Digital Culture and Humanities 1

Anna Wing-bo Tso
*Editor*

# Digital Humanities and New Ways of Teaching

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# Digital Culture and Humanities

## Challenges and Developments in a Globalized Asia

Volume 1

This book series on digital culture and humanities examines how digitization changes current cultural practices as well as the modes of thought in humanities subjects, such as art, literature, drama, music and popular culture (which includes comics, films, pop songs, television, animation, games, and mobile apps). It also addresses the opportunities and challenges for scholarly research, industrial practices and education arising from the wide application of digital technologies in cultural production and consumption.

The series publishes books that seek to explore how knowledge is (re/)produced and disseminated, as well as how research in humanities is expanded in the digital age. It encourages publication projects that align scholars, artists and industrial practitioners in collaborative research that has international implications. With this as an aim, the book series fills a gap in research that is needed between theory and practice, between Asian and the global, and between production and consumption. Furthermore, the multidisciplinary nature of the book series enhances understanding of the rising Asian digital culture, particularly in entertainment production and consumption, cultural/artistic revisioning, and educational use. For instance, a study of digital animated Chinese paintings will elucidate the reinterpreted Chineseness in artistic representation.

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# Digital Humanities and New Ways of Teaching

Springer

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# Preface

"Traditional" humanities disciplines have all undergone transformation in the twenty-first century, namely, the process of digitization. In order to get a good grasp of the changes, new perspectives and methods are needed. The book series studies how digital culture has revolutionized the humanities in terms of production and the form of presentation, interpretation, and research. Through addressing questions about knowledge, scholarship, and practices, the book series aims to revitalize the humanities disciplines and explore new possible modes of critical thinking.

The book series also aims to address the rapid changes of contemporary culture. The rise of digital media is constantly changing our perception of the world in the aspects of politics, economies, social lives, and culture. In the realm of culture, traditional cultural texts, forms, and scholarly works are transformed, while new cultural practices are created. The emergence of virtual/augmented reality, as well as community, has generated new cultural forms and interactions, which in turn intervene and reshape the non-virtual reality. By putting digital technology under scrutiny, the book series will study social impact in the emergence of digital culture, especially how changes in the form of cultural production affect expressions in art and communication. It seeks to provide a wide array of new thoughts, particularly from Asian perspectives, on various facets of digital culture in the globalizing world.

With the development of new media forms, it is clear that our lives, both personal and social, have come under the mediation of digital representation. The advent of digital technologies has greatly impacted the way society functions and how culture is (re/)mediated, (re/)produced, consumed, interpreted, and manipulated. The series publishes books that seek to explore how knowledge is (re/)produced and disseminated, as well as how research in humanities is expanded in the digital age. With this as an aim, the book series will make connections between theory and practice, between Asian and the global, and between production and consumption.

Furthermore, the multidisciplinary nature of the book series will enhance understanding of the rising Asian digital culture, particularly in entertainment production and consumption, cultural/artistic revisioning, and educational use.

Hong Kong
April 2018

Kwok-kan Tam
Series Editor

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I would like to express my heartfelt gratitude to Professor Kwok-kan Tam, chief editor of the *Digital Culture and Humanities* book series, for introducing me to the world of digital humanities. Without his visionary insights, tremendous guidance, and unwavering support, this book volume would not have been possible at all.

I also wish to extend my sincere appreciation to Professor Andrew Parkin for taking care of the copyediting and proofreading. My wholehearted thanks too to the peer reviewers of the volume, associate editors of the book series, as well as all the book chapter contributors, for their invaluable contributions.

A special acknowledgment is extended to the Research Grants Council of the Hong Kong Special Administrative Region, China, which provides the Research Institute for Digital Culture and Humanities at The Open University of Hong Kong with research and publication funding through the institutional development scheme (reference no.: UGC/IDS16/14). I also owe a debt of gratitude to my colleagues, including Sunny Lam, Josephine Chiu, Agnes Lam, Jae Cheung, Patricia Ng, Calvin Wong, and Louis Lu. The volume could not have taken shape if not for their assistance and understanding throughout the publication process.

Hong Kong
November 2018

Anna Wing-bo Tso
Volume Editor

# Introduction: Digital Humanities in Research, Practice, and Pedagogy

Digital humanities used to be called "Humanities Computing," which largely refers to the mere application of computer technology in the humanities. Yet, as the range of devices, media, and web technology proliferated in recent decades, the digital experience has come to play a central role in modern life. For many, life in the digital era is meditated through the new media, social networks, and virtual applications. The digital experience is not just a part of everyday life; it has become our everyday life. Critics and scholars in disciplines ranging as widely as art, history, film, language, literature, education, media studies, and sociology now describe this emerging global phenomenon as digital humanities, an emerging field that increasingly grows in depth, diversity, and richness. For humanities departments that have long suffered budget cuts in the tertiary sector, digital humanities is now considered a new hope which attracts funding for international research and education.

To promote the sharing of interdisciplinary research and teaching ideas in digital humanities, from 2015 to 2017, the Research Institute for Digital Culture and Humanities (RIDCH) organized annual international conferences on a different topic each year, including "technologizing interconnections in art, history, and literature," "digitization and reconceptualizations of the humanities," and "digitization of the humanities and new ways of teaching." The invited keynote speeches and selected papers from the annual conferences are collected in this volume of 12 papers, all of which are written either by scholars who are from Asia or those who have close connections to the Asia-Pacific Region. Covering four main themes of the conferences, the chapters in this volume are categorized as four parts in the volume. The first part presents how digital humanities, in particular data archiving and cultural preservation, is practiced across Asia, Canada, and Europe nowadays. The second part examines the current interaction between creativity, digitization, language, and literature. The third part discusses pedagogical implications and new ways of teaching as digital humanities becomes a part of our everyday life. The last part explores different forms of new literacies emerged from digital technology. As the changing landscape and new possibilities in digital humanities are addressed in each chapter, a global view with an Asian perspective is adopted throughout the book.

## Part I: Digital Archiving and Cultural Heritage Preservation

In view of the worldwide waves of digital humanities in recent years, in Chap. 1, Monika Gänßbauer gives an overview of the top trends in digital infrastructure in Germany, shedding light on different viewpoints on this matter for the West and beyond. Gänßbauer states that in 2013, the president of the German Academic Exchange Service strongly demanded of the universities in Germany that they should implement digitization in their academic teaching. Otherwise, they shall face the risk of being wiped off the scientific map of the world. While some scholars actively deal with practices of digitization and their dissemination, others also pose the question whether digital humanities such as database archiving does have an intellectual agenda besides constituting an infrastructure. The chapter also probes into the price people are paying for the recent technological progress.

In Chap. 2, Jack Hang-tat Leong provides his insights into the future of digital humanities in libraries. He shares his experiences in library science and presents an environmental scan of digital humanities curated by university libraries in both Canada and the USA, including the University of Toronto Library, the University of British Columbia Library, and Stanford University Library. Specifically, the chapter examines the "Hong Kong-Canada Crosscurrents Project," a collaborative project among the author and humanities scholars in Canada and Hong Kong, which, with an Asian perspective, demonstrates a viable model for the convergence of librarianship and humanities scholarship in the digital humanities.

In Chap. 3, Sir Anril Pineda Tiatco, Bryan Levina Viray, and Jem Roque Javier continue the discussion of digital humanities and cultural heritage preservation. Browsing through the infrastructural design and setting of the "Philippine Performance Archive on Cultural Performances," the chapter puts forward that besides its sociocultural, political, and historical significance, the Philippine cultural performances repository can also be used as a pedagogical tool for students, academics, and the general public.

## Part II: Current Research on Digital Humanities

Reflecting on the deep impact of digitization on language, literature, and creativity, in Chap. 4, Andrew Parkin reviews how he has witnessed the transition from typed to digitalized texts and from slow traditional publication to fast-track digital publication in Web 2.0. He considers his own research on poetry as an example of digital experimentations, pointing out how the emergence of digital media and digital technology has led to new forms of creative writing, and that new modes of contemporary literature are able to probe new ways of social life.

Andy Chi-on Chin, on the other hand, addresses the impact of digitization on language research from the aspect of Cantonese linguistics. In his chapter, he emphasizes the importance of collecting representative and authentic Cantonese

data through corpus linguistics, which could further enhance our understanding of Cantonese spoken half a century ago and trace its development since then. In 2012, the Department of Linguistics and Modern Language Studies at the Education University of Hong Kong launched "A Corpus of Mid-20th Century Hong Kong Cantonese," an online search engine with both textual data and video segments. The chapter discusses the rationales for constructing the Cantonese corpus and provides a demonstration of the online search engine.

In Chap. 6, Chaak-ming Lau illustrates the digital influence on Cantonese studies. In his 3-year experimental project launched in 2014, crowd-sourcing strategies were used to build *words.hk*, a Cantonese-to-Cantonese dictionary with 42,000 entries. Similar to open-to-all encyclopedia such as Wikipedia, *word.hk* aims to provide language data/tools for natural language processing, linguistics research, and teaching. While Chaak-ming Lau mentions that the crowd-sourcing project has limitations, the chapter nonetheless indicates that digitization has given new meaning to language studies and to the dissemination of knowledge.

## Part III: Teaching on Digital Humanities

Part III elucidates innovation learning and new ways of teaching in the digital age. With a view to meeting the learning needs of culturally diverse university students in Australia, in Chap. 7, Helena Hing-wa Sit and Sijia Guo recount the successful flipped classroom approach they used for teaching Chinese as a second or foreign language in Australia. They suggest that the teaching model, which allows dynamic activities, enhances interaction, and enables flipped learning, can be employed as a matrix for designing more language courses other than Chinese.

Likewise, in Chap. 8, Noble Po-kan Lo and Billy Cheuk-yuen Mok look for the possibility of enhancing second language acquisition through nontraditional pedagogy. First, the authors study gaming language, an online slang that is now eclectically used in mainstream discourse in the social context to achieve specific effects such as humor. Word formation processes of the gaming jargon, including affixation, initialism, semantic and functional shift, are explained in detail with common examples. In the second part of the chapter, the authors argue that language teachers should not underestimate the pedagogical effect of digital gaming language. Gaming jargon can be an effective language learning tool when used effectively.

In the last chapter of Part III, John Paolo Sarce acknowledges and elaborates the significance of e-literature in the Pacific, a creation under the umbrella of digital humanities. It is noticed that while there is only a small number of Digital Humanities Centres available in the Philippine context, the Philippines can still manage to produce two popular types of e-literature through social media and other computational devices – "text Tula" (hyper-poem) and "text serye" (a story that is made out of chat conversations captured in screenshots). Despite the limited resources in promoting and sustaining digital humanities at the moment, Sarce insists that education

institutions in the Philippines should embrace e-literature as well as the teaching of e-literature.

## Part IV: Future Directions in Digital Humanities

Following the exploration of digitalized texts and their possibilities, the three chapters under Part IV all contribute to new literacies, namely, the new social practices of literacy made possible by digital technology. In Chap. 10, Anna Wing-bo Tso and Janet Man-ying Lau deal with multimodal literacies by studying the digital revolutions in museums and museum studies. By conducting a case study of a successful multimodal fine art exhibition at the Hong Kong Heritage Museum in May–July 2016, the authors investigate the impact of digital devices and multimedia platforms on visitors' perceptions and engagement in the exhibition.

In Chap. 11, Dora Wong approaches the matter of creativity, digitization, and literature from a new angle. She investigates the impact of digital media on creative thinking and the training of storytelling techniques by sharing the data she collected from her undergraduate creative writing class, where a blended model of pen and paper, social media, and Blackboard (an online learning platform) was used at the Hong Kong Polytechnic University. By observing students' creative process, Dora Wong contends that the blended learning mode in the creative writing classroom, when well-balanced, can be effective in creativity, collaboration, and self-reflection.

Alongside multimodal museum literacies and information literacy at university, digital literacies in a social media networking site are also explored in the final chapter. Grounded in Barton and Hamilton's framework of literacy as social practice and Wenger's community of practice learning theory, Winnie Siu-yee Ho's Chap. 12 looks into how the self-generated literacy practices of adult volunteers from an aviation-centered uniformed youth group in Hong Kong are shaped by new technologies. Through the analysis of multimodal texts on Facebook and other written texts related to the volunteering work, the author contributes to the understanding of new practices on social media and other technologies, which will continue to become more prevalent in the future.

## Final Remarks

Digital humanities as an academic subject is still an emerging field in Asia. Relevant publications in the field are largely written from the Western perspective. Few works on digital humanities are written by Asia-based researchers and scholars, and fewer discuss the education implications of digital humanities in Asia. In light of this, with an Asian audience in mind, our edited volume presents a selection of papers that are written by Asian researchers and experts with close connections to the Asia Pacific

region. By providing multiple recent case studies, analyses, and examples on archives, libraries, digital storytelling, e-literature, blended learning, gaming literacy, museum studies, Cantonese corpus linguistics, and more, we endeavor to draw attention to the crosscutting concerns and discussions on digital research and teaching across all arts and humanities disciplines in the twenty-first century.

Hong Kong Anna Wing-bo Tso

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# Part I
# Digital Archiving and Cultural Heritage Preservation

# Chapter 1
# Digital Humanities in the German-Speaking World


**Monika Gänßbauer**

**Abstract** The topic of digital humanities provokes widely varying views in the German-speaking world. In Germany digitalization efforts are often limited to a regional scale. This paper presents several examples of digitalization in the humanities: the use of audio sources, weblogs, big data, and simulations. The paper also examines the dissemination of practices of digitalization in the German-speaking world. Some experts note structural problems for digital innovation in Germany. Others make a plea for the realization of achievable tasks. The third part of the paper focuses on the general discussion of digitalization in Germany. Several authors see Germany in a "digital hibernation." Prominent intellectuals such as Hans Magnus Enzensberger, Frank Schirrmacher, and Harald Welzer have on the other hand become harsh critics of digitalization.

**Keywords** Digital humanities in Germany · Audio sources · Big data · Critics of digitalization · Digitalization in the German-speaking world · Digital play · Weblogs

In an article for the *International New York Times* dated February 2015, the evolutionary biologist Armand Marie Leroi from Imperial College in London diagnosed an upcoming "transformation of the humanities into science" (Schmale 2015, p. 12). He made this alleged prediction with regard to the digitalization of cultural heritage and a predominant usage of quantitative and statistical methods on the basis of digitalized texts in the future. In Leroi's view this approach would be a much more objective one than that of an individual researcher.

The German historian Wolfgang Schmale responded to this text in a book published in 2015, taking a pointedly oppositional stance. Schmale argues that the ability to perceive subjectively and explain the world is essential for a human society. Schmale states that it is not the methods that define the humanities as scientific but

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the cognitive research outcome, which should contribute to a better understanding of the world. The tools of data mining should be put to use following the research questions in the areas of humanities and not the other way round.[1]

From these first remarks, it should have become clear already that the topic of digital humanities provokes widely varying views in the German-speaking world.

The historian Martin Schaller has compared the digitalization of newspapers in the European and the German context. The EU has financed a Europeana Newspapers project (Schaller 2015, p.16) with the aim of building a gateway to European newspapers online. Historical newspapers are perceived as part of a common European heritage. The project implemented a full-text search. German institutions such as the State Library in Berlin and the State Library of Hamburg have been involved in that project.

Schaller also looks at the specific situation in Germany, a country clearly characterized by a federal structure. According to Schaller, digitalization efforts in Germany are, though, often limited to a regional scale. The digital data are in most cases not amalgamated on a national level.

Manfred Thaller has since the year 2000 been a professor of "Humanities Computer Science" at the University of Cologne, Germany, and since 2010 strategic advisor to the Board of the BMBF (German Federal Ministry of Education and Research) for the eHumanities. In a book chapter on controversies in the digital humanities, he also uncovers problems with digitalization projects: "This preparation of digital material was so labor intensive, that at the end of the day many projects funded for short periods of time discovered at the end of the funding period that no more time was left for analysis. This seemed to be the most vexing and … tragic problem of the field" (Thaller 2012, p. 10). Thaller asks himself whether the digital humanities do have an intellectual agenda or whether they constitute only an infrastructure.

## Examples of Digitalization in the Humanities

In 2012, Brett D. Hirsch, a University Academic Fellow in Textual Studies and Digital Editing, stated that pedagogy still had a marginalized position within digital studies. She wrote that to exclude pedagogy from critical discussions of the digital humanities reinforces "an antagonistic distinction between teaching and research …. We owe it to ourselves (and indeed to our students) to pay more than lip service to pedagogy in our field" (Hirsch 2012, p. 5 and 6).

Hirsch then cites Roger Simon who observed that pedagogy was "a more complex and extensive term than teaching, referring to the integration in practice of particular curriculum content and design, classroom strategies and techniques, a time and space for the practice of those strategies and techniques, and evaluation purposes and methods … To propose a pedagogy is to propose a political vision" (Hirsch 2012, p. 14).

[1] See also Kurz (2015), p. XI

In what follows I would like to give several examples of digitalization in the humanities in the German-speaking world. Jack Hang-tat Leong has undertaken a similar endeavor in his book chapter centering on Digital Humanities Projects on Chinese Canadian Studies.

In a book chapter from 2015 (Walach 2015), the historian Thomas Walach dealt with the use of audio sources in oral history courses. Listening to voices is part of how we perceive a person. As an example he cites a secret recording of a conversation between Hitler and the commander of troops in Finland, Carl Gustav Emil Mannerheim. Germans are well acquainted with the blaring and hysterical sound of Hitler's voice in his public speeches that inspired Charlie Chaplin's famous imitations. Walach writes that many people find this secret recording quite irritating because Hitler the mass murderer is speaking here in the friendly, sonorous tone of a godfather:

https://archive.org/details/OnlyKnownRecordingOfHitlerSpeakingInAnUnofficialTone-PublicVersion

According to Walach, digitalization contains a promise for oral history: "…the actual voice (orality in all its meanings) and embodied voices and context in ever richer video documentation returns to the centre of immediacy and focus in oral history, as in the experimental interview or field documentation setting" (2015, p. 37).

Mareike König is a historian and head of the library at the Institute for German History in Paris. She is a well-known blogger who uses the German language in her blog. In her view, blogs in the scientific sphere offer many liberties and opportunities for individual publishing. On a blog genres can be mixed; links, images, and videos can be included in a text. For her, blogging is a scientific practice that is also a lot of fun. In König's view a blog can help one to sort out one's own thoughts and provide other people with inspiration (König 2015, p. 60). In the "blogosphere" different practices of writing can unfold and are not reduced to standardized peer-reviewed articles. Blog articles offer direct and prompt statements that can be commented upon. Blogs can reveal the authors' thoughts, their daily work routine, their hypotheses, and their doubts (König 2015, p. 63–64). König also addresses skeptical comments that criticize the lack of a peer-review process for texts published on a blog. In her view, blog texts are in fact peer-reviewed, too. The only difference is that the peer-review process begins after the publication, not before.

Roberto Simanowski, a scholar of German literature and founder of the online journal *Dichtung Digital* (*Digital Poetry*) (Simanowski 2001, p.7), cites Wirth on the reading of texts and hypertexts, i.e., links on the Internet: "The hypertexts are spread like rhizomes. This organization frees us from the logic of a linear sequence but is always suspected of arbitrariness. A text with hypertexts that are spread like rhizomes leaves the reader with the task of finding her or his way between the extremes through a detective-like search and a 'dandified' browsing of the net" (Wirth 1997, p. 335).

In the web philosopher David Weinberger's view (as cited in Haber 2001, p.49), browsing is an "associative cultural technique." He speaks of the "power of digital

disorder" and states that in the real world disorder makes our lives harder but that this doesn't apply to the digital world. The greater the chaos in the digital world, the more information we may obtain. We can assign digital objects any amount of locations, meanings, relations, and connotations.

The historian Josef Köstlbauer has done research on the topic of digital play and simulation (Köstlbauer 2015). For Köstlbauer digital play is a key to culture following digital premises. The author especially looks at simulations which have functioned as scientific instruments or the basis of planning since such simulations began. Köstlbauer disputes combat and assault simulation games but also architectural simulations such as the virtual reconstruction of the Columbian Exposition in the year 1893 in Chicago:

https://www.youtube.com/watch?v=CSDusnazo8s

Simulations cannot make the dream come true to "show how it really was," but they still offer a possibility to deal with the question of counterfactuality and with the opening of new spaces. From Köstlbauer's point of view, simulations can introduce the element of contingency into historical studies (Köstlbauer 2015, p. 119). In historical events only one alternative became true, but any historical event is still surrounded by alternative scenarios that are worth considering.[2]

## Big Data in the Humanities: Two Examples

Viktor Mayer-Schönberger and Kenneth Cukier have defined big data as follows: "At its core, big data is about predictions. Though it is described as part of the branch of computer science called artificial intelligence, and more specifically, an area called machine learning, this characterization is misleading. Big data … is about applying math to huge quantities of data in order to infer probabilities … The key is that these systems perform well because they are fed with lots of data on which to base their predictions" (Mayer-Schönberger and Cukier 2013, p.11).

Andreas Jungherr has used big data in order to analyze political communication in Germany during the election year 2009. Twitter has become a widely used element in political campaigns around the world. Jungherr's analyses are based on data collected through the Twitter application programming interface (API). Jungherr found that German politicians tended to use Twitter predominantly to post information on their campaign activities and policy statements. Only a negligible amount of messages were geared toward mobilizing followers (Jungherr 2015). Here may lie a difference in the way prominent politicians in the United States are using Twitter nowadays.[3]

[2] Although not developed in the German-speaking world, a nice example of digitalized teaching material in the field of Chinese studies – the author's own background – is the philosophical book of Zhuangzi: https://www.youtube.com/watch?v=OM6kdJ6xq2A

[3] See, for example, Graham (2017).

The historian Wolfgang Schmale, cited above, is involved in a digital research project on allegories of continents during the Baroque period. Here, for example, you can find paintings in different German cities that depict the history of civilization:

http://erdteilallegorien.univie.ac.at/narrationen/gemalte-zivilisationsgeschichte

## Dissemination of Practices of Digitalization

In 2012 the Association *Digital Humanities im deutschsprachigen Raum (Digital Humanities in the German-Speaking World)* was founded. According to the board, it has now more than 160 members. A brochure at the webpage of *Digital Humanities im deutschsprachigen Raum* (http://dig-hum.de/) provides details of all the universities in Germany where one can study digital humanities:

http://dig-hum.de/sites/dig-hum.de/files/cceh_broschuereweb.pdf

The Alexander von Humboldt Foundation also offers relevant information on studying digital humanities in Germany. According to the Foundation, there are currently 15 Bachelor's and Master's courses of study in Germany:

https://www.humboldt-foundation.de/web/kosmos-cover-story-102-4.html

Still one has to say that regarding the dissemination of practices of digitalization in the humanities at German universities, several authors paint a rather pessimistic picture, including Gregory Crane, the Alexander von Humboldt Professor of Digital Humanities at the University of Leipzig.

Crane spent 2 years in Germany and during that time wrote a paper titled *The Big Humanities, National Identity and the Digital Humanities in Germany* (Crane 2015). In his analysis he states that support from the German Federal Ministry of Education and Research (BMBF) has rapidly expanded the number of researchers engaged in the digital humanities. Bringing senior humanists into digital projects can yield interesting and important scholarship, writes Crane, but "there is no substitute for the expertise that scholars develop by working their way up and doing the hard, messy practical work of building systems … Simply spending money will not advance the Digital Humanities and could even devastate German research if it promotes models of digital scholarship that do not reflect the rapidly evolving cutting edge of research…." (Crane 2015, p. 9).

The education expert Joerg Draeger (Draeger and Müller-Eisele 2016) is of the opinion that "Humboldt would have been in favor of digitization. Wanting 'education for all' to serve as the basis for self-determined lives, the great 19th-century reformer created Germany's model of compulsory education. His long-unfulfilled ideal: anyone with ability could go far, no matter where they were from. This sort of democratization is now possible. Thanks to digital tools, people who were once left behind now have access to affordable and personalized education. Aptitude is becoming more important than background or title. Few of these trends, however,

have yet to make themselves felt in Germany. What is missing is the sense of urgency…." (Draeger and Müller-Eisele 2016, p. 2).

In 2008, the Deutsche Forschungsgemeinschaft (DFG, German Research Foundation) started collaborating with the National Endowment for the Humanities in the United States to fund bilateral projects in the digital humanities. The partnership supports German-American collaborative projects designed to establish or further develop digital information infrastructures for research in the humanities.

In 2013 the president of the German Academic Exchange Service, Margret Wintermantel (as cited in Handke 2015, p. 7), strongly demanded of the universities in Germany that they implement digitalization in their academic teaching. Otherwise they would be wiped off the scientific map of the world. But in reality many teachers at universities in Germany still seem to avoid this trend.

Jürgen Handke who is a professor and an expert in applying digital teaching methods complained in 2014 that academic teaching is generally treated as the universities' stepchild (Handke 2014, p. 10). Handke compared academic teaching in Germany with a patient. Wolfgang Strauss and his colleagues from the Fraunhofer Institute for Media Communication came to a similar conclusion regarding the use of digital media for education purposes:

> Digital media, information and network technologies have profound implications for the opportunities for communicating and building knowledge, online study and e-learning. For some, the main advantage of online learning is the ability to communicate instructions via the internet wherever you are, as can be witnessed in numerous popular e-training programs. Others regard the internet as little more than a wild, untamed data archive. Neither of these groups is making the most of the opportunities available, since the constantly growing network of networks offers far more than just that. It creates a space in which learners and teachers can work together to create and depict new forms of knowledge from a universal archive, regardless of the time or place they occupy. (Strauss et al. 2004, p. 1–2)

In a recent publication, Handke makes a plea for a realization of achievable tasks and not for an unrealistic comprehensive digitalization at German universities in the near future (Handke 2015, p. 9). He also states that universities need to provide teams for multimedia development, as well as appropriate equipment (Handke 2014, p. 93). The universities should also offer courses on developing media-relevant skills, and these courses should become part of obligatory further training for teachers (Handke 2014, p. 141). Handke also stresses that teaching methodology must drive technology and not vice versa (Handke 2015, p.10).

Birte Heidkamp and David Kergel from the University of Oldenburg provided a textbook on learning and the use of digital media at universities in 2015. They focus on science as a collaborative process of gaining knowledge. In the age of e-science, students should be enabled to develop academic competencies combined with media skills. Key points in this regard are open access, visualization, search engines, data mining, collaborative writing tools, and blogs. Kergel and Heidkamp state a current lack of methodological concepts and methodological competences on the teachers' side. In light of the ever-changing media innovations, the methodological challenge seems to be an even bigger one (Kergel and Heidkamp 2015, p. 50 and 52).

Through user-generated content (UGC), consumers of web content can now turn into producers of such content (Kergel and Heidkamp 2015, p. 53). Social software offers the opportunity to narrow the divide between producers and consumers. Communication processes in Web 2.0 are open for participation. Content can be generated and commented upon. The web is shifting from a medium in which information is transmitted into a platform on which content is created, shared, remixed, repurposed, and passed along.

For example, material that has been used in a seminar can be annotated on a sharing platform. Presentations can be uploaded to the platform in order to share them with the class and/or get feedback from other students or groups of students who can give an authentic but constructive response. Sometimes a feedback culture or etiquette needs to be established, especially for constructive feedback.

Another example is collaborative writing tools such as the online editor and word processor "Authorea" can be used (Kergel and Heidkamp 2015, p.57).

Students can focus on identifying and collecting relevant data on a topic in the process of so-called web quests. The author Frank Schirrmacher proposes that after "hunting for rich information" at the World Wide Web, students should evaluate and assess the acquired information in interchanges with the members of a learning group, so that the judgment takes places "in their own head" (Peters 2013c, p. 154).

In recent years quite a few course books on the use of digitalization in school and university courses have been published in the German-language context.

One concrete project I would like to mention is the MediaArtLab@School, funded under the German Higher Education and Research Program of the German Bund-Länder-Commission for Research Planning and Education. This project was carried out in a UNESCO project school in Flensburg, and it addressed two questions: how to integrate digital media creatively into arts education in schools and how to effect more practice-oriented initial art teacher training at university level. The pupils who participated in the project were tutored by teams of art student teachers. The teachers worked with fourth-grade pupils at elementary level to introduce and test a media-arts education strategy using the collaborative painting and storytelling tool KidPad. The main aim of the project was to support pupils' learning and develop their understanding of digital media through a hypermedia storytelling context they drew, developed, and realized themselves. In the view of the project designers, this school project proved to be a fruitful scenario for embedding the computer in aesthetic processes (Reimann 2008).

Interestingly, recent surveys of student expectations in Germany have shown that they do not want to have entire lessons digitalized. Instead they favor mixed media education. To have an entire seminar happen in a digitalized way can also turn out to be monotonous in their view (Blatter et al. 2015, p. 37). These findings resonate with the experiences described by Dora Wong from The Hong Kong Polytechnic University. The classes in her case studies used a blended model of pen and paper, social media, and an online learning platform.

In Germany many students nowadays do use Web 2.0 media but in a passive-receptive way. According to a survey conducted by Martin Blatter and his col-

leagues, some students even wrote: “I still prefer to use paper and paper editions of books in my study work” (Blatter et al. 2015, p.29).

A recent survey of the German cultural magazine *Die Zeit* (*AFP*-news report dated Oct 19, 2016) showed that German teenagers would explicitly *not* recommend later generations to introduce children as early as possible to the Internet.

In the journalist Klaus Lüber’s view (Lüber 2016), there is hardly another country where the possible risks of the use of digital technology are more in the public eye. He reports: “For example, in their book *Die Lüge der Digitalen Bildung* (*The Lie of Digital Education*) Gerald Lembke and Ingo Leipner argue that children are in the position to use computers, laptops and smartphones productively only after the age of twelve. Before this, they say, use of digital technology leads to overstimulation” (Lüber 2016, p.2).

Gerald Lembke is professor for digital media at the Baden-Württemberg University of Applied Sciences. His research area is digital media usage. On his blog Lembke states (Lembke 2017): “Youth have a hard time in this digital age … the so-called generation Y seems to have grown the smartphone on the body … This behavior is … associated with risks. Digital communication floods them with stimuli and forces them to multitask. The attention span continues to decrease … It is … not a question of condemning smartphones from the life of young people. It is about the responsible handling, specifically the breaching of behavioral routines. Smartphone use has become a routine that has mutated for more and more people into a bad routine. But it is especially difficult for young people to break through these routines. For the breakthrough of one’s own behavioral routines, abilities are necessary, which are often not particularly pronounced even in adults: self-awareness, reflexion ability or pronounced self-control abilities.”

On his blog Lembke proposes ten escapes “from the digital hamster wheel.” The text is presented here in the translation from the website:

> Reflection: Install the app “Offtime” to capture and reduce your usage.
>
> Apps: Clear 90 percent of your apps. Make notifications. Use statistics apps to monitor your usage behavior.
>
> Analogue alarm: The bedroom is digital free. Smartphones get their crib in a drawer outside the bedroom. It is only switched on after showers and breakfast.
>
> WhatsApp: Uninstall. Before you write your contacts, you are now available via telephone and via SMS.
>
> Facebook: Get rid of people who have nothing to say and fill your precious time with cat pictures and advertising.
>
> Food: For common meals, digital media are taboo. Notifications: Turn off all (!) notifications in your smartphone settings.
>
> Usage Frequency: Instead of looking at the smartphone every seven minutes, reduce it at the beginning at once the hour. Car, train, airplane and toilet are mobile phone-free and serve the recreation.
>
> Real life: … Plan for daydreams and walks in nature – this promotes your creativity and relaxes at the same time. (Lembke 2017)

## The General Discussion on Digitalization in Germany

Let us now focus on the question of how the topic of digitalization in general is discussed in Germany. The journalist and policy advisor Dieter Klumpp saw structural problems for innovation in the field of digitalization in Germany in the year 2014. In a book chapter (Klumpp 2014), he asked himself: "Is the whole of Europe facing a 'log-off' in the near future?" Germany might have lost its pioneering role in information and communication technology. Most innovations in the field of digitalization are now taking place in Asia and the United States, not in Europe. According to Klumpp the European states and industries would have to invest many more resources in these areas and to reduce their regulations in order to successfully compete with other regions of the world. The economy in Germany lacks the ability to think very, very big. This statement was made at the Technical University of Darmstadt in 2013. A recent article published by *Deutsche Welle* (Wenkel 2017) reported that the majority of German CEOs are preparing for the growing digitalization of their companies. Sixty-one percent assume that the trend toward the use of a networked system will change their internal production and service chains. A study from the Institute for Employment Research (IAB) in Nuremberg shows that around two-thirds of CEOs even see a trend toward digital networking between their firms and suppliers and customers. Nevertheless a large portion of the 12,000 companies surveyed still believe that digitalization is not important for them for the time being.

Wenkel asks himself:

> Are Germany's CEOs in a digital hibernation? Perhaps, but only to a point. Many companies have already initiated important processes for the digitalization of production and services. However, many business executives complain that politicians are too hesitant in their approach to the basic requirements needed for the digitalization of the economy, including nationwide broadband coverage … Additionally, in order to make a digital economy possible, skilled workers must be found. In Germany, the shortage of mathematicians, computer scientists, natural scientists and engineers has reached a record high. (Wenkel 2017, p. 2)

A book authored by the philosopher Florian Sprenger and the social scientist Christoph Engemann published in 2015 is entitled *Internet der Dinge* (*Internet of the Objects*). The authors state that nowadays we are confronted with technologies that extremely challenge our perceptions of work, thoughts, and living. We have to ask ourselves: What kind of relation is there between human beings and machines? Skeptical observers of the latest developments are voicing their concerns that thanks to internet connectivity, the most banal everyday objects have acquired tremendous power to regulate human behavior.

But, similar to the situation that Andrew Parkin is describing in his book chapter, there are also critical voices pointing in another direction. Evgeny Morozov has stated in *The Guardian* that "…it's a mistake to think that Silicon Valley wants to rid us of government institutions. Its dream state is not the small government of libertarians – a small state, after all, needs neither fancy gadgets nor massive servers to

process the data – but the data-obsessed and data-obese state of behavioral economists" (Morozov 2014, p. 7).

Is the World Wide Web furthering democratization? Newt Gingrich's *Magna Carta for the Cyberspace* which he published in 1994 seemed to see democracy realized through open access to the Internet and the freedom of expressing one's opinion (as cited in Rötzer 1997, p. 374.). Here the access to the Internet appeared as a realization of the American dream, and the cyberspace seemed to be the latest American frontier. Newt Gingrich and others were connecting liberal and anarchic ideas with a glorification of capitalism in their utterings.

The German scholars Sprenger and Engemann express serious doubts on the hypothesis whether the World Wide Web is furthering democratization.

Natascha Zowislow-Grünewalt and others are quite critical about the so-called harnessing of collective intelligence. Page rank methods, wiki, and tags decide on the significance of specific content. Content is categorized as useful or useless simply by majority decision (Zowislo-Grünewalt et al. 2015). But is there really something like "crowd intelligence" or "swarm intelligence"?

"Preserve yourself from the dangers of the digital world regarding democracy." Under this headline a list of ten thought-provoking rules for the digital world, authored by the public intellectual Hans-Magnus Enzensberger (2014), were published in the German newspaper *Frankfurter Allgemeine Zeitung* in February 2014. Enzensberger wrote, in the translation of Florian Cramer, "For those who aren't nerds, hackers or cryptographers … there are simple rules to resist exploitation and surveillance…" (Cramer 2014, p.1). Let us take a look at some of the rules:

> 5. The madness of networking every object of daily use … via the Internet can only be met with total boycott. Their manufacturers don't give a single thought to privacy … Only bankruptcy will teach them.
>
> 6. The same applies to politicians … They are submissive to the financial markets and don't dare to go up against the activities of secret services…
>
> 7. E-Mail is nice, fast and free. So watch out! If you have a confidential message or don't want to be surveilled, take a postcard and pencil. Handwriting is hard to read for machines. Nobody suspects important information on a … picture postcard…

As Odile Heynders has stated Enzensberger's advice was meant as a cheerful warning against the civic naïveté with regard to digitalization. Enzensberger warns that "most of the people are asleep and will open their eyes only when changes are not possible anymore" (Heynders 2015, p. 27). As Heynders reports, the 62 online responses to Enzensberger's commandments, as posted on the *Frankfurter Allgemeine Zeitung* website, were mostly negative. The single most supporting feedback was posted by Axel Fachtan, introducing himself as a liberal and warning that the Stasi and Gestapo would have enjoyed such big data systems (Heynders 2015, p. 28).

Otto Peters, professor at the Open University, Hagen, has stressed that soberness and truthfulness demand that along with the chances of digitalization, its risks are recognized as well: "The challenge for us is to develop forms of living and working in the parallel digital world that is now available, in which the positive facets of digitalization are strengthened and their negative facets are weakened. We should

ourselves be guided by the intention of adhering to perceptions of a humane life" (Peters 2013a, 7).

The journalist Susanne Gaschke has campaigned against the promise of salvation of the "digital natives" and the expectations of salvation of many protagonists of digitalization, including "journalists and scientists, education politicians and entrepreneurs." They eulogize the Internet "as the way to knowledge and prosperity." Gaschke finds that the new medium is "breathless," because what is always important to it are "rapidity" and "simultaneity." But these categories are obstacles to the calm formation of political opinion. With Neil Postman she regards it as highly problematical if rapidity is regarded as the equal to progress (Peters 2013b, p. 124). Gaschke is not an enemy of the Internet. She admits: "There is no need to stress the advantages of the internet – from emails through the opportunity for organized cooperation of scientists to the rapid findability of important texts and books." Her critique is directed at the widespread uncritical use of the Internet (Peters 2013b, p. 132).

Frank Schirrmacher's critique of the Internet was obviously triggered by a disturbing personal experience. Schirrmacher is a German literary scholar, essayist, and author. In his view the digital revolution "is a process without precedent. No one can now be in any doubt that we have entered a new era, but the misgivings about where it is leading us remain" (Peters 2013c, p. 148). Schirrmacher suggests that digitalization is not a systematically calculated process but an evolutionary one. In his view all information is in a struggle for attention: "The winner is the information that is most requested … and this is irrespectively of its quality" (Peters 2013c, p. 150). Schirrmacher also criticizes that major companies such as Google and Yahoo collect data about us and keep files on us that, as a consequence of the computer's reliable memory, will soon know more about us than we do ourselves (Peters 2013c, p. 150–151). Many see in this the danger that George Orwell described in *Animal Farm*: the development of a society that is policed and controlled "by a cold power" (Peters 2013c, p. 151).

One of the harshest critics of digitalization is the German philosopher Harald Welzer. He has in 2016 written a book entitled *Die smarte Diktatur* (*The Smart Dictatorship*).

Let us take a look at an interview that the German television channel ZDF in *Heute Journal* conducted with Welzer and broadcast on May 17, 2016. The journalist starts with the following remarks: "Since 10 years smartphones connect us to the entire human knowledge, current knowledge and knowledge, that is thousands of years old, knowledge you can put into words, pictures and sounds." But Welzer asks: "Do we consider the price we are paying for this technological progress? Smartphones can record everything we do, as they are always with us."

Harald Welzer warns against a dictatorship of the smartphone. In his view we happily give away data and disconnect with the real world. We are remote controlled. In everything that has been established over the last 200 years in Europe in terms of democracy and maturity, the republican behavior of free and responsible citizens will be reduced to irresponsibility.

We constantly put data and data-collecting techniques between us and the world. These are good times to monitor, Welzer claims, as the monitored deliver the data themselves nonstop. People who are careful are being rated uncool or too stupid to deal with technology. Welzer stresses that nowadays one can walk around consuming products, services, and information. He sees two elements combined here: the possibility for total surveillance and the possibility for endless consumerism. That is what makes this development so successful but at the same time dangerous, too.

In the just mentioned interview the German television channel conducted with Welzer, the journalist remarked: "Since 10 years smartphones connect us to the entire human knowledge." The historian Peter Haber questions this assumption. In a publication from 2011, he speaks of the so-called Google syndrome. In his view the World Wide Web has reactivated the phantasm of universally available knowledge. But Haber sees a huge gap between rhetoric and reality. As a historian he is well aware of the fact that a large amount of data is not digitalized yet and maybe never will. But the rhetoric of the Internet is an inclusive one. The all-embracing claim of the World Wide Web generates an irritating empty space. It becomes increasingly necessary to know how one can get hold of the "right" information. What is needed is a good sense of orientation, a so-called second-order knowledge or informed knowledge.

The historian Peter Haber also reminds us of the importance to forget. In his view the technical possibilities of the computer age tempt us to forget how important it is to forget. The rules of so-called social forgetting in a society have to be negotiated anew under the premises of digital storage capabilities. Since antiquity there has been a widespread awareness that in order to remember, it is necessary first of all to be able to forget: the countless singular and irrelevant elements of objects and events but also the excess of accumulated memories. Haber cites the Jewish authors of the Talmud who have emphasized the importance to forget for a society in order to survive (Haber 2011, p.64).

The dramatist Botho Strauß advises his readers, too: "Do not collect things incessantly, but leave them to one side, forget them, lose them" (Peters 2013d, p. 168).

Here I am in the end reminded of Chapter 48 of the Chinese classic *Daodejing* (*Classic of the Way and Its Power*) where we read the following lines:

| | |
|---|---|
| 为学日益 | wei xue ri yi |
| 为道日损 | wei dao ri sun |
| 损之又损 | sun zhi you sun |
| 以至于无为 | yi zhi yu wu wei |
| 无为而无不为 | wu wei er wu bu wei |

In the translation of Wing-tsit Chan:

> The pursuit of learning is to increase day after day.
> The pursuit of Dao is to decrease day after day.
> It is to decrease and further decrease,
> until one reaches a point of taking no action.
> No action is undertaken,
> and yet nothing is left undone. (*The Way of Lao Tzu* 1963, p.184)

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# Chapter 2
# Digital Humanities Projects on Chinese Canadian Studies


**Jack Hang-tat Leong**

**Abstract** This chapter discusses how librarians collaborate with humanities scholars in projects involving the creation and curation of cultural and heritage materials in digital format on Chinese Canadian studies. Libraries, as the "laboratory for the humanities," have played a significant role in curating printed materials. In the digital era, libraries continue to take up the challenges of facilitating and preserving collections for digital humanities. Information professionals, with training in data curation and analysis methods, can support humanists in the exploration of digitized artefacts, presentation of research findings by digital means and curating the data created for seamless, persistent and long-term access. This paper first reviews the concept of digital humanities, such as its origin, evolution, characteristics, challenges and opportunities. Second, using the digital humanities projects on Chinese Canadian studies that the author coordinates, leads and participates in, the paper provides useful experiences and lessons in developing digital initiative for research in the humanities.

**Keywords** Digital humanities · Hong Kong migration · Chinese Canadian history · Education resources · Digital libraries · Digital preservation · Chinese Canadian archives · Internet resources · University of Toronto libraries · Text analysis · Metadata · Chinese diaspora · Hong Kong social movement

## Digital Humanities Definitions and Evolving Concepts

A discussion of the term "humanities" seems to be essential before reviewing the concept of digital humanities. The humanities, derived from humanism, emerged during and after the Middle Ages in Europe and referred to a developing set of liberal arts subjects, contrasting with studies in divinity and the education of professional classes, such as doctors, lawyers and theologians. The goal of these subjects, such as philosophy, literature, religion, art, music, history and language, is to record

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and examine the experiences of human lives, thoughts and actions. Libraries are always essential to humanists – where they find the texts to study and in turn create the concept of a modern library – collections of books or any other media that hold the texts in readable form which are open to any qualified user who could read them (Gardiner and Musto 2015). The book has been the most important medium to record and disseminate humanities research and knowledge ever since the invention of printing. It enables the sharing of and provides open access to knowledge among the learned societies. Humanists and librarians began their long journey of collaboration in creating and curating knowledge since the invention of books and the establishment of libraries.

Compared to humanities, the "digital" side of the concept emerged very recently. Alan Turing, in his article "On Computable Numbers, with an Application to the Entscheidungs Problem," (Turing 1937) provided the first workable model and theoretical framework of digital computing technology. In 1945, 8 years after the publication of Turing's article, another inventor, Vannevar Bush, in his essay "As We May Think" imagined a device similar to what is now known as the Internet, called Memex. Interestingly, he predicted that this machine would change the way scholars do their research and may create "a new profession of trail blazers," probably digital humanists, "who find delight in the task of establishing useful trails through the enormous mass of the common record" (Bush 1945). In 1949, merely 4 years after Bush's prediction of the pseudo-Internet device, the first experimentation of intertwining the worlds of the humanities and of computing began when Roberto Busa, an Italian Jesuit and theologian, convinced Thomas Watson, founder of IBM, to help him in indexing the works of Thomas Aquinas, eventually creating the Index Thomisticus, an electronically compiled Thomas Aquinas concordance (Waters 2013). In a little less than 70 years, the intersection of digital computing technologies and humanities research has expanded and become more complex. Humanists started to notice and to embrace the compelling tools offered by computers, such as mass storage, instant retrieval, search and sort and many other processing, organizing and networking functions that were developed over time. This collaboration and interaction has undergone rapid development in the name of "humanities computing" until the term "digital humanities" first emerged in Library and Information Science Literature in June 1998 (Zhang et al. 2015). In a two-page report entitled "The National Initiative for a Networked Cultural Heritage," Green (1998) illustrates the database of *digital humanities* projects.

The term "digital humanities" has dominated the field since its use in the title of an edited volume called *A Companion to Digital Humanities* (Schreibman et al. 2004). John Unsworth, founding director of the Institute for Advanced Technology in the Humanities at the University of Virginia, and one of the editors of this work, suggests that the term was first coined in 2001 when Susan Schreibman, Ray Siemens and John Unsworth discussed the title of their book project with Blackwell Publishing. The edited volume was originally entitled "A Companion to Humanities Computing" but was revised to be "A Companion to Digitized Humanities" for appealing to a wider readership. Unsworth proposed "digital humanities" to distinguish the field from mere digitization, which has been subject to its own critiques as

noted by Gänßbauer in Chap. 1 of this volume, and the term was accepted in the field (Kirschenbaum 2010). The term referring to this emerging field has become congruent, while the definitions and concepts continue to flourish. A brief survey of the literature reveals dozens, if not hundreds, of definitions of digital humanities (Gardiner and Musto 2015; Zhang et al. 2015), spinning primarily from the perspectives of the humanities and the digital technologies. Kathleen Fitzpatrick, in her blog reporting a digital humanities conference in 2010, proposes a definition of the digital humanities that combines the two sides: "digital humanities [is defined] as a specialist interdisciplinary area that can be characterized by (a) asking traditional and sometimes new humanistic questions using digital resources and methods; or (b) subjecting computing technologies to interpretation and critique by humanistic methods and strategies of questioning" (cited in Waters 2013, p.4). This definition is worth quoting in full as the twofold definition corresponds interestingly with the parallel conferences on the themes of digital humanities and digital culture, respectively.

Digital humanities (DH) is often understood as an interdisciplinary movement, which appears to be highly collaborative and attracts project members with different expertise (Adams and Gunn 2013). It may involve coding or tool development for textual analysis, data visualization, spatial representation and data mining. Interestingly, many discussions of digital humanities as a concept argue that "DH" may become the norm of humanities research in the future, despite such concerns as the uncertainty of its weighting in the hiring, promotion and tenure review processes, the unbalanced geographical and disciplinary distributions and technological barriers created for new scholars, and long-term data preservation. DH often creates open-access resources that reach a broader audience with built-in discovery tools (Zhang et al. 2015).

## Collaboration Between Digital Libraries and Digital Humanities

One recurring characteristics in most of the definitions reviewed appears to be the collaborative and interdisciplinary nature of DH projects. This may be both a strength and a weakness of digital humanities. Although its collaborative nature provides many opportunities, this may also leave such projects vulnerable to the types of structural impediments Gänßbauer discusses in Chap. 1 of this volume. Nevertheless, academic research questions posed by DH scholars are becoming more sophisticated and complex, so that they often require team and digital approaches (Newell and Swan 2000; Hara et al. 2003; Siemens et al. 2011). Besides, the funding agencies are adapting their policies to motivate the trend of more team-based projects (Office of Digital Humanities 2010; SSHRC 2004; Waters 2013). Digital humanities research creates opportunities for collaboration among computer scientists, engineers, librarians, archivists, museum curators and humanities

scholars (Moulin et al. 2011; Fay and Nyhan 2015). For projects that require crowd sourcing and public participation, the collaboration may include non-specialists in digital humanities (Causer and Wallace 2012; Fay and Nyhan 2015). This phenomenon has attracted much scholarly attention. A special edition of the *Journal of Library Administration* (2013) explores many aspects of this collaborative trend between DH and library communities. This issue includes discussions of a conceptual model of the partnerships between libraries and DH, administrative and institutional obstacles for developing DH in library settings, creating positive collaborations between DH and libraries and library-based DH research laboratories, thus enabling information professionals to carry out DH projects (Fay and Nyhan 2015). In the review of the concept of DH and the survey of DH projects, DH scholars often seek support from libraries and also partner with information professionals. Libraries and information professionals, as the ACRL Research Planning and Review Committee's report (2014) observes, "…are logical partners for digital humanities collaborations because they have already developed the skill sets necessary to sustain and preserve a digital archive. Through experiences gained creating digital repositories, working with faculty to manage federally funded research, and creating metadata and organizational schema for unique collections and resources, academic libraries can play a key role by partnering and collaborating with humanities scholars in digital humanities projects" (ACRL Research Planning and Review Committee 2014, p. 301). In these collaborative projects, liaison librarians often facilitate the beginning of the partnership (Siemens et al. 2011).

There are many examples of successful partnerships between DH scholars and library professionals, illustrated by the cases quoted in the ACRL report, including the Maryland Institute for Technology in the Humanities at the University of Maryland, College Park, the Scholars' Lab at the University of Virginia and the Digital Scholarship Commons at Emory University, among many others (ACRL Research Planning and Review Committee 2014). Case studies appear to be numerous in literature. Most recently, Fay and Nyhan (2015), in their article "The Webbs on the Web", present a partnership of funders, librarians and subject experts for developing a digital humanities resource. The library community contributed the infrastructure and skills needed to support sustainable access and preservation, subject experts provided use cases for digitized resources and research methodologies or technologies, and funders enabled the capacity for content addition and implementation of functionality, preservation and access interface (Fay and Nyhan 2015). In the following discussion, I will illustrate this collaborative model by examining the DH works done by the University of Toronto, Stanford University and the University of British Columbia in which I am a project leader or member of these digital humanities projects on Chinese Canadian history.

## DH Initiatives at the University of Toronto

The University of Toronto is perhaps one of the first scholarly institutes in Canada to embark on digital humanities projects. Ian Lancashire, professor of English and the founding director (1985–1996) of the Centre for Computing in the Humanities located in the library, is perceived as the "father of Canadian humanities computing" (Siemens and Shawver 2009). In addition to establishing digital repositories for humanities research, Lancashire engages textual and computational analysis in his research projects. His most recent research in this field examines the use of vocabulary from 14 works of Agatha Christie and argues that she suffered from dementia in the later years of her life, as detected by his textual analysis using computer algorithm (Lancashire 2013).

After receiving his PhD in English, focusing on early modern theatre, in 1969, Lancashire took up work as editor and bibliographer of the Records of Early English Drama (REED) project, which involved visiting many archives and libraries for examining the records of performances kept in local institutes. This project resulted in a publication in 1984 entitled *Dramatic Texts and Records of Britain: A Chronological Typography to 1558*. During the process, Lancashire tried to use computing technology to carry out his work, but he was ahead of his time. No one did that in the humanities at the time. He could not get any funding, but he ventured into it on his own and produced the manuscript in computer file at that time. However, the publisher, University of Toronto Press, did not know how to handle the file. He had to print out the manuscript for the press to typeset it again on their printing machine. After the establishment of the Centre for Computing in the Humanities, he transformed this project and made it available online (http://reed.utoronto.ca/), which is among one of the most outstanding computing humanities projects. From around the mid-1980s onwards, the University of Toronto has been supportive of digital humanities initiatives. This is particularly important given that support for the digital humanities is not guaranteed as seen in Gänßbauer. Lancashire was asked to establish and head the Centre for Computing in the Humanities, and he became the founding director for more than 10 years from 1986. During this time, numerous digital humanities projects were developed, including a collaboration between the Centre and IBM that developed the Text Analysis Computing Tools (TACT); Representative Poetry Online (https://rpo.library.utoronto.ca/), which appears to be one of the legacy projects that have undergone several digital platform transformations; and the Lexicons of Early Modern English (http://leme.library.utoronto.ca/). The two online portals continue to be hosted by the library and have been migrated from textual basis using HTML in 1994 to database platform using SQL in 2002 and recently to a more dynamic, interactive and multimedia format using content management system Drupal in 2012. These paradigm shifts for each project, done collaboratively by scholars and system librarians, were very costly in terms of human and financial resources. A tailor-made system development for each individual project is not sustainable, given today's demand and the number of projects that require information technology support and infrastructure. The University

of Toronto Libraries, therefore, are developing a central repository for digital projects called Collections UofT (http://collections.library.utoronto.ca/; in Beta phase).

In partnership with humanities scholars, funders and other stakeholders, the library preserves and provides access to digital projects using the Islandora software to build this repository. Collections UofT has begun to take in a portion of the digital humanities collections that are part of the University of Toronto's vast academic resources, digital projects and research output. Our digital scholarship team is developing this open-access digital repository using practices and standards that enable searching across collections. Most importantly, the repository is being created to facilitate project collaborators and scholars to take an active role in creating, submitting and maintaining digital collections using a user-friendly and customizable interface provided by Islandora and our system development team. This "do-it-yourself" model addresses the increasing needs for the library to support digital humanities projects without too much demand from our system librarians as in the case of our legacy projects. Collections UofT adopts practices provided by the digital archiving community for its preservation of digital projects. It supports interoperability and across platform discovery by embracing Open Archives Initiative Protocol Metadata Harvesting (OAI-PMH). Usage statistics and analysis can easily be gathered and performed in the system. The author is working with the system development team to migrate the various Chinese Canadian history projects to this central depository for seamless and universal access, interoperability and efficient maintenance.

## Chinese Canadian History Projects

Chinese started to settle in Canada more than 200 years ago. Yet the period before the 1960s was predominantly one of discrimination and exclusion, with their voting rights denied by British Columbia in 1872 and their entry to federal Canada hindered by the introduction of a head tax for Chinese immigrants in 1885. If the head tax measure did not prohibit Chinese from entering Canada for decades, the Chinese Immigration Act, also known as the Exclusion Act, in force from 1923 to 1947, completed the mission, at least legally. The tide started to turn in 1947 when the Exclusion Act was repealed and Chinese were granted the right to vote by the federal government. Subsequently, in the 1950s and 1960s, Canada witnessed a new wave of Chinese immigration, primarily through family reunion, as the Chinese Canadian community consisted of mainly males, with their wives and children living in China at that time. In 1967, Canada started to adopt a universal point system to select immigrants according to their educational background, occupational skills and other criteria linked to economic and labour requirements. Many Chinese immigrants selected by this new policy were professionals such as engineers, teachers, executives, doctors, entrepreneurs and technicians. With the new immigration and multicultural policy, the Pierre Trudeau government invited more Chinese people to immigrate to Canada, particularly from Hong Kong. In 1986, the Canadian

government introduced the Immigrant Investor Program to encourage entrepreneurs to invest in Canada. With these changes in Canada's immigration policy, and the uncertainty about the handover of Hong Kong in 1997, there were large numbers of Chinese from Hong Kong immigrating to Canada. Between 1990 and 1997, about 450,000 Chinese immigrants entered Canada, and 275,127 were from Hong Kong (Statistics Canada 2001). According to the 1996 census, there were 921,585 people of Chinese origin living in Canada. The Chinese population in Canada just surpassed 1 million in the 2001 census and reached 1.35 million according to the 2011 census (Statistics Canada 2013a, b).

In view of the significance of Chinese Canadian history and the collection focus of the Richard Charles Lee Canada-Hong Kong Library at the University of Toronto that the author established, Leong has initiated, led and participated in a number of projects related to the study of Chinese Canadian history, particularly related to Hong Kong's role as an emigration and immigration port over the last 150 years. The Chinese Railroad Workers in North America Project that discusses the Chinese emigrants who went through Hong Kong in the 1850s–1860s, the Chinese diaspora in Toronto (2010 to present), the Hong Kong Basic Law Portal (2013), the Hong Kong-Canada Crosscurrents Project (2014–2019) and the Hong Kong Umbrella Movement Archive (2014) shed light on the ongoing connectivity between Canada and Hong Kong from the 1960s. Given the recent trends in migration to Germany, it will be interesting to see whether similar projects emerge there despite the difficulties Gänßbauer describes. The following section examines these collaborative projects between the author and humanities scholars in Canada, the United States, Mainland China, Taiwan and Hong Kong. This examination presents a viable model for the convergence of librarianship and humanities scholarship in the digital humanities.

## The Chinese Railroad Workers in North America Project

The nations of Canada and the United States were largely built on their transnational railroads in the mid-nineteenth century when thousands of Chinese workers migrated through Hong Kong to help construct North America's transcontinental railroads. The Chinese Railroad Workers in North America Project, hosted at Stanford University, "seeks to give a voice to the Chinese migrants whose labor on the Transcontinental Railroad helped to shape the physical and social landscape of the American West" (Chinese Railroad Workers in North America Project at Stanford University 2017). The project repository includes a timeline list of major historical events with embedded links to these events, digital archive, books, digital visualizations, conferences and public events that are accessible online. It involves participants from different disciplines and professions, including history, archaeology, architecture, literature, cultural studies, information science and community partners. Using WordPress, the project already includes a timeline and many archival resources, such as photographs, interview recordings and event records. This

project, therefore, may have similarities to the *Philippine Performance Archive on Cultural Performances* discussed by Tiatco, Viray and Javier in the next chapter of this volume in terms of its ability to serve as a site of cultural memory and pedagogical tool.

The author was invited to participate in the project to provide the Hong Kong Connection in this collaborative project. In the 1850s, the gold rush created a pacific pathway between North America and Hong Kong, which was already developing as a major gateway to Mainland China and other parts of Asia. Tens of thousands of Chinese merchants and gold seekers had been travelling across this marine highway. Previous research and studies on Hong Kong as a leading pacific gateway have been focusing on the gold rush period and other immigration phenomena. There is not much research pinpointing Hong Kong's role in serving as an *entrepôt* for the Chinese railroad workers who made an undeniable contribution in building the transnational railroads in the United States and Canada. More importantly, these workers acted as intermediaries for the material and cultural interactions between Asia and North America when they crossed the Pacific in both directions. Most, if not all, of the Chinese railroad workers started their journey to North America from Hong Kong's emigrant port. During the years of building the railroads, Hong Kong was the connecting point for most of the workers' communications, remittances, goods and sometimes the repatriation of bones between North American and their home towns in Southern China (Yip 2009). A study of Hong Kong's role in bringing these workers, their letters, goods, money and cultural translation across the Pacific would make a significant contribution to the studies of Chinese railroad workers in North America. Reviewing the archives, historical records and writings by people who recollected this period of Hong Kong's history, this paper illustrates the port that these young men from Guangdong would have encountered when they were there and en route to North America.

In the 1850s and 1860s, Hong Kong appeared to be a regulated, legitimate, safe and booming emigration port. When the news of finding gold in California spread to Guangdong through Hong Kong in these decades, thousands of people moved to Hong Kong to work in the trade for the California Market, and the hundreds of passengers waiting to depart for the "Gold Mountain" made the newly established port a vibrant and booming place (Sinn 2013). Hong Kong became *the* emigration port for its regulations on passenger ships, a safe and vibrant port, and the legitimacy of emigration that Hong Kong provided. Choosing a port for a 2–3-month sea journey which the worker's life depended on, he would choose facilities with a good reputation in terms of health and safety, considering the desperate and risky conditions at the time. Nevertheless, Hong Kong's significance reaches beyond merely providing a relatively safe, legitimate and accessible emigration infrastructure and port facilities for these Chinese railroad workers making their journey to the United States. The cultural, social and business networks in Hong Kong figure prominently for their voyage, during their transit, in the years while they worked and lived in North America and after their return to China, whether alive or dead.

Discussing various aspects of Hong Kong facilitates the studies and understanding of the lives of the Chinese workers. Hong Kong was a nearby port where the

workers stayed for at least a few weeks awaiting the departure of their ship. Its rich networks in trading provided them food and medicines during their journey and the years ahead when they were building the railroads. Through Hong Kong, the workers communicated with and supported their family and their loved ones back home. While the Chinese workers built the transcontinent railroad for the making of the United States, Hong Kong served as the central connecting port, providing support for their struggles and survival. The networks and supplies from Hong Kong assisted the workers in their actual journeys, communications with their family, goods and remittance and information exchange. If they stayed behind in the United States, Hong Kong continued to be their connection to home, with its well-established shipping and emigration facilities, Western legal and political framework with local Chinese interaction and its strategic geographic location.

## The Chinese Diaspora in Toronto Project

Since 2010, this project has provided opportunities for student scholars, in collaboration with library staff, to research the lives and legacies of generations of Chinese, particularly Hong Kong, migrants to Canada. It documented and situated these experiences within broader, transnational socio-economic and political processes. A special global internship program has been created with the Faculty of Social Sciences of the University of Hong Kong. Students in this program conduct oral history interviews and use other qualitative research methods to learn about the lives and pathways of successive generations of Chinese in Toronto. For example, students visited Chinese Canadian residents at Mon Sheong Home and Yee Hong Home for the aged and members of clan associations to capture their life stories. In the last 5 years, the project gathered interesting data on adaptation, language, identity, media consumption and political participation. The long-term goal of this project is to create a longitudinal dataset on changing Chinese pathways that will be accessible by future generations of scholars and by the public through an online digital archive and a backup of the physical archive housed at the Richard Charles Lee Canada-Hong Kong Library.

In 2010, the survey for this project was entitled “Voyage: Struggle and Hope.” The research team conducted interviews with nine Chinese Canadians in Toronto. The preliminary analysis of these interviews showed the interviewees, like many other Chinese immigrants, had faced the challenges of settlement, including employment, language and cultural differences and racial inequality. Yet, they were determined to accept the challenges and make Canada their home. All interviewees devoted themselves to family, volunteering service and additional training before landing their first full-time job in Canada. Eventually, they all obtained positions in mainstream companies or organizations. In fact, all interviewees were highly educated professionals, and they were flexible in the family role and career downward or upward movements. Most interviewees expressed explicitly concerns of discrimination and racial profiling when they were asked about the relation between Chinese

and the broader society. All of them transformed these concerns into the motivation to become more active in the ethnic community and the mainstream society to advocate for equality and appreciation of Chinese culture and values.

The theme of the survey in 2011 was on the use of language among youths. Fifty-nine Chinese Canadians of 14–30 years old completed a questionnaire, and 13 participated in a group interview. The survey showed that among the youths participating in this project, Cantonese was used mainly among family members at home, whereas English was the primary language of choice almost everywhere else. This study confirmed that the participants' use of and fluency in Chinese language are closely associated with their Chinese media consumption, such as reading Chinese magazines, watching Chinese TV and listening to Chinese music; their connection to Hong Kong, Mainland China or Taiwan, through visits and having close relationships with relatives and friends in their homeland; and finally their attendance at Chinese schools.

The project focused on the Hong Kong immigrant's identity in 2012. The research team conducted a survey of 50 Chinese Canadians whose age was 18 or above. Twelve of them chose "Hong Kong Identity," 5 chose "Canadian Identity", 26 opted for "Both Hong Kong and Canadian Identity", and only 7 left the question unanswered. This shows a strong Hong Kong attachment among this group of interviewees. In determining their identity affiliations or choices, the participants considered the factors of family history, education background, friends and social networks, cultural influences and value system. Interestingly, more than 80% of the interviewees preferred Chinese food over Western food.

In 2013, the project investigated the political participation of Chinese Canadians in Toronto. The research team conducted four in-depth and qualitative interviews. According to these interviews, there was a perception that most of the Hong Kong immigrants during the 1980s and 1990s were well-educated professionals, and they brought a new level of activism to the Chinese communities in Canada. There were many who broke the glass ceiling and became successful in many areas, including politics, which made them role models to encourage more young Chinese Canadians to consider a political career. The immigrants from Mainland China in some municipal regions actually were more likely to vote than other Chinese Canadian subgroups. A city councillor, therefore, had been learning to speak Mandarin Chinese as the Mainland Chinese immigrants were increasingly important for the election. The impression that a Chinese voter is more likely to support a Chinese candidate may not, however, be true. Sometimes the Chinese were more critical towards a Chinese candidate. Understanding of the needs of the community was more important than one's ethnic background. Once elected, the candidate would not only work for or represent the Chinese but also the interests and needs of the whole society.

The theme of the survey was on media consumption in 2014. The research team obtained 49 responses to their survey. Based on these responses, the most popular news channels were social media, newspaper and television. Most respondents (76%) received news from Chinese Canadian media, such as the Chinese news program at OMNI TV and Fairchild TV, Chinese Canadian radio programs and the Eastern Canada version of *Ming Pao* and *Sing Tao Daily* newspapers. Some 27% claimed

that they consumed news directly from Hong Kong-based media. The respondents were almost equally interested in news about Canada and Hong Kong or China. The interviews with executives and editors from Toronto's main Chinese media provided interesting comments on adaptation of news from Hong Kong and Mainland China. All interviewees claimed that news items were adapted to their Canadian counterpart with minimal editing. While there had been a shift of interest among their readers from Hong Kong to Mainland China because of the change in the demographics of new immigrants over the past two decades, news coverage and sources remained Hong Kong-based due to historical reasons and the press freedom there.

In 2015, the research team focused on the perception of education systems in Canada and Hong Kong in the survey on Chinese in Toronto. We interviewed five parents and one student and obtained relevant data from two specialists on multicultural study and migration policy studies and two community charitable organizations. The survey showed that education was an important consideration in the migration decision among the families interviewed. While students supported the decision in view of the opportunities for better education, and hence a better career and future, parents immigrating with school-aged children were motivated by the perception of a less stressful learning environment for their children, compared to the competitive school system in Hong Kong. The participants of this survey recognized the positive values of the education system in Canada, which allowed students to foster success through personal interest and motivation. Students seemed to enjoy a more comprehensive, or whole-person, development in Canada.

## The Hong Kong Basic Law Portal

An online gateway (http://guides.library.utoronto.ca/hkbl) to Basic Law research materials from major institutions around the world was created by a research team led by the author in 2013. This useful research portal provided literature review and analysis, and a most comprehensive bibliography of online and library resources on Hong Kong Basic Law. The team included the author; Professor Ming K. Chan, Hong Kong expert at the Center for East Asian Studies of Stanford University; Prof. Simon Young, former Director of the Centre for Comparative and Public Law at the University of Hong Kong; and library staff. The Hong Kong government's Basic Law Committee adopted it as a showcase for its international outreach and promotion initiatives. This project marked the beginning of my role as "hybrid" professional in digital humanities. In addition to developing the content with the help from the two prominent scholars, the author learned how to use the tool LibGuide to develop this interactive platform for the research on Basic Law.

## The Hong Kong-Canada Crosscurrents Project

This collaboration project has been in process since 2014 and will be concluded in 2019. It aims to provide coordination and depository infrastructure for the research, collection development and public education and for the effects of migrations and cultural connections between Hong Kong and Canada from the 1960s to the 2010s. This project serves as a platform for the library's collection development, faculty liaison and community outreach and advancement.

It was launched in February 2014, and a project website (https://hongkong.library.utoronto.ca/crosscurrents2) was created in May 2014 for providing online access to the updates and databases created by the project. The project members included researchers, librarians and community leaders. Besides the library, other institutional partners consist of St. John's College at the University of British Columbia, the Hong Kong Economic and Trade Office in Canada, the University of Hong Kong Libraries, the David Lam Centre at Simon Fraser University, the York Centre for Asian Research and Macau University Library.

The Hong Kong-Canada Crosscurrents Project has created a digital depository for research and public education. It establishes a forum across multiple media and both inside and outside universities for the public to understand the effects of migrations and cultural connections between Hong Kong and Canada from 1962 to 2012. The data created and gathered enable research involving data mining, a geographic information system and semantic and lexical analysis, following the example of the Chinese Canadian Stories hosted by one of the lead organizations – St. John's College at the University of British Columbia. The Chinese Canadian Stories digital project (http://ccs.library.ubc.ca/) involved librarians from the partnering institutes at almost all levels and departments. With the support of the Spatial History Lab at Stanford University, researchers explore data visualization as a way of identifying patterns and putting the data to new uses. Public education events organized since its launch in 2014 include "The Hong Kong Spirit" by Frank Ling and Bernard Luk, "Yinglish/Englishized Cantonese and Cultural Identities in Hong Kong" by Kwok-kan Tam, "Migrants and Group Boundaries in Hong Kong: Assimilation and Sharing Negative Sentiments toward Recent Migrants" by Eric Fong, "History of Hongmen and Chinese Freemasons in Canada" by David Chuenyan Lai and "Measuring Social Inclusion Among Chinese Immigrants in Hong Kong and the United Kingdom Using SCOPE" by Kara Chan. The project has harnessed contributions from researchers, librarians and archivists, creating powerful new research tools and collections in the online environment. There were online and interactive learning resources for school teachers and students.

## Hong Kong Umbrella Movement Digital Archive

The Umbrella Movement in Hong Kong that took place from September 28 to December 15, 2014 was one of the most significant social movements in the history of the territory. Tens of thousands of citizens protested and occupied strategic locations in the city, for months, in support of "universal suffrage" for the 2015 Chief Executive election without any screening process. Throughout the series of events, social media platforms such as Facebook, Instagram and Twitter, websites and Google Maps overlays were utilized in real time for the very organization of the movement itself. Constant streams of texts, images, video clips and other information provided instantaneous temporal and geospatial references to various groups including protestors, the police and members of the counterprotest movements. The changing dynamics of the movement were reflected in social media activity. A team of librarians at the University of Toronto Libraries have been capturing the contents of these platforms since the early phases of the movement using Archive-It. While conscious of the copyright, privacy and complicated ethical issues surrounding the data, we have begun to prepare and analyse it in hopes of enabling innovative and important research, with the ultimate goal of presenting the archive and the analysis in an accessible medium. Analysing the emergent development of slang, as a means of both participant communication and satire, would be one example of its application. The variety of data, including images, texts, timestamps, locations and embedded media contents, opens up new research using digital tools. For our ongoing development for access, we would investigate the possibilities of conducting image and text analysis using data captured from various seed URLs.

## Conclusion

A review of the digital humanities projects on Chinese Canadian studies demonstrates that digital technologies, in computation and communications, have enabled and facilitated large-scale collaboration among information professionals, humanities scholars, community stakeholders and funding agencies across continents. The emerging field of Chinese Canadian studies greatly benefited from this multi-institutional and international partnership as the research in this field often involves participants globally, such as from Canada, the United States, Mainland China, Taiwan, Hong Kong, Macau and Singapore. My examples reinforce Zhang, Liu and Mathews' argument in their article "Convergence of digital humanities and digital libraries" that the development of digital humanities is geographically unbalanced, primarily dominated by North America and Europe (2015). With the active engagement from Asians in the digital humanities projects this paper discussed, and the establishment of digital research institutes, such as the one at the Open University of Hong Kong, perhaps the future development of digital humanities will be more balanced in the global picture by having a third dominant area in Asia.

The author's contributions, in his capacity as librarian and researcher, in these digital Chinese Canadian projects vividly illustrate the new desirable role for librarians – mediator and interpreter, partner in curation, tools developer, curator, innovator, hybrid scholar and advocate or, in sum, a hybrid professional (Zhang et al. 2015). When the author and his colleagues interested in this field make themselves more prominent, approachable and beneficial to digital humanities scholars, they are becoming part of the DH community.

Despite the positive outcomes of Chinese Canadian history projects using the DH approach and a growing number of collaborative projects, the author discovers from the literature review and his own experiences that building the collaboration framework, sustaining and preserving the online resources and assessing the academic value of these projects remain uncertain and challenging (Zhang et al. 2015). Moreover, collaboration and trans-institutional work practices in different continents require clear communication, coordination, documentation and leadership, which entail more training for all project participants (Fay and Nyhan 2015). Synergies of skills from team members with different backgrounds and expertise can be maximized when there is a process to review and document each member's similarities and differences, expectations of project outcomes and benefits and lessons learned in each step (Siemens et al. 2011; Fay and Nyhan 2015). This process not only improves DH partnerships in a systematic manner, but it may also provide inspiration for future projects.

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# Chapter 3
# The Philippine Performance Archive on Cultural Performances: Archive as Performative Cultural Memory and Pedagogy


**Sir Anril Pineda Tiatco, Bryan Levina Viray, and Jem Roque Javier**

**Abstract** The essay is a general overview of the *Philippine Performance Archive on Cultural Performances.* The first part is an introduction and a presentation of the archival project with emphasis on the concept of cultural performance, concretized within performance studies paradigm using Philippine society and culture as context. The second part is a discussion of how data in the archive were documented and collected using focused ethnography as primary methodology. The method is argued to be the distinguishing mark of the project from other digital archives. Also, this section provides a detailed exposition about the significance of understanding local performance vocabularies and how these terms are translated into the archive through semantic framing. In the end, it is asserted that the *Philippine Performance Archive on Cultural Performances* functions not only as a repository of resource materials on the study of Philippine cultural performances but also as a performative cultural memory and a pedagogical tool.

**Keywords** Philippine cultural performances · Digital archive · Focused ethnography · Semantic framing · Philippine Performance Archive · Performative cultural memory

## Introduction

The first two chapters present case studies – German-speaking communities and Chinese-Canadian libraries, respectively – underscoring the current situation, practices, and challenges in designing, creating, and analyzing data in the digital age. This chapter will highlight the current endeavor in transforming data from focused ethnographies of various cultural performances in the Philippines, with the aim to develop a comprehensive archive of these nonmaterial cultural artifacts for use in

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heritage preservation, pedagogy, and research in the humanities, social sciences, and related disciplines.

On 1 April 2016, a huge fire engulfed the Bulwagang Rizal (Rizal Hall) or popularly known as the Faculty Center of the University of the Philippines Diliman (UPD). The Faculty Center used to house the teaching and research staff of the College of Arts and Letters and three departments of the College of Social Sciences and Philosophy. For many in UPD, this rectangular structure is considered "with pride and humor as the densest concentration of brainpower in the country" (David 2016, p. 17). This is because the center was a "venue for forums, debates, lectures, seminars, and symposia" (David 2016, p. 17) and which main hall, the Claro M. Recto Hall, is considered as a "microcosm of consensus and dissensus on both the university and national levels" (Nemenzo and UP Diliman Information Office 2014, p. 13).

However, the center was not only famous for its public forums but also for its academic and scholarly resources. This is because each room of the faculty center was an archive. Each room served as sanctuary for everything that UP academics cherished and valued including books, artworks, and research folios to name a few. Sociologist and Professor Emeritus Randy David (2016) nostalgically writes:

> …this is where they kept their most precious tools and memorabilia – their books, journals and notes, their personal papers and official documents, their laptops, their priceless collections of artworks, souvenirs, CDs and photographs, their favorite working chairs and desks, etc. (p. 17)

The fire that gutted the Faculty Center also destroyed video recordings and audio recordings of cultural bearers, works of national artists such as paintings and sculptures, scripts of traditional theater forms, video recordings of rituals and performances, and manuscripts from the sixteenth to the early twentieth century. This is because the center was the home of important libraries containing collections of Philippine historical records. For many scholars in the Philippines, the Faculty Center was the largest physical archive in the country, even larger than the National Archives of the Philippines in terms of archival collections. The burning of the Faculty Center is one primary reason why a digital archive becomes a more pressing need at least in the University of the Philippines. The academic community of the University used the different materials at the Faculty Center as pedagogical tools. The resource materials stored at the center were once upon a time beneficial to students, teachers, and researchers or academics in the humanities and the social sciences.

This chapter is an introduction to a project funded by the Office of the Vice President for Academic Affairs of the University of the Philippines billed *Philippine Performance Archive*, which aims to develop a digital archive of resource materials of Philippine performance cultures such as theater, dance, and cultural performances, the last one being the focus of this chapter.[1] The archive is intended for the documentation, hence "preservation," of these performance forms

[1] The Philippine Performance Archive project is composed of four sub-domains: an archive on Philippine dance, an archive on Philippine theater, an archive on writings about Philippine performance, and an archive on Philippine cultural performances.

since they are valuable examples of the nation's intangible cultural heritage. More so, the project is somehow shifting a perspective on theater and performance research where borrowing from performance scholar Jonathan Bollen (2016), "to encapsulate the perspective of a data model for collection information about performance" (p. 615). In short, the project is an attempt to intersect performance theory and the growing field of the digital humanities.

In the last decade, many theater and performance scholars have also methodologically used online data models as alternative facts and/or information for the understanding and analysis of the performance concept (Caplan 2015; Bollen 2016; Escobar 2016; Taylor 2010). The *Philippine Performance Archive Project* is an attempt to establish the relationship between performance and digital humanities not on the basis of data models and online visualizations but more on the pragmatics of pedagogy, similar to the archival projects of the Asian Shakespeare Intercultural Archive (Yong et al. 2016) where searchable resource materials on different Shakespeare productions in East and Southeast Asia are made easily available to students, teachers, researchers, academics, and the public interested in Asian Shakespeare.

The first part of the essay is a descriptive introduction of the archive on cultural performances – *Philippine Performance Archive on Cultural Performances* – with a presentation of a conceptual framework for the understanding of cultural performance. The second part outlines the methodology employed by the research team in collecting data for the archive. The third and final part is a discussion of how the project may be used as a repository of cultural memory and a possible model of a pedagogical tool for students engaged in the study of culture and society through performance traditions.

## Cultural Performances

Central to the *Philippine Performance Archive on Cultural Performances* is the concept of cultural performance, which first appeared in the language of the academia when Milton Singer (1972) published his book *When a Great Tradition Modernizes*. Side by side with the publication of Singer's seminal study, folklorists and anthropologists were also fascinated by the concept of cultural performance that it has been consistently used as a theoretical lens for the understanding of the self in relation to his or her society and culture. Richard Bauman (1977) insists on a critical reflection on communicative processes as bounded events or in the interactions of daily life through cultural performance. Victor Turner (1967, 1987) shifts anthropological focus on cultural performance by transcribing structure to process and from competence to performance. Deborah Kapchan (1995) explores performances as "repetitive aesthetic practices" (p. 479) and "multisemiotic modes of cultural expressions" (p. 480), transforming the individual into a consensual membership of a group through collective cultural performance. Today, cultural performance is proposed as an important paradigmatic lens in the discipline of performance studies (Lewis 2016; McKenzie 2001; Tiatco 2016). The birth of cultural performance as a theoretical idiom beginning in the social sciences, particularly in anthropology and

folklore studies and now in the humanities, especially in theater and performance studies, paved the way for a dictum, which throws off earlier habits of using culture as a noun and to come to terms with the complexity of recasting it as a verb (Lewis 2016; McKenzie 2001; Tiatco 2016). J. Lowell Lewis (2016) is persuaded that performance studies also paved the way for the thinking of culture as a grand performance against the typical anthropological agenda of a grand (textual) narrative based on formal functions and structures observed in the field.

Performance scholar Jon McKenzie (2001) provides a general overview of what cultural performance is vis-à-vis the development of performance studies:

> …[t]hese include traditional and experimental theater; rituals and ceremonies; popular entertainments, such as parades and festivals; popular, classical, and experimental dance; avant-garde performance art; oral interpretations of literature, such as public speeches and readings; traditions of folklore and storytelling; aesthetic practices found in everyday life, such as play and social interactions; political demonstrations and social movements. (p. 29)

In relation to this, McKenzie adds that at the heart of its movement of generalization, performance studies scholars have constructed cultural performance as an engagement of social norms and as an ensemble of activities with the potential to uphold societal arrangements or, alternatively, to change people and societies. In short, cultural performance produces "efficacy." In simple terms, efficacy is its commanding authority to produce an effect: something, which transgresses in the case of religious cultural performances and subverts, in the case of public demonstrations and political protests.

Nonetheless, what are the identifiable markers for an activity to be called a cultural performance? The safest direction is to think of its components. Singer (1972) writes:

> …the performance became for me the elementary constituents of the culture and the ultimate units of observation. Each one had a definitely limited time span, or at least a beginning and an end, an organized program of activity, a set of performers, an audience and a place and occasion of performance. (p. 70)

While these are the basic units we follow in the identification of a cultural performance, the research team has also established its own conceptual lens for the identification of a cultural performance. Following early theorists and scholars in performance and cultural studies such as Milton Singer (1972), Dan Ben-Amos (1972), Richard Bauman (1977), Victor Turner (1987), Deborrah Kapchan (1995), McKenzie (2001), and Tiatco (2016), the research team was able to identify four distinguishing markers, used to identify cultural performances to be archived. First, a cultural performance is an artistic communication in a small group (Ben-Amos 1972; University of the Philippines Open University 2017). Second, it is performed before a public even if the efficacy is often intended for a personal advocacy or intention (Kapchan 1995; Turner 1987; Tiatco 2016). Third, a cultural performance is an intervening space between the past and the present, the self and the community, the state and religion, ornament and function, fact and fiction, celebration and solemnity, sacred and secular, and other related intervening entanglements (Kapchan 1995; Tiatco 2016). Finally, it is implicated as an important community narrative (Ben-Amos 1972; Bauman 1977; Kapchan 1995; Tiatco 2016).


**Fig. 3.1** This is the proposed log-on page of the archive on Philippine cultural performances. The photo used here is the ritual of *pamagdarame* performed mostly by male devotees in the village of Cutud in Central Luzon, Philippines

An example of a cultural performance the research team documented for the archive is the ritual of *pamagdarame* performed in many villages in Central Luzon (see Fig. 3.1). The performance highlighted here is the *pamagdarame* in Cutud where side by side with this ritual is an actual nailing on the cross. This cultural performance is performed every Holy Week of the Catholic calendar where devotees, popularly known as *magdarame*, reenact the sufferings of Jesus Christ before and during the crucifixion. For the *magdarame*, the annual *pamagdarame* performance is the fulfillment of their *panata* or a sacrificial religious vow (Tiatco 2016). Typically, the performance is carried out from early morning until 3 in the afternoon in the entire Holy Week. Nonetheless, there are no restrictions as to how much time should be spent doing the performance, as long as all activities should cease by 3 p.m. on Good Friday, the time believed by the Catholic Church as Jesus Christ's death on the cross. The devotees start their ritual at the church. Afterwards, they roam around the town, with each having his, in some instances her, own route.

## The Archive

The use of Singer's concept of cultural performance is strategic primarily because the initial phase of the project is also highly descriptive. Nonetheless, the archival project is also an attempt to situate the sociocultural, political, and historical


**Fig. 3.2** The topmost section of the proposed home page

contexts of the different *cultural performances* found in the archipelago. It is for this reason that a *reflexive* annotation for each *cultural performance* will also be included in the database.

The objectives of the archival project are the following: develop an archive of Philippine *cultural performances* (i.e., rituals, festivals, spectacles, and related performances) and scholarship resource materials; annotate collected materials for the use of researchers, scholars, academics, students, teachers, practitioners, and general audience of Philippine *cultural performances*; expand discussions of these performances via a comparative analysis with *cultural performances* in the archipelago; generate a comprehensive list of bibliographic materials about Philippine *cultural performances* for the consumption of researchers, scholars, academics, students, teachers, practitioners, and general audience of Philippine performance culture; and produce an interactive database relevant for the study of *cultural performances*. The next paragraphs navigate the database currently developed for the project.

The home page is envisioned to be divided into three sections. The first section (see Fig. 3.2) mirrors the log-on page. Topmost is a welcome tab and beside it is the name of the user. On the top and rightmost portion of the home page is the log-out tab. Just below the welcome sign are five menu bars: *Home*, *About*, *Performances*, *People*, and *Contact us*. When *Home* is clicked, the tab leads to, again, the home page of the archive. Clicking the *About* tab leads to a descriptive overview of the project. *Performances* tab is a rundown of the archived cultural performances. Clicking the *People* tab lands on a page identifying the key figures and institutions


**Fig. 3.3** The centermost portion of the proposed home page of the archive

part of the completion of the archive. Finally, the *Contact us* tab leads to useful contact information of the project administrator and the project's program manager.

Moving the scrollbar a little below the banner photo of the topmost part of the home page is the centermost portion consisting of five links (see Fig. 3.3): four boxes (Box 1: What is Cultural Performance?; Box 2: Geography of Cultural Performances; Box 3: Forum; and Box 4: Compendium of Philippine Cultural Performances) and a calendar of cultural performances in the Philippines. The landing page of box 1 is an introductory essay on the concept of cultural performance. Included in this essay is a paradigmatic schematization on the specifics of how cultural performance may be understood in the context of the Philippines. Box 2 leads to a page where the map of the Philippines is presented. When the cursor is placed on a region, a tab bar appears with cultural performances associated with the region. Another feature of this page is an attempt to visualize cultural performances in the region via data analysis of the documented performances. Some of the key data in this page are three performative tropes identified during the fieldwork or data gathering: the concepts of *panata* (religious vows), *pagdiriwang* (festivities), and *pagtitipon* (small gatherings). Also, this page is an attempt to visualize available data pertaining to structural typologies of the performances: indigenous, hybrid, or appropriated. In this regard, the visualizations are useful data for the analysis of Philippine performances. When a cultural performance is clicked, the user is led to its main page such as Fig. 3.4 below.

Box 3 is envisioned to engage archive users in conversations. The research team is developing an application where teachers may log on to create an online class-

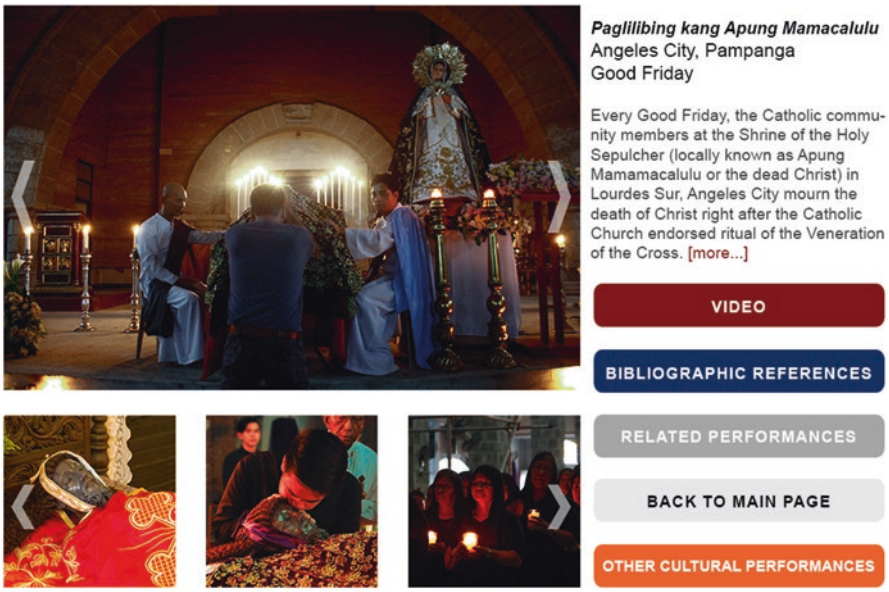


**Fig. 3.4** Prototype main page of a cultural performance

room where assignments may be posted and discussions may commence. Box 4 is the digital version of a conceptual reader on Philippine cultural performances that the team members are envisioning as the only non-digital output of the project.

On the rightmost portion of this section is the "Calendar of Cultural Performances in the Philippines." Since many cultural performances are time-bound, it is important for the user to be introduced to the dates of the performances as well. This section of the archive is useful for researchers and academics to schedule a trip to the location of any performance should they intend to conduct a field visit. When the user clicks the calendar link, she/he is led to a navigable calendar where cultural performances are placed inside a date box. When these performances are clicked, the archive user is once again led to the main page of the cultural performance (see Fig. 3.4).

The bottommost portion of the website has four subsections (see Fig. 3.5). First, there is a link intended to feature a cultural performance every week. When a user clicks the "more…" box, she/he is led to the home page of the featured cultural performance. Below the "Feature of the Week" is the "Performance Vocabulary." As will be explored later, another important methodological tool the research team used in the collection and documentation of materials is semantic framing. This is because cultural performances in the archipelago are also dependent on the use of texts/words. With this, one way of understanding the different cultural performances in the archipelago is through the analysis of keywords used by the locals in the performances. In this section of the archive, a list of vocabularies and their semantic web of associations with other linguistic categories and linkages with worldviews of other ethnolinguistic groups in the archipelago are also provided.

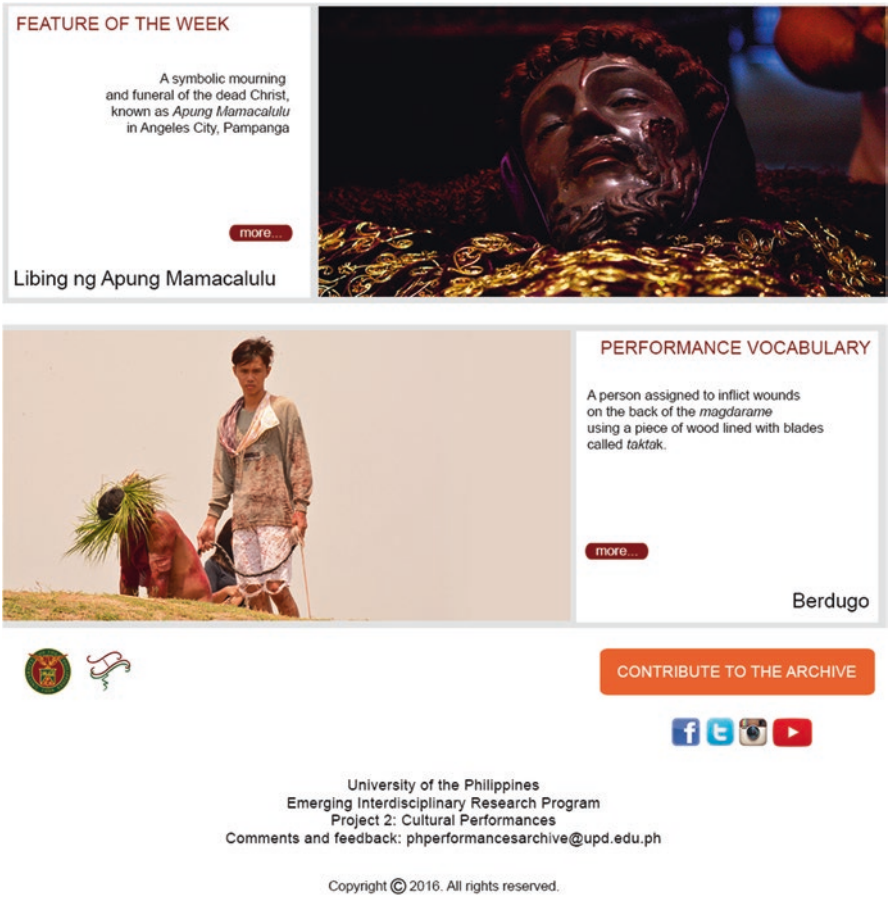


**Fig. 3.5** Prototype bottommost section of the archive

Below "Performance Vocabulary" is the "Contribute to the Archive" box. The archive team is aware that its members cannot exhaust all cultural performances in the archipelago. It is for this reason that the archive encourages users to contribute to the archive. Beside this contribution box are the official logos of the participating institutions. On the bottommost portion of the archive is the copyright information.

Generally, each cultural performance in the archive will consist of the following:

1. *Basic information*. A brief introduction and a preliminary annotation on the identified/archived cultural performance (see Fig. 3.6).
2. *Context.* A general overview on the sociohistorical, political, geographical, and cultural context of the archived cultural performance (see also Fig. 3.6).
3. *Reception.* Different forms of receptions/responses on the archived *cultural performance*: blogs and other online features, news reports, feature stories, academic

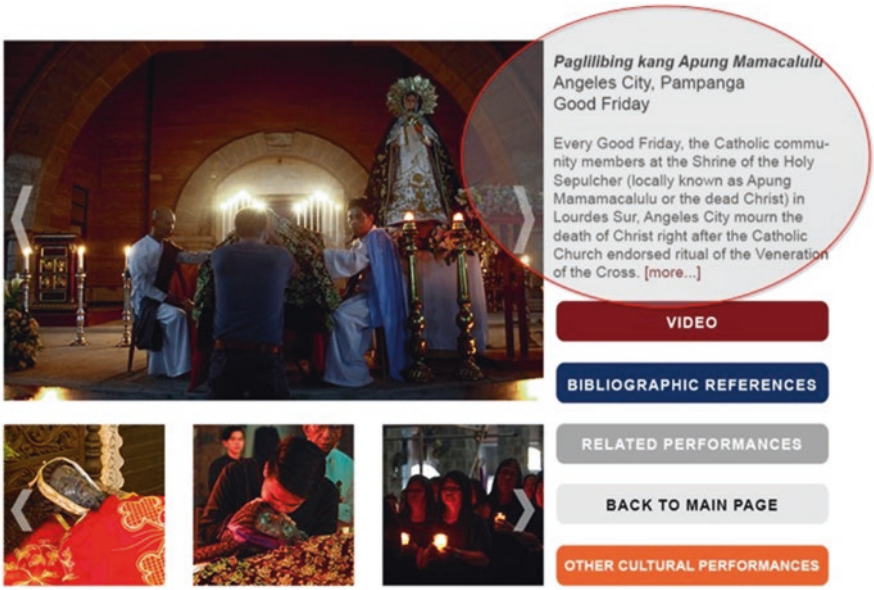


**Fig. 3.6** This is a prototype of a cultural performance page. Encircled is the basic information of the cultural performance. Included in this narrative are the sociohistorical, cultural, and political contexts of the cultural performance

papers, and journal articles. It should be noted that in as much as there is an attempt to be really comprehensive in the listing of all possible bibliographic resources on the *cultural performance*, this section is envisioned to provide excerpts (e.g., academic papers), abstract (e.g., thesis, dissertation) and complete bibliographic details of every entry. However, if the entry is available online, a link to the entire article, blog, and news feature is made available. This limitation is due to copyright concerns/issues (see Fig. 3.7).

4. *Multimedia resources.* Different media resources on the archived *cultural performance*: program, photographs, publicity materials, sound recording, and video (see Fig. 3.8).

## The Digital Archive Is/as Thick Description of Cultural Performances

Collection of data for the *Philippine Performance Archive on Cultural Performances* commenced in March 2016 until the second quarter of 2017. Most digital archive projects rely on the already available data online. At the same time, these projects include the digitization of printed documents (i.e., historical documents, photographs, official papers) (Bollen 2016). As they did for these earlier models, the research team also collected available printed documents such as photographs,

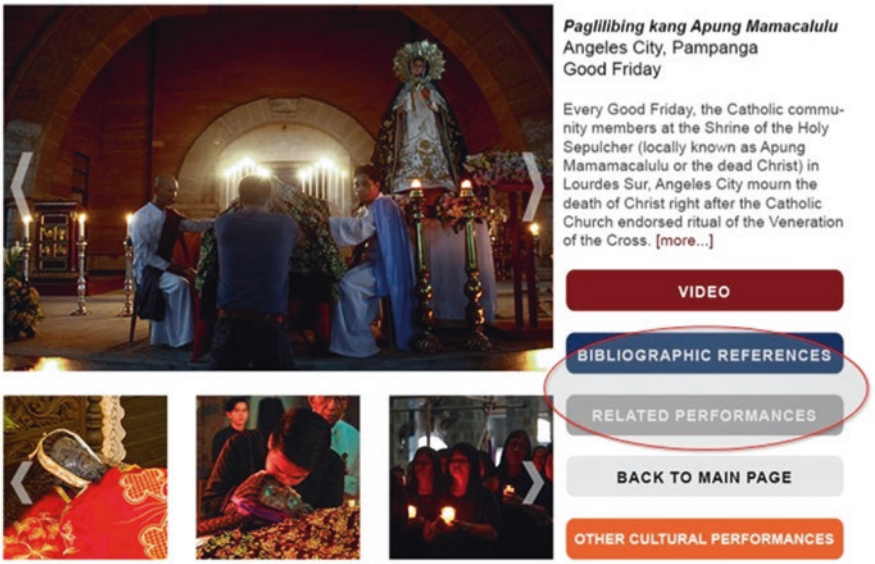


**Fig. 3.7** The encircled part are links to resources such as academic journals, books, other printed manuscripts, and digital resources such as blogposts, online journals, and websites related to the discussed cultural performance. Related performances refer to other performances that might be closely affiliated with the discussed performance. It may be geographical, thematic, or temporal affiliation

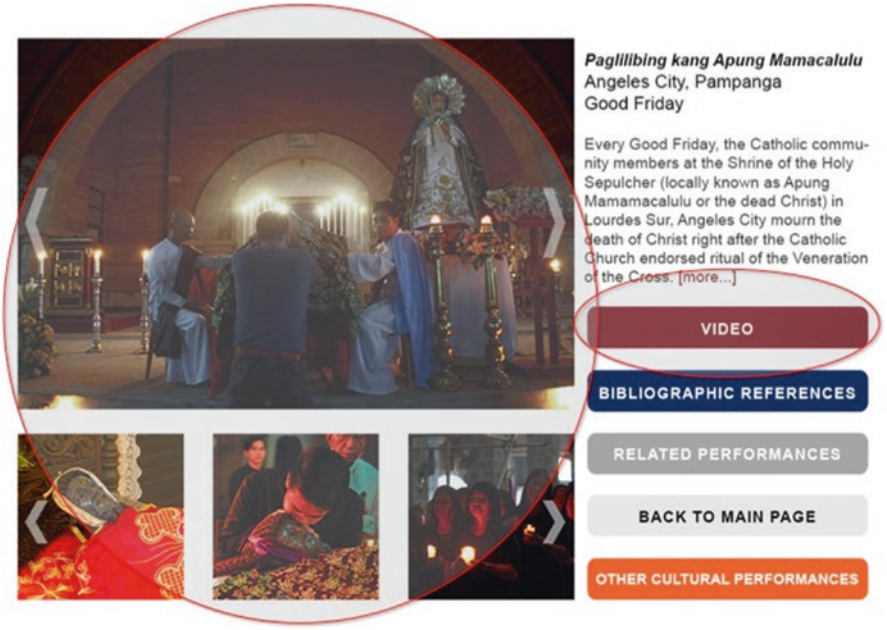


**Fig. 3.8** Encircled are the multimedia resources. The big circle consists of photographs from the cultural performances. The video is a link to either a complete video or an excerpt or a sound bite (if available) of the performance

programs, and manuscripts, which are transformed into digital copies. At the same time, the team made use of the Internet to gather information regarding the most documented and most studied Philippine cultural performances. The team also looked at the databases of different academic libraries in order to create an initial list of cultural performances from all over the islands found or recorded in different databases. After having identified the most studied and documented performances, the research team started communicating with key figures or personalities from the regions who may help in the identification of other cultural performances identifiable with the framework being used by the research to mark activities as cultural performances. Afterward, the team traveled to different regions of the archipelago to witness firsthand the performances and to communicate with key personalities and community members practicing the identified performances.

In this light, the research team started using ethnography as a primary method in data collection. The team documented cultural performances by observing and in some instances even participating in cultural performance activities of community members from the different regions the team visited. Also, the team conducted formal and informal interviews and focused group discussions with key personalities from the different regions visited.

At the end of the 1st year, the team witnessed and documented a number of cultural performances ranging from religious rituals, civic festivals, and domestic gatherings, which were identified and tagged as either performances of *panata* (sacrificial vows), *pagdiriwang* (festivals), or *pagtitipon* (gathering). Table 3.1 is the list of documented cultural performances during the 1st year of the project:

While ethnography is interested in what Clifford Geertz (2000 [1973]) calls the formation of a thick description of culture based on the narratives of community members, the ethnography used in the project is a modified one, described as a focused typology. Such ethnographic method is:

> …[c]haracterised by relatively short-term field visits (i.e. settings that are "part-time" rather than permanent). The short duration of field visits is typically compensated for by the intensive use of audiovisual technologies of data collection and data-analysis. Length (extension) of data-collection as it is common in conventional ethnographies is substituted for by the intensity of data-collection. In addition, the lack of intensity of subjective experience in conventional ethnography is compensated for by the large amount of data and the intensity and scrutiny of data analysis. (Knoblauch 2005, p.2)

Most of the interviewees and/or resource persons of the project were cultural bearers and performers of the communities we visited. Some informants were local tourism officers. These informants unite in convictions that traditional practices such as cultural performances must be preserved amidst the fast-changing lifestyle of local residents in their respective areas.

In this project, the cultural performances are also treated as texts, paving the way for the researchers to reflect on how communities make sense of the world. Treating the cultural performance as a text means the research team has to make sense of these practices in order to unravel how the community interprets their realities and ultimately how they make sense of their identities and how they fit into the world.

**Table 3.1** List of regions and cultural performances documented via focused ethnographic method

| Region/island | Specific location | Cultural performance |
|---|---|---|
| Batanes group of islands | Chavayan | *Palo-Palo* |
| | Sabtang Island | *Panyinyiwang* |
| | | *Gozos* |
| | | *Sagala* |
| | | *Invivayvatan* |
| | | *Inyispanyol* |
| | | *Mamahemahes* |
| | | *Laji* |
| | Entire archipelagic province of Batanes | *Palo-Palo* |
| | | *Laji* |
| Cordillera Administrative Region | Entire region | *Cañao* |
| | Kiangan and Asipulo, Ifugao | *Lokwab* |
| Central Luzon | Pampanga province and some municipalities in the nearby provinces of Tarlac, Bataan, and Bulacan | *Pamagdarame* |
| | | *Pabasa* |
| | Cutud, City of San Fernando | *Pagpapako sa krus* |
| | Provinces of Pampanga and Bulacan | *Limbon/prusisyon ng Biyernes Santo* |
| | Angeles City, Pampanga | *Libing nang Apung Mamacalulu* |
| | Apalit, Pampanga | *Libad nang Apung Iru* |
| | Sasmuan, Pampanga | *Kuraldal* |
| | Jaen and Peñaranda, Nueva Ecija | *Arakyo/Araquio* |
| | San Miguel, Zambales | *Bendisyon ng bangka* |
| | | *Pag-aanito* |
| | | *Pamamanhikan* |
| | | *Prusisyon sa bangka* |
| Southern Tagalog | Entire province of Batangas | *Santacruzan* |
| | | *Subli* |
| | | *Katapusan* |
| | | *Pasasalamat* |
| | Entire province of Marinduque | *Moriones/pagmomoryon* |
| | | *Tubong/putong* |
| | | *Bulating* |
| | | *Antipono* |
| | | *Prusisyong Biyernes Santo sa Gasan* |
| | | *Dalamhating salubong ni Maria at ni Hesus* |
| | Entire province of Quezon | *Sagala* |
| | Puerto Princesa, Palawan | *Pabilogon* |
| | | *Pagdidiwata* |

(continued)

**Table 3.1** (continued)

| Region/island | Specific location | Cultural performance |
|---|---|---|
| Bicol Region | Naga City, Camarines Sur | *Translacion* |
| | | *Peñafrancia* |
| Panay Island | Iloilo City, Iloilo Province | *Panaet* |
| | | *Tubong-Tubong* |
| | | *Pasungay/pahibog* |
| | Panay, Capiz | *Escotis* |
| Central Visayas | Cebu City, Cebu | *Sinulog* (*prayer*) |
| | | *Sinulog* (*festival-dancing*) |
| | Carcar City, Cebu | *Linambay* |
| | Oslob, Cebu | *Santacruzan* |
| | Bohol province | *Igui-Igui* |
| | | *Kuradang* |
| | | *Pastores* |
| | | *Daigon* |
| Mindanao Island | Iligan City, Lanao del Norte | *Diandi* |
| | | *Yawa-yawa* |
| | | *Eskrima* |
| | Marawi City | *Bayok* |
| | | *Singkil* |
| | | *Kasipa* |
| | | *Darangen* |
| National Capital Region | Metropolitan Manila | *Sagala* |
| | | *Flores de Mayo* |
| | | *Pista ng Nazareno* |
| | | *Santo Niño de Tondo* |
| | | *Pagbasa ng pasyon* |

As pointed out earlier, one significant aspect of the project is the development of performance vocabulary or a lexicographic list of terms related to the cultural performances in the archipelago. Most of the terms gathered during the focused ethnographies in the different sites are deeply entrenched in the culture of the community. These terms, which are also used in everyday situations, are often reimagined as containing meanings that are specially assigned to the concepts related to the cultural performances. As a consequence, the metalanguage, in the case of the archive, English, oftentimes fails to adequately describe the term that is provided with its definition.

Since a language reflects the culture of the community that speaks it, inevitably, a number of words do not have equivalent terms in the translation to the metalanguage used (in case of the archive, the English language). In the case of the project's attempt at a glossary of performance jargon, many of the collected words are related to the informants' everyday reality to religious and spirituality activities. This same situation is shared with the study of Manueli et al. (2009), where they try

to lay the ground for translating religious and cultural concepts in the context of the Philippines and Malaysia. These "specialized" terms undergo what is called decontextualization or a process where a word is transferred from one context to another within a specific universe of discourse. It is used to "convey novel information to audiences who are at a distance from the speaker and who may share only limited amounts of background information with the speaker" (Snow 1991, p. 7). Consequently, the decontextualized are considered technical or special. It is interesting to figure how the meanings of the decontextualized terms are modified and to what extent these meanings have been changed in order to adequately describe a particular aspect within the cultural performance, which, as mentioned earlier, is also viewed as a text.

By transforming a performance into a text, the project relies on semantic framing, introduced by Charles Fillmore in the 1980s. Frame semantics can be defined as "any system of concepts related in such a way that to understand any one of them is to understand the whole structure" (Fillmore 1982, p. 111). Frame semantics carries with it two key ideas: the background concept or the frame and the lexical set or the words related to the frame. A famous example of an analysis of meaning using this framework is the conceptualization of marriage and its related concepts, which is illustrated below (Illustration 1).

As we can see from this example, the lexical item marriage is the frame, since it serves as the background concept of the set of lexical items related to it, such as husband, wife, and divorce, among others.

Using frame semantics as a theoretical basis for the formation of the lexicon of the different cultural performances stems, it may be inferred that key concepts in cultural performances are simultaneously and continuously contextualized and decontextualized. In this regard, meanings are extracted from the important lexical items in the text. It should also be noted that cultural performances have internal structures demanding explication. More importantly these structures are relative to

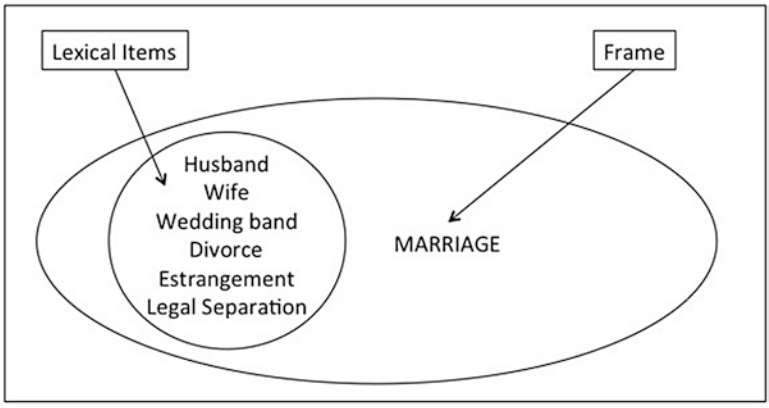


**Illustration 1** Marriage as the background concept and the related lexical items. (Manueli et al. 2009, p. 43)

a background frame or a scene. Following Fillmore, "meanings are relativised to scenes" (Fillmore 1977, p. 72). This becomes all the more crucial since the performance vocabulary section of the archive is envisioned to be a multilingual conceptual glossary of Philippine cultural performance terms.

An example of this is the term *panata*, which roughly and literally translates to English as "vow" or "devotion." This term, as the team has observed as dominant in Philippine cultural performance scholarship, is very prevalent in many parts of the archipelago, especially those that practice cultural performances related to Catholicism. The concept of *panata* is considered as a sacred pact in general, between the performer of a cultural performance – who is often a participant in the cultural performance and a supernatural being, in the case of Catholicism – God (Bautista 2010; Mojares 2017; Peterson 2016; Tiatco 2016). Usually lasting for years or even decades, the *panata* is the person's share of sacrifice for the fulfillment of a prayer to God. The *namamanata*, or the person performing the *panata*, may either have already received a favorable answer to their prayer or have yet to receive it. In other words, the performance of a *panata* may either be a form of thanksgiving or supplication.

The performance of the *panata*, therefore, can be seen as both an overarching notion of spirituality and at the same time specific practices that express this religious devotion. In Cutud, in the province of Pampanga, for instance, throngs of people flock the makeshift hill of death or Golgotha during Holy Week (Good Friday) in order to witness the renowned performer of the crucifixion (or the actual nailing on the cross). Many people are also participants in the different practices of self-inflicting pain and wounds as a form of penitence from all their sins committed or as a form of devotion as discussed earlier. In the interview with the performers, they mentioned that this kind of sacrifice is their *panata* for the maintenance of health and wellness of their family. Another form of *panata* is performed by the audience members. Since Cutud is located on a very dry land that is hardened lahar from the nearby volcano, the temperatures could reach a little below 40 °C, especially when the number of people is at its peak (the moment when the "Christ" is crucified, in real life, let alone annually). For the audience member that the team had interviewed, this is a form of *panata* as well, since they have sacrificed their being present at work and braved the heat and dust of the venue.

Going south in the province of Quezon, another form of *panata* is being performed every May – the *santacruzan* and *sagala*. Upon interviewing the most important queen in the parade, popularly called the *Reyna Elena*, she mentioned when she was little, their whole family, walking on bare feet, would join the procession. This was a *panata* performed by her family. When she grew up and joined many beauty contests and appeared in different television programs and advertisements, she was sent many invitations to join as the *Reyna Elena* of the *sagala*. However, she makes sure not to miss the *sagala* in Quezon every year since this is her personal vow, which for her is a way of thanking God for the blessings she received. According to her, participating the Quezon *santacruzan* nowadays is more fulfilling not by walking bare foot, but by wearing high-heeled shoes during the

whole procession or parade. She adds that walking with heels is a sacrifice considering the terrain of the province (most roads have yet to be paved).

Janus Cabazares (2017) explains frame semantics thus: the "…meaning of a lexical item is assumed to include the related concepts that provide the context which motivates the interpretation of the word by the language user" (p. 61). Because of this, the culture of the speech community where these performance lexical items can be found should be explored as context. The methodology proposed by frame semantics, therefore, is not autonomous to the ethnographic method used by the research team in documenting cultural performances in the Philippines. Citing Fillmore (1982):

> It is most akin to ethnographic semantics, the work of the anthropologist who moves into an alien culture and asks such questions as, 'What categories of experience are encoded by the members of this speech community through the linguistic choices that they make when they talk?' (p. 373)

In the data presented above, the term *panata* can be seen as a frame or the background concept in which relevant concepts occur. Focusing on the case of Cutud, in the province of Pampanga, several items arise, such as *pamagdarame* performance discussed earlier. Even the terms referring to the tools and instruments used in this cultural performance must be construed within a semantic frame. Some of the examples include *taktak* or a piece of wood lined with blades used to inflict wounds on the back of the magdarame (one who performs the panata) and *palaspas* or the kind of leaf that is most commonly used as a crown worn by the magdarame.

Removing the background concept of religion, the notion of the term *panata* is limited to a promise or an oath. In writing the glossary of Philippine cultural performances, total description of the terms is an absolute requirement. This includes the way it is perceived by the language users or, in the case of the research, the performers of the cultural performance. Included here is also the context (sociocultural, political, and historical) of the term usage. Finally, the researchers' interpretation of keywords within the world of cultural performances completes the entire framing of the performance jargon.

## The Significance of the Archive or Its Becoming a "Repertoire"

Why is this archiving important? The very idea of "performing culture" is not a new thing to the Filipino people. The Philippines is a nation of cultural performances – with all its regional festivities, religious and sacred rituals, political rhetoric in the house of congress and senate, and even with Filipino's love for beauty pageants, boxing matches, and basketball games. These performance activities are also embodiments of artistic communications in small groups, public events, and continuum between the past and the present and based on collective stories. Often, these are in forms of ritualistic songs and dances performed during community festivities.

In this regard, it is notable to reinstate the tourism strategy during the time of President Corazon C. Aquino: advertising or marketing the Philippines as a fiesta archipelago. Even after President Aquino's term, the Philippine government continued to promote the country as a fiesta island. This is because every region – more so, every province – is performing its own cultural performance vis-à-vis its celebration of fiestas. At the same time, the country is also a nation of different cultural performances implicating domestic affairs and yet performed before a public and embodying a sense of collective narrative making a unique artistic means of communicating among the members of the group (University of the Philippines Open University 2017).

In relation to the fire that gutted the physical archive that is the Faculty Center, the *Philippine Performance Archive Project on Cultural Performances* works twofold. First, it functions as an alternative to the more fragile actual archive. In this way, the archive is a cultural memory, which is highly performative. Miguel Valera Escobar (2016) notes, "digital archives do behave as repertoires in that they are constantly evolving and they also keep and transform "choreographies of meaning" (p. 4). While performance studies elucidate a certain ambivalence to this archiving motif because "the theatrical archive is [..] problematic [as] it stands in opposition to another mode of transmission through time and space, the repertoire. The repertoire is an archive of the body and of oral knowledge" (Escobar 2016, p. 4). The digital archive, despite it being no different from the physical archive Sarah Jones, Daisy Abbott, and Seamus Ross (2009) observe code-based archiving, requires interaction and the presence of the users because "digital records are inherently performative, only coming into existence when the correct code executes the data to render a meaningful output" (p. 170). Thus, the digital archive is a performative memory in a sense that it undergoes what Escobar (2016) identifies as "constant change that is driven by improvisation and the possibility of embedding the items of the repertoire in entirely new settings" (p. 4). Performance studies' scholar Philip Auslander (1999) reminds us: there is immediacy and intimacy in the mediatized culture.

Diana Taylor (2010) notes that "[t]echnologies offer new futures for our pasts; the past and present are increasingly thought through in terms of future access and preservation" (p. 1). More so, she professes that:

> [D]igital databases seemingly combine the access to vast reservoirs of materials we normally associate with archives with the ephemerality of the 'live.' [and that] the digital that enables almost limitless access to information yet shifts constantly, ushers in not the age of the archive, nor simply a new dimension of interaction for the repertoire, but something quite different that draws on, and simultaneously alters both. (p. 10)

Following Auslander's arguments on the mediatized and the mediatization of culture, the *Philippine Performance Archive Project on Cultural Performances* is aimed to contribute to pedagogy.

Auslander implicitly calls this period as the age of mediatization. In relation, the digital realm must not be ignored. Students are now engaged in a network community. The project is a fulfillment of the need to provide the twenty-first-century

learners and educators innovative and quality pedagogical tools by contributing resource materials for understanding Philippine performance cultures that are relevant, holistic, comprehensive, and up-to-date. Being aware of the current pedagogical trends, such as the employment of the digital, the twenty-first-century learners are conveniently and comprehensively engaged in the problematization of society and culture through Philippine cultural performances. The digital humanities dimension of the project definitely satisfies the playful and curious mind of the potential intellectual capital, at least in the Philippines.

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# Part II
# Current Research on Digital Humanities

# Chapter 4
# Digitization and Literature: The Approach of a Poet-Critic to Digital Influences on Poetry and Fiction with Special Reference to My Own Experience as a Writer

**Andrew Parkin**

**Abstract** The invention of printing spread detailed knowledge within and across frontiers. The late twentieth-century digital revolution has made the spread global and much faster. New technologies and political systems at the beginning of the twentieth century permitted the rise of *agitprop* writing; global capitalism, leaking of digitized data, and rapid organization of street protests have, at the beginning of the twenty-first century, permitted what we might term *digitprop*. The literature must be affected. My own generation saw the transition from typed to digitized texts. Writing begins with words in the head; poetry begins with word music in the head, then pencil or pen jottings and then revision by hand until a draft appears that can be digitized and further altered. Prose can more easily be written directly into a computer. Revision can then be rapid. Digital texts now follow a double highway: the 'slow lane' of traditional books; digital publication on web-based sites is nearly instantaneous. Advantages are obvious, but copyright becomes tricky or non-existent. Prestige still resides with the printed book, which cannot easily be falsified. Digital sites depend on rapidly changing technology and can be made to vanish very easily, thus losing huge amounts of data. The writer may albeit depend on a 'digital support stream' of sites. Readership for digital e-books grows and wanes, though the *e-zine* is now a well-established fact. Many writers still need readings in person with live audiences who give support and live reactions. The democratic spirit often appears at such readings where the 'open mic' follows featured writers. Yet new publishers producing *printed books* spring onto the scene each year. Some texts, especially complex academic ones, need to appear as printed books.

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**Keywords** Print media · Digital revolution · Agitprop · Digitprop · Poetry · Fiction · Web-based sites · Copyright · E-books · E-zines · Support streams · Readings · Print publishers

## From Oracle Bones to Mishmash Politics

A recent research project at the University of Cambridge involved the digitization of Chinese characters over 3,000 years old. Researchers made three-dimensional images of 1 out of the Cambridge University Library's collection of 614 oracle bones (Cambridge Digital Library 2015).This is an example of the digitization of some of the earliest writing from the beginnings of civilization. To see and register something of the extent of Chinese modernity, however, we need to look no further than Charles Cao's bringing us fibre optics, an invention changing the world again after the computer revolution. It depended on western scientific methods and facilities combined with a Chinese quality of mind.

The early years of the twentieth century saw the rapid development of Marxist aesthetics and the artistic movement we know as 'agitprop'. This Communist 'newspeak' word conflating agitation and propaganda was a result of the Soviet Communist Party's zeal to convert Russia and the world in the 1920s. This conversion, politically, didn't happen. Yet before their suppression by Stalin's favoured socialist realism in art and literature, Russian experimental theatre converted Europe to new approaches to staging through setting, costume design and acting styles.

The Victoria and Albert Museum's exhibition, "Russian Avant-Garde Theatre", has been recorded in a printed book. It contains a valuable piece by Kate Bailey in which she interviews Katie Mitchell and Vicki Mortimer (Bailey 2014). The images that helped to change twentieth century theatre were powerful, even exotic, and rare. But now we have in our digital world a surfeit, what Vicki Mortimer calls "the imagistic saturation of today" (quoted in Bailey 2014, p. 101). In the 1920s in Russia, there was an immense pressure to change the entire country. Now, according to Mitchell, we live in an era of pressure and uncertainty (cf. Chekhov's *The Cherry Orchard*) about "enormous change that you cannot name or predict" (quoted in Bailey 2014, p. 97).When the Soviet system collapsed and the Chinese post-Maoist system joined in the enterprise of global trade to become one of the greatest economic powers of our present times, we all awoke into a world of digital technology where photographic images multiply instantaneously and writing is 'posted' millisecond by millisecond and transmitted on the web to be downloaded and copied at will.

The incredibly rapid development of a digital revolution in technology has enabled some artists to attempt a Marxist critique of capitalism we might call 'digitprop' using a species of Orwellian satire of 'newspeak'. This includes such artistic experiments as the so-called 'mishmash' art, signifying a sometimes unruly and unexpected mixing of the available media. The history of such experimental art has been introduced to the public on Canada's west coast by the Vancouver Art Gallery's exhibition "MashUp: The Birth of Modern Culture (From 1912 to right now)". When Picasso and Braque added to their compositions scraps of different materials

glued on, they changed the givens of European art at the time. To represent changes in visual culture, the curators of the exhibition selected examples from media such as architecture, photography, film, video, sculpture, industrial design, drawing, painting, animation, collage, graphic design and illustrations. The exhibition explores the links with music, computing and literature, not forgetting copyright issues. This owes much to digitization for assembling disparate elements.

In the political arena, through digital media, huge street assemblies and demonstrations can be organized extremely quickly, and habitual activists can be brought in from other countries. Demonstrations have never been totally confined to political parties or trade unions, but the new technology has made them more widespread. The latest president of the United States 'tweets' some of his thoughts and responses to events, following in the wake of European politicians. In the recent (2017) French presidential elections, one of the far-left contenders, Jean-Luc Mélenchon, gave a political speech in a number of different towns simultaneously by the use of *holograph images of himself* giving the speech. Admittedly, a holograph image of a person was used in Vancouver back in Expo [19]86, but in France this holographic campaign by Mélenchon was widely reported in the media. This is a perfect example of the way some politicians suffer from a 'god' complex, for only God can be simultaneously in more than one place. Many artists, though, use the new digital technology fortunately for its artistic rather than extreme political possibilities.

## From the Invention of Printing to the 'E-Book'

We have long recognized that the invention of printing made the circulation of ideas more accurate, more efficient, more rapid and more inexpensive than was the case in the older oral cultures. Since printing was a German invention, it is interesting to note the discussion of "Digital Humanities in the German-Speaking World" in Chap. 1 of this book. Writing and reading over centuries changed from being specialized skills known to an elite to become skills available to almost everyone through the school systems of modern states. In the second half of the last century, the use of computers and digital imaging was once the privilege of the few, but the technology was rapidly commercialized, becoming available to anyone wielding an old-fashioned cheque book rather than a smartphone. Nowadays, even beggars on the streets of North American cities sometimes have digital phones, even if they are not iPhones. When I was in Hong Kong about 4 years ago, I noticed a taxi driver who had no fewer than eight cell phones attached to the dashboard. He claimed he received orders for fares from each of the phones. They were good for business. The ability to use computers and their applications of course is now being learned by small children; some teenagers have even become masterly 'hackers'. The dissemination of data, ideas, knowledge, simple messages and even literature is now instantaneous, inexpensive and virtual.

Printed books, it would seem to some, are no longer an obligatory channel for the dissemination of thinking and knowledge. I, among many, do not believe that the physical book is extinct. I agree with Krashen (2015). Free reading is still a good idea.

On the other hand, as Bruce Grenville (2015) writes (in print on paper): "Fundamental issues of creativity, inter-disciplinarity, new technologies and intellectual property are decisively linked to the birth of mashup culture" (Grenville 2015, p. 17).

## A Personal View of Attacks on Writing

How does digitization affect me as a writer? Why, in a digital world, would I put myself through the tedious, uncertain and expensive process of squeezing between the covers of a book? The answer to the second question is short and quick: data is not the same as knowledge, or thought, or feeling. These are more complex phenomena than data, and, when one has spent a great deal of time putting thought and feeling into words that are more likely to last longer than the 'sound bi[y]tes' favoured by television journalists, the promise of the printed book is this: it offers a text that cannot easily be erased or burned into by anyone trying to suppress all but some officially approved 'correct' thinking and communication.

The Soviets and Maoists wanted people to think in 'politically correct' ways. Naturally, people who believe in freedom of thought and speech or writing have fought through the centuries for these freedoms, and they do not want them barred by governments or *bien-pensants* who think they have a right to control other people's thoughts. Hence the organization PEN supports writers who have become political prisoners. Orwell (1949) warned us of such dangers in his novel, *Nineteen Eighty-Four*. This dystopia, based on Orwell's knowledge of far-left and far-right politics, seems now to have become a handbook for those pushing for political obedience. We must now always ask these questions: who is pretending to know what is 'politically correct'? Whose politics are being upheld as the norm by which to judge? If politics is a battle of ideologies, what is the truth as opposed to 'correctness'? Writers suffering from state control thus wrote freely a *samizdat* or self-printed underground literature that was smuggled out of the Soviet bloc into the western democracies. Digitized dissent can now be sent around the world in the blink of an eye. Political correctness pundits who assume their thought is correct without asking by what authority it merits the term are, fortunately for those able to think for themselves, still able to be challenged on the Internet, especially through the social media.

Michael Clune (2015) asserts, "I knew that I could learn more about the past, more about the present and the future, by playing *Return to Castle Wolfenstein* [a computer game set in World War II] for two months straight than I could by reading a hundred history books" (Clune 2015, p. 106). This memoir of his early life and the writing of his PhD records some of the experiences of a TV and computer age childhood and youth. But the man who wrote this memoir has published it *as a hardcover book*. Why isn't it just an e-book? He perhaps thinks it is an important record—but is it more important than a hundred history books? That depends on the quality of the writers and their thinking. Professor Clune's writing cannot compete with that of old Edward Gibbon, Arnold Toynbee, Winston Churchill, Asa Briggs or, the contemporary historian, Andrew Roberts. Professor Clune's experience is usefully

overshadowed by another recent book by Frank Furedi (2015). The idea that books are finished and nobody reads is a popular error; Furedi's *The Power of Reading: From Socrates to Twitter* certainly refutes that kind of unthinking assertion. In May 2016, *The Guardian* published an opinion piece on books and reading: "Books are back. Only the technodazzled thought they would go away" (Jenkins 2016a). I am indebted to James Wood for alerting me to this *Guardian* piece by Simon Jenkins. Jenkins also published some months later "Libraries are dying—but it's not about the books" (Jenkins 2016b, *Guardian*, 22). The trade figures show that after their initial surge, e-book sales are down while real book sales are up.

Novelty moves in cycles and soon wears an old hat. Young people master very quickly the latest technology, but since the technology changes so quickly, there comes a point where keeping up with the medium inhibits the space and time needed for profound thought or much thought of any kind.

## A Writer's Personal View of the Impact of Digitization

To return to my leading question about the personal impact of digitization on my own practices as a writer, it is evident that digitization now affects us all as writers. Voice recognition devices can ease the task of the writer, perhaps being of most use to playwrights or scenarists, but this would depend on whether a writer feels better able to dictate work than write it down to begin with. But digitization affects me differently when I write as an academic, a novelist, or a poet.

As an academic I started writing out essays and book chapters by hand and correcting and then typing up a draft on my Olympia typewriter. I then took a corrected typescript (TS) to a professional typist who used a bigger machine with a print ball rather than type on metal arms! Then I wrote a book on an electronic typewriter, thinking I was very modern. Then the University of British Columbia, where I was working, advised all the faculty to get personal computers. This led to a big debate about Apple or Microsoft. It did not lead to the university's buying the machines for us.

Nowadays, I write my academic work directly onto my laptop, save it on a USB key and correct directly on the screen if necessary. I have no paper drafts marked up with corrections. I do have printers' proofs for books; I correct and return. These now are usually received as PDF docs by e-mail rather than on paper through the post. I print them out and correct by hand because I find typographical errors and other mistakes easier to catch this way. I then transfer my corrections to the digitized text. My most complex academic book was my edition of manuscripts of two plays by W. B. Yeats, *At the Hawk's Well* and *The Cat and the Moon*, for Cornell University Press (Parkin 2010). This was made easier by digital technology. I could trace manuscript holdings of the two plays by using Internet sites for a number of libraries with Yeats collections or archives. E-mail and letters posted to librarians were necessary to obtain permissions to examine manuscripts and typescripts in their collections. I visited libraries in the United States, Ireland and the British Library to examine MSS and TSS in situ. Digital cameras of at least 6 million pixels

took admirable photographs of the relevant papers. These were then sent to me on discs. I then put the manuscripts, page by photographed page, on my screen for transliteration, adding any necessary notes. My editor in Seattle would then use a special programme to add squiggly lines, strange deletion marks and other quirks of Yeats's punctilious arrival at a draft that could be given to his typist (perhaps his wife, perhaps Ezra Pound). This book on Yeats's two short dance plays, from tracking the manuscripts to publication, took me 6 years. Without digitization it would have taken far longer. Digital technology, however, would not help scholars to discover manuscripts held by private individuals with no need or interest in making them available to the scholars.

## My Work as a Poet

My practice as a poet is to listen to words that come into my head unannounced and to observe closely the external world as well as my interior world. My aim is to express the *in*ternal and *ex*ternal experience in a vain attempt to make it *e*-ternal! I always start with a pencil or pen and pieces of paper. I jot down scraps of my inner and external worlds as words on the page. These pages need additions, cancellations, underscorings and markings with metrical beats, for the words always have a music of their own. Sometimes I work towards some kind of stanza form, shy off in different directions, suddenly interrupt myself and so on. Such jottings lead soon to a sense of direction, a sense that I must follow a particular image and even a sequence of images. And above all, I seek to capture that word music which first invaded my consciousness. A word will stubbornly attach itself to a draft or succession of drafts. The microprint version of the full multivolume *Oxford English Dictionary* (OED) is a necessity for me, but the digital version is beyond my pocket. I arrive eventually at what could be a poem. Only then do I type it into my computer. Then I bless the computer as opposed to the old typewriter, because the inevitable errors or wrong directions can be reworked without the tedium of *retyping everything*, correcting, *retyping* and so on, until some version emerges that might be publishable. I am free of the old typewriter tedium. I can save my drafts on a USB key just as surely as I can save my publishable version. Thus the digital technology saves me from drudgery, but it cannot give me the right words in the right place to express thought, feeling, mood, music or the sensory experience that will make the poem itself. The best way I have found to test whether a poem 'works' is to read it with a public audience.

It is often the case that a poem must use a vocabulary *not* to be corrected by some digital spell check and grammar check programme. Dialect words or even archaic ones may sometimes be the best for a certain poetic line. Yeats thought the best diction was that of the *King James Version* of the Bible with obsolete words cut out. Many professional writers and critics consult the OED, etymological dictionaries and even the dialect dictionary of Joseph Wright or at least David Crystal's *The Disappearing Dictionary*. In his selection from Wright's work, Crystal explains, "I find old words fascinating, especially when they express a notion in a vivid, playful, or ingenious way…they make us see things in a different light, or suggest an alternative way of

talking about something to what is available in present-day English" (Crystal 2015, p. xviii). A good example from Crystal is the verb "pample" to mean "toddle about" when used for young children or domestic animals (Crystal 2015, p. 121). Attentive readers of the Harry Potter novels will find many obsolete and dialect words used or modified to suggest the world of wizards and wizardry.

In my poem "The Familiar Suddenly is Changed" (Parkin 2003, pp. 78–79), I used the current dialect word 'lass' not of a young girl but of a wife and mother in her late 40s, because it came to me as a word from the north of England expressing a certain tenderness towards this Yorkshire woman, when I saw her for the last time. She was dying because of cancer. Another example comes to mind. I telephoned my cousin who lives in England. She is some 8 years or more older than I. She opened the conversation with a phrase from a Yorkshire village: "I haven't popped my clogs yet!" She meant that she was not yet dead. I think this phrase will one day invade one of my poems.

An increasingly frequent use of digital media with poetry is found at poetry readings where the poet or poets are recorded for publicity or archival purposes. This is common practice now in, for example, the Royal City Literary Arts Society (RCLAS) of New Westminster in British Columbia. Their weekly meetings are thus recorded as well as special events, such as the Poetry Month Canada readings in 2016 by me and Candice James, the local Poet Laureate at that time. I was also filmed reading some of my poems on the campus of the Chinese University of Hong Kong for a digital archive of English language Hong Kong poets directed by Professor Mimi Ching. For a poet, the viewing of such recordings can be instructive as a guide for what could be improved in future readings. The continuing links between my work and Chinese culture were recognized by Dr. Jack Hang-tat Leong when he invited me to contribute to a project in Chinese Canadian Studies at the University of Toronto; his Chap. 2 above discusses this and contains his discussion of collaboration between librarians and scholars.

Poetry is notoriously difficult to get published in famous print magazines and in collections. In the last century, this led to a proliferation of chapbook publications either by small publishers or by the poets at their own expense. These chapbooks are still being published, but now, as with RCLAS, editors can publish poetry anthologies and 'e-zines' on the Internet, thus giving rapid exposure to poets, at least for the members of such societies or their followers, for example, on Facebook. These Internet offerings can be lavishly illustrated in colour, if their producers are technically proficient.

## My 'Interarts' Poems

I realize that several of my poems already in print are examples of 'interarts' writing. Critic Jack Stewart has written astutely on my poetry in *Poetry Canada* (Stewart 2011a) and in a feature article in *Symbolism* (Stewart 2011b) on broader aspects of


**Illustration 1** Etched gourd resting on a map of the Parisian 12th arrondissement where I lived for 12 years

my work, together with my poems that are 'ekphrastic'—such poems refer specifically to works of visual art, such as sculpture or painting (Illustration 1).

My poetry connects me with place (the map) and art (the etched surface) and ethnicity (the Chinese gourd/world). Professor Klaus Stierstorfer interviewed me in 1999 on the presences and places and the Hong Kong identity as touched on in my writing (Stierstorfer 1999).

Some years later, in fact, I was asked to publish a collection of art-related poems, the artworks to be printed together with the poems in English and Chinese translation. This was a project of Shaw College, the college head at the time, Professor Ching, asking me for poems relating to paintings of the college from different points of view and at different times of day by the contemporary Chinese painter, Chan Hang. The College Secretary Julia Woo sent me a request for poems to accompany the paintings in an exhibition to be held at the College. Digital images of paintings arrived by e-mail. I sent back by e-mail a group of poems. Later I arrived in Hong Kong to stay at Shaw College to discuss the project and fine-tune it with the painter Chan Hang and the translator Laurence Wong. We all attended the *vernissage* where paintings and poems were juxtaposed along the walls. The book of our efforts was printed in Shenzhen, China. The result was *Shaw Sights and Sounds* (2006). Because of digital technology, *the printed version* of this book was produced in hardcover with a slip case in just 2 weeks!

Before this I had collaborated with Jacqueline Ricard, a Parisian engraver and maker of handsome 'artists' books', to produce a handmade book with a coloured

engraving of Tolo Harbour on which my poem "At Chinese University" was printed in Chinese and English and also in a Chinese and French version. The artist published these at her own press, *La Cour Pavée* (2000). Such artists' books may take weeks to produce and are thus expensive collectors' items. Though they cannot be produced digitally, Jacqueline Ricard, for example, now scans her designs and stores them on an external hard drive. Of course, an artist of David Hockney's fame and wealth is now able to plan huge murals and canvases on computers, mixing images and colours as he wishes. His exhibition at the Royal Academy in London contained some striking examples of his work in this mode.

It is now accepted widely that ekphrastic poetry has become a field of study in poetry and poetics. Professor Murray Krieger wrote a pioneering book, *Ekphrasis* (1992), which helped establish this particular critical trend. Recently, in New Westminster's Royal City Literary and Art Society, a course in poems and artworks over the centuries for creative writers was devised by member Alan Girling. He kindly gave permission for me to use the chart here (Table 4.1).

**Table 4.1** Examples of ekphrastic poems with relevant artworks

*Ut pictura, poesis* (As with painting, so with poetry)

**Two Hundred Years of Ekphrastic Poetry**

| | Produced in... | Artist | Work of Art | Poem | Poet | Published in... | |
|---|---|---|---|---|---|---|---|
| 1 | ca. 444 BC | Phidias | *Elgin (or Parthenon) Marbles* | *On Seeing the Elgin Marbles* | John Keats (1795-1821) | 1816 | 1 |
| 2 | ca. 1600 | [unknown Flemish painter] | *Medusa's Head* | *On the Medusa of Leonardo da Vinci...* | Percy Bysshe Shelley (1792-1822) | 1818 | 2 |
| 3 | ca. ?? | [unknown] | *[sketch by Keats]* | *Ode on a Grecian Urn* | John Keats (1795-1821) | 1819 | 3 |
| 4 | ca. 1558 | Agnolo Bronzino | *Lucrezia de' Medici* | *My Last Duchess* | Robert Browning (1812-1889) | 1842 | 4 |
| 5 | 1860-62 | Jean-François Millet | *L'Homme à la Houe* | *The Man with the Hoe* | Edwin Markham (1852-1940) | 1897 | 5 |
| 6 | ca. 475 BC | Pythagoras? or Kanachos of Sikyon? | *The Miletus Torso* | *Archaïscher Torso Apollos (Archaic Torso of Apollo)* | Rainer Maria Rilke (1875 - 1926) | 1908 | 6 |
| 7 | 1903 | Pablo Picasso | *The Old Guitarist* | *The Man with the Blue Guitar* | Wallace Stevens (1879-1955) | 1937 | 7 |
| 8 | 1558 | Pieter Breughel, the Elder | *Landscape with the Fall of Icarus* | *Musee des Beaux Arts* | W.H. Auden (1907-1973) | 1938 | 8 |
| 9 | 1883 | Paul Cézanne | *L'Estaque* | *Cézanne's Ports* | Alan Ginsberg (1926-1997) | 1950 | 9 |
| 10 | ca. 1820 | Angelo Monticelli | *Interpretation of the Shield of Achilles* | *The Shield of Achilles* | W.H. Auden (1907-1973) | 1952 | 10 |
| 11 | 1918 | Giorgio de Chirico | *The Disquieting Muses* | *The Disquieting Muses* | Sylvia Plath (1932-1963) | 1957 | 11 |
| 12 | 1558 | Pieter Breughel, the Elder | *Landscape with the Fall of Icarus* | *Landscape with the Fall of Icarus* | William Carlos Williams (1883-1963) | 1960 | 12 |
| 13 | 1601 | Caravaggio | *Conversion on the Way to Damascus* | *In Santa Maria del Popolo* | Thom Gunn (1929-2004) | 1961 | 13 |
| 14 | 1889 | Vincent van Gogh | *The Starry Night* | *The Starry Night* | *Anne Sexton (1928-1974)* | 1961 | 14 |
| 15 | 1565 | Pieter Breughel, the Elder | *Hunters in the Snow* | *The Hunters in the Snow* | William Carlos Williams (1883-1963) | 1962 | 15 |
| 16 | ca. 1376 | [unknown] | *Arundel Tomb, Chichester Cathedral* | *An Arundel Tomb* | Philip Larkin (1922-1985) | 1964 | 16 |
| 17 | 1890 | Edwin Romanzo Elmer | *Mourning Picture* | *Mourning Picture* | Adrienne Rich (1929-2012) | 1965 | 17 |
| 18 | 1669 | Rembrandt van Rijn | *Self-Portrait at the Age of 63* | *Rembrandt's Late Self-Portraits* | Elizabeth Jennings (1926-2001) | 1975 | 18 |
| 19 | 1972 | Nick Ut | *Phan Thị Kim Phuc Fleeing* | *War Photograph* | Kate Daniels (1953- ) | 2002 | 19 |
| 20 | 1991 | Harry Foster | *Burying the Ruler* | *Remembering Carl Beam* | Franci Louann (1946- ) | 2007 | 20 |

(continued)

**Table 4.1** (continued)

**Two Hundred Years of Ekphrastic Poetry (cont'd.)**

| | Produced in... | Artist | Work of Art | Poem | Poet | Published in... | |
|---|---|---|---|---|---|---|---|
| 21 | 1558 | Pieter Breughel, the Elder | *Landscape with the Fall of Icarus* | *February 3rd, 1959 – plane crash in Iowa* | Alan Girling (1959- ) | 2008 | 21 |
| 22 | 1903 | Pablo Picasso | *The Old Guitarist* | *The Blue Guitar* | P.K. Page (1916-2010) | 2009 | 22 |
| 23 | 1559 | Titian | *Diana and Actaeon* | *Actaeon* | George Szirtes (1948- ) | 2012 | 23 |
| 24 | 1996 | Don Portelance | *Choir* | *Choir* | Candice James (1948- ) | 2012 | 24 |
| 25 | 1905 | Paul Cézanne | *Les Grandes Baigneuses* | *Cézanne's Baigneuses* | Susan McCaslin (1947- ) | 2014 | 25 |

**Paintings Inspired by Poems**

| | Published in... | Poet | Poem | Work of Art | Artist | Produced in... | |
|---|---|---|---|---|---|---|---|
| 1 | 1830 | Alfred, Lord Tennyson | *Mariana* | *Mariana in the Moated Grange* | Sir John Everett Millais | 1851 | 1 |
| 2 | 1832 | Alfred, Lord Tennyson | *The Lady of Shallot* | *The Lady of Shallot* | John William Waterhouse | 1888 | 2 |
| 3 | 1819 | John Keats | *La Belle Dame Sans Merci* | *The Pretty Lady Without Mercy* | John William Waterhouse | 1893 | 3 |
| 4 | ca. 1648 | Robert Herrick | *To the Virgins, to Make Much of Time* | *Gather Ye Rosebuds While Ye May* | John William Waterhouse | 1909 | 4 |

To read these poems once again and see the works of art that inspired them (or vice versa), you will need an electronic copy of this handout. Contact me for one:

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***Local contempory poets who have produced excellent ekphrastic work:***

**Girling, Alan.** kalgirl@telus.net
**James, Candice.** *Ekphrasticism ~ Painted Words.* Silver Bow Publishing, 2013
**Louann, Franci.** flouann@telus.net
**McCaslin, Susan.** *Painter, Poet, Mountain: After Cézanne.* Quattro Books, 2016 [in the Fall].
**Timmins, Leslie.** *The Limits of Windows* [on Henri Matisse]. Alfred Gustav Press, 2014.
**Zilm, Jennifer.** *the whole and broken yellows (van Gogh and others)* . Frog Hollow Press, 2013.

*"Painting is poetry that is seen rather than felt, and poetry is painting that is felt rather than seen."* -- Leonardo da Vinci

Thank you for allowing me to share my interest in and love for ekphrastic poems. I hope I have stimulated you enough to pursue other examples, or to try writing a few yourself.

Another example of my interarts poetry is the longish ode written for Sir Run Run Shaw's hundredth birthday. This I started writing in Hong Kong at Shaw College and finished in Paris. I sent it by e-mail to a literary journal in India. Within 2 weeks the editor wrote saying they thought it best to bring it out as a parallel text, English and Hindi, in book form, keeping my title, *Star of a Hundred Years* (2009). An old school friend in Aberdeen University told me I had written a *scenariode*. I had in essence 'mashed' the ode together with film scenario conventions, in honour of Sir Run Run Shaw as a father of Asian cinema.

## E-Zines, 'Flash' Fiction and Novels

Short fiction can also find an audience on the Internet. In this way, little known or novice writers can air work and seek thumbs up 'likes'. I have published a short story in a RCLAS e-zine. The novel, however, cannot easily or sensibly be

published on a website or on social media outlets; it can, of course, appear as an e-book to be downloaded to a tablet or kindle device. Yet it is possible that a novel might be published in episodes in an e-zine, just as novels were serialized in Victorian print magazines. Many readers of poetry, novellas and novels prefer, though, their reading to be in a book that can be felt and smelled and put into a bag or a pocket and stored in the bookshelf at home. The look and weight and sensuous presence of the book are still valued by serious readers. From my own experience, I prefer the printed copy of my novel *Private Dancers or Responsible Women* in hardback to its paperback version, but I realize that its e-version (now also available) could be used successfully in, for instance, the Philippines (see John Paolo Sarce's discussion in Chap. 9 of this book). Of course, both paperback and e-book versions are necessary, because hardcover books are usually rather more expensive.

## A Personal Approach to Writing Fiction

My experience of writing a novel has been as follows: I think about a character and a plot element arising from the character's life and relationships. Such ideas I type straight into my computer in a file designated 'To be used later' or titled with a character's name. Sub-headings such as 'Bruno's murder' or 'Attack on a couple in the street' or 'Hand Grenade attempt' refer to scenes to be written or maybe already written; they can be added at will to the main files. Themes I am not consciously planning may surface. In a proposed but in fact not published cover blurb for *Private Dancers or Responsible Women* (2015), Jack Stewart in 2014 sent me the following, in which he wrote: "The boundaries of dream, illusion, and reality are deliberately blurred and the plot surrounding the magnetic figure of Kalitza/Kim/Alissa is compulsively bizarre—like Jung's Anima she seems to arise from the male unconscious, yet clearly has independent existence. Kalitza's future and identity are essentially open-ended, as befits the novel's themes of freedom and metamorphosis" (unpublished remarks from 2014 e-mail).

The beauty of the computer for a novelist is that as a chapter is being written, it is very easy to copy and paste material into appropriate places. Moreover, the writing process itself is not necessarily systematically linear, for bits of a novel, scraps of dialogue, a disguise, a weapon or an antique may become useful or even key to the development of a story. They can be recorded now without the tedium of retyping, cut and paste in a literal sense or repaginate. Before personal computers, there was much rewriting and retyping to be done where additional material had to be fitted in. The renumbering of pages had to be accurate too, if chaos were to be avoided. Here we must remember, though, that experimental novelist B.S. Johnson's *The Unfortunates* (1969) was a novel in which the first and last chapters were fixed but all other printed sections of the novel were unbound so that the reader could arrange them in whatever order she or he preferred. The number of reorderings of the 27 unbound sections runs into millions. This experiment of course preceded the digiti-

zation of texts but anticipated a kind of mishmash fiction that is now very easily achieved. Our digital age has rediscovered Johnson: a new *print* edition of the novel (2008) and *The BS Johnson Journal* have now appeared.

In my *Private Dancers or Responsible Women* (a set text for a literature course planned and listed at the Chinese University of Hong Kong in 2014/2015 session) and its yet-to-be published sequels, the narrative technique closely resembles the short scenes and cross-cutting to be found in films and television emissions. Again, for such an interarts narrative technique, the computer is a very handy tool. Some short stretch of dialogue or description can easily be copied and pasted to enable some desirable reordering of chronology, for example, or to make ironic juxtapositions of scenes in the narrative. Furthermore, digitization is convenient for inserting illustrations of enigmatic signs or graphic symbols or emblems, if these have to appear in a certain type of novel. Although for my story I draw on experience acquired many years ago of an aspect of the security forces, I realize that if psychological factors have changed very little, motivations do, according to contemporary circumstances. Motivations for terror, my concern in antiterrorist crime fiction, are multiple; 'radicalization' being but one of the routes to terrorism. Moreover, the technology of weaponry has changed a great deal. Here the Internet can give information about the kind of guns and explosives terrorists and security forces may be using, but, as a writer, I have great fun *inventing* spying technology that could probably be used in real life if secretly manufactured.

## Online Resources for Writers

In a general way, it should be acknowledged that the Internet now has numerous aids for writers: there are podcasts, organized writing groups and online seminars for writers and many sites that list aid such as publicity firms, editors, lists of agents, lists of publishers accepting submissions and self-publishing companies trying to get writers to part with their cash in order to get a book published. Vanity presses have long been in existence, but now there are many such publishers who, thanks to the Internet, can get books printed on demand very rapidly. There is also at least one publisher who has revived the centuries old idea of publishing a book if the author can get a subscriber list with promises to buy the book when published, thus cutting the risk of a publisher being unable to sell copies enough to cover the cost of publication. This was common practice in the eighteenth century and has come up for air in the digital age. Why? There are increasing numbers of people who wish to produce at least one book—and that still means a print book. There is thus a huge market. In turn, this means that publicity is necessary for marketing and a great deal of that is done digitally through 'social media'. Increasing numbers of writers have personal websites and blog sites and a presence on Twitter and Facebook and LinkedIn.

The book fairs that are now held in many major cities, along the pattern of London, New York, Dusseldorf and Paris annual fairs, not only display in the

numerous booths of publishers' printed books and have famous writers doing book signings and brief lectures, but they also display a wealth of digitized work in online catalogues to market every kind of fiction and other genres. These are huge annual trade fairs, and Asia now has its share of them.

Digitization cannot think for us; it is, though, a wonderful facilitator or virtual secretary. Book indexers find that the computer saves hours of the retyping that was once inevitable. Furthermore, anywhere in the world with Internet access can be a writer's 'local habitation' with ready and rapid links to the big publishing cities.

## Conclusion: Poetry Again

To end, I return briefly to poetry. When I was thinking about the seemingly eternal human urge to make war, I wanted to make a powerful statement in a poem. Two major connections came to mind. First, humanity's blood-soaked history is long—why not try to compress it into a sonnet? After all, to compress explosive material makes it even more explosive. Second, the invention of film has meant that historical events from the late nineteenth century onwards have been filmed. If only we could reverse history or edit it, as we can films! This led to my writing the prize-winning (interarts) sonnet "Last Reel":

> Could we, for an instant, freeze the frame,
> Reverse the long, calamitous movie,
> Our reeling past, our jabbering history,
> To make the martyrs whole, unkindle flame,
> And spurning every lethal bid for shame,
> Undeclare the wars, undrill each army,
> Unfire the guns, uncross each crimson sea,
> Undo the wrongs, and then unsay the blame;

The sonnet's octave illustrates the reverse film imagery as it creates a rhetoric to counter violence (Parkin 1987, p. 45).

Later, when I wrote the ode for Sir Run Run Shaw's hundredth birthday, as mentioned above, it seemed natural to marry the ode to the techniques of the film script.

When I was first using a personal computer and learned about the World Wide Web, I was collecting poems together for my first collection, *Dancers in a Web*. The web is comparable to a universe without limits. How do we compress infinite riches into a little room? Well, seeds are like very small rooms filled with potential. In 1985 I wrote the poem "Seeds" which begins with the image of the magic beanstalk growing from a tiny seed, but at the turn in the ninth line, the sonnet presents another seed image, one that relates to computing and electronic engineering:

> And now we plant the seeds of complex thought
> in winding trails as small as any bean
> that guide us through dark regions and can sort,
> re-order, search, and blossom on a screen.

The final couplet reminds us, though, that the digital world goes only so far; the human being has the words, the ideas and sometimes the wisdom to see the pain and the beauty in human life:

> The germinating word strikes root and grows
> to bear the thorns of wisdom and its rose. (Parkin 1987, p. 87)

Interviewed recently in *The CUHK Newsletter*, Father Louis Ha (2016) explained why he taught Latin at the Chinese University of Hong Kong. He stressed the admirable clarity of both Latin and Classical Chinese. Both languages were carved in stone; they therefore prized brevity, being "concise and pithy". His interviewer realizes that Ha (2015) "brings home what we writers face today: technology makes writing faster but does not contribute to clear and precise thinking and expression" (Ha 2015, p. 3).

The human word, not the technology, is where we start, when we think and create. In correspondence with me in 2016, James Wood pointed out that the capital 'I' of "In principio erat verbum" was wonderfully rendered in mediaeval illuminated manuscripts of the Latin Bible and 'highly prized' by scribes and scholars. We now consider these priceless manuscripts as works of art. Moreover, such manuscripts were truly digital, being written by hand with the use of the fingers. The electronically 'digital' is a late comer indeed and a virtual one at that:

> *In the beginning was the word.*

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# Chapter 5
# Initiatives of Digital Humanities in Cantonese Studies: A Corpus of Mid-Twentieth-Century Hong Kong Cantonese

**Andy Chi-on Chin**

**Abstract** This paper reports on one of the new initiatives in digital humanities on Cantonese studies undertaken in the author's department at the Education University of Hong Kong: *A Corpus of Mid-twentieth-century Hong Kong Cantonese*. The data of the corpus were collected by transcribing some of the dialogue of Cantonese movies produced between the 1950s and the 1970s. There are two phases of the corpus. This paper focuses on the second phase of the corpus which, when compared with the first phase of the corpus, includes lexical semantics information and media technology which can facilitate users to undertake Cantonese linguistic studies beyond the traditional approach such as discourse and pragmatics, multimodality, and ontology.

**Keywords** Digital Humanities · Corpus of mid-twentieth-century Hong Kong Cantonese · Cantonese movies · Cantonese linguistics research

## Introduction

Digital humanities is a new field that emerged in the past few decades. By means of technologically enriched digital archives, researchers from different disciplines encounter others and share knowledge, beliefs, values, and resources. The intersection between humanities and computational technology within this space emphasizes the "creation, preservation, and interpretation of the cultural records" (Burdick et al. 2012, p. 4). Digital humanities have thus become a new approach that is widely adopted for such a mission in many tertiary institutions. In Hong Kong, a Research Institute for Digital Culture and Humanities was established at the Open University of Hong Kong in late 2014.

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Digital Culture and Humanities 1, https://doi.org/10.1007/978-981-13-1277-9_5

In linguistics, digital humanities research involves collection and processing of huge amounts of textual material in the form of digital format, which is usually referred to as *corpus*. It is now common for linguists to work on corpus data in order to explore the patterns and habits of language users (see, e.g., McEnery and Wilson (2001), Baker (2009), McEnery and Hardie (2012), Biber et al. (1998)). Some well-known linguistic corpora include British National Corpus, American National Corpus, Corpus of Contemporary American English, and Asian Corpus of English.

Hong Kong, being a multilingual society with three linguistic varieties (i.e., Putonghua, English, and Cantonese), has been experiencing the world's rapidly changing and expanding cultural landscape through a boundless cyberspace. There is thus an urgent need for maintaining and understanding of our cultural records, including oral traditions and expressions, through the construction of relevant linguistic corpora. Capitalizing on the research strengths in corpus linguistics and Cantonese studies in the author's department at the Education University of Hong Kong, some initiatives in digital humanities for Cantonese studies have been undertaken in the past few years. One of such is the construction of a corpus of mid-twentieth-century Hong Kong Cantonese for preserving and processing cultural heritage texts in Hong Kong. The corpus is not only designed for dialectology and linguistics research, but also for studying human language from other perspectives, such as multimodality. This essay describes the rationale for and the design of the corpus. We shall first discuss the linguistic situation of Hong Kong, especially the sociolinguistic status of Cantonese.

## Sociolinguistic Significance of Cantonese in the Hong Kong Context

Cantonese refers to the standard dialect of the Yue dialect group of the Chinese language now spoken mostly in Hong Kong, Macau, part of the Guangxi Zhuang Autonomous Region, and Canton, the capital city of Guangdong Province of China (Wurm et al. 1987; Yue-Hashimoto 1991). In Hong Kong, Cantonese has been one of the major vernaculars back to the time when Hong Kong was ceded to Britain in the nineteenth century (Zhang 2009). According to the latest census conducted by the Hong Kong Government in 2011, nearly 90% of Hong Kong's population (7.07 million) speak Cantonese as the usual home language.[1] Furthermore, it has been shown that, over the past four decades, a significant number of Hong Kong residents with other Chinese dialects as their mother tongues such as Fujian, Hakka, and Siyi (another subgroup of the Yue dialects) have undergone language shift by switching their home language to Cantonese after settling in Hong Kong (Tsou 1997, 2002; Bacon-Shone and Bolton 1997; Lau and So 2005). Such a sociolinguistic realignment indicates that Cantonese has been enjoying a higher status than

[1] http://www.census2011.gov.hk/en/main-table/A111.html

other Chinese dialects in Hong Kong. Following Ferguson (1959), Cantonese can be described as high language, while other Chinese dialects may be considered low languages (Tsou and You 2003). The above description can be echoed by Guldin's (1997, p. 27) remark: "…without doubt, Hong Kong is, ethnically and demographically speaking, a 'Cantonese world'" and "speaking Mandarin or *chiu jau wa* [Chaozhou] or Hakkag [Hakka] will usually not get you very far if you're speaking to a Cantonese vendor."

While Cantonese has been serving as the lingua franca in Hong Kong, Lee and Leung (2012), in their surveys, found that Cantonese has never been taken seriously in the government, education, and curriculum, when compared with English, Putonghua, and Modern Standard Chinese. After 1997, there have been concerns about the status of Cantonese in Hong Kong (see, e.g., Bauer (2000)). In 1999, the Hong Kong Government sets *trilingualism* and *biliteracy*[2] as the language goal for improving Hong Kong people's language ability and competitiveness. One of the consequences of this goal is the adoption of Putonghua as the medium of instruction for the Chinese language subject. However, the effectiveness of using Putonghua in teaching Chinese language in terms of elevating students' proficiency in Chinese has been challenged, as discussed in Tang (2008). In her studies on language attitudes perceived by Hong Kong secondary students born after 1997, Lai (2009) found that although the vitality of Putonghua is not perceived as highly as Cantonese and English, students have begun to "recognize the increasing instrumental importance of Putonghua for their future and there was a tendency towards a more accommodating attitude towards the language" (Lai 2009, p. 91). Specifically, local students assign different roles to the three linguistic varieties: English is a major tool for "academic and career development;" Cantonese is the "mother tongue and the language of local identity;" Putonghua is for "nationwide communication" and carries "the sense of Chineseness" (Lai 2005, p. 130).

In addition, there are rigorous language debates that have been taking place in Hong Kong in the past few years, such as whether Cantonese is a *language* or a *dialect* (see Cheng and Tang 2014) and the use of simplified Chinese characters on public signage. These debates usually intermingle with political issues and subjective views and go beyond the academic context. Even though there have been new developments in the linguistic landscape of Hong Kong after 1997, Cantonese is still the lingua franca of the city and plays a significant role in daily situations (see the surveys done by Lee and Leung (2012)). Given its important sociolinguistic status and the long history in Hong Kong, the development of Cantonese, in both synchronic and diachronic dimensions, deserves linguists' attention.

[2] *Trilingualism* and *biliteracy* focus on the spoken varieties and the written varieties respectively. The former refers to the ability and proficiency in Cantonese, English, and Putonghua, while the latter refers to Chinese (i.e., Modern Standard Chinese) and English.

## Diachronic Studies of Cantonese

The traditional way of studying Chinese dialects is by fieldwork investigations through which some selected speakers, preferably over 60 years old with minimal education and staying in the homeplace for most of their lifetime, are interviewed with standardized templates of some 2000 lexical items and around 100 sample sentences that cover the major syntactic constructions of the Chinese language. The goal of fieldwork investigations is to obtain an updated synchronic description of the dialects concerned. Since the 1970s, a number of detailed studies on Cantonese and other regional varieties of the Yue dialect group were produced. Some notable ones include Yue-Hashimoto (1972, 2005), Cheung (1972), Gao (1980), Zhan and Cheung (1988, 1994, 1998), Matthews and Yip (1994), Li (1995), Zhan (2002), Lin and Qin (2008), and Tang (2015). In addition to the synchronic dimension, a systematic and comprehensive study of a language should also include its diachronic dimension (Chin 2011). The diachronic studies of Cantonese, especially its syntax, did not become active however until the late 1980s, when more Cantonese language materials compiled between the early nineteenth century and mid-twentieth century were found. These early Cantonese language materials, mostly written by western missionaries or foreigners, have different natures and cover a wide range of topics: translation of the Bible, descriptions of Cantonese, vocabulary lists, dialogues and conversations, and descriptions of Chinese culture and customs. These materials provide concrete and salient information for reconstructing the earlier stage of Cantonese (You 2002; Yue 2004), and a number of linguistic features characterizing Cantonese spoken in the nineteenth and early twentieth centuries in the areas of phonology, lexicon, and syntax have been identified from these materials.[3] The nearly 130-year time span covered by these early Cantonese language materials is sufficiently long to provide clues and evidence to document linguistic changes (Claridge 2008). For example, some linguistic features found in these materials are rarely used in contemporary Cantonese or are occasionally used by some senior speakers. These materials therefore have enhanced our understanding of the historical development of Cantonese which cannot be obtained with the apparent-time approach,[4] such as fieldwork investigations with informants of different age groups. In addition, these materials reveal that some critical linguistic changes with typological significance such as yes-no questions and the dative marker took place in the 1950s. It is thus logical to hypothesize that Cantonese around the mid-twentieth century might contain linguistic features *before* and *after* the change. The coexistence of old and new features offers us a precious opportunity to examine these

[3] For a summary on the studies that made use of these earlier materials, see Chin (2011).

[4] Apparent-time and real-time approaches are used to investigate language change in sociolinguistic studies. The former compares "the speech of older speakers with that of younger speakers in a given community" and assumes that "differences between them are due to changes currently taking place within the dialect of that community" (Trudgill 2003, p. 9). On the other hand, the real-time approach studies "language changes as they happen … by investigating the speech of a particular community and then returning a number of years later to investigate how speech in this community has changed" (p. 109).

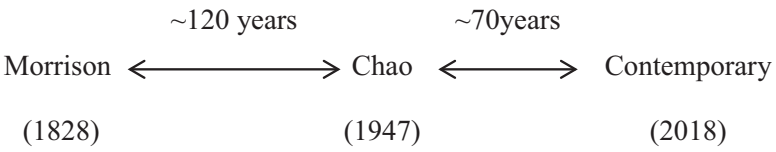


**Fig. 5.1** Critical time points in the diachronic study of Cantonese

changes. However, there seems a gap in the provision of language data of this critical period. Only a scant amount of language materials comparable to those in the nineteenth century in terms of nature and scope were published after the 1950s. This may lead us to overlook linguistic features that characterize Cantonese in the mid-twentieth century, especially if they had disappeared in contemporary Cantonese. In this connection, there is a need to fill up the gap by supplementing new and additional authentic language data for understanding better the development of Cantonese during the past sexagenarian period. Figure 5.1 summarizes the various critical time points pertinent to the diachronic study of Cantonese.

Robert Morrison's *Vocabulary of the Canton Dialect* published in 1828 (Morrison 1828) is now generally regarded as the earliest extant publication on Cantonese with English glosses and Romanization.[5] According to the survey in Chin (2011), many previous linguistic studies on early Cantonese made use of materials usually up to the *Cantonese Primer* written by Y. R. Chao in 1947 (Chao 1947). After that, not many language materials were consulted. One possible reason is that language data after 1950 could be collected through fieldwork investigations. However, we cannot safely assume that speakers always use the language of the time period in which they were born or grew up. We can illustrate this phenomenon with the lexical item 雞茶 (lit, chicken-tea)[6] which occurs five times in the corpus reported in this paper. This kind of tea is rarely found on the menus in Hong Kong restaurants, and no speaker over 60 years old whom we consulted recalls this commodity. For old syntactic features, elder speakers may not use them at all, but when they are probed about these old features, they may recall the usage, but still no usage frequency can

[5] There are in fact extant publications on Cantonese prior to Morrison (1828). In 1815, Morrison published *A Grammar of the Chinese Language* (Morrison 1815) in which there is a section on Cantonese. However, the section only contains a few pages, and the data are not sufficient for a detailed examination of Cantonese prior to 1828. Other pre-nineteenth-century works include二荷花史 (*er hehua shi*), 花箋記(*hua jian ji*), and 粵謳 (*yue ou*). Although their exact publication dates are uncertain, the first two could be dated back to the sixteenth or the seventeenth centuries, while the third one was likely published in the nineteenth century. These three works are usually categorized as Cantonese wooden fish songs (木魚歌), which are "…printed and hand-written texts of oral and performance-related prosimetric narratives" (Bender 2001, p. 1025–26). The language in these wooden fish songs is considered colloquial and reflects "…a more informal style of spoken Cantonese" (Chan 2005, p. 4). Since these works are only the few extant works produced in the sixteenth and seventeenth centuries, they may not be able to allow us to trace the development of Cantonese across time.

[6] This word has no entry in any modern Cantonese dictionaries. The author informally consulted some senior speakers of Cantonese, and none of them recalled this item. It has been suggested that *chicken tea* could be a thick and salty extract of chicken similar to Bovril.

be provided. Therefore, we could not simply rely on fieldwork to explore the early stage of a language. Instead, the real-time approach is preferred by looking for and examining data that was actually produced and used in the period concerned.

## Construction of a Corpus of Mid-Twentieth-Century Cantonese

To bridge the gap of the provision of language resources for the diachronic study of Cantonese, an online corpus of mid-twentieth-century Hong Kong Cantonese was constructed in 2010. The data of the corpus was collected by transcribing the dialogues of 20 black-and-white Cantonese movies produced in Hong Kong in the 1950s and the 1960s.

In spite of the important status of Cantonese in Hong Kong, not many large-scale Cantonese corpora have been built, partially due to its spoken nature, which requires substantial work such as selection of appropriate spoken data, data transcription, and text processing involving segmentation and tagging, which are the major challenges in natural language processing of the Chinese language and its dialects. To the best knowledge of the author, there are at least seven Cantonese corpora that have come to known in the field. However, not all of them are open for access.[7]

1. *Hong Kong Cantonese Child Language Corpus* was developed in 1996 and is now maintained and hosted at the Language Acquisition Laboratory of the Department of Linguistics and Modern Languages at the Chinese University of Hong Kong (Lee and Wong 1998). The corpus contains language data of Cantonese-speaking children with a focus on the study of longitudinal language development.
2. *Hong Kong Bilingual Child Language Corpus* is now hosted at the Childhood Bilingualism Research Centre of the Department of Linguistics and Modern Languages at the Chinese University of Hong Kong (Yip and Matthews 2007).

[7] The URLs of these corpora are provided below (accessed on March 16 2018).

| Cantonese corpus | URL |
|---|---|
| Hong Kong Cantonese Child Language Corpus | http://www.arts.cuhk.edu.hk/~lal/corpora.html#CANCORP |
| Hong Kong Bilingual Child Language Corpus | http://www.cuhk.edu.hk/lin/home/bilingual.htm |
| Hong Kong Cantonese Corpus | http://compling.hss.ntu.edu.sg/hkcancor/ |
| Hong Kong Cantonese Adult Corpus | The corpus is not available online |
| PolyU Corpus of Spoken Chinese (Cantonese) | http://asianlang.engl.polyu.edu.hk/#can |
| A Parallel Corpus of Spoken Cantonese and Written Chinese | The corpus is not available online |
| Early Cantonese Dolloquial Texts: A Database | http://pvs0001.ust.hk/Candbase/ |
| Early Cantonese Tagged Database | http://pvs0001.ust.hk/WTagging/ |

The data of the corpus is based on bilingual children with exposure to Cantonese and English.

3. *Hong Kong Cantonese Corpus* was developed at the Department of Linguistics at the University of Hong Kong in the 1990s (Wong 2006; Luke and Wong 2015). The corpus has 230,000 Chinese words with data drawn from spontaneous speech and radio programs.[8]
4. *Hong Kong Cantonese Adult Corpus* (Leung and Law 2001) has its speech data taken from phone-in programs and forums on the radio of Hong Kong. A total of 69 speakers were involved, and the corpus has a size of 170,000 characters.
5. *PolyU Corpus of Spoken Chinese* was developed by the Department of English at the Hong Kong Polytechnic University. Data of Putonghua and Cantonese were collected, and the source of the data came from conversational exchanges between interviewers and interviewees.
6. *A Parallel Corpus of Spoken Cantonese and Written Chinese* was developed at City University of Hong Kong (Lee 2011). The corpus "consists of transcriptions of Cantonese spoken in television programs in Hong Kong, and their corresponding Chinese (Mandarin) subtitles" (Lee 2011, p. 1462). The corpus has 36,775 and 39,192 characters in Mandarin and Cantonese respectively.
7. *Early Cantonese Colloquial Texts: A Database* (Yang 2008) and *Early Cantonese Tagged Database* (Yiu 2012)[9] are now hosted at the Division of Humanities of the Hong Kong University of Sciences and Technology. These two databases contain annotated early Cantonese texts published in the nineteenth and early twentieth centuries.

The above corpora were constructed to serve different research purposes as reflected by their names. For example, the first two were designed for language acquisition research. Data of the next three corpora were collected from spontaneous conversations of university students and radio programs which can well reflect the characteristics of Cantonese in the 1990s. The sixth one focuses on the contrastive features between Cantonese and Putonghua. The last one is useful for diachronic studies of Cantonese. No corpus on mid-twentieth-century Cantonese, however, has been developed.

## *Movie Dialogues as Corpus Data*

To construct a corpus, the choice of language data is very important in terms of quality and quantity. In particular, our concern is naturalness, authenticity, and representativeness in the sense that the corpus data has to include "the full range of

[8] This Cantonese corpus was developed by Professor Luke Kang Kwong at the University of Hong Kong in the 1990s. Professor Luke is now working at the Nanyang Technological University (NTU), Singapore, and the corpus is now hosted at NTU.

[9] See Yiu, C. (December, 2012). *Zaoqi yueyu biaozhu yuliaoku: jiankou he yingyong* [The early Cantonese tagged database]. Paper presented at the 17th International Conference on Yue Dialects, Guangzhou.

**Table 5.1** Annual production of Cantonese and Mandarin movies in Hong Kong between 1952 and 1970

| Years | No. of Cantonese movies | No. of Mandarin movies |
|---|---|---|
| 1952–1955 | 627 | 222 |
| 1956–1960 | 963 | 314 |
| 1961–1965 | 928 | 206 |
| 1966–1970 | 361 | 286 |
| Total | 2,879 | 1,028 |

variability in a population" (Biber 1993, p. 243). In this connection, early Cantonese materials described in the section of "Diachronic studies of Cantonese" do not entirely meet these criteria because many of them are language manuals or textbooks which did not record comprehensively what was actually said by native speakers in daily life. In this regard, we tried to look for authentic and natural language data that can characterize mid-twentieth-century Hong Kong Cantonese. We found that there is one type of spoken data that has not received much serious attention in previous Cantonese linguistics research: *Cantonese movies*.

To justify that movie dialogues can serve as the source of corpus data, it is relevant for us to review briefly the Hong Kong movie industry in the 1950s. According to Chung (2004), the movie industry in Hong Kong has a history of over 100 years and played a major role in Hong Kong's entertainment sector, especially in the mid-twentieth century. Fonoroff (1988, p. 302) states that "Cantonese cinema flourished from the late 1940s to the mid-1960s." Teo (2007) even describes the 1950s as "…a renaissance era for Cantonese cinema" (Teo 2007, p. 43). Jarvie (1977) argues that Cantonese, the mother tongue of the majority of the local population, is one of the critical factors leading to the boom of Cantonese movies. In terms of annual production in the 1950s and 1960s, Cantonese movies far exceeded Mandarin movies as shown in Table 5.1 with data extracted from Jarvie (1977, p. 129).

The above brief quantitative and qualitative review of Hong Kong's movie industry suggests that Cantonese movies of mid-twentieth century can serve as a rich source of language data for linguistics research. However, studies of Hong Kong movies in the past tend to focus on history, arts, and identity (see, e.g., Fu and Desser 2000; Chu 2002) as well as "…the construction of atmosphere and characters' psychology…the social constructs films reflect and propagate" (Alvarez-Pereyre 2011, p. 48).[10] Linguistic studies with Cantonese movie dialogue, let alone the construction of corpora, are rare.[11]One may be skeptical of the naturalness and

[10] In 2008, a Cantonese Cinema Study Association (香港粵語片研究會) was set up with the aim to reaffirm the status of Cantonese movies as an important legacy and asset in Hong Kong history, but the focus is still on the cultural aspect (https://www.facebook.com/groups/CCSAHK/).The potential value of these movies for linguistic analysis, however, is not mentioned.

[11] There are only a few studies such as Lee and Hsu (2005) and Lau and Siu (2010), but these studies do not use the corpus approach. There are other studies using TV dramas or radio programs such as Chan (2006) and Leung (2005).

authenticity of movie dialogue, because the scripts were usually claimed to be prepared by scriptwriters, producers, and directors for actors to memorize. Therefore, the language of movies or television dramas was always considered *unnatural* and *non-spontaneous* and was not widely used for linguistic analysis before (see the discussions and reviews in Quaglio 2008, 2009; Bednarek 2010; Richardson 2010; Alvarez-Pereyre 2011). Alvarez-Pereyre (2011) argues against this view by claiming that the production team in fact makes "…linguistic choices they feel relevant for the characters in the specific situations imagined" (p. 51). He also suggests that movie language is "…the repeated imprimatur of a number of people" and "…telecinematic discourse tends to provide a pool of linguistic structures acceptable for theoretical research" (p. 66). Furthermore, the language of movies can "…give us insights into people's cognitive models, or schemata of conversation" (Bednarek 2010, p. 63). In other words, the cinematic language can represent the language in current use in the community. Furthermore, the topics covered in the movies were diversified, including "…social issues, attacking the feudal system, commenting on patriarchal values and reaffirming the family" (Teo 2007, p. 49). The characters in the movies represent different social classes ranging from the upper and middle classes such as millionaires, sugar daddies, managers, and police officers to the grass roots such as hawkers, beggars, and thieves. All these characteristics suggest that movie dialogue provides suitable data for linguistic analysis.

## *Phase I of the Corpus*

There are two phases of the mid-twentieth-century Hong Kong Cantonese corpus reported in this chapter. The first phase, supported by an internal research grant from the author's institution, was constructed in 2010 by manually transcribing the dialogue of 20 movies. Each movie has a length of about 90 min. Movies with different actors, genres, and topics (except Cantonese operas) were selected in order to obtain a balanced and representative description of Cantonese. In mid-2012, the corpus was made available online for searching at http://corpus.eduhk.hk/hkcc/. The corpus has about 186,000 Chinese characters, yielding about 2600 character types, 8600 word types, and 144,000 word tokens after text processing. Registration for accessing the corpus is required, but it is free. Up to January 2018, there were nearly 2,200 registered users of the corpus.

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The study by Lee and Hsu (December, 2005) refers to: Lee, H-K. and Hsu, T-P. (2005). *Wu, liushi niandai xianggang yueyu dianying yuyan yanjiu – yi yuqici 'ze' 'zek' weili* [A study of Hong Kong Cantonese in movies of 1950s and 1960s with special reference to ze and zek]. Paper presented at the 10th International Conference on Yue Dialects, Hong Kong.

And the study by Lau and Siu (December, 2010) refers to: Lau, C-F. and Siu, P-S.(2010). *Xianggang yuyan bianhua de tantao: touguo liushi niandai yueyu dianying bijiao jinxi yueyu yuyin* [A study of language change in Hong Kong: An analysis of sound change with Cantonese movies of the 1960s]. Paper presented at the 15th International Conference on Yue Dialects, Macau.


**Fig. 5.2** Search interface of the corpus

The corpus data can be searched with Chinese characters or Cantonese Romanization in the form of Jyutping devised by the Linguistic Society of Hong Kong in 1993, as shown in Fig. 5.2.

Figure 5.3 shows the results of the query [kʷaː] (in IPA format) or [gwaa] (in Jyutping) without specifying the tone.

Users can also search the corpus with non-linguistic elements such as genders, names of actors/actresses, names of the movies, etc. More descriptions on the search functions of the corpus can be found in Chin (2013).

## *Phase II of the Corpus*

In 2013, the author, with the support of the Research Grants Council of the Hong Kong SAR Government, started phase II of the corpus. This second phase contains dialogue from 60 movies,[12] with about 5,500 character types and 767,000 character tokens. The corpus can be accessed at http://corpus.eduhk.hk/hkcc-v2/. In addition to the search functions, some new initiatives were attempted to facilitate the study of Cantonese related to digital humanities.

### Incorporation of Video Segments

In the second phase of the corpus, ELAN developed by the Max Planck Institute for Psycholinguistics in the Netherlands was used for the transcription work. ELAN is a free manual annotation tool for audio and video resources. It is particularly relevant and useful as it can link the transcripts with the corresponding video segments (Brugman and Russel 2004). This mode of presentation can allow users to obtain extralinguistic information such as physical settings, facial expressions, and gestures of speakers when making utterances. This kind of information can widen the scope of the project by not only focusing on the language structure but also on the use of language. The search engine of the second phase of the corpus will display

[12] Appendix I lists the 60 movies.

# Jyutping Search 粵拼搜索

25 word(s) are found to contain characters having the sound 「"gwaa"+Any Tone」.

25個詞語含有「"gwaa"+所有聲調」這個音的字。

| ID 次序 | Word 詞語 | Occurrences 出現次數 |
|---|---|---|
| 1 | 啩 | 54 (check examples 查看例句) |
| 2 | 嘓啩 | 21 (check examples 查看例句) |
| 3 | 掛 | 14 (check examples 查看例句) |
| 4 | 掛住 | 11 (check examples 查看例句) |
| 5 | 瓜 | 4 (check examples 查看例句) |
| 6 | 呱呱叫 | 4 (check examples 查看例句) |
| 7 | 咋啩 | 3 (check examples 查看例句) |
| 8 | 茶瓜 | 2 (check examples 查看例句) |
| 9 | 孤男寡女 | 2 (check examples 查看例句) |
| 10 | 呱呱 | 2 (check examples 查看例句) |
| 11 | 褂 | 2 (check examples 查看例句) |
| 12 | 掛爐大鴨 | 1 (check examples 查看例句) |
| 13 | 口寡 | 1 (check examples 查看例句) |
| 14 | 瓜直 | 1 (check examples 查看例句) |
| 15 | 嗦嘓啩 | 1 (check examples 查看例句) |
| 16 | 喇啩 | 1 (check examples 查看例句) |
| 17 | 掛心 | 1 (check examples 查看例句) |
| 18 | 打瓜 | 1 (check examples 查看例句) |
| 19 | 清心寡欲 | 1 (check examples 查看例句) |
| 20 | 寡佬 | 1 (check examples 查看例句) |
| 21 | 大冬瓜 | 1 (check examples 查看例句) |
| 22 | 寡仔 | 1 (check examples 查看例句) |
| 23 | 掛喺口唇邊 | 1 (check examples 查看例句) |
| 24 | 瓜柴 | 1 (check examples 查看例句) |
| 25 | 長衫馬褂 | 1 (check examples 查看例句) |

**Fig. 5.3** Search results of [kʷaː] without specifying the tone

the corresponding movie segments together with the textual data, so that users can understand better the utterances actually made in the movies.[13]

Human communication is a complex process which involves more than only linguistic elements. It is socially situated and influenced as well as determined by many paralinguistic or extralinguistic features. In addition to linguistic elements, there are other nonlinguistic means (known as modes or modalities) used in communication. Typical examples include facial expressions, gestures, and vocalizations (Kendon 2004). As pointed out by Flewitt et al. (2014), linguistic data only provides partial evidence, and it is more relevant and important to describe the interrelationship

[13] It should be stressed that the video segment displayed only associates with the utterance returned from the search algorithm. The corpus does not mean to distribute the whole movie, and only relevant segments are shown for illustrating how the utterance was made.

between language and other modalities in human communication. In other words, human communication or conversations are multimodal in nature. It is anticipated that this initially text-video-aligned corpus serves as a base for further development of a multimodal Cantonese corpus. In particular, sentence final particles in Cantonese deserve our attention as they are not only rich in inventory but also carry a lot of speakers' meanings which are usually associated with multimodal elements. In addition, the video segment can allow researchers to examine the utterances with respect to phonological features such as prosody, intonation, and stress patterns, which are not included in the previous Cantonese corpora described above.

### Ontological Information in Cantonese

The search function of the first phase of the corpus is based on keyword matching. Character strings in the corpus that contain users' query phrases will be retrieved. In the new phase of the corpus, we go beyond this keyword matching by incorporating parts-of-speech information and ontological information. For example, when a user searches for the word "靚" (beautiful), its synonyms (words with similar senses) such as "省鏡", "美麗", and "漂亮" and antonyms such as "醜樣", "醜惡", and "核突" and related concepts such as "善良", "美好", and "愛心" will also be retrieved. With such ontological information, computational technology of data mining, data extraction, and data abstraction can be further developed which can be applied to areas such as textual summarization and automatic sentiment classification.

The corpus makes reference to the Cantonese thesaurus《實用廣州話分類詞典》compiled by Mai and Tan (2011). Around 7500 Cantonese lexical items were classified into 11 categories such as people (人物), nature and natural phenomena (自然物和自然現象), artifacts (人造物), time and space (時間與空間), psychology and skills (心理與才能), motion and action (運動與動作), human activities (人類活動), abstract things (抽象事物), state and phenomenon (狀況與現象), numbers and quantity (數與量), and others (其他). Figure 5.4 is an example showing the ontological information (partially due to space limit) associated for the keyword 塞車 (traffic congestion) based on the relevant information in Mai and Tan (2011). Items in white cells can be found in the corpus, while those in gray cells are absent in the corpus. Users can click on those items in white cells to further retrieve examples for the item concerned. More work on ontology can be further developed with this lexical network information. The project team is currently on sentiment analysis focusing on adjectives related to personality.

## Concluding Remarks

In this chapter, we introduced the research initiatives on digital humanities undertaken at the Education University of Hong Kong with a special focus on the corpus of mid-twentieth-century Hong Kong Cantonese. The corpus, on the one hand, can provide useful language data for studying the development and early features of

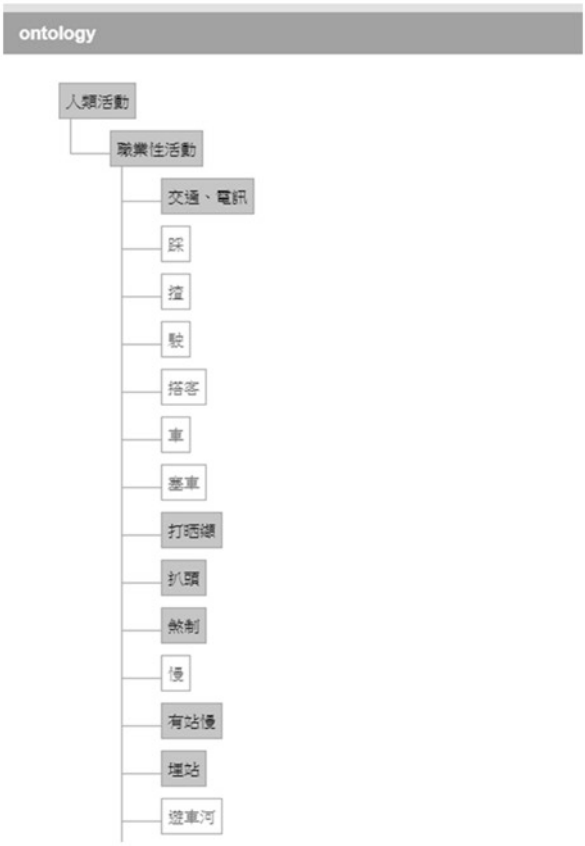


**Fig. 5.4** Ontological information of 塞車 (traffic congestion)

Cantonese (Lai and Chin 2017). The corpus has also incorporated other features such as video segments and ontological information which offer more resources for other humanistic studies. In addition, the interactive nature of the corpus also allows Cantonese linguistics studies at the discourse and pragmatic levels. Some studies include the use of a classifier in co-referential noun phrases such as 你個衰女 in which 你 (you) co-refers to 衰女 (bad daughter). This type of co-referential noun phrase has the same structure with the possessive construction involving classifiers. In other words, 你個衰女has another meaning of "your bad daughter" in addition to "you, the bad daughter" (Tse and Chin 2015).[14] Another topic that the project team has started is discourse markers which have the function of expressing speakers' attitude and stance (Chin 2018).[15] However, such linguistic expressions are relatively understudied in Cantonese, possibly due to the unavailability of interactive

[14] See Tse, M. S. and Chin, A. C. (April, 2015). Y*ueyu "ming-liang-ming" jiegou de tongzhi yongfa* [The co-referential usage of the N-CL-N structure in Cantonese]. Paper presented at the 15th Workshop on Cantonese, Hong Kong.

[15] See Chin, A. C. (March, 2018). *Discourse markers in Cantonese.* Paper presented at the 30th North American Conference on Chinese Linguistics (NACCL), Columbus, Ohio.

spoken data in the past. Other elements of interest are idiomatic expressions such as *xiehouyu* (歇後語), similar to riddles, which are commonly found in conversations in the old days (Chin 2017).

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## Appendix: List of 60 Movies with Transcribed Data in the Second Phase of the Corpus

| Year | Film title | English title |
|---|---|---|
| 1943 | 癡兒女 | Stubborn Lovers |
| 1947 | 新白金龍 | The New White Golden Dragon |
| 1948 | 刁蠻宮主 | A Spoilt Brat |
| 1950 | 血淚洗殘脂 | Blood, Rouge and Tears |
| 1950 | 細路祥 | The Kid |
| 1950 | 英雄難過美人關 | The Hero Becomes a Prisoner of Love |
| 1951 | 唔嫁 | She Says “No” to Marriage |
| 1951 | 紅菱血(下集) | Mysterious Murder, Part Two |
| | | Hongling’s Blood, Part Two |
| 1952 | 為情顛倒 | Lovesick |
| 1952 | 十月芥菜 | A Ready Lover |
| 1952 | 契爺艷史 | Foster-Daddy’s Romantic Affairs |
| 1953 | 危樓春曉 | In the Face of Demolition |
| 1953 | 鬼妻 | The Ghostly Wife |
| 1954 | 好女十八嫁 | Eighteen Marriages of a Smart Girl |
| 1954 | 長使我郎淚滿襟 | Grief-Stricken for My Husband |
| 1954 | 金蘭姊妹 | Sworn Sisters |
| 1955 | 人頭奇案 | The Mystery of the Human Head |
| 1955 | 半夜奇談 | Strange Tale at Midnight |
| 1955 | 飛天蟾蜍 | The Flying Spider |
| 1956 | 失匙夾萬/失匙甲萬濶少爺 | The Scatterbrain |
| | | Alias: All Lost But One |

(continued)

| Year | Film title | English title |
|---|---|---|
| 1956 | 九九九命案 | Dragnet |
| 1956 | 人面桃花相映紅 | Peach-Blossom Face |
| 1956 | 同撈同煲 | Great Chums |
| 1957 | 黛綠年華 | The Tender Age |
| 1957 | 彩鳳引金龍 | She's So Neat |
| 1957 | 小婦人 | Four Daughters |
| 1957 | 鬼夜哭 | The Nightly Cry of the Ghost |
| 1958 | 歷盡滄桑一美人 | The Beauty Who Lived Through Great Changes |
| 1958 | 奸情 | Adultery |
| 1959 | 大廈情殺案 | Crime of Passion in the Mansion |
| 1959 | 歡喜冤家 | The Quarrelsome Couple |
| 1960 | 亞福對錯馬票 | A Wonderful Dream |
| 1960 | 龍鳳合歡花 | The Joyful Matrimony |
| 1961 | 骨肉情深/父子情深/偷香血債 | Blood Is Thicker Than Water |
| 1961 | 小千金 | Valuable False Daughter |
| 1962 | 九九九怪屍案 | 999 Grotesque Corpse |
| 1962 | 難得有情郎 | He Is a Rare and Passionate Lover |
| 1962 | 秋風秋雨 | Autumn Wind and Autumn Rain |
| 1962 | 浴室飛屍 | Murder in the Bathroom |
| 1963 | 九九九我是兇手 | I Am the Murderer |
| 1963 | 夜半人狼 | Midnight Were-Wolf |
| 1963 | 千金之女 | The Millionaire's Daughter |
| 1964 | 小夫妻 | Beware of the Husband |
| 1964 | 死亡角之夜 | A Deadly Night |
| 1965 | 標準丈夫 | Standard Husband |
| | | Alias: An Ideal Husband |
| 1965 | 女生外向 | When Girls Are in Love |
| 1965 | 八個兇手/午夜追兇 | Eight Murderers |
| 1965 | 恩義難忘 | Your Infinitive Kindness |
| 1966 | 神秘的血案 | A Fatal Adventure |
| 1966 | 難為了嬌妻 | Love Burst/Aggrieve My Wife |
| 1966 | 送錯禮餅煲錯薑/喜結良緣 | The Topsy-Turvy Marriage |
| 1967 | 紅衣少女 | Girl with Red Coat |
| 1967 | 血染鐵魔掌 | The Anti-poison Heroine |
| 1967 | 一步一驚心 | Shaky Steps |
| | | Alias: Every Step of Alarm |
| 1968 | 青春歌后 | Lady Songbird |
| | | Alias: The Great Singer |
| 1969 | 說謊的人 | The Liar |
| 1969 | 相思甜如蜜 | My Sweet Heart |
| 1969 | 聰明太太笨丈夫 | Lovely Husbands |
| 1970 | 瘋狂酒 | The Mad Bar |
| | | Alt title: The Crazy Bar |
| 1970 | 歡樂時光 | Happy Times |

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# Chapter 6
# Building Cantonese Dictionaries Using Crowdsourcing Strategies: The *words.hk* Project


**Chaak-ming Lau**

**Abstract** The *words.hk* project is the first attempt to build a Cantonese-to-Cantonese dictionary using a lean start-up (see Ries, *The lean startup: How today's entrepreneurs use continuous innovation to create radically successful businesses*. New York: Crown Business, 2011) model combined with crowdsourcing strategies. The goal is to produce a comprehensive dictionary written for Cantonese and in Cantonese. Existing resources are often (1) not available electronically, (2) out of date, or (3) too Anglo- or Sino-centric. Building large data sets from these existing resources requires a lot of editing and 'data-janitorial' work, which can be done far better with a large group of less-experienced people than just a handful of experts, and crowdsourcing strategies are particularly appropriate in these cases. We started with a small team of editors and software developers in 2014. In less than 3 years' time, we grew into an organisation with over 400 volunteers, gathered over 42,000 entries, of which more than 36,000 entries have been edited with Written Cantonese descriptions, examples, and translations as of June 2017. Given the nature of the project and the member composition – a language with no authority to fall back on and most members with no formal linguistics or lexicographical training – we adhere to two simple principles, in order to keep the dictionary growing without introducing major issues in the core data: 'usage over etymology' and 'decision problem avoidance'. I will discuss how these principles have shaped the architecture of the project, the editing workflow, and other technological difficulties that we face.

**Keywords** Cantonese · Dictionary compilation · Crowdsourcing · Usage over etymology · Decision problem avoidance · Open data

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## Introduction

This chapter is an overview of the *words.hk* project, an attempt to build a comprehensive Cantonese-to-Cantonese dictionary[1] using crowdsourcing strategies. Every keyword listed above ('Cantonese-to-Cantonese', 'comprehensive', 'dictionary', and 'crowdsourcing strategies') has attracted diverse responses from the online community, ranging from whole-hearted support to strong criticisms. In the following, I will address these concerns, summarised in three frequently asked questions, namely:

(Q1) Why do we need a Cantonese-to-Cantonese dictionary?
(Q2) How do we ensure data accuracy?
(Q3) Who has the authority to make judgments?[2]

I will tackle the questions in this order, giving a brief description of the landscape of Written Cantonese in Hong Kong before *words.hk* came into the scene, to justify why the project is needed. I will then give an outline of the current project: what it has grown into and the strategies/core principles being used. I will discuss some criticisms and conclude with some implications of this project on Written Cantonese and digitalisation of less standardised language.

## Background

### *Written Cantonese in Hong Kong*

Cantonese was, and perhaps still is, considered a vernacular tongue that needs not be written down, by many of its speakers.[3] The use of Cantonese (or 'Chinese') in Hong Kong has been described as a diglossic (Ferguson 1959) situation in the literature (e.g. Bauer 1988; Snow 2004). Almost all written materials used to be written in Modern Standard Chinese, a written language based on Mandarin vocabulary and grammar, with albeit significant influence from Classical Chinese (文言 *manjin* or *wenyan*) and Cantonese. Words or grammatical structures that are unique to Cantonese were consciously suppressed when one needed to write in formal contexts. At the same time, there was a force going against the diglossic trend: users

[1] A Cantonese-to-English dictionary is being compiled at the same time.

[2] These nicely rephrased questions were perhaps brought up because some think (1) there is no use; (2) online projects should never be trusted; and (3) how dare you write a Cantonese dictionary?

[3] I refer readers to Li (2011) and Snow (2004), respectively, for the status of Written Cantonese in its early stage and subsequent development until the early 2000s. The recent development of Written Cantonese as a fully functional written variety is discussed at length in a submitted manuscript by the author titled 'The Transformation of "Cantonese in Written Materials" into "Written Cantonese"'.

tended to insert Written Cantonese in less formal situations when the line between spoken and written language is unclear. For decades, Written Cantonese could be seen on slogans, advertisements, casual articles, messages, etc. but was often mixed with non-Cantonese (e.g. Written Chinese) elements. Snow (2004) describes a growing trend of Written Cantonese at that time, but the use of "Authentic Cantonese", a written variety based on Cantonese lexicon and grammar, was still limited until the time of his writing.

Since then, Cantonese, in particular "Authentic Cantonese" under Snow's classification, has stayed strong and has become increasingly more popular and standardised. Cantonese Wikipedia,[4] established in 2006, is a project that involves writing encyclopaedic articles in Cantonese. Through this ongoing project, more than 40,000 articles have been written, mostly in an academic or semi-academic style. It is still by far the largest collection of written Cantonese articles to date.

Cantonese has also become the de facto default written language on certain popular public and on social media, such as Facebook or WhatsApp. It is not easy for researchers to tap into these closed networks. The author, an experienced social network user, has witnessed the emergence of a highly standardised form of Cantonese among Facebook communities of people in Hong Kong ('Hongkongers'). Certainly some users will have a more developed and consistent system, while others may have to resort to English transliterations / Standard Chinese grammar from time to time, but using Cantonese seems to have become the code of conduct among a significant number of Hongkongers, and failing to do so will be considered awkward within those groups. It is almost impossible to assess the situation fairly without a bird's-eye view, but from the author's view, the prevalence of Written Cantonese is perhaps seriously underestimated.

The latest additions to the list of Written Cantonese media are the multiple official Facebook pages of various Hong Kong governmental departments and organisations, in particular govnews.hk and Hong Kong Police. Except when direct quotation of Written Chinese materials is needed, nearly all postings are written in Cantonese.

As predicted by Snow (2008), Cantonese written materials were initially found in domains where the conventions have not been set. The use of Cantonese then extended to other domains that were quite well established, such as novels, argumentative essays, and teaching materials. By the time of writing, Written Cantonese might have replaced English and Chinese as the default written language for all registers at least in some communities. The author and a group of enthusiasts noticed the change, and strongly felt the need to create a set of more localised, Cantonese-centric lexical resources to serve the users of these communities.

[4] Cantonese Wikipedia (n.d.). In Wikipedia. Retrieved June 25, 2017, from https://en.wikipedia.org/wiki/Cantonese_Wikipedia

## *Dictionaries and Corpora*

Accurate dictionaries are the natural starting point of the development of all other lexical, computational, or pedagogical resources, and the compilation of dictionaries requires abundant linguistic data, e.g. a large collection of written record or a corpus, to begin with.

Modern *word-based* Cantonese dictionaries[5] come in two types: comprehensive dictionaries compiled for learners and the so-called monolingual dictionaries which list explanations of more difficult words. The term "monolingual dictionaries" though is a misnomer. The term is used to refer to Cantonese word lists or dictionaries that give explanations in Standard Chinese, supplemented with Putonghua (Mandarin) vernacular. These are valuable resources, but they require and presume proficiency in colloquial Standard Chinese, which is often not the case for most Cantonese speakers.[6] Another major pitfall is that a word is often not included when the usage of the word is similar in both languages. By not listing shared words, learners will be unable to tell from the dictionary whether a commonly used Putonghua word is legitimate in Cantonese. These dictionaries are, in essence, long lists of Cantonese words with direct translations into another, more widely spoken, Chinese language.

The most comprehensive word-based Cantonese dictionaries are Cantonese-to-English,[7] and their target readership is not native Cantonese speakers. Monolingual comprehensive dictionaries have been compiled for many other languages (e.g. Merriam-Webster and Oxford English Dictionary for English, *Daijirin* for Japanese, *Xiandai Hanyu Cidian* for Modern Standard Chinese), but the same has not been done for Cantonese. This is the reason why we would like to compile a dictionary written specifically for Cantonese.

[5] Premodern Cantonese word glossaries do exist. Chapter 11 of Guangdong Xinyu 廣東新語 (Qu 1678) and the preface of Yue'ou 粵謳 (Zhao 1821). The scale is however not comparable with a full dictionary.

[6] Native speakers usually look at *character-based* collections, such as *A Chinese Syllabary Pronounced According to the Dialect of Canton* (Wong 1941) or online references like *Chinese Character Database: With Word-formations Phonologically Disambiguated According to the Cantonese Dialect* (accessible from http://humanum.arts.cuhk.edu.hk/Lexis/lexi-can/), to look up the Cantonese pronunciation of a character. Most speakers do not consult a dictionary to check the meaning of unknown Cantonese words.

[7] Prominent ones include *A Chinese Dictionary in the Cantonese Dialect* (Eitel 1877), *The Student's Cantonese-English Dictionary* (Meyer and Wempe 1935), *Cantonese Speaker's Dictionary* (Cowles 1965), *Cantonese Dictionary: Cantonese-English, English-Cantonese* (Huang 1970), *A Practical Cantonese-English dictionary* (Lau 1977), and *Touhou Kantongo Jiten* (Chishima 2005).

### *Online Cantonese Dictionaries*

So far there are two Cantonese-English online dictionaries (that are not digitalised forms of printed dictionaries).

*CantoDict* (http://www.cantonese.sheik.co.uk/dictionary/) is a project founded in 2002 and provides Cantonese Romanisation, short English translations, and bilingual examples. It also doubles as a Putonghua dictionary as it provides explanations and pronunciation guide for Putonghua as well.

Pleco's *CC-Canto* (http://www.cantonese.org) is a new project founded in 2015, which aims to gather 200,000 words. It provides simple English translations of each word, and it is still undergoing rapid expansion.

There are also word list 'infographics' circulated on forums and social networks. These infographics are organised in a way to show the uniqueness of Cantonese, such as a list of all words ending with 水 (*seoi2*, water), a long list of 'sandwich puns' (歇後語), etc. These lists (often poorly made infographics hampered by typos) are yet rich resources for learners, given that existing dictionaries are often not sufficiently comprehensive. Looking at these resources, we can easily see that Cantonese lexicography has not moved forward like other modern languages did. *Words, as opposed to characters,* have not received enough of the attention they deserve. There is so far no comprehensive Cantonese dictionary that is written in Cantonese for native speakers or advanced learners.

## The words.hk Project

The *words.hk* project is a privately owned dictionary project founded in February 2014, with a small team of editors and software developers. At that time our group felt the need to create an authentic Cantonese-to-Cantonese dictionary to serve the increasingly popular Cantonese-writing community in Hong Kong and nearby regions. As of June 2017, the project is fully functional in its beta stage and is publicly accessible from https://beta.words.hk/ online (certain features require a Facebook account).

The aim of the project is to build a true Cantonese dictionary, which should fulfil the following criteria:

C1: Written in Cantonese.[8]
C2: Comprehensive, i.e. all common Cantonese words, spoken or written/unique to Cantonese or shared with Mandarin, should be included.
C3: Words (rather than characters) will be the default unit.

[8] Hong Kong Cantonese is the de facto standard, but we also recruited editors from other Cantonese-speaking regions.

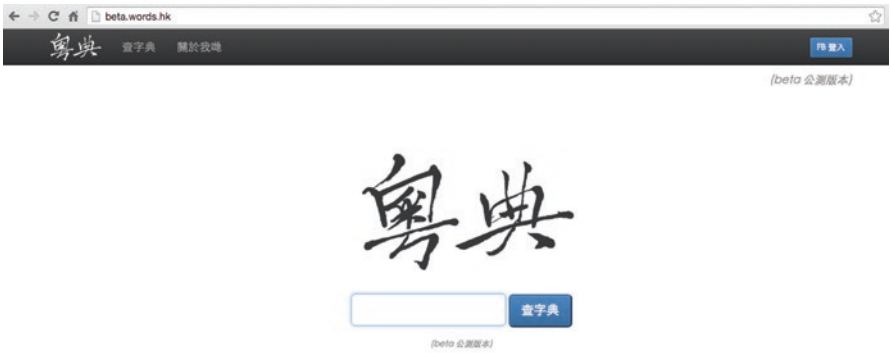


**Fig. 6.1** Front page of the words.hk project

In order to fulfil C1, all entries have to be newly written. Except for a few common items that can be referenced from Cantonese Wikipedia (which will also be too lengthy for dictionary entries), editors need to create new content. This makes entry compilation a deliberate content-generating process, i.e. the action of writing entries is simultaneously generating more Written Cantonese materials for later use (Fig. 6.1).

## *Open Data Policy*

We adopted an 'open data' policy, in the form of a licence agreement,[9] to promote the use of the dictionary data and to facilitate collaboration between groups developing language tools for Cantonese. All dictionary data are freely accessible to the public. In addition, they can be freely modified, adopted, and published for non-commercial and certain small-business purposes.

More importantly, although we have retained ownership of copyrights via a private company, we added a few clauses in the licence to avoid the data from being 'locked up' for many decades[10] in case our project gets abandoned due to unforeseeable circumstances. Firstly, we clearly state the copyright owner in the licencing agreement; secondly, we impose an obligation to the copyright owner to respond to licencing enquiries; and thirdly, we make the content free for *any* use and adaptation after it has been released for 10 years.

We hope, through this open licence agreement, we could avoid the all so familiar situation where a promising project ends up being scrapped after a few years due to lack of interest or funding and unclear copyright status preventing others from subsequently picking it up and making further improvements. We hope that by setting

[9] See http://beta.words.hk/base/hoifong/ for the full licence text.

[10] Copyrights in Hong Kong are generally retained for 50 years after author's death or 50 years after being published.

an example, valuable work could avoid the fate of being 'orphaned' without recourse, and thus we urge all content owners in the academic, literary, and linguistic fields to consider adopting a similar 'open data' policy,[11] so that valuable work could outlive the projects that created them.

## *Compilation*

As we started working on the project, we soon discovered that corpus compilation, sometimes considered the best way to compile a dictionary, may not be the best solution for Cantonese dictionaries. Unlike Mandarin Chinese, English, or Japanese, which have large annotated corpora to begin with, all existing Cantonese corpora (Leung and Law 2002; Luke and Wong 2015) are too small to be used as the basis of a comprehensive dictionary. There is also a tendency to deliberately avoid native Cantonese words that do not have a well-accepted written form. Building dictionaries from corpora or written materials is not the best solution at this stage.

Since there were no comprehensive lists of Cantonese words, we decided to combine headwords from all available resources as a starting point. First, a list from an unpublished dictionary prepared by the University of Hong Kong's Linguistics Department (hereafter HKUDict), Hong Kong Education Bureau Chinese Vocabulary List,[12] and later words from the *Dictionary of Cantonese Slang* (Hutton and Bolton 2005) were imported to the database. These lists were from Cantonese-English dictionaries, so the imported entries would lack definitions in Cantonese. The English explanations also tended to be terse. Hence, all these entries were considered 'incomplete' and were assigned to editors for a complete rewrite.

Upon receiving a new word list, the word list is converted into a standardised form, in characters and LSHK Jyutping, and then intelligently merged to the original list. Potential synonyms or duplicates will be marked in a comment section so that experienced editors can delete/merge entries manually later on. Our editors regularly create new entries if a word is found to be absent in the database, which is one of the major sources of new dictionary entries.

So far 42,000 entries have been imported or created, of which more than 36,000 entries have been edited.

[11] Our "Non-Commercial Open Data Licence" (see Footnote #8) can be readily adapted to any project with valuable content. In addition, the Creative Commons family of licenses (http://creativecommons.org) are also a popular choice for open licencing of data.

[12] Which contains words in Mandarin, but most of them are shared among Mandarin and Cantonese, and it also contains local words that are used by Cantonese speakers only.

## *Edit and Review Cycle*

The compilation of the dictionary is done in several steps. First, entries are entered into the database either by importing from existing dictionaries/word lists or via manual creation by editors. These entries are randomly shown on the editors' home screen. Editors are asked to edit entries about which they are confident (i.e. words that they use in their daily lives or technical words in their respective fields). Edited entries are then inserted into a review queue and will be further cross-checked and edited by other editors. Editors can judge whether the content is up to standard or not and report their judgement by clicking 'Skip' (content requires further editing or verification) or 'Reviewed' (good enough for going public).

All content is publicly assessable, but un-reviewed content can be seen only after log in (open to anyone with a Facebook account). This prevents the casual user from seeing content that has not yet been through our review process and more importantly prevents search engines from indexing such content. Experienced editors have access to a queue of reviewed entries. These reviewed entries can be published or stay in the review queue. After an entry is published, the content will be available to all users and may get indexed by search engines.

## *The Role of Social Networks*

From 'Day One', we were aware that such projects could not be done with only a few people. Cantonese is still an active language, and new words are being created every day. We need editors from all walks of life. We started recruiting editors in May 2014, immediately after the test version of the online editor platform went live.

Crowdsourcing (Howe 2006) is a widely used technique to perform tedious checking work or for large amounts of content generation. It involves breaking down a gigantic task into subtasks manageable by individual contributors. Writing dictionary entries is an ideal task for which to employ this technique. Similar success in *Urban Dictionary* (http://www.urbandictionary.com) and *Wikipedia* has been achieved, and the same should be achievable within the Cantonese-writing community. The nature of dictionary compilation also requires checking by a multiple and diverse speaker population to eliminate unneeded idiolect or subgroup jargon influence. Therefore, the project was designed with work distribution in mind to cater for contribution and cross-checking by multiple users.

In order to keep a constant inflow of new contributors, and to keep them engaged, publicity is the fuel of the project. We need to keep promoting the project via online social networks and traditional media. It is not easy to keep a group of volunteers working on the project. So we started two subprojects to attract more visits.

### Facebook Page

Selected articles and news related to the Cantonese language will be shared or reported using the project's Facebook page, to attract interest and recruit new members.

### Word of the Day

'Word of The Day' was a promotional campaign that began in November 2014. A list of 12 words was selected every 2 weeks, which would be edited and published, one word per day, with either an infographic or an artist's illustration. This raised our online presence, and the discussion of the dictionary meaning of words every day ensured momentum in our project. The scheme is currently put on hold since online presence is now a lower priority and the cost of creating illustrations every day is no longer justified.

As of June 2017, we have attracted 12,000+ 'likes' on our Facebook page and over 400 volunteers. Daily tasks are assigned through social networks (mainly a Facebook group or WhatsApp). We also hold biweekly 'wordathon' meetings to encourage new editors to work together offline.

## *Internship Scheme*

Since 2014, we have been recruiting paid interns every summer. By the time of writing, 21 interns, mainly secondary school or university students, have been recruited at some point in time. Interns play an important role by completing ground work and maintaining a high standard of entry selection and description. Work done by interns helps guide less-experienced volunteers to write better entries.

Our online and media presence seems to be crucial in the recruitment process. Entering the 4th year of the internship programme, we are still amazed by the high competence (both linguistic ability and other qualities such as attention to detail) of our candidates. We are also aware that many have contributed well after the end of the internship programme. We spread the job-ad through social media, and recruits are mainly from a more tech-savvy population who are also interested in language-related issues. This targeted strategy makes our recruitment programme quite unlike other intern programmes which post job-ads to on-campus noticeboards or a job-hunting website.

## Strategies

The project was not executed/implemented with a detailed step-by-step plan. Since the project has several unpredictable elements (popularity, contributors, availability of electronic or non-electronic resources), it is unwise to have everything decided upfront. Instead, the team chose the agile development model[13] over the waterfall model.[14] The former is a practice borrowed from the software development industry in which requirements need to be flexible and constantly updated.

There are two core guiding principles. Instead of making long-term plans, it is more important to ensure the project grows in a desired direction. These two principles, namely, 'usage over etymology' and 'decision problem avoidance', were considered extremely useful for building our data set.

### *Usage over Etymology*

There are simply not enough written materials to ascertain the true etymology of Cantonese words or sayings. Many etymological discussions are nonacademic or anecdotal at best. On the other hand, etymologies, regardless of their accuracies, do not usually provide added value (other than entertainment, which is not our goal) to the end-users. The general approach is that *words.hk* to purposefully leave out etymological information in the entries and have all descriptions based on the usage of particular words or phrases. By not going into the etymological debate, we can save time for other higher priority tasks and avoid running into the two issues below that are faced by many traditional dictionaries.

#### Which One Is the Correct Character?

Cantonese orthography has not been thoroughly standardised (e.g. by a governmental body), and words can often be written in multiple ways. For example, the word *di1* was historically 滴 and printed as 的 in some older texts. 啲 and D are used in movie scripts, subtitles, and printed materials. In addition, 尐, shown to be folk etymology,[15] was recycled and adopted by a small group of users. When there are

[13] A software development practice 'in which requirements and solutions evolve through collaboration between self-organising, cross-functional teams' (Wikipedia).

[14] The practice of separating development task into clear-cut phases; the process flows downwards through these phases.

[15] The character was originally proposed by Kong (1933) to be the character for 'a bit', but it was listed without any justification. The character is pronounced as *zit3* according to correspondence rules between Middle Chinese and Cantonese pronunciation and had never been listed in any Cantonese materials except for that single occurrence, before the character was rediscovered and popularised by columnist Pang Chi-Ming.

multiple characters available, our rule is to keep all characters that are used and order them by popularity, according to Google search counts, speaker surveys, or editors' intuition. The first two characters are not listed although they are etymologically justified, while the last character is kept and listed at the end of the list since it is used and recognised by a smaller group of speakers.

#### Where Did That Idiom Come from?

Certain dictionaries give full description of how a phrase came about. These explanations are good to have but usually not verifiable, and there are often multiple accounts that contradict each other. Instead of writing about etymology, we direct our editors to describe how a word is used and give more examples when in doubt. In that way, we avoid spending resources verifying etymological claims and avoid being challenged with alternative etymology theories, yet we are still able to provide users with a clear and concise picture of how the word is used in a modern context.

## *Decision Problem Avoidance*

There are several classes of problems that have been classified as 'decision problems' by our team. A decision problem is something that requires a judgement, a clear-cut A or B answer. These problems are often not helpful when compiling a dictionary. For example, drawing a line between vegetables and fruits is a decision problem. Some are fairly easy, e.g. orange is definitely a fruit, lettuce is definitely a vegetable; some are less trivial, e.g. tomato. These decision problems do not really give much information to dictionary users. In the latter case, it is preferable for a dictionary to explain the cultural and botanical classifications of tomato, instead of forcing them into inflexible categories. A list of these problems and their treatment will be briefly discussed.

#### Cantonese vs. Not-Cantonese

Most Cantonese word lists aim at compilations of words that are unique to Cantonese. Ideological issues aside, it is not always easy to decide whether a word is or is not part of Cantonese. Cantonese speakers have a tradition of using Cantonese reading pronunciation over sound borrowings when presented with materials written in another 'character language'. Given the ubiquity of Written Standard Chinese (also known as 書面語 *syuminjyu*, literally: the written language), Cantonese speakers can draw words from Mandarin and use them in Cantonese freely. We acknowledge the fact that the distinction between Cantonese words and Mandarin words will be affected by significant individual differences and will not be a helpful

distinction for any users that we envisage. The tradition in Chinese linguistics is to divide the vocabulary of a Chinese 'topolect' into three types (Tang 2015, p.23): (a) *shared vocabulary*, words that are shared with Standard Chinese; (b) *community vocabulary*, words pertaining to certain communities (e.g. due to social or political differences); and (c) *topolectal vocabulary*, words that are only used in certain linguistic varieties. Chinese topolectal dictionaries are only interested in elements of a topolect that are not shared with Standard Chinese (i.e. Mandarin). Shared vocabulary, despite being an inseparable part of a speaker's Cantonese knowledge, will be not be recorded in these dictionaries. If a word is classified as 'shared vocabulary', deviations in usage or collocations will not be captured, and certain important linguistic information will be undocumented.

Therefore, we made a conscious decision to keep all words that can possibly be used by a Cantonese speaker. We only flag words that will 'definitely sound odd if used in any Cantonese context' with a 'Written Chinese' flag. This flag is intended as a reference only, and as such, any 'mislabelling' of such words in difficult or edge cases should not adversely affect the quality of the dictionary content. It is expected that in these difficult cases, the editor can give a more detailed explanation of the usage of the word to clear up any potential misunderstandings, instead of relying on mechanical categorisation or flagging.

### Word-Class Classification

Deciding whether one word belongs to, say, a locative or a noun, usually will not give a lot of information to users. The word-class list has been refined multiple times so that word-class determination should be more evident to editors. We consciously avoid harder distinctions (e.g. different subclasses of verbs) and only keep larger distinctions like noun vs. verb and provide clear-cut tests for different categories. For example, we give these instructions to our editors for the distinction between verbs and adjectives:

> *A word is an adjective only if (a) it does not take an object, (b) it can be used as a modifier and a predicate, (c) the word itself or the root can be modified by a degree adverb like hou2 or gei2.*

Usages should be reflected in the examples or clearly stated in the descriptions. Oftentimes, those harder distinctions occur when a word lies somewhere along the class boundary. These words will very likely have properties of both word classes. Dictionary users are not supposed to rely on the part-of-speech classification when they look up a new word, since there are other properties of each word that can only be ascertained with examples. Given enough usage information in the description and the examples, assigning them into one of the ambiguous word classes using a clean, easy-to-follow set of rules should not introduce any issue and is therefore the best and easiest solution for a dictionary-in-progress. These undecided cases can be reviewed at a later stage if necessary.

### Headword Problem

We leverage our setup as an online dictionary that has no limitation on space. Entries in traditional dictionaries should almost never be double-listed as things cannot easily be kept track of, and that will occupy double the space. That means derivations of words will very likely be listed under a headword. Although we do have guidelines for headword determinations, those are just style guides, and we encourage editors to create new entries when in doubt. This allows us to have compounds or set phrases as headwords (or head items to be more accurate) and have specific descriptions/examples for these items. By doing so, users can see more detailed explanation when looking at the entry specifically created for a compound (as a head item).

### Proper Nouns

Traditional dictionaries do not contain proper nouns, but there are dictionaries that do otherwise. Chishima's (2005) Cantonese-Japanese dictionary, for instance, listed artist and place names. Having these names in a dictionary may take up too much space, but this should not matter in the digital age. Having said that, we do not encourage editors to work on proper nouns, since there are higher priorities. We do not want to have a clear-cut line saying what proper names can be recorded and what cannot. For example, 青山 *cing1saan1*, a place name in Hong Kong, is a common metonym for psychiatric hospitals, and 周公 *zau1gung1* is often used in words related to 'sleep', etc. As long as proper nouns are labelled as such, they will be allowed on the system.

### Jargons

Jargons are often not listed and cannot be fully listed in paper dictionaries, due to space limitation or other reasons. Instead of spending hours deciding whether a certain jargon word should be included, we will accept all kinds of jargon, as long as it is labelled. For example, we have entries of police jargon that is commonly heard in movies, which may have been considered too informal or regional to be included in many existing dictionaries (Fig. 6.2).

## Potential Issues

### *Issues with Pure Descriptivism*

Since we are not an official body and have no regulatory power over the orthography or pronunciation of Cantonese, we have to maintain a descriptive stance when it comes to any conflicts. Here we face a dilemma. Should we use a clear-cut

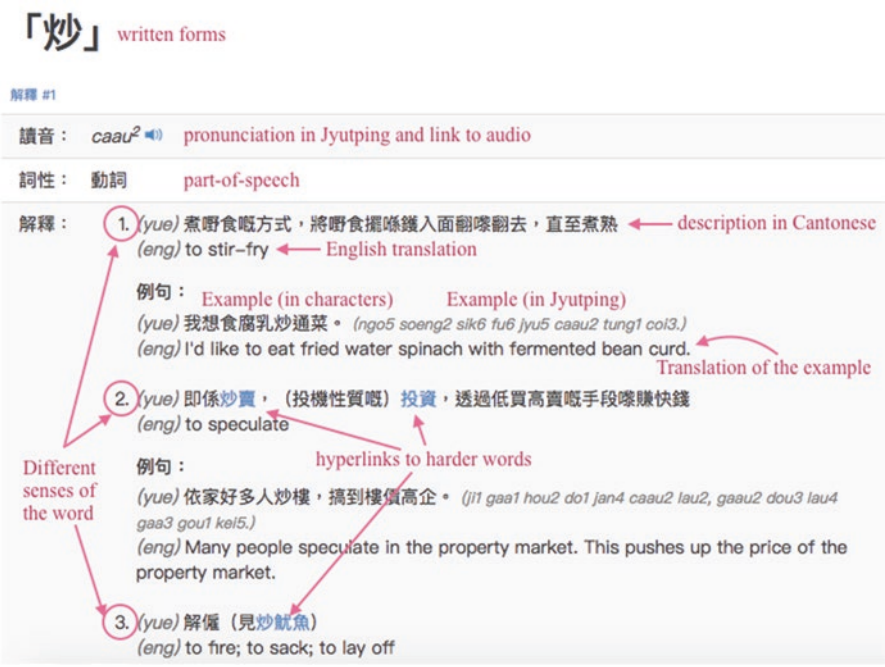


**Fig. 6.2** A sample dictionary entry (*caau2*, n.d.)

frequency-based criterion for written form inclusion, then we would have to include written forms that are clearly stemming from typographical mistakes, which can be fairly ubiquitous in real-life written texts. (This is exacerbated by the fact that there is practically no autocorrect for either Standard Written Chinese or Written Cantonese.) For Cantonese words that are not shared with Standard Written Chinese, written variants that are etymologically justified, or those found in historical sources or dictionaries, might have a frequency even lower than a common typo. For example, the character 準 (*zeon2*, 'accurate') is a common typo for the homophonic word 准 (*zeon2*, 'to allow'). Any dictionary editor will exclude the erroneous form without a blink. The line becomes less clear-cut when it comes to more colloquial words. The same also applies to pronunciation. The word 腳踝 (ankle) is listed as *goek3 waai5* in all existing sources, but the second character is often pronounced as *lo2* when speakers are forced to guess the pronunciation.

If we decide to include a less frequent written form for certain words as an 'accepted form' but reject certain more frequent written forms as 'typos', then we cannot claim to be truly descriptive. However, if we want to be as descriptive as possible and draw a clear line using certain statistical criteria, then the data will be contaminated by typos that are frequent but not accepted by the majority of the educated class. This latter stance is clearly unfavourable by considering a hypothetical English dictionary that lists 'your' as 'a variant of you're, the contraction of you

are' on a pure frequentist ground that the misspelt 'your' is more frequently used than the rare spelling 'gaol' for the word 'jail'.

A sensible decision would be to include only widely accepted forms for less frequent words and accept a written form or pronunciation only if the form is used consciously by the user. Pronunciation that resulted from reading pronunciation[16] or typographical errors, despite their high frequencies, should be considered 'noise' to the data. Unjustified or invented written forms or pronunciations should only be accepted when consensus has yet to be reached.[17]

### *Lack of Consistency Across Entries*

Entries that are perceived to fall under the same category, e.g. nouns for animal names, specialised medical terms, gambling jargon, four-character idioms, idiomatic expressions, etc., will quite likely be drafted and edited by different editors. Due to the bottom-up nature of the compilation, it is very likely that these entries will look quite different, information-wise, and stylistic, if compared with each other. The interim solution is to ensure all entries, if looked at in an isolated way, contain all required information and are stylistically acceptable. Consistency across entries is a nice-to-have feature, but we do not consider that important for now. Ideally if the project further grows and receives more resources, we can assign certain entries of the same nature to the same editor for a consistency check, but this is not our first priority.

### *Repetition*

Also an implication of the compilation method, certain information will be repeated in multiple entries. For example, two synonyms may be edited by two or more editors, resulting in two words with similar meaning having descriptions in different wordings. These potential issues are often raised by editors and users. Although they will not undermine the usefulness of the dictionary and therefore are receiving less attention, the team understands that a reasonable expectation by both users and editors would be (1) clear instruction on the descriptivism stance, (2) consistency across entries, and (3) avoidance of repetition. As long as it does not go against our core methodology, we will make improvements on these aspects when resources are available.

[16] That is, when the speaker is forced to guess the pronunciation of a word or required to write out certain spoken words with which they are unfamiliar.

[17] Despite the fact that Cantonese orthography or pronunciation is not officially regulated or standardised by any institutional bodies, elements that are shared between Cantonese and Standard Written Chinese are standardised and well-documented.

## Discussion

As the project progressed, the team realised that compilation work could not be just a simple collection of language data, and we realise how the project should not be conceived of a typical archival project. Guidelines and procedures were needed in order to generate required content for the project. From the design of the data structure to the actual implementation, every single step calls for careful philosophical consideration. The methodology, as outlined in the two previous sections, is the summation of our solutions we faced in the due course. The descriptions in the sections 'Strategies' and 'Potential Issues' are outlined in a way to highlight the difference between traditional and online lexicography, and in fact they also touch on two questions related to digital humanities in general, namely, objectivity and value.

Digital humanities projects may give the public a false perception of objectivity since it is easy to generate statistics about a given set of data. This is not the goal of our project. Unlike an archive that is designed to be balanced or exhaustive, our team made it explicit that data from *words.hk* were not designed this way and hence unsuitable for statistical analysis. With a dictionary that contains millions of characters in a computer-friendly format, it is tempting to assume that the dictionary is a fair representation of the spoken language. One can easily think of measures that may have significant theoretical implications, such as a comparison of lexical similarity between two related languages, using one dictionary from each language and find out the ratio of cognates. This may seem to be an objective measure (as it is quantifiable), but the result is highly affected by the compilation standard of the two dictionaries. Other statistics such as word or token frequency, entry length, etc. are also more linked to compilation methods than lexical properties of the language. Our stance is to discourage the use of text-mining techniques on our data, as this will inevitably lead to misrepresentation of the language.

Even if we assume that the numbers that we collect are accurate, as Rieder and Röhle (2012, p.73) have pointed out that the search for objectivity does not necessarily "guarantee a higher epistemological status of the results". This is an accurate description of this dictionary project. Not only that numbers generated from the data are prone to all kinds of error, the act of interpreting these numbers, in many cases, do not enhance our understanding of a language. Our project is a case that shows how digital archives do not always need to cater for these purposes.

Despite our compilation philosophy that discourages quantitative analysis, the guiding principles described in the section 'Strategies' in fact serve to improve objectivity in the process of dictionary compilation. The usage over etymology principle frees editors from judging validity based on limited written source, so that they can concentrate on grammaticality judgement. The avoiding decision problem principle is a move to acknowledge the limit of objective decision. By reducing classification, such as whether a word is archaic or not, correctness of less common usage, etc., certain types of quantitative analysis would be made impossible, which can in turn improve objectivity.

In addition, the project is not just a text archive of existing dictionaries. Cantonese description and translation are newly written by the editors; the selection of the content and example sentences is also a new content. The compilation involves processing of natural language materials found online and in existing dictionaries by native speakers and converting the information into text-based entries. It should be seen as a way to actively encode native linguistic information in a guided way. Similar attempts of encoding have also been done in other projects. Chin's (2018) (Chap. 5 of this volume) Cantonese corpus, for example, added multimodal information, as perceived by native speakers, to movie dialogues. This is a content-generation process that is value adding and can stimulate further research.

Dictionary projects in general should not be viewed as just another convenient resource of natural language data for text-mining or statistical analysis. The *words.hk* project shows that the compilation process, the architecture together with the content, is in itself a valuable and innovative way to preserve human knowledge.

## Concluding Remarks

Returning to the questions raised in the introduction section, the *words.hk* project was started amidst an unprecedented growing use of Written Cantonese. The editing process is at the same time a content-generation process, so by expanding the definitions and examples, we are also producing more materials to the Written Cantonese repertoire (Q1). An entry is reviewed by multiple editors before it gets published by an experienced editor, and volunteer editors, interns, and readers are encouraged to report errors. We believe that this approach will provide us with higher accuracies of dictionary definitions (Q2). We understand that most dictionaries are viewed as language authorities, but given the nature of the ongoing 'social standardisation' of the language, it is unwise to be 'the authority' when variations are put to test every day. We do not intend to use the project as a form of standardisation.[18] This stance is also consistent with our core driving principles (usage over etymology and decision problem avoidance) and helps us remain as the 'humble documenter' of the language, focussing on 'describing the language' rather than making decisions or taking up the role of the 'authority' (Q3).

Since we started, we have encountered vast numbers of word lists and resources that have never been published: copyrighted works that are valuable but unusable due to legal issues and valuable resources that would be best put together yet remained untouched in libraries. It is just a matter of time that open-source Cantonese resources will catch up. This is the question we need to ask all Cantonese

[18] Cantonese *Wikipedia* used to have a set of standard characters, and they are no longer in use. Since there is a large community of Written Cantonese speakers, as well as publications using Written Cantonese, a socially emerged standardisation is taking place, and a rigid top-down standardisation seems unnecessary.

researchers and lexicographers: should we say goodbye to the old 'proprietary' age, where we hold onto our data like closely guarded secrets or instead adopt a more open approach, to create a better future for our language?

We have seen a similar movement in the online knowledge space: the shift from traditional encyclopaedia like *Encyclopaedia Britannica* or *Encarta* to 'open-to-all' *Wikipedia*. In order to progress in the digital age, we need to allow users to generate content, accept that there is no single authority, and focus on building things with richer, multidimensional content instead of merely answering yes-no questions and shoehorning data into inflexible categories.

This essay documents the principles and experience of the building of our dictionary project *words.hk*. This is also an example of digital humanities projects that require contribution from a large user base. The prerequisite for these projects is not just a system that allows focussed individuals to put together existing resources but also adequate principles and strategies, which have been discussed in detail. Hopefully the team's attempt will encourage future digital humanities endeavours in language content generation and aggregation for lexical resources, especially projects written in Cantonese and for Cantonese users.

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# Part III
# Teaching on Digital Humanities

# Chapter 7
# An Exploration of Design Principles to Enhance Students' L2 Acquisition in a Flipped Class


**Helena Hing-wa Sit and Sijia Guo**

**Abstract** Research has shown that the flipped classroom approach enhances student learning by creating a more interactive and dynamic environment which offers greater flexibility in terms of time, location, and pace of study. Different from the traditional pattern of teaching, students can access teaching and learning content through online interactive activities prior to class and prepare themselves for desired tasks. However, few studies have been undertaken to investigate its impact on student learning outcomes in second language acquisition. Traditional models of Chinese language teacher education generally focus on knowledge-based transmission such as second language learning and acquisition. Nevertheless, recent research has demonstrated that teaching a second language should be context-based. In most Australian universities, language units other than Chinese (e.g. Japanese, French, and German) are currently offered online. To bridge this gap, a set of audio-visual materials were designed and developed to help students flip the classroom as part of a pilot study that adopted a functional model of language teaching. This current study expanded upon the preliminary body of work and investigated second language (L2) learners' use of captions while watching videos in Chinese and its impact on expected learning outcomes. Both quantitative and qualitative research methods were employed to gain students' perceptions of (a) how the captioned videos affected their second language acquisition in their undergraduate Chinese language units and (b) their learning experiences in a flipped class. The research findings provide a theoretical and practical framework for the design of a teaching model for language teachers other than Chinese, one that supports the development of dynamic activities, enhances interaction, and enables flipped learning in the classroom. The results shed light on this current trend in teacher education, promoting the application of innovative pedagogical practices using technology in the digital era.

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## The Context of the Study

Australian universities have been offering modern language studies to a diverse population of students. These studies explore the role of languages in the creation and representation of cultural identities and examine their impact on linguistic and literary products in social life (Department of International Studies 2017). Here, diverse student background is represented by international students, migrants, as well as local students born and raised in Australia. Since 2001, the Asian Studies Association of Australia (ASAA) has reported that enrolments in Asian languages, such as Chinese, Indonesian, Japanese, and Arabic, have been high in Australian institutions (McLaren 2011). In particular, Mandarin Chinese was reported as one of the priority Asian languages in the Australian Asian Century White Paper in 2012 and identified as a must-have language for learners from kindergarten to university within and beyond the Asia-Pacific region (Wang et al. 2013). Consequently, there has been an increase in demand for services in Australia that teach Chinese as a second or foreign language (CSL/CFL). Currently there are two typical student cohorts, namely, heritage and non-heritage learners sitting in a Chinese language classroom in Australian institutions.

Higher education is often a time of transition where students' prior educational experiences can influence their learning. Within the higher education sector, universities, as the key service providers, operate in an increasingly internationalised, hostile environment. For example, diverse, busy students are keen to brand-switch between classes and universities; demanding employers expect to hire graduates who have well-developed employability skills and intercultural capabilities; and university teaching staff face a complexity of changes while surfing the wave of Australian education internationalisation and technology innovation in teaching and learning. Therefore, how innovative learning approaches can be implemented to align with stakeholders has become of great concern (Sit and Meshram 2016). To attract more global students and provide them with more dynamic learning experiences, flexible and blended learning approaches (i.e. part face-to-face and part online) have been highly recommended in the redesign of units to enable blended delivery of coursework in most Australian universities (Hampel 2012; Kozar 2015). In recent years, flipping the classroom, which inverts traditional teaching by delivering lectures/instructions online and moving activities/interactions into the classroom, has become a popular idea. Research supports that this is an innovative pedagogical approach and its associated teaching activities can bring digital humanities into the classroom (Bergmann and Sams 2012; Hall 2015). However, the effectiveness of these shifts in the delivery model and the basic principles of such an approach in creating a high-quality blended learning experience in the field of second language education needs to be addressed and evaluated.

## Literature Review

Recent research has shown that the flipped classroom approach can enhance student learning by creating a more interactive and dynamic classroom and by providing increased flexibility in terms of time, location, and pace of study (Berrett 2012; Smallhorn 2017). There is a widely held view that a flipped classroom model can encourage active learning and engage students in meaningful discussions. For instance, Smallhorn (2017) defines the concept of a flipped classroom as a pedagogical model that encourages students to prepare and engage with the typical lecture-based material outside the class in the forms of videos, readings, recorded lectures, and so on. Different from the traditional pattern of teaching, students can access teaching content or key concepts through online interactive videos and activities prior to class and prepare themselves for group/collaborative discussions that clarify concepts and contextualised knowledge through application and discourse analysis at their own pace (Berrett 2012; Karanicolas and Snelling 2010). In general, this model supports an idea that traditional/face-to-face lecture and student-assigned homework can be reversed.

Although research has explored the design and efficacy of learning activities used in the flipped approach (McLaughlin et al. 2014), Karanicolas et al. (2016) claim that there is limited published evidence available demonstrating the impact of this model on student engagement and success. Translating the flipped classroom concept into practice in a recent study, they evaluated student-flipped learning effectiveness across a wide range of first-year health science courses by examining students' preferences for a variety of learning activities, as well as their learning motivations and strategies in three Australian universities (Karanicolas et al. 2016). Their findings have significance for the development of resources that help teachers design flipped classroom activities effectively to facilitate student learning. Nevertheless, limited studies have been undertaken to investigate how the flipped approach affects student learning outcomes in second language (L2) acquisition. Hence, this current study explores how flipped classrooms enhanced students' second language learning outcomes through effective teaching practice. In this case study, the use of a flexible, flipped pedagogical approach and design in a Mandarin Chinese language course, a common subject in modern language studies and international studies, is presented and discussed.

As the most widely spoken language in the world, Chinese has been taught in Australian schools since the 1950s (Government of Western Australia School Curriculum and Standard Authority 2015). China is Australia's biggest trading partner. The 2016 free trade agreement directly links Australian expertise with China's exploding middle class and is all about job opportunities for Australian graduates. For instance, Wang et al. (2013), on summarising the regional implications of and strategic considerations for resourcing with regard to CSL/CFL, have noted the popular trend of learning Chinese. It is estimated that over 100 million global learners are learning Chinese as a second or foreign language (Wang et al. 2013). Orton (2016) also points out that "as China's role in Australian's economic and strategic

future continues to grow, there is a need for a deeper capacity to engage with it on a linguistic and cultural level playing field…. It's time for a serious stocktake" (2016). Though it is hard to predict the outcomes of this stocktake as promoted by Orton, the need to stimulate investment in Chinese language education programmes is highlighted. Meanwhile examining how the Chinese curriculum design and development are inspiring to L2 learners is also of interest to the authors of this chapter.

Nevertheless, due to its unique orthography and pronunciation system, notwithstanding its tones and traditional and simplified characters, Chinese is considered a difficult language to learn by most Western learners. Welles (2004) has found that many universities are overwhelmingly shifting from face-to-face teaching modes to online foreign language course delivery because of students' increased interest in L2 learning. For example, in most Australian institutions, courses are largely implemented in hybrid or blended learning modes including both in-class course instruction and independent online delivery for L2 courses via learning management systems (Chenoweth et al. 2006; Scida and Saury 2006). However, the reality as revealed in this Australian urban university where the current study was conducted is that all the language units (e.g. French, Japanese, German, Spanish, etc.) are turning to online offerings except for Chinese. To bridge this gap, a set of audio-visual materials including captioned videos were designed and developed to help students flip the Chinese classroom by adopting a functional model of language teaching in the previous project (Guo and Möllering 2016, 2017). This current study is an extension project that aimed to evaluate the effects of these captioned videos on learners' second language acquisition in undergraduate Chinese language units and the learning experiences of students in a flipped class.

Captioned videos were originally developed as an aid to hearing-impaired individuals in the early 1970s (Taylor 2005). Research into captioning's usefulness as a tool for second language (L2) learning began in the early 1980s. A spectrum of studies has shown that it helps learners connect auditory to visual input, which may aid form-meaning mapping—a key process contributing to second language acquisition (SLA). Moreover, many scholars find that it helps to improve L2 listening, reading comprehension skills (Danan 2004; Markham and Peter 2003), and vocabulary acquisition. Winke et al. (2010) support the use of captioned videos, which can be implemented in online, hybrid, and blended-instruction courses, as a good resource for presenting native speaker voices, particularly for less-commonly taught languages, such as Arabic and Chinese, with non-Latin scripts. In general, most Australian institutions are implementing online foreign language courses via learning management systems (e.g. Blackboard, Moodle, and now MOOCs). Captioned videos, which incorporate native speakers' presence and voices, have become an effective resource supporting the online teaching platform. Complementarily, the practice has pedagogical potential with regard to Chinese character recognition.

Even though numerous studies have contributed to the literature on how to effectively use audio-visual materials in the form of captioned videos to enhance students' L2 acquisition skills, limited published research evidence as studies have been concerned about whether digital material/resource development is context-based and/or relevant to the learners when acquiring that language. Christie (2012),

on addressing the essential elements that should be considered when examining language and literacy in the twenty-first century, points out that there is still a lack of teachers' awareness regarding multimodal texts including those nontraditional texts/materials developed by digital technologies that should be context-based for a richer development that could move forwards. Hence, the aim of this current study was to investigate pedagogical theories and principles for the design and development of audio-visual materials that help facilitate a successful flipped classroom.

## Theoretical Framework

The project was an extension of the pilot study *Developing Online Capacity in Introductory Chinese Language Units* in which a variety of sample interactive activities using audio-visual materials for learning and teaching purposes were produced and trialled (Guo and Möllering 2016, 2017). Informal feedback from the pilot study—integrating these interactive learning activities for the units—were positive and supported the view that this approach was integral to enhancing student language proficiency and class engagement. The pilot study was successful as it enabled an innovative learning and teaching approach to improve student engagement and assessment tasks in Chinese. To further implement the digital teaching and learning materials (21 video clips) and establish a learning database that students could access, additional funding in the form of a university extension grant enabled the authors to undertake the current study. This allowed further examination of the effects of the captioned videos on learners' Chinese language acquisition in their undergraduate Chinese language units and their experience in a flipped class. The project rationale was to encourage students to engage in unit materials and assessment tasks. It was expected that the study would provide more creative, comprehensive teaching and learning resources for both on-campus and distance students to learn and practise Chinese. We anticipated that the use of audio-visual products would also contribute to learners' development of language skills.

A functional model of language teaching and learning, as proposed within the context of systemic functional linguistics (SFL) (e.g. Christie and Martin 1997, Christie 2012; Martin 1999; Rothery and Stenglin 1994), was also reviewed in this extension study. This was undertaken as these studies have contributed to current understandings of how the determining role ideology plays in the construction of meaning in a language, as shown in Fig. 7.1.

Figure 7.1 represents how the process of teaching and learning a genre writing can be conducted through the three stages of genre-based pedagogy as proposed by Martin (1999): (a) the deconstruction stage in which a text structure is shown and analysed by teachers, a certain social convention is discussed, and linguistic features are explained, (b) the joint construction stage in which students are encouraged to construct a text together, and (c) the independent construction stage in which learners produce his/her own texts. These cyclic strategic phases of teaching and learning writing through a genre-based pedagogical model are commonly used

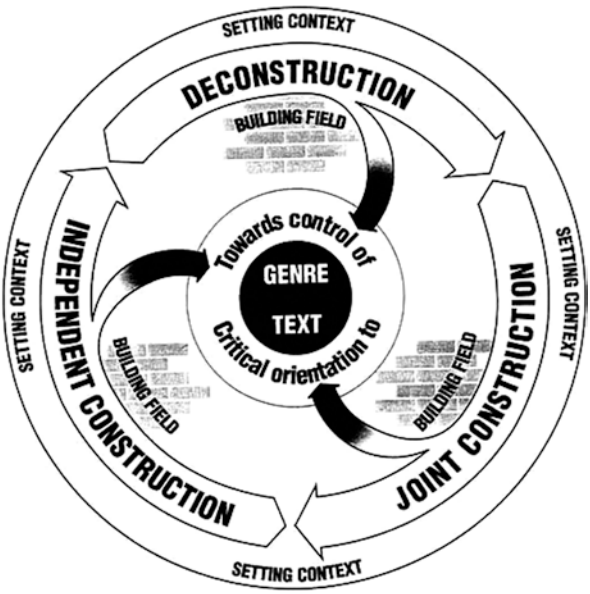


**Fig. 7.1** The genre pedagogy cycle (Rothery and Stenglin 1994, as cited in Martin 1999)

in Australia to help students develop their writing skills of genres/text types (e.g. narrative recount, descriptive report, explanation, and analytical exposition).

In this case study, this genre-based teaching and learning cycle was adopted as the theoretical framework to examine its effectiveness in developing students' overall Chinese language skills. This is because this model not only explains how to scaffold students' genre writing but also overtly places importance on setting the context of constructing a certain text type as the initial stage and the role of modelling in deconstruction.

This effective language teaching and learning cycle encourages teachers to set the context for learners to build on what they have already learned and to develop their filed knowledge and cultural context. Traditional pedagogical models of CSL/CFL language teacher education generally focus on knowledge-based transmission. A knowledge-based framework usually contains elements to attain, such as second language acquisition, theories of language learning and teaching, and so on. Nevertheless, it is argued that the social-cultural context of language learning is equally important and, as such, teaching a second language should be context-based (Christie and Martin 1997; Hyland 2003). Dirgeyasa (2016), who also considers genre as "a matter of communication event by social context" (p. 48), argues that class learning activities should "match with students' needs and market needs where they will work later" (p. 48). Thus, deconstruction using a modelling session is necessary to guide students as they examine the language functions as communication, learning activity's social purpose, structure, and linguistic features.

Despite the fact that the model is helpful for English language teaching and improving students' writing capabilities at both primary and secondary levels (Christie 2012; Martin 1999; Dirgeyasa 2016), there is limited evidence available to

suggest that such a pedagogical model can also be applied to Chinese language teaching and learning at the tertiary level in Australia. Hence, this study attempts to fill this gap by exploring how this model facilitates students' Chinese language acquisition.

## Research Method and Data Collection

This study was carried out in the Department of International Studies at an Australian institution. Both quantitative and qualitative research methods were employed to gain students' perceptions of how the captioned videos affected their second language acquisition in undergraduate Chinese language units and their learning experiences in a flipped class through the abovementioned cyclic strategic phases. The data collection techniques involved a quantitative survey and qualitative focus group interviews. Group dynamics can stimulate students to openly discuss and generate critical thinking about a topic. Focusing on general group interactions can also be useful for obtaining sound information about both personal and group feelings and opinions (Fern 2001). All students enrolled in the Chinese undergraduate language programmes *Introductory Chinese for Non-heritage Learners I and II* and *Chinese for Heritage Learners I and II* were invited to participate. This number was sufficient to provide initial data information required for further analysis. The study consisted of three phases, which were implemented to achieve the expected study outcomes (see Table 7.1).

A quasi-experimental design was adopted for the study. At phase 1, three modes of captions including full, annotated keywords, and non-captions were proposed to investigate their impact on beginning learners of Chinese in the two elementary units. At phase 2, the anonymous post-session questionnaire link was made available on iLearn (Moodle) for the participants to access and report their overall feelings and experiences regarding the use of captioning video in Chinese flipped

**Table 7.1** Research development

| Research plan | Purpose of each stage | Data collection |
|---|---|---|
| Phase 1<br>Proposed three modes of captions: full, annotated keyword, and non-captions | To investigate their contributions to the beginning learners of Chinese in the two units | 60 students participated and watched 5 videos with different types of captions in the tutorials in weeks 5, 7, 10, 11, and 12 |
| Phase 2<br>Survey | To understand students' overall feelings and experiences with the use of captioning video on Chinese language learning | 56 students were surveyed |
| Phase 3<br>Focus groups | To gauge students' in-depth viewpoints on the effectiveness of using captioning video in language learning | 4 focus groups (16 student volunteers) were conducted |

classroom learning following the last video view. During phase 3, those students who expressed interest in volunteering for the focus groups were then interviewed, thus providing their in-depth viewpoints on the effectiveness of using such digital learning activities in a genre-based language teaching and learning cycle.

In terms of data analysis, the survey data was calculated and compared between the three groups of participants. Due to the limited number of subjects, the quantitative survey did not provide significant data about differences in terms of gender, age, or socio-economic background but indeed demonstrated the major gaps of preference between these groups. The focus group transcripts were loaded into NVivo 9 (N9), a software programme that is commonly used to construct databases for textural data. The main questions were used as indicators for the initial coding. Each interview was entered as a separate text file. The analysis assisted in identifying connections between specific themes and gaps and discrepancies. In addition, the information was systematically arranged and sorted by theme and concept, from which preliminary categories emerged.

## Findings

### *Video Activity Design*

Of the 78 Chinese learners in the 2 elementary units invited to participate, 60 volunteered to watch 5 videos with different types of captions in weeks 4, 5, 8, 9, and 10 before attending the tutorials during the semester. Based on their tutorial streams, the participants were divided into three groups. Each of the groups that consisted of 20 students watched different versions of the video material twice, both times with full, annotated keywords, and non-captions (see Table 7.2).

The five situational conversation videos, produced as learning activities for students in the previous pilot study, were selected on the basis that they covered the typical genre/text type available in the Chinese textbook used for the units. Each video lasted for around 2–3 min. The video content was consistent with the language syllabus and textbook. An interesting and innovative point was that the context/scene for a genre type (i.e. family story, transportation enquiry, lifestyles and hobbies, shopping and dining, sports, etc.) was set up and presented in each video. Through this study, the set context included locations surrounding the university, places with which the students were already acquainted (e.g. the library, classrooms, train/bus stations, shopping centres, student hub/cafeteria, restaurants, etc.).

**Table 7.2** Video watching in groups

| Viewing | Group 1 ($n$ = 20) | Group 2 ($n$ = 20) | Group 3 ($n$ = 20) |
|---|---|---|---|
| First | Full | Annotated keywords | Non-captioned |
| Second | Annotated keywords | Annotated keywords | Annotated keywords |

### *Survey Results*

Of the 78 students who were invited to participate, 56 completed the online survey immediately after watching their last video, making the overall response rate of 71.8%. Part 1 of the survey was designed to collect participants' demographic information. Results indicated that 42 of the students were non-heritage Chinese learners while 14 were heritage learners; 65% were Australian local students, with the remaining 35% from the UK, New Zealand, Russia, China, Korea, Japan, Indonesia, Vietnam, Thailand, and Cambodia; and, with regard to the duration of learning Chinese as second or foreign language, 88% of the students had learned Chinese within 6 months while only 3 had learned Chinese for over 12 months.

Questions in part 2 were designed as selected-response items on a 5-point Likert scale ("strongly agree" to "strongly disagree"). The participants were required to indicate the level of agreement about the impact of captioned videos on Chinese flipped classroom learning. Key results are presented below (Fig. 7.2) with the caveat that they were based on a small sample size.

As shown in Fig. 7.2, when asked about their general feelings regarding the use of captioned videos in Chinese learning, more than half of the participants (84%) from Group 1 agreed that watching full captioned or keywords with Pinyin, English, or Chinese characters helped them learn Chinese language, while 68% of participants from Group 2 strongly felt that watching captioned videos with annotated keywords would be the only effective way to help them learn Chinese. In comparison, only a small proportion of participants (36%) from Group 3 found non-captioned videos useful, whilst the rest responded that what prevented them from understanding the video were "new words without English meaning". At the same

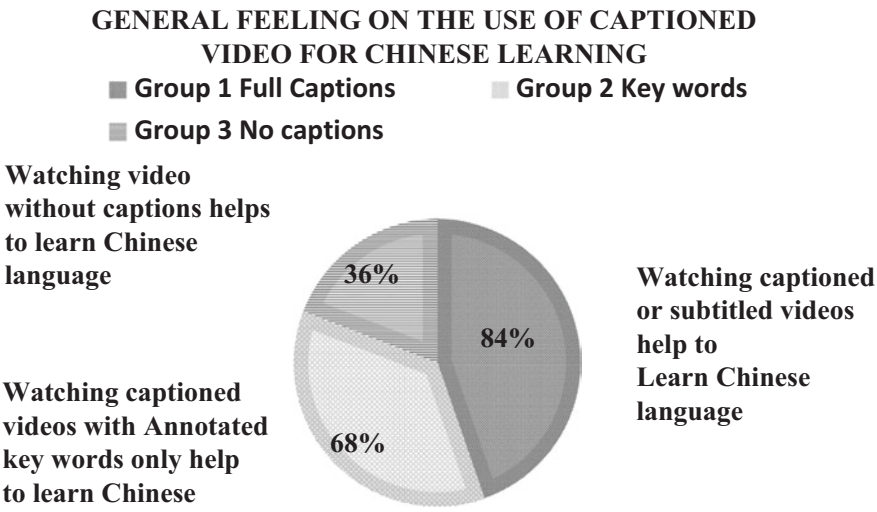


**Fig. 7.2** Participants' perceptions regarding the use of captioned video in Chinese learning

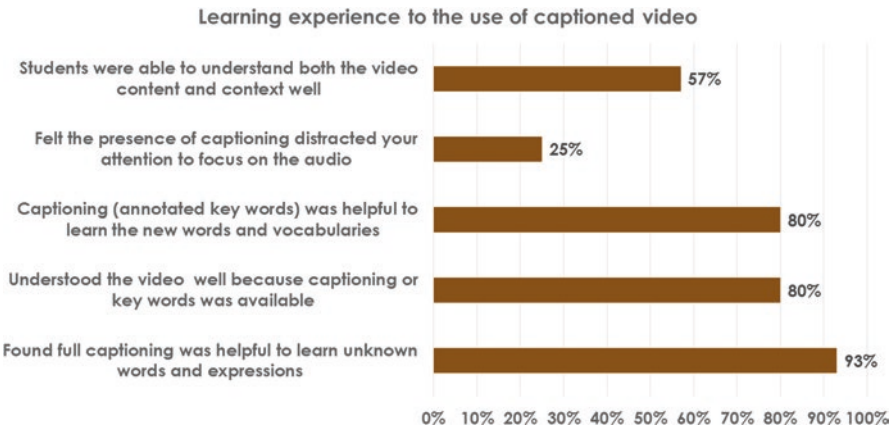


**Fig. 7.3** Participants' experience with the use of captioned video in Chinese learning

time, most of the first two groups of students (82%), when asked what helped them the most in understanding the video, responded to this open-ended survey question that they felt greatly helped by "captions, captioned-key-word-with-translation, and context/environment/setting". Some reported that what they found most helpful was "body language and what [was] happening in [the] video", having "the video [put] dialogue into context" and that it was "good, relevant to our context". Likewise, group 3 also reported that what helped them the most to learn Chinese were "captioned keyword[s], subtitles and annotations, and putting [these] into the real situation by using what we have learnt in class". These results imply that the majority preferred to watch videos with captions and annotated keywords and that, in particular, they mostly enjoyed learning Chinese in the setting context in which what they had learnt in class was transferred into their real lives.

On the other hand, the participants also responded to what degree they favoured their learning experiences to the use of captioned videos in the flipped class (see Fig. 7.3). Echoing the results explained above, 93% participants found that full captioning was the most beneficial way to learn new words and vocabularies. 80% participants indicated a positive attitude towards the use of captioned keywords and full-captioned videos. A few felt the presence of captioning distracted their attention to the video, which affected their overall understanding. Other general comments included the following: "the pace of conversation could be slower", "keyword/phrases go too quickly to follow", "unknown words and phrases", and "lack of word translation". Overall, most of them felt it was a wonderful learning experience and a very interactive session as it featured everyday situations.

## *Interview Results*

The primary focus of the interview was to explore students' perceptions of using captioned videos on their language acquisition and how these activates enhanced their learning experience in a flipped class. Four focus groups of 16 participants (each group comprising of 4 students), who were enrolled in their first year of undergraduate elementary Chinese units, volunteered for the interview. These groups, which consisted of eight heritage learners and eight non-heritage students of Chinese background, studied in a range of disciplines, such as accounting, business, linguistics, law, economics, and communications, at this university. Among the participants, 10 were male and 6 were female. Each focus group interview lasted for approximately one hour and was digitally recorded, transcribed verbatim, and then sent to the participants for verification.

Four areas of interest emerged from the analysis of the transcripts:

1. Theme I: general flipped learning experience with watching the videos (answering core question: What is your general experience with watching the video?)
2. Theme II: language comprehension enhanced by the captioned videos (answering core question: How has the captioned video influenced your Chinese learning in a flipped class?)
3. Theme III: students' understanding of the language context through these learning activities (answering core question: How has the teaching and learning cycle enhanced your Chinese learning?)
4. Theme IV: suggestions for future improvement (answering core question: What improvements should the course make in the future to implement the design and delivery of Chinese language lessons?)

These findings are presented in detail in the following sections.

### General Flipped Learning Experience with Watching the Videos

The question "What is your general experience with watching the video?" encouraged the students to discuss the impact these videos had on their flipped learning experience. It was expected that responses to this question would assist in understanding whether the interviewees enjoyed the flipped class approach, the captioned videos involved in their learning activates, and the effectiveness for enhancing their language skills. In general, feedback on students' learning experiences was positive. Most interviewees ($n$ = 14) indicated that they had been introduced to this new model and approach to learning Chinese, as demonstrated by the following comments:

*I thought this flipped class experience by watching the videos was pretty unique and as far as having questions asked ... I thought it was a more refreshing way to be tested on things…* (Interviewee 3)

*It helps. Mostly it helps me with, there are two things, mostly the context like watching the people, the teachers and fellows acting out, and you can get the meaning. You know, "oh, that's what the word means." I find captions a lot easier. Captions help a lot just because you see action…* (Interviewee 6)

Some students ($n = 8$) expressed interest in participating in this kind of experiential learning because the actors/actresses were known to them and the teachers' video transcript was helpful for learning conversations beyond the textbook. In addition, they anticipated that doing activities online would in the future become a trend in the mode of class delivery, as reflected by the participants below:

*From learning in the textbook, you don't pick up the conversational stuff that you would say to people. Doing these kinds of videos [and] exercises where you are actually watching people especially the ones you know have conversations is better than just learning from the textbook for me, for an outside person who's got no experience.* (Interviewee 8)

*We end up looking it [teaching materials] online.* (Interviewee 12)

## Language Comprehension Enhanced by the Captioning Videos

Apart from the positive impact that the flipped approach had on interviewees' learning experiences, perceptions of whether the captioning video influenced their Chinese language comprehension were also reported. There were three controlled groups who watched three modes of videos. The following quotes indicate mixed views on the use of these modes. Most of the participants ($n = 10$) who had watched the videos with both full captions and annotated keywords found it useful to acquire language:

*It's really good. Especially the ones that give questions and sometimes the answers are given, highlighted…. Sometimes when you're lost, it gives you a right hint. I reckon the caption helps out a lot.* (Interviewee 10)

*I prefer the ones with subtitles. With the subtitles, especially with the new words being subtitled in the videos, makes it easier to understand the new words and vocabularies, and also helpful for listening and reading comprehensions.* (Interviewee 5)

Unlike the majority of the viewpoints shown above, two participants with more Chinese learning experience held a different response to the use of captions or keywords, which they felt were distracting to some extent. Rather, they indicated their preference for taking on more challenges and learning, for example, by using only some keywords or half captions:

*Full captions is always the easiest but I didn't mind the challenge of just some keywords because if it's full captions, then everybody just reads everything and they don't pay attention to what's going on. With captions, you look at it but then there're not enough captions, so you still have to pay attention to the video. When you watch anything in subtitles, you just end up reading all the subtitles. Half captions was good. It was challenging but it was good.* (Interviewee 2)

In contrast, those ($n$ = 5) who had watched non-captions for the first time expressed that they understood the video text better when the keywords appeared the second time. They also thought that if they could choose, they would prefer to watch the keywords twice, as commented by the following students:

> *I would say obviously with subtitles was better. When I watched the first time, I didn't really understand much at all and then the second time is very much easier with the keywords and stuff.* (Interviewee 16)

> *If I had a choice, I would probably watch the keywords one more [time]. I'd maybe watch the first one and then go through the keyword one a few times, just because it's a bit easier when you have the keywords.* (Interviewee 13)

> *[Having] keyword[s] is definitely better than without.* (Interviewee 11)

Regarding students' language skills, all the interviewees shared their feelings and thoughts. About two-thirds of them indicated that their language skills, such as listening, reading, and speaking, were improved after the five video sessions. Apart from that, their learned words and vocabularies were added:

> *I believe it has improved my listening comprehension because, as I said, in class we are not used to speaking in fast pace. By being able to have the caption, and looking and trying to understand… I reckon it's better. Listening-wise, I reckon I understood more. Over each week, I've been able to pick up more words quicker. Whereas, sometimes in class we don't do that and dictation's just one word.* (Interviewee 1)

> *I am not too great at anything, but I reckon my best out of those would probably be reading at the moment.* (Interviewee 15)

> *I think it has [improved]. And the one thing I got out of the videos, was how to put the words together in a sentence. Sometimes when you want to make basic sentences, you might leave out some words, but when you watch the videos and you think about longer sentences, then you add more things to the vocabulary…. I thought it was useful for vocabulary.* (Interviewee 12)

> *I would say for speaking, it definitely helps because you see that structure and then you talk with someone, like introduce yourself—it helps.…That goes back to the longer sentences. We would add things to the end and stuff to make it more natural.* (Interviewee 4)

### Students' Understanding of the Language Context

In response to the question "How has this teaching and learning cycle enhanced your Chinese learning?" all the participants overwhelmingly reported that the context settings in each video contributed to their greater understandings of the language context in which similar communication of a genre would occur in an everyday life situation.

> *Each week we do a chapter [of the textbook]. Then, the video is based on that chapter. It gives you a better understanding of how people would use that conversation in a real-life situation. Then, you can understand better when to use what words in what text type, such as ask[ing] for ... direction[s], buying a train ticket…* (Interviewee 7)

In particular, one heritage learner reflected that the setting of the language context enriched their Chinese learning experience and commented that it was an effective way for the learners to experience the real language context that few people would have the opportunity to do so in their daily lives.

> *The context helps a lot. What I mean is maybe you have family members who could speak Mandarin like mine do. I can ask my parents to have a conversation…Not everyone has the opportunity to go outside and actually listen to their surroundings and have that present in their life. You may just be able to listen to the Chinese when you're in class, and that's not a lot of exposure. It's not enough.* (Interviewee 9)

### Suggestions for Curriculum Design and Development

The participants expressed their positive impression of this learning experience, identified both strengths and weaknesses, and provided suggestions for our future curriculum design and development. In general, all of the students found the set of digital videos that were implemented in the cyclic strategic phases to be interesting, engaging, and inspiring and requested that more video sessions be developed to accommodate their needs. Two students also suggested alternative assessments for us to consider:

> *As far as suggestions, I think there could be more of them and more widely used…and then having the class summarized the video…. I thought they were good at applying the language. The textbook is good at teaching you but the videos were good to use to analyze a situation.* (Interviewee 10)

> *I thought they were good because when you're in a Chinese-speaking environment, obviously you have to listen to what people are saying, so the videos were good for that. The textbook you can read slowly and stuff but in real life, people don't talk slowly and there isn't [*sic*] subtitles and stuff. To hear people speak at [a] normal pace, it was a good learning exercise. It could be applied more.* (Interviewee 2)

Three students however felt that the speech pace was a weakness, noting that this could have been slower and also suggested that a modelling writing session be offered in the future:

> *I think we should focus more on learning to write, because that's the hardest thing.* (Interviewee 16)

> *Nothing negative. Just the native speakers usually speak too fast in the video.* (Interviewee 11)

## Discussion

Having reviewed the data from the survey and focus group interviews, some key principles for enhancing students' L2 acquisition in a flipped class emerged for an in-depth discussion. First, the study proved to be successful because leadership capacity was built into the development of the pedagogical approach and the

strategies supporting the use of a flipped classroom to promote students' engagement in class and facilitate their L2 acquisition. The universal value of this curriculum design and development should be effective and highly adaptable to all language teaching units other than Chinese. Particularly, the genre-based teaching and learning cycle was evaluated in this study as effective for scaffolding students' Chinese language acquisition in their undergraduate Chinese units.

A noteworthy point was that the setting context, which was relevant to students' daily life, gained greater popularity as the students were interested in familiarising themselves with the text type in their "special context". As noted by Pritchard (2015), authentic output and meaningful social communications are emphasised in contemporary language acquisition theories, and, as such, an essential aim of language learning should be to "promote understanding across cultural and linguistic groupings and enhance international mindedness" (p. 62). The students were then guided to learn how to achieve social communicative purpose by mastering commonly used vocabularies, linguist features, phrase and sentence structure, and speaking patterns through modelling and by deconstructing the text. After the demonstration session, they were encouraged to jointly construct a text/conversation by using pro forma and model. This was paired with online/in-class activities so that the students could practise their listening, reading, and speaking skills. For the more proficient learners, they even extended the task and, in groups, filmed a new word writing process and uploaded them on iLearn to share with their peers. Finally, students worked independently by utilising the learnt knowledge from the previous learning cycle.

Second, in addition to the effective pedagogical model embedded in the learning activities, the study also provided more than anecdotal evidence supporting the rationale that informed this innovative curriculum design. The variety of video products developed were viewed as helpful learning and teaching activities that guided students in their learning and enhanced their understanding through engagement with a spectrum of authentic language materials. In short, it was beneficial for the students to learn Chinese through the "fresh" situational dialogue made by their lecturers and peers who had volunteered. Despite the claim that the flipped class is an interesting and flexible approach to engage students to learn at their own pace, the question remains whether the use of flipped activities is interactive and authentic enough for language learners to understand the text type in a certain context. The overall positive feedback that we used more authentic scenarios and the topics that were highly relevant to their daily life provided confirming evidence that the innovative design of teaching materials and the application of the teaching and learning cycle had an impact on these students' Chinese learning. As Hall (2015) concludes, teaching practices that involve digital humanities in class would also help students to develop their collaborative working capacities, critical thinking skills, understanding of the importance of narrative, and visual communication through using the new media.

Meanwhile, the "actors/actresses" in the videos, which included native speakers of Chinese, fellow students, and the teachers, like the authors themselves, were more appealing to the students who were therefore more engaged when watching

the videos. This experiential learning element was helpful in motivating and encouraging students to learn, demonstrating that "language is the essential condition of knowing, the process by which experience becomes knowledge" (Halliday 1993, p. 94). L2 experiential learning should encourage students to use L2 as a communicative tool more functionally when practising with native speakers and/or competent speakers of the target language. As previously noted by Pritchard (2015), L2 when acquired experientially can provide students with "a robust, context-reinforced scaffold of memorised perceptual cues" (p. 62), if produced within a culturally authentic setting. Moreover, this study's findings can be extended to other language units/programmes within the faculty and across the university to support and enhance other language study programmes and to ensure that nontraditional pedagogical approaches to language learning and teaching can be adopted and implemented effectively.

Third, the salient features of the teaching and learning material design emerged at the conclusion of this study. On the one hand, the five-stage teaching and learning cycle (see Fig. 7.4) was developed and implemented, namely, (1) lesson content introduction with identified aims, (2) specific learning context setting based on topic and text type (e.g. library, coffee shop, movie centre, opera house tour, etc.), (3) learning content demonstration/modelling presentation, (4) learning content practice and independent production, and (5) evaluation. Echoed by some studies (e.g. Tsung et al. 2009; Tomlinson 2011), teaching materials used in language teaching should empower students to experience from input to output process. Therefore, teaching materials should include communicative interactions that enable students to acquire L2 from the new input to learners' output in order to functionally use the

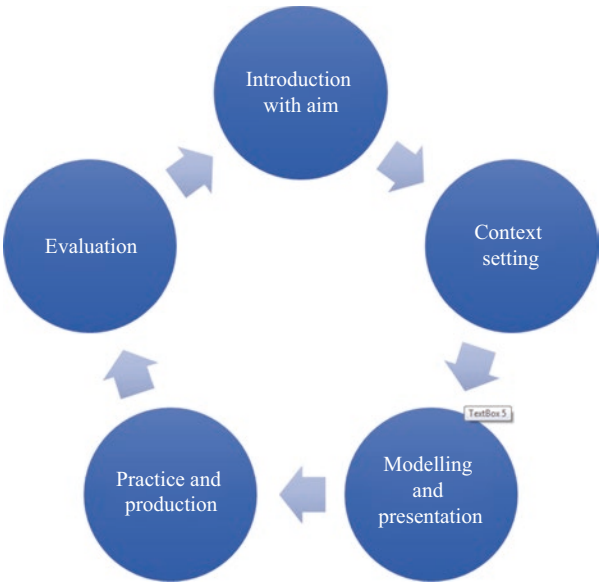


**Fig. 7.4** Stages of the learning and teaching cycle

informative source of input (Tomlinson 2010). As this study demonstrated, each video design focused on strengthening the students' general language skills (listening, speaking, reading, and writing). The students needed to listen to the content, imitate the designed dialogue in both groups and individually, learn to read, and finally learn to write.

On the other hand, genre-based teaching methodologies and materials strengthened the students' ability in Chinese word recognition, reading, and writing and thus their interest in listening. The teaching activities were developed based on genres/text types by means of oral or written forms of practice which enabled the students to master different kinds of texts. Students' reading and writing skills were fostered and enhanced because they needed to produce their own work after listening and speaking comprehension tasks. Based on the nature of the unit, the different texts such as narrative account and descriptive report were used to train students to express different texts. For instance, a video text required students to describe their hobbies and explain why they liked or disliked it.

Although writing and stroke order were reported by the students to be the most difficult of their learning experiences, this provided confirming evidence and supports earlier findings (Guo and Möllering 2016) that it is essential to provide students with visual assistance to facilitate their speaking and writing acquisitions because of the nature of Chinese orthography and its pronunciation system (whereby pronunciation cannot be deduced from spelling or writing). Thus, it would be more instructive for the teachers to add a modelling stroke-order session as another necessary complement not only for improving learners' listening and speaking skills but also for their Chinese character recognition. As encouraged by Tomlinson (2011), the material developers should be more aware of the need to design materials that contain both spoken and written texts which provide language experience being used and ensure that learners are exposed to sufficient learning samples.

Fourth, the media used in this study included video cameras, microphones, and YouTube. Students were able to access YouTube links via iLearn. There were different versions of videos available, such as full subtitles, keywords only, and annotated keywords with Pinyin, English, and Chinese characters, which catered to the needs of students at different levels. Regardless of the students' linguistic and cultural backgrounds, the majority favoured captioned videos that incorporated the presence and voices of native speakers and acknowledged that this was a set of resources which was effective in supporting the online teaching and learning platform. The study's findings were also consistent with those of Winke et al. (2010) who found that in comparison to the absence of captioned videos, the provision of captions was more inductive to language learning in terms of novel vocabulary recognition and overall comprehension. Watching videos with captions or with annotated or highlighted keywords or even unknown words indeed helped the students to understand how the words fit in different contexts.

Lastly, the study's results suggest that combining Chinese language with other popular disciplinary studies (e.g. business, mass communication, law, psychology, etc.) is attractive to many domestic and international students, which indicates a new trend of studying Chinese for a special purpose and aligns with the national

research priority goal that Australia's institutions and its teachers should enhance students' capacities to interpret and engage with its regional and global environment through a greater understanding of languages, societies, and cultures. In this study, graduates reported that their knowledge of Chinese was considered to be of great importance in a range of career pathways, for example, as representatives of companies in Asia, as teachers, or as academics specialising in the history or politics in China and so forth. Therefore, those wishing to use Chinese professionally after graduation are advised to combine the study of Chinese with various disciplines. Moreover, the project findings should provide an exemplary model of language studies for Australian universities and demonstrate the significance of blended learning in language curriculum design, delivery, evaluation, and implementation. Additionally, the study is aligned with the Australian Institution's Framing of Futures principle of transformative enquiry-based learning and supports the strategic goal of enhancing academic quality, the student learning experience, and student-focused teaching delivery. In this way, students' learning will be fostered in an encouraging and engaging way.

## Conclusion

This study was limited to the perspectives of a relatively small sample. More significant results could be achieved by conducting the study on a larger scale. Due to constraints of time and budget, our study focused only on the perspectives of students and did not include the perceptions of Australian academics. Further research with a greater number of students and academics would provide a more comprehensive picture of teaching learning experiences in a flipped class.

Despite these limitations, this study was significant as it explored diverse students' responses and perspectives on quality teaching and learning in Australian universities and how they reported their preferences for using the captioned videos as teaching materials/activities designed in the study. Further, it investigated the effect of captioned videos on learners' language acquisition in the hope of paving the way for online Chinese language programme development. In turn, it should be valuable for academics' teaching reflections on how to put theory into practice and plan into implementation so as to create possible useful strategies that accommodate the diverse learning needs of students in Australian universities in the twenty-first century.

From a pedagogical point of view, the research findings provide a theoretical and practical framework for the design of a teaching model for all language teachers other than Chinese to support their development of dynamic activities and flipped learning in the classroom. The idea of using digital humanities pedagogy, as an interdisciplinary field of scholarship and a hot topic in teacher education today, is to encourage teachers to position themselves at the intersections of humanities and computational technologies and investigate how digital methodologies can be applied to transform and enhance teaching in second language education. Through

this study, a Chinese learning database has also been established to allow peers to learn from one another. The results should shed light on current trends in teacher education, promoting the application of innovative pedagogical practices using technology in the digital era. The successful promotion of Chinese language teaching all over the world depends largely on the teachers who are capable of working independently and creatively in a multicultural environment. It is suggested that a deconstruction of existing theoretical frameworks is needed in order to establish a new path for the training of teachers of Chinese as a second language.

From a professional development angle, teaching Chinese specialisation is more and more popular due to the rise and influence of China as a regional leader in Asia. China's growing participation in and influence on world affairs will drive demand for language competency. This in turn will drive demand for highly skilled teachers with both knowledge of Mandarin as a language and knowledge of the pedagogical and linguistic skills that support the transfer of the language. It is timely and essential for language teachers to raise awareness of the need to equip ourselves with up-to-date knowledge on transforming learning with new technologies and any possible ways to teaching and learning.

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# Chapter 8
# Gaming Literacy and Its Pedagogical Implications


**Noble Po-kan Lo and Billy Cheuk-yuen Mok**

**Abstract** Traditionally, there is a dichotomy of spoken and written language facility, but a new kind of 'biliteracy' seems to have emerged, whereby there is now one way to write a language in the online medium and another to write it offline. Be that as it may, online literacy could also be a source of influence on the offline literacy, just as speech has affected written literacy. For instance, contraction is now found in the latter. One big area of online literacy is gaming literacy, which is the focus of this paper. The impact of gaming literacy and justification for this study can be indirectly seen in the revenue statistics of online gaming. While parents of some youngsters often complain that online games 'fracture' their children's language, this paper seeks to argue that gaming literacy not only is a creative development of language but also has its pedagogical potential for even aiding the acquisition of a second language (L2). This chapter begins with some brief discussion of gamer talk characteristics, followed by an explicit focus on gamer slang ("ludolects"), and then, with the aid of questionnaire findings and some literature reviews, goes on to explore the bigger picture: gaming literacy's pedagogical implications in terms of "paratextuality", social identity and learner autonomy.

**Keywords** Gaming literacy · Pedagogy · Gamer slang · Paratext · Social identity theory · Learner autonomy

## Introducing Gaming Literacy

Traditionally there is the dichotomy of speech and written literacy, but a new kind of biliteracy seems to have emerged, whereby there is now one way to write a language in the online medium and another to write it offline (Varnhagen et al. 2010).

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Having said that, online literacy could also be a source of influence on the offline literacy, just as spoken language has affected written literacy. An instance would be where some speech contractions are now found in written texts. One big area of online literacy is gaming literacy, which is the focus of this chapter. The impact of gaming literacy and justification of the study can be indirectly seen in the revenue statistics of online gaming.

According to Statista (2017), in Hong Kong, the revenue of video games (not yet including the free-to-play online games) amounts to US$301 million in 2017. User penetration is at 20.6% in 2017 and is expected to hit 66.0% in 2021. Meanwhile, the School of Journalism and Communication, Chinese University of Hong Kong (2012), in the Hong Kong Internet Use and Online Gamer Survey 2011, found that the target audiences of online games are mainly aged 15–24. While parents of these youngsters often complain that online games 'fracture' their children's language, we seek here to argue that gaming literacy not only is a creative development of language but also has its pedagogical potentials, even aiding the acquisition of a second language (L2). This chapter begins with some brief discussion of gamer talk characteristics, followed by an explicit focus on gamer slang (also known as 'ludolect'). Then, with the aid of questionnaire findings and literature reviews, the bigger picture – gaming literacy's pedagogical implications in terms of 'paratextuality', social identity and learner autonomy – is explored.

## Gamer Talk Characteristics

Gamer cliques have their language features. Meanwhile, 'directives', 'expressives' and 'commissives' dominate the discourse of online games.

Directives are expressions to direct another person to do or not to do something. Subcategories include commands, requests, orders, prohibitions and suggestions. Imperative verb forms and clauses are their common features, e.g. "*Get objectives!*" They can also be through modal and other auxiliary verb constructions, e.g. "You *must* read the map!" or "You *need to* buy Deathcap".

Expressives denote feelings and sensations such as joy, pain, desire, pleasure, sorrow and anger. And as players are immersed in gameplay, they could become emotionally involved. These emotional outbursts, for success and failure are like life and death, are expressed in expletives, nonlexical items and laughter (Ensslin 2012).

(A) *Crap* (expletive)*, you feeder! Now Sivir's gonna kill us all.*
(B) *Hehehehehehehehe* (laughter).
(C) *Read the map idiot*.
(D) *Ahhhhhhhhhhhhhhhhhh* (nonlexical item) *she just one-shotted me :(*

Commissives, as suggested by its name, commit speakers to a future action of some kind. They can be promises, refusals and threats, and so they engage linguistic features of futurity. Some examples would be "I*'ll gank* mid lane after dragon." and "I*mma* (= *am gonna*) afk".

In terms of computer-mediated discourse, for the general 'time is of the essence' rule, gamers tend to economise on typing effort and so shorter and direct expressions are used. Written chats often mimic spoken language. However, unlike face-to-face communication which adds gesture and pitch, computer-mediated communication lacks sensory channels and paralinguistic cues. In this sense, gaming discourse is not exactly polite, but in general, players expect to be told what to do in as direct a manner as possible. (Ensslin 2012) The rules of politeness are consciously and frequently broken as the gaming platform allows their different social identity to challenge each other and engage in debates over performance and competition. Gamers also tend to express themselves creatively (Herring 2001).

Amongst these characteristics, one important feature is *mia* on the list: *gamer slang*. It is the peculiar feature in gaming literacy that even begs an independent section probing into it.

## Gamer Slang

What is gamer slang?
Have you ever come across terms like these?
*gg, noob, nerf, tank, mia*

This is roughly how gamer slang appears. Ensslin (2012) defines gamer slang as "a specialised set of expressions and communicative practices, which are applied by their competent users to varying degrees and effects". It does not mean nevertheless that individual elements of gamer slang cannot enter general or mainstream discourse, as you will see in the later sections of this chapter. But, in general, gamer slang finds its place in the middle of the spectrum with its left side being the game developer and ludological jargon and its right side being the general discourse. From left to right, the degree of lexical accessibility increases, and the degree of lexical specialisation decreases. Along the line, the target audiences widen in scope (Ensslin 2012).

### *Why Is Gamer Slang Used?*

In general language use, slang fulfills a number of important communicative and social functions. Channels such as written and oral chats are more synchronous and therefore require users to engage in quick forms of turn-taking (Ensslin 2012). As a result, words and phrases tend to be shortened due to time constraints. They can also be used to signal belonging to a social group and exclude outsiders and unmask or tease neophytes or "newbies" (Shortis 2001).

### *How Is Gamer Slang Formed?*

Some gamer slang items might not have emerged from the gaming context in the first place, say instead from its close relative – the computing context – but as modern language is so known for its adaptability, they have fused in the family of gaming language. Bearing in mind that the origin of a word is often debatable (as it could have been created from different persons independently), this section seeks to analyse or at least give a probable deduction of the constitutive elements of gaming literacy from an etymological perspective, as they make up the unique vocabulary that reflects the activity of the gaming universe. Seeing word origins can be a productive exercise for uncovering the social dimension reflecting how people think and relate to each other. Linguistically speaking, it can as well show patterns in language (Shortis 2001).

According to Algeo (1999), very few words are coinages unrelated to other words and so most have origins and a lexical genealogy. Etymology is the study of those origins. Common gamer slang can be broadly put into six categories: shortenings, shifts, composites, blends, 'leetspeaks' and typos, but note that a gamer slang item can be formed by a combination of a few.

The following table provides some interesting illustrations of the common categories of gamer slang formation (Table 8.1):

Going through the characteristics of gamer talk and gamer slang, despite their creativity, one may feel that such level of informality does no good to the 'language health'. But as we argue, they can be put to good use for learners' acquisition of L2, if one allows oneself to take a step back and look at the bigger picture.

## The Bigger Picture: Gaming Literacy's Pedagogical Implications

### *Gaming Language in Daily Life*

Putting aside discussions about a game where gaming language is expected to be used, there are in fact not few instances where some lexical items are eclectically employed in daily lives to achieve specific rhetorical effects such as humour, outrage, education or commercial actions (Ensslin 2012). In cases from mass media, some headlines copied gamer slang items to grab readers' attention, e.g. "Don't be a breastfeeding **noob**" (Wong 2017), "油性肌走開 6種害你「油光煥發」的食物...酒鬼**GG**了 [*Go Away! Oily Skin! The 6 Culprit Foods that Make Your Skin Oily… **GG**, Alcoholics*]" ("Youxingji zoukai" 2017) [emphases added].

Gamer slang per se can even be a topic of discussion. A Facebook page has filmed a video where they interviewed laymen about some popular gamer slang terms and then explained the terms ("Shaonianmen" 2017). BuzzFeed has also posted a gamer slang quiz to which "netizens" positively reacted (Sanchez 2015).

**Table 8.1** Common categories and examples of gamer slang formation

| | | |
|---|---|---|
| Shortenings | Acronym/ initialism | *Definition*: taking the first letter of each word or syllable in a word or a phrase to make a word. This could be for phonological or typing effort economy. An acronym can be spoken as a word, but an initialism is pronounced as letters in sequence |
| | | *Examples*: |
| | | **gg** (good game) |
| | | **ggwp** (good game well played) |
| | | **ez** (easy) |
| | | **op** (overpowered) |
| | | **ks** (kill steal) |
| | | **AD** (attack damage) |
| | | **AP** (ability power) |
| | | **cd** (cooldown) |
| | | **KDA ratio** (kills-deaths-assists ratio) |
| | | **ff** (forfeit) |
| | | **ff/FF** (final fantasy) |
| | | **mia** (missing in action) |
| | | **afk** (away from keyboard) |
| | | **cc** (crowd control) |
| | | **AoE** (area of effect) |
| | | **MMORPG** (massively multiplayer online role-playing games) |
| | | **MOBA** (multiplayer online battle arena) |
| | | **87** (*baichi* in Putonghua, meaning 'idiot') |
| | | **sb** (*shabi* in Putonghua, meaning 'idiot') |
| | Clipping | *Definition*: retaining only a part of the original word |
| | | *Examples*: |
| | | **noob** from newbie |
| | | **ult** from ultimate |
| | | **b** from back |
| | | **imba** from imbalanced |
| Shifts | Pejoration | *Definition*: downgrading or depreciating a word's original meaning so that it develops a negative connotation. This could satisfy gamers' emotional outburst or achieve sarcasm |
| | | *Examples*: |
| | | **gg** (good game → to be doomed/ game over) |
| | | **noob** (a new player → a player who is unskilled and dumb) |
| | Narrowing | *Definition*: the meaning of the word becomes less inclusive than its original meaning |
| | | *Examples*: |

(continued)

**Table 8.1** (continued)

| | | |
|---|---|---|
| | | **tank** (a heavy armoured military vehicle with heavy firepower for front-line combat → a character whose role is to withstand most of the damage from opponents for his teammates) |
| | | **lane** (a road → a main path in a game map) |
| | Semantic shift | *Definition*: functions like a metaphor but actually changes the word's original meaning and adopts |
| | | *Examples*: |
| | | **tank** (a heavy armoured military vehicle with heavy firepower for front-line combat → anthropomorphised to be a character whose role is to withstand for his teammates most of the damage from opponents) |
| | | **nerf** (the Nerf brand of toys which are soft and not likely to cause serious injury → a change to a game from one version of the game to the next that reduces the power of a weapon or a skill; more often used as a verb: see also functional shift) |
| | | **buff** (to polish → a change to a game from one version of the game to the next that increases the power of a weapon or a skill or a temporary effect that makes a character stronger) |
| | | **farm** (to grow crops or keep lifestock → to engage in repetitive tasks such as repeatedly killing AI-controlled monsters) |
| | | **creep** (to move slowly → AI-controlled monsters and soldiers; see also functional shift) |
| | | **push** (to exert force on something in order to move that thing away from oneself → to kill creeps and to destroy towers in a lane so that the team can move closer to the enemy's base) |
| | | **camp** (to live for a time in a tent → to adopt a strategy where a player stays at one location, often repeatedly, to do something which the player can take advantage of) |
| | | **toxic** (poisonous → an adjective to describe a rude or unwelcoming behaviour which detriments the other gamers' gaming experience or to describe a gamer with such behaviour) |
| | | **flame** (to burn brightly → to send an angry and insulting message to other gamers to vent your spleen) |
| | | **troll** (an ugly cave-dwelling creature → a player/an act which lacks logic, reason, empathy and goodwill) |
| | | **feed** (to give food to somebody → an act of allowing the player himself to be killed by the enemy team; pejorated) |
| | | **fed** (passive form of 'feed' → the status where the player has a disproportionate amount of kills) |
| | | **ace** (very good → to have eliminated the whole enemy team; narrowed) |

(continued)

**Table 8.1** (continued)

| | | |
|---|---|---|
| | | **crowd control** (a public security practice to manage large crowds to prevent outbreaks → ability that influence or prevent the abilities or actions of other opponents) |
| | | **meta** (a prefix used to mean 'about its own category' → the strongest strategies in the gameplay currently) |
| | Functional shift (grammatical conversion) | *Definition*: changing the word class of an etymon without changing its form. English is prone to shifting forms between parts of speech because of the relative lack of word endings marking parts of speech (Shortis 2001) |
| | | *Examples*: |
| | | **afk** (away from keyboard – *adverbial phrase* → *verb*) |
| | | **ff** (final fantasy – *noun* → *verb*) |
| | | **nerf** (a change to a game from one version of the game to the next that reduces the power of a weapon or a skill – *noun* → *verb*) |
| | | **creep** (to move slowly → AI-controlled monsters and soldiers – *verb* → *countable noun*) |
| | | **troll** (a player/an act which lacks logic, reason, empathy and goodwill – *noun* → *verb*) |
| Composites | Compounding | *Definition*: two or more words or free morphemes placed together to produce a new word |
| | | *Example*: |
| | | **overpowered** (over + powered) |
| | Affixation | *Definition*: a word joined by a bound morpheme which alters its sense |
| | | *Examples*: |
| | | **feeder** (*-er*: designating persons from some special characteristic) |
| | | **tanky** (*-y*: characterised by…) |
| | | **debuff** (*de-*: removing or reducing…) |
| Blends | | *Definition*: combining morphemes from two words to imply a blend of meanings of the two words, i.e. compounding+shortening |
| | | *Example*: |
| | | **gank** (to gang up on and kill one; meaning also narrowed to include a surprise element) |
| Leetspeaks/leet/1337 | | *Definition*: a specialised form of symbolic writing using numerals or special characters to replace the standard letters by their similarity. The original version of leet was developed for obscuring the meaning to uninformed readers. It has since fused with other kinds of e-dialects over time |
| | | *Example*: |
| | | **n00b** from 'noob' (alphabet 'o' replaced by numeral '0') |
| Typos | | *Definition*: originally (could be) a genuine typo but now used deliberately to achieve humour or sarcasm or to humiliate |
| | | *Examples*: |
| | | **teh** from 'the' |
| | | **pwn** from 'own' (to imply domination of the opponents and to taunt them) |

We have distributed questionnaires as part of the current research in 2017 and received 158 valid sets of them. The questionnaires inquired into Hong Kong university students' knowledge of gamer slang, the frequency of their hearing usage of gamer slang in daily life contexts, the frequency of their personal use of the gamer slang in daily life contexts, and their views on gaming language in general (the 'Research'). The questionnaire provided a selection of some common gamer slang items with the relevant explanations of the items. The explanations were provided thereat to avoid potential misunderstandings. The numbers of participants from associate, bachelor and postgraduate degrees are 44, 95 and 19, respectively. 116 of them have played online games before while 42 of them have not. Amongst the gamers, the top 3 most popular online games are (1) *League of Legends* (48.3%), (2) *Counter-Strike Online* (39.7%) and (3) *Overwatch* (31.0%). The following four tables (Tables 8.2, 8.3, 8.4 and 8.5) are the brief summary of the findings.

As seen from Tables 8.2 and 8.3, in terms of participants' knowledge on gamer slang, participants generally show a high degree of understanding of the more popular items, with the slang word 'gg' reigning with a percentage of 87.3%. Even amongst non-gamers, there is a 71.4% of them knowing this word. This may be attributed to the fact that over 90% of them have in fact heard of "gg" in daily life contexts. Other common terms such as "ff", "op", "troll", "toxic" and "noob" also recorded double-digit percentages even in non-gamers' statistics. These are indeed high percentages considering that they concern *daily life contexts* rather than a

**Table 8.2** Overview of participants' exposure to gamer slang

| | |
|---|---|
| The most understood gamer slang items | (1) **gg** (game over): 87.3% |
| | (2 – tie) **ff** (to fantasise): 62.7% |
| | (2 – tie) **op** (overpowered): 62.7% |
| | (4) **troll** (a player/an act which lacks logic, reason, empathy and goodwill): 53.2% |
| | (5) **noob** (newbie): 41.8% |
| The most heard gamer slang items in daily life contexts | (1) **gg** (game over): 94.3% |
| | (2) **ff** (to fantasise): 66.5% |
| | (3) **op** (overpowered): 59.5% |
| | (4) **troll** (a player/an act which lacks logic, reason, empathy and goodwill): 41.8% |
| | (5) **noob** (newbie): 28.5% |
| The most used gamer slang items in daily life contexts | (1) **gg** (game over): 69.0% |
| | (2) **ff** (to fantasise): 49.4% |
| | (3) **op** (overpowered): 38.0% |
| | (4) **troll** (a player/an act which lacks logic, reason, empathy and goodwill): 27.2% |
| | (5) **noob** (newbie): 14.6% |
| Frequency of hearing gamer slang in daily life contexts | 3.08/5 (sometimes) |
| Frequency of using gamer slang in daily life contexts | 2.26/5 (sometimes) |

**Table 8.3** Comparison of gamers' and non-gamers' exposure to gamer slang

| | Gamers | Non-gamers |
|---|---|---|
| The most understood gamer slang items | (1) **gg** (game over): 93.1% | (1) **gg** (game over): 71.4% |
| | (2) **op** (overpowered): 77.6% | (2) **ff** (to fantasise): 47.6% |
| | (3) **ff** (to fantasise): 68.1% | (3) **troll** (a player/an act which lacks logic, reason, empathy and goodwill): 23.8% |
| | (4) **troll** (a player/an act which lacks logic, reason, empathy and goodwill): 63.8% | (4 – tie) **noob** (newbie): 21.4% |
| | (5) **nerf** (a change to a game from one version of the game to the next that reduces the power of a weapon or a skill): 50% | (4 – tie) **op** (overpowered): 21.4% |
| The most heard gamer slang items in daily life contexts | (1) **gg** (game over): 95.7% | (1) **gg** (game over): 90.5% |
| | (2) **op** (overpowered): 71.6% | (2) **ff** (to fantasise): 59.5% |
| | (3) **ff** (to fantasise): 69.0% | (3) **op** (overpowered): 26.2% |
| | (4) **troll** (a player/an act which lacks logic, reason, empathy and goodwill): 49.1% | (4) **troll** (a player/an act which lacks logic, reason, empathy and goodwill): 21.4% |
| | (5) **noob** (newbie): 34.5% | (5) **toxic** (an adjective to describe a rude or unwelcoming behaviour which detriments the other gamers' gaming experience or to describe a gamer with such behaviour): 16.7% |
| The most used gamer slang items in daily life contexts | (1) **gg** (game over): 77.6% | (1) **gg** (game over): 45.2% |
| | (2) **ff** (to fantasise): 55.2% | (2) **ff** (to fantasise): 33.3% |
| | (3) **op** (overpowered): 47.4% | (3) **troll** (a player/an act which lacks logic, reason, empathy and goodwill): 16.7% |
| | (4) **troll** (a player/an act which lacks logic, reason, empathy and goodwill): 31.0% | (4) **op** (overpowered): 11.9% |
| | (5) **noob** (newbie): 17.2% | (5) **ff** (forfeit: surrender): 9.5% |
| Frequency of hearing gamer slang in daily life contexts | 3.28/5 (sometimes) | 2.52/5 (sometimes) |
| Frequency of using gamer slang in daily life contexts | 2.53/5 (sometimes) | 1.52/5 (occasionally) |

gaming context. Coupled with the fact that even non-gamers would actually use these items in daily life contexts, the statistics have shown that gamer slang does fuse in everyday life and is definitely not something exclusive to gamers. The frequencies of gamers and non-gamers hearing and using these terms have shown that gamer slang is not alien to most of them. We suggest that the participants may have

**Table 8.4** Distribution of gamers' and non-gamers' views on gamer slang on a scale of 1–7

| Gamer slang | | Strongly disagree (1) | Disagree (2) | Somewhat disagree (3) | Neutral (4) | Somewhat agree (5) | Agree (6) | Strongly agree (7) |
|---|---|---|---|---|---|---|---|---|
| (a) influences how people speak in daily conversation | Gamers | 1.7% | 2.6% | 16.4% | 10.3% | 42.2% | 20.7% | 6% |
| | Non-gamers | 0% | 4.8% | 9.5% | 21.4% | 33.3% | 26.2% | 4.8% |
| (b) is used by mainstream media | Gamers | 2.6% | 14.7% | 17.2% | 28.4% | 24.1% | 11.2% | 1.7% |
| | Non-gamers | 4.8% | 21.4% | 14.3% | 26.2% | 21.4% | 9.5% | 2.4% |
| (c) is mainstream | Gamers | 2.6% | 7.8% | 24.1% | 34.5% | 19% | 8.6% | 3.4% |
| | Non-gamers | 4.8% | 16.7% | 16.7% | 31% | 23.8% | 4.8% | 2.4% |
| (d) is interesting | Gamers | 1.7% | 5.2% | 8.6% | 20.7% | 29.3% | 25.9% | 8.6% |
| | Non-gamers | 4.8% | 7.1% | 7.1% | 40.5% | 16.7% | 14.3% | 9.5% |
| (e) has limited usage | Gamers | 2.6% | 11.2% | 17.2% | 32.8% | 17.2% | 11.2% | 7.8% |
| | Non-gamers | 0% | 7.1% | 19% | 38.1% | 19% | 14.3% | 2.4% |
| (f) is not easy to understand | Gamers | 6% | 15.5% | 24.1% | 20.7% | 15.5% | 14.7% | 3.4% |
| | Non-gamers | 7.1% | 7.1% | 14.3% | 28.6% | 28.6% | 7.1% | 7.1% |
| (g) can be impolite | Gamers | 2.6% | 10.3% | 9.5% | 16.4% | 25% | 30.2% | 6% |
| | Non-gamers | 2.4% | 9.5% | 11.9% | 35.7% | 19% | 16.7% | 4.8% |
| (h) is insulting | Gamers | 11.2% | 11.2% | 11.2% | 44% | 13.8% | 6% | 2.6% |
| | Non-gamers | 4.8% | 16.7% | 11.9% | 35.7% | 26.2% | 4.8% | 0% |

encountered these words from their gamer peers or, even as above-mentioned, some social media and mass media platforms, where journalists and bloggers manipulate the words for rhetorical effects.

From Tables 8.4 and 8.5, it is quite encouraging to see that non-gamers in general welcome gamer slang, as most of them are inclined to think that while gamer slang can be impolite, it is interesting and not insulting. Compared with gamers, non-gamers do not feel gamer slang is as mainstream, nor is it as much used by mainstream media, nor is it of as wide usage. Nevertheless they do not find it particularly difficult to understand either. Amusingly, non-gamers even concur with it more than gamers that gamer slang influences how people speak in daily conversation. We thereby deduce that students at large should not be resistant to gaming language and that gaming language should be interesting to them or, at the very least, it should not be alien to them. This leads us to the questions: What could be the ways to put it to good use for L2 acquisition? What could be the theories that support such proposals?

**Table 8.5** Integrated data of gamers' and non-gamers' views on gamer slang on a scale of 1–7

| Gamer slang | Gamers' average | Non-gamers' average | Gamers' majority | Non-gamers' majority | Gamers' median | Non-gamers' median |
|---|---|---|---|---|---|---|
| (a) influences how people speak in daily conversation | 4.75 (somewhat agree) | 4.80 (somewhat agree) | 5 | 5 | 5 | 5 |
| (b) is used by mainstream media | 3.97 (neutral) | 3.76 (neutral) | 4 | 4 | 4 | 4 |
| (c) is mainstream | 4.00 (neutral) | 3.76 (neutral) | 4 | 4 | 4 | 4 |
| (d) is interesting | 4.83 (somewhat agree) | 4.38 (neutral) | 5 | 4 | 5 | 4 |
| (e) has limited usage | 4.16 (neutral) | 4.21 (neutral) | 4 | 4 | 4 | 4 |
| (f) is not easy to understand | 3.82 (neutral) | 4.29 (neutral) | 3 | 4,5 (tie) | 4 | 4 |
| (g) can be impolite | 4.66 (somewhat agree) | 4.29 (neutral) | 6 | 4 | 5 | 4 |
| (h) is insulting | 3.66 (neutral) | 3.76 (neutral) | 4 | 4 | 4 | 4 |

## *Educational Benefits of Gaming*

Nowadays, American and Japanese game companies enjoy a large market share in terms of the production of digital gaming, including games on the Internet and mobile phones. Educators are sceptical towards this trend and research has been done about how games affect student learning in both positive and negative ways (Chik 2014). According to Whitton (2010), the most welcoming commercial off-the-shelf games are designed solely for leisure instead of learning. While games are usually initially available in English or Japanese and, in Hong Kong, English is taught as one of the core subjects from kindergartens to secondary schools, there could be a potentially very important educational aspect to investigate and examine how digital gaming and its marginalia affect students' language acquisition and learning behaviour. Furthermore, according to our research, an overwhelming majority of students played online games before. Even if some of them do not consider themselves as frequent gamers and/or have never played online games, they have come across with different gamer slang items and used them in their daily lives. Chik (2012) also observes that some gamers are looking for language support from communities. In this regard, online gameplay can be utilised for English learning. It therefore follows that pedagogical uses regarding the learning opportunities provided by the games, discussion boards and peripheral artefacts are worth attention.

Learning occurs when students encounter a L2 game. Since online gaming has become more and more popular in recent years, it is crucial for educational practitioners to incorporate this new trend into classroom teaching with a view to motivating students. Research has shown that commercial off-the-shelf games and MMORPG games create a L2 learning space and opportunities (Cornillie et al. 2012; Reinders 2012). For instance, Reinhardt and Sykes (2012) classify "game-enhanced" and "game-based" learning where educational benefits can be found in L2 teaching and learning. In their studies, they examine the multifaceted aspects of game-enhanced, game-based L2 learning and L2 teaching. Amongst these perspectives, game-enhanced L2 learning exists "in the wild" (Reinhardt and Sykes 2012, p. 33). In other words, L2 learning occurs naturally when students play digital games. To a degree it shares a similar strand of rationale with the 'suggestopaedia' methodology which seeks to dissuade students from thinking that language learning is difficult but could be achieved by a rather relaxing atmosphere, and so the actual learning process is rather by subconscious processes. As Sykes and Reinhardt (2013) suggest, digital gaming can be beneficial to language learning in terms of five major aspects, namely, aims, interaction, reflection, context and motivation. Through game-mediated language learning activities, they believe that digital games can be applied in classroom contexts with learning theories.

Often seen as non-educational if not addictive, gaming has not been promoted in teaching and learning contexts. But evidence-wise, Slyvén and Sundqvist (2012) suggest that a positive correlation is present between L2 gaming and L2 learning, as they find that frequent gamers achieve the higher score in a vocabulary test than the moderate and non-gamers. Rama et al. (2012) also find that with gaming expertise, gamers gain language support from the gaming community.

## *Paratextuality*

Consumption and production are the two essential blocks for effective L2 acquisition. Both components could be found in gaming experience as gamers consume texts developed by gamers and gaming communities and produce texts as a part of game discussion or sharing 'metas' on forums. In a broader sense, texts that appear in entertainment platforms, such as walkthroughs, online tutorials, and fan art, have been described as "paratexts" (Apperley and Walsh 2012; Consalvo 2007). These textual productions are complicated, with a wide range of lexical elements and syntactic language formation, in various genres (Thorne et al. 2012). The online platforms, for instance, provide a common space for L2 learners and gamers to take part in different discussions. Through (re)production of the texts, gamers are exposed to gaming literacy which is crucial for academic and career growth in the future (Gee and Hayes 2011). It could be even more effective than traditional literacy as games have strong association of words with images, actions, goals and dialogues (Gee 2012).

Ensslin (2012) categorises such practices into top-down and bottom-up discourses, where the former refers to discourses produced by game makers who create texts for discursive promotional purposes and the latter emerges from the gamers who negotiate games. Vivid resources are created by gamers. They can range from the background of the game, background of the characters to player guides for the game and even game updates and patch notes. Very often, the texts introducing the game and characters employ very rich descriptive vocabulary, extensive collocations and varied sentence structures. They are excellent resources for advanced students' intakes and can serve as teaching materials for classes on descriptive writing. A class with elementary and intermediate students on the other hand may prefer a communicative approach to a lexical approach and explore exponents and functional language from either gamers' dialogues or colloquial expressions used by the game makers in the game updates and news. Language points can also be found and focused on as part of the lesson design, such as the modals mentioned in the previous gamer talk characteristics section, amongst the directives, expressives and commissives. Gamer slang can also be an entry point to arouse learners' interests and serve to remind learners that language can be informal and fun.

As regards the production aspect, while gamers may share their feedback and metas on forums, they would also read the feedback and metas from other co-gamers. Introduced by Battarbee (2003a, b), co-experience is defined as the experience that users co-create in social interaction where participants share their feelings and affections regarding their consumption practices. The conceptualisation of co-experience integrates sharing of experiences between users of a product or service into the whole consumption experience. As a result, it is the seamless combination of user experience in products and social interaction (Battarbee 2003b). In fact, communication has been considered as a necessity in the creation of co-experience (Battarbee 2003a). Drawing on this view, the co-experience of viewers on the online fora emerges via the communications within the gaming community, at which both L2 inputs and outputs take place.

Recently, the forms of computer-mediated communications have been extended beyond text and image to audio and video as results of the revolution of cutting-edge internet technologies. In specific, a unique form of social media has emerged and been recognised as live video streaming platforms. As a special combination of multiple media forms, live streaming allows individuals to publicly broadcast live video streams, accompanied with a shared chat room for user communication (Hamilton et al. 2014). Generally, a typical live video streaming activity involves a streamer/broadcaster who uploads his/her real-time video and audio content including video games, talent performance, daily life or whatever he/she expects to share. Viewers/audiences on the streamer's channel can comment and communicate with each other via text-based chat room function. Meanwhile, the streamer also engages in dialogue and interaction with his/her audiences while broadcasting.

Live streaming activity has grown rapidly since the availability of diverse platforms such as Twitch and YouTube Live (live streaming service of YouTube) (Smith et al. 2013). For instance, Twitch made up 1.8% of total US Internet traffic and ranked at the fourth during peak periods in 2014 (Pires and Simon 2015). Twitch

also announced it had more than 2.25 million broadcasters and also partnered with more than 17,000 channels (Grubb 2016). It seems that more and more people are becoming immersed in this live video watching.

As such, we see streaming is a popular type of bottom-up resources of which learners can potentially make use as a listening training, albeit its nature being rather marginally peripheral. Or in rarer cases but possible cases, the learner can be the streamer so it would be a braver speaking attempt. It would of course be more beneficial if gamers Skype with each other so it would be a bilateral and practical exercise. It would even be better if gamers make friends and start using the game language, that is L2, and begin language exchange based on their common gamer codes, so that they get to practise L2 proactively. In any case, whether by streaming or Skype, the essence is that gamers make use of a gaming community, where gamers can have their virtual identity with which embarrassment, if any, becomes a lesser deal, and so they can be better motivated. They may also have another social identity, as we elaborate in the next sections, with which they might turn into a loyal viewer of a streamer. This ongoing motivation could contribute to the learners' autonomy for learning English in a virtual L2 immersive environment, as opposed to an environment restricted to a classroom setting.

## *Continuance Intention and Social Identities*

Compared with a flourishing development in the practice field, the academic realm has paid unequal attention to live video streaming activity. Users' continuing attention to other types of social media, such as virtual communities and social networks, has though received sufficient attention in the academic domain (See Lin et al. 2014; Zheng et al. 2013). However, most studies in computer science take a technological approach to optimise streaming network systems or seek to demonstrate the characteristics of streams on some famous platforms (See Barekatain et al. 2015; Kaytoue et al. 2012; Pires and Simon 2015). Extant literature still lacks a comprehensive framework to explain audiences' continuous watching behaviour. Only limited studies have shed light on this question, but it was observed that on the one hand, the presence of co-viewers and a sense of community within streaming channels have been regarded as necessary elements; on the other hand, frequent interactions between broadcasters and audiences have been emphasised for attracting and maintaining audiences (Hamilton et al. 2014; Lim et al. 2012; Smith et al. 2013). Therefore, audiences' continuous watching intention may be explained in a social-psychological approach which considers both the audience-broadcaster tie and audience-other audiences tie.

In fact, the nature of live video streaming activity not only offers a real-time watching experience for audiences but also provides opportunities to communicate and socialise amongst broadcasters and other co-viewers. These interactions in cyber contexts may promote the development of audiences' self-definition process and further identifications with various referents (Hall-Phillips et al. 2016). Also,

the psychological bond of a social referent is an important predictor of loyalty behaviour within virtual communities (Badrinarayanan et al. 2015). Thus, incorporating the identification concept in the current study may be helpful to explain the study question, which leads to the fact that learners can gain benefits from streaming platforms.

The more the gamers get involved in streaming platforms, the more group support behaviours they experience. Proposed by Tajfel and Turner (1979), social identity theory posits that people hold various social identities along with their individual identities. It is assumed that our self-concepts are partially defined by certain social groups where we obtain the sense of oneness or belongingness, as well as involving values (Ashforth and Mael 1989). Hence, people tend to classify themselves into various social categories that they identify with and develop social identifications which depict the oneness or belongingness to certain social categories (Ashforth and Mael 1989). This social identification process mainly serves as a self-defining way to achieve self-consistency, self-esteem and self-enhancement (Bhattacharya and Sen 2003). In consequence, to maintain their favoured social identities, people's deep identifications with groups, organisations or other human aggregates lead to in-group favouritism and corresponding results such as enhanced commitment, intragroup cohesion, product and service preference and group support behaviours (Ashforth and Mael 1989; Bhattacharya and Sen 2003; Trepte 2006). Once learners become members of the social groups, they are able to gain advice and mutual support.

Based on the social identity theory, a social identification concept has been widely applied in social media research and conceptualised into specific forms such as organisational identification, community identification, etc. (See Helm et al. 2016; Luo et al. 2016). Recently, studies on virtual communities and social networks have verified the crucial role of community identification of members in showing positive outcomes such as consumption behaviours, generating positive word of mouth and continuous usage intention (Algesheimer et al. 2005; Badrinarayanan et al. 2015; Helm et al. 2016; Hsu et al. 2015; Yoshida et al. 2015). In fact, the live video streaming service can be regarded as a special type of video-based social media, indicating that social identity theory and social identification concept may be effective to explain a member's intent for continuous participation.

Furthermore, L2 learners may enjoy different roles on streaming platforms. People often retain multiple identities in varying salience (Kleine et al. 1993). Belen del Río et al. (2001) further argue that identification can be distinguished into group-based identification and individual-based identification. In their study, two relevant social referents, i.e. audiences and broadcasters, coexist within live streaming platforms. Consequently, members' social categorisation process may result in their identifications with audience groups and broadcasters, respectively.

Drawing on related works, one can regard the audience group identification as psychological attachment and emotional and social bonds a member shares within an audience group (Algesheimer et al. 2005; Füller et al. 2008; Hall-Phillips et al. 2016). Users from the same audience group interact with each other mainly via text-

based dialogues (Hamilton et al. 2014). During their communication, audiences can exchange their ideas and thoughts about streams, broadcasters and even issues unrelated to stream contents. Meanwhile, audiences will subtly deliver their identity-related information and perceive others' identities in a form of collective group identity. In consequence, a member may identify with other audiences if he/she perceives the fit of values and beliefs between the group and himself/herself. According to Keh and Xie (2009), identification is effective in promoting commitment to and the maintaining of long-term relationships. Badrinarayanan et al. (2015) also indicate that identification with other members will lead to sustained participation and interaction on virtual communities. Therefore, one can infer that, with the increased identification with an audience group, a member will feel stronger attachment to the group and choose to maintain their intragroup connections by continuous watching, sharing and learning via streaming platforms on a voluntary basis.

Live video streaming service distinguishes itself from other social media forms via the existence of broadcasters/streamers (Smith et al. 2013). Accordingly, the individual-based identification aspect is manifested as identification with broadcasters on live streaming platforms. Kelman (1961) defines this kind of identification with an individual as "classical identification" which means a person "attempts to be like or actually to be the other person" and desires to "appease, emulate, and vicariously gain the qualities of others" (Kelman 1961, p. 63). Identification with a person is similar to identification with a group (Ashforth and Mael 1989). However, personal identification incorporates other essences including liking and admiration, perceived similarity, attitudes and beliefs adoption (Basil 1996; Brown and de Matviuk 2010; Brown 2015; Katz and Liebes 1990). Accordingly, a viewer's identification with a broadcaster takes place when a viewer takes a broadcaster as self-referential in belief, personality, competence and other aspects. L2 learners, therefore, may consider the broadcaster a gaming expert with native language proficiency.

According to recent studies on personal identifications, people tend to regard identified individuals as role models and incline to maintain reciprocal relationships (Ashforth et al. 2008; Zhang et al. 2016; Zhu et al. 2015). On the one hand, a viewer's identification with broadcasters may also trigger the intention to maintain longer relationship and loyalty as a result of role model effect. A viewer may admire and worship a streamer because of his/her attitudes and values, special talents, or even personal charisma. Previous studies imply that it is streamers' personalities that exert vital influence on viewers' willingness to stay (Hamilton et al. 2014). On the other hand, live streaming activity is characterised as a personal branding practice, establishing broadcasters' idiosyncratic online identities to attract followers (Tang et al. 2016). Studies have validated that positive brand outcomes such as brand loyalty and commitment are direct responses of brand identification (Stokburger-Sauer et al. 2012; Tuskej et al. 2013). Therefore, one can infer that a viewer's identification with a broadcaster may produce a sustained, long-term preference for the broadcaster's broadcast channel, contributing to viewers' continuous watching intention and, at the same time, the development of learner autonomy.

### *Learner Autonomy*

Students' learning autonomy can be achieved when they have "the ability to take charge of [their] own learning" (Holec 1981, p. 3). Little (1991) holds that when learners gain knowledge and are able to apply that to wider contexts, the capacity for autonomy will be demonstrated. In this sense, students gain the ability to self-learn outside the classroom. Macaro (2008) claims that learners tend to take clear and particular actions to become responsible for their learning when they can communicate with others via a particular variety of language using, such as code-switching. For example, it is not uncommon to hear 'gg' in students' daily communication.

From a sociocultural perspective, the two major factors for autonomy development are supportive social development and intrinsic motivation (Ushioda 2007). In Japan, for example, university students are provided with a receptive and open-minded community where they can interact with others in a physical learning space (Murray and Fujishima 2013). According to Murray and Fujishima (2013), a learning community is built when learners gather together for a specific end or goal. Thorne et al. (2012) suggest that a learning community and learner autonomy are indispensable and that they influence learners' decisions on gaming choices and the use of communal resources such as online forums, contributing to their whole gaming experiences. When learners enjoy the digital gaming as a group-based activity, their autonomous learning as a team will occur simultaneously.

Moreover, language learning driven by gaming can take place everywhere, both physically and virtually. According to Chik (2014), there are some differences for students to learn in a physical setting and to interact with others through online platforms. When learners play offline games on their own, they are exposed to in-game dialogues with limited interaction. On the contrary, when they play with their friends, it provides additional interaction on the side where they are able to learn new language items from their peers (deHaan et al. 2010). Gamers can get access to online game servers via Internet connection, and thus extra L2 interaction opportunities occur. Take the popular MOBA game *League of Legends* as an example: Hong Kong gamers can connect to the North American server to interact with people there in English while they can also play in the EU West server to practise their French, Italian and Spanish through real-time communication. Based on a focus group interview conducted by Chik (2014), two research participants, Edmond and Tom, claimed that gaming sessions on Saturday nights in a student hall offer a chance for them to battle with local and international students with instantly installed games in their laptops, and English became the de facto gaming language. In another example, Chik (2014), through a stimulated recall session with her research participant Kenneth, finds that digital gaming could motivate students for self-learning, as Kenneth started playing the *Ace Attorney* series so as to learn legal English. He was admitted as a psychology major, while he in fact wanted to read for a law degree. Despite the psychology classroom setting, he was not prevented from enriching his legal vocabulary. By immersing himself in a digital gaming environment full of

English-language criminal cases, Kenneth found it very useful to memorise "professional and technical terminologies" (Chik 2014).

Meanwhile, digital gaming can be regarded as useful for both incidental and intentional L2 learning purposes too. While, as previously discussed, L2 acquisition through gaming has more of a peripheral nature, in some cases, the intention of gaming could be all about L2 acquisition. Hulstijn (2008) claims that an obvious intention of learning and application of learning strategies are the critical aspects of purposeful learning. The Kenneth legal English case is one of the best examples. Moreover, another research participant of Chik (2014), Jana, used educational games such as *My Japanese Coach* and *Cooking Mama* to learn Japanese. Edmond, a fan of NBA and a Mainland Chinese student in Hong Kong, took up his friend Jack's advice to play *NBA 2K11* in order to learn basketball jargons. Edmond found it particularly useful to learn new vocabulary and phrases in English in this way because there was no English class offering such content. Consequently, from the aforementioned cases, the intention of L2 learners can form a crucial aspect of learning autonomy. Chances are L2 learners use L2 gaming to supplement their formal English classes or treat L2 gaming as their major sources of knowledge formation.

After all, autonomy is not an inborn ability but a life-long learning attitude to be nurtured. As Beauvoir suggests, "On ne naît pas autonome, on le devient" [One is not born autonomous, one becomes so] (cf. Little 1991, pp. 3–4; Lamy and Hampel 2007, pp. 147–148). With higher degree of autonomy, learners can seek subtle feedback from their peers, realise genre conventions and lower their dependence on classroom instruction (Hanna and de Nooy 2009), and as a result, their L2 acquisition will be more effective.

## Conclusion

Online games are mostly fun, relaxing, playable and accessible. It comes as no surprise that some parents or teachers see them as taboo, as they take the view that online games could take up disproportionate time and endanger learning. Yet their benefits are often overlooked. While it is a subject of linguistic analysis, its pedagogical implications cannot be undermined either. With gaming language's relative acceptability across gamers and non-gamers, it can and should be put to good use, recognised for its effectiveness in L2 learning and its paratextuality and informed by the social identity theory and its capability of driving autonomy. Even if digital gaming is not to be incorporated in L2 curriculum, it shall be a fresh and good idea for L2 teachers to utilise the paratexts, say, in an informal class to stimulate L2 learners, according to their levels. In any case, as games are played, incidental and/or intentional learning would take place. At the very least, educators and parents should consider taking a positive view to see gaming as a tool for language learning because at worst, every cloud has a silver lining.

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# Chapter 9
# Locating Digital Humanities: Teaching e-Literature in the Pacific


**John Paolo Sarce**

**Abstract** Teaching e-literature (electronic literature) is an academic space for both explorations and contestations in the East. However, the East is not a monolithic location or space; the East that lies near and within the Pacific is still divided, based on the countries' locations and economic statuses. The Philippines, as a country located specifically in the Southeast of the Pacific, is still experiencing several struggles over teaching and creating e-literature, a part of the 'Digital Humanities' that cultivate and nourish, while at the same time deconstructing different forms of art. Teaching in the twenty-first century is already a huge challenge for every pedagogue; thus, to teach e-literature is another challenge that both educators and school administrators have to work on and excel at when they prepare their students for the future. Not only 'teaching' and 'e-literature' or Digital Humanities (in the broader sense) are sites that should be considered and interrogated critically under different researches focusing on these new trends in academia, but also 'location' should be taken into consideration within this field. This essay interrogates and presents the complications of teaching e-literature, once it is juxtaposed to 'location'. Studying location vis-à-vis teaching and e-literature creates tension and nuances that, once critically interrogated and examined, appear since location can either denote resistance or acceptance when analysed through the lenses of post-colonial theory. This chapter presents the multileveled and varied reaction of a Southeast Pacific country towards Digital Humanities, due to their former colonialisation and to their social and economic statuses that, in spite of technology's invasions across the world e-literature or Digital Humanities, are still outside or weak on the Philippines' academic radar. Our perception of e-literature is currently affected by such forces as cultural and economic ones, which makes teaching e-literature almost impossible. But because of the current changes in education in the Philippines, our perception on e-literature is now possibly able to change. Teaching e-literature in our classrooms now can open up a space of mutual understanding and for bridging the widening gaps between science, technology, and the humanities.

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**Keywords** E-literature · Critical studies · Pedagogy · Cultural studies · Digital Humanities

Unlike other well-known countries such as Japan, South Korea, and China, the Philippines is a Southeast Asian country. It is currently one of the former colonies of the Spanish, occupied by the Japanese in the Second World War, and dominated by the Americans since then. It thus struggles to adapt to the rapid changes in the world, less quickly than its neighbouring countries like Japan, Singapore, Hong Kong, and South Korea.[1] However, in 2013 the Philippines, after several decades of implementing the 10-year basic education curriculum, has upgraded its educational system by following the 'K-12 program'. This improvement in the curriculum has revolutionized the country in many respects, from labour intensive to a more modern economic status. Yet, no matter how promising this programme is, the country still faces a number of struggles especially on the content of courses that should be taught inside the classroom.

In the current status quo, the educational paradigm shift has made educational administrators and teachers struggle in order to be on a par with giants of the West and the East. The pacing of the international community is surely at its *allegro*. Changes are happening so rapidly, and these changes are not only manifested through physical shifts (i.e. in architecture and transportation) but also within cyberspace. The concept of cyberspace and technology has proliferated in the consciousness of the West and in some parts of the East like Japan. Cyberspace and technological advances have often been considered fields of contestation and exploration for both academic and scientific purposes. However, situating the Philippines in this compelling frame of fast-paced changes, educators and the stakeholders still wonder about and question the capability and competitiveness of the Philippines' education system in the digital era, specifically in the field of the Digital Humanities.

Digital humanities is a field of hybridity of forms and structures of the traditional humanities mixed and intertwined with the computational and systematic orders and processes of technology in abstract form. In this field of critical inquiry under the turf of academe, structures and forms are being deconstructed, resulting in another form of art interwoven with the data and figures of technology. Interactive fiction, 'chatbots', kinetic poetry, and other forms of e-literature were born out of these chaotic and intimate interactions between humanities and technology. This hybridity of forms has been part of academia in most countries in the West and some countries in the East and is still on its ongoing process of being learned and explored.

On that note of 'ongoing', questions might actually cloud our minds about the nature and function of Digital Humanities in other places of the world. Probably, one might ask: what is it like to teach the topics under digital humanities in the East, especially in the places wherein 'technology' is considered as taboo and dangerous? What are the ways of introducing digital humanities to the sites of the colonized and marginalized? And what are the philosophical and pedagogical effects or

[1] See Lepi (2014) for 2014 ranking of educational systems in the world.

implications of introducing digital humanities to the colonized others? These questions were prompted by juxtaposing pedagogy to cultural and critical studies like post-colonialism and digital humanities. We seek to understand the ongoing flux and vexation of digital humanities vis-à-vis culture, education, and location. Therefore I now explore the theories that may shed light on the importance of being open to new possibilities in academia by discovering the interplay of science, technology, and humanities. Secondly, I shall try to illuminate some important points on how we must rethink Digital Humanities as a field of learning that does not homogenize culture and histories. I will present some examples of e-literature made popular in the Philippines as examples of unique and different ways of mapping the progress of Digital Humanities in a developing country.

Scholars can interrogate the function and effects of Digital Humanities under critical forms, education, and location, for these aspects of society affect and hone the implementation and nurture of Digital Humanities. Moreover, these aspects of society also encourage the culture of research and appreciation which can still be fostered after Digital Humanities is introduced. Using critical studies under this phenomenon of 'changes' would help us to understand the shifts of forms happening within the production of literature, films, paintings, music, etc., as critical studies would also help us to recognize the nature of these changes occurring within the frame of forms. On the one hand, the field of pedagogy will be useful in understanding the effects of these sudden changes of forms within the pedagogical structures and explaining the possible effects and the future productions of it. Furthermore, cultural studies will be valuable in understanding the complications of implementing these sudden changes in the frame of forms in the field of humanities, once these are contrasted with pedagogy that extends and expounds the uncertainty of teaching digital humanities when they are laid down under the impediments of different locations. The criticality of the notion of 'location' in this study was observed under the theoretical and philosophical principles of post-colonialism. Analysing critical 'location' would not only denote spatial symbols and codes that result in maps, but rather it would also open up political and social issues that create inequalities and tensions between the colony and the imperial power.

Both cyberspace and computers have been active loci of post-structuralism since the 1940s. Without these two resources, the creation of e-literature would not have happened. Variations of forms were even created under e-literature,[2] but among these types, 'print' literature is excluded. As N. K. Hayles (2008) defined it: "Electronic Literature, generally considered to exclude print literature that has been digitized, is by contrast "digital born," a first-generation digital object created on a computer and (usually) meant to be read on a computer" (Hayles 2008, p. 3).

We note that Hayles' definition of electronic literature explicitly states the exclusion of print as a form or medium for electronic literature since e-lit or electronic literature is 'born-digital'. These born-digital literatures are possible through the use of the computer, but computer here doesn't denote desktop and laptops only: computer here means computing devices such as smart phones and tablets or even

[2] E-literature also known as e-lit or electronic literature

calculators. As Sample (2016) discusses in his online lecture: "[E]-lit extends beyond hulking desktops and sleek laptops. The computers I'm talking about here are really computing devices. And this includes smart phones and tablets, even calculators and watches …. Computers and phones of all shapes and sizes are a familiar part of everyday life, while e-lit made for those very same computers and phones is alien to most of us".

Understanding from this point of view, e-lit absolutely excludes print literature from its own sphere, since there is a shift of medium from paper to technological devices and gadgets, from analogue to digital, from concrete form to abstract form, and from printed type on paper to computational data on different devices. These data are responsible for creating this new form of literature, a hybrid form, borne out of the womb of Digital Humanities. As for Burdick, Drucker, Lunenfeld, and Presner (2012, p. 16), the formations of Digital Humanities and the categories under it follow certain stages of development: "Digital Humanities projects can be described by sketching their structure at several levels. These begin with basic computation (programming, processing, protocols) and extend through the levels of organization and output that form the basis of most users' experience (interface, devices, networks)".

These kinds of stages of development happening within the Digital Humanities absolutely affect the creation of e-literature as a category or type under the umbrella of Digital Humanities. E-literature works on several developments to enable itself to produce different forms from hypertext fiction and poetry, kinetic poetry, and chatterbots to novels or short stories in a form of SMS or e-mails. This electronic literature (or digital literature) also encloses different elements that generate diverse forms of electronic literature. These elements are data, processes, interaction, surface, and context. Each of the elements is important in generating e-literature. As Wardrip-Fruin (2010) elaborated in an essay: first, electronic literature has data that includes images, text, instructions, and sound files. It processes "work" and "efforts" while generating e-literature. It has "interaction" which is a change of state of an e-lit on an action coming from outside it. Its surface is "space" where interaction happens. And it has context, one of the most important elements among the five mentioned. Therefore, it is important for readers or users to make sense of and understand their experiences through the surface of this category of Digital Humanities. These elements together with the stages of development of Digital Humanities contribute to the idea of "criticality" of the form of electronic literature, since it requires a different way of understanding literature due to its own nature of being different and hybrid.

Both of the discussed elements and stages of development contribute to the criticality of the form of e-literature. These two components of e-literature as well as Digital Humanities create the wide variations of genres for e-literature. N. K. Hayles (2008) said in her book (p. 30):

> Hypertext fiction, network fiction, interactive fiction, locative narratives, installation pieces, 'codework', generative art, and the Flash poems are by no means [an] exhaustive inventory of the electronic literature, but they are sufficient to illustrate the diversity of the field, the

> complex relationship that emerges between print and electronic literature, and the wide spectrum of aesthetic strategies that electronic literature employs.

These genres mentioned are ostensibly generated through the combination of print and electronic literature while going through a "spectrum of aesthetic strategies" that includes the elements and different stages of development of electronic literature. From stages of development down to elements and genres of electronic literature, the criticality of its nature is very apparent compared to print. Electronic literature requires a lot of resources, patience, and imagination since authors in this field not only write their literature, but they merge it under the computational field of science and technology.

## Pedagogical Repressions and Reproductions

Schools and universities have played an important role in introducing and developing Digital Humanities. However, if a country or a certain nation fails to introduce and support this new field of scholarship, there would be difficulties in understanding it and also on building a positive attitude towards it. Schools and universities, in some sense, are also responsible as an apparatus of productions or an apparatus for repressions. By apparatus what I mean is a structure that not only specializes in the reproduction of goods but also in the relations of productions to the extent of ideology. From Kant (2007) down to Readings (1999), schools and universities have discussed thoroughly their role in the society as an apparatus – which actually came from the Latin word *apparare* which means 'to make ready' or 'make ready for'. Coming from this etymological background, schools and universities are seen to be a kind of *topos*[3] that prepares agents in the society to become civilized and educated members. Focusing on the idea of 'civilization', it is known to be one of the key features of enlightenment that schools should envision and work on, as Kant (2007) argued in his work:

> One principle of the art of education, which particularly those men who are educational planners should have before their eyes, is this: children should be educated not only with regard to the present but rather for a better condition of the human species that might be possible in the future; that is, in a manner appropriate to the idea of humanity and its complete vocation. (Kant 2007, p. 442)

In this part of Kant's discussion on the role of education, he emphasized the importance of being educated through schools for the better future of humanity. But this future is possible only if humans could achieve or could completely understand their humanity that includes becoming civilized and enlightened, which is part of the "complete vocation". Furthermore he adds that:

[3] See Althusser's book *On the Reproduction of Capitalist lll Ideology and Ideological State Apparatuse*s where he mentioned *topos* as "topography, from the Greek word *topos*, meaning place".

> The human being can either be merely trained, conditioned, mechanically taught, or actually enlightened. One trains dogs and horses, and one can also train human beings…. But to have trained one's children is not enough. Rather, what really matters is that they learn to think. This aims at principles from which all actions arise. Thus we see that in a true education there is a great deal to be done. (Kant 2007, pp. 444–445)

Kant's articulation of the essence of education is that education should teach students to think not just to be trained or to be disciplined but to learn how to ponder, to reflect, and to use the faculty of reasoning which makes the 'real' teaching hard and requires a great deal. Kant's (2007) "Lecture on Pedagogy" basically contends that the role of school is to discipline, to moralize, to civilize, and to cultivate the members of the society as effective agents of the perfected humanity. Schools and universities under the paradigm of Kantian thought push forward the seemingly 'perfected' version of humanity that can be even exercised through experiments in education. He further added that through the coming generations, as education gets better, our humanity will get better too; this image of perfected humanity shared an ambivalent characteristic of becoming both repressive and ideological in its productions. Interestingly, Louis Althusser (2014) discusses in his seminal work *Ideology and Ideological Apparatuses* the function of school as both ideological apparatus and repressive apparatus in an almost similar way to how Kant argues the function of school, as both a *topos* for disciplining and civilizing the members of society. Althusser (2014) explains that:

> I think I can claim that all state apparatuses, repressive and ideological alike function simultaneously on repression and on ideology, but with one very important distinction that precludes confusing the repressive apparatus with the Ideological State Apparatuses…that the Ideological State Apparatuses, for their part, function in overwhelmingly preponderant fashion on ideology, while functioning secondarily on repression, even if it is, at the limit - but only at the limit – quite attenuated and more or less symbolic. (Althusser 2014, pp. 85–86)

Althusser thus thinks that all state apparatuses are capable of becoming repressive and ideological. School and universities are all examples of this "overwhelmingly preponderant fashion on ideology and secondarily on functioning on repression" as school and universities both discipline, through training and laws or orders, and civilize, through educating, teaching, and learning, the members of society. In any case, the academe would always be a place of ambivalent reproductions. Althusser even further discusses the dominance of the scholastic apparatus as the replacement of churches after the French revolution:

> In this concert, nevertheless, one Ideological State Apparatus well and truly plays the dominant role, although no one, or almost no one, lends an ear to its music… this is the school… [And] No other Ideological State Apparatus, however, has a captive audience of all the children of the capitalist social formation at its beck and call…for as many years as the schools do, eight hours a day, six days out of seven. (Althusser 2014, pp.145–146)

The performances of these state apparatuses, in Althusser's view, have embedded their position as dominant or hegemonic from the start: first, the scholastic apparatuses have replaced the former dominant ideological state apparatus which is the church, and, second, the scholastic apparatuses have been the most influential state

apparatus since children of every family have to spend a lot of time there and are thus honed through learning from it. Moreover, he has critiqued this apparatus since scholastic apparatuses have a tendency to exploit and retain the old problematic characteristic of the former dominant state apparatus, though we have to acknowledge the kind of unique and rare teachers whom he considered as "heroes" since they are going against the rotten system that the capitalist has created and manipulated. This rotten system has been the project of the capitalists down to neocapitalists ever since; this is the tendency of the capitalist to exploit the relations of productions, corrupt dogmas, and promote bourgeois ideology. Similarly, Bill Readings (1999) has studied the functions and the changes that have occurred over time within the apparatuses:

> The University thus shifts from being an ideological apparatus of the nation-state to being a relatively independent bureaucratic system. The economics of globalization means that the University is no longer called upon to train citizen subjects, while the politics at the end of Cold War means the University is no longer called upon to uphold national prestige by producing and legitimating national culture. (Readings 1999, p.14)

For Readings, the university has reached its "shift" after the Cold War wherein universities as well as schools are no longer sites of ideological apparatus. The university has been transformed into an "independent bureaucratic system". Universities are reduced to other privatized apparatuses that deal with the neocapitalist projects, i.e. the idea of "excellence", school sports associations, school merchandises, etc. He extends his critique of universities thus:

> [T]he state is merely a large corporation to be entrusted to businessman, a corporation that increasingly serves as the hand maiden to the penetration of the transnational capital. The governmental structure of the nation-state is no longer the organizing center of the common existence of peoples across the planet, and [a] University of Excellence serves nothing but itself, another corporation in a world of transnationally exchanged capital. (Readings 1999, pp. 42–43)

Understanding Reading's point of view, we might conclude that the university or the school has been transformed into a corporation selling education which is a complete departure from the Kantian and Althusserian ideologies of education and schools. As the neo-liberal/neocapitalist project dominates the world by making slogans about creating a more engaging and more promising education through the ideology of "excellence", schools and universities which should have been the *topos* of enculturation, civilization, and the (almost) perfected humanity have been transformed into mere factories and corporations of the transnational economy. Because of this, Readings argued the importance of "dereferentialization" or thrusting ahead the rethinking of the university from scratch.

From Kant down to Reading, there would always be the seemingly compelling idea that surrounds the principles of education. Kant would even value the idea of experimented education which caters to the idea of doing something new that might lead to the discovery of intimate and good relationships of science and the humanities, while Althusser would commend the few "heroes", who are teachers and professors that go against the "rotten" system of the bourgeois ideology, and Readings

argues that we have to be open-minded and be ready for "dereferentializations" which would help us – as part of academia – to think outside of the failing system of education and think of other better ways to teach and to educate.

Digital Humanities as a new field of inquiry in the Philippine academe is something we can push forward not just to promote the "globalized" idea of university but also work on the better future – a kind of "experimented education" wherein science, technology, and humanities would fall under the same spaces. To accomplish this, we should embody the Althusserian thought of "heroes" as teachers who keep on doing their noble duties by going against the seemingly slowly falling educational system of the postmodern scholastic apparatuses and, lastly, rethink our visions and way of teaching. This may be done especially in teaching and combining the science and humanities as Readings claims with his notion of dereferentializations, by recreating different ways of teaching and building up the benevolent university.

## Technology and Post-coloniality

From the Spanish and Portuguese colonial times down to the Cold War (or even the current war happening in Syria[4]), technology, machines, and other equipment are seen to be a tool of the imperialists to rule the world. These technologies, machines, and equipment are either used to kill the native settlers of the colonies or to entice them with their seemingly 'high-tech' spectacles. With this kind of historical past down to the complexities of the present, technology and machines have come to conquer the world, arising from the first-world country making the third-world country a locus for cheap labour and thus more profit; coming up with the promises of an easy, quick, and convenient way of living; and articulating the potentiality of having a better future.

In this "future" as the neocapitalist/neocolonialist would articulate, the technology and the innovations it brings have been an integral part of globalization. This adds up to the ongoing problems and complications of locating the subaltern or the other[5] within the promising space of science, technology, and cyberspace, since the neocapitalist and neocolonialist have already politicized and corrupted the idea of "globalization" as a space for the resurgence of the empire and the bourgeois. Spivak (2003, 2008, 2013), Bhabha (1993), and Appadurai (2010) are some of the post-colonial scholars who have worked on the idea of globalization, postmodernity, and hybridity. They technically combat the corrupted idea of homogenization in the *topos* of globalization.

Arjun Appadurai (2010) in his book on *Modernity at Large: Cultural Dimensions of Globalization* talks about globalization and its flow in the international and local

[4] See the websites https://www.sott.net/article/347665-The-war-machine-continues-US-planning-on-regime-change-in-Syria-Haley and http://www.independent.co.uk/news/world/middle-east/syria-civil-war-state-of-the-art-technology-gives-president-assad-s-army-the-edge-a6898741.html

[5] See Gayatri Chakravorty Spivak's essay "Can the Subaltern Speak?" (1988).

community. He argues, and would suggest, that globalization is not the homogenization of one's culture; rather for him, globalization would always offer a room for localities and their backgrounds:

> Globalization does not necessarily or even frequently imply homogenization or Americanization, and to the extent that different societies appropriate the materials of modernity differently, there is still ample room for the deep study of specific geographies, histories, and languages. (Appadurai 2010, p. 17)

We can understand from this that globalization offers a space for our identity or our background, whether we are white, black, yellow, or brown, through our "geographies, histories, and languages". Moreover, Appadurai stresses the role of technology in global communities:

> By technoscape, I mean the global configuration, also ever fluid, of technology and the fact that technology, both high and low, both mechanical and informational, now moves at high speeds across various kinds of previously impervious boundaries. (Appadurai 2010, p.34)

We can say that technology has bridged different boundaries due to its nature of being innovative and promising. Now we may understand technology as an aid or tool, whether high or low technology, for a global community. It helps and shapes the global community on reconfiguring itself based on different demands coming from inside and outside of a certain country or society. Also in this sense, technology, as a medium, was never neutralized nor become nonsubjective. Even if it is a tool or aid, it still carries and helps cultures within the space of globality to be identified and recognized. As for H. K. Bhabha (1993) who is well known for his ideas and theory of hybridity, he said that cultures are both transnational and translational:

> It [culture] is transnational because contemporary postcolonial discourses are rooted in specific histories of cultural displacement, whether they are the 'middle passage' of slavery and indenture, the 'voyage out' of the civilizing mission, the fraught accommodation of Third World migration to the West after the Second World War, or the traffic of economic and political refugees within and outside the Third World. Culture is translational because such spatial histories of displacement – now accompanied by territorial ambitions of 'global' media technologies – make the question of how culture signifies, or what is signified by culture, a rather complex issue…. (Bhabha 1993, p.172)

Because of culture's characteristic of being both transnational and translational – which is by any means very postmodern and global – it was able to survive no matter how fast the world changes. Culture as both transnational and translational is mainly because of culture's wide and deeply rooted background. It has been created, recreated, and hybridized due to different mixtures of experiences and shared histories through the movement of people from North to South, East to West, or vice versa. These were even made possible through the "global media technology". The relation and effects of technology through culture is similar to what "technoscapes" can do with the global community. If, for the global community, technology has bridged gaps and territories, in culture, technology has bridged both time and space making culture a malleable subject, surviving the shifts of time, and enriching it from place to place. Interestingly, Bhabha (1993) also briefly discussed the role of

world literature for the "others" and the nature of world literature, espousing the history of transnationalism:

> The study of world literature might be the study of the way in which cultures recognize themselves through their projections of 'otherness'. Where, once, the transmission of national traditions was the major theme of a world literature, perhaps we can now suggest that transnational histories of migrants, the colonized, or political refugees – these border and frontier conditions – may be the terrains of world literature. (Bhabha 1993, p. 12)

Similarly, Appadurai discussed his idea of globalization by saying that it gives room for different cultures, while Bhabha, from these passages, recalls the tendencies of world literature to recognize cultures by projecting their "otherness". World literature, in any manner, carries the transnational histories of people from migrants and refugees to colonized, and these have allowed the "other" to project themselves in a more global and wider sphere, speaking out of their unique background and cultures. Globalization for Spivak (2013), on the other hand, has the tendency to become problematic since the neocapitalist and neocolonialist have taken themselves into a different form (or medium) that has been more fluid and promising, the form of technology:

> Globalization takes place only in capital and data. Everything else is damage control. Information command has ruined unknowing and reading. Therefore we don't really know what to do with the information. Unanalyzed projects come into existence simply because the information is there. Crowd sourcing takes the place of democracy. Universities become adjuncts to what is called international civil society; the humanities and imaginative social sciences bite the dust. (Spivak 2013, p.1)

Spivak posted this kind of premise in her book, *An Aesthetic Education in the Era of Globalization*. And from the passage quoted above, we can already understand that technology and globalization once used by neocapitalists and neocolonialists for their own selfish and conceited profits might be really dangerous even to the humanities and social sciences. She even said in one of her essays in *A Critique of Postcolonial Reason* (2003) that "Electronification of biodiversity is colonialism's newest trick" (p. 391). Here we can fully understand the possibilities of being irresponsible in using and managing these technologies that might affect our idea of "globalization". Through neocolonialist/neocapitalist technology, the mute "others" would be able to reconquer them. Nevertheless, Spivak (2008) in another book discussed possibilities of using technology in this respect:

> [T]hat 'technology', that vague evil, is something the humanist must confront by inculcating humanistic 'values', or by drawing generalized philosophical analogues from the latest spatio-temporal discoveries of the magical realms of 'pure science', or yet by welcoming it as a benign and helpful friend. (Spivak 2008, p. 149)

At this juncture, we can see the dualities of technology as either a tool of neocapitalists or neocolonialists for their own self-serving and conceited version of globality or "technology" as a tool that a humanist should "confront by inculcating humanistic values" so that the function of technology would be like that of 'technoscapes' that bridge the 'impervious boundaries'. With these functions, technology comes with ambivalence – a mixture of "the vague evil" or "[the] helpful

friend". To make technology a helpful friend with humanistic values, it is important to note that in this growing power of 'globality', Digital Humanities plays an important role, and that is the use of technologies as a tool that can bridge gaps and reconfigure the 'rotten' formation of a homogenized 'global community' from the hands of neocapitalist/neocolonialist.

Digital humanities in this sense is one way of empowering Appadurai's (2010) understanding of globality that has room for specific "…geographies, histories, and languages" of a certain state or certain culture using the technologies – that the former imperialists who are now neocapitalist/neocolonialist used to dominate the world – by understanding that it is a tool that can either create or carry culture, since cultures, just as H. K. Bhabha (1993) sees it, are both transnational and translational and have the capability to be used for humanistic purposes rather than to be destructive and deceiving as the "vague evil". Digital Humanities is a place for the technoscapes that help the global community to be reconfigured and bridge boundaries; through Digital Humanities we, as the disc jockey, that Spivak (2008) mentioned in her book, can inculcate humanistic values on these gadgets and computational machines, instead of pushing humanities and social sciences to the periphery, to the extent of making them bite the dust.

## Data Discussions

The following are data and information collected which are manifesting issues about Digital Humanities.

### *Unequal Distribution of DH Centres Across the Globe*

Centres are important for honing skills, promoting innovations in education, and conducting other important projects that can promote DH in a country. Digital Humanities centres across the globe are mostly found in Europe and North America – like bees in a beehive – meanwhile one can notice that on the southern part of the map from Fig. 9.1.

In South America, Africa, and Asia, there are limited and small numbers of DH centres available for students, scholars, and pedagogues alike. How can we even promote the possibility of a mutual and good relationship of science, technology, and humanities if we lack centres that can help us to understand and be more enthusiastic, in spite of the criticality of forms that an e-literature or other forms of Digital Humanities have?

Another thing that we can notice from this map is that most of the centres are located in the former imperial states, while the colonies and the colonized lands have few or even no DH centres. This recalls T. Mcphersons's (2012) article on *Debates on Digital Humanities* entitled "Why Digital Humanities is so White?" If


**Fig. 9.1** World map of DH centres courtesy of dhcenternet.org. (CenterNet 2017)

centres are like a garden's nursery that allows plants to pollinate and take care of the growing seeds, how can we pollinate enthusiasm and passion towards the mixing of science, technology, and humanities if we lack centres across the world? How can we see ourselves in the sphere of Digital Humanities if most of the forms of it like e-literature are created from the places where DH centres are erected? Isn't it this, with the unequal distribution of DH centres across the world, that already concedes to the other side of technology, as Spivak mentioned in her books, a project of neo-capitalist/neocolonialist? What happened to Appadurai's technoscapes that enabled technology to bridge these impervious boundaries? And, how can we see our own culture as both transnational and translational in the field of technology, if a centre that can help us mix and understand the complexities of e-literature or Digital Humanities is absent?

Of course, one might answer these questions by simply noting that technologies already exist around us; these things are already there. But the question is: how are we to be informed to use technology the same way that the disc jockey in Spivak's essay was informed? One should understand the importance of having a centre for DH in a country, aside from the fact that it 'stages' a country in terms of advancement in humanistic and technological academe. It also serves as a nursery that can help scholars, students, and teachers to work on the possibilities of using science and technology in the field of humanities with "inculcated humanistic values" in spite of using technology's "vague evil[ness]". DH centres can drive learners to produce and learn e-literature as a hybrid form of literature that can deal with the current issues of humanity Table 9.1.

## *School Policies Against Gadgets and Other Computing Devices*

As a teacher for 3 years, I am a bit disappointed about how institutions come up with pages of rules and regulations about the banning of such gadgets in school, instead of promoting the interdisciplinary and positive sides of learning how to use properly these computational devices. Most of the schools would think of students' safety

**Table 9.1** Sample of school policies

| Sample of school policies on using gadgets and other computing devices |
|---|
| 1. For security reasons, students are not allowed to bring mobile phones to school. This is accordance to DepEd regulation regarding the matter – *School A* |
| 2. Bringing of toys, playing cards, cassettes, radios, disc players, audio players, cameras, other electronic devices and/or gadgets, and other items not related to academic work without the necessary school permit – *School B* |
| 3. Possession of cell phones, any paging device, beeper, or similar electronic communication device on the school campus is forbidden from the first bell until after the last bell unless specifically exempted by the administration for health or other compelling reasons – *School C* |

The following policies are from different schools like private (Ateneo, La Salle, Centro Scholar, Fatima, Benedictine International School (2011), Colegio de San Juan de Letran Calamba (2015), and Xavier School (2016), etc.) and public schools (Manila public schools such as Justin Veach Elementary School (2016), DepEd schools like MaSci High School, etc.)

(which I personally don't have any problem with), but we will not be able to rethink on how gadgets might be used inside of classrooms if we do not trust and encourage our own students to be responsible users of the available technologies. We can't, in effect, trust them. Though currently there are some few schools that are already rethinking about how to use gadgets inside their classrooms. Sadly, most of these schools are private schools, and most of them are schools located in the urban areas, while if you go to the far-flung or rural areas, projectors and LCDs are not even available for normal classes.

On the other hand, some schools are also allowing their students to use their phones but only for some 'valid' reasons like health and personal family issues. However, this doesn't cater for the possibility of using these computational devices for learning and producing e-literature. In some schools, students are required to have a permit before they can use their devices, or else they will be considered to show unbecoming behaviour inside the campus. There is no problem with this. I understand that gadgets in a developing country, sometimes, can risk the life of a student. Here we can say that an Althusserian idea of scholastic apparatus may be seen as both repressive and ideological. It might become manifest as schools try to discipline students to become responsible in using their gadgets. However, this conflicts with Kant's (2007) and Reading's (1999) idea of school, perhaps, in the new future when DH centres are to be erected in the country. In fact, people's perception towards these computational gadgets might change just like how people thought of videos as a waste of time before, but now, as revealed in Sit and Guo's chapter in the book, it is seen as way of learning and exercising second language development; they may learn how to value the idea of experimental education and learn how to dereferentialize technology as a means of learning, rather than something that can harm a student's life. If there are to be numbers of pages banning gadgets and other electronic devices, let there be also a similar number of pages and lessons that will help students to become responsible users of gadgets and that can help them create e-literature and cyberspace, thus teaching students the ethics of using social media and other useful websites for learning.

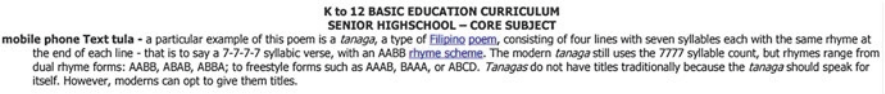
K to 12 BASIC EDUCATION CURRICULUM
SENIOR HIGHSCHOOL – CORE SUBJECT
**mobile phone Text tula -** a particular example of this poem is a *tanaga*, a type of Filipino poem, consisting of four lines with seven syllables each with the same rhyme at the end of each line - that is to say a 7-7-7-7 syllabic verse, with an AABB rhyme scheme. The modern *tanaga* still uses the 7777 syllable count, but rhymes range from dual rhyme forms: AABB, ABAB, ABBA; to freestyle forms such as AAAB, BAAA, or ABCD. *Tanagas* do not have titles traditionally because the *tanaga* should speak for itself. However, moderns can opt to give them titles.

**Fig. 9.2** K-12 curriculum guide for twenty-first-century literature from the Philippines and the world (screen capture of the document)

## *Forms of e-Literature in the Philippines*

The Philippines, as a country well-known for being an active user of social media, has been also able to create other forms of literature through the gadgets and other computational devices. One of those forms is known to be 'text tula' or 'hyper-poem' (Fig. 9.2).

The updated curriculum of DepEd[6] for senior high school has included 'text tula' as a form of literature born out of using mobile phones in the heyday of 2000s.[7] Text tula or hyperpoem was known to follow the form of modern *tanaga*,[8] a poem that uses 7777 syllable count but revived and made popular through mobile phones (Image 9.1).

Above is an example of text tula. It follows the 7777 syllable, and it has three stanzas. Another example of e-literature is the 'social serye' or 'text serye', a story that is made out of screenshots of SMS and chat conversations collected into an album that unfolds a narrative of a certain story. Both 'social serye' and 'text tula' break the conventions of the traditional Filipino poem and short story through their medium and form (Image 9.2).

The author/ creator of this well-known 'social serye' is Jenny Ruth Almocera. Her work has received a lot of attention because of the uniqueness of the form; it was even considered as the New Age *Romeo and Juliet*[9] because of its popularity among the masses and the quality of the narrative it presents, 'Vince and Kath'. It eventually got adopted for film and a novel in book form which are all from ABS-CBN, one of the three giants in the television industry of the Philippines (Buccat 2016).

For a country that topped the ranking in using social media, this kind of e-literature is not impossible to be created. We have 48 million active users of social media who use desktop, laptop, PSP, and cell phones,[10] although in more specific data there are 41 million mobile social media users who normally use cell phones or tablets. With this kind of population enthusiastic enough to engage with social media through

[6] See Department of Education (2016). DepEd means Department of Education.

[7] See DepEd memo http://www.deped.gov.ph/sites/default/files/memo/2008/DM_s2008_377.pdf.

[8] Tanaga is a type of Tagalog poetry that can be traced back to the time of Spanish occupation in the Philippines.

[9] See Atienza (2016) or through Wikipedia https://en.wikipedia.org/wiki/Vince_and_Kath

[10] Data based from the infographic from the presentation slides by We Are Social Singapore and Hootsuite (2015).

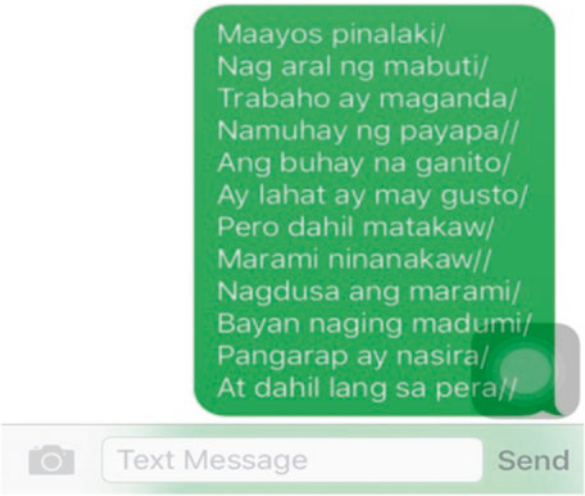


**Image 9.1** Text tula sample. (Susmerano 2016)

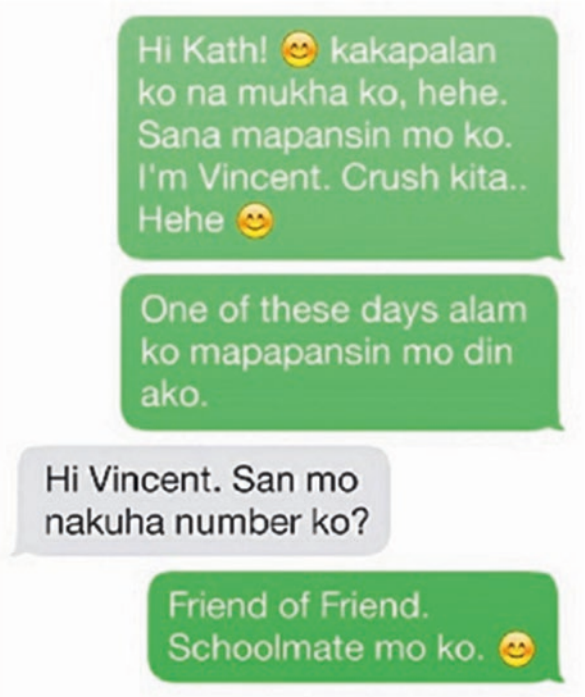


**Image 9.2** Social serye 'Vince and Kath' from Facebook (Life and Social Media 2016)


**Image 9.3** Data on social media users in the Philippines

computational devices, e-literature such as hyperpoem or 'text tula' and 'social serye' or 'text serye' is not impossible to make happen and be created (Image 9.3).

Given this kind of context, even if the Philippines does not have any digital humanities centre, it can still produce simple examples of e-literature born out of cyberspace with a lot of patrons and consumers. It is a good thing that public schools nationwide are mandated by the DepEd to teach and integrate technology in their literature classrooms. However, the majority of the teachers are still unfamiliar with the nature and function of e-literature in the classrooms. We have also to remember what Mcpherson (2012) said in her online article:

> We must remember that computers are themselves encoders of culture…. Politically committed academics with humanities skill sets must engage technology and its production not simply as an object of our scorn, critique, or fascination but as a productive and generative space that is always emergent and never fully determined. (Mcpherson 2012, para. 54)

We should think that "computers are themselves encoders of culture". Similar to H. K. Bhabha's (1993) idea of culture as being both transnational and translational which may be tied with the use of global new media technologies, computers and other computing devices at the moment are considered as encoders of our life, history, and culture. In the Philippines, our e-literature might really be formed out of these computational devices to create a modern "Urbana at Feliza"[11] as a way of

[11] A novel that follows the lives of the two siblings, namely, Urbana and Feliza. The narrative of the story unfolds through the siblings' exchanges of letters.

narrating a story, and just as Lo and Mok's study of gaming literacy in Chap. 8 demonstrates, gaming culture of the current teenagers is also a possible site of learning; the Philippines unique forms of e-literature has also the potential to become part of the pedagogical space of learning as well as culture nurturing.

Here comes again the importance of having a DH centre that can strengthen both purposes of using technology for humanities or for social sciences. DH centres can provide training, seminars, workshops, and short courses in Digital Humanities, whether for teaching or for scholarship, given the fact that there are forms of DH which are quite critical and complex. Erecting DH centres will help the Philippines to project itself in the global community that is reconfiguring itself in academia through the technoscapes. And building DH centres will help the 41 million 'disc jockeys' to learn how to inculcate 'humanistic values' in the technology.

## Conclusion

E-literature as a product of Digital Humanities may embody that 'experimented' education that Kant posited. Through e-literature in both technoscapes and cyberspace, we may break 'impervious boundaries'. We can project our culture in the widening and broadening global community. Moreover to strengthen, improve, and enrich the unknown beautiful and helpful capacities and possibilities of mixing science, technology, and humanities, we need DH centres for the production and continuous exploration in Digital Humanities. The DH centre is one of the three levels that we should consider upon embracing this new trend in the academic world. As S. Antonijević (2015) discussed in her book, there are three relevant levels in Digital Humanities scholarship, namely, "…the micro level (individual scholars), the meso level (academic fields), and the macro level (academic organizations)" (Antonijević, 2015, p. 4). This passage shows that at the micro level both teachers and students alike are part of it, while on the meso level are the subjects that cater to DH as a field of learning, like literature and new media classes and courses, and lastly, at the macro level of academic organization which DH centres can provide. Each of these levels is being reconfigured by the technoscapes using technological tools to aid learning and create new kinds of digital humanities. In the Philippine context, we may say that both micro and meso levels are available, though these levels are still weak and fragile. Meanwhile, creating the macro level will be a huge help to strengthen and improve the current status of both micro and meso levels.

The macro level of Digital Humanities scholarship is important if a country would like to strengthen and improve the current status and the seemingly divided entities of the micro and meso level. Establishing a DH centre would aid the two levels to be more refined; moreover, having a centre would help the former colonies to be more global in terms of "technoscapes" that can bridge the different sides of the world. Risam (2015) in her talk about "Humanities in the Global south" mentioned that:

> Indeed the digital divides that exist in the world do so unevenly, the local context matters, and are inflected by linguistic, cultural, and social dimensions: each location and even local communities within a national context are uniquely constituted beyond binaries like East or West and their practices move beyond Humanities and Sciences. It is only by defining and situating these contexts and the Digital Humanities practices that exists within them that we can understand what Digital Humanities looks like above the local and global scales.

Digital humanities, similarly to what globality means for A. Appadurai, is induced with different linguistic, cultural, and social dimensions. We can map digital humanities through the different practices that a local community can do; as for the Philippines, we have two distinct types of e-literature – 'text tula' (hyperpoem) and 'text serye' (social serye) – which are produced out of the Philippines' enthusiasm and patronage of the social media through the cyberspace. Pinning e-literature or even other forms of Digital Humanities into our education means a lot, as Mcpherson (2009) argued in her lecture at CSWR University entitled "Expanding the Scholarly Imagination: Experiments in the Digital Humanities":

> I think we should value multi-media literacy and push in a way into the machines…and I think what Humanities scholars are supposed to do is to understand meaning in the world those of us who study at least the present to understand meaning, we need to be at least literate in codes, maybe we need language and reading exams in information structures and databases code as a very generic part of education, I think one of the reasons that Digital Humanities is such a hard sell for the traditional Humanities scholars is that our universities don't reward a sort of promiscuous interdisciplinarity at all.

Here resonating again the Kantian thought of "experimented" education and Reading's argument on "dereferentialization", universities and schools should value this "promiscuous interdisciplinarity" so that we can have a more dynamic and enthusiastic attitude towards the innovations and possibilities of mixing science and humanities together and the beauty of undetermined outcomes that might bring. Through Digital Humanities, we can be the disc jockey that Spivak (2008) mentioned who can inculcate the "humanistic values" in the "vague evil" and make it be a "helpful friend" inducing our culture, different and specific backgrounds, languages, and histories that will help to reconfigure the global community by finding ourselves in the broadening and widening field of Digital Humanities.

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# Part IV
# Future Directions in Digital Humanities

# Chapter 10
# Visitors' Perception of a Multimodal Exhibition: A Case Study at the Hong Kong Heritage Museum


**Anna Wing-bo Tso and Janet Man-ying Lau**

**Abstract** One of the most important issues for museum curators today is to enhance the digital experiences of visitors. Multimedia and hypermodal resources have been tailor-made to meet the expectations of modern audiences, or so the curators have perceived. With a view to investigating the effectiveness of museum-based multimodal devices in Hong Kong, this chapter uses a case study evaluation approach to examine the visitors' digital experiences in "Claude Monet: The Spirit of Space" (May to July, 2016), a much-acclaimed exhibition held at the Hong Kong Heritage Museum. To find out the museum visitors' perception of the multimedia setting and their multimodal experiences in the Monet exhibition, the authors invited 12 Hong Kong adult visitors to participate in the case study. Findings from the small-scale opinion survey and focus group interviews revealed that digital devices, multimedia platforms, and resources do enhance visitors' engagement, regardless of the different education levels or fine arts backgrounds of the exhibition visitors. However, in terms of narrative design and meaning making, most visitors reflected that digital platforms may sometimes overwhelm the core content they represent. Whether the aura of the masterpieces can be fully captured and/or enhanced by the digital tools has also aroused concerns. The gap between the exhibition content and the digital design has to be bridged. Based on the findings, this chapter explores how images, sounds, words, and designs interact and integrate in constructing a coherent discourse in the exhibition. This chapter also discusses ways to craft a focused, specific, and coherent narrative as learning experiences at museums become more and more digitized.

**Keywords** Multimodal literacies · Museum-based digital learning · Museum visitors

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## Digital Revolutions in Museums and Museum Studies

Technological advancements in the last 10 years have brought huge impacts and reforms to cultural institutions of all kinds, and museums are no exception. The future directions in digital humanities shall include digital literacy in different areas at all levels, ranging from online social networking for the general public to multimedia learning platforms specifically designed for professional courses at university. In order to live up to the expectations of the local community and serve a global audience, experts in museums, teachers, and students of museum studies must observe the digital impact on the field, get professional, and fulfill their true potentials in the following emerging trends:

1. *Digitization of the museum collections*

Traditionally, museums are cultural institutions where physical artworks and cultural objects are collected, catalogued, and made accessible to the public through in-house exhibitions. In the digital age, however, museums are further expected to play the role of storing, developing, and archival cataloging digital cultural content for academic research, education, leisure, and commercial use. The formerly clear boundaries between museums, libraries, and archives have been blurred due to technological advancements (Hedstrom and King 2004). One international role model is New York's Metropolitan Museum of Art, which has developed a digital collection of free-to-use images of up to "13% of the museum's permanent collection of 1.5 million artworks" (Ha 2017). This online archive is ever-expanding, and its scale is now considered comparable to the world-class digital image resources provided by the British Library and the New York Public Library.

2. *Social media marketing*

As the population of social communities keeps rising rapidly, museums need effective social media strategies to build a strong online presence so as to attract and engage new and diverse audiences. Corresponding to current digital culture and trends, top-tier museums, including New York's Museum of Modern Art (MoMA) and Guggenheim Museum, have put a great deal of effort into increasing their social media reach. According to Stokes and Scott (2015), MoMA has reached a record-breaking 124 million users on Instagram's social media accounts, let alone its countless followers on Twitter, Facebook, Tumblr, and other social networks, who constantly share their museum experiences via selfies, pictures of artworks, live event videos, etc. Powerful social media tools such as online ticketing and GPS within the exhibition area have also been invented to assist museum visitors when touring onsite.

3. *Exhibition practices blended with technological innovations*

Besides digital archiving and social media marketing, highly successful museums are also keen on engaging visitors through "… high levels of technological interactivity" (Ravelli and Heberle 2016, p. 521) when housing collections, making the visitor experience in the in-house exhibition as alive and exciting as they can be.

Unlike exhibitions curated before the digital age, in modern times, multimodal exhibitions need to keep up with the "growing shift in how literacy is being defined and what it means to be literate in the twenty-first century" (Albers and Harste 2007, p. 6). Put simply, present-day curators are expected to make good use of the digital media for both entertainment and education purposes, which can include virtual texts such as film clips, audio clips, image projections, as well as interactive devices such as games, apps, and social networks, alongside the museum displays and physical facilities of in-house exhibitions.

While all three aspects are equally crucial for museum design and management, the focus of this chapter is mainly on the third aspect. We will first look into the notion of new multimodal literacies, the key to new directions in digital humanities. Present-day multimodal exhibition practices in museums will be discussed. Then, we will start our case study of "Claude Monet: The Spirit of Space" (May to July, 2016), an in-house exhibition built upon new multimodal literacies, which was made successful at the Hong Kong Heritage Museum. The case study was conducted at two levels: (1) observations of the multimodal design in the exhibition venue and the education corner, and (2) an evaluation of the visitors' perception of the multimedia setting and their multimodal experiences in the Monet exhibition. After discussing the case study in Hong Kong, this chapter will also briefly revisit Tilden's (1957) six interpretive principles and look into possible ways of conducting a focused, coherent, and satisfactory multimodal exhibition.

## What Is Multimodal Literacy?

"Multimodal literacy," also commonly known as "multimodal literacies," is a term coined by Kress and Jewitt (2003). Marked by the plural suffix –ies, it stands apart from the singular and linear concept of print literacy (Heydon and O'Neill 2016). Its plurality suggests that "literacy nowadays is no longer limited to reading and writing" (Tso and Ho 2017), which are often not "transferable to all contexts and all disciplines" (Tso and Chung 2016). Instead, the concept of literacy has been redefined as the ability to read, view, understand, respond to, and produce (Walsh 2010) open, diverse, and interconnected ways of knowledge representations and meaning-making (Kress and Jewitt 2003). For example, to play a digital navigation game well, one shall need orienteering literacy skills that range from map reading, compass bearing, direction visualization, distance measurement, and visual-spatial organization (Tso and Lau 2016). A player may be considered illiterate if his or her skills are limited only to reading and writing. Moreover, being literate in the digital gamification setting also means mastering combined literacy abilities such as digital literacy, problem-solving, team-building, self-learning (Tso and Lau 2018), and most of all, legitimate participation in socially-situated practice (Tso and Ho 2018). Likewise, "multimodal" (Anstey and Bull 2010) refers to texts that are composed of two or more of the following five semiotic systems:

1. Linguistic: comprising aspects such as vocabulary, generic structure, and the grammar of oral and written language
2. Visual: comprising aspects such as color, vector, and viewpoint in still and moving images
3. Audio: comprising aspects such as volume, pitch, and rhythm of music and sound effects
4. Gestural: comprising aspects such as movement, speed, and stillness in facial expression and body language
5. Spatial: comprising aspects such as proximity, direction, position of layout, and organization of objects in space

Most Web 2.0 sources contain all five semiotic systems. One typical example is an online app on Facebook, which can include written instructions, an interactive forum, still and moving images, music and sound effects, maps and compasses, etc. Because of the shift from print-based texts to multimedia texts in the digital environment, "multimodal literacies" is often used interchangeably with "multimedia literacies" in public contexts, which reflects the increasing importance of interactive multimedia and digital texts. The term "[m]ultimodal," on the other hand, "is preferred in the field of composition and rhetoric" (Lauer 2009, p. 231).

## Multimodal Practices When Housing Exhibitions

While digital technologies have brought boundless possibilities to creating interactive exhibit designs, the content designers and museum curators can be torn between key factors such as "audience experience, digital mediation, visualization techniques and meaning" (Kocsis and Barnes 2008, p. 1). Whether to use multimedia within the exhibition galleries or set multimedia only in separate areas, Davis et al. (1996) have provided clear guidelines addressing the visitor experience. Multimedia applications are advised within exhibition areas when:

1. The designed multimedia "relate directly to the storyline or subject matter of a specific gallery" (p. 19).
2. The multimedia setting presents no problem in visitor flow (*ibid*).
3. The in-gallery multimedia does not create conflicts between the social behavior they promote and the social behavior considered acceptable inside the exhibition areas (*ibid*).

In other words, multimedia installation should not be used merely as gimmicks. They are not suggested if visitors find them too intrusive and distracting to enhance their museum experience. What is at issue is: what do museum visitors like or dislike about the multimodal settings in in-house exhibitions? What should museums do to optimize the benefits of using multimedia and digital technologies when curating exhibitions? Our case study will address these two questions by examining the exhibition design and the adult visitors' perceptions and experiences of "Claude

Monet: The Spirit of Space," a popular multimodal exhibition held in Hong Kong in May to July 2016.

## Purpose of the Study

With a view to investigating the effectiveness of the multimodal exhibitions in Hong Kong, in June 2016, we carried out a small case study to examine Hong Kong visitors' multimedia learning experiences in "Claude Monet: The Spirit of Space" (May 4 to July 11, 2016), a recent exhibition held at the Hong Kong Heritage Museum. We noticed that young and adult visitors may react very differently to digital devices and multimedia. As Albers et al. (2008, p. 4) have observed, "…[f]or students, YouTube, iPod Nans, cell phones with still, video, and audio capabilities, and other digital devices are not new; they are the everyday tools used to communicate in or navigate their worlds". Children and teenagers can be more tolerant to the presence of interactive multimedia in the exhibition. Yet, adults in their 40s, 50s, and 60s may be looking for "contemplative viewing experience" (Davis et al. 1996, p. 18), which makes it more challenging for museums when handling multimodal exhibitions. In light of this, we choose to evaluate the exhibition effectiveness from the perspective of adult visitors, who may not be as easily satisfied as the young visitors.

## Research Questions

In this case study, we have two research questions:

1. How was the museum exhibition, as a multimodal text, designed to display artworks and convey knowledge to its visitors?
2. How successfully did the Monet exhibition in Hong Kong engage the adult participants with the multimodal exhibition design?

To reveal how the multimodal design became part of the Monet exhibition in Hong Kong, in the following, we will give a descriptive account of the exhibition design based on the observation we conducted in June 2016. Following the descriptive account, we will move on to research question 2 and analyze the exhibition impact on adult visitors by looking into the data we collected from the pre-visit art knowledge test, the post-visit survey, and interviews.

## Exhibition of the French Painter

The recent public exhibition "Claude Monet: The Spirit of Place" (Monet's exhibition) was held from May 4 to July 11, 2016 at the Hong Kong Heritage Museum. Different from the high-end Hong Kong Art Museum in Tsim Sha Tsui, the Hong

Kong Heritage Museum is a public-friendly exhibition venue popular with families, students, and laymen alike. There were a total of 17 Claude Monet's original paintings displayed at the exhibition, which were conserved in private and French public collections. It also featured an audiovisual and multimedia installation with images from Monet's time and today. About 250,000 visitors visited it during the exhibition period in 3 months. Seemingly, the local community admired the masterpieces by the French painter because they did not mind queuing up for the exhibition in order to get into the exhibition for a glimpse. The exhibition was a huge success by attracting the large amount of visitors and to a certain extent promoted the appreciation of modern art to the local public.

## Design of the Exhibition Venue

Traditional art exhibitions normally emphasize the artworks displayed in spacious areas and let them speak for themselves, which tend to be more static and passive. However, the Monet exhibition employed more interactive and educational displays when compared with the previous art exhibitions held in Hong Kong. This exhibition not only showcased some of Monet's original artworks but also used multimedia technologies and interactive installations to enhance the visiting experiences of the public. Meanwhile, a series of special programs including talks, workshops, educational activities, and guided tours were also organized to introduce the artist in a relatively three-dimensional way, covering content ranging from his artworks and his life to the French lifestyle. The audience had the chance to learn more about how the artist worked and got inspired as they physically visit the mock-up areas of Monet's living room, dining room, and his studio, all of which were designed with reference to the setting of Monet's home in Giverny, France.

The exhibition comprised two main sections: the exhibition hall and the education gallery. Curated by Bruno Girveau, the director of the Palais des Beaux-Arts de Lille and the *Musée* de l'Hospice Comtesse in France, the exhibition hall was divided into four main themes center-staging specific places Monet had stayed in France or Europe, including Normandy and Brittany, Paris and the Ile-de-France region, London and Venice, and Giverny's famous water lily garden. The original paintings displayed side-by-side with the multimedia installations created a stunning and interactive visual experience for visitors. The exhibition hall was created in a one-way spiral design, which led the visitors through the exhibits in different areas. It all started with a short video as a brief introduction to Monet's biography at the entrance of the hall, followed by selected original paintings related to different places alongside some other short videos with explanation about the rise of Impressionism and the painting style of Monet and so on. Finally, the exhibition ended with a large interactive installation of a replica of Monet's water lily pond. The floor plan design of the exhibition hall can be seen in Illustration 10.1 below. The original paintings were mainly mounted and displayed in classical frames. The general lighting was dim, but there were spotlights on each of the paintings. Visitors


**Illustration 10.1** A one-way spiral walking path was designed to lead visitors through the exhibition

could look at the paintings at a very close distance, and most of the paintings allowed photo shooting without flashlight. Also, many people took selfies with the paintings, and some also posted and shared the selfies on their own social media platforms.

## Multimedia as Part of the Exhibition Design

The Monet exhibition employed various multimedia tools as part of the exhibition design, including short video projections and interactive games. There were nine 2-min video clips about Monet's biography, Monet's living places and the landscapes in his paintings, Impressionism, and Monet's drawing techniques. They were projected on the walls inside the exhibition areas, in addition to two interactive installations separately placed at both the entrance and the exit of the exhibition hall. Together with the spatial arrangement and the written descriptions printed on the wall, the multimodal exhibition contains all five semiotic systems.

There were more multimedia installations at the education gallery outside the main exhibition hall. Designed by the Hong Kong Heritage Museum, the education gallery was furnished with reconstructed scenes that simulated various corners in Monet's home, studio, and garden, giving visitors the opportunity to see the connection between Monet's life and works from different perspectives. For example, the dining table at Monet's home installed six projectors to project French cuisine. Visitors were invited to choose from appetizers to desserts through a touch panel of

a virtual menu. This small interactive game was designed to give visitors a taste of the French lifestyle. Furthermore, some mock-up windows in Monet's home were installed with LEDs which simulated the from-dusk-till-dawn lighting effect of the natural environment. Lighting and music were used in the education gallery to create the atmosphere. The floor plan design is shown in Illustration 10.2.

Among the simulated rooms, the replica of Monet's water lily pond was designed as a main focal point of the Monet exhibition in order to echo Monet's most famous water lily paintings. When entering this exhibited area, visitors would hear soft classical piano music and birds singing, which brought the audience to a simulation of Monet's Japanese water garden. A giant screen was placed flat on the floor as a kind of pond-like imitation with a Japanese-style walking bridge in the middle, while four interactive kiosks were located at each side. Each kiosk had a touch panel to let visitors choose different colors and shading of water lilies to be displayed on the giant screen on the floor (see Illustration 10.3). Once the user confirmed the selection, the water lily would bloom and gradually fade out in slow motion to create the mood of mother nature. Though the area was packed with many visitors, no one could resist staying and appreciating this imitated water lily pond. The response to the water lily interactive installation was positive.

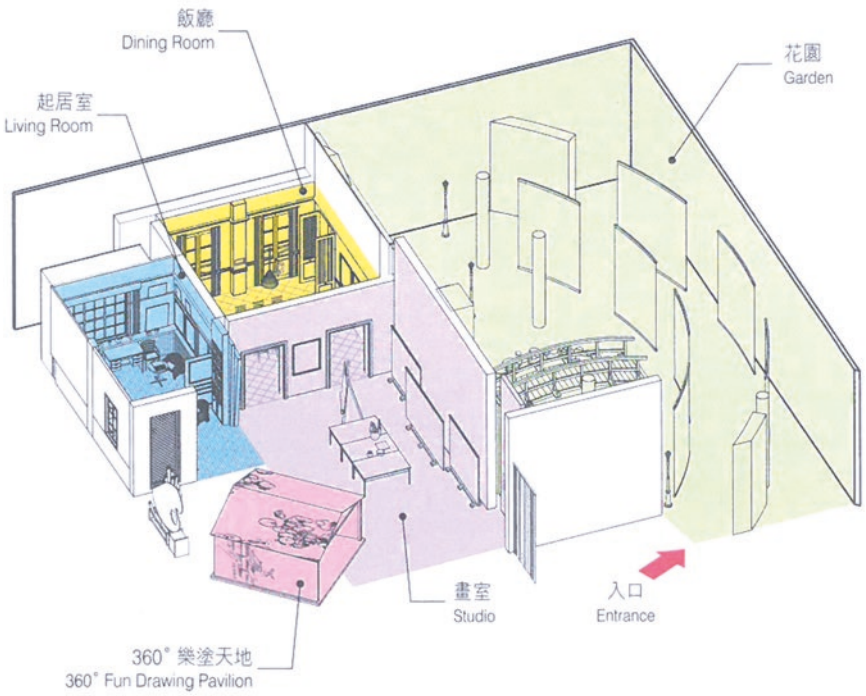


**Illustration 10.2** The walking route was designed in a single direction to lead the visitor through the simulated Monet's garden, living room, and dining room, followed by his studio and the 360° Fun Drawing Pavilion


**Illustration 10.3** The simulated water lily pond in the exhibition venue

## Multimedia as a Visitor Learning Tool

The Monet exhibition was unlike most of the art exhibitions in Hong Kong. It largely employed multimedia installations to enhance the visitors' experiences. As the government wrote in its press releases of this exhibition, "Multimedia technologies are being applied to reconstruct the famous garden and water lily pond for special visual impact" (Leisure and Cultural Services Department of The Government of the Hong Kong Special Administrative Region 2016, para. 9). The use of multimedia installations apparently served as a strong focal point to attract visitors, meeting its purpose as stated. On visiting the exhibition for five times in both weekdays and weekends, we noticed that the exhibition hall was more likely to attract adults who tended to stay there longer. They were also more willing to spend a longer time to look at each painting and video. The simulation of Monet's Japanese water garden located near the exit, in particular its interactive game kiosks, appealed to all generations. The comments on this exhibition were polarized in two extremes, in particular in the use of multimedia. Some people spoke highly of its unconventional display of art. For example, YTSL (2016), a popular Hong Kong blogger who has seen the masterpieces in most world-famous museums, cannot help praising this exhibition:

> In addition, I heartily applaud the use of multi- and interactive media here, in the form of such as screenings of informative short films (about Monet's life, the Impressionists' preference for painting outdoors, etc.) and – less conventionally – an opportunity to virtually "visit" and digitally "paint" water lilies onto the surface of a reconstruction of the pond of Monet's Japanese Water Garden.

Meanwhile, as reported by *Standnews* ("Zhuanfang – Monai zhan" 2016), some people were upset about the use of technology, commenting that the lighting arranged to match with the multimedia display defeated the purpose of art appreciation.

Furthermore, each painting had a small label which included some basic information and a QR code for smart phone scanning. Supplementary information of the paintings could be easily obtained, which again provided a learning aid for visitors


**Illustration 10.4** The education gallery

to know more about the artist and his artworks. For the education gallery, it was particularly attractive for those visitors with family members who would like to wander around and relax in the museum. To sum up, the Monet exhibition not only attracted visitors who were interested in the Impressionists' legacy in Western art but also provided fun through learning devices for entertainment and education (Illustration 10.4).

## Research Methodology

To understand Hong Kong adult visitors' perception of the multimedia setting and their multimodal learning experiences in the Monet exhibition, 4 male and 8 female Hong Kong adult visitors were invited to participate in our small-scale study. Mixed research methods were used to collect data:

- Participants were invited to fill in a multiple-choice (MC) test on Western fine art. All 15 MC questions were based on the GCSE Art and Design examination.

- Each participant was also asked to fill in a questionnaire which collected both their demographic information and their overall perceptions of the Monet exhibition.
- Participants were paired up and interviewed for their comments on the experiences in the multimodal exhibition and the interactive multimedia education gallery.

## Findings and Discussion

As found through the survey, these 12 visitors were local middle-class Hong Kong citizens, among which 6 were in their mid-40s, 2 were in their 50s, and 4 were in their mid-60s. Eleven participants who received secondary school education or above said they had heard of Claude Monet and his masterpieces, and all of them had expressed interest in the Monet exhibition. One participant said she had happy experiences visiting galleries and museums since childhood:

> My father used to take my siblings and I to galleries and museums when we were children. I have always loved the quiet, sublime moments in the spacious exhibition area. Though no one explained anything to me and I did not know the artists and their works on display, I learnt to enjoy the ambience in museums and appreciate the delicate beauty in the artworks. (Sharing by a female participant)

Yet, none of them had any initial training or qualifications in fine art, Western art history, or art education. A participant shared with us in the interview that he was surprised to know that Monet is one of the world's most expensive artists. Knowing that the average price of each Monet's painting is over US$ 7020 million shocked him:

> I didn't know the paintings that I have seen in the Hong Kong Heritage Museum just now are worth billions of Hong Kong dollars! If I had been well-informed before entering the exhibition, I would have spent more time appreciating the invaluable artworks! The curator really should have shown the price of each painting underneath the frame! (Comments made by a male participant who had not heard of Claude Monet beforehand)

One reason for this phenomenon is that fine art appreciation has not been in the core curriculum within the education system in Hong Kong, not to mention the education system in the 1960s–1980s. Though most Hong Kongers today welcome public exhibitions of world-class artworks, fine art appreciation is commonly perceived as a classy and expensive activity for the leisure class. The lack of art education did correspond to the frequency of going to museums: two participants admitted they never had the habit of visiting museums. The rest revealed that they only visited museums once or twice a year.

The average test score the participants obtained was 59 out of 100, which also reflected the participants' lack of Western art knowledge:

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Test score | 47 | 47 | 53 | 53 | 53 | 60 | 60 | 60 | 60 | 60 | 73 | 80 |

The participants' unsatisfactory results in the art knowledge test embarrassingly indicate that most participants only knew Leonardo da Vinci and Pablo Picasso but had hardly heard of other world-famous artists including Sandro Botticelli, Gustav Klimt, Salvador Dali, Andy Warhol, and Frida Kahlo. Masterpieces such as Auguste Rodin's *The Thinker* (1880), Gustav Klimt's *The Kiss* (1907–1908), Henri de Toulouse-Lautrec's *At the Moulin Rouge* (1892–1895), and Grant Wood's *American Gothic* (1930) were not recognized either, even though clear images of the artworks were printed on the test paper. Few managed to guess the nationalities of the artists; fewer could distinguish artistic movements like primitivism, cubism, fauvism, and modernism. The world knowledge that average UK citizens obtained at high school in art class (for GCSE level) was not shared by the 12 Hong Kong participants.

## Adult Visitors' Experiences of the Multimodal Exhibition

Despite the participants' disappointingly thin art knowledge, from the questionnaires and focus group interviews, it is revealed that 11 of them found the exhibition enjoyable. Although the exhibition venue was small, three participants stayed for over an hour, seven stayed for about 1 h, and two stayed for about 30 min. One of the participants expressed that she spent more time on the exhibition than she had expected. Regardless of their different education levels, many of them believed the 17 original paintings of Monet were the highlights of the exhibition. Interestingly, it appears that some even like the multimedia application more than the paintings (Chart 10.1).

To a certain extent, participants agreed that digital devices and multimedia platforms in the exhibition and education gallery had enhanced visitors' engagement. See Table 10.1 below.

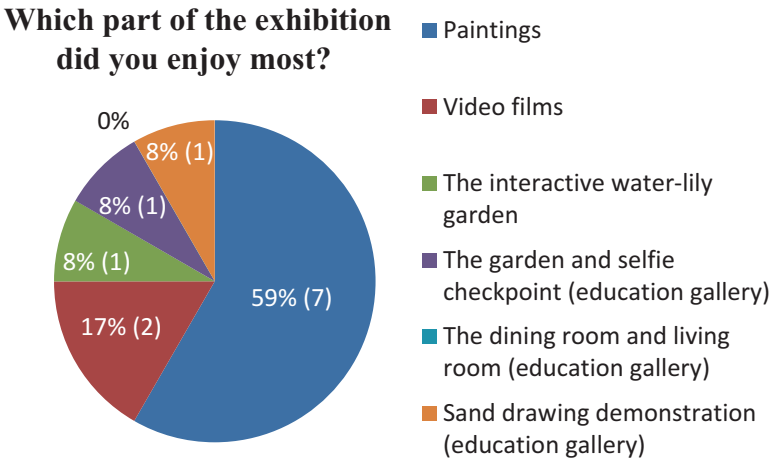


**Chart 10.1** Adult visitors' responses on being asked what they enjoyed most in the exhibition

**Table 10.1** Feedback from adult visitors on being asked whether digital devices and multimedia platforms in the museum enhanced visitors' engagement

| | |
|---|---|
| Feedback 1 | "The three precious film clips on Impressionism, Monet's biography, and Monet's painting skills were most enjoyable. I watched and re-watched them" |
| Feedback 2 | "The re-created garden, studio, living room and dining room of Monet's home in Giverny were authentic. I now have a more comprehensive understanding of Monet's life, the way he lived, and his works of art" |
| Feedback 3 | "The digital tablets placed around the pond allowed me to paint my own water lilies inspired by Monet's works. It's great fun" |
| Feedback 4 | "The audio-visual narration enhanced my knowledge about Monet and his lifetime" |

It was indeed impressive to see how the curators managed to pack the 17 artworks with enjoyable multimedia devices and resources in so packed a space. In view of the limited exhibition space, 2 participants mentioned that projecting short film clips on the walls in the exhibition venue was an effective way of presenting information:

> This museum is so small that you simply cannot sit down and appreciate artworks at your own pace. The two-min film clips, one after another along the one-way path, are perhaps a strategy to make sure visitors won't be stuck in one place for too long? (An observation made by one participant after the post-visit interview)

> There are too many people rushing into the exhibition area at the same time. The room can be very crowded during peak hours, I can imagine. No wonder the short film shows have no seats. That saves space. (Another post-visit remark made by a participant)

Just as Davis et al. (1996) predict, museum visitors are likely to accept the in-house multimedia application if it does not create problems for the visitor flow. Nonetheless, there were people who felt that the film projection could obstruct their view of the oil paintings:

> Because of the LED projection on the walls, the lighting inside the exhibition hall is dim. I cannot see Monet's paintings clearly. That defeats the purpose of the exhibition. (A criticism made by one participant)

The exquisite storyline narrated in the exhibition was praised by the participants, for they were well-informed about the places Monet had lived and worked. It was reported that the juxtaposition of the painted landscapes and their real images were the most amazing. Meanwhile, participants also raised the point that digital and multimedia devices should not be used at the expense of a coherent narrative design. Some adult visitors reflected that in the education gallery, the scattered, varied, and incongruent information they obtained from the digital setting did not seem to provide them with a solid narrative handle to hold on to. Some thought that the education gallery was on the theme of French culture, and this topic seemed to have overwhelmed the main theme (i.e., Monet and his paintings). They expected the education gallery to stick to artworks:

> I thought this museum wanted to educate us on Impressionism, Monet and his paintings? Then, I saw images of French food flashing on the dining table of Monet's simulated home. Food and Monet, where is the connection? (A comment by one participant after visiting the education gallery)

> I found the apps about French menu in Monet's living room a bit distracting. The room is crowded with kids. It's hard to squeeze my way in. (A participant's comment upon being asked about the impression on the education gallery)

> Kids love digital games so maybe that's why the multimodal installation is designed in the education gallery. But adults want a more meaningful learning medium. (Another comment made by a participant in the post-visit interview)

At first glance, the blunt comments look like criticisms against the usefulness of digital media, complaining how deep information cannot be easily conveyed through digital devices and platforms. In fact, the point raised by the participants was not against the use of new media. It was about when and how digital and multimedia should be used in exhibitions, which reinforces one of the three concerns addressed by Davis et al. (1996): the multimedia application in the exhibition must "relate directly to the storyline or subject matter" (Davis et al. 1996, p. 19), or else the multimedia may become a distraction and visitors may feel lost.

Even if the multimedia application is in alignment with the storyline curated in the exhibition, that is, in this case, the narrative about the natural landscapes captured in various countryside places which Monet had lived in his lifetime, flaws can still be found in the multimedia. As pointed out by a number of participants, high technologies cannot capture intangible qualities such as the "aura" and "spirit" of the artworks, nor can they revive the "atmosphere" of the physical site:

> I have been to famous galleries and museums in the [sic] Europe for dozens of times. Of course one cannot compare this simulated water-lily in Hong Kong with the authentic water-lily in Musée de l'Orangerie in Paris. They are simply different. (Feedback from one participant who had visited museums overseas)

> The virtual experience of the water lily pond is good, but it's just not the same as the physical experience. Also, it takes up too much space in the exhibition area. (Another feedback from a participant who had visited major museums in Europe)

The tasteful simulated water lily pond did create a "wow" effect. The blooming water lilies and the changing of sunlight to moonlight were fascinating. Nonetheless, aura is an inimitable essence.

Yet another conundrum museum curators and designers cannot tackle is the widely different and conflicting taste of museum visitors in different age groups. Whether to install digital multimedia or not is sometimes a dilemma – if the exhibition allows selfie photo taking, social media users will be instantly entertained, but then how about the visitors looking for a contemplative experience? The serene ambience and visitor flow are bound to be disrupted by selfie takers who crowd around selfie checkpoints such as Monet's invaluable paintings. Our study of Hong Kong adult visitors reveals this dilemma too:

> There were too many people in front of me taking photos and selfies of Monet's paintings. Were people really enjoying art? Do they feel anything at all in the crowded and noisy environment? I could hardly keep my mood for appreciating the artworks. (A complaint made by the participant who stayed for only 30 min in the museum)

> The selfie designs in the education gallery are not my cup of tea. I'd rather have more meaningful artwork displays and explanations of the Impressionist master. (Disappointment expressed by a participant who disliked selfies)

## Conclusions

From this case study on Hong Kong adult visitors' perceptions of the multimodal exhibition in "Claude Monet: The Spirit of Space" (May to July, 2016), we collected 12 Hong Kong adults' opinions about the impact and effectiveness of digital and multimedia installation in museum exhibitions. We found that the majority of the participants were satisfied with the exhibition's multimodal design. The unified and logical narrative in the main exhibition area successfully engaged the adult visitors, despite a few negative comments on the dim lighting, nuisance from selfie takers, and the incongruent narrative presented in the education gallery, such as the slightly far-fetched French food app. Yet the question is: is it fair to put the blame on the curatorial team that was in charge of the education gallery at the Hong Kong Heritage Museum?

Before we pass a judgment, first, we can go through Tilden's (1957) six interpretive principles, namely, the principles that museums and cultural institutions are advised to follow if they are to increase visitor engagement and enjoyment for all ages:

1. Any interpretation that does not somehow relate what is being displayed or described to something within the personality or experience of the visitor will be sterile.
2. Information, as such, is not interpretation. Interpretation is revelation based upon information. But they are entirely different things. However, all interpretation includes information.
3. Interpretation is an art, which combines many arts, whether the materials presented are scientific, historical or architectural. Any art is in some degree teachable.
4. The chief aim of interpretation is not instruction, but provocation.
5. Interpretation should aim to present a whole rather than a part, and must address itself to the whole man rather than any phase.
6. Interpretation addressed to children (say up to the age of 12) should not be a dilution of the presentation to adults, but should follow a fundamentally different approach. To be at its best it will require a separate programme. (Tilden 1957, p. 9)

Upon reading principle number 6, we realize that the Hong Kong Heritage Museum had already tried their best to pitch the Monet exhibition at Tilden's standard: cleverly arranged as a separate program from the core exhibition program curated by the French curator, the education gallery aimed to convey to young learners more general rather than complicated information on a wider range of topics, including French cuisine, weather and daylight hours in France, and an overview of modern arts in Europe. Apparently, the education gallery was treated as an interpretation especially for children, whose attention span is shorter than that of grown-ups. Also, the selfie checkpoints as well as the multimedia design and installation were tailor-made mostly for young visitors, namely, the digital natives. Likewise, the digital tools and apps in the education gallery were designed to attract and educate junior visitors. It is thus not totally fair to consider the education gallery as "a dilution of the presentation to adults" (Tilden 1957, p. 9). After all, the education gallery, as an interpretation, was meant to be a provocation mainly for children, not adult visitors. Children's perceptions and experiences of the multimedia displays should be of first priority when designing the education gallery. Otherwise, as Tilden points out in principle number 1, designs and activities inside the education gallery may be deemed useless and sterile if the target audience could not relate to their everyday experiences with the interpretation.

In our case study, the subjects on whom we focused were adult visitors in their 40s–60s. Unavoidably, the data we collected reveal only the perceptions of adult visitors. Had there been another parallel case study which focused on junior visitors or adults who had to take children to the Monet exhibition at the Hong Kong Heritage Museum, their sharing and perspectives could have given a more all-round picture to our visitor analysis. It would not be surprising should junior visitors and their parents find the main exhibition hall challenging, whereas the education gallery would be enjoyable. They might even request for more fun-filled digital games and multimedia tools which suit children's learning needs, as well as art and cognitive development.

In any case, the use of digital and multimedia design in museum exhibitions is an interpretation of the original artworks. Mastering the techniques of digital and multimedia application involves catching the audience's attention, relating the exhibition to the audience's everyday life, forming a logical storyline that addresses the whole, striving for message unity, and accentuating an aura in the atmosphere. All this would not be possible without knowledge of the visitor needs. While there are limitations in incorporating digital technologies to a wide range of audiences with different visitor needs, to a large extent, the gap between the exhibition content and the digital design can still be bridged.

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# Chapter 11
# Digital Storytelling Using Both Keyboard and Pen


**Dora Wong**

**Abstract** The digital media provide multiple platforms for nurturing creative thinking and training in writing. The keyboard and pen however are not mutually exclusive for aesthetic and technological reasons as well as for the practical needs of individual learners. This chapter shares three case studies from an undergraduate creative writing class using blended model of pen and paper, social media, and Blackboard, an online learning platform. Storyboards from a digital storytelling exercise and project, students' self-reflections, and peer comments are discussed to illustrate how creativity, writing skills, and digital proficiency can be nurtured through a blended and collaborative learning environment.

**Keywords** Digital storytelling · Creative writing · Blended learning · Collaborative learning

## Introduction

Digital storytelling has been employed in the language classroom for developing an array of professional and academic skills meeting the needs of the digital era. This fiction genre requires a unique way of telling authentic and imagined experiences using features of multimodality and hypertextuality (Petroni 2011) in new media. Digital stories often contain emotions and demand critical interpretation and sensitivity to reveal human responses to stimuli of the senses. This would mean an acute awareness of human emotions through senses of sight, hearing, taste, smell, and touch can be conducive to training of creativity in a creative writing class. At the same time, an ability to reflect on such experiences in critical ways is of equal importance in a good story.

The development of sensitivity in the creative writing classroom using new media, therefore, is associated with nurturing critical thinking, creative thinking, and writing skills in addition to digital literacy. Although the creative process

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emphasizes individuality and original thinking, learners need to develop skills of editing and critiquing when producing a digital story. The teaching and learning approach therefore suggests a combination of blended learning (Holland 2017) and collaborative learning in a computer-mediated environment (Warschauer 1997) or through web-based interaction (Neo 2003; Woo and Reeves 2007) to encourage learner autonomy and peer collaboration with appropriate teacher guidance and, more importantly, in providing options and opportunities for learners to acquire digital literacy and creativity.

The digital media provide multiple platforms in nurturing creative thinking and training in storytelling techniques. The keyboard and pen however are not mutually exclusive (Farinosi et al. 2016) based on aesthetical reasons, technological reasons, and practical needs of individual learners. Although quantitative studies have explained reasons for student preferences regarding traditional tools and digital devices, cultures may also have an impact on such choices. This research examines student artifacts and uses the case method to conduct a qualitative study of digital literacy development in the context of an Asian classroom.

The data were collected from undergraduate creative writing classes in Hong Kong using a blended model of pen and paper, social media and Blackboard (an online learning platform). Storyboards from a digital storytelling exercise followed by a project are included to illustrate three case studies on students' learning process. Peer comments and self-reflections were also collected to gauge the students' learning and understanding of digital storytelling techniques and to address the following questions:

(1). *How can a blended and collaborative learning environment accommodate student needs and preferences in developing digital storytelling techniques?*
(2). *How can a blended and collaborative learning environment encourage development of digital storytelling techniques?*
(3). *What do peer comments and self-reflections reveal about students' acquisition of creative and critical thinking skills?*

## Literature Review

Digital storytelling combines narrative with digital contents in the format of images, sound, and video, to create a film. It often includes elements of imagination, authentic experiences, and emotions. Digital stories belong to a genre of new media featuring *hypertextuality* and *multimodality* (Petroni 2011). Use of computer technologies for recording and editing of audio and video stories are essential for production and sharing of such work in the digital media.

While tools of the digital age are considered as "assistive technologies for the artistically challenged" in Ohler (2013), a generation described as *digital natives* in today's new media classroom could also be "technically challenged" (p. 4). Such challenges were studied in a survey (Kennedy and Fox 2013), conducted with 1,130

first-year undergraduate students from The University of Hong Kong. It was found that while access to learning technologies could be very high in Hong Kong, only about 54% of the respondents used computers monthly to create or edit audio and video contents, while 28% had no experience in using computer technologies for such purposes. On student perception of learning technologies, less than 25% of the respondents agreed that creating audio/video was useful for their studies.

In a report (Adams Becker et al. 2017) on new media educational trends, however, a call for accelerating technology adoption in higher education proposes long-term goals to advance cultures of innovation and deep learning approaches, midterm goals to grow focus on measuring learning and redesigning learning space, and a focus on short-term objectives of blended learning designs and collaborative learning. At the same time, wide application of electronic communication devices in the workplace demands improved digital literacy to facilitate communication and develop quality digital contents. Specifically, curriculum design of a digital storytelling classroom should consider the needs of a workforce to aggregate information across multiple channels by updating content and status, search for important content, and organize and share functions for individual and collaborative sensemaking (White 2012).

The university curriculum therefore sets priority on training in and application of new media tools. In a creative writing classroom using new media, learning to create a quality digital story clearly requires traditional storytelling skills as well as digital literacy (Ohler 2013). On teaching of multimodal and digital literacy in L2 settings, Lotherington and Jenson (2011) explain that digital literacy "assumes visual literacy and entails both the ability to comprehend what is represented and the ability to comprehend the internal logics and encoding schemes of that representation" (p. 298).

Many teachers are aware of the benefits of new media and digital technologies (Robin 2008; Sadik 2008). They are open also to the practice of blended and collaborative models in creative writing training (Ohler 2013). In an article discussing best practices of blended learning, Holland (2017) defines *true* blended learning as not just combining both online and in-class learning activities but also affording students room for innovation and active control over learning methods, pace of learning, and the spotting of learning opportunities within the classroom. However, there are few studies that explore students' preferences and needs in such models of learning in an Asian context. In addition, there is also a need to share pedagogical design and assessment of a creative writing class using new media.

Essential components of a compelling digital story comprise a call to adventure, followed by a problem-solution involving transformation and closure (Ohler 2013). Digital storytelling projects therefore offer opportunities to cultivate authentic workplace skills. Practicing digital technologies is found to be constructive in developing creative and critical thinking skills (Anderson et al. 2016). Creating a digital story often taps skills and talents in art, media production, storytelling, and project management. Digital, oral, and written literacies are thus developed in an integrated fashion by sharpening critical thinking, research, and writing skills (Neo 2003; Robin 2008; Lambert 2013; Ohler 2013). Through creating narratives using a

storyboard, researching for background information, drafting scripts, as well as engaging in audio and video production, students can develop the power of their own *voices* and become heroes of their own learning stories. By interacting with the physical world, students can explore cultural skills, social skills, and citizen skills apart from the acquisition of knowledge-based skills (Gregori-Signes 2014). In addition, digital storytelling encourages learners to be *active* participants rather than passive consumers in a society saturated with media (Anderson et al. 2016).

Effective assessment with formative feedback is conducive to enhancing digital literacy, creative writing, and critical thinking skills. According to Boud and Molloy (2013) in their book on formative assessment in higher education, a tripod of three types of assessment including those of peer, self, and teacher can engage students in the active role of soliciting and using feedback to improve their learning experience. Ohler (2013) agrees with Boud and Molloy (2013) in formatively assessing digital story projects by grading the planning process, media grammar and use of media, understanding and presentation of content, teamwork, and use of resources. Public participation in the process of assessment is also possible through online sharing and performing it before an audience to collect feedback.

On assessing digital storytelling projects, Ohler (2013) emphasizes an assessment of all documents and media pieces, especially the *written* work leading to the final project shown on screen. The rationale of such a suggestion is that story creation produces a cornucopia of assessable material and much of it is *traditional* in nature. It also echoes a quantitative study on student preferences for the pen and screen (Farinosi et al. 2016) due to technical, aesthetical, and practical reasons.

Studies on digital storytelling training have researched various topics, including integration of technology (Robin 2008; Sadik 2008; Yang and Wu 2012), fostering a creative community, the practice of student reflections (Blocher 2008; Lambert 2013), enhancement of critical thinking, reading and writing skills, and student motivation (Barrett 2006; Robin 2008; Morgan 2014; Yang and Wu 2012; Nam 2017). However, few qualitative studies can be found on exploring students' creative process of a digital story production. By sampling artifacts of storyboards with references to peer comments and self-reflections, this chapter investigates stages of planning, drafting, and editing. More importantly, it attempts to understand challenges faced by students in their learning of creative writing using new media. Lastly, it also reflects on pedagogical design of creative writing training in an Asian context.

## Pedagogical Design and Practice of Learning Models

Adopting both collaborative and blended learning models, the teaching pedagogy revolves around notions of learners' autonomy, while interdependence (Johnson and Johnson 2009) is also respected. Digital literacy can be developed as a result of respecting individual needs and learning preferences rather than a passive mode of learning using designated tools and software.

As many students use Facebook to discuss group projects and share learning resources, it was a natural option to set up a closed group for such purposes. It can also facilitate communication and learning outside the classroom. On the other hand, by using the discussion forum on Blackboard to upload completed work for peer review, students can actively learn from peers and collaborate with them both in individual tasks and group projects. At the same time, anonymity is possible to reduce potential bias and peer pressure during peer review. Practically, the teaching strategies can be summed up by five principles of teaching innovation based on a study (Trauth and Booth 2014) examining student engagement in a technology-mediated environment.

1. Leverage what students do, know, and think about.
2. Active learning.
3. Emphasis on signature projects and practices.
4. Collaborative learning.
5. Flexibility.

In terms of the fifth principle, it is a result of the first four by considering individual needs of the enrolled students, especially in opening up options for available digital media tools. It is also important to allow students to digitalize their work when traditional tools like pen and paper are used. This kind of flexibility can also be found in the following section on development of the digital story telling project.

## *Stages of Learning and Assessment in Digital Story Production*

Over a thirteen-week practice of three individual tasks adapted from Neubauer (2005) (Appendix I Write Brain Exercises) and an individual or small group digital storytelling project (Appendix III Let's Tell a Story), learning and assessment comprised three key stages (Fig. 11.1): preproduction, production, and postproduction.

In each task, the students needed to conduct a self and peer review of the draft. On completion of their project, they also needed to write a self-reflection with response to peer comments received. While the first draft was not assessed, the peer comments and self-reflection were required for teacher's assessment. They form a part of the formative assessment in addition to teacher's grading. The students could also seek help through consultation with the teacher during the preproduction and production stages.

### Stage 1: Preproduction (Weeks 1–7)

At this stage, the three Write Brain Exercises aim at training of digital skills of using audiovisual and linguistic devices. The students practiced crafting, drafting, editing, and reviewing audiovisual collected through a daily setting. The 1-min production of sounds, images, hand-drawn storyboards, and written scripts helped students to

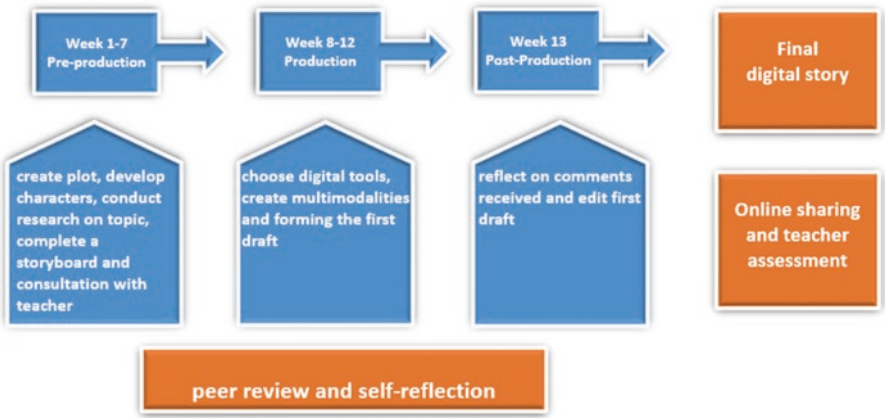



**Fig. 11.1** Key stages of digital story production (Adapted from Anderson et al. 2016)

learn recording and editing multimodal texts. A set of customized assessment rubrics has been designed for each exercise and used by both the students and teacher (Appendix II).

### Stage 2: Production (Weeks 8–12)

Building on their experiences from the Write Brain Exercises, the students at this stage formed ideas and selected semiotic resources to prepare a new storyboard of a 3-min digital story. Scripting is always an important training at this stage of the production. By now the students would have created raw clips and further developed their characters using dialogues.

### Stage 3: Post Production (Week 13)

On completion of a draft version of the digital story, a face-to-face peer review was conducted. Students could self-arrange further peer review in class or seek comments from a target audience who may not be taking the course. To elicit responses and facilitate discussion, students were encouraged to share their work online.

At this stage, the students could practice critical thinking and develop evaluative skills by critiquing work of others and revising their story with the help from peers. They also needed to write a self-critique with response to the peer comments received. Again, a specific set of assessment rubrics (Appendix IV) were used by both the students and teacher in giving comments.

**Table 11.1** List of artifacts completed by the students and arrangement of peer review

| Project member | Artifact number | Peer commentator |
|---|---|---|
| Janet and Peter | 1, 2, 7 | Emily and Natalie |
| Emily and Natalie | 3, 4, 8 | Janet and Peter |
| Sally | 5, 6, 9 | A classmate and a friend |

## Data Collection

Three student projects with nine artifacts including storyboards (Figs. 11.1, 11.2, 11.3, and 11.4) and screen captures (Fig. 11.5) were collected for a qualitative analysis with reference to peer comments and self-reflections. These projects will form three case studies detailing the five students' learning experiences (Table 11.1). Pseudonyms are used in this discussion to respect the privacy of the students.

A total of six storyboards from Write Brain Exercise 3 and the project will be examined with corresponding peer comments and self-reflection. They aim to address Research Question 1 on meeting students' preferences and needs through a blended and collaborative learning environment.

The storyboards from Write Brain Exercise 3 will be further compared with those from the digital storytelling project. The analysis aims to track the students' acquisition of digital storytelling techniques and provide an answer to Research Question 2. Three screen captures of the digital storytelling projects (Fig. 11.5) will then be used to explain the level of digital literacy among these students by examining the digital tools they have employed.

In the process of analyzing student peer comments and self-reflections, development of creative and critical thinking skills will be discussed to seek answers for Research Question 3.

## Discussion and Analysis

### *Case Study 1: Talents of Janet and Peter*

As students' choice of pen and paper can be explained by aesthetical, technological, and other practical reasons (Farinosi et al. 2016), the hand drawings (Fig. 11.2) by Janet reflect her talents of using lines and colors. Water colors were used in artifact 1, a storyboard submitted for Write Brain Exercise 3. By the time Janet and Peter submitted their storyboard for the digital story project, visual effects like shadow and light could be found in artifact 2. Janet and Peter seemed to have tapped into their talents and polished their storytelling techniques by combining both photographic and hand-drawing skills to create cinematic effects (Neo 2003; Robin 2008; Lambert 2013; Ohler 2013).

*artifact 1*


**Fig. 11.2** Storyboards for Write Brain Exercise 3 (artifact 1) by Janet and digital storytelling project (artifact 2) by Janet and Peter

*artifact 2*

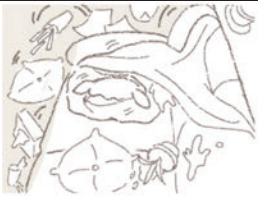
| | |
|---|---|
| Scene 1: Father is singing inside the car. He looks relaxed because he is excited to adopt Sandra. | Scene 2: The presence of Guardian indicates Sandra was from adoption centre. Father and Sandra both look happy. |
|  |  |
| Scene 3: The family is playing ball games with Sandra. Her face should not be shown. | Scene 4: The mother is scolding Sandra. Sandra is trembling with fear. |
|  |  |
| Scene 5: Sandra is wrapping herself up with a blanket. She is making a huge mess (plants, dishes, tissue paper, pillows etc.) | Scene 6: Father and mother exchanged looks. They look sad but seem to have made a decision. |
|  |  |
| Scene 7: Father is holding Sandra's favourite toy. Sandra is going after it. Father's look slightly hesitated. | Scene 8: Father is driving with Sandra. Do not show Sandra's face. |
|  |  |
| Scene 9: Father throws Sandra's toy away. Sandra runs after and try to catch it. Include tall plants to create a feeling of isolation. | Scene 10: Sandra is abandoned. It is revealed that Sandra isactuallya dog. |
|  |  |

**Fig. 11.2** (continued)

Peer comments and self-reflection from the students shed light on the stage of preproduction and can justify the decisions and choices made in the production stage. The peer commentators showed appreciation of the hand-drawing and understanding of the creative process:

> *The drawing suits the theme of the story. Most of the time, the face of the "dog" did not show up, paving the way for the ending. Moreover, the blurring scenes at the end demonstrate the reviewee's ability in drawing.*

The peers also demonstrated competency in their critique on the use of language in the scripts:

> *Some of the word choices, like "fetch", "runs so fast" and "snatched", could reveal that Sandra may not be a human. The title for each scene is good, especially for the title "The Winter". The freezing cold weather in winter echoes with Sandra's emotions of being punished.*

Regarding the structure of the story and development of the plot, the peers commended the exploration of social issues:

> *The story allows us to reflect on the relationship between humans and pets….Since the story is meaningful and indicates the social issues of abandoning pets, it would be great if the story could be published in the pamphlet of organizations like SPCA, or as a book for adult reading.*

The making of digital stories therefore provides an opportunity for students to interact with the physical world and develop social and citizen skills (Gregori-Signes 2014). It is an important process for them to develop critical thinking skills in response to authentic happenings.

On the use of audio, the commentators also provided specific technical advice about the recording of sound:

> *…it would be better and more realistic if a child's sound and a mother's sound are used. It would be better to add the crying sound of dog at the end to appeal to people's pathos.*

Technically, Janet and Peter considered themselves not as "competent film makers" while acknowledging their respective talents in painting and voice-covering. Specifically, the students wrote:

> *…this* [use of hand-drawing] *could be a limitation to our project. However, through drawing, there are more variation and we are also able to illustrate the idea in an artistic way.*

Such an understanding of their strengths and weaknesses explains the students' choice of tools used in their process of digital storytelling. They demonstrated in the self-reflection also a sound understanding of angles used in the drawing which formed successful acquisition of multimodal literacy in new media writing (Ohler 2013):

> *Moreover, we tried to add more variety with the drawings. For instance, you can see that different angles have been used in drawing. For the final reveal of Sandra's identity, we zoomed into Sandra's eyes and slowly transit them into the dog's. We planned this transition as we want to make it smooth.*

In the postproduction stage, the students were able to reflect on their plot development and explain in detail their creative thinking process:

> *We have been paving the major plot twist at the beginning. We provided some of the hints about the character's true identity but not too obvious to give the answers right away.… The major plot twist is the final reveal. The idea of Sandra 'posing' as a human being was not about misleading the audience.*

When discussing limitation in their use of still images, they explained how detailed narration and dialogues were added to make the story interesting. While adopting peer comments in their editing of sounds and dialogues, Janet and Peter were encouraged by the positive peer feedback on the plot:

> *The peer comments have suggested we should add a variety of sounds and we re-recorded some of the dialogues to better illustrate the character's personality. They also indicated that the titles of the storyboard are a bit ambiguous and we have made it theme-oriented to improve it.*
>
> *We are happy to know that they find the flow of the story smooth as we have put in effort to build the climax (Sandra having a great time with the family) and the anti-climax (the family grew tired of Sandra).*

As indicated in this case study, collaborative learning can be successful when peer commentators are interdependent and able to give constructive comments and appreciate the efforts of their peers' work (Johnson and Johnson 2009). Room for flexibility is equally important to promote collaborative learning (Trauth and Booth 2014).

In this project, the students were given an option to arrange for further peer review after class and choose their peer commentators both from the class and from their social circles.

## *Case Study 2: Digital Expertise of Emily and Natalie*

Emily and Natalie were very familiar with video editing, while they were less confident with hand-drawing. This can be found in their choice of using mainly digital tools for preparing both storyboards (Fig. 11.3). Collaborative learning is also noted in the students' ability to delegate and adopt different ideas at the preproduction stage:

> *We had a clear delegation of work, e.g. Emily was responsible for directing the film and doing video-editing, and Natalie was responsible for the acting and script-writing. Also, we listened to each other's opinion. At first, Emily wanted to work on local culture like the diminishing traditional culture, while Natalie wanted to work on "loser". After we listened to each other's opinion, we came up* [with] *a story that addresses both themes.*

In their development of digital literacy, the self-reflection provides evidence of planning and application of digital technologies:

> *First, we successfully conveyed the same message under limited resources, such as the lacking of kid actors and a 'real' office. We think it was quite clever to show their sound only and film the scenes from specific angles.*

> *Second, the shooting process was well-organized, smooth and efficient. We listed out all the scenes and then divided them into groups according to the settings. Also, as our male actor had to arrive later, we arranged filming all his scenes at last.*

The students' self-reflection further illustrates technical problems in the production stage and indicates their ability to comprehend what has been represented in the story which includes the internal logic and encoding schemes of that representation (Lotherington and Jenson 2011):

> *Since some of the settings were noisy, we needed to record the dialogue separately and match it with the video. Although it makes the sounds clearer, it could be a bit unnatural to watch.*

At the postproduction stage, the students were able to critically examine their character development through the use of dialogue:

> *We think some of the scenes are not intense enough because the protagonist felt a bit too shy to act dramatically in the public, such as scolding at the editor in the second interview scene.*

The students further demonstrated critical thinking skills in their ability to evaluate and assimilate feedback (Boud and Molloy 2013):

> *We reckoned* [with the commentators] *the use of different fade in and out can make the transition better. However, we think two soundtracks within the story would be enough, because each of them addressed different developments in the story, in which the first soundtrack addressed the flashback, while the second one addressed the turning point.*

By engaging students in seeking and giving constructive review of their work, the case suggests ways to nurture digital fluency.

*artifact 3*

**Storyboard**

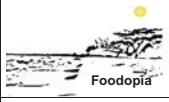
| No. | Sketch | Description | No. | Sketch | Description: |
|---|---|---|---|---|---|
| 1 |  | Weather Shot:<br>The sunset view in Foodopia;<br>Words "Foodopia" appears at the bottom right hand corner of the image | 2 |  | Point-of-view Shot:<br>The image of crop failure in Foodopia, the audiences seem to walk through the crops |
| 3 |  | Transition: L cut<br>Audiences will hear the sound of the crowd a few seconds before they see the crowd<br><br>Close-up Shot (slow motion):<br>People in Foodopia are suffering in famine and fighting for food | 4 |  | Wide Shot (Two-shot):<br>Jack and Alan (citizens in Foodopia) are sitting away from the crowd, discussing on how lonely and hopeless Foodopia is because of its poverty |
| 5 |  | Transition: Scene No.4 fades out, No.5 fades in<br><br>Medium Shot:<br>Images shift from Foodopia to Pizza Planet | 6 |  | Close-up Shot:<br>Millions of people protest against food waste, they advocate sharing of food to poor country like Foodopia |
| 7 |  | Medium Shot:<br>Pizza Planet's Government decided to donate some food to Foodopia | 8 |  | Close-up Shot:<br>Due to the more even distribution of the food, citizens in both Foodopia and Pizza Planet become happy. Finally zoom in the smiling face of Jack and Alan. |

**Fig. 11.3** Storyboards for Write Brain Exercise 3 (artifact 3) by Emily and digital storytelling project (artifact 4) completed by Emily and Natalie

*artifact 4*

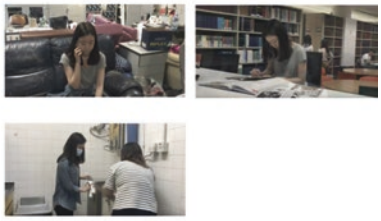
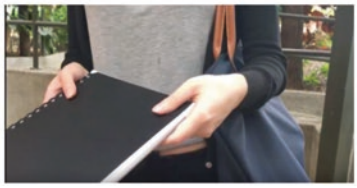
| | | | |
|---|---|---|---|
| 1 | Yan was proposing her wish to have her book published in a publisher.<br>  | 2 | After the editor's rejection, Yan was depressed and went to a park.<br>  |
| 3 | A series of flashback appeared in Yan's mind. For example, the drawings she painted when she was at kindergarten age, and her classmates' discouragement of her dream as an illustrator when she was a secondary school student.<br>  | 4 | The flashback continued, Yan remembered how her mum scold at her when she told her mum that she was admitted to IVE, how she worked hard then, and how she was humiliated by a staff when she was doing part-time to earn pocket money.<br>  |
| 5 | Yan left her picture album in the park, and a child picked it up and returned it to her. What the child said had encouraged Yan to continue drawing.<br>  | 6 | Yan went to the publisher again. At first, the editor rejected to publish her album. After Yan's expression of her views, and editor's careful consideration, her book was finally published.<br>  |

**Fig. 11.3** (continued)

## *Case Study 3: Work-in-Progress Saga by Sally*

Sally was more confident of her writing skills than hand drawing and using digital tools. She further developed the plot of her digital story using the food-sharing topic, the Caritas story from Write Brain Exercise 3. It is Sally's dream to produce a film ultimately on the theme of a young Holocaust survivor during the Second World War. Given the complexity of the story and its background, Sally decided to

prepare written scripts of a major scene for her project instead of shooting a video. Researching into the setting of her story, Sally explained in her self-reflection how she adapted and recreated the Caritas story using various sources:

> *With the themes of family, survival and the Holocaust, I created the plot of "Pierre" with influences from The Book Thief by Markus Zusak and The Diary of a Young Girl by Anne Frank. I then recreated the plot into a screenplay through influences from The Pianist, a film directed by Roman Polanski.*

By focusing on traditional storytelling techniques of adding dialogues in the narrative, Sally drafted lines for her characters with an awareness of pacing the speech using sound and images (Fig. 11.4). On her draft, Sally received comments from a peer who took the course and a friend who was not from the class. The peer wrote:

> *Your screenplay has very detail*[ed] *description on the setting and the action they did, and as I could only see a scene, I could not understand the whole story, I would suggest that to write more scenes or to provide more background information of the story to make the reader easier to follow. On the other hand, it may* [be] *possible to add the time that the speech start*[s] *and how long would it last for to let the actors to have a better time management.*
>
> *I think the typesetting of the screenplay have to be modified for increasing the readability.*

The peer mentioned the need for actors to see the time slots and appropriate use of typesetting in a screenplay. This indicates that the student commentator was aware

*artifact 5*

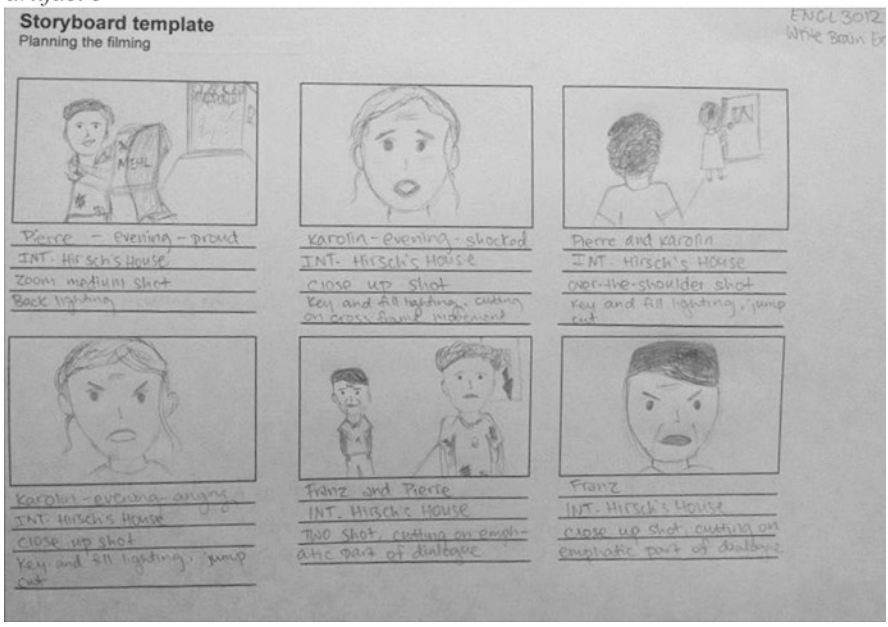



**Fig. 11.4** Storyboards for Write Brain Exercise 3 (artifact 5) and storytelling project (artifact 6) by Sally

*artifact 6*

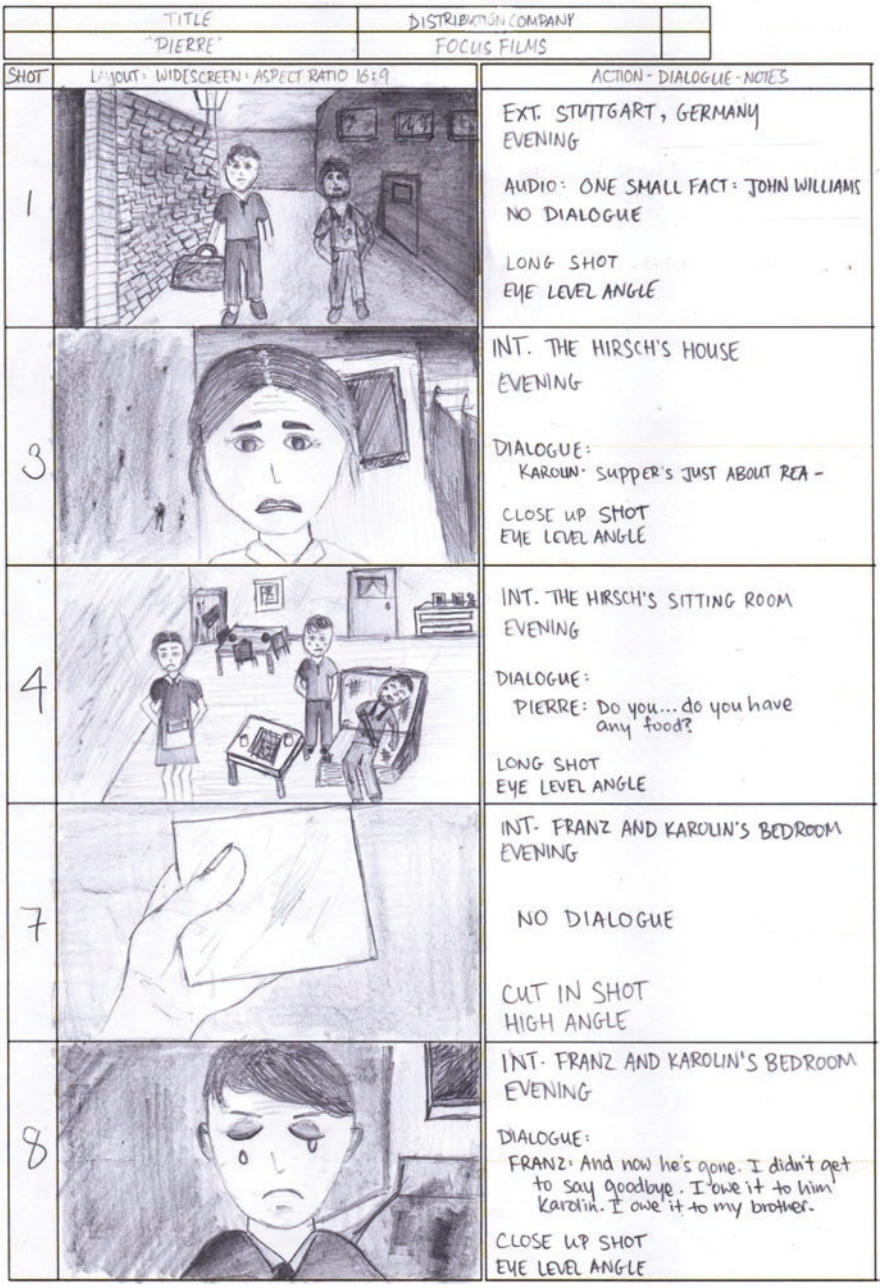



**Fig. 11.4** (continued)

of the format as well as the target reader. The peer reviewer was also able to offer advice in Sally's creative process by posing as a potential audience.

While the project in this case was an individual attempt, collaborative learning was still possible through online peer reviews not just by a classmate but also a friend on Facebook. The comments from the friend could relieve some worries Sally might have on the accuracy of facts about an era she could only experience through history:

> *You said you were worried about the accuracy of the events – I think it is realistic based on the context and based on what I have read from other books. Based on the scene it lets me wonder how come Karolin did not know about Franz's brother? Is Karolin and Franz's marriage not doing good?*

In response to the comments, Sally could reflect on her choice of facts to be included in the plot:

> *Research into the accuracy of events was the toughest part about writing this plot as another audience to my film would be the general public in which academia studying the Holocaust, Holocaust Research Centers and other individuals specializing on the topic could retain an awareness to the events – therefore, accuracy is of great importance.*

The reviewer further commended Sally's choice of camera shots and critiqued the use of soundtrack:

> *I liked the screenplay and think the storyboard goes together with the story – good choice of film shooting shots. The soundtrack of John Williams is good for that scene but maybe you can tell us which part of the song you'll include or will you include the whole song? Also maybe at the end, some music can be added to show the end of the scene.*

It is noted from Sally's clarification that she understood the *audio* was an important element of film production. On her use of only one soundtrack, Sally explained:

> *…to suit the needs of general film viewers so elements of audio [are] crucial to be included – however, only one soundtrack is used in the above scene as I chose to focus on the dialogue of the characters instead.*

While making a film out of screenplay takes much efforts and time, Sally ended her reflection with a practical plan:

> *To further work on this script, it would've been nice to have a test shoot to see whether specific dialogue or actions could be further improved to create the emotion of desperateness from Pierre and hesitancy from Karolin.*

Comparing artifact 5, a storyboard for Write Brain Exercise 3 with artifact 6, a storyboard of the digital story project using the same plot, Sally seemed to have improved in her storytelling techniques. Such improvement can be found in her awareness of camera angles and pace of narrative in the new storyboard. The hand-drawing also seemed to have been refined by adding details and perspective to the image design. For example, to represent the movement of camera angles, Sally made prominent in her storyboard (artifact 6) the use of wide angle, top view, and close-ups of the face and hand. To create visual effects of darkness and gloom, she also added shadows. In designing the setting of her story, Sally was careful with the transition between interior and exterior shots by marking story grids with "INT" and "EXT."

In this case study, the student explored her topic in-depth and clarified what she knew about the topic during the preproduction and production stages of developing and communicating her story. In the postproduction stage, through sharing of drawing and scripts on a digital publishing platform (issu.com), she could interact with her commentators and reflect on her own thoughts and engagement with the topic of her interest, visually and aurally (Sadik 2008). By giving students autonomy to pace their acquisition of digital literacy and creating opportunities to refine their skills through peer collaboration, the learning process can be fruitful and encouraging.

As noted in the three case studies on digital storytelling projects, the students have all successfully created digital or digitalized work (Fig. 11.5) using both keyboard and pen. The findings help to address Research Questions 1 and 2 on how a blended and collaborative environment is conducive to the development of storytelling techniques by meeting different needs and preferences of learners. The student artifacts also suggest development of digital literacy can go beyond the boundary of a particular software application when students can choose a digital format and platform appropriate to their work and focus of learning. A meaningful integration of technology in the digital storytelling classroom is therefore important to help students learn to "think and write about people, places, events and problems that characterized their individual life experiences or others' experiences" (Sadik 2008, p. 502).

Based on the above analysis of peer comments and self-reflections, evidences of students' critical thinking and creative thinking processes have been gathered to answer Research Question 3. According to the findings from the case studies, to measure the outcome of learning, a set of standardized criteria is necessary to conduct regular peer review and self-reflection. With the use of assessment rubrics as checklists and guidelines, it can enhance collaborative learning to facilitate students' understanding and acquiring course-related skills (Nam 2017). Since the teacher also used the same set of rubrics for assessment and writing feedback, the students could solicit and compare feedback from both the peer and teacher while reflecting on their own work. The students could also monitor their learning progress on a regular basis with the help of social media and an online learning system which facilitate peer commenting and sharing of work.

## Implication and Conclusion

In her paper on writing, Janet Emig (1977) described writing as a mode of learning and a unique language process which requires careful thinking and results in a visible graphic product. She regarded writing as a "…technological device – not the wheel, but early enough to qualify as primary technology" while "…talking is organic, natural, earlier" (p. 124). As noted in the case studies, the creative process of digital storytelling requires a combination of writing and talking with components of researching, storyboarding, scripting, and making of audio and video, all of which demand a set of multiple and multidisciplinary skills. It can therefore be


**Fig. 11.5** Screen captures of digital stories shared online by the students

challenging for both the teacher and learners. More importantly, the pedagogical design of a digital storytelling class should consider how to accommodate differences in levels of digital proficiency and offer options and opportunities for students to make good use of their strengths and talents at each stage of the production.

Regarding design and application of a blended learning model in the creative writing classroom, teachers need to consider students' preferences to work independently or collaboratively by designing tasks which encourage both individual efforts and teamwork (Trauth and Booth 2014). While peer and self-assessments can be useful to train editing and evaluative skills, teachers need to be aware of differences in students' levels of digital literacy and language proficiency which are important determinants in the process of administering peer review activities. Although learning technologies may reduce bias and peer pressure by allowing anonymity, self-arranged peer review and face-to-face discussion can also be options to encourage collaboration and motivate learning.

In conclusion, this study indicates a blended learning model is not only confined to the physical setting and adoption of learning tools but can be practised also with a combined use of the keyboard and pen as well as screen and paper. Through a balanced training of traditional storytelling techniques, including storyboarding, scripting and use of visual and audio effects aided by a basic practice of digital editing software, and regular peer review and self-reflection tasks, quality digital contents can be well-developed.

**Acknowledgment** *My sincerest gratitude goes to the five innovative digital storytellers who have generously allowed me to quote their work. My heartfelt appreciation and best of wishes also to the 39 brave young artists who have created stories and shared with me in their learning journey.*

## Appendices

### *Appendix I: Assignment Guidelines to Write Brain Exercises (Adapted from Neubauer 2005)*

**Write Brain Exercise 1**

Create a one-minute audio autobiography.
Compose a one-minute audio clip that explores the role of sound in your own life, and record sounds around you, including your own thoughts and voice.

**Write Brain Exercise 2**

Create a one-minute video autobiography.
Compose a one-minute audiovisual text using the ideas and sound clip you have formed in Exercise 1.

**Write Brain Exercise 3**

Create a one-page storyboard and draft scripts.
Watch the video story of "One Human Family, Food for All" (https://youtu.be/qhU5JEd-XRo) by Caritas. Use the plot to recreate your own version of the story. Prepare a storyboard, and draft scripts for a one-minute scene in digital format. You need to:

1. Describe the synopsis/"blurb" to introduce your story.
2. Include a storyboard (one A4 page) and scripts (one minute of a major scene).

## *Appendix II: Rubrics of Write Brain Exercise 3*

**Write Brain Exercise 3: Storyboard (10%) and script (10%)**

On a scale of 1 to 5, please circle one number and add your comments

| 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|
| Little evidence of careful planning, composing, and producing graphical plot and written scripts | | | | Lots of careful planning, composing, and producing graphical plot and written scripts |
| **Comment:** | | | | |
| Little structure and hard to follow the narrative | | | | Clear structure and easy to follow the narrative |
| **Comment:** | | | | |
| No or little original ideas | | | | Many original ideas and well developed |
| **Comment:** | | | | |
| No or inappropriate plan for audio and visual elements | | | | Appropriate plan of audio and visual elements |
| **Comment:** | | | | |
| No thoughts on audience needs | | | | Awareness of audience needs |
| **Comment:** | | | | |
| Less creative and insightful use of linguistic device | | | | Very creative and insightful use of linguistic device |
| **Comment:** | | | | |
| Less than careful approach to citation, documentation, copyright, and licensing | | | | Very careful approach |
| **Comment:** | | | | |

## *Appendix III: Guidelines on the Digital Storytelling Project*

"Let's Tell a Story!"

You are invited to produce a story by employing your senses and ideas. The content and format of the story is entirely of your own decision and making.

**The task** (individual attempt or group work in two and three):

(a) **Storyboard**

(One A4 page, 5%)

Week 9: Submit a storyboard of the main plot to the teacher before project consultation. The task assesses both *originality* and *creativity.*

(b) **Self-/Group Review, Peer Comment, and Final Reflections**

(Total of three comments in about 900 words, 15%)

Week 11: The first draft can be in the format of written scripts and semi-edited audiovisual clip. You need to conduct a self-review using the rubrics provided and write in 300 words to explain your creative process.

Week 12: Conduct a peer review of first draft, and write in 300 words using the rubrics given.

Week 13: Write another 300-word reflection on the project, and respond to peer comments received.

(c) **Digital Story**

(Ten A4 pages or 3 min in digital format, 20%)

Publish your digital story online in a digital or digitalized format. You can choose appropriate online platforms or social media for sharing with your target audience.

Please submit on Blackboard the URL to your digital story and written scripts with clear instructions for screen production.

## *Appendix IV: Assessment Rubrics of Digital Storytelling Project*

**Storyboard and digital story (25%)**

| Category/ indicative grade | F, D to D+ | C to C+ | B to B+ | A to A+ |
|---|---|---|---|---|
| Creativity | DIFFICULT to figure out the plot of the story because of LITTLE interesting ideas | The plot is SOMEWHAT clear, but many aspects of the story seem only SLIGHTLY related. Ideas are NOT attractive or specific enough | The story CLEARLY establishes a plot but SOMETIMES wanders from that focus and lacks attractiveness | The story DISTINCTIVELY establishes a plot and appeals to the audience and ALWAYS maintains a focus |

(continued)

| Category/ indicative grade | F, D to D+ | C to C+ | B to B+ | A to A+ |
|---|---|---|---|---|
| Coherence | Information is NOT organized, and audiences have BIG trouble following | Information is SOMEWHAT organized, and audience have SOME trouble following | Information is MOSTLY organized, and audiences have LITTLE trouble following | Information is SMOOTHLY organized with a FOCUS and FLOW that audience have NO trouble following |
| Originality | Uses other people's ideas but does NOT give them credit | Uses other people's ideas (giving them credit), but there is LITTLE evidence of original thinking | SOME original thoughts with credits to other people's ideas | Shows a GREAT amount of original thought with MUCH insight |
| Audience awareness<br>For example, audio/visual effect, caption, subtitle, etc. | LIMITED attention to audience in designing the story | SOME attention to audience | GOOD attention to audience | EXCELLENT attention to audience |
| Delivery of message<br>Verbal or written text | Does NOT present clearly the main plot | SOMETIMES clear | MOSTLY clear | ALWAYS clear |
| Script instruction | Text with NO instructions and contains ***more than 10*** errors | VAGUE instructions with ***6–10*** errors in the script | CLEAR instructions but ***2–5*** errors in the script | CLEAR instructions but ***2 to NO*** errors in the script |
| Script layout | Inappropriate format and layout | Format and layout are SOMEWHAT appropriate | Format and layout are MOSTLY appropriate | Format and layout are HIGHLY appropriate |

**Peer review and self-reflection (15%)**

| Category/ indicative grade | F, D to D+ | C to C+ | B to B+ | A to A+ |
|---|---|---|---|---|
| Application | Comments do not reflect understanding of the text and irrelevant from the learning expected and NOT helpful | Comments SOMEWHAT indicate SOME related ideas relevant to the learning but NOT specific enough to help the peer improve | Comments CLEARLY indicate SOUND understanding of the story and relevant to the learning, but SOMETIMES not very relevant or misleads the peer | Comments DISTINCTIVELY indicate in-depth knowledge of the learning and ALWAYS offer useful suggestions which are relevant and specific for the peer to improve |

(continued)

| Category/ indicative grade | F, D to D+ | C to C+ | B to B+ | A to A+ |
|---|---|---|---|---|
| Argument | Ideas are NOT organized, and the reviewee has BIG trouble following | Ideas are SOMEWHAT organized, but the reviewee has SOME trouble following | Ideas are MOSTLY organized, and the reviewee has LITTLE trouble following | Ideas are CONCRETE organized with a logical argument that the reviewee has NO trouble following |
| Reflective learning | Both peer and self-reviews are showing surface learning with use of jargon only | Both peer and self-reviews are showing SOME depth of learning on creative writing and use of the new media | In-depth understanding but little original thoughts | Profound understanding and insight offered in editing and improving the story |

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# Chapter 12
# Adult Learners' Digital Literacies on an Online Social Networking Site: Facebook


**Winnie Siu-yee Ho**

**Abstract** The aim of this chapter is to depict the combination of dominant and vernacular practices of adult learners that occurs through the world's most popular online social networking site (SNS) in the volunteering domain. The rise in digital technologies, especially social networking sites such as Facebook, has also led to thriving online literacies or computer-mediated communication as a communal resource within the volunteering community.

This chapter will introduce participants' perceptions of computers, the Internet, Facebook and what the Facebook platform looks like. Finally, the cases of four writers will be investigated further, concentrating in particular on using Facebook for social purposes and their different perceptions of the definitions of 'Facebook friends'. Based on the analysis of images and written texts on Facebook, with semi-structured interviews for 2 years, I presented how and why individual adult volunteers treated friendship in the digital context within this uniformed group as a social world and Hong Kong society at large. Volunteers are engaged in a volunteering environment full of print-based and digital texts. Social media have shaped the volunteering culture by strengthening the social relationships through online interactions.

**Keywords** Adult learners · Computer-mediated communication · Digital literacies · Digital texts · Facebook · Online social networking site · Vocational qualification programme · Volunteers

Adult learners from a vocational qualification programme in voluntary youth uniformed groups – like people in schools and workplaces – spend a substantial proportion of their time writing and reading. By 'writing and reading', I am deliberately framing a type of practice as a new literacy practice in an aviation-oriented uniformed group composed of 3,263 cadets and 1,588 adult members – Hong Kong Air

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**Fig. 12.1** Online and offline contexts of the HKACC: the entrance to the HKACC headquarters building in Hong Kong (left), HKACC official website (right) and HKACC official Facebook group (bottom)

Cadet Corps (HKACC): the self-generated writing and reading of four focal adult volunteers in the digital format, supplemented by some printed texts.

My paper aims to depict the combination of dominant and vernacular practices that occurs through the world's most popular online social network in the volunteering domain. The rise in digital technologies, especially social networking sites (SNSs) such as Facebook, has also led to thriving online literacies or computer-mediated communication as a communal resource within the volunteering community. In fact, over 90% of adult volunteers in HKACC are active users of Facebook, according to the records of the youth organization (Ho 2016). The four cases are chosen because they are 4 out of 36 volunteers who join the vocational qualification programme and are active Facebook users as well. Using Facebook, volunteers also communicate with others who are outside this community of volunteers.

This chapter will address the following research question:

**What are adult volunteers' perceptions of Facebook? How can they define 'Facebook friends'?**

This chapter will introduce participants' perceptions of computers, the Internet, Facebook and what the Facebook platform looks like. Finally, the cases of four writers will be investigated further, concentrating in particular on using Facebook for social purposes and their different perceptions of the definitions of 'Facebook friends' (Fig. 12.1).

## Facebook as an Internet Example

It is widely agreed that the Internet and other associated technologies have become part of human life (e.g. Barton and Lee 2013; McMillan and Morrison 2006). A revelatory case, reported by an online newspaper ("Essential elements" 2015), highlights the unique features of the current digital generation. In the past, the three essential elements of human survival were "air", "water" and "food". However, a newspaper article included an image widely circulated on the Internet recently in which a secondary school student filled in the blanks with "Android[1]", "WhatsApp" and "Facebook", respectively, in a Liberal Studies examination. My argument in this section, and in much of the chapter, demonstrates the importance of technology in contemporary society.

People's face-to-face communications and interactions have extended into cyber worlds to form Internet-based technologies and social networks. Adult volunteers are no exception as they too have engaged in five major types of "communicative channels and text types" (Page et al. 2014) in different decades: letter, electronic mail (email), Facebook, computer-based messenger and WhatsApp. Adult volunteers function in a world where technologies are changing the ways in which they make meanings, interact and engage with each other. Figure 12.2 reveals the heavy reliance on various types of communication technologies in the HKACC community.

Communication technologies have played different roles in different decades within the HKACC. Letters, as the prime example of print texts, used to be the core communication technology, starting in the 1970s, though letters have largely been replaced by emails in the past 20 years. Letter writing only occurs on rare occasions nowadays, including, for example, official recruitment letters for flag sellers for the HKACC Flag Selling Day. Traditional letters, or 'snail mail', became somewhat more endangered in the 2010s when letters became more digitized, as now we tend to send scanned letters to others electronically.

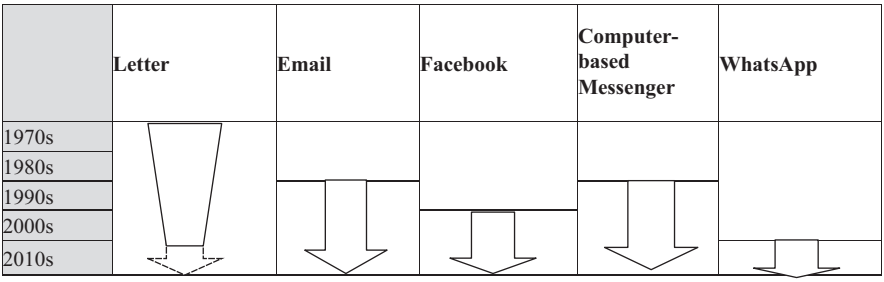


**Fig. 12.2** Timeline of selected communication technologies within the HKACC

[1] Android is a mobile operating system developed by Google for touchscreen mobile devices such as smartphones.


**Fig. 12.3** Example of a Facebook public group

Computer-based messengers, like MSN Messenger and Yahoo Messenger, were a popular way of chatting and transferring big files among adult volunteers during the 1990s–2000s. Facebook Messenger emerged in the 2010s as part of Facebook's functionality. WhatsApp, a smartphone application for mobile instant messaging, has formed a newly emerging "social network" (Bouhnik and Deshen 2014). From my own experience, WhatsApp has become increasingly important in enhancing the mutual communication of HKACC members and sometimes takes over the function of emails in terms of spreading information more quickly. However, in view of the limitation of data access for the time being, the scope of my study is limited to one major type of participants' digital literacies: Facebook.

Adult volunteers make good use of Facebook as a relatively less official communication platform but a commonplace one among our volunteers since 2007. It is common practice for each HKACC unit to have its own Facebook page or group, such as the "Vocational Qualifications Unit (VQU), Hong Kong Air Cadet Corps" (see Fig. 12.3 which shows an image of five of our graduates attending a Cadet Vocational Qualification Organisation graduation ceremony at the Royal Military Academy Sandhurst, in 2014). This kind of Facebook page or group also allows flexibility in information sharing, since the administrator can set the page or group to either private or public. Facebook's active users exceeded one billion around the world in October 2012 (Facebook 2012) and reached 1.39 billion in 2015. Approximately 745 million active users log on to Facebook using their mobile devices every day ("Facebook says" 2015). As of July 2014, Hong Kong has 4.4 million Facebook users ("Hong Kong" 2014). Ho (2011) also found out that around two-thirds of university students are "addicted to Facebook". As of January 2018, Facebook as the most popular social networking site worldwide attracted two billion active users (Statista 2018).

The majority of the aforementioned communication technologies have become portable and digital; thus, volunteers can now get access to email, Facebook, computer-based messengers and WhatsApp wherever and whenever they go, as long as their mobile phones are connected to the Internet or Wi-Fi.

## Literature Review

### *Digital Literacies and Computer-Mediated Communication (CMC)*

"New literacies" can be quite diverse since they encompass letters, symbols, colours, sounds and graphics. Such multiple literacies (New London Group 1996) move away from dominant written texts to digital literacies (Gee 2010), ranging from visual and audio to gestural and spatial, whereby a greater social network can be formed (Street 2004). Thus, research on reading and writing can change from a focus on individuals to interaction and social and cultural practices more broadly (Heath 1983; Street 1984, 1995). In the uniformed group I have investigated, a majority of the volunteers have their own SNS accounts, so their literacy practices and interactions with one another are frequent. The following subsections will define the main analytic units in NLS studies, including my research, namely, literacy events and literacy practices, as well as previous studies on dominant, academic, vernacular and digital literacies. All these types of literacies coexist in the volunteers' lives.

There has been a trend for studies to examine the digital literacies of online reading, writing and communication in the literacies' field in the last few decades (e.g. Baron 1984; Gee 2001; Leu et al. 2009; Barton and Lee 2013). While much has been said about the prevalence of literacies in the lives of the "digital generation" (Buckingham and Willett 2013), "digital natives" (Prensky 2001; Palfrey and Gasser 2008), the "Net Generation"[2] (Tapscott 2005) and the "digital generation" (Davies 2006), e.g. seventh-grade students aged approximately 12–13 (Bryant et al. 2006), low-income high school students aged 17–19 (Greenhow and Robelia 2009), secondary school and university students aged 13–25 (Lee 2002), undergraduate and postgraduate students and graduates aged 20–28 (Lee 2007; Barton and Lee 2012) as well as the elderly, aged 60 and over (Gatto and Tak 2008), little is understood about the kinds of writing and reading of adult volunteers aged 21 or over[3] who start immersing themselves in the digital life or how the social practices around these digital as well as print-based texts constitute professional practices within a uniformed group as a non-formal education context. The space constraints of this

[2] Generally this generation of people was born in or after 1980 and is immersed in digital technologies.

[3] Minimum age (as one of the admission requirements): Applicants have to be 21 years old by the time they are officially enrolled as adult members of uniformed groups in Hong Kong.

chapter prevent my detailing all aspects of my analyses and conducting a critique of all digital literacies, so the key aspects are inevitably selective.

To emphasize the dynamics of digital literacies in my research, the following section will highlight a new perspective in the current social networking era. People nowadays, in particular adult volunteers, go through a process of creating, exchanging and perceiving information using networked telecommunications more frequently. Because of the growth in CMC, adult volunteers incorporate communication technologies into their volunteering life, and their interactions extend from face-to-face settings to the virtual world. As Romiszowski and Mason (1996) note, such communications mediated by digital technologies can be both synchronous and asynchronous and thus in "real time" and "delayed time", respectively.

## *Social Media*

Social media, as "Internet-based sites and services that promote social interaction between participants" (Page et al. 2014, p. 5), are one of the vital research foci in my research. The extent of language-related research on social media platforms has been increasing rapidly in recent decades (Gillen and Ho in press). The findings of some key studies have contributed to the development of my own theoretical and methodological ideas, as I shall show in this section.

First of all, weblogs, commonly called blogs, share one of the common functions of a Facebook page – a place for informal discussion. Some blog studies are relatively influential on my empirical work. For example, teenage girls maintain strong social ties and transfer this kind of relationship to their online blogs with an informal style. Blogs ultimately connect both online and offline worlds (Bortree 2005). Though the ethnographic studies of Davies and Merchant (2007) and Huffaker (2004) focused on academic blogs, the way the former conducted auto-ethnographic research serves as a good reference in terms of research methodology. The latter also enhanced my understanding of the characteristics of blogs.

Next, in view of the similar message posting and commenting functions of Facebook, as the most popular social networking site in Hong Kong, Ferdig and Roehler's (2003) observations of online discussion forums also serve as a good reference. Their work has let me critically reflect on the pros and cons of asynchronous and synchronous conversations in an online commenting environment.

Finally, a couple of local and international studies on Facebook further influenced my theoretical and methodological framework. Doing "Facework" on Facebook as a new literacy practice examined by Davies (2012) and the comprehensive and influential study on Flicker (another image and video hosting website for social use) done by Barton and Lee (2013) further shaped my conceptual framework and laid the foundations for me to depict some of the substantial elements in my findings section. I also critically review some of Barton and Lee's (2013) key notions, such as techno-biography, and redefine its meaning.

There are essentially two reasons for choosing Facebook as my research site, despite its relatively short history. The first reason, needless to say, is its unprecedented popularity across a number of countries, including Hong Kong. Moreover, Facebook is a contemporary site that demonstrates a substantial amount of user-created content, which is also a distinctive feature of other social media platforms, such as blogs, discussion forums, content-sharing sites (including text-sharing, photo-sharing and video-sharing) and, most importantly, social networking sites.

The rise of Web 1.0 in the 1990s and Web 2.0 in the 2000s has been changing literacy practices around the world. Compared with Web 1.0 as a "read-only medium" (Thompson 2007) full of content only for consumers, Web 2.0 is noted for having more content creators because of its reading and writing nature. In spite of the fact that teenagers and young adults label email as an old-fashioned communication tool (Carnevale 2006), email communication still preserves its core official role in business and voluntary organizations. Dehinbo's (2010) study also takes a step in the direction of justifying other Web 2.0 technologies, such as weblogs and SNSs, which make more contributions to knowledge management than the first generation. I argue that the two types of communication technology are of equal importance in terms of enhancing mutual communication and understanding between fellow adult volunteers, regardless of their ages. Meetings and discussions of adult volunteers, for example, are increasingly being replaced by digital literacy practices in email messages, Facebook chats and/or Facebook private messages. Talk hinging on both email texts and Facebook posts is a common literacy event among the volunteers.

### *Research on Facebook*

From a digital framework within NLS, texts can be multimodal: "meaning and knowledge are built up through various modalities (images, texts, symbols, interactions, abstract design, sound, etc.) not just words" (Gee 2003, p.210.). Ivanič et al. (2009) also capture the essence of modes and technologies by describing how modes and technologies are interpreted:

> Modes refers to the range of semiotic resources which can be employed to make meaning: spoken language, written language, visual, material and/or animation. Technologies includes [sic] not only electronic media but also the material media and resources of 'old technologies' such as books, newspapers, magazines, pens, chalk and different types of paper. (p. 61)

## Research Methodology

The following section will detail my personal experience of undertaking a doctoral research in which texts collection and semi-structured interviews featured as the two major data collection methods (Ho 2016).

### *Texts and Artefacts Collection*

The first type of data collection method is the collection of texts and artefacts as well as a combination of field notes and audio recordings. The collection of documents ran in parallel with the research process. At least one writing sample related to a vocational qualification programme was collected from each informant. All vocational qualification assignments are in the format of an autobiographical narrative. These narratives document the informants' self-reported personal experiences in response to key questions mentioned in the resource packs and demonstrate skills and competences at management level in the HKACC. They also reveal the writers' professional competence. This type of retrospective review as one type of learning biography is welcomed by researchers like Carroll (1967) as it involves a great deal of linguistic input and output. For example, Sam attended the Officer Cadet Training Course in 2002, finished his reflective report with a narrative and systematic reflection in 2010 and has continued to serve in the uniformed group. Other texts written on other occasions within the uniformed group, such as email exchanges, can supplement the reading and writing practices of the writers and serve as appendices to vocational qualification written assignments if applicable.

Extracts from the participants' Facebook pages also constitute authentic texts for thematic analysis that interprets raw data. The aspects of techno-biographies I focus on in my research are current practices, participation, life history and digital timelines (Page et al. 2014). The texts and practices studied in this research have a mixture of Cantonese and English. For example, written assignments, guidebooks and email correspondence are all in English, while interview transcripts and Facebook messages were first written in Chinese and then translated into English for data analysis purposes. The Facebook pages of my research participants contain rich data on online interaction and content creation. I captured and stored all relevant data for later analysis using enough evidence of the online literacies of my research participants and their fellow volunteers, which were shaped by the HKACC's institutional culture and the social context of their lives (Hine 2000).

### *Semi-structured and Unstructured Interviews*

The second distinctive method of data collection is semi-structured and unstructured interviews. Whereas "…structured interviews follow a predetermined and standardised list of questions", "…at the other end of the continuum are unstructured forms of interviewing such as oral histories" (Dunn 2005, p. 80); the semi-structured interview "…has some degree of predetermined order but still ensures flexibility in the way issues are addressed by the informant" (*ibid*). Two semi-structured interviews for each vocational qualification participant (except Chris who replied to the questions for the semi-structured interviews in a questionnaire

format due to his busy schedule) were given, each one lasting approximately for 30 min.

### Interview Guide for Technology-Related Life History, Current Practices, Social Networking and Interacting on Facebook

New data types emerge in the volunteers' online world. To understand how writers interacted with technologies in the past and what their present practices on Facebook were, a semi-structured interview was arranged with the list of questions shown on Fig. 12.4.

The above general interview guide, compared with the detailed interview schedules normally used in structured interviews, implies a sense of flexibility (Richards 2009). Nevertheless, I treat research design as an ongoing process, and so the interview guides for the informants were amended at various stages of the research. Not all interviews were strictly structured, in spite of the long list of planned interview questions with three main focus themes: technology-related life history, current practices and social network and interaction. With the objective to generate new themes in our discussions, I allowed and encouraged my research participants to reply to questions in a spontaneous way. Sometimes, unexpected answers given by the participants led to adjusting the actual list of interview questions in the field. Also, all informants were given the opportunity to seek clarification of some particular wordings of the interview questions when they were in doubt. In short, it was my common practice to go beyond the interview guides and encourage my

**Part A –Technology-related life history**

1.Can you remember when you started using a computer?
2.Can you remember when you started using the Internet?
3.Can you remember when you started using Facebook?
4.Why did you join Facebook?
5.What are your reasons for using Facebook?

**Part B – Current practices**

1. Do you go on Facebook in different places (home computer, work computer, mobile device)?
2. How often do you use a mobile phone, home computer or work computer to access Facebook?
3. How much reading and writing related to our Corps do you do on Facebook?

**Part C – Social network and interaction**

1. How do you choose your 'friends' on Facebook in terms of i) accepting friend requests and ii) initiating friend requests?
2. What proportion of your Facebook 'friends' are Corps members (i.e. fellow volunteers)?
3. Do you get to know more about Corps members on Facebook in terms of both quantity and quality?
4.What do you think about the relationship between Facebook and mutual communication between Corps members?

**Fig. 12.4** Semi-structured interview guide

participants to express their ideas as freely as possible. In addition, ad hoc unstructured interviews were also arranged when I met vocational qualification writers or their peers at some large-scale events or training activities within our uniformed group. On average, the number of ad hoc interviews was two per participant.

## Findings and Discussion

With the aim to gain a more representative picture of the volunteering literacy practices of HKACC writers, it is worth exploring another part of volunteering lives – cyberspace or, I might say, the online world with a particular focus on Facebook – the most popular online SNS in Hong Kong in recent years. "Yet the change in communication technologies that seems to happen almost daily is both real and dramatic in the ways it is changing how young people read and write with words and images" (Williams 2008). In fact, in the HKACC community, the transformation in communication technologies is not only happening in the world of our young people, i.e. our cadet members and young adult members, but also in that of our older generation. Members, regardless of rank, post or unit, are immersed in the life of Facebook. Cadet-adult members and junior-senior dialogues, interactions and exchanges are more frequent.

Compared with vocational life writing, Facebook life writing is more global and interactive. Vocational writing is only shared among the personnel involved in the assignment writing process, which are vocational qualification writers, academic advisors, major unit commanders and the assessor. In contrast, Facebook life writing involves more than four types of people. It has been recognized that the Internet or World Wide Web cultivates global literacy practices (Hawisher and Selfe 2000). Facebook is a contemporary example of electronic communication, what researchers such as Cope (2000) have termed a global village. That is, the research participants in my study extend the boundaries of the communities of friends and families they belong to, wherever those people are relocated to, even if the original connection was local. More specifically, my research participants make use of Facebook to extend their volunteering literacy lives in global ways. For example, in this electronic environment, HKACC volunteers can be in touch and share their writing with their fellows from the same uniformed group, their friends from other uniformed groups or even counterparts from the Air Cadet Organisation (ACO), UK,[4] which transforms the traditional 'pen pal' system (Bates and Murphrey 2015). The post together with the photograph in Data extract 1 shows how I integrate language and SNS as a global resource for an original local activity and assist Dan, a volunteer from the other side of the globe, to convey a message to Bobby who is another volunteer who has travelled from the UK to Hong Kong as an escort officer for a course held in Hong Kong in 2013. My post, as a connection tool, also attracts comments from two other friends of Bobby.

[4] ACO is a youth organization or uniformed group sponsored by the Royal Air Force, UK.

**Data extract 1**
A local image triggers global communication and interaction
31 August 2013
Our favourite Uncle Bobby
*[an image here]*
*60 like this*

| | |
|---|---|
| Volunteer 1: | I miss him too ~ |
| Volunteer 2: | He marched to CO for the medal yesterday |
| Volunteer 3: | Oh this is uncle Bobby ;) |
| Dan: | Winnie can you ask Bobby to ring me when he returns to UK thanks. He looks as though he had a good time. Haha |
| Winnie: | Dan, wilco! Volunteer 2, yes, this pic was taken on Thursday |
| Friend 1 of Bobby: | Bobby – looking good |
| Friend 2 of Bobby: | Retirement suits you Bobby |

*(Winnie, Facebook post, 2013)*

On the other hand, Facebook life writing, as mentioned in section 'Research methodology', certainly involves more communication and asynchronous interaction between all writers if they are part of the Facebook community. Vocational life writing has no interaction between writers and assessors. Both the assignment itself and the feedback report are just one-way communication. However, all vocational qualification writers, academic advisors, major unit Cdrs and the assessor can be Facebook writers if they wish. Vocational qualification writers can update their status on Facebook and expect other writers in their network to write replies, comments or questions. The Facebook timelines of all four volunteers involved in my study have regular entries with commentaries, descriptions of events and other materials, such as videos or graphics.

The literacy practices on Facebook related to the voluntary youth group are deeply embedded in adult volunteers' lives. Being oriented by the theoretical underpinnings that I discussed in the section 'Research Methodology', after exploring literacy practices within a volunteering domain, my focus shifted from print to the digital domain and my interpretation of the Facebook literacy practices of my research participants in the HKACC. My research question relates to adult volunteers' writing practices in Facebook as a virtual community of practice. The texts on their Facebook timelines are all "co-produced" and "mobile" (terms used by O'Reilly 2008). The focus is on literacy activities in a virtual world, thus extending their routine literacy activities into the real volunteering world. Our adult volunteers actively engage in all sorts of interaction and participation in their activities on Facebook. The computer-mediated communication data presented in this paper are social media genres encompassing written (with spoken-like) and hybrid modes of communication (Page et al. 2014), which are multimodal affordances.

### *Computers, Internet and Facebook*

The first part of each second semi-structured interview aims to explore my participants' literacy history on computers, the Internet and Facebook. Discussions of technology-related life history not only serve the purpose of having a warm-up activity before examining core issues but also provide an opportunity for my interviewees to recall their first memory with large bulky computers, which contrast with their contemporary life with computerlike mobile devices such as smartphones and personal digital assistants. The first reaction of both Holiday and Jayden was to burst into laughter before their self-reported accounts, which shows that the contrast between the two types of 'computers' could be an interesting issue.

When Holiday was asked when she started using a computer, she giggled at the question and immediately related her computer usage to her academic study at secondary school. She started using an Intel 486, a microprocessor produced in around 1989, because of a mandatory subject at her school: Computer Studies (see Data extract 2). Sam, as young as Holiday, also started using computers at secondary school.

**Data extract 2**

Holiday: 'I started using a computer to do an assignment for Computer Studies'ent for Computer Studies'
Winnie: Do you remember when you started using a computer?
Holiday: Wah (exclamation in Chinese) … Haha! Form 4. When I was in F.4, I used 486
Winnie: 486? Ah yes, it seems to be
Holiday: I remember I studied computer studies when I was in F.4 since I opted for the science stream and added one more subject called 'computer studies'. So it's the first time I started using a computer to do an assignment for computer studies

*(Holiday, semi-structured interview, 2014)*

Not surprisingly, Holiday, Sam and I shared similar memories of the past because we are of a similar age. That is the reason why I concurred with Holiday's claim about the computer model by saying "486? Ah yes, it seems to be". In contrast, at first I was a bit lost when Jayden mentioned an unfamiliar term, "Apple 1", during his interview and felt that Jayden may have shared a not-so-similar experience until Jayden further explained the models "286, 386 and 486". As an experienced trainer, Jayden immediately thought of a good example with the aim of explaining that period of time more clearly by labelling it "The Wynners period". In Data extract 3, the expression "The Wynners period" was used because the Wynners was a well-known band in Hong Kong in the 1970s and has been influential in the popular music industry for four decades. Though Jayden and Chris are of the same generation as older computer users, Chris started using computers at a later stage, in 1992.

**Data extract 3**
Jayden: 'Computer? 30 years ago. Apple I period … the Wynners period'
Jayden: Computer? 30 years ago. Apple 1 period
Winnie: Oh, what's this?
Jayden: Computer 286 laptop!
Winnie: Oh, I have heard of this!
Jayden: 286, 386, 486, etc.
Winnie: 30 years ago?
Jayden: Yes, 30 years ago. Were you born yet?
Winnie: No, yes yes, Haha!
Jayden: The Wynners period
*(Jayden, semi-structured interview 2, 2014)*

Internet use is the second technology issue I explore. Being immersed in the Internet world for around two decades, all my participants, regardless of age, have a solid foundation in technology and thus encountered neither difficulties nor challenges when they transited to Facebook. The barriers, such as frustration, physical and mental limitations and mistrust, studied by Gatto and Tak (2008) did not happen in the world of my older computer users. Both young and old adult volunteers have a sound system of online social support and computer-mediated communication, which further cultivates their sense of connectedness and satisfaction.

In terms of Internet usage history, older adult members such as Chris and Jayden reported that they had been surfing the Internet for nearly "20 years" (*Jayden, semi-structured interview, 2014*), while younger users like Holiday and Sam remembered starting their Internet journey when they were senior secondary school students in the mid-1990s. For instance, Holiday, who pursued her study of the discipline of Computer Studies further after her secondary 5 education, mentioned the classical and dominant web browser "Netscape Navigator", in the 1990s, as an example of her first impression of the Internet: "After Form 4, when I was doing my Diploma, I started using a search engine, Navigator … I did a diploma after Form 5. I was doing the Diploma in Computer … Computing" *(Holiday, semi-structured interview, 2014)*. Sam did not account for his view of the importance of the Internet in his interview, but his vocational qualification assignment shows his stance. He supports the view that digital literacies on the Internet benefit his communication with fellow members, as well as training activities (as seen in Data extract 4). MSN (Microsoft Network) mentioned by Sam used to be the most popular computer-based messenger from 1999 to 2013, though MSN or Windows Live Messenger was later replaced by Skype and thus finished its historical mission.

The last, but core, aspect of technology our adult volunteers are immersed in is the Facebook world in this research. All four Facebook users created Facebook accounts in 2007 with reference to the timeline function of the Facebook platform. When users were asked when they joined the online social networking world, they

**Data extract 4**

Sam: 'Internet nowadays has been one of important parts of our daily life'

Need not to say, Internet nowadays has been one of important parts of our daily life. Teenagers also often spend much time on surfing Internet, such as chatting with friends on MSN, seeing friends' new posts on Facebook and etc. As the 'customers' of our Corps and our squadron are the teenage cadets, we must understand their daily life more, with a view to having more topics when communicating with them. Besides, by making good use of Internet, for example, communicating with cadets by means of emails will also increase the efficiency in communication within the squadron

*(Sam, Reflective report, 2010)*

addressed the issue in different ways. For instance, Holiday immediately associated Facebook with her Information Technology job: "Oh, Facebook? I already started working [when I started using it]! I think it should be … when I started working in ABC Company" *(Holiday, semi-structured interview, 2014)*. Jayden reacted to the question with his usual humour. He implicitly compared Facebook's age with his own age by pointing to his face: "As for Facebook, [I started using it] in recent years … for around 5 years. Facebook wasn't that old!" *(Jayden, semi-structured interview and field note, 2014)*.

## Facebook's Key Features

Before analysing adult volunteers' perspectives on Facebook, the appearance of the SNS needs to be portrayed. In doing so, I present the most distinctive feature related to writing – the status update feature – in the following. On Facebook, with a documenting life function, timeline shows one's life story. Each user's personalized timeline, which was the 'profile' page or 'wall' before 2011 or 'homepage' (Harper et al. 2012), has three major sections where one can voluntarily update one's Facebook status inside a status box in response to the prompt 'What's on your mind?' in the desktop version or the mobile app. On each user's Facebook page, with the content below the status box in the middle column is the 'news feed', which shows a stream of updates about what their friends post.

All statuses can reference one another on each writer's timeline. Each timeline shows updates in reverse chronological order, with the latest one at the top of the timeline. Alternatively, each status can be treated as an individual post. The first type of status is text-oriented 'status': it is to post text items, ranging from letters, words and sentences to paragraphs. The owner of a post can also adjust its privacy setting. This privacy feature can limit who sees the information. In response to 'Who should see this?', either 'Public (anyone on or off Facebook)', 'Friends (your friends on Facebook)' or 'Only me' can be set before clicking the button 'post'.

The second type of status update feature on Facebook is multimode-oriented 'photo/video'. In the twenty-first century, in spite of the common culture of having semiotic systems such as non-text-based images and videos, written texts still constitute a core and dominant part of new media (Lee 2011), in my case Facebook timelines. Facebook is full of multimodal texts ranging from linguistic, visual and audio to gestural and spatial (Bull and Anstey 2010; Jewitt 2005). Since literacy can be examined in multiple dimensions, the combination of oral, visual and gestural modes with written forms can be regarded as "multimodal literacies" (Makin and Whitehead 2004). For example, when volunteers navigate their own Facebook pages or their friends' pages, they not only type messages on pages but also share videos, songs, photographs and hypertext links with fellow volunteers on friends' lists. The process of updating texts, visual images or audio files can be completed without the constraint of geographical distance.

Facebook users can share their updates by uploading either photos or videos. Photographs can be divided into two types: personalized or other photos. As for personalized photos, for example, users' personal profile pictures are organized in reverse chronological order, with the aim of helping others recognize them on Facebook. Compared with the smaller dimensions of the profile picture which is restricted to a square crop, a cover photo is another option to upload a bigger photo to the top of one's timeline. Regarding other photos, users can create photo albums or simply keep photos or videos in either 'timeline photos' or 'mobile uploads' folders.

## *Common Facebook Purposes: Social Use and Different Perceptions of the Definitions of 'Facebook Friends'*

It is shown that there is an overlap between participants' online and offline networks of friends; thus, the online connection can strengthen the offline one (Subrahmanyam et al. 2008). This relationship also works the other way round. In my research study, offline bonding among adult volunteers can also strengthen online bonding. Therefore, my research findings will demonstrate both online and offline friendships. The analysis in this section is concerned with adult volunteers' common purpose of joining the Facebook platform, as well as their different viewpoints on the meaning of Facebook friends.

### Social Use

Based on all of my participants' accounts of their reasons for joining Facebook, as expected, the common experience among them was social use or, explicitly, being connected with friends to maintain social relationships. For example, Holiday commented that using Facebook let her share her status and photographs. "[Facebook] is a platform for exchanging things with friends" *(Holiday, semi-structured interview, 2014)*. Jayden had the same idea. Sam further emphasized the two-way

communication between him and his Facebook friends, 70% of whom are Air Cadets: "to view the latest updates of my classmates, colleagues and friends [and] to share my posts and updates with others" *(Sam, semi-structured interview, 2014)*. This finding matches a key finding in research on Facebook in higher education in the United States (Roblyer et al. 2010): a majority of college faculty and students used Facebook with the aim of keeping in touch with friends. For Chris, Facebook is useful for him to share his viewpoints, feelings and attitudes on volunteering life with his HKACC counterparts, as shown in Data extract 5:

**Data extract 5**
Sharing a view on the importance of volunteering
31 July 2011
Chris shared the 789 Squadron of Hong Kong Air Cadet Corps (official)'s photo
We cannot just focus on activities, which are for money making. The most important asset is whether we are dedicated [in volunteering]
(*Chris, Facebook post, 2011*)

## Facebook Friends

Despite having the same purpose of joining Facebook, all the Facebook users in my research had different perceptions of the definitions of 'Facebook friends' and 'friending' practices. Some members use this SNS to maintain "existing social ties" (Ellison et al. 2007, p. 1144), whereas others aim at making new contacts. For instance, for Chris, his existing Facebook friends included both his real friends, 75% of whom are HKACC's members as well as his "kids". Chris seems to adopt an 'all are welcome' policy in terms of Facebook friend selection. He accepted almost all the friend requests he received on Facebook. His intention in using Facebook was to "get closer with my friends and my kids" (*Chris, questionnaire, 2014*). Chris's children have been sent to study abroad, so Facebook is effective in breaking down the geographical constraint as well as bridging the generation gap to a certain extent. Facebook enables Chris to get closer to his children, as reflected in an unstructured interview in 2012.

In contrast, Jayden, Sam and Holiday had a more conservative attitude towards friend selection on Facebook. Jayden's friend selection criterion was to accept fellow members from the same organization online: "since I receive some friend requests for no reason, I still add them after I check they are friends from Air Cadets with uniform. Though I do not know them, I know they have seen me before but I forget who they are. I am not that "powerful" for adding every single person" (*Jayden, semi-structured interview, 2014*). Apart from having children who study in another part of the world as well, Jayden has Facebook friends who are both real friends and relatives abroad. In Jayden's Facebook account, 60% of his friends are fellow volunteers from HKACC. Jayden appreciated the social networking function of Facebook which let him feel that "the bonding among us [him and his relatives

abroad] is very close" in Data extract 6. The expression "close" appears twice in this description of his relationship with his Facebook friends. From Jayden's viewpoint, Facebook fosters a sense of solidarity among volunteers.

**Data extract 6**

Jayden: 'I feel the bonding among us is very close'
Jayden: Regarding the Facebook programme, once you have an account, you can find many of your friends and 朋友 (the word 'friends' in Chinese) inside. Since some of your friends are relatives abroad, I feel the bonding among us is very close
Winnie: Yes
Jayden: The connection is very close. And the real-time function can cause immediate reaction if they view Facebook [updates]. That's why I always see things about you and your husband
Winnie: (smiling)
Jayden: …and I also know those events within Air Cadets
*(Jayden, semi-structured interview, 2014)*

Furthermore, Sam and Holiday are even more conservative in terms of "friends" selection online. Their Facebook friends are those with whom they have connected in the physical world. Unlike Jayden, Sam did not choose every person he knew on Facebook as friends, only those who were "like-minded" *(Sam, semi-structured interview, 2014)*. Holiday shared the same view because she was aware of the security issue. She felt more satisfied and comfortable online after face-to-face interactions with her offline friends. She did not intend to add any strangers or other members whom she did not understand well (see Data extract 7). All of these self-reported accounts of informants have been crosschecked with my virtual data from participant observation.

**Data extract 7**

Holiday: 'At least I have to talk to them first to have feelings about them. If they are okay, I add them'
Holiday: [I choose] those whom I have talked to. I have to know their names and personality. At least I have to talk to them first to have feelings about them. If they are okay, I add them. For those who have never talked to me, I don't add them
Winnie: Anyone sends you friend requests?
Holiday: Yes, I reject them since I have never talked to them before
Winnie: Unless they invited you and you know them?

(continued)

Holiday: Yes, because Facebook can be dangerous if you have never heard of this person … after you add some people on Facebook as friends, they can see everything about you. So if you do not know their personality, it can be very dangerous
Winnie: So in short, your Facebook friends mean your real-life friends?
Holiday: Yes, unless they are my clients … no, I still don't add them
*(Holiday, semi-structured interview, 2014)*

Holiday first defined "Facebook friends" as her classmates from the Diploma in Computing. In her early Facebook period, she felt a strong need to keep in touch with her classmates after class and commented that "we played together" *(Holiday, semi-structured interview, 2014).* Currently, 60% of her Facebook friends are from the HKACC with a relatively great proportion of those being cadet members (as shown in Data extract 8).

**Data extract 8**
Holiday: 'We played together'
Holiday: My friends created [an account on Facebook], I had to [communicate] with them. Therefore I created it
Winnie: Friends mean ACC or non-ACC?
Holiday: Non-ACC, my computer classmates. We played together
Winnie: Classmates mean diploma or degrees?
Holiday: Diploma … Diploma's friends [were] together then we created Facebook accounts [together]
Winnie: What proportion of Facebook 'friends' are your corps' members (i.e. your fellow volunteers)? Just a rough percentage is alright
Holiday: Wah (exclamation in Chinese)! … more Facebook friends are cadets especially after every squadron's recruitment exercise. I think 60% are ACC, 40% are those friends whom I have met in my daily life
*(Holiday, semi-structured interview, 2014)*

## Conclusion

To conclude, the article demonstrated that volunteers are engaged in a volunteering environment full of print-based and digital texts. Social media such as Facebook have shaped the volunteering culture by strengthening the social relationships through online interactions. I discussed how and why individual adult volunteers treated friendship in the digital context within the uniformed group as a social world

and Hong Kong society at large. Their close online bonding is revealed, thanks to their well-established offline relationships. The significant influence of the computer-mediated communication contributed to the bonding development of both offline and online friendship in the volunteering world.

A feasible scope for further research is the possibility of having more empirical studies on virtual CoPs as a new learning practice through different communication technologies in the volunteering context. To enrich the picture painted by the current research, a similar study could explore more in-depth and comprehensive interview data about participants' perspectives on their own literacy practices on Facebook as well as textual discourses from other digital platforms such as WhatsApp.

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