e.g. for tech jobs) is necessary: there is a general consensus that media artists are essential drivers of technological innovation and should be supported as such. Innovation should not be construed as the sole expertise of computer scientists.
- A wider definition also means that more support should be given to more artistic and innovative business projects and solutions. For example, in its funding proposal for the CreateSmart Initiative, CreateHK reported some achievements in the recent years including '*sponsoring start-ups for production of animation and games*'⁵⁹ (p.3)⁶⁰. One interviewee however stressed that more attention should be paid to supporting indie games with more original contents and concepts (A14). Conceptual innovations should be stressed, even when it means longer initiation phase or a longer road to

⁵⁹ Legislative Council Panel on Information Technology and Broadcasting, 'Funding Proposal for the CreateSmart Initiative', LC Paper No. CB(4)429/17-18(05), 8 January 2018

⁶⁰ CreateHK supports startups through 5 separate programmes: 1) the Design Incubation Programme run by Hong Kong Design Centre, 2) the animation support program, 3) the mobile game support program, 4) the support programme for advertising and music talents and 5) the Ear Up Record Label Creation and Incubation Programme (cf. Legislative Council, 'Updated background brief on the work of Create Hong Kong and Hong Kong Design Centre' Panel on Information Technology and Broadcasting, Meeting on 9 July 2018, LC Paper No. CB(4)1337/17-18(02)

autonomy. This might call for a more varied approach to support as well, or more diverse support mechanisms.

- One interviewee mentioned the difficulty of gathering public support for showing art in the public sphere (A18). However, it is important to show media arts in public areas, and in different neighbourhoods, on a regular basis so that it becomes part of every citizen's cultural landscape, not just once or twice a year. It may spark interest for creative jobs and, therefore, enhance Hong Kong's position as a creative city. A few years ago, the Hong Kong Ideas Centre proposed 'the establishment of a 'Percent for Art' Scheme for public buildings and facilities', i.e. 'the allocation of about 1% of the construction cost of public buildings and facilities to art (p.11)⁶¹'. A similar portion of new private land development contracts could be allocated to arts funding as well. These mechanisms could help support media arts in the public sphere.
- Public festivals, and outdoor versions of existing media arts festivals contribute to the vibrant cultural scene in Hong Kong and to the city's reputation as a creative hub. They also contribute to a better knowledge about some forms of media arts. Therefore, it is important that they receive steady funding. However, they only last for a few days. Consequently, it is important that they are complemented by a more perennial space dedicated to media arts.
- Our findings suggest that social media was the most common channel for promoting media arts events. However, as we noted, this strategy may only reach insiders. Some interviewees talked about the difficulties of finding such information. In order to expand the viewership of media arts, the government may support the creation of a portal– with a presence on social media as well – dedicated to the media arts in Hong Kong in all its aspects (events, actors, business, training, relevant funding etc.).
- Expand the geographical reach of new media events. This could be achieved in partnership with the Leisure and Cultural Services Department for example. This recommendation concurs with those of the Hong Kong Ideas Centre (2009), which proposed 'organising creative events in the 18 districts of Hong Kong', as well as with the study on Arts participation and consumption, which

⁶¹ Hong Kong Ideas Centre, "Study on Creative industries in Hong Kong: Key recommendations", 9 August 2009, <http://www.ideascentre.hk/wordpress/wp-content/uploads/2009/02/study-on-creative-industries-in-hong-kong-key-recommendations-82009.pdf>

stressed the importance of organizing ‘arts activities in venues that are close to residential areas’ (p.25).

- There was a general perception among our interviewees that spaces such as Science Park, InnoCentre and Cyberport were not designed for experimental practices or for younger innovators but tended to favour a more restrictive conception of marketing and design. One interviewee considered that such places should be more open to recent graduates (A16), while another one proposed a more maker-friendly environment (A19). It is important that support for innovation tackle the needs of diverse creative practices.
- Encourage support for young artists and a more even playing field in general for larger events. For example, in its latest budget, the government has pledged to ‘provide \$40 million additional funding to the Hong Kong Arts Festival Society for commissioning creative works and performances by local arts groups and artists during the Arts Festival⁶²’. The Hong Kong Arts Festival Society should be encouraged to open call for these works and performances so that more and more artists have a chance to participate.
- ‘Actively promote the setting up of private foundations to support arts and culture and consider the provision of special tax incentives⁶³’. As the case of the Bloomberg Emerging Artists Programme shows, private foundations can support young artists’ practices in an efficient way. There should be more incentives for them to do so. It is also necessary that they fulfil their agreed obligations towards the artists they support (A1).
- Even though the CreateSmart Initiative aims to nurture talents and support start-ups, it tends to rely on major organizations such as the Hong Kong Design Centre, which act as a de facto screening mechanism for what they consider as viable design projects. The same bias affects the art scene where, according to the Report on the capacity of civil society, nine performing arts groups have received more public funding from the Home Affairs Bureau (HAB) than either the Arts Development Council or the Hong Kong Academy for Performing Arts. The report concludes that ‘this creates a yawning gap in capacity and financial stability between these few privileged performing arts groups and the many other smaller groups in Hong Kong’ (p.36). Furthermore, this preference has a

⁶² <https://www.budget.gov.hk/2018/eng/budget27.html>

⁶³ Hong Kong Ideas Centre 2009, p.18

trickle-down effect since private funding tends to follow the same pattern, as the same report emphasises: *‘While the government-initiated ‘Matching Grants Scheme’ encourages arts groups to seek business funding, the scheme provides more opportunities to well-established [Arts and Cultural Non-Profit Organizations] because businesses usually prefer to work with more prominent groups in corporate sponsorships (p.43).’* Therefore, a more distributed funding may send strong signals to the private sector and ensure a more efficient ‘Matching Grants’ mechanism.

- *‘I think the government has to provide space (A5)’.* This has been a recurring theme in our research and in other previous research. For example, the ‘Updated background Brief on Create Hong Kong and the Hong Kong Design Centre’ proposes that *‘the Administration should convert vacant government premises, such as vacant school buildings, into studio units and offer them to practitioners and students of the fashion industry at affordable rent (p.8)’.* Such conversion should benefit all arts and creative professionals in general. As the case of Foo Tak Building shows, a space with cheap rent and freedom to create solves a lot of problems for artists. Most of the successful art-business owners had spent some time in this self-sustained, vertical art village which serves as a *de facto* incubator. But with more and more graduates entering the labour market and hoping to pursue their artistic and creative endeavours, it is crucial that the government also provide space. More importantly, the space provided by the government should cater to the different needs of innovation, for example, with less stringent regulation. For example, one interviewee mentioned that, because of the perceived lack of space, it was important for artists and creatives in general to adapt by having a creative use of space (A2). Such adaptability should be allowed in building regulations.

(6) Policy implications and recommendations

Objective 6: to formulate policy recommendations to further enhance the competitiveness of the expertise in new media arts in those sectors

In this chapter, we will provide 1) a thematic summary of the recommendations outlined in previous chapters, and 2) a presentation of recommendations for each objective.

Thematic summary of recommendations

Towards a better understanding of the importance of a multi-faceted creativity in the industries

- A wider definition of creative, computer-related industries (e.g. for tech jobs) is necessary: there is a general consensus that media artists are essential drivers of technological innovation and should be supported as such. Innovation should not be construed as the sole expertise of computer scientists.
- A wider definition also means that more support should be given to more artistic and innovative business projects and solutions. For example, in its funding proposal for the CreateSmart Initiative, CreateHK reported some achievements in the recent years including ‘*sponsoring start-ups for production of animation and games*’⁶⁴ (p.3)⁶⁵. One interviewee however stressed that more attention should be paid to supporting indie games with more original contents and concepts (A14). Conceptual innovations should be stressed, even when it means longer initiation phase or a longer road to

⁶⁴ Legislative Council Panel on Information Technology and Broadcasting, ‘Funding Proposal for the CreateSmart Initiative’, LC Paper No. CB(4)429/17-18(05), 8 January 2018

⁶⁵ CreateHK supports startups through 5 separate programmes: 1) the Design Incubation Programme run by Hong Kong Design Centre, 2) the animation support program, 3) the mobile game support program, 4) the support programme for advertising and music talents and 5) the Ear Up Record Label Creation and Incubation Programme (cf. Legislative Council, ‘Updated background brief on the work of Create Hong Kong and Hong Kong Design Centre’ Panel on Information Technology and Broadcasting, Meeting on 9 July 2018, LC Paper No. CB(4)1337/17-18(02)

autonomy. This might call for a more varied approach to support as well, or more diverse support mechanisms.

The role of universities

- Allow for a more flexible and optimal use of UGC-funded equipment and premises for outreach programmes and to support alumni's practice.
- Support universities to present more exhibitions throughout the year by local and international artists.
- Support workshops and other sharing sessions by alumni, local artists and international artists, as well as discussions and debates on theoretical, ethical and practical issues pertaining to media arts. Improve the visibility of such events and discussions by featuring them on government and many culture and tourism websites.
- Enable universities to support art and technology project developments by recent graduates.
- Widening access to universities, for example by providing incentives for universities to enrol associate degree students and atypical profiles. As mentioned previously, the media artists who started with an associate degree before applying to universities were generally more mature and had more life experiences, which proved more useful later on. Having a more diversified life experience was often cited as a major advantage at the university and in the work place. Underlying this proposition is a redefinition of the value of diverse personal trajectories.
- Foster the development of young graduates' new media expertise by creating a mentorship research fund within the UGC system to enable young graduates to perfect their expertise in new media under the guidance of an professional artist working in academia. This fund could be combined with other business-oriented vocational programmes if the graduate plans to set up their own businesses.

Arts education

- A diversified life experience increases creativity and employability (A15, A11). Therefore, the government may consider supporting gap years for students, for example by fostering internships⁶⁶, exchange programs or experiences in social work. This is consistent with the proposals of the Hong Kong Design Centre and the Asia Case Research Centre on the role of education in a creative economy, which insisted on the merits of ‘expos[ing] students to the widest spectrum of learning disciplines and cultures so that students become more resourceful and multi-faceted as they prepare to test their creative and innovative minds in the professional world or further studies’ (p.39)⁶⁷.
- Arguably, there are more incentives for schools to provide arts education; STEM education has enabled children to be induced to creative uses of technologies at earlier ages than their predecessors. However, the transition from STEM to STEAM should result in a real implementation of arts programmes at school. Whenever it is possible, it is important that artistic experimentation underlines technological discovery. As one interviewee pointed out, STEM education ‘shouldn’t just be about robotics’ (A12).

Art in the public sphere

- One interviewee mentioned the difficulty of gathering public support for showing art in the public sphere, notably because of the costs it might incur (A18). However, it is important to show media arts in public areas, and in different neighbourhoods, on a regular basis so that it becomes part of every citizen’s cultural landscape, not just once or twice a year. It may spark interest for creative jobs and, therefore, enhance Hong Kong’s position as a creative city. A few years ago, the Hong Kong Ideas Centre proposed ‘the establishment of a

⁶⁶ However, it is important that internships do not become equated with cheap labour. Therefore, they should be tightly monitored (e.g. with a specific outcome determined from the onset with all the parties: the student, the academic advisor, the employer).

⁶⁷ Hong Kong Design Centre and the Asia Case Research Centre, the University of Hong Kong, ‘From Creative Industries to Creative Economy: The Role of Education’ 2008

‘Percent for Art’ Scheme for public buildings and facilities’, i.e. ‘the allocation of about 1% of the construction cost of public buildings and facilities to art (p.11)⁶⁸. A similar portion of new private land development contracts could be allocated to arts funding as well. These mechanisms could help support media arts in the public sphere.

- Public festivals, and outdoor versions of existing media arts festivals contribute to the vibrant cultural scene in Hong Kong and to the city’s reputation as a creative hub. They also promote a better knowledge about some forms of media arts. Therefore, it is important that they receive steady funding. However, they only last for a few days. Consequently, it is important that they are complemented by a more perennial space dedicated to media arts.

Publicity

- Our findings suggest that social media was the most common channel for promoting media arts events. However, as we noted, this strategy may only reach insiders. Some interviewees talked about the difficulties of finding such information. In order to expand the viewership of media arts, the government may support the creation of a portal– with a presence on social media as well – dedicated to the media arts in Hong Kong in all its aspects (events, actors, business, training, relevant funding etc.).
- Expand the geographical reach of new media events. This could be achieved in partnership with the Leisure and Cultural Services Department for example. This recommendation concurs with those of the Hong Kong Ideas Centre (2009), which proposed ‘organising creative events in the 18 districts of Hong Kong’, as well as with the study on Arts participation and consumption, which stressed the importance of organizing ‘arts activities in venues that are close to residential areas’ (p.25).

⁶⁸ Hong Kong Ideas Centre, “Study on Creative industries in Hong Kong: Key recommendations’, 9 August 2009, <http://www.ideascentre.hk/wordpress/wp-content/uploads/2009/02/study-on-creative-industries-in-hong-kong-key-recommendations-82009.pdf>

Awards

- Extend HKADC awards collaborative works in addition to individual prizes. As we mentioned earlier, new media art projects are transdisciplinary. Even though some artists are solo practitioners, many large-scale projects require collaborations. In this case, the award should benefit all the team members;
- Extend HKADC awards to individual stakeholders (mentors, and so on) for their contribution to the art scene. The HKADC used to hand an individual award in the 'Arts promotion' category (2012). This practice could be renewed;
- Include an HKADC award for 'best curatorial statement'. This would acknowledge the essential role of curators in providing additional conceptual frame to the artist's work and contributing to the appreciation of the arts;
- Extend HKADC awards to sound arts. The current 'music' category does not include sound arts. Some elements of sound may be present in the works of the recipients of the 'media arts' award but 'sound arts' per se are a distinct category of practices. This distinctness should be acknowledged;
- Create a 'media arts' specific system of awards, in addition to the HKADC awards. This would be similar to what exists in other art fields: for example, the Hong Kong Dance Awards, established by the Hong Kong Dance Alliance, honour 'choreographers, dancers, directors, dance companies, independent dancers and dance organizations, educators, educational institutions, community and youth groups; lighting, costume, and sound designers, composers, dance photographers, critics, producers, sponsors, presenters, activists, advocates, and patrons⁶⁹'. The categories for the Dance Awards are more detailed than the HKADC awards and cover: 'outstanding choreography', 'emerging choreographer', 'outstanding large venue production', 'outstanding small venue production', 'outstanding lighting and/or visual design', 'outstanding music composition and/or sound design', 'outstanding dance education', 'outstanding services to dance' and so on. A similar distribution could be identified for media arts (e.g.. outstanding innovative use of technology, outstanding interactive art, outstanding performance, outstanding

⁶⁹ Hong Kong Dance Alliance, *About Hong Kong Dance Awards*, http://www.hkdanceall.org/?a=group&id=award_about

outreach programme, etc.). These awards would highlight the diversity of skills and practices in (new) media arts and help the public understanding this diversity. The management of these awards could be handled by an existing organizations (e.g. Microwave...) or to a new organization developed in the following point;

Supporting innovation

- There was a general perception among our interviewees that spaces such as Science Park, InnoCentre and Cyberport were not designed for experimental practices or for younger innovators but tended to favour a more restrictive conception of marketing and design. One interviewee considered that such places should be more open to recent graduates (A16), while another one proposed a more maker-friendly environment (A19). It is important that support for innovation tackle the needs of diverse creative practices.

Supporting young artists

- Encourage support for young artists and a more even playing field in general for larger events. For example, in its latest budget, the government has pledged to ‘provide \$40 million additional funding to the Hong Kong Arts Festival Society for commissioning creative works and performances by local arts groups and artists during the Arts Festival⁷⁰’. The Hong Kong Arts Festival Society should be encouraged to open call for these works and performances so that more and more artists have a chance to participate.
- ‘Actively promote the setting up of private foundations to support arts and culture and consider the provision of special tax incentives⁷¹’. As the case of the Bloomberg Emerging Artists Programme shows, private foundations can support young artists’ practices in an efficient way. There should be more incentives for them to do so. It is also necessary that they fulfil their agreed obligations towards the artists they support (A1).

⁷⁰ <https://www.budget.gov.hk/2018/eng/budget27.html>

⁷¹ Hong Kong Ideas Centre 2009, p.18

Ensuring a more equitable funding between large and smaller organizations

- Even though the CreateSmart Initiative aims to nurture talents and support start-ups, it tends to rely on major organizations such as the Hong Kong Design Centre, which act as a de facto screening mechanism for what they consider as viable design projects. The same bias affects the art scene where, according to the Report on the capacity of civil society, nine performing arts groups have received more public funding from the Home Affairs Bureau (HAB) than either the Arts Development Council or the Hong Kong Academy for Performing Arts. The report concludes that ‘this creates a yawning gap in capacity and financial stability between these few privileged performing arts groups and the many other smaller groups in Hong Kong’ (p.36). Furthermore, this preference has a trickle-down effect since private funding tends to follow the same pattern, as the same report emphasises: *‘While the government-initiated ‘Matching Grants Scheme’ encourages arts groups to seek business funding, the scheme provides more opportunities to well-established [Arts and Cultural Non-Profit Organizations] because businesses usually prefer to work with more prominent groups in corporate sponsorships (p.43).’* Therefore, a more distributed funding may send strong signals to the private sector and ensure a more efficient ‘Matching Grants’ mechanism.

Providing space and allowing for a creative use of space

- *‘I think the government has to provide space (A5)’.* This has been a recurring theme in our research and in other previous research. For example, the ‘Updated background Brief on Create Hong Kong and the Hong Kong Design Centre’ proposes that *‘the Administration should convert vacant government premises, such as vacant school buildings, into studio units and offer them to practitioners and students of the fashion industry at affordable rent (p.8)’.* Such conversion should benefit all arts and creative professionals in general. As the case of Foo Tak Building shows, a space with cheap rent and freedom to create solves a lot of problems for artists. Most of the successful art-business owners had spent some time in this self-sustained, vertical art village which serves as a *de facto* incubator. But with more and more graduates entering the labour market and hoping to pursue their artistic and creative endeavours, it is

crucial that the government also provide space. More importantly, the space provided by the government should cater to the different needs of innovation, for example, with less stringent regulation. For example, one interviewee mentioned that, because of the perceived lack of space, it was important for artists and creatives in general to adapt by having a creative use of space (A2). Such adaptability should be allowed in building regulations.

A permanent space for media arts

- Establish a permanent ‘media arts centre’. As other examples overseas have shown, having a space where media arts are shown all year long is a major attribute of all creative cities. This media arts centre would serve as a resource centre, providing documentation and exhibitions on the history of development of media arts practices locally and internationally. The projection created for the exhibition ‘Algorithmic Art’ exhibition curated by Linda Lai at the Hong Kong City Hall and which traced the historical linkages and development of technologies could be permanently showcased here. The centre would organize discussions, sharing sessions, debates on theoretical, practical and social issues regarding media arts, in partnership with different stakeholders such as universities, private sectors (technology, creative companies...), funding organizations and grassroots organisations. It would organise workshops and cultural exchanges as well as residency programmes for local and international artists. Its main function would be to become a permanent point of reference for anyone curious about media arts. New media artists should be involved in decisions regarding its inception and management. Such a space would solve a practical question for Hong Kong: (lack of space of course and-) lack of time (for example to attend festivals, which can only last for a couple of weeks).

Objective-based presentation of conclusions and recommendations

Objective 1: to review the current definitions of new media art

New media art is generally understood to define a plurality of practices anchored in arts, technologies, sciences, and aiming to transform how we relate to the world (economy,

politics, media). In practice, the use of the term has waned these past few years, following heated debates about its relevance and the agenda underlying its promotion. However, it remains relevant because it refers to specific practices involving the use of computing devices and because it has had a structuring effect on the art world and in government support policies for the arts and education sectors.

Objective 2: to review the existing postsecondary new media art curriculum in Hong Kong

The large number of training opportunities pertaining to creative technologies shows an interest from potential trainees in learning these skills and an interest from training institutions in developing this market. As the recent report of the Hong Kong Digital Entertainment Association shows, there is a need across creative industries for such skills. Furthermore, the interviews have shown that the UGC-funded programs have quite a good reputation. However, a better understanding of the position of each curriculum is necessary. This is particularly important within the UGC system where duplication of funds is a sensitive issue. Furthermore, in order to encourage cooperation between universities, it is important that they develop their competencies distinctively and that they communicate better on their specific contributions to the academic ecology. These distinctions should be made more explicit.

Objective 3: to establish a working definition of new media art expertise in the context of Hong Kong creative economy

Our research identified the main actors which define new media arts in the context of Hong Kong creative economy. We have shown that the expression ‘media arts’ was preferred to ‘new media arts’. We have also established that the (new) media art practices were either associated with other categories in the statistics, or they were difficult to isolate within business records because of their pervasiveness. However, we outlined the main definitions given by the stakeholders. They emphasised the centrality of the transformative approach to technology and a willingness to surpass its limitations, to break down barriers. Therefore, (new) media expertise refers to the experimental use of (computing) technologies across different fields of knowledge and aiming at transforming our relation to the world.

Objective 4: to perform an ethnography of the integration of new media art expertise by new media art graduates in sectors of the creative economy in Hong Kong where the impact of this expertise is the most salient

It is important to consider different ways to acknowledge the various practices and categories pertaining to (new) media arts as well as the diverse contributions of the whole ecology, the role of specific organizations and individuals which support the development of art practices. Therefore, we recommend:

- that the HKADC offer awards to collaborative works in addition to individual prizes. As we mentioned earlier, new media art projects are transdisciplinary. Even though some artists are solo practitioners, many large-scale projects require collaborations. In this case, the award should benefit all the team members;
- that the HKADC offer an award to individual stakeholders (mentors, and so on) for their contribution to the art scene. The HKADC used to hand an individual award in the ‘Arts promotion’ category (2012). This practice could be renewed;
- that the HKADC offer an award for ‘best curatorial statement’. This would acknowledge the essential role of curators in providing additional conceptual frame to the artist’s work and contributing to the appreciation of the arts;
- that the HKADC offer an award for sound arts. The current ‘music’ category does not include sound arts. Some elements of sound may be present in the works of the recipients of the ‘media arts’ award but ‘sound arts’ per se are a distinct category of practices. This distinctness should be acknowledged;
- the creation of a ‘media arts’ specific system of awards, in addition to the HKADC awards. This would be similar to what exists in other art fields: for example, the Hong Kong Dance Awards, established by the Hong Kong Dance Alliance, honour ‘choreographers, dancers, directors, dance companies, independent dancers and dance organizations, educators, educational institutions, community and youth groups; lighting, costume, and sound designers, composers, dance photographers, critics, producers, sponsors, presenters, activists, advocates, and patrons⁷²’. The categories for the Dance Awards are more detailed than the HKADC awards and cover: ‘outstanding

⁷² Hong Kong Dance Alliance, *About Hong Kong Dance Awards*, http://www.hkdanceall.org/?a=group&id=award_about

choreography’, ‘emerging choreographer’, ‘outstanding large venue production’, ‘outstanding small venue production’, ‘outstanding lighting and/or visual design’, ‘outstanding music composition and/or sound design’, ‘outstanding dance education’, ‘outstanding services to dance’ and so on. A similar distribution could be identified for media arts (e.g.. outstanding innovative use of technology, outstanding interactive art, outstanding performance, outstanding outreach programme, etc.). These awards would highlight the diversity of skills and practices in (new) media arts and help the public understanding this diversity. The management of these awards could be handled by an existing organizations (e.g. Microwave...) or to a new organization developed in the following point;

- the creation of a permanent ‘media arts centre’. As other examples overseas have shown, having a space where media arts are shown all year long is a major attribute of all creative cities. This centre would serve as a resource centre, providing documentation and exhibitions on the history of development of media arts practices locally and internationally. It would organize discussions, sharing sessions, debates on theoretical, practical and social issues regarding media arts in partnerships with different stakeholders such as universities, private sectors (technology, creative companies...), funding organizations, grassroots actors etc. It would organize workshops and cultural exchanges as well as residency programmes for local and international artists. Its main function is to become a permanent point of reference for anyone curious about media arts. The projection created for the exhibition ‘Algorithmic Art’ exhibition curated by Linda Lai at the Hong Kong City Hall and which traced the historical linkages and development of technologies could be permanently showcased here. New media artists should be involved in decisions regarding its inception and management. Such a space would solve a practical question for Hong Kong: (lack of space of course and-) lack of time (for example to attend festivals, which can only last for a couple of weeks);
- the creation of a mentorship research fund within the UGC system to enable young graduates to perfect their expertise in new media under the guidance of an professional artist working in academia. This fund could be combined with other business-oriented vocational programmes if the graduate plans to set up their own businesses;

- the strengthening of training institutions' capacity to act as a catalyst for the transfer of new media expertise to the creative economy and the society as a whole. This involves: more flexibility in the use of their resources (equipment, facilities...) by alumni and for outreach educational programmes, providing support to initiatives aiming at optimising the use of these resources (for example via summer workshops such as the 'Summer School Series' organized at the School of Creative Media and focused on the transmission of new technological skills); and fostering discussions and experimentations on the latest creative tools within art and creative departments and with representatives of the business environment and the society;
- promoting equal access to higher education by creating incentives for UGC-funded programmes to accept more atypical profiles.

Objective 5: to identify the factors of competitiveness of the integration of a new media art expertise in those sectors of the creative economy where this integration is the most salient

This chapter has shown that in spite of the main advantages of doing business in Hong Kong ('freedom of creation and publication', 'simple tax system', 'possessed international vision'), the creative industries are still hampered by 'insufficient support from the government', high rental costs' and a small market. Besides these general characteristics, the creative companies which business rely on innovative uses of technologies are faced with risk aversion, lack of knowledge on alternative uses of technology, lack of direct support for small structures. Furthermore, in order to accelerate the transfer of innovative practices from the art scene to the general economy, it is important that to increase the general public's awareness for new media arts by: improving the public outreach, foster the acceptance of new media practices by all actors of the economy including incubator programmes, potential sponsors, and educators. Therefore, we recommend the following:

- A wider definition of creative, computer-related industries (e.g. for tech jobs) is necessary: there is a general consensus that media artists are essential drivers of technological innovation and should be supported as such. Innovation should not be construed as the sole expertise of computer scientists.
- A wider definition also means that more support should be given to more artistic and innovative business projects and solutions. For example, in its

funding proposal for the CreateSmart Initiative, CreateHK reported some achievements in the recent years including ‘*sponsoring start-ups for production of animation and games*’ (Legislative Council, 8 January 2018, p.3). One interviewee however stressed that more attention should be paid to supporting indie games with more original contents and concepts (A14). Conceptual innovations should be stressed, even when it means longer initiation phase or a longer road to autonomy. This might call for a more varied approach to support as well, or more diverse support mechanisms.

- One interviewee mentioned the difficulty of gathering public support for showing art in the public sphere (A18). However, it is important to show media arts in public areas, and in different neighbourhoods, on a regular basis so that it becomes part of every citizen’s cultural landscape, not just once or twice a year. It may spark interest for creative jobs and, therefore, enhance Hong Kong’s position as a creative city. A few years ago, the Hong Kong Ideas Centre proposed ‘the establishment of a ‘Percent for Art’ Scheme for public buildings and facilities’, i.e. ‘the allocation of about 1% of the construction cost of public buildings and facilities to art (p.11)⁷³’. A similar portion of new private land development contracts could be allocated to arts funding as well. These mechanisms could help support media arts in the public sphere.
- Public festivals, and outdoor versions of existing media arts festivals contribute to the vibrant cultural scene in Hong Kong and to the city’s reputation as a creative hub. They also contribute to a better knowledge about some forms of media arts. Therefore, it is important that they receive steady funding. However, they only last for a few days. Consequently, it is important that they are complemented by a more perennial space dedicated to media arts.
- Our findings suggest that social media was the most common channel for promoting media arts events. However, as we noted, this strategy may only reach insiders. Some interviewees talked about the difficulties of finding such information. In order to expand the viewership of media arts, the government may support the creation of a portal– with a presence on social media as well –

⁷³ Hong Kong Ideas Centre, “Study on Creative industries in Hong Kong: Key recommendations”, 9 August 2009, <http://www.ideascentre.hk/wordpress/wp-content/uploads/2009/02/study-on-creative-industries-in-hong-kong-key-recommendations-82009.pdf>

dedicated to the media arts in Hong Kong in all its aspects (events, actors, business, training, relevant funding etc.).

- Expand the geographical reach of new media events. This could be achieved in partnership with the Leisure and Cultural Services Department for example. This recommendation concurs with those of the Hong Kong Ideas Centre (2009), which proposed ‘organising creative events in the 18 districts of Hong Kong’, as well as with the study on Arts participation and consumption, which stressed the importance of organizing ‘arts activities in venues that are close to residential areas’ (p.25).
- There was a general perception among our interviewees that spaces such as Science Park, InnoCentre and Cyberport were not designed for experimental practices or for younger innovators but tended to favour a more restrictive conception of marketing and design. One interviewee considered that such places should be more open to recent graduates (A16), while another one proposed a more maker-friendly environment (A19). It is important that support for innovation tackle the needs of diverse creative practices.
- Encourage support for young artists and a more even playing field in general for larger events. For example, in its latest budget, the government has pledged to ‘provide \$40 million additional funding to the Hong Kong Arts Festival Society for commissioning creative works and performances by local arts groups and artists during the Arts Festival⁷⁴’. The Hong Kong Arts Festival Society should be encouraged to open call for these works and performances so that more and more artists have a chance to participate.
- ‘Actively promote the setting up of private foundations to support arts and culture and consider the provision of special tax incentives⁷⁵’. As the case of the Bloomberg Emerging Artists Programme shows, private foundations can support young artists’ practices in an efficient way. There should be more incentives for them to do so. It is also necessary that they fulfil their agreed obligations towards the artists they support (A1).
- Even though the CreateSmart Initiative aims to nurture talents and support start-ups, it tends to rely on major organizations such as the Hong Kong Design Centre, which act as a de facto screening mechanism for what they consider as

⁷⁴ <https://www.budget.gov.hk/2018/eng/budget27.html>

⁷⁵ Hong Kong Ideas Centre 2009, p.18

viable design projects. The same bias affects the art scene where, according to the Report on the capacity of civil society, nine performing arts groups have received more public funding from the Home Affairs Bureau (HAB) than either the Arts Development Council or the Hong Kong Academy for Performing Arts. The report concludes that ‘this creates a yawning gap in capacity and financial stability between these few privileged performing arts groups and the many other smaller groups in Hong Kong’ (p.36). Furthermore, this preference has a trickle-down effect since private funding tends to follow the same pattern, as the same report emphasises: ‘*While the government-initiated ‘Matching Grants Scheme’ encourages arts groups to seek business funding, the scheme provides more opportunities to well-established [Arts and Cultural Non-Profit Organizations] because businesses usually prefer to work with more prominent groups in corporate sponsorships* (p.43).’ Therefore, a more distributed funding may send strong signals to the private sector and ensure a more efficient ‘Matching Grants’ mechanism.

- ‘*I think the government has to provide space (A5)*’. This has been a recurring theme in our research and in other previous research. For example, the ‘Updated background Brief on Create Hong Kong and the Hong Kong Design Centre’ proposes that ‘*the Administration should convert vacant government premises, such as vacant school buildings, into studio units and offer them to practitioners and students of the fashion industry at affordable rent* (p.8)’. Such conversion should benefit all arts and creative professionals in general. As the case of Foo Tak Building shows, a space with cheap rent and freedom to create solves a lot of problems for artists. Most of the successful art-business owners had spent some time in this self-sustained, vertical art village which serves as a *de facto* incubator. But with more and more graduates entering the labour market and hoping to pursue their artistic and creative endeavours, it is crucial that the government also provide space. More importantly, the space provided by the government should cater to the different needs of innovation, for example, with less stringent regulation. For example, one interviewee mentioned that, because of the perceived lack of space, it was important for artists and creatives in general to adapt by having a creative use of space (A2). Such adaptability should be allowed in building regulations.

(7) Conclusion

Summary of findings

The definitions of new media art may vary but they all stress the centrality of a transformative use of technologies and an experimental ethos, which artists use in their work experiences.

New media expertise in Hong Kong is mostly associated with the School of Creative Media (City University) but the diversity of available training in Hong Kong fosters a diverse new media landscape as well.

The role of the whole ecology of supporting structures (places of training, of exhibition, residency, socialization; competitions, awards, festivals) and individuals has been essential for a lasting new media expertise and its endurance in creative structures.

New media artists have been important actors of the transmission of new media expertise into the private sector, notably by setting up their own creative companies. They have contributed to the transfer of new media skills by organizing outreach educational programmes aimed at bridging the technological divide in the society at large.

The main obstacles to a transfer of creative skills from the art world to the business world are related to the lack of affordable space, funding (aversion to risk by private companies) and a conservative mindset.

Lack of knowledge by senior management and a narrow definition of tech-creativity are also significant obstacles to a faster integration of new media expertise into the creative industries of Hong Kong.

New media expertise is still marginal in the public sphere. It tends to be reduced to fashionable technologies, which unproblematized use only serves homogenization and not creativity per se.

Conclusion

‘How can we ensure that [artists] have ample, or enough resources, money, time, and space to explore, to do experiments, so to create something new for Hong Kong? (A16).’ This report has identified the development of a new media expertise, from dedicated curriculums to the creative industries. It has highlighted the importance of the interdependent relation between the art world and the creative economy, the role of supporting structures and the attitudes of practitioners towards technology and experimentations. As training opportunities increase, the economy will have to provide sufficient employment and promote entrepreneurship among graduates. In its recent budget, the government has already pledged to offer more support for young artists and for small and medium sized companies and start-ups through its various funding mechanisms such as CreateSmart Initiative. Such policy changes are welcome. However, they should adopt a more direct approach in favour of these populations instead of mainly relying on a small number of large gatekeepers; they should also widen the scope of their target industries in order to include more innovative practices (independent games, innovative practices developed within the art scene...). In the case of new media expertise, new media artists have been at the forefront of the transfer of more innovative solutions into the private sector. Therefore, supporting the artists’ experimental practices contributes to a vibrant innovative economy. Furthermore, cultural and creative entrepreneurship promote an enriched economic and social fabric. Their initiatives aiming at expanding the general public’s knowledge and use of technology should be actively supported. The endgame is to unleash the untapped creative capabilities of every citizen and reduce the social discrepancies, so that new media can positively transform the society.

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SELECTION OF USEFUL LINKS

Hong Kong Arts Development Council (ADC)

<http://www.hkadc.org.hk/?lang=en>

Incubator for Film and Visual Media in Asia (formerly the Hong Kong Independent Short Film and Video Awards)

<http://www.ifva.com/?lang=en>

Floating Projects

<http://floatingprojectscollective.net>

Microwave International New Media Arts Festival

<http://www.microwavefest.net/festival2017/>

Soundpocket

<http://www.soundpocket.org.hk/v2/>

Videotage

<http://videotage.org.hk>

Zuni Icosahedron

<http://zuniseason.org.hk/en/home/>

Arts and Culture Outreach

<https://www.aco.hk>

Archive of the People

<https://archiveofthepeople.com/wp/>

Rooftop Institute

<http://www.rooftopinstitute.org>

Twenty Alpha

<https://www.facebook.com/20alpha/>

Contemporary Musiking

<http://www.cmhk.org>

ADC ArtSpace

<http://artspace.hk/?lang=en>

Fo Tan Studios

<http://www.fotanstudios.org>

Goethe Institute-HK

https://www.goethe.de/ins/cn/en/sta/hon.html?wt_sc=hongkong

Hong Kong Visual Arts Centre

https://www.lcsd.gov.hk/CE/Museum/APO/en_US/web/apo/va_main.html

Osage Art Foundation

<http://www.oaf.cc>

Empty Gallery

<https://emptygallery.com>

Para Site

<http://para-site.art/en>

Tai Kwun Centre for Heritage and Arts

<https://www.taikwun.hk/en/>

Jockey Club Charities Trust

https://charities.hkjc.com/charities/english/community-contributions/arts-culture-and-heritage.aspx?current_category=9&page=2

Lumières Hong Kong

<https://www.lumiereshk.com>

Creative companies:

Don't Believe in Style (DBIS)

<http://www.dontbelieveinstyle.com/main/html/about.php>

IOIO Creative

<https://www.ioiocreative.com>

NNNNNNN (N7)

<http://www.nnnnnnn.co>

XCEED

<http://www.xceed.hk>

XEX/XCEPT

<http://xcept.hk>

yU+co.[lab]

<http://www.yucolab.com>

WARE

<http://ware.hk>

Dim Sum Labs

<http://www.dimsumlabs.com>

LAB by Dimension+

<http://labbydimensionplus.co/hk/>

MakerBay

<https://www.makerbay.org/>

MakerHive

<http://makerhive.com.hk/>

Academic resources:

Chinese University of Hong Kong – Department of Fine Arts

<http://www.arts.cuhk.edu.hk/~fadept/>

City University of Hong Kong - School of Creative Media (SCM)

<http://www.scm.cityu.edu.hk>

Education University of Hong Kong – Department of Cultural and Creative Arts

<https://www.eduhk.hk/cca/>

Hong Kong Arts School

<http://www.hkas.edu.hk/en/>

Hong Kong Baptist University - Academy of Visual Arts (AVA)

<http://ava.hkbu.edu.hk>

The Hong Kong Polytechnic University – Design (PolyU Design)

<http://www.sd.polyu.edu.hk/en/>

Lingnan University – Department of Cultural Studies

<https://www.ln.edu.hk/cultural/>

Savannah College of Art and Design

<https://www.scad.edu/locations/hong-kong>

Create Hong Kong

<https://www.createhk.gov.hk>

Cyberport

<https://www.cyberport.hk/en>

Hong Kong Design Centre

<https://www.hkdesigncentre.org>

InnoCentre

<https://www.hkstp.org/en/our-stories/our-footprint/innocentre/>

Science Park

<https://www.hkstp.org/en>

Working Family and Student Financial Assistance agency (WDSFAA):
https://www.wfsfaa.gov.hk/cef/download/CREATIVE_INDUSTRIES.pdf

Appendix I. Public Dissemination of Research Findings

- (6) Details of the public dissemination held, if any; and

Some of the preliminary results of this study have been published in the following journal, ranked number 2 in the world for urban studies:

Charrieras, D., Darchen, S., Sigler, T. (2018), “The shifting space of creativity in Hong Kong”, *Cities*, Elsevier Publications, vol. 74, pp.134-141

A+ journal

JCR Impact Factor 2016: 2.449; 2/38 in Urban Studies

H Index 58 (Q1 in Urban Studies & Q1 in Sociology and Political Science)

2015/2016 RG Journal impact 3.32

We shared also the preliminary results of our research during various academic conferences and presentations. This report will constitute the basis of further public dissemination.

Public Workshops and roundtables

During our study, we noticed that the new media art practioners interviewed often complained on the lack of space for experimentation and innovation. Our survey identified some key skills that were still underdeveloped in Hong Kong new media art milieus despite their growing importance in the international context of new media art practices. These skills were machine learning and artificial intelligence in arts, practices related to physical computing (the use of microcontroller for distributed computing and installations) and the latest motion capture technologies. Rather than organizing a traditional academic symposium around the questions of new media art practices in Hong Kong, we decided to have a proactive approach regarding the building of skills in new media art practices in Hong Kong as well as creating a temporary space for experimentation and innovation.

To this end, we designed a series of public workshops on these topics open to Hong Kong based creative professionals. We think this approach was effective in enhancing and structuring the community building we did during our 15 months study on new media art practices in Hong Kong. The invited international artists and academics invited for this workshops and roundtable were well known practitioners in their fields with connections to prestigious international new media art centers (e.g. V2 Institute for Unstable Media in Rotterdam and Parson School of Design in New York). They shared their experiences as new media artists with the participants, providing a comparative approach to new media art practices in the world.

Each workshop was conceived as an intensive learning experience spread on several days with a hand-on teaching of practical, scientific and aesthetic skills and a reflexive approach to new media art as a professional activity integrated in the creative economy. It included discussion and roundtable with the participants were

encouraged to share their modes of practicing new media art in Hong Kong and it gave us material to further some key points we identified during the semi structured interviews and in the online questionnaire.

We advertised these series of events in the relevant department or schools of Hong Kong universities and art organizations and institutions of Hong Kong (School of Creative Media – City University of Hong Kong, AVA-HKBU, Fine Arts Department – CUHK, Videotage, SoundPocket, Osage, Maker Bay and Dim Sum Lab)

Workshop 1 with Fito Segrera (artist, technologist and Head of Research/Creation at Chronus Art Center, Shanghai.): 14 hours of workshop on machine learning in arts.

Workshop 2 with Alexis Mailles (former creative manager of ‘HI Studio’ at Xxtralab, Taipei and former creator and head of the ‘No Media’ studio at ENSAPC (Fine Art University), Paris): 35 hours of workshop + 1-day exhibition on physical computing and the question of space in new media art installations.

Workshop 3 with Gordan Savičić (professor at the Geneva School of Art and Design (HEAD – Genève) and the University of applied arts in Lucerne): 9 hours of workshop on the manipulation of WIFI and satellite waves

Workshop 4 with Andrew Crowe (technical director at MetaObjects: 6 hours of workshop on motion capture.

Total number of participants for the 4 workshop: 56 students, alumni in creative media and creative professionals.

Total number of hours of workshop given (excluding roundtables and discussions/exchange of experience): 64 hours over 15 days.

Appendix II. Interview Guides Hong Kong New Media Arts Skills - May 2017

Profile of interviewee: artist

Research questions:

- 1) how the existing NMA curriculum fosters an NMA expertise
- 2) the embodiment of this expertise along the career paths of NMA graduates working in different sectors of the creative economy

Assumptions:

- 1- NMA curriculum teaches skills, but also a world vision, a way to relate with the world, to 'be and artist'
- 2- NMA schools as spaces of exploration, places of identity formation, community building (with other students, but also with the teachers...)
- 3- NMA schools as brands (for a certain way of doing things: why do students this school instead of another?)
- 4- NMA schools and the city: HK values modern areas of 'usefulness' (jobs in companies e.g. finance, medicine etc.... quantifiable GDP...) and in 'prestige' do they prepare students for life in this particular city (should they)? Are students prepared for an international career (since HK is a relatively small market but, presumably, inscribed in an international network of nma)

TRAJECTORY AND SPECIALTY AND MAINTINING/DEVELOPPING THE SET OF SKILLS

What is your background in Art? in Technology? (why did you choose that art school instead of another?) What kind of artwork you produce? Could you describe the trajectory that led you to produce this kind of artworks? How do you maintain your knowledge in Arts? In technology (News, continuing education, the places you go to or the people you meet)?

TRAINING

How your university curriculum or school has helped you in your present career? Which courses did you enjoy the most? Which ones are the most useful for your artistic career? Which are most useful for your professional practice outside your artistic practice? What did you like most about your years in university (do you miss anything from those years)? Are you still in contact with people you met at the university? Are you still in contact with your teachers?

From your perspective, is there anything that distinguishes your school from other art schools (if you compare your own experience with the experience of other artists who were trained at other schools for example). Are you doing now what you expected to do before you entered university or even after graduating? What would you like to achieve now?

TECHNOLOGY

What technology/software do you use? Have you always used them since you started your artistic career or has there been a change, whether in the technologies themselves or in the way you've used them?

COMMUNITY

Do you prefer to work alone or with other people? If so, how and why do you choose who you work with (complementarity of skills? Similar artistic vision? Friendship?: how did you meet? At school or in other places?)? Where do you go when you are faced with an obstacle in your artistic practice or your professional life?

Would you consider you belong to a new media art and digital art (sub)community? What is its relation to your initial curriculum at university? What are the characteristics of this community? Is it defined by the use of a specific type of technology, or by personal histories e.g. the schools you attended?) Is there a technological tool your community is specialized in? Do you exchange about it? Is this community Hong Kong based or international? What is your relation to contemporary artists? Do you subscribe to arts-related mailing lists?

LIVING CONDITION AND RELATION TO CORPORATE WORLD

How do you make a living in Hong Kong? Are you self-employed? What kind of job do you do? Does this impact a lot on your artistic career? Have you received any grant?

How do you consider the use of creative new media technologies in the corporate world (the wide realm of 'creative media')?

IF THEY TEACH: where, what and how (and why?)?

IF THEY ARE CULTURAL ENTREPRENEURS/EVENT PLANNERS etc.: what are your objectives (how/why did you end up becoming a cultural entrepreneur?)? What are your activities? How do you contact potential participants or clientele? What kinds of follow-ups are organized? What obstacles do you encounter (are these specific to HK?)?

HONG KONG

Would you consider you would have had a similar career in other cities around the world? In which ways the fact to be in Hong Kong influences your practice? Are you happy with it?

INTERNATIONAL

Do you travel often? Have you already exhibited your works abroad or have you taken part in residencies abroad?

PROSPECTIVE

For you and in relation to your practice, what is the future interesting trend in new media arts? What skills do you think is the more important to maintain and to develop for you? (there is a chance they won't talk a lot here...)

Profile of interviewee: program leaders or art organisation worker⁷⁶

⁷⁶ Inspired by Sarah Rowles' research. See Harris, D., Rowles, S., Bickers, P., Throp, M., & Timberlake, J. (2010). 8 course leaders 20 questions. ualresearchonline.arts.ac.uk : interviews with eleven of

Interviewee:

Identity of the interviewee

Background of the interviewee

Role of the interviewee: how long have you been teaching at the School of Design?
What classes do you teach? You are also a program leader: what does your role consist in?

The department:

Description (mission, approximate number of students?): what are the differences between your school and other art-related curriculums?

Do your students take classes outside your department? In other universities?
Are there students from other universities who come and take classes in your department? What kind of classes?

Staff (more research, practice or teaching? Proportion of full-time vs part-time, professors vs lecturers)

How many members of the teaching staff are practicing artists?

How many of these are associated with digital and new media art?

The students:

Where are they from?

How are they selected?

What are they trained for (in terms of knowledge, in terms of job market)?

What kind of jobs do they get after graduating?

What is the percentage of your graduates who become artists?

(Do they get to travel abroad during their studies? How many students take part in exchange programs?)

Alumni: do you establish formal relations with your alumni?

The curriculum:

What is the general orientation of the curriculum?

What is the share of practice vs theory?

What about new media? How many classes are associated with new media?

The university and its neighbourhood:

Are there any links or connections (whether formal or informal) between the university (or your department) and its neighbourhood?

Hong Kong:

London's major BA Fine Arts): how current pedagogical practice compares with their own art school education, what they look for when selecting students, the processes they use in evaluating art, the benefits of art education, the importance of an institution's reputation, where in art education the education takes place, and how art education influences the work we see in contemporary art galleries.

Is there a specific trait that sets Hong Kong artworld apart (training, market, practices)?

Are there any differences between HK and other parts of the world regarding new media art (in terms of training, practice, market, available funding or assistance)?

Do you think there is a difference between new media art is practiced in Hong Kong as compared with cities?

Is there something specific about Hong Kong education for new media or the new media art market?

What do you think are the necessary elements for a vibrant new media art economy?
What are the elements that contribute to the practice of new media art?

Last question: what makes a good art training program?

Appendix III. List of Figures & Tables

Figures:

Fig.1. Q7 - Please, tick the relevant art fields in which your own practice is currently situated or was previously situated (including art forms studied during your curriculum as long as it became part of your own practice)

Fig.2. Q1 - Bachelor's degree training (multiple choices possible)

Fig.3. Q2 - Master's level training (multiple choices possible)

Fig.4. Q3 - PhD Training (multiple choices possible)

Fig.5. Q9 - Please rank the following according to their importance in your artistic practice:

Fig.6. Q49 - Which technical skills are required in your 'day' job? Please list

Fig.7. Q44 - Apart from your art practice, do you have a 'day' job?

Fig.8. Q42 - Please rank the following sources of income

Fig.9. Q57 - Then and Now. Would you agree with the following statements?

Fig.10. Q10 - How many exhibitions/performances have you had in the past ten years IN Hong Kong?

Fig.11. Q11 - How many exhibitions/performances have you had in the past ten years outside Hong Kong?

Fig.12. Q12 - Where do you make the most sales?

Fig.13. Q14 - Would you say that it is easy to find an exhibition place in Hong Kong

Tables:

Table 1: Profile of interviewees

Table 2: Performance of CCI component domains in 2016

Table 3: Arts sponsorship and government incentives

Table 4: Hong Kong artists at the Venice Art Biennale

Table 5: The major strengths of the arts and cultural sector in Hong Kong

Appendix IV. Online questionnaire

Q1. Bachelor's degree training (multiple choices possible)

- Year of Graduation (BSc/BAS/BA...):
- Major:
- CityU
- HKU
- HKBU
- CUHK
- PolyU
- Lingnan U
- HKUST
- Open University
- HK Art School
- HK Academy for Performing Arts
- Hong Kong Visual Art Centre
- Hong Kong Design Institute
- Other (please specify):

Q2. Master's level training (multiple choices possible)

- Year of Graduation (MA/MFA/Msc...)
- Major
- CityU
- HKU
- HKBU
- CUHK
- PolyU
- Lingnan U
- HKUST
- Open University
- HK Art School

- HK Academy for Performing Arts
- Hong Kong Visual Art Center
- Hong Kong Design Institute
- Other (please specify)

Q3. PhD Training (multiple choices possible)

- Years of study
- Discipline/field
- CityU
- HKU
- HKBU
- CUHK
- PolyU
- Lingnan U
- HKUST
- Open University
- HK Art School
- HK Academy for Performing Arts
- Hong Kong Visual Art Centre
- Hong Kong Design Institute
- Other (please specify):

Q4. Additional training: Have you undergone any additional training? (even if it is not directly related to your art practice)?

- Yes (please specify)
- No

Q5. Is there any additional training you would like to undertake but couldn't?

- Yes (please specify)
- No

Q6. Artistic practice: Number of years of activity:

- 1-5
- 6-10
- 11-15
- More than 15

Q7. Please, tick the relevant art fields in which your own practice is currently situated or was previously situated (including art forms studied during your curriculum as long as it became part of your own practice)

- 1. Drawing: Art using drawing tools (graphite, chalk, ink, pencil)
- 2. Painting: Art using colored pigments applied to a surface
- 3. Sculpture: Art using a combination of physical materials in 3D space
- 4. Printmaking: Art created by pressing ink onto a surface
- 4.1. Relief Printing: Ink rests on the top of the surface (woodcut, wood engraving, linocut)
- 4.2. Intaglio: Ink goes into grooves made in the surface (engraving, etching, mezzotint, aquatint)
- 4.3. Planographic: Ink is selectively applied by treating the surface (lithography, monotyping)
- 4.4. Stencil: Ink is pressed around precut shapes (screen-printing, pochoir)

- 5. Photograph: Art created using a photographic process
- 6. Filmmaking: Art which to present a sequence of images
- 6.1. Pre-Film: Special techniques for presenting temporal images
- 6.2. Film Based: Filmmaking with a photographic process
- 7. Video Art: Art using broadcasting, television or video as the medium
- 8. Kinetic Art: Art driven by physical motion (closely related to Sculpture)
- 8.1. Naturally-Driven Art: Kinetic art using natural forces (wind, air)
- 8.2. Mechanically-Driven Art: Kinetic art using motors
- 8.3. Puppetry: Kinetic art using human-interaction to create motion in objects
- 8.4. Performance Art: Kinetic art using the human body as the medium
- 9. Mixed Media: Art which uses a combination of traditional media together
- 9.1. Graphic Design: Art using cut shapes, drawing and type to create visuals
- 9.2. Photomontage: Combination of drawing and photography
- 10. Multimedia Art: Art which uses digital versions of traditional media
- 10.1. Non-Linear Editing: Art of filmmaking using digital video
- 10.2. Digital Painting: Art of painting using digital tools (e.g. photoshop)
- 10.3. Web Design: Art of graphic design using web page as canvas
- 10.4. Interface Design: Art of graphic design to create software interfaces
- 11. Computer Graphics: Art using computer modeling and rendering to create virtual scenes
- 12. Interactive Art: Art involving human-interaction
- 12.1. Indirect Interactive: Art in which cameras and detectors passively record human motion
- 12.2. Directly Interactive: Art in which direct manipulation is required of the viewer
- 13. Internet Art: Art using the internet, or web site, as medium
- 14. Information Art: Art using databases and social or statistical information as a source.
- 15. Algorithmic Art: Art using a mathematical formula or algorithm as the source of form or structure.
- 16. Other(s) (please specify)

Q8. In your own words, what inspires your work?

Q9. Please rank the following according to their importance in your artistic practice:

- experimenting with newest technologies
- experimenting with new and old technologies
- developing a new idea or a new concept, a new way to look at things
- telling a story
- raising awareness (e.g. on social or environmental issues...)
- provoking thoughts

Q10. How many exhibitions/performances have you had in the past ten years IN Hong Kong:

- Solo exhibitions/performances
- Group exhibitions/performances

Q11. How many exhibitions/performances have you had in the past ten years outside Hong Kong:

- Solo exhibitions/performances
- Group exhibitions/performances

Q12. Where do you make the most sales?

- Physical spaces (galleries etc.)
- Online

Q13. In total, how many artist-in-residence schemes have you participated in

- in Hong Kong:
- outside Hong Kong (please specify where):

Q14. Would you say that it is easy to find an exhibition place in Hong Kong?

- Yes
- No. If not, what difficulties do you face to present your work in Hong Kong:

Q15. Have you received any grants?

- Yes. If yes, please list:
- No

Q16. Have you received any loans?

- Yes. If yes, please specify (bank, family/friends, or other):
- No

Q17. Which adjective best describes your artistic practice

- coherent (why, what holds your practice together?)
- eclectic (why?)
- neither (please specify)

Q18. How do you archive your works?

- on the cloud
- personal hardware
- analog (e.g. paper based)
- a mix of the above (specify)

Q19. In addition to your portfolio, do you keep a process-folio (a record of your artistic process)

- yes: choose one of the answers: digital; analog; a mix of the both
- no

Q20. Have you ever encountered a problem with your archival system?

- Yes (please specify)
- No

Q21. Where is your studio?

- At home

- In an industrial building
- Somewhere else. Specify

Q22. How long have you been using that space?

Q23. How many studios have you had since you started your career?

Q24. In which neighborhood do you live?

Q25. In which neighborhood is your art studio?

Q26. In which neighborhood do you work?

Q27. Do you share your studio?

- Yes
- No

Q28. In your artistic practice, do you work:

- Always alone
- Mostly alone
- Rarely alone
- In a local collective. Specify
- In an international collective. Specify
- In more than one collective. Specify
- Always with different collaborators. Specify

Q29. How do you choose your collaborators on a project?

- complementary skills
- friendship
- other (Please specify):

Q30. How easy is it to find the collaborators you need for a project?

- very easy, I ask my friends
- not easy, I have to search overseas
- I never ask, they ask me

Q31. Please name 3 people you often collaborate with (or have collaborated with) in your artistic practice

Q32. When facing an obstacle or a problem in your artistic practice, what do you do:

- I try to solve it by myself
- I ask a friend
- I ask a community online (please specify):
- Other (please specify):

Q33. Over the past three years, how often have you attended exhibitions/performances/screenings... in Hong Kong:

- at least once a month
- at least twice a year
- at least once a year
- never

Q34. Over the past three years, have you attended exhibitions/performances/screenings abroad?

- Yes: could you list a few of the events you attended abroad?
- No

Q35. Why do you attend artistic activities?

- interesting activities
- friendship
- networking
- Other:

Q36. Why do you choose not to attend artistic activities?

- lack of time
- lack of interest
- lack of information
- Other:

Q37. How do you stay informed on developments in your field of practice?

- Magazines (please specify):
- Newsletters (please specify):
- Social Media (please specify):
- Websites. Specify
- Friends
- Colleagues
- Other (please specify):

Q38. How do you publicize your work?

- Personal website
- Social media (please specify):
- Specialized websites. Specify
- Flyers
- Other (please specify):

Q39. Please name 3 people who have been important in your artistic career (e.g. someone you enjoy working with, someone who has inspired you, someone who has helped you in some way...):

Q40. Please list 3 places where you often go, apart from your studio and workplace:

Q41. What kind of cultural activities/outings/hobbies do you do in your free time:

- Museums. Specify
- Art galleries. Specify
- New media art shows. Specify
- Performances. Specify
- Performing arts. Specify
- Cinema. Specify
- Web videos. Specify

- TV. Specify
- Video games. Specify
- Music concerts. Specify
- Sports. Specify
- Camping. Specify
- Hiking. Specify
- Others. Specify

Q42. Please rank the following sources of income:

- Artwork sales
- Commissioned works
- Commercial contracts
- Employment in private company
- Employment in a government agency
- Employment at university
- Other. Specify

Q43. Monthly salary in HK dollars:

- Less than 12,000
- 12,000-15,000
- 15,000-20,000
- 20,000-30,000
- 30,000-40,000
- 40,000-50,000
- +50,000

Q44. Apart from your art practice, do you have a 'day' job?

- Yes (please specify the job title and the employer)
- No

Q45. Time spent on your art practice per week (in hours)

Q46. What is the percentage of working time you spend on your artistic practice per week?

- less than 20%
- less than 50%
- less than 75%
- more than 75%

Q47. Which statement best reflects your position regarding other work experiences:

- I prefer to focus entirely on my artistic practice
- I prefer not to depend only on my artistic practice
- I enjoy having a day job that has nothing to do with my artistic practice
- I would like to have a day job that can be useful for my artistic practice

Q48. In your day job, how often do you use your technical skills:

- always
- often
- seldom
- never

Q49. Which technical skills are required in your ‘day’ job? Please list:

Q50. Are the technical skills used in your day job overlapping with the technical skills used in the context of your artistic practice?

- Yes. Specify
- No

Q51. Technologies: which technologies do you use in your artistic practice? Please state how often you use the following technologies:

	always used	often used	used sometimes	rarely used	never used
Image processing software, drawing					
Photoshop					
Illustrator					
InDesign					
Painter					
Game engines					
Unity3D					
Unreal					
Cry engine					
Real time video synthesis					
Resolume avenue					
Vvvv					
Max Jitter					
Web based programming language					
Dreamweaver					
HTML/CSS/Javascript/PHP					
Perl					
Flash					
Text based programming languages					
JAVA					
C++					
Python					
GLSL					

p5.js					
Processing					
Open Frameworks					
Cinder					
3d animation					
3DS Max					
TouchDesigner					
Houdini					
Blender					
Rhino 3D					
Grasshopper (ALGORITHMIC MODELING FOR RHINO)					
Micro controller programming environment (Physical computing)					
Arduino					
Video editing, postproduction software					
Premiere Pro					
Final Cut Pro					
DaVinci Resolve					
After effects					
Cinema 4D					
Fusion					
Music/sound synthesis software or programming languages					
Ableton live					
Logic Pro					
MaxMSP					
Pure Data					
Chuck					
SuperCollider					

Ixi					
Lua					
Scratch					
C-Sound					
Kyma					
Synth Edit					
OSC					
Others (Specify)					
Technologies					
3D printing					
Real time motion capture (Kinect or others). Specify					
Stereographi c projection					
Traditional mediums. Specify					
Other. Specify					

Q52. Please rate your proficiency in the technologies you use

	Expert	Very good knowledge	Average user	Beginner
Photoshop				
Illustrator				
InDesign				
Painter				
Unity3D				
Unreal				
Cry engine				
Resolume avenue				
Vvvv				
Max Jitter				
Dreamweaver				
HTML/CSS/J avascript/PHP				
Perl				
Flash				
JAVA				
C++				
Python				
GLSL				

p5.js				
Processing				
Open Frameworks				
Cinder				
3DS Max				
TouchDesigner				
Houdini				
Blender				
Rhino 3D				
Grasshopper (ALGORITHMIC MODELING FOR RHINO)				
Arduino				
Premiere Pro				
Final Cut Pro				
DaVinci Resolve				
After effects				
Cinema 4D				
Fusion				
Ableton live				
Logic Pro				
MaxMSP				
Pure Data				
Chuck				
SuperCollider				
Ixi				
Lua				
Scratch				
C-Sound				
Kyma				
Synth Edit				
OSC				
Others (Specify)				
3D printing				
Real time motion capture				
Kinect				
Stereographic projection				
3D printing				

Real time motion capture				
Traditional mediums (specify)				
Others (Specify)				

Q53. Please specify where you learned them

	Pre-university	University	Other post-secondary institutions	during an artistic collaboration	During a residency	Self-taught	at your day-job workplace
Photoshop							
Illustrator							
InDesign							
Painter							
Unity3D							
Unreal							
Cry engine							
Resolume avenue							
Vvvv							
Max Jitter							
Dreamweaver							
HTML/CSS/Javascript/PHP							
Perl							
Flash							
JAVA							
C++							
Python							
GLSL							
p5.js							
Processing							
Open Frameworks							
Cinder							
3DS Max							

TouchDesigner							
Houdini							
Blender							
Rhino 3D							
Grasshopper (ALGORITHMIC MODELING FOR RHINO)							
Arduino							
Premiere Pro							
Final Cut Pro							
DaVinci Resolve							
After effects							
Cinema 4D							
Fusion							
Ableton live							
Logic Pro							
MaxMSP							
Pure Data							
Chuck							
SuperCollider							
Ixi							
Lua							
Scratch							
C-Sound							
Kyma							
Synth Edit							
OSC							
Others (Specify)							
3D printing							
Real time motion capture							
Kinect							

Stereographic projection							
3D printing							
Real time motion capture							
Traditional mediums (specify)							
Others (Specify)							

Q54. Can you draw a timeline indicating the acquisition of skills that constitute your core technical expertise in new media art making (e.g. Processing (2009) Open Frameworks (2012) C++ (2015) etc.)?

Q55. What is the next technology you think you should learn?

- Photoshop
- Illustrator
- InDesign
- Painter
- Unity3D
- Unreal
- Cry engine
- Resolume avenue
- Vvvv
- Max Jitter
- Dreamweaver
- HTML/CSS/Javascript/PHP
- Perl
- Flash
- JAVA
- C++
- Python
- GLSL
- p5.js
- Processing
- Open Frameworks
- Cinder
- 3DS Max
- TouchDesigner
- Houdini
- Blender
- Rhino 3D
- Grasshopper (ALGORITHMIC MODELING FOR RHINO)
- Arduino
- Premiere Pro
- Final Cut Pro
- DaVinci Resolve

- After effects
- Cinema 4D
- Fusion
- Ableton live
- Logic Pro
- MaxMSP
- Pure Data
- Chuck
- SuperCollider
- Ixi
- Lua
- Scratch
- C-Sound
- Kyma
- Synth Edit
- OSC
- Others (Specify)
- 3D printing
- Real time motion capture
- Kinect
- Stereographic projection
- 3D printing
- Real time motion capture
- Traditional mediums (specify)
- Others (Specify)

Q56. What are the prerequisites for the next technology(ies) you should learn?

Q57. Then and Now. Would you agree with the following statements?

	Yes	No
It is easier to acquire new technical skills now		
It is easier to receive grants now		
It is easier to sell artworks now		
It is easier to exhibit your works now		
It is easier to find a studio to practice art now		
It is easier to find the		

necessary resources (human, information, etc.) for your practice now		
It is easier to live from art now		

Q58. Your age group

- Under 20y
- 20–30y
- 31–40y
- 41–50y
- 51–60y
- 61–70y
- Above 70y

Q59. Gender

- Male
- Female

Q60. Place of birth

Q61. Place of residence

Q62. If you would like to keep informed of the results of this study, please leave us your email:

Annex V. New Media Art related curriculums

Institution	Department	Programme level	Programme name	Example of courses	Stated objectives	Normal period of study	Funding	Intended learning outcomes	Articulation
New Media Art Core Training									
The City University of Hong Kong	School of Creative Media	Undergraduate	Bachelor of Arts and Science (BAAS) in New Media	Creative Media Studio, Critical Theory and Socially Engaged Practices, CreativeCoding, Physical Computing and Tangible Media, Understanding Data, Generative Coding Studio, Materials and Fabrication Studio, Imaging Science Studio, Special Topics in Art and Science Studio, Mathematics and Robotics Studio, Major electives: Animation (3D animation), Digital Lighting & Texturing, Industry Internship, Computer animation for interactive content, Cinema & Photography (History of cinema, expanded photography, directing for Hong Kong Cinema...), Critical theory & Practices (Queerism and tactical media, micro-narratives, relational aesthetics and participatory media, culture society and new technologies...), Game & Playable Media (3D game production, game process for animation, games and installation, ethnography in games & virtual environments...), New Media (Interface design, future cinema, network art, image processing and AR, New Media Art theory and history, New Media for installation, events and performance, special topics in intermedia art practices: robotic art, wearable...), Sound (audio recording arts, sound design for cinema, some arts & the History of Sounds and Noise, Live sound production, sound spatialization...).	This major aims to nurture graduates with creative skills in the field of new media art. The definition of new media art adopted here includes two features. First of all, new media art adopted here includes practices that uses computation and/or electronics, such as for instance, software/generative art, robotic art, or physical computing. In this context, new media is distinguished from creative media. Instead, as the latter involves the use of pre-existing digital tools such as software packages), whereas new media involves the creation of one's own resources, for instance a filmmaker or video artist who uses existing editing software is not, by this definition, a new media artist. The emphasis lies on asking a standpoint towards computational and electronic resources as artistic media that aim to be materialized in line with the definition. The programme encourages students to take an interdisciplinary look at the traditional concepts of art, media and contexts. In the process of using the latest digital art practices, robotic art, performance, space design, in intermedia art installation, event and narrative, special topics in intermedia art, sound design for cinema, some arts & the History of Sounds and Noise, Live sound production, sound spatialization, AR to multimedia, acquiring research skills, synthesizing knowledge across disciplines or applying research and knowledge to real-life problems. Demonstrate accomplishments of discovery/innovation/creativity through predicting/constructing or creative works/new methods/effective solutions to real-life problems or new problems/innovation/creativity through predicting/constructing or creative works/new methods/effective solutions to real-life problems. Demonstrate accomplishments of discovery/innovation/creativity through predicting/constructing creative works/ new artworks, effective solutions to real-life problems or new processes.	4 years	UGC-funded	Formulate their focus for artistic/professional development within a range of clearly articulated expertise. Conceptualize the interdisciplinary relationships between the media professions and the sciences, as well as other relevant professions and fields of study. Participate in scientific research projects, working together with scientists in a collaborative environment. Use scientific principles to produce and reflect on their work. Act as a culturally-sensitive and socially responsible media art professional. Command a rich language in describing and theorizing the type of creative work they are doing. Reflect on the future of new media creativity, using their own interdisciplinary creative projects as illustrations. Use a research-oriented approach that employs experimentation, innovation, and cross-disciplinary work. Communicate learning achievements (6) through (8) with a coherent and well reasoned Graduation Thesis. Develop an attitude of discovery/innovation/creativity, as demonstrated by students possessing a strong sense of curiosity, asking questions actively, challenging assumptions or engaging in inquiry together with teachers. Develop the ability/skill needed to discover/innovate/create, as demonstrated by students possessing critical thinking skills to assess ideas, acquiring research skills, synthesizing knowledge across disciplines or applying academic knowledge to real-life problems. Demonstrate accomplishments of discovery/innovation/creativity through predicting/constructing creative works/ new artworks, effective solutions to real-life problems or new processes.	
The City University of Hong Kong	School of Creative Media	Undergraduate	Bachelor of Arts and Science (BAAS) in New Media	Visual communication (UI/UX), Fundamentals of Animation, Game Prototyping and Design, New Media for Installation, Events and Performance, Contemporary & New Media Art Computer systems, Data art practices for Media, Computer programming, Data art practices for Media, Cloud Storage Database systems, Applied algorithms, Software engineering principles and practices, Elective Specialization in Media Production, Project, Interactive Narratives, all game production, project level design, 3D material, Interaction, Digital composition, Character animation, discourse, computer games, Fundamentals of Internet applications development, advanced programming, VR, AI game programming...	The major aims to produce professionals in creative media who are strongly versed in computing technology. The main emphasis of this major on the computing under lying digital media, but graduate will also receive solid foundation in the creative practices. Students, for example, game design, cover graphics, install art and interactivity, special media production, Creative design should be able to apply the latest computing and media technologies in the creation of special media, including game design, animation and special effects, Internet applications and mobile devices and services. This major combines these courses from both the School of Creative Media and the Department of Computer Science to produce graduates that bridge the gap between the technical and artistic side of the media field.	4 years	UGC-funded	demonstrate proficiency in both the artistic and technical aspects of digital media production. Apply knowledge and skill in computer science to the creation, development and processing of digital media software and contents, identify and analyze the impact of media technologies on the broader social environment. Work effectively as a member of a creative team, and contribute to both the technical and creative sides of media projects. Prepare himself/herself for continuous advancements in media technologies through life-long learning. Demonstrate problem-solving skill and resource management skills. Develop an attitude of discovery/innovation/creativity, as demonstrated by students possessing a strong sense of curiosity, asking questions actively, challenging assumptions or engaging in inquiry together with teachers. Develop the ability/skill needed to discover/innovate/create, as demonstrated by students possessing critical thinking skills to assess ideas, acquiring research skills, synthesizing knowledge across disciplines or applying academic knowledge to real-life problems. Demonstrate accomplishments of discovery/innovation/creativity through predicting/constructing creative works/ new artworks, effective solutions to real-life problems or new processes.	

The City Creative University of Hong Kong	School of Creative Media	Postgraduate	Master of Philosophy	Research skills and Methods; Electives: Art and technology; Topics in Media Arts; Introduction to New Media Arts; Interactive Media; Art in the Information Age - creative act, art object, aesthetic perception; critical theory for contemporary curators; World-building in digital narrative media; Computer games and society; Philosophy of technology and new media; Visual ethnography - critical and creative practices; Critical Ideology, etc.	This programme aims to train and produce graduates who can contribute to the extension of knowledge in their chosen subject areas, preparing them for advanced research at the PhD level or professional careers in science and engineering.			Recognise and discuss the content and methods of their chosen subject areas; Apply appropriate research methods and tools to the creation of independent research; Formulate and produce applied research in their chosen subject areas; Discuss the research process and analyse research findings through communications within the learned community; Create knowledge through the process of applied research	
The City University of Hong Kong			PhD	Research seminars; Research skills and methods; Electives: Introduction to New media arts - theories, technologies, aesthetics; Animation - Principles and Practice; Cinematic Arts Workshop; Art and technology; Interactive Media; Digital sound and computer music; Topics in photography; Topics in Media history and theory; Arts management and curatorialship; gender in popular media; etc.	This programme aims to train and produce independent researchers with state-of-the-art expertise who can create original knowledge through innovative research.			Formulate and construct effective, innovative, and original solutions to fundamental problems in their chosen subject areas; Demonstrate general intellectual proficiency and specialization in their chosen subject areas; Apply appropriate research methods and tools to the creation of independent research; Discuss the research process and analyse research findings through communications within the learned community; Create new knowledge through in-depth investigations of the chosen subject area	
Hong Kong Baptist University	Academy of Visual Arts	Undergraduate	BA (Honours) in Visual arts	Concentration: Studio & Media Arts; Sound - The basics; Installation Art; Interactive Art; Analogue photography; Digital photography; Media arts - Physical media; Human Machine Interface	Studio and Media Arts (SMA) allows the student to focus his endeavours in traditional studio arts and/or contemporary media arts, aiming to generate meaning through aesthetic and/or intellectual concepts, beyond a merely functional approach. It indicates the student's ability to work in areas related to the fine arts - as a practicing artist -, to teach related areas or take on some administrative positions from the area.				
Hong Kong Baptist University	Academy of Visual Arts	Postgraduate	MA in Visual Arts (IA, IIA, IIB)	Concentrations: Studio & Media Arts; 'Craft & Design'; Core courses: research methodology for the visual arts; Visual Arts theory & Criticism; Critically Engaged - Creative Practices in Context; Arts & the Public - Interpretation & Presentation; Concentration-based courses: Studio & Media Arts studio project (IA, IB, IIA, IIB); Craft & Design Studio Project (IA, IB, IIA, IIB)	to nurture creative talents with contemporary research methodologies, in-depth professional knowledge and skills as well as cross-cultural and interdisciplinary awareness in diverse visual arts practices; to inspire students' creative and academic practices in global and local socio-cultural contexts; to enable students to develop their own creative projects according to their research interests in specific visual arts discipline (their declared concentration); and to meet the growing demand for professional practitioners in the cultural and creative sectors in Hong Kong and beyond.				
Hong Kong Baptist University	Academy of Visual Arts	Postgraduate	Mphil	Theory-based or Practice-led	a) Ideal with complex issues both systematically and creatively, make sound judgements in the absence of complete data, and communicate their conclusions clearly to specialist and non-specialist audiences; b) demonstrate self-direction and originality in tackling and solving problems, and act autonomously in planning and implementing tasks at a professional or equivalent level; c) continue to advance their knowledge and understanding, and to develop new skills to a high level; and will have d) the qualities and transferable skills necessary for employment requiring the exercise of initiative and personal responsibility, decision-making in complex and unpredictable situations, and the independent learning ability required for continuing professional development.	2 years			
Hong Kong Baptist University	Academy of Visual Arts	Postgraduate	PhD in Visual Arts		Typically, holders of the qualification will be able to: a) make informed judgements on complex issues in specialist fields, often in the absence of complete data, and be able to communicate their ideas and conclusions effectively to specialist and non-specialist audiences; b) continue to undertake pure and/or applied research and development at an advanced level, contributing substantially to the development of new techniques, ideas or approaches; and will have: c) the qualities and transferable skills necessary for employment requiring the exercise of personal responsibility and largely autonomous initiative in complex and unpredictable situations in professional or equivalent environments.	4 years			
The Polytechnic University of Hong Kong	School of Design	Top-up degree	BA (Digital Media)	Applied media aesthetics; Sound design; Character design; Creative process design; Digital Media Studio; Advanced Visual Effects; Advanced Animation	The programme aims to produce idea-driven content designers regardless of their disciplines. It reflects the paradigm of continuing creativity based on ideas with fabrication based on technical know-how. With this in mind, students are taught the necessary technical, entrepreneurial and analytical skills in order to become self-starting and self-enabling for the successful execution of a given creative idea.	2 years	Government- funded		

The Polytechnic University of Hong Kong	School of Design	Top-up degree	BA Interactive Media	Visual thinking; Digital aesthetics; Interface design; Design for interactive design; User experience design; Studio - Networks and Communities; Co-operative project; Entrepreneurship for interaction designers...	This programme aims to nurture designers with a strong, humanistic mindset, as well as technological knowledge, to actualise ideas as design artifacts that will enable people to make meaning out of interactive dynamic experiences. To this end, the missions of the programme are to train designers creating interactive media artifacts to guide generation of meanings through interactive dynamic experience; to teach creative application of technological knowledge to develop students' sensitivity to emergent human needs; to develop students' critical judgment based on contextual review	2 years			Upon completion of the MScAIE programme, students will be able to have the following skills: Professional / Academic Knowledge Skills: The ability to conceptualize, design and develop innovative multimedia products and applications; Understand the relationship humans have with media, from physical and psychological to social and cultural; Proficiency with design research methods; Optimally deliver design products/concepts through a coordinated communication and implementation plan; Generic Skills for All-roundness: The ability to generate planning and coordination strategies; The ability to create and communicate effective ideas; Interpersonal skills needed to collaborate with those from other disciplines; Creative insight and critical thinking skills for sustained future growth beyond the university	
The Polytechnic University of Hong Kong	School of Design	Postgraduate	Master of Science (MSc.) Multimedia & Entertainment Technology	Study streams: Applied design psychology; Game Development; Social, Mobile and Internet; Courses: Innovative multimedia project development; Production processes in multimedia and entertainment; Recovering creativity; Game design; New opportunities in Digital Media; Emerging multimedia technologies for Digital Media Industry; Sound design and technology; Concept Art & Production design...	The programme is for those who are keen to lead in the digital entertainment industry. It is designed to open creative possibilities in the minds of the students by exploring cross-disciplinary media applications and technologies. Through theories and project-based modules, students are encouraged to look afresh into all aspects of how media impacts our lives, ranging from technological innovation and development for human-machine interfaces to creative content design for digital entertainment. The course starts with the building blocks of human psychology, game design, and on-line entertainment and encourages students to look beyond technology by finding value in innovation to shape the path of what digital entertainment can become.	12 months			This specialism seeks to join theory and action by: putting people first in the people/technology equation – explore human-centredness; understanding active communication processes on which interactivity is built; learning methods for analysis and construction of interaction design; working across communication technology, product interfaces, and service systems; focusing on one of the above as an alternative focus; developing a holistic approach to human-centred interaction that includes problem or opportunity identification, research, prototyping and execution	
The Polytechnic University of Hong Kong	School of Design	Postgraduate	Master of Design (MDes.) in Interaction Design	Concept workshop; Tangible interaction workshop; Vision and Change; Embedded interaction workshop; Innovation tools for strategic design; Design criticism and Visual arguments; Finance and Accounting for Design Business...	This specialism seeks to enhance human ability and life through the design of innovative, interactive and experiential ideas, based on a synthesis of human thought patterns and habits with technical means. A combination of theory, planning strategies, research, and technical skills provide the foundation for workshops that explore emerging aspects of interaction design, based on human needs and pleasures as well as technological development.				1. An ability to apply knowledge of mathematics, science, and computer engineering; 2. An ability to analyze an engineering problem and identify the hardware and/or software requirements appropriate to its solution; 3. An ability to design and implement a computer-based system including embedded systems encompassing hardware and/or software to meet desired needs; 4. An ability to conduct teamwork, especially in a multi-disciplinary environment; 5. An ability to identify, formulate and solve computer engineering problems subject to practical constraints; 6. An ability to understand professional and ethical responsibility; 7. An ability to communicate effectively with a range of audience; 8. An ability to understand the local and global impact of computer engineering solutions on individuals, organizations and society; 9. An ability to understand contemporary global, economic, environmental, and societal issues, and their potential connection with computer engineering; 10. An ability to recognize the need for, and to engage in life-long learning; 11. An ability to use the techniques, skills, and modern engineering tools necessary for solving computer engineering problems; 12. An ability to use hardware and/or software tools to effectively solve engineering problems with an understanding of their processes and limitations	
The Hong Kong University of Science and Technology	School of Engineering	Undergraduate	Bachelor of Engineering (Degree) in Computer Engineering	Introduction to Electro-Robot Design, Introduction to Biomedical Engineering, Programming with C++, Object-Oriented Programming and Data Structures; Machine Learning, Data Mining, Image Processing; Computer Music; Game Programming; Digital Media and Multimedia Applications...	1. Technical knowledge, hands-on experience, presentation and management skills required for pursuing innovation-based careers and advanced research studies in any computing-related discipline that may involve the development and/or applications of computing devices and systems, ranging from embedded processors to networks of supercomputers; 2. The cross-disciplinary knowledge in computer science and electronic engineering of sufficient breadth and depth, as well as the fundamental knowledge in mathematics and science, for tackling important real-world engineering problems which may involve hardware, software and/or their co-design; 3. Solid preparation to launch their careers, and to eventually become leaders and mentors of their peers in the innovation-based business within their chosen professions; 4. An appreciation of the significant roles, impacts and responsibilities of computer-engineering-related professionals to the modern society, especially as innovators and technopreneurs.	4 years				
Peripheral undergraduate and postgraduate training with some aspects of new media training										
The Chinese University of Hong Kong	Department of Fine Arts	Undergraduate	B.A.	3 Streams: Art History, Modern Art Studio, Art History and Art Studio; Courses: Drawing Fundamentals; Principles of Chinese Calligraphy; Fundamentals of 3-Dimensional Forming; Artistic Traditions in China; Artistic Traditions in the West; Art and the Humanities; Mixed Media; Digital Imaging Workshop...	The Department of Fine Arts offers a comprehensive and balanced undergraduate programme for students in order to prepare them for future careers in the arts. Such careers include that of artist, art historian, museum curators, and other art-related professions.					

The Chinese University of Hong Kong	Department of Fine Arts	Postgraduate	M.Phil./PhD in History of Chinese Art	Methodology in Art-Historical Research; Theories of Chinese Painting and Calligraphy; Schools of Model-callingigraphy and Seal Studies; Special Topics in Hong Kong Art; Thesis research...	The programme aims to provide a candidate training for student to conduct advanced research on the history of Chinese art. Fields of specialization include the histories and theories of Chinese painting and calligraphy, jades, bronzes, ceramics, religious art, and contemporary Chinese art.	2 years/4 years			
The Chinese University of Hong Kong	Department of Fine Arts	Postgraduate	Master of Fine Arts	Seminar: Special Topics in Hong Kong Art; Professional Practice Electives; Courses: Methodology in Art-Historical Research; Post-graduate Seminar: Special Topics in Chinese Art; Doctoral Art and Relics; Special Topics in Art History; Art Creation; Thesis research	The programme aims to provide advanced training for students to develop a career in studio art through studio and art theory courses.	2 years (Full time)			
The Chinese University of Hong Kong	Department of Fine Arts	Postgraduate	Master of Arts in Fine Arts	Contemporary Art; Chinese Art; Special Topics in Studio Art; Creative Workshop; Seminars in Cultural Theory and Criticism; Exhibition Design and Translation; Visual Arts Administration; Graduation Workshop	The Master of Arts Programme in Fine Arts aims to provide a platform for the development of individual art practices. With their knowledge and experience, the teaching staff will provide support to student peer groups and, through facilitating critical debate as well as offering practical help and advice, encourage the development of personal projects. The programme is made up of components in Art History, Culture Theory and Studio. It will help students to define or reconfigure their art projects and to equip them with the critical tools and practical skills necessary for an advanced professional practice.	2 years (Part-time)			
The Chinese University of Hong Kong	Department of Cultural and Creative Arts (CCA)	Undergraduate	Bachelor of Arts (Honours) in Creative Arts and Culture and Bachelor of Education (Honours) (Music) (Co-terminal Double Degree Programmes) - DD-Ba(CAC)& BE(MU)		The programme aims to prepare professional Music teachers and community-based artists who: can demonstrate a solid foundation in music skills, related academic competencies, and music teaching practices to meet their future teaching needs; have a passion for professional excellence and are committed to lifelong learning; can work collaboratively with students, parents, colleagues, school administrators and other professionals to promote music and related arts education in primary/secondary school; and are able to work across a range of established art forms and contribute to the promotion and development of the arts and arts education in the local, regional and international cultural and creative industries.	4 years		Upon completion of the programme, students should be able to: understand and interpret the arts and cultures from diverse theoretical and practical perspectives; express and create through musical, visual arts and interdisciplinary arts practices; make connections across the arts, related academic disciplines and cultural contexts in Hong Kong, Mainland China and other parts of the world; reflect on and make reasoned analysis of the needs and issues relevant to the cultural and creative industries; and work competently and professionally in supporting arts education and arts administration within cultural and creative industries.	
The Chinese University of Hong Kong	Department of Cultural and Creative Arts (CCA)	Undergraduate	Bachelor of Arts (Honours) in Creative Arts and Culture and Bachelor of Education (Honours) (Visual Arts) (Co-terminal Double Degree Programmes) - DD-Ba(CAC)& BE(VA)		The programme aims to prepare professional Visual Arts teachers and community-based artists who: can demonstrate a solid foundation in visual arts skills, related academic competencies, and visual arts teaching practices to meet their future teaching needs; have a passion for professional excellence and are committed to lifelong learning; can work collaboratively with students, parents, colleagues, school administrators and other professionals to promote visual arts and related arts education in primary/secondary schools; and are able to work across a range of established art forms and contribute to the promotion and development of the arts and arts education in the local, regional and international cultural and creative industries.	4 years		Upon completion of the programme, students should be able to: understand and interpret the arts and cultures from diverse theoretical and practical perspectives; express and create through musical, visual arts and interdisciplinary arts practices; make connections across the arts, related academic disciplines and cultural contexts in Hong Kong, Mainland China and other parts of the world; reflect on and make reasoned analysis of the needs and issues relevant to the cultural and creative industries; and work competently and professionally in supporting arts education and arts administration within cultural and creative industries.	
The Chinese University of Hong Kong	Department of Cultural and Creative Arts (CCA)	Postgraduate	Master of Arts in Visual Arts Education and Creative Practice	Contemporary Digital Practices; Research Methods in Artistic Practices; Collaborative Artmaking Practices; Arts Management in Hong Kong; Art Criticism and Museum Experience; Collaborative Artmaking Practices...	Provide advanced opportunities for artistic development, the cross-fertilisation of ideas and a trans-disciplinary approach to professional practice in the art and educational fields, covering entrepreneurship and stimulating innovation; enhance specialised pedagogical knowledge and advanced skills in contemporary visual art practice through collaboration with different disciplines, tertiary educational institutions, the creative industries and cultural sectors; equip students with a deeper understanding of contemporary approaches to learning and teaching, whilst also enhancing media techniques within their chosen visual arts specialisation; facilitate the acquisition of the necessary artistic skills through practical experiences to generate the self-confidence and knowledge necessary to undertake research and critical analysis of contemporary and new media art, social practices and social media within a context relative to visual arts and arts education; and, enable students to cultivate a knowledge of historical, cultural, philosophical, aesthetic and educational paradigms, and the practical strategies required to support particular career paths.	1 year	Self-funded		
Hong Kong Baptist University	School of Communication/ Academy of Film	Undergraduate	Bachelor of Communication (Bcomm)	Film Major' with Animation and Media Arts' concentration	Animation and Media Arts Concentration provides theoretical training in visual media and creativity, with an emphasis on leveraging digital media for various forms of creative expression, such as digital animation, interactive gaming, visual design and art installations.	4 years			

Hong Kong Baptist University	School of Communication/Academy of Film	Undergraduate	BA (Honours) in Creative Writing for Film, Television and New Media	Creative writing for new media, television writing workshop, creative thinking, screenwriting workshop, the languages of new media...	Cultivates creativity and originality in media convergence in an era of globalisation. Emphasis on creative writing and professional scripts for feature film, television/web serial drama, variety show and new media, such as television/film content for mobile devices, video games, 3D-animation and podcasts.	4 years (year 1 entry) 2 years (year 3 entry)	Self-funded	
Hong Kong Baptist University	School of Communication/Academy of Film	Postgraduate	MFA in Film, Television and Digital Media		Students of the MFA receive a broad practical training across the board, before specialising later. The course also incorporates elements of theory and criticism.			
Hong Kong Academy for Performing Arts		Postgraduate	Master of Music	Performance Major/Conducting Major/Composition Major	The Academy's 2-year Master of Music programme equips students for entry into the music profession at a high artistic level. Performance students gain a comprehensive knowledge and broad experience through participating in a wide range of solo, ensemble and orchestral activities. The flexible curriculum encourages the development of artistry, exploration of areas of special interest and performance specialisms, and the cultivation of the cognitive and generic skills that are necessary for the profession. The 2-year Master of Music programme for composers provides professional training in composition, analytical skills and associated research at an advanced level, and is situated within an environment that encourages students to compose music in a variety of contexts and styles that they are then able to experience in performance.	2 years		On completion of the programme, the student is able to: Possess fundamental and interdisciplinary knowledge of music, including music theory, contextual study of music, performance on a major instrument, and multiple musical traditions. Acquire transferable and professional skills including (i) ability to work independently and in groups, (ii) express oneself about music in written and spoken English and Chinese, (iii) think creatively and critically, (iv) make evidence-based critical judgments about musical performance, composition, and musical culture and (v) perform at an appropriate professional level on their major instrument. Develop an open mindset towards different modes of musical expression, passion for communicating through music, awareness of and appreciation for the significance of music within various societies.
The Chinese University of Hong Kong	Department of Music	Undergraduate	BA in Music		Our BA programme in Music is designed to enable the students to learn and grow intellectually and socially in a tertiary setting. The curriculum encourages the development of creativity and critical thinking through the performance of Western and non-Western instruments as well as the study of music from analytical, historical, and ethnomusicological perspectives. Composition and music information technology also complement these areas of study.			
Savannah College of Art and Design (SCAD)		Undergraduate	B.F.A. in Animation	Advanced survey of computer art applications; Visual Culture in Context; Media Literacy Theory; Drawing; 3D Form in Space; 3D Animation Production; Principles of Screen Design...				
Savannah College of Art and Design (SCAD)		Undergraduate	B.F.A. in Interactive Design and Game Development	Core principles: Programming, Interactive Design and Game Development; Game Art; Game Design; Game Tech; User-centered Design...				
Savannah College of Art and Design (SCAD)		Postgraduate	M.F.A. in Interactive Design and Game Development	Contemporary art; Visual Interface and Information Design; Game Design; Documentation; Interactive web design; Human-centered Interactive Design...				
Savannah College of Art and Design (SCAD)		Postgraduate	M.F.A. in Interactive Design and Game Development	Contemporary art; Visual Interface and Information Design; Game Design; Documentation; Interactive web design; Human-centered Interactive Design; Thesis studio...				
Savannah College of Art and Design (SCAD)		Undergraduate	B.F.A. in UX Design	Drawing: Form and Space; Drawing: Composition and Media; Mathematics and Computer Science; Algorithm Design and Analysis; Model and Prototype Development; Human/Computer Interaction; Prototyping Electronics for Designers; UX Design Studio; Sponsored Collaboration for UX...				
Savannah College of Art and Design (SCAD)		Undergraduate	B.F.A. in Visual Effects	Introduction to Visual Effects Programming; Procedural Modeling and Animation Techniques; Professional Development for Visual Effects...			Self-funded	

Suvarnabh College of Art and Design (SCAD)		Undergraduate	B.F.A. in Graphic Design	Survey of computer art applications; Core Principles: Interactive Design; Applied Principles: Interactive Web Design; Interface Design...				
Suvarnabh College of Art and Design (SCAD)		Postgraduate	M.F.A. in Graphic Design and Visual Experience	Experience Design for Physical Spaces; User-centered Strategy and Process; Typographic Voice and Visual Narrative; Ideation Models and Process...				
Hong Kong Design Institute/Scho of for Higher and Professional Education (SHAPE)/Cov entry		Undergraduate	BA (Honours) in Media	Understanding Visual Media; Creative Development; Final Major Project; Professional Practice; Academic English for Media and Performing Arts	This programme aims to equip students with the skills and knowledge associated with the visual media ecology including film, television, animation and design. The key aims of the programme are: - Understanding the contemporary media and art and design landscapes; - Developing disciplined and rigorous thinkers and producers with a critical, contextual engagement in their work; Operating as a creative practitioner, producing regular professional-standard work; Engaging with technology to develop and future-proof their work; and - Experimenting and evaluating the business of the creative industries and belonging to a community of practice locally, nationally and internationally.	1 year (full time); 2 years (part- time)		Articulation from HKDI: Higher Diploma in Creative Media; Higher Diploma in Animation and Visual Effects; Higher Diploma in Film, Television and Photography; Higher Diploma in Transmedia; Professional Diploma in Transmedia; Professional Diploma in Visual Effects Design
Hong Kong Design Institute/Scho of for Higher and Professional Education (SHAPE)/Cov entry		Undergraduate	Bsc (Honours) in Music Technology	tools and techniques commonly used in music technology for application in areas such as live concert sound production, electronic music composition, and multimedia and game audio programming	This programme will give you the skills, knowledge and techniques you will need to become involved in the creation and recording of music and audio. The programme is designed to reflect the range of areas that make up the subject of music technology and the wide range of jobs that may be available to you once you have completed your studies.	1 year		VTC Higher Diploma in Digital Music and Media
School for Higher and Professional Education (SHAPE)/UW E-Bristol		Undergraduate	Bsc (Honours) in Digital Media	Creative technologies project; Interactive design; 3D modelling and animation; Live sound; Advanced Performance Commercial Games development	In particular, this programme aims to: provide skills in the design and implementation of digital media and computer games, including an understanding of the mathematical and technological principles required, as well as an exploration of the creative potential presented within the development of media for web platforms, and the cultural and technological contexts out of which they arise; provide practical skills in web development and design and deployment of rich interactive media; develop students' ability to make efficient, innovative and robust contributions to companies engaged in the development of products for web platforms and related digital media; and develop students' understanding of the importance and mechanisms of project management, and associated tools, within computing, with particular reference to the development of digital media and the web.	1 year (full time); 18 months (part- time)		
School for Higher and Professional Education (SHAPE)/Cov entry		Undergraduate	BSc (Honours) in Multimedia Computing	Designing for usability; Digital Media Technology; 3D Modelling and Animation; Web API Development; Interactive Pervasive Computing; Phone Development skills	This programme aims to develop Information Technology professionals with specialised concepts, skills and knowledge sitting them particularly for the creative industries. The applicability of skill to a wider range of industries and end destinations enhances students' employability. You will have opportunities to develop mobile applications for smartphone and wearable information devices, design and implement a website of dynamic content, create 3D models and animations, develop integrative skills in multiple source video creation, as well as enrich your practical skills in user interaction evaluation and user-centred design of user interface.	1 year (full time); 14 months (part- time)		
Technological and Higher Education Institute of Hong Kong (THHB)		Undergraduate	Bsc (Honours) Multimedia Technology and Innovation	Introduction to Animation; Graphics & Imaging; Computer Music; Science and Technology in Arts; Creative Coding; Computer programming; Interactive Communications; Design and Technology; Embedded Device Computing; Interfacing the Perceptual World; Interactive Multimedia; Programming; Game Design; Cyber World application; Ubiquitous Computing	This programme focus on emerging multimedia technologies and the creative process in a commercial and social context that is relevant to a career in the multimedia industry. It also emphasises on intellectual and creative development through the application of technology, computer systems and design to produce innovative multimedia solutions. The industry-focused approach nurtures a new generation of multimedia professionals with strong technology knowledge with awareness in the art, design, cultural, social and commercial context.	4 years (year 1 entry); 2 years (year 3 entry)		

Carrius Institute of Higher Education		Undergraduate	BSc(Honours) in Digital Entertainment	Creative Design: Data Structures & Algorithms; Introduction to Computer Programming; Introduction to Multimedia Computing; Critical thinking; Database Systems & Application; HCI Development; Culture, Arts & Design; Digital Storytelling; Photo Art Manipulation & Applications; 3D Game Design & Development; Creative Programming & Gadgets Design; Advanced Reality & Computer Vision...		4 years		
Hong Kong Art School / RMIT		Undergraduate	BA Fine Art	Ceramics/ Painting/ Photography/Sculpture	The RMIT Bachelor of Arts (Fine Art) (the programme) aims to develop students' individual creative growth and establish strong perceptual, analytical and conceptual awareness within the context of contemporary fine art practice. It enables students to achieve a high level of confidence and personal integrity associated with the best artistic practice, and to realise his or her potential as a professional artist. Graduates are multi-skilled and may pursue careers as independent professional artists or within the diverse industries and cultures associated with the fine arts. The three-year programme is jointly presented by RMIT University and the Hong Kong Art School, enabling students to benefit from international and local perspectives.	3 years		
Hong Kong Art School / RMIT		Postgraduate	MFA	Self Directed projects; Professional Practice Advanced Seminars; Major Project Proposal Development	The Master of Fine Art prepares you to take on the role of an informed contemporary artist.	2 years		
The Hong Sing University of Hong Kong	Department of Computing	BA in Applied and Human-Computer Computing	Computing Lab; Human Computer Interaction; Software Application Development; Graphic Design and Multi-media	BA-AHCC is an applied computing degree programme that teaches the student how to produce attractive and user-friendly software solutions. Apart from traditional computer science subjects, it also provides supplementary knowledge from graphic design and various application areas. The programme also offers a wide range of elective subjects covering many hot-topics in computer science, including artificial intelligence, financial computing, HCI and more.	4 years			
Associate degrees, higher diploma, top-up degrees								
City University of Hong Kong	Community College	Associate of Science	Creative and Interactive Media Production	Media production, Interactive Media Design; Multimedia and the Web; Visual Effects and Photography...	Upon successful completion of this programme, students will be able to: Relate creativity, aesthetics and media technology to areas of media design and production; Apply media and information methodologies, both independently and within a team, to develop interactive multimedia systems and enhance the levels of quality in production process; Relate the major ideas in arts and humanities, science and technology to their own area of study; Appreciate the major socio-political, cultural and economic issues that may affect media production; Practice in an ethical, responsible and professional manner; and Apply safety and health measures at work; Communicate effectively in a culturally diversified workplace.			
Hong Kong Baptist University	College of International Education (in collaboration with the Academy of Visual Arts HKBU)	Associate degree	Visual Arts	I introduction to visual arts; Visual thinking and observation; Graphic design and visual narratives; History and Civilization; Values and the Meaning of Life; Culture, creativity and innovation; Science, technology and society...	This area of Concentration Studies aims to provide students with visual arts training needed for academic advancement and careers in arts and creative industries. Distinctive features include: Encouraging individual development of concepts and skills in visual arts through a variety of courses offered in studio practice as well as art appreciation; Auxiliary art activities, such as lectures by established artists or curated art exhibitions, fostering a broader understanding of the field; Well-equipped studios and supporting facilities for professional visual arts training.			
City University of Hong Kong, Bachelor of Arts in Creative Media, Bachelor of Arts in Linguistics and Language Applications, Bachelor of Arts and Science in New Media, Bachelor of Business Administration in Information Management, Bachelor of Business Administration in Marketing, Information Management, Bachelor of Engineering in Computer Engineering, Bachelor of Engineering in Information Engineering, Bachelor of Science in Computer Science, Bachelor of Science in Creative Media, Hong Kong Baptist University, Bachelor of Arts (Honours) in Creative and Professional Writing, Bachelor of Arts (Honours) in Creative Writing for Film, Television and New Media, Bachelor of Arts (Honours) in Visual Arts, Bachelor of Business Administration (Honours) in Accounting, Bachelor of Social Sciences (Honours) in Communication, Film and Media Arts Major, Bachelor of Science (Honours) in Computer Science, Bachelor of Science (Honours) in Computing and Information Systems, Hong Kong Polytechnic University, Bachelor of Arts (Honours) in Design, Bachelor of Arts (Honours) in Digital Media, Bachelor of Arts (Honours) in Interactive Media, Bachelor of Business Administration (Honours) in Marketing, Bachelor of Engineering (Honours) in Building Services Engineering, Hong Kong University of Science and Technology, Bachelor of Engineering of Computer Science, The Chinese University of Hong Kong, Bachelor of Engineering in Computer Science, City University of Hong Kong, Bachelor of Arts in Linguistics and Language Applications, Bachelor of Arts and Science in New Media, Bachelor of Business Administration in Information Management, Bachelor of Business Administration in Marketing, Information Management, Bachelor of Engineering in Computer Engineering, Bachelor of Engineering in Information Engineering, Bachelor of Science in Computer Science, Bachelor of Science in Creative Media, Hong Kong Baptist University, Bachelor of Arts (Honours) in Creative and Professional Writing, Bachelor of Arts (Honours) in Creative Writing for Film, Television and New Media, Bachelor of Arts (Honours) in Visual Arts, Bachelor of Business Administration (Honours) in Accounting, Bachelor of Social Sciences (Honours) in Communication, Film and Media Arts Major, Bachelor of Science (Honours) in Computer Science, Bachelor of Science (Honours) in Computing and Information Systems, Hong Kong Polytechnic University, Bachelor of Arts (Honours) in Design, Bachelor of Arts (Honours) in Digital Media, Bachelor of Arts (Honours) in Interactive Media, Bachelor of Business Administration (Honours) in Marketing, Bachelor of Engineering (Honours) in Building Services Engineering, Hong Kong University of Science and Technology, Bachelor of Engineering of Computer Science, The Chinese University of Hong Kong, Bachelor of Engineering in Computer Science.								

Hong Kong Baptist University	College of Interpersonal Education	Associate degree	Film, Television and Digital Media Studies	Digital animation fundamentals: Film appreciation; Film history; Script writing; History and Civilization; Values and the Meaning of Life; Culture, creativity and innovation; Science, technology and society...	This area of Concentration Studies is designed to integrate history and theory with creative production in the fields of film and television. Students can perform creatively with authentic connection to our culture and society. Distinctive features include: Learning to produce their own creative visual works. The output formats include but are not limited to narrative film, documentary film, MTV, stop motion and photo animation. Covering knowledge on different types of script writing, including narrative film, infotainment and feature story; including historical, cultural and social perspectives in studying film and television as modern art forms and cultural products.				Hong Kong Baptist University: BA (Hons) in Creative Writing; BA (Hons) in Film, Television and New Media; BA (Hons) in Journalism; BA (Hons) in Journal and Cultural Studies; BSc (Hons) in Communication - Film and Media; Arts Major; BSc (Hons) in Integrated Communication Management; BSc (Hons) in Media and Social Communication; City University of Hong Kong: BA (Hons) in Creative Media; BA (Hons) in Media and Communication; BAS (Hons) in New Media; The Hong Kong Polytechnic University: BA (Hons) in Digital Media; The Education University of Hong Kong: BA (Hons) in Language Studies - Chinese / English; Bachelor of Education (Hons) (Secondary) - Information and Communication Technology; Lingnan University: BA (Hons) in Chinese; The Open University of Hong Kong: BA (Hons) in Creative Writing and Film Arts...
Hong Kong Baptist University	College of Interpersonal Education	Associate degree	Film, Television and Digital Media Studies	Communication Fundamentals: Digital Animation Fundamentals: Digital Audio and Video Production; History and Civilization; Values and the Meaning of Life; Culture, creativity and innovation; Science, technology and society...	This area of Concentration Studies aims to train students to acquire broad-based knowledge in digital media design from planning, creative development and production to management. The programme will provide students with the opportunities for the innovative use of digital and media-related technologies in the art design and media industries. Distinctive features include: A comprehensive and integrative approach to learning, which helps students study the principles and concepts of business, communication and multimedia design. Preparing students for professional practices in a wide range of design disciplines, for example, graphic design, branding and design management, imaging, animation, audio and video production and user interface design.				Hong Kong Baptist University: BSc (Hons) in Communication - Film and Media Arts Major; BSc (Hons) in Integrated Communication Management; BSc (Hons) in Media and Social Communication; BA (Hons) in Visual Arts; The Chinese University of Hong Kong: BA (Hons) in Fine Arts; BA (Hons) in Philosophy; City University of Hong Kong: BA (Hons) in Creative Media; BA (Hons) in Digital Television and Broadcasting; BA (Hons) in Integrated Strategic Communication; BAS (Hons) in New Media; The Hong Kong Polytechnic University: BA (Hons) in Art & Design in Education; BA (Hons) in Digital Media; BA (Hons) in Interactive Media; BA (Hons) in Interactive Media; BA (Hons) in Design (Advertising Design); BA (Hons) in Scheme in Design (Communication Design); The Education University of Hong Kong: BA (Hons) in Creative Arts and Culture
Hong Kong Baptist University	Space Community College	Higher diploma	New Media and Communication		This programme aims to provide students with an understanding of the underlying concepts of communication as well as practical production with new media, including digital photography, sound and video production. Students will also be taught on how to use various post-production softwares which are widely used by the industry. The programme targets to nurture a new generation of producers who do not only possess communication knowledge, but are also versatile in both media planning and new media technology to fulfil the growing market needs of new media production.				Hong Kong Baptist University: BSc (Hons) in Communication - Film & Media Arts; City University of Hong Kong: BA Digital Television and Broadcasting; BAS New Media; BA Media and Communication; The Hong Kong Polytechnic University: BSc (Hons) Internet & Multimedia Technologies
Hong Kong Baptist University	Department of Communication Design and Digital Media	Higher diploma	Creative Media		The programme aims to nurture students in developing their aesthetic sensibility and hands-on production skills. It also equips students with the ability to adapt to new skills and technologies in the future. After a common first semester, students may focus on one of three study streams: Animation and Visual Effects, Interactive Media or Web and App Design, subject to academic performance and availability of places.				Coventry University, UK: BA (Hons) Media, City University of Hong Kong: BA Creative Media / BSc Creative Media / BAS New Media; Hong Kong Baptist University: BA (Hons) in Visual Arts / BCOMM (Hons) - Film Major (Animation and Media Arts Concentration); The Hong Kong Polytechnic University: BA (Hons) Scheme in Design / BA (Hons) in Digital Media / BA (Hons) in Interactive Media
Hong Kong Baptist Institute	Department of Communication Design and Digital Media	Higher diploma	Animation and visual effects		This programme aims to nurture aesthetic and art sense associated with professional knowledge and hands-on skills, with a goal to prepare students to become animation and visual effects professionals. The programme will provide training regarding state-of-the-art knowledge of a animation, art direction, character design, scene design, visual effects design and storytelling skills so to enable students to adapt to new trends for their career development and articulation.				Coventry University, UK: BA (Hons) Media, City University of Hong Kong: BA Creative Media / BSc Creative Media / BAS New Media; The Hong Kong Polytechnic University: BA (Hons) Scheme in Design / BA (Hons) Digital Media; Hong Kong Baptist University: BA (Hons) in Visual Arts

	Department of Communication Design and Digital Media	Higher diploma	Digital Music and Media	Areas of studies include visual language and expression, narrative skills, concept visualisation, media art, illustration appreciation, lettering and typography, and visualisation skills such as drawing, painting and computer graphics. Areas of contextual studies will include cultural studies, professional practices and entrepreneurship. The programme also provides professional level training in the observation, exploration of communication methodology and visual interpretation.	The Higher Diploma in Digital Music and Media is a unique programme in Hong Kong that integrates education and training in both music production and audio technology for media production. The programme aims to develop a new breed of music, sound and audio talents, designers, and production specialists who can work across different media and entertainment industry sectors.			A student-centred pedagogy enables students to develop their knowledge through participation in a variety of practices and learning activities providing students with a creative, experimental and technically oriented learning experience to build up their professionalism.	Coventry University, UK; BSc (Hons) Music Technology; Oxford Brookes University, UK; BA (Hons) Creative Music Production / BSc (Hons) Music City University of Hong Kong; BA Creative Media / BSc Creative Media / BAS New Media, Hong Kong Baptist University; BA (Hons) in Music, The Chinese University of Hong Kong; BA (Hons) Music, The Education University of Hong Kong; BA (Hons) in Creative Arts and Culture (Music) / BMus in Education (Hons) (Contemporary Music and Performance Pedagogy); The Hong Kong Academy for Performing Arts; BMus (Hons) Degree / BFA (Hons) Degree in Theatre and Entertainment Arts, The Hong Kong Polytechnic University; BA (Hons) in Digital Media, The University of Hong Kong; BA (Hons) Music
Hong Kong Design Institute	Department of Communication Design and Digital Media	Higher diploma	Illustration	The Higher Diploma in Illustration aims to equip students with creative and effective illustration skills including critical and analytical thinking, graphic manipulation, visual expression and concept visualisation.					Coventry University, UK; BA (Hons) Graphic Design / BA (Hons) Illustration and Graphics, City University of Hong Kong; BA Creative Media, Hong Kong Baptist University; BA (Hons) in Visual Arts, The Hong Kong Polytechnic University; BA (Hons) in Communication Design / BA (Hons) in Advertising Design / BA (Hons) in Digital Media / BA (Hons) in Social Design
									Coventry University, UK; BA (Hons) Media, Technological and Higher Education Institute of Hong Kong; BA (Hons) in Advertising, City University of Hong Kong; BA Creative Media / BSc Creative Media / BAS New Media, Hong Kong Baptist University; BCOMM (Hons) Programme: Film Major – Animation and Media Arts Concentration, The Hong Kong Polytechnic University; BA (Hons) Scheme in Design
Hong Kong Design Institute	Department of Communication Design and Digital Media	Higher diploma	Transmedia	Filmmaking, visual effects, sound design, graphic communication, 2D animation and character design, game design	The Higher Diploma in Transmedia nurtures creative talents to become proficient storytellers who can move fluidly across a multitude of media. They not only are knowledgeable about the trends of social network platforms, but also possess a strong marketing sense.				
Hong Kong Art School		Higher diploma	Fine Art	Critical Thinking & Creative Problem Solving, Visual Culture, 2D Visualization, 3D visualization, Western Art History.	The Higher Diploma in Fine Art programme aims at providing students with the opportunity to build up professional platform in skills and knowledge in the fine art area. With specialized study and relevant generic and broad-based skills, students will be able to think critically about art, become technically competent in various mediums and approaches, have a strong awareness of the theoretical and cultural context of their area of study, and work independently with appropriate analytical and evaluative skills. The programme also prepares students for future artistic development or further academic studies in conjunction with fine art disciplines and other creative fields.			You will be able to: Learn from practicing artists; Focus your study in a specific major or stream; Engage in studio-based practice; Enjoy learning atmosphere with small class size; Gain experience via a wide spectrum of art projects conducted by the School and the Hong Kong Arts Centre	2nd year of the HKAS BA (Fine Art)
Open University of Hong Kong	U Ka Shing Institute of Professional and Continuing Education (UPACE)	Higher diploma	Creative Culture and Media Practice	Psychology and Media; Visual Communication and Storytelling; New Media Culture; Media Management and Interactive Entertainment...	The programme aims to equip students with creativity, digital literacy and technical competency in working with media for creative industries. Students will have exposure to different subjects, methodologies, concepts and approaches to learning. They will receive training with a business foundation for language proficiency and communication competence, and acquire comprehensive knowledge in the development and operation of cultural and creative industries from inter-disciplinary perspectives.	2 years		Upon completion of the programme, students should be able to: Apply a wide range of generic skills (including languages, creativity and information technology) in the areas of communication, teamwork, leadership, ethics and problem-solving; Demonstrate the ability to reflect and appraise the cause and impact of the development of a variety of global creative industries; Apply the basic skills and theories to analyze the intertwined cultural, economic, social and political forces behind the commercialization of creativity and the culturalization of commerce at an industry-level; Develop self-learning ability and learn how to deliver their innovative cultural-business ideas effectively.	Year 3 of OUHK BA (Hons) in Creative Writing and Film Arts; Year 3 of OUHK Bachelor of Fine Arts (Honours) in Cinematic Design and Photographic Digital Art

Open University of Hong Kong	Li Ka Shing Institute of Professional and Continuing Education (LIKPEC)	Higher diploma	Popular Music and Music Production	Applied Music Technology and Composition; Computer Music and Sound Art; Scoring for Visual Media; Music Industry and Arts Management...	The programme aims to provide students with an understanding of the cultural, historical, industrial and aesthetic aspects of popular music, and to equip them with the essential creative and technical skills to compose, perform, and produce popular music for the entertainment industry. It is designed to cover the core aspects that prepare graduates to pursue careers like singer-songwriters, recording studio technicians or related roles in the music industry.	2 years		Upon completion of the programme, participants should be able to : Apply appropriate creativity skills and production techniques in composing, performing and presenting popular music and sonic artworks; Analyze the cultural, social, economic, historical and technological factors affecting the development of popular music and the related genres; Evaluate popular music and market situation of present day in Hong Kong, greater China, South-East Asian, and other regions; Demonstrate originality in music outputs with a strong, marked sense and marketing strategy; Construct a portfolio of original music composition or music performance and present it in a professional manner; Apply a range of generic skills, including language, interpersonal communication, strong sense of social responsibility and civic values, a passion in pursuing creativity and innovativeness, and a spirit of lifelong learning.	BA (Honours) in Creative Arts and Culture (Music) offered by the Education University of Hong Kong; Bachelor of Arts in Music offered by the CUHK
Technological and Higher Education Institute of Hong Kong (THEi)		Higher diploma	Games and Animation	Game design; Digital Video and Photography Fundamentals; Introduction to Programming; Introduction to Computer Graphics; Interactive Media and Games; Game Programming; Computer Animation Pre-Production; Whole Person Development...	To cope with rapid development of digital entertainment industry in Hong Kong and Asia, this programme aims to equip students with practical knowledge and skill to become professionals for design and development of computer game, computer animation, and visual effects. This is a unique programme in which students will be able to design, create and develop computer games and software to realize their creative ideas for the production of digital content/important products. The computer game stream designed with modules to develop the competency of graduates in applying computer graphics programming techniques in developing interactive game and training simulation applications. The computer animation stream with modules to enable graduates to become professional computer animators to serve the growing market of computer games, animated feature films, television and visual effects productions.	2 years			City University of Hong Kong; Hong Kong Baptist University; The Chinese University of Hong Kong; The Hong Kong Polytechnic University; The Hong Kong University of Science and Technology; The Open University of Hong Kong; The University of Hong Kong
Technological and Higher Education Institute of Hong Kong (THEi)		Higher diploma	Multimedia and Virtual Reality	Mathematics and Problem Solving Techniques; Digital Video and Photography Fundamentals; 3D Modelling & Rendering Techniques; Multimedia Pre-Production and Storytelling; Interactive Media Design; VR/AR Fundamentals; 3D Visualization for Multimedia and Virtual Reality	This programme is designed to equip students with up-to-date professional knowledge and techniques in interactive multimedia and virtual reality technologies that meet the rising demands in various creative industries. Students will acquire practical and hands-on experience through internship and participating collaborative projects with the industry. This programme is designed with an emphasis on generic and language training, whole-person development and workplace experience, to well prepare the students to further studies and pursue career after graduation.	2 years			City University of Hong Kong; Hong Kong Baptist University; The Chinese University of Hong Kong; The Hong Kong Polytechnic University; The Hong Kong University of Science and Technology; The Open University of Hong Kong; The University of Hong Kong
Hong Kong Design Institute		Professional Certificate	New Media Illustration	Motion graphics storytelling, 2D and 3D motion graphics design, visualisation media, technique and style...					
Hong Kong Design Institute		Professional diploma	Creative Media III	3ds Max / V-Ray; Aerial Shooting; Adobe Live; Professional BIM (with CTRP); Creative Multimedia Illustration; Creative Illustration Workshop; Design Management; Design Thinking; Photography and Digital Imaging; Pro Tools;					
The Polytechnic University of Hong Kong (SPED)	School of Professional Education and Executive Development	Top-up degree	BA (Honours) in Applied and Media Arts	Business communication in Chinese; Creative Economy: Practices and Opportunities; Design Research and Methodology; Experimental Visualisation; Industrial Collaboration Project; Computational Graphics; Consumer Behaviour; Digital Video; Foundation of Animation; Identity Design; Image and Text; Information Graphic...	The Bachelor of Arts (Honours) in Applied and Media Arts provides a creative, experimental and interdisciplinary study of applied and media arts, developing students as creative practitioners with critical framework for analytical reflection of the practices in the culture and creative industries.	2 years part-time	Self-financed		
The Chinese University of Hong Kong and with RMITs University	School of Continuing Education and Professional Studies	Top-up degree	Bachelor of Creative Arts (Digital Media)	History of Film Style; Understanding and Developing of Film Styles; Multimedia Production; 3D Media Studio; Digital Games; Advanced concepts of 3D design...	The programme aims to explore the connections between technology and the creative arts and the ways in which digital media is used in society and the workplace. You will gain essential professional skills in digital media production, including the operation of software and hardware, as well as the ability to plan, develop and complete a digital media product, including scripting, production and post-production stages. You will also develop an understanding of screen and digital media through their historical developments, social and cultural applications, and the function of formal and aesthetic properties in various forms.	12 months			

