Crowdsourcing Global Culture: Visual Representation in the Age of Information

Scott R. McMaster

A Thesis

In the Department

of

Art Education

Presented in Partial Fulfillment of the Requirements

For the Degree of

Doctor of Philosophy (Art Education)

at

Concordia University

Montreal, Quebec, Canada

September 2016

CONCORDIA UNIVERSITY

SCHOOL OF GRADUATE STUDIES

This is to certify that the thesis prepared

By: Scott R. McMaster

Entitled: Crowdsourcing Global Culture: Representation in the Age of Information

and submitted in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY (Art Education)

complies with the regulations of the University and meets the accepted standards with

respect to originality and quality.

Signed by the final examining committee:

_____Chair

Dr. David Howes

_____External Examiner

Dr. Joanna Black

_____External to Program

Dr. Vivek Venkatesh

_____Examiner

Dr. D. Pariser

_____Examiner

Dr. L. Blair

_____Thesis Supervisor

Dr. J.C. Castro

_____ Approved by

Dr. K. Vaughn, Graduate Program Director

_____

Dr. R.T. Duclos, Dean, Faculty of Fine Arts

ABSTRACT

Crowdsourcing Global Culture: Visual Representation in the Age of Information

Scott R. McMaster, Ph.D.

Concordia University, 2016

This doctoral dissertation extends existing frameworks of visual content analysis by coupling them with crowdsourcing technologies for international data collection and an iterative, interpretative visual analysis. In the age of information, imagery continues to be consumed and circulated at exponential rates, influencing and changing global flows of information that parallels Internet communication technology as it penetrates and gains ubiquity in new regions. To investigate the visual, media, and cultural phenomena that lie within these globalized pictorial exchanges, a flexible, visually-based inquiry is essential. This qualitative, visual-ethnographic survey was conducted over the Internet and aims to help inform visually-based literacy and media studies and further image-based research methodologies. The researcher collected over 2000 drawings from 61 countries diverse in geography and culture. The researcher revealed fresh insights into the visual-textual relationship, identity, and representation in a globalized context, specifically looking at emergent tensions between local and global ways of interpretation and meaning construction online. The researcher also considers the effects of a technologically mediated visual culture and its potential to influence or change deeply ingrained ideas once specific to geography and culture into new global trends and evolving material practices.

The analysis is centred on a selection of drawings from 106 Asian participants who drew intercultural representations of the words meal, marriage, and home. The most striking discoveries indicate varying degrees of homogeneity and hybridity among the visual cultural representations received and reveals connections among language, the Internet, advertising, and identity. The findings break with more traditional views of globalization occurring in a direct West-East flow and highlight regional powers that can serve as cultural hubs of attention. These hubs act as filters, possibly creating and hybridizing new commercial and cultural trends and positioning themselves as beacons of modernity with considerable visual cultural influence. The researcher also makes suggestions for future studies using an extended multimedia visual methodology as well as the potential inherent in emerging technologies for exploring phenomena in artistic, educative, and academic contexts.

Acknowledgments

Personal Acknowledgments

I would like to personally thank the entire Department of Art Education faculty and staff, each of whom has had a positive impact on my studies and my academic and professional development at one point or another during the completion of my doctoral program. In particular I would like to thank my thesis supervisor Juan Carlos Castro whose support over the years, prior to the thesis during teaching and research assistantships, during the proposal and funding stages, and of course through each and every aspect of the thesis itself, helped make this research project possible. His feedback and practical knowledge were instrumental in refining this thesis and bringing it to an exciting and informative conclusion. Juan's willingness also to just listen and provide moral support and other related feedback was also exemplary.

I am also very grateful to Richard Lachapelle for his help in the development of the pilot projects that evolved into this thesis research and his generous recommendation, which aided me in receiving the FQRSC doctoral scholarship. David Pariser also played an important role through his teaching and also because of his diligent efforts in providing me with additional feedback, outside of his obligations, as well as being a confidant and someone with whom I relished conversing and engaging in occasional fiery discourse. I must also thank David along with Lorrie Blair as my thesis committee members for their straightforward and no-nonsense feedback and practical expertise, which tied up any loose ends and helped make this thesis more relevant and accessible. Larissa Yousoubova and

Stan Charbonneau also cannot be overlooked for their eternally positive attitudes and vigorous behind the scenes efforts, which I probably do not fully realize, that also helped make my research a success.

My Parents Doug and Marian provided continuous moral support and were fundamental in my smooth relocation from Korea to Montreal, helping me to find a new house and make it a home and also providing me with non-academic feedback that helped to ground my research. My sister Meghan and brother-in-law Nick also lent me a sympathetic ear numerous times during this process. Of course my sincerest appreciation and deepest gratitude is reserved for my lovely wife Mia Sung, whose sacrifices, too numerous to list here, were the seeds of my success. Her unwavering moral support and unfaltering belief in me provided me with the confidence I needed, and her unmatched work ethic and beautiful smile served as a beacon during turbulent times. I cannot thank you enough for helping to make this day possible. Lastly, my stalwart companion Yulli, who provided me with sometimes necessary distractions during my writing and whose puzzled looks seemed to convey, "It's OK, I have no idea what you're doing either," which helped alleviate my isolation and prompt me to step away from the computer for much needed respite and reflection.

Institutional Acknowledgments

I would like to sincerely thank Concordia University's Department of Art Education and Faculty of Fine Arts for their support provided though the Ann Savage Award, The Millennial Scholarship Award, and several Conference and Travel awards. I would also like

Table of contents

Contents

List of Tables

List of figures

INTRODUCTION

Context

We are constantly exposed to and targeted by media on a scale almost unfathomable just over a decade ago. Considering the importance and rapidly expanding influence technology and visual imagery have on society, what efforts are being made to understand the production and consumption of our vast, diagrammatic, and increasingly technological world? This research aimed to draw upon the lived experiences of people from diverse geo-cultural backgrounds and examined if a homogenization of generally universal concepts (as typified by each cultural milieu) is taking place via global visual culture on the Internet. To explore these issues *Image-based Research* methods were used to elicit drawings or graphical representations of visual culture from online participants originating from all major regions around the globe.

Popular visual culture can be extended to include all visual artefacts present in everyday life, including ads, news, photos, videos, art and even packaging (Giroux, 1994; Tavin, 2005). Visual culture examines how visual experience is constructed and deconstructed within society to create meaning, claiming that people continually shape and re-evaluate their identities through the lens of popular visual culture (Crossley, 2005; Duncum, 1993, 2003; Giroux, 1994; Tavin, 2005). Globalization could be expressed as a force that dissipates international boundaries and homogenizes the understanding of economic, political, and cultural values held by individual persons and nations. The

Internet has played an increasingly important role in globalization due to the digitization

and dissemination of information such as mail, photo, videos, books, newspapers and

television (Beaudoin, 2008). This digitization has allowed information to be circulated at an

astounding rate as Internet usage around the world has surged over the past decade

(Internet World Statistics, 2011). Images now form an integral part of the Internet, further

speeding the consumption of information and news through a multimodal form of delivery

via smartphones, tablets and public screens that appeal to learners whose strengths may

lie more in visually based understanding rather than linguistic learning (Beaudoin, 2008;

Harris, 2006). A careful look at the top rated destinations on the Internet reveals sites that

use visual imagery as a key element for disseminating ideas, information, and

advertisements, allowing people to search for information in formats other than plain text

and offering up billions of videos and images for examination. Despite this rise in visual

cultural communication, "visual learning" across disciplines still experiences a disparity

when compared with textual and numerical literacy and learning (Delacruz 2009; Lester,

2006; Sinker, 2007; Chung, 2005). This disparity is concerning because of the importance

of visually based learning and its effect on cognition and development (Lester, 2006;

Burnmark, 2002; Clark and Paivio, 1986; Eisner, 1986; Read, 1954).

Critics have argued that the vast majority of cultural clout emanates from the *West*

travelling outward with a large deficit of global cultural exchange going one way (Crossely,

2005). Within this cultural sphere, imagery receives less attention inside educational

research when compared with text-based forms of representation (Delacruz 2009b; Chung,

2005; Spencer, 2010). This is disconcerting because of the importance of imagery in

meaning construction and its effect on learning (Stankiewicz, 2003).

Positionality

During almost a decade of living abroad in South Korea and travelling throughout Northern, East, and South East Asia, I made numerous casual observations regarding the many cultural differences between Korea, Asia, and where I was accustomed to growing up in Canada. Of course, initially being unable to speak the language or understand the customs, much of what I observed was strictly visual in nature. From the clothes to non-lingual signs, body language, architecture, and other signs and symbolic designs, I constantly compared and evaluated these differences both consciously and unconsciously in an attempt to form a complete picture of my new surroundings. In the absence of oral-textual communication, the visual was a door towards exploration and intercultural understanding before learning the language. Above all, one of the most important lessons from my time overseas was gaining new perspectives outside of my western milieu and seeing the region and the world from a fresh socio-historical and cultural position that originated in a very different yet equally valid context.

During my last few years in Korea, I began my Masters of Education in Technology, and many of the courses emphasized the importance and value of critical reflection on teaching and lived experiences. As I neared completion of the program and began to formulate my manuscript, I focused on visual literacy and the increasingly visual and technology driven world that was rapidly transforming before my eyes with the introduction of the first smartphone and a new influx of foreign goods.

After I left that region and way of life and reflecting on my experiences there I have been able to recognize and recall instances where western popular visual culture may have had an influence on Korea on many levels. These examples were manifest throughout daily life and stemmed from places like foreign TV programming (BBC, CNN, and Discovery), imported products in grocery stores (alcohol, snacks, dried goods), and the adoption of bikinis and swimwear reflected in beachgoer's attire where they were seldom worn previously.

Anecdotal Examples

The following are some of the anecdotal observations made during my time in Korea, recapped upon intensive reflection, which has influenced and led me towards the development of this research project and doctoral dissertation. They are in no particular order and cover mostly everyday experiences with popular visual and consumer culture as well as relating to my teaching experiences in both private and public secondary and post-secondary institutions teaching English as a second language (ESL). The ESL industry and Korea's quest to have the next generation fluently bilingual also seems a likely contributing factor as the country went from only a few thousand foreign English teachers entering the country in the late 1990s to over 20,000 per year following 2002, the year they hosted the FIFA World Cup and my first year there (Hoe, 2006).

One of my very first visual experiences, aside from walking around and randomly exploring in public, was a simple trip to the local supermarket. It was immediately

apparent that not only were the shelves filled with unknown, brightly coloured products, but the store was laid out differently, had many more employees, and had larger sections of fresh foods, not to mention a realm of new scents. Again imagery was key in locating products in lieu of being able to read or ask for help. Of course, there were some similarities such as "Lion Flakes" cereal and the all too ubiquitous Coca-Cola among a few others, but most products were largely unfamiliar to me. A few months later after moving from a smaller satellite city into the metropolis of Busan, I lived near TESCOs, a supermarket chain I was familiar with from living in England. However, upon my first visit to its aisles I was in for a disappointment.

Large international supermarket chains such as Carrefour and Walmart also existed during my first few years in Korea but later closed their doors, while their British counterpart and competitor TESCO grew and remains in the top two nationally. Part of Tesco's strategy was affixing the very popular and possibly most trusted electronics brand, Samsung, a Korean institution, to their signage (10% shares going to their "sponsor"), the other being that TESCO did not try to impose its British version of "supermarket" on Korean consumers.

Figure 1: **Homeplus signage**

One of most notable differences was the almost absence of the TESCO Brand products I was accustomed to consuming while living in England, which encompassed everything from beer to soap and bread. After their closures it was reported that while Carrefour and Walmart relied on their foreign operations for designing store layout, product offerings, and so forth, which eventually led to their demise (Choe, 2006), TESCO began with more localized designs and offerings, gradually increasing TESCO brand goods over many years, after having gained local patronage and trust. Those TESCO goods I originally sought that were once absent from shelves in 2002 could now be found in many aisles in 2009-10. During that same period mid-range or family chain restaurants such as Outback and TGIF also grew.

Another interesting observation was that despite a very high level of literacy in Korea, 98% (UNESCO, 2014), many restaurant menus provide photos of completed dishes and some also showcase maquettes of these dishes in display cases in the window or on the streets or sidewalks. This was actually quite helpful for foreigners like me, since literal Korean-English translations were often lacking in nuance (see Figure 2) and would turn one away if not for the accompanying photo, an instance of which is highlighted in an article titled "Lost in Translation" by Garland (2012).

Figure 2: Crotch steamed dish

아구찜
アンコウ煮
Crotch steamed dish
の食事できます

Signs for the police station, construction sites, and apartment advertisements are all very visual as well and often employ animated characters, which was explained to me by locals as being more welcoming and appealing to the general public.

One final observation I wish to share on Korean visual culture, and perhaps the most visual, was that of how locals dressed when going to and swimming at one of the country's most popular leisure spots, *Haeundae Beach*. What struck me upon my first visit in 2002 (and subsequent years that followed) was that most people, male and female alike, did not wear typical swimwear that one would see in western nations when either sunbathing or swimming. Instead many simply opted to wear T-shirts and shorts (sometimes cut-off jeans) in lieu of trunks and or bathing suits/bikinis. Korea is a more conservation country,

particularly when it comes to the body. Customs even checks for pornography, as full frontal nudity is illegal, and it was interesting to see how regular swimwear was adapted and worn over the years until in the end of the last decade it was no longer unusual to see speedo or bikinis on the beach anymore.

Figure 3: On the left an image from Haeundae beach circa 2003, on the right an image from the same beach circa 2008 or later. Photographer: Shawn Perez (Flickr CC Licence 2.0; free to adapt and share).

Also interesting to note was some of the early adopters of this trend were also those who had some connection to foreign teachers, whose numbers also increased during this period (Hoe, 2006). Often the speedo and bikini-clad beachgoers were not far from the ESL Beach Volleyball area (AKA "Foreign Zone") as well as surfer groups and so on. Whether these early adopters felt pressured (directly or indirectly) or simply wanted to fit in when hanging out, or if reality TV had a hand in influencing them is unknown, but the parallels between this fashion trend and the influx of foreign TV and English teachers is hard to deny. This should be given some consideration and is an interesting segue into this visual study.

These critical reflections and realizations have influenced and informed my pursuit of visuals and current course of research. They have prompted me to reflect on the ways in which these visual cultural trends are distributed, accepted or rejected, and assimilated into foreign cultures. With this study, I attempt to unearth some salient examples that could indicate similar cultural changes and trends in other countries as I witnessed taking place in Korea.

Add to these experiences and reflections the influences of faculty, students, coursework, new technologies, and new viewpoints from an Art Education perspective gained since returning to Canada and joining Concordia and we arrive at the place where this study began to unfold.

Statement of Inquiry

Research questions

My positionality and earlier pilot studies (McMaster, 2015; 2012) led me to examine to what extent popular visual culture (VC), amplified by the Internet, has influenced the homogenization of individuals' representation of ideas through visual imagery. While past studies in art education showed noticeable differences in graphic representation (drawings) across cultures (Beckman and Smith, 2006; Wilson and Wilson, 1984), recent scholars suggest that a homogenization of visual representation could be taking place due to globalization (Delacruz, 2009a; Desai, 2008). I sought to investigate this idea further, guided by the following questions:

1. What tensions emerge between local and global ways of interpretation and meaning construction when participating online?

2. To what degree does visual culture influence or change commonly accepted ideas specific to geography and culture into normative global ideals?

In order to address these questions I pursued the following objectives:

Explored new software and online platforms available and emerging on the Internet to reach a global audience in order to recruit participants, conduct research, and collect all image and textual data.

Examined the influence of visual culture's impact on learning, considering the following: How pervasive is VC originating from the West in other regions of the world? What forms of VC are most prevalent online? How and what do or can we learn from its presence and consumption?

Gathered valuable data concerning people's consumption, interaction and interpretation of VC and looked at its possible influence on them.

Uncovered links between VC, globalization, and learning and answered, in part, to what extent VC accelerates globalization and the homogenization of cultural norms in the form of visual representations.

Explored the possibilities image-based research holds for furthering educational inquiry and exploring VC. Made suggestions for capitalizing on informal learning online and the inclusion of VC as an integral part of interdisciplinary educational settings.

Statement of the problem

The exploration of trending issues such as popular visual culture and new media or the more fundamental concepts of visual education and literacy have been the subject of much scrutiny in the literature when it comes to art and education; however, much of the information we consume and study still lies within the pages of text based and numerical analysis. Meanwhile, visual means of approaching these issues has seen less and perhaps waning interest. Methods such as image-based research, that elevate imagery above its subordinate position under text and numeracy, still appear somewhat underrepresented, particularly with regard to publication in journals whose pages are covered mostly by text. Add to this the variable of technology and its role in compounding the influence and impact of visual imagery. Contrast this with the hesitation of some veterans in the field (Delacruz, 2009) who view technology as a means to simplify word processing and data storage instead of researching, creating, and discovering new ways of understanding these issues through new media opportunities, and the need for visually based research that takes advantage of new technology becomes clear.

Images, both still and moving, permeate our homes, cars, streets, workplaces—even our pockets. For most people images are both ubiquitous and essential to our everyday lives. Hudson (1987) pointed out that as far back as 1936 it was assumed that over 65% of all our information was attained visually. Hudson then made the case that with all the

advances made in technology and the supremacy of visual processes, he estimates that over 85% of all knowledge is attained visually (1987). "In spite of this, visual training, visual language and literacy, have not as yet achieved an equal position beside the other fundamental literacies—verbal, oral, and numeral" (p. 277). This is more recently supported by others (Chung, 2005; Harris, 2006; Herne, 2006), who describe our wakeful lives as environments drenched or supersaturated with imagery.

Almost 30 years ago Boughton (1986) noted the decline in the textual compared with the visual. This fact has become even more prominent today with new media, increasingly visually based gadgets, and the Web—things that Boughton recognized before they had come to fruition. He made the claim that visual literacy has the potential to significantly impact art education's content and methodologies. He made a point, later reiterated by Avgerinou and Ericson (1997), that there is no clear meaning of visual literacy but instead describes it as several loosely tied but fundamentally different concepts. Boughton (1986) argued that in an educational context that values "getting back to basics", visual education is one of those basic values. Although today there is considerably more emphasis on being visually literate, its tenets are still not universal and sentiment has shifted more towards media and or multiliteracies.

Twenty years after Boughton's (1986) remarks, Harris (2006) observed that in almost all aspects of public and private life the visual is primary. Icons erase words from desktops and menus; textbooks have become inundated with images; information seekers use computers, televisions, and cell phones, simultaneously, in what seems to be an almost constant swirl of search-find-post and search again activity; images are both higher in

demand and in circulation than text (p. 213). We turn to our smartphones and LCD screens almost instinctually for information, and while a good deal of this information is still textual, it is rarely unaccompanied by images. Harris (2006) remarked that most students come in contact with millions of images a year, and today thousands of hours of video are uploaded to Youtube alone (Duncum, 2014), which means lifelong continuous learning is enhanced with a consideration of the multitextual and highly visual character of information production, presentation, and consumption (Harris, 2006, p. 214). All these visual sources of understanding and their increasing dominance, disseminated and exaggerated in multiple media technologies around the world can be fused under the banner of visual culture. Visual culture was itself once highly contested and controversial, and even recently has been overlooked, as to its importance within the arts (Duncum, 2006, 2001; Eisner, 2001; Tavin, 2005, 2003). Further issues regarding information communication technology's (ICT) role have been debated throughout educational fields, with most disciplines adapting to new methods of teaching and research, making its integration a priority. That also includes the fine arts, but they have been criticized at times for falling behind the rest instead of leading (Sweeny, 2008), or sometimes being more hesitant to embrace the technological opportunities that abound (Abromov, 2008; Delacruz, 2009; Herne, 2005). However, putting those points of contention aside, I have chosen to focus on exploiting ICT, specifically as a tool for the thoughtful exploration of visual culture, and find out what this symbiosis yields about the futures of both IT and VC within arts education in the western hemisphere. Although there seems to be more "talk" about these issues, there is not a myriad of examples furthering the use of both ICT and VC as counterparts in learning and research. Although the numbers of case studies and articles

seem to be increasing, there seems to be a more immediate need to adopt new forms of investigation to address the lack of image centered inquiry mediated by precipitously evolving technologies.

Limitations

The limitations of my study are related to how participants access (are communicated with) and participate in the study. Since the study is conducted online only, those who have access to the Internet were included. Of course, the degree of access varies widely from country to country (Internet World Stats, 2011) and relies on a number of economic and technological factors. I used online websites known as "*crowdsourcing*" platforms that connect and recruit people to do surveys or *microtasking* to publish the survey and collect all the data. Despite the limitation often referred to as the digital divide, and the fact that English language skills may be necessary to navigate these crowdsourcing sites, their users "make up a diverse group, including a range of ages, education levels, and socio-economic strata, though primarily from highly industrialized societies" (Ross et al. 2010, p3). A further limitation noted by Ross is the possibility of creating "demand characteristics" in that participants may fashion their replies based on what they believe is required of them in order to ensure compensation for the task (2010, p2), also referred to as audience bias. In order to address this concern, the guidelines for participant submissions have been carefully crafted to ask them for their personal insights and interpretations. In addition, the instructions and a survey will automatically be translated,

based on the participant's location, into his or her native or preferred language. These strategies helped avoid some of the limitations of participation, but they cannot bridge the digital divide still present in many regions.

Terminology

Amazon Mechanical Turk (Mturk): An online crowdsourcing/microtasking technology used by individuals and companies to compile survey data, conduct market and other research, and tag and label images and websites for a variety of purposes.

CAQDAS: Computer Assisted Qualitative Analysis Software: Allows data to be input into a computer program (or cloud-based platform) to analyze large amounts of data.

Crowd Flower: An online crowdsourcing/microtasking site similar to Mturk.

Crowdsourcing: A form of online mass communication and group formation for the purpose of completing a single task. Tasks can be outsourced to large or small groups and can consist of many individuals working on small segments of a mutual/collaborative task or numerous individuals working on an identical task.

Globalization: A force that dissipates international boundaries and homogenizes aspects of economic, political, and cultural activities or values held by individual persons, businesses, and nations (Arnett, 2002).

Hybridity/hybridization: In the context of globalization, the idea, in contrast to homogenization, that images, economics, and cultural practices and concepts are becoming mixed, hybrid forms as opposed to previous notions of dominant western cultural forms colonizing others (Embong, 2011).

Image-based Research (IBR): A form of inquiry or research method that borrows from visual sociology, ethnography, and anthropology as well as semiotics and is unique in its prizing of imagery as a powerful narrative tool and significant form of data. It encompasses many (if not all) visual forms of representations such as photo, art, animation, graffiti, television, and cinema (Prosser, 1998).

IP Address: An Internet Protocol Address number assigned to personal computers describing its physical location.

Microtasking: A form of crowdsourcing that breaks larger tasks into smaller ones to be completed by many individuals.

New media: An umbrella term used to describe the myriad of information communication technologies accessed via digital devices that encompass basically all computer based hard and software technologies. Usually used to refer to novel, creative, and collaborative innovations that allow access to and sharing of media and information with a particular emphasis on networked communities (Manovich, 2001).

Platform: In this study platform is used as a descriptor for various forms of hardware and or software combinations that perform numerous functions from crowdsourcing to data analysis and social media.

Reverse Image Search: Using search engines such as Google it is now possible to upload an image to the Web and search to see where it appears, giving a better (sometimes exacting) idea of where an image may have originated.

NVivo: A qualitative research software that aids in the analysis and organization of multimedia data including video, transcripts, audio, images, and even Twitter data. NVivo lessens the time taken to structure and analyze large amounts of data, fast tracks coding, and is able to make subtle connections among different forms of data.

VPN: Virtual Private Networks allow Internet surfing to be somewhat anonymous and can assign IP addresses from elsewhere within a country or other countries to make the computer appear as if it has a different physical address.

Thesis Structure

The following paragraphs give an overview of the thesis structure by providing excerpts from each chapter's introduction that serve as previews of the major topics covered in each section.

Chapter 2: Literature Review

I begin in this chapter to look at previous visual research that relates to my study and is then followed by a look at the importance and implications of visual culture. Visual culture leads us towards communications technology and its role in the rise

of the image, bringing us into globalization, which is catalyzed by both imagery and technology. This is followed by a section on imagery's place within learning. Lastly, the issues raised in these sections are brought to light under the frameworks of critical theory, pedagogy, and network theory.

Chapter 3: Methodology

In this chapter there is a description of how my study was developed and tested during two earlier pilot projects and how these projects and their initial discoveries led to the creation of this larger international study. The ambiguity and sometimes opaque nature of Content Analysis, a principal method in the study, is discussed in terms of its applicability, as well as pros and cons for using this method for research of a visual nature. These methods are then interwoven with other visual methods to provide a more fully developed "image-centric" analysis that addresses the cultural and technological aspects of visuality. This chapter also discusses the online platforms known as crowdsourcing sites, as well as the benefits and limitations of both crowdsourcing and online research in general.

Chapter 4: Findings

In this chapter I provide in-depth coverage of the image and survey data collected and refined for this project. It begins with the profile of a representative participant from the study and is followed by a descriptive country-by-country analysis of male and female participant images. The three most impactful and significant images of meal, marriage, and home are then analyzed in terms of the themes that emerged from the visual content analysis and successive coding and interpretation.

Relationships between the countries, survey responses, and imagery are then discussed with regard to the most and least prevalent imagery and the reasons why certain images may be more or less represented in the data. This is followed by a discussion of the major themes that emerged from the data and brought back into the context of the research questions.

Chapter 5: Conclusion

In this final chapter, the thesis is reviewed to provide clarity and a summary is provided of the major the major points of each chapter. This is followed by a review of the major themes that the researcher is concerned with and highlights a selection of implications and suggestions that intersect the following topics; Art, Education and Information Communications Technology, Socio-cultural Functions of Visuality, Multiliteracies, and Visual and Critical Research. In the last section before my final remarks I detail a proposed visual ethnographic study that seeks to build upon the findings of this thesis and suggest field a proposed visual ethnographic study that seeks to build upon the findings of this thesis and suggests field work to make further inroads and pursue some of the imaged-based leads inherent in the drawings of marriage.

Literature Review

Introduction

For the purpose and goals of my study I pursue and expand upon methods for visual research, emphasizing the nature of the image, and to examine the flux of representation in the age of information and a new globalized ontology. As I move from the purpose and goals of my study to the literature surrounding this inquiry, I will cover several different but intersecting areas of interest as they pertain to the methods, themes, and issues raised during the planning and execution of my study.

The literature review here is both broad and interdisciplinary, as are the overarching questions I have asked, in an attempt at giving a balanced overview of the issues surrounding the image in multifaceted contexts. I begin this chapter with a look at previous visual research that relates to my study and is followed by a look at the importance and implications of visual culture. Visual culture leads us towards information communication technologies and their role in the rise of the image, which then brings us into globalization that is catalyzed by both imagery and technology, which is followed by a

section on imagery's place within learning. Finally, the issues I raise in these sections are brought to light under the frameworks of critical theory, pedagogy, and network theory.

Visual Research and Visual Culture

Past Studies and Research

As Prosser and Loxley (2008) point out, visuals in research, in general, were virtually invisible just over twenty years ago. However, due to a surge in Internet usage, the present conspicuous ubiquity of imagery has been catalyzed and has led to significant and complex research questions addressing new globalized contexts across disciplines. Prosser and Loxley (2008) continue to impress that examining these emerging global themes and issues via a visually based heuristic is crucial for the understanding of the nature of our daily lives. But before we delve into what other academic scholars have done with regard to image-based research and the types of inquiries that have been carried out in Art Education and related fields, I must first introduce the work that inspired this study, which was Aaron Koblin's artistic use of Amazon Mechanical Turk (Mturk). One of Koblin's (2006) earliest explorations of Mturk was with his project titled *The Sheep Market*, in which he asked crowdsourced users to simply draw a sheep facing left. To capture their responses Koblin wrote the code to create an embedded drawing tool, similar to MS paint, directly within Mturk's platform that both allowed people to draw with their computer's mouse and recorded their progress from start to finish. The results showed a full range of 10,000 drawings he collected from intricate to chaotic, all displaying each person's idea of what a

sheep facing left should look like. The images were gathered both to form an online database, allowing us to view how each person drew their image, and to become a gallery installation, with viewers being able to take away samples of these individual drawings.

Koblin (2006) also used Mturk to perform a variety of other projects such as recreating Charlie Chaplin's "Modern Times," again drawn by Mturk users frame by frame without knowing what it was they were drawing. Likewise in his Johnny Cash project, users each took a section of the song "Ain't No Grave" to draw a music video frame by frame with astounding results. Koblin's examples, although far from social science and academic work, provided both inspiration and ideas of the potential and types of questions and inquiry that could be asked of these new communication technologies and how they can connect and reveal things about ourselves.

Going back long before any of these technologies were even thought of, Wilson and Wilson (1984, 1987) conducted several international studies of children's drawings to examine to what extent graphic development differed not only around the world but also within cultures and to uncover reasons for any discrepancies. The Wilsons' studies found that children modelled their drawings from their cultural milieus, and when significant influences of media or imagery were absent, they learnt pictorially from older children. Wilson and Wilson (1987) noted:

> If a child is born into a culture in which literally millions of graphic images abound, will those images shape the child's cognitive world; and will those images constitute the materials from which the child invents a graphic symbolic world? By contrast, if a child is born into a culture with a paucity of graphic images, from what is the

child's cognitive image of the world invented; and, asked to form a graphic symbolic

worldview, what will be the basis of that worldview? (p. 10).

While their rural Egyptian example provides evidence of the presence of less

imagery overall in the village they studied, likely leading to differing graphic development,

they did note the ubiquity of the television and its implicit influence as a possible source of

imagery for "world-making," along with looking to their senior peers. It also prompts one

to wonder if the absence of the TV or introduction of the Internet would have significantly

changed their findings?

This notion of graphic development is further linked to cultural indoctrination by

the findings of Pariser et al. (2007, 2008), who state that "The symbol systems relevant to

graphic development are generally based on mark-making tools that function mostly in the

two dimensional medium and that are sanctioned by the relevant cultural milieu . . ." (2008,

p.294). This is one idea that I wished to capitalize on by eliciting drawings from

geographically distinct cultural milieus and attempting to reveal how such "sanctioning"

might take place in the eyes of participants. Again similar to the Wilsons' studies, Pariser et

al (2007, 2008) sought to understand graphic and aesthetic development, the locus being

the judgement of the quality and skill of the rendering of drawings (draughtsmanship)

across cultures and age. Although not specifically concerned with innate influences on the

drawings produced, they did indeed note that, "The youngest children, not having been

thoroughly trained in the practice of traditional aesthetic values, are open to what is

probably the most potent aesthetic influence at the moment—the media and popular

culture" (Pariser et al., 2007, p.113). This links back to the Wilsons' studies and further

poses media and communication technologies as both conduits and sources that may levy a hefty impact on both what is drawn and where the mental images a person draws upon come from. As Bagnoli (2009) posits, drawings aid in cases where participants find it hard to express themselves verbally in addition to facilitating the investigation of "layers of experience that cannot easily be put into words" (p. 548). Bagnoli further supports the idea that a focus on the visual allows oral deficiencies to be resolved and includes a deeper scope of experience that could otherwise be overlooked, stating that, "A creative task may encourage thinking in non-standard ways, avoiding the clichés and 'ready-made' answers which could be easily replied" (2009, p. 566).

Mitchell (2011a, 2011b, 2008, 2004) has shown that drawings, photos, videos, and other participatory forms of visual inquiry lend themselves to numerous insights, from studies of HIV and violence against women to teachers' self-reflection and professional development. Her studies and her founding of the Participatory Cultures Lab at McGill University showcase many examples of illuminating and exciting visually based research and the profound impact it can have on both researchers and participants in a variety of cross-cultural and geographic settings. Banks (2001, 2007), Mitchell (2011a), Pink (2013), and Rose (2012) offer numerous good examples of working with visual data and doing visual research themselves as well as showcasing a variety of others. This included Lutz and Collins' (1993) "*Reading National Geographic,*" examined a set of themes that ran through *National Geographic*'s pages with regard to people in third world countries being portrayed as "exotic," "naturalized," "idealized," and "sexualized." The study revealed how *National Geographic* established a style of coverage that was deemed most attractive to

Euro-American audiences. Lutz and Collins' (1993) insights helped point me to the methodology and the framing of my driving questions.

Prosser and Schwartz (1998) in their exploration of qualitative image-based research note imagery's importance as a cross-cultural tool for visual sociology/anthropology, which is also mentioned by Harper (1998). They contend that little had been written on the roles images (photos) can play in the research process and that, while many have used photos, there is generally a taken-for-granted assumption that images are what they appear to be and should be taken at face value. They cite the necessity for further examination or exploration of visuality to see the subtle, casually overlooked meaning present in everyday imagery. They also emphasize the need to use emergent designs, driven by the image data collected, and its interpretations, as paradigms shift to accommodate current practices in education focusing on the construction of knowledge and the interchange between student and teacher.

Besides these larger or well-known studies, numerous small scale and classroom studies have been conducted with visual analysis, critical reproduction, and/or research as part of their goals. Capstick (2011) used flipcams to do a participatory video project with dementia patients; Chung (2005) used cigarette ad deconstruction/reconstruction in the classroom; Herne (2005) did work with students using Photoshop and postcard creation; Chen (1995) looked at American and Taiwanese children's drawings; Hsu (2014) and Yamada-Rice (2010) portrayed drawing as a portal to aid the manifestation of imagination, emotion, and uncovering clues of image consumption. There are many other examples of studies that also hit upon the same ideas.

These studies intersect my project on many levels and helped me frame this inquiry, structure, and analysis of the data I collected, but most importantly they aided me in identifying a gap, at least in terms of my research questions. In contrast to previous research, my research explores drawings from more than a handful of countries, uses drawings to try and gain insights into preconceived notions and perceptions of adults while simultaneously exploring new technologies to study the effects of globalization via visual culture. So while text and interviews may well be able to elicit and represent significant emotional responses from participants, images can unearth even more powerful and direct emotional and cognitive representations as well as unanticipated reactions (Prosser and Loxley, 2008). Unanticipated and more visceral contributions are key components of image-based research and my inquiry.

For the remainder of this chapter, I isolate the dominant themes and issues inherent in this complex cross-section of visual culture, technology, and globalization, as well as education.

Visual Culture

Throughout the literature, it becomes increasingly apparent that it is very difficult to separate the need for visual methods and the pursuit of media literacies from a parallel call for the study of visual culture. As Rose (2013) argues, "The form of the relationship between 'visual research methods' and 'contemporary visual culture' has not yet been interrogated" (p. 2). Of course, popular visual culture is the very essence of the creation,

circulation, and consumption of visual imagery. The communication technologies and media that deliver film, TV, news, ads, and social platforms are now structured around images that comprise the majority of what we see and represent a great deal of knowledge; the image alters the perspective with which we interpret the accompanying text and/or dialogue and vice versa.

Duncum (1993) via his five functions of the visual arts in society establishes the importance of the visual in our day to day lives and how it is intrinsically connected with popular culture consumption. Duncum claims that it is critical to understand the motives and justifications that children and adults make as to their engagement in the production and consumption (and sharing today) of imagery. By doing this we will be able to better inform the place of visual art's role in society. Duncum points out that in 1993 children were exposed to many more visual narratives than in the past via TV; this has even more significance to educators today because of the ubiquity of the Internet and access students have to these narratives. Take the example of YouTube and the thousands of hours per minute of video now uploaded each and every day and continuing to increase year after year (Duncum, 2014).

As many other theorists and scholars besides Duncum contend, one of the issues with the study of popular visual culture has been the way it was classically framed, according to Hall (1997), in absolute high vs. low cultural forms, high being "good" and worthy of study and low being "bad" and not as worthy of our consideration. However "in recent years, and in a more 'social science' context, the word 'culture' is used to refer to whatever is distinctive about the 'way of life' of a people, community, nation or social

group" (Hall, 1997, p. 2). Tavin (2003, 2005) defines visual culture as a field of study in which researchers analyze and interpret how visual experiences are constructed within social systems, practices, and structures. He claims that children and youth construct their ever-changing identities through popular culture; TV programs, music videos, and movies become the material milieu of the everyday discursive formation through the contribution of language, codes, and values.

This touches on the relationship elucidated by Hall (1997) between the meanings constructed in our heads and how they influence and regulate our social practices and personal actions having real consequences and effects on how we live. "Visual signs and images, even when they bear a close resemblance to the things to which they refer, are still signs: they carry meaning and thus have to be interpreted" (Hall, 1997 p.19). This line of argumentation becomes clear, Hall (1997) claims, when we consider animation or an abstract drawing where we require a refined "conceptual and shared linguistic system to be certain that we are all 'reading' the sign in the same way" (p.20). Hall goes on to argue that we learn the systematic treaties of representation, symbols, and codes of language and culture that enable us to become inscribed by and in our respective cultures, and this allows us to function as cultured citizens. This process of acculturation, Hall (1997) claims, is not expressly obvious in the way in which we learn it. He states that we unconsciously internalize many of the elements of these systems of representation gradually over time so that many of their mechanisms are never consciously criticized and challenged, except by that same system with which we learned them.

So what happens when the system, conventions, and codes of a culture of representation are permeated by outside influences, i.e., foreign popular visual culture, and/or are contrasted with competing modes of representation not born in the local cultural milieu? If we agree with Hall's remarks that meaning is ultimately never fixed but negotiated by socio-cultural and linguistic settings, then we can agree, as he did, that words can carry different meanings. It is then not much of a stretch to assume that these meanings can be renegotiated in light of new concepts that can be more easily conveyed through visual culture than through language from outside the local socio-cultural and linguistic settings.

One of Hall's (1997) main points is that meaning does not truly exist in the real world in objects and situations and so on; it is produced and constructed by us. Take the word *home*, for example. If we had never encountered the word before, it is completely meaningless, and even showing us the object often associated with the word (a house) also does nothing for us until we attach the significance of family, shelter, property, and so on. To understand the word we must draw upon our cultural milieus, experiences, and mental images to place it within our individual view of the world. Hall contends that "we must not confuse the material world, where things and people exist, and the symbolic practices and processes through which representation, meaning and language operate" (1997, p. 25). Hall points to the importance of "social actors" who use, misuse, reproduce, and modify linguistic and multiple representation systems, to make meaning and place themselves in the world in a significant way that also allows them to communicate these ideas among one another. Hall (1997) calls this sort practice of negotiating meaning as the "work of representation," as we attempt to combine, construe, and separate the material, conceptual,

and symbolic functions of our worlds. This point is also noted by Banks (2014) who states, "Whatever neuro-physiological processes are involved in visual perception, the brain can only interpret the images it receives through the filter of 'culture'" (p. 7).

Tavin (2003, 2005) claims that with a shift in focus to the real world or everyday experience, teachers and students will be able to see the pedagogical power of visual culture as it is a transdisciplinary catalyst, both challenging and crossing boundaries. He also saw the primacy of pop culture in daily life stating, "Images and artifacts from pop culture's terrain lie in the everyday and are invested with meaning and pleasure" (2003, p. 198) and cites cultural studies and the use of critical social theory as important in critiquing and interpreting popular visual culture. The importance of interrogating visual culture becomes more visible when we consider its impact upon identity (Giroux, 2011; Tavin, 2003) and numerous scholars have also pointed to the importance of visual culture and have tried to articulate how it fits into education (Bolin & Blandy, 2003, 2003; Duncum, 2014, 2004, 2001, 1993; Tavin, 2005). The question of identity when considered alongside commercial consumer culture creates a tempting vacuum where "the cultural forms of global capital combine images, words and sound to produce highly seductive experiences…" (Tavin, 2003, p. 202). This reflects Sturken & Cartwright's (2001) argument:

Images are a central aspect of commodity culture and of consumer societies dependent upon the constant production and consumption of cultural ideas about lifestyle, self-image, self-improvement, and glamour. Advertising often presents an image of things to be desired, people to be envied, and life as it "should be." As such,

it necessarily presents social values and ideologies about what the "good life" is (p. 189).

Frosh (2003) in his book *The Image Factory* speaks about the path of the image (mainly the photograph) and its function and place in society stating "... it is important to recognize the ways in which they [linguistic-semiotic approaches] are resisted by visual images, and to understand visual experience and the interpretation of images as not wholly explicable in terms of textual decipherment" (pp. 21-22). Frosh (2003) also hits upon Hall's (1997) ideas, when he writes about the production and circulation of cultural products and practices, claiming production as "privileged" because, he claims, it is at this time when cultural products acquire their fixed codes regarding the intended audience. At this point Frosh argues that these cultural forms become locked and the meaning conveyed at production "closed" or embedded within the product or object with a stamp of approval. "However much consumers may be free to interpret, 'resist' or even alter these sealed forms", he says, "it is these forms that they must receive and act upon" (2003, p. 12).

Although this is an interesting consideration, it diminishes somewhat in light of the recent developments of social media and accessible forms of production such as YouTube, not to mention trends in remix or "mashup" culture. This view is also at odds with Castells' (2010a) thoughts on "mass culture" in the sense that the audience is a collection of passive receptacles does not exist and that mass culture is the technological system itself (similar to McLuhan's "media is the message"), jockeying with other competing high-low models. He states that the "media, and particularly audiovisual media in our culture, are indeed the basic material of communication processes. We live in a media environment, and most of our symbolic stimuli come from the media" (Castells, 2010a, p. 364). Efland (2005)

supports Duncum's (2002) claims and a shared emphasis on fine art paralleling visual culture, arguing that the main reason for visual culture's inclusion is to increase the capacity for critical consciousness.

In examining the importance of visuals in the social sciences Pauwels (2000) claims that visual practices generate a wide variety of issues and opportunities, but these are often neglected. And despite a proliferation of visual means and new information communication technology in society and a hybridization of the media, researchers are still deficient in the skills and insights for producing visual material as a crucial part of social and scientific dissemination. Pauwels (2000) points to the camera image as a dominant visual social research tool, claiming photos produce detailed records of complex and fleeting phenomena. Also dominant is popular visual culture (societal imagery), which is a rich source of cultural info. However, argues Pauwels (2000), the value or quality of a product (of research) cannot be read from a single picture; it depends on the whole process that led to it—influences, circumstances, gathering of data, processing, and presentation. Pauwels (2000) also states that while there is much unrealized potential in images and visual media, "some believe that the strengths of visuals are killed by efforts to streamline its use" (p. 11), in reference to having to categorize visual research within existing theoretical and methodological paradigms.

As is clear from the literature, although visuals continue to increase in value for learning and research, offering us new avenues with which to explore old and new issues alike, they lead to a profundity of rapid social changes that are not seen in their entirety or entirely understood. Unfortunately, images remain underused regardless of their potential

to societies of research and learning, and gaps in research, methods, and real world practical applications leave those educators and researchers with much to be done until visuality is seen on equal grounds with other forms of representation. As we review insights about the state of technological innovation, its delivery systems, and impact on our lives, new opportunities are realized in pursuing visual cultural research in combination with new and emerging communications technologies.

Technology and the Internet

To trace the transformative and interconnected relationships intertwined at the intersection of visuality and technology, I needed to examine information communication technology in general and trace the recent leaps forward in the use and examination of new technologies in society as well as in academic contexts:

> For the past 3500 years of the Western world, the effects of media—whether it's speech, writing, printing, photography, radio, or television—have been systematically overlooked by social observers. Even in today's revolutionary electronic age, scholars evidence few signs of modifying this traditional stance of ostrich-like disregard (McLuhan, March 1969).

> Putting aside any points of contention that may still exist today regarding the use of technology, the focus here is on what is already happening, or not happening, with regard to the use of *information communications technology* (ICT), specifically as a tool for the

thoughtful exploration of visual culture and what this says about the futures of both ICT and visual culture within the fine arts and education in the western hemisphere. Although in the recent past there appeared to be more "talk" about these issues than action, there are some examples of the use of both ICT and visual culture as counterparts in learning (Castro, 2012, 2015), and the numbers of case studies and articles seem to be increasing, leaving me with an optimistic view of their persistence. As a result, I can envision an increased presence in forthcoming art education paradigms. What follows are some of the themes and issues regarding ICT's role in relation to visual culture. However, it should be noted that these are not necessarily things that are happening, but rather things that are progressing on various levels from discussion to practice.

"In North America most people under the age of 25 live in an environment of digital technology" (Carpenter & Taylor, 2007, p. 84). Carpenter and Taylor (2007) claim that the visual art world has already become a digital extravaganza of interactive exhibition spaces and collaborative creations that appropriate old and new through performance and new media. They point out that today's youth, or "digital natives" (Prensky, 2001), see nothing spectacular in all of this technology. For them it is the digitally mediated world to which they are accustomed and which constitutes an important niche of their lived experiences (Ferneding, 2007; Harris, 2006; Spalter & van Dam, 2008). Moreover, Carpenter and Taylor (2007) state that students are essentially metamorphosed from just a decade earlier and require new forms of educational stimulus that reflect the rapid shift towards and changes brought about by the age of information, also mentioned by Synder and Bulfin (2007).

Carpenter and Taylor (2007, 2003) used hypertext programs such as *Tinderbox* to do interactive online projects with students that combined multimedia with visual representations of websites, links, concepts and more. The process and concept were similar to mind-mapping, giving representations to students' thoughts through text. Then connections are made with imagery, including videos, and meaning is collaboratively and constructively generated as students nourish each other's work and interpretations to create a collective body of knowledge around their topic of choice. Carpenter and Taylor (2007) developed four conditions to consider for the use of technology teaching and learning:

1. Students need guidance to develop critical viewing practices in digital media.

2. Incorporation of digital media should not be an afterthought or supplement to the curriculum (Ferneding, 2007; Stockroki, 2007) but thoughtfully integrated as a core component.

3. The questions and choices teachers make should consider students' everyday lives (Chung, 2008; Herne, 2005).

4. Art educators need to recognize the cultural, social, and political factors inherent in the development, distribution, and use of digital media and use this context to bring up issues as well as find solutions (Addison, 2010; Snyder & Bulfin, 2007).

Some of these conditions are already being realized in places like Singapore, where learning technology has become mandatory at all levels and academic disciplines, including art (Kan, 2009). Kan describes how adolescent artists, through digital animation, created

engaging visual stories that helped them confront, describe, and share their personal emotions that encapsulated their social milieu by working within a popular form of visual culture. Kan (2009) as well as Carpenter and Taylor (2003) also note a self-directed aspect of techno-learning and the sense of empowerment students felt by resolving issues independent of the teacher. This type of compulsory ICT learning extended to art can also be seen in Hungary (Stokrocki, 2007).

Delacruz (2009) also points to an important shift in art education technology pedagogy in response to today's technologies that promotes concerns of cultural citizenship relevant to an age of global media. She comments that when made an integral part of the art room, ICT can forge connections among art, technology, and social justice. However, Delacruz (2009) remarks that pessimism still surrounded the then current attitudes of a majority of "veteran" art teachers at all levels of education, in their acceptance of the necessary changes needed to allow art education to embrace the innovations and creative possibilities provided by new media, attitudes that are also noted by Wilson (2008). Delacruz (2009) acknowledges the potential for change in the near future, which is occurring now, but from the next generation of art educators, believing that technology will transform art education but only after a born digital generation of teachers have taken over bringing their plethora of technological skills to bridge connections to everyday lifestyles.

Delacruz's concerns were realized in recent texts such as *Art Education: The Development of Public Policy* (2005) and *Art Education in a Climate of Reform* (Dorn & Orr, 2008), where author Charles Dorn, former head of NAEA, fails to even mention technology

as a concern for art education despite it being an important factor at the time(s) for both policy and reform. *Visual culture in the Art Class: Case Studies* (2006), edited by Paul Duncum, also showcases past disparity in which out of 21 one studies chosen for the NAEA text, only four (Tavin & Toczydlowska, 2006; Amburgy, Knight & Boyd, 2006; Barney, 2006; Black & Smith, 2006) mention the use of technology to explore visual culture, and only one of those (Black & Smith, 2006) comment specifically on the role that technology plays in the visual arts. Duncum (2005) also fails to include technology in his book chapter entitled "Popular Visual culture and Ten Kinds of Integration," where he acknowledges how our realities are derived from and negotiated with mediated sources but neglects to examine the role technology plays in mediating and interpreting those sources, also overlooking technology as a source in and of itself. However, Duncum has since refocused and given more careful consideration to technology in more recent articles (2014).

Freedman (2000) realized over a decade ago that "visual culture is expanding as is the realm of the visual arts," which "includes fine art, television, film and video, computer technology, fashion photography, advertising, and so on" (p. 315). Freedman (2000) also notes that these forms, which cross boundaries, are present in contemporary forms of fine and mass produced art. This power for ICT to cross boundaries has not gone unnoticed by Stokrocki (2007), Synder & Bulfin (2007), Carpenter &Taylor (2003), or Abrahmov (2008), who recognize the technologically mediated and socially constructed nature of reality in which ICT is a resource, a tool, a site of intercultural exchange as well as a medium to critically engage with itself and help cope with an exponentially increasing and value-laden information driven environment.

Freedman (2000) mentions that the applications of virtual environments as "literal and conceptual, intertextual and intergraphical connections between television, the web, and other visual technologies, such as film, photography, and video, are expanding this learning environment" (p. 325). These applications are also noted by Sweeny (2008), but we need not limit ourselves there. "Distance art," recently created by David Hockney through the use of his iPad to continuously update a digital painting exhibition at the Royal Academy each time he was inspired to sketch, was something quite novel (Makarechi, 2012). Technology now allows the dynamic tracking of contribution and participation on a project, making it an ideal tool for collaborative and constructivist group work, which can allow the viewing of multiple perspectives and interpretations of a work. "Such connective and expansive experiences promote complication and ambiguity that are likely to inspire more meaningful and relevant ways of knowing than the traditional linear or compartmentalized approaches do in art education" (Carpenter & Taylor, 2003, p. 41). Technology allows non-linear ways of thinking to emerge as well as non-linear methods of approaching teaching, study, and research.

The successful merger of ICT and art to study visual culture can be seen in projects like Chung's (2008) cigarette ad deconstructions using Photoshop, where youth learned to uncover the hidden meanings and values embedded within media advertisements, that reflect sentiments from Gude (2004), who states that "by shifting the context within which a familiar advertising image is seen, students spontaneously question who creates and controls imagery and how this imagery affects our understandings of reality—an important activity of visual culture art education" (2004, p. 10). Herne (2005) shows that we need not limit this type of learning to older students, recognizing in his study that children are

capable of adapting to the use of technology and also possess a willingness to take on the conceptual role of assigning meaning to images through the use of captions that reflect a development of students' visual vocabulary and enhanced interpretation of imagery. As for adult learners, we need only look to Aaron Koblin's (2006) numerous projects, including *The Sheep Market* and *The Wilderness Downtown*, in which he uses technology to create hugely collaborative yet intimate and personal works that emulate intersections of art, technology, identity, and the creative potential inherent in mass communication and visual culture. Koblin's projects display the types of research, deconstruction, interaction, and manipulation of the social milieu that many art educators have called for (Spalter & van Dam, 2008; Ferneding, 2007; Snyder & Bulfin, 2007; Stokrocki, 2007).

Napoli (2008) contends that we need to rethink our approach to mass audiences as mere receivers, and this becomes clear when we consider today's technologies and the ability for audience members to also be potent mass communicators via popular social media such as Youtube, Facebook, and Twitter. This means confronting the "work" (Napoli, 2008) that the audience does in new communication systems by sharing, critiquing, imitating, and parodying, of which numerous examples can be found in the aforementioned social platforms. Furthermore, we also need to examine the monetization of their mass communications in the context of data mining and advertisement placements, which dominate both overtly and shyly before, after, and in between these transmissions. Audience members, as well as producers, are invited not only to consume but to rank, rate, describe, discuss, and categorize numerous forms of social, commercial, and other media sources, both monetizing and becoming monetized simultaneously. Fuller (2005) in his discussion of a "Media Ecology" described an intense, increasingly complex reliance on ICTs

for the "reproduction, storing and distribution of texts, images and sounds, the constituent elements of culture" (p. 1); therefore, in order to understand contemporary culture, we must understand these technologies. Identity and authorship of visual culture are now wide open, and we need to learn how to authenticate and value media, as individuals place us within it and it within our relevant cultural milieus.

An expert on the Internet and communications technologies both generally and in a global context, Castells (2010a) states that one of the important features of ICT is "the *pervasiveness of effects of new technologies*. Because information is an integral part of all human activity, all processes of our individual and collective existence are directly shaped (although certainly not determined) by the new technological medium" (p. 70). Here Castells indicates the impact that new technologies have in shaping not only our individual identities, but also our collective cultures and industries. Speaking of a paradigm of technology, Castells describes the beginning of this techno-transformation in the mid-70s up to the 90s, saying, "It appears that society as a whole, business firms, institutions, organizations, and people, hardly had time to process technological change and decide on its uses" (p. 86). He claims that the new economy of ICT is not just information-based but informational, stating that "the cultural-institutional attributes of the whole social system must be included" (p. 100). This means that we cannot simply focus on one part in isolation because any look, even a glance, implores us to consider the interconnectedness of the entire system.

Like Napoli (2008) and Frosh (2003), Castells (2010a) also points out the influence multinational corporations can have across regions, citing that the greater the degree of

globalization a given company has, the greater the potential exists for connections inside national politics and business. He also posits the importance of these multinationals in creating and maintaining these globalized networks of information and labour. In considering how these networks link together, Castells asks, "What glues together these networks? Are they purely instrumental, accidental alliances? It may be so for particular networks, but the networking form of organization must have a cultural dimension of its own" (p. 214). Therefore, in order to have global clout, these multinationals must become embedded within particular cultural milieus to become and remain economically viable to sustain the network links created. Delving further into what this cultural component may be, Castells describes a *multifaceted virtual culture* that comprises many values, social milieus, projects, a "patchwork of experiences and interests," that circulate both through the minds of those networked and the network itself, constantly changing those minds as they transform, adapt to, and adapt the network itself (2010a, p. 215).

Drawing from Postman's many insights into how technology has shaped and transformed culture, Castells states that "because culture is mediated and enacted through communication, cultures themselves—that is, our historically produced systems of beliefs and codes—become fundamentally transformed, and will be more so over time, by the new technological system" (2010a, p. 357). He points to the importance of the multimodality of human communication and how it is realized for the first time in history in these new technologies. Again drawing from Postman's work, Castell's claims society chooses its preferred media by the path of least resistance, or by the minimum effort required to produce a desired effect of contentment. As TV represented the death of the logocentric "Gutenberg Galaxy" (2010a, p. 360), so does the Internet represent the death of a central

media of the home. Castells (2010a) claims that only a few years after its release on the mass market, TV became the cultural epicentre of society, in part due to its seductive method of sensory simulation of reality.

In terms of the global trends and implications of new ICTs, "the predominant pattern of behaviour around the world seems to be that in urban societies media consumption is the second largest category of activity after work, and certainly the predominant activity at home" (Castells, 2010a, p. 362). This idea is not difficult to adapt to current uses of personal technologies, although it is less communal than its predecessor TV, with tablets, laptops, and smartphones, and services like *Netflix* providing individualized media consumption across a broad range of categories that has upset the dominance of traditional cable television. Castells (2010a) also points to the globalization of satellite broadcasting and the rise in worldwide popularity of networks such as CNN (noted by my participants). In particular, he remarks of its penetration into the Asian market, specifically mentioning the Indian market as a prime example. In the next section ICT in terms of global communications and research potential is discussed as a path towards understanding and making contact with communities and individuals for whom these issues are becoming profoundly influential.

Online Research

In this section I briefly outline the benefits of conducting research online and compare and contrast those methods with more traditional ones. In order for me to explore images on a global scale, I needed a networked source of individuals (online community)

from which I could recruit participants with diverse backgrounds. This is because physical travel to and financing of stays in a variety of distinct global regions would be severely constrained and limit the scope and number of regions that could be included (Beaudoin, 2008). Although there are now numerous crowdsourcing platforms available online, the only such platform that reached the largest global audience was Mturk, which according to Amazon Web Services (2010) had over 500,000 registered workers in over 190 countries worldwide. This was supposed to have meant unprecedented access to participants in almost all regions on earth that are networked, but as you will see in the next chapter, Mturk did not work out quite as planned.

Access to networked communications was also an important factor for me to consider, as only those with Internet connectivity and possibly a good grasp of English were able to participate. To alleviate language barriers participants were able to view the tasks in their own language via Google's instant translation software. Yet "viewing language" in another way strengthens my study's ties with globalization, as recent Internet usage statistics suggest that English dominates the Web with an over thirty percent penetration rate and an estimated 1.3 billion worldwide engaged in the use of English online in one form or another (Internet World Statistics, 2011). The role of the language used to access the Internet will also come into play later in the Findings chapter.

Despite the diversity of Mturk described above the study still needed to account for higher percentages of users from regions like India (Aytes, 2011). This was to be accomplished using built-in geographic filters which allow the researcher to limit the task once a region neared its per-capita share or other reasonable representation in the data.

This access to such a global pool of participants and advanced filtering and HTML tools makes crowdsourcing an ideal choice for the project. That being said, crowdsourcing turned out to be a challenge for this project's methods and design, described further in the following chapter.

Although having conducted two successful pilot projects beforehand led me to trust that crowdsourcing platforms such as Amazon Mechanical Turk (Mturk) could be used to gather image based data for education research, questions were raised as to whether or not the image data gathered could then satisfy critics as to its authenticity and/or credibility. One concern raised was of the originality of the data submitted and truthfulness of the participants and whether or not they simply used Internet tools, such as Google images, to draw from (or copy) to give me what they thought was a suitable representation for the task and questions I provided.

Available literature seemed to indicate that though there is ample evidence to suggest that online methodologies and data collection are indeed equally valuable to traditional or offline research (Dunn, 2002; Granello and Wheaton, 2004; Lefever et al., 2007; Griffiths, 2010), there is little that documents or supports the use of imaged based research. Again this is likely due to image-based research (IBR) being as yet an outlying method of educational and academic research, although one could argue that since there is literature to support various other forms of online research and data, it is not a great leap to extend or extrapolate these findings and apply them to image data as well. However, part of my intention was to try and add to existing literature and fill the gap, further supporting

both IBR and visual research online, towards a better understanding of visual and media literacies.

Traditional research methods can be fraught with limitations. Some of the main reasons and benefits for conducting research online according to Dunn (2002) are as follows:

- **Geographical:** Using online methods you can reach a much broader (and possibly more diverse) audience to recruit participants (Lefever et al., 2007). You are also able to overcome funding issues and gather data from remote areas that have Internet access.

- **Economic:** Studies are almost always influenced by funding concerns; those involving travel are particularly subject to budget constraints. Online methods eliminate most economic issues; they are simply more cost efficient (Granello and Wheaton, 2004; Griffiths, 2010).

- **Time and Place:** Traditional methods involve gathering people, booking or arranging a place to meet, and setting up a schedule, all the while making sure both the time and the physical space are conducive (or at least non-disruptive) for gathering the data you want. Because online research can take place asynchronously, participants choose a time and place (from which they contribute) at their leisure and are less inhibited, thereby contributing more sincerely than they might be in person (Griffiths, 2010), and participating becomes less disruptive to their daily lives (Lefever et al., 2007).

This is not to say that online methods are beginning to trump traditional ways of conducting research. The drawbacks and disadvantages facing online research and data collection, such as trust and credibility, are the same as those that affect traditional methods (Griffiths, 2010). Griffiths claims that adhering to the same types of stringent plans as done in traditional methods can overcome these concerns (2010). In terms of visual and online research, an added benefit is the "flexibility and control over format." Graphics, video/animation, and sound can all be used in one setting (Granello and Wheaton, 2004, p. 388). Online data collection also makes it possible to collect multiple formats of data from participants, as evidenced in my previous pilot projects (McMaster, 2012, 2015), which collected over four different kinds of image data in both word processing and various graphics formats.

Above all other considerations and appropriateness of my study's design, it simply would not have been possible without access to global participants and cultures via the Internet.

Globalization

As defined earlier, a common understanding of *globalization* is a force which dissipates international boundaries and homogenizes economic, political and cultural activities or values held by individual persons, businesses and nations (Arnett, 2002). However, this general definition only begins to reveal a more populist explanation for globalization, and many scholars are now realizing it is a deeply complex and rapidly

transforming site of intense negotiations of political, cultural, and economic concerns with varying degrees of agency from individuals to corporations and nations. The typical notion that globalization merely homogenizes is an oversimplification of a process that can also include heterogenization and hybridization (Embong, 2011) as well as subtleties existing in between that have not yet been elucidated.

Hall (1997) claims that globally, mass culture is controlled by cultural production, and this, in turn, is dominated by visual imagery, which has the capacity to cross borders with ease and can speak to people across language barriers in a very salient way. The image, of course, is directed by and constructed of the constituents and material objects of everyday life and popular culture:

> Global mass culture has a variety of different characteristics but I would identify two. One is that it remains centered in the West. That is to say, Western technology, the concentration of capital, the concentration of techniques, the concentration of advanced labor in the Western societies, and the stories and the imagery of Western societies: these remain the driving powerhouse of this global mass culture. In that sense, it is centered in the West and it always speaks English (p. 28).

Since Hall wrote this almost twenty years ago, many of the elements and commentaries on globalization's driving forces have changed and shifted. The Internet is thought to have made inroads towards increasingly democratic use, although today we see that English still dominates communications (Young, n.d.; Graham and Zook, 2013) and that a handful of large western corporations still exert tremendous control over flows of information in addition to creating and maintaining the pathways through which we

consume and interact. Chen (2004) states that "the popular cultural realm is not distinct from geopolitics; the popular culture realm is a multilayered site of commodification, production, consumption, domestic and international politics, global economics, and socially situated identities that infuse and mediate lived experience" (p. 2). Although she is speaking of the embeddedness of popular culture in terms of journalists' overseas coverage, we can perhaps also understand its function in the context of the presence of western culture within foreign borders, typified by one soldier's remarks about the absence of McDonald's in Iraq as indicative of the country's progress.

Of course, as discussed in the previous section and as noted by Hall (1997) and others, globalization would not be as prevalent without networked technologies mediating the flow of cultural and economic capital. Hassan (2004) agrees that the network society we have come to know could not exist without the economic clout behind it, just as globalization could not exist without information communication technologies propelling it forward. He further claims that economics are at the heart of both political and cultural globalization, stating that as digital networked communications grow and become more deeply embedded in what we do, so does it catalyze its impact. Hassan also points to the impact of curiosity when encountering global culture such as fast foods and claims that individuals after having seen the commercials and passed by the golden arched storefront will eventually question whether they might be missing out on a hip new trend (2004).

Ashcroft (2015) questions, "Is there any cultural product in this globalized world that lies absolutely outside the domain of intercultural exchange and transcultural dialogue?" (p. 8), claiming that modernity, as opposed to western influences, is a

multifaceted result of continuous negotiations of the global and local. He also questions to what extent "traditional" art production exists in modern times and whether or not dilution, hybridization, and transcultural aesthetics are crucial to the survival of tradition and identity (Ashcroft, 2015). Frosh (2003) also argues:

> Cultural products are designed, produced and distributed in complex manufacturing environments which are increasingly composed of organizationally distinct yet interlinked sites, from the development systems and marketing departments of transnational corporations to the more fluid settings of freelance artists and independent specialists. A potential product—an advertising image, a pop song, a film script, a news format, a commercial photograph—must prove itself against alternative potential products as it develops and moves across these sites (p. 13).

Frosh (2003) also points to the global "visual content industry" of stock photography and its digitization, exemplified in sites such as *Getty Images*, which he claims exacerbate the blurring of boundaries that were once distinct. In particular, Frosh (2003) states, it is the amalgamation of images from historical, fine art and news with commercial, faux vintage and contemporary imagery that cloaks any discursive context of its original production (p. 6). Frosh claims that this issue is aggravated by a lack of scholarly activity and the fact that photographic conglomerates have grown, globalized, and made their business an integral source for the imagery that encapsulates us in everyday life. He claims that online "digital delivery increases concern about the relationship between globalization and the dominance of Western cultural perspectives and commercial interests" (2003, p.

206). Frosh goes on to argue that despite a glut of imagery far exceeding previous production and delivery ceilings, the industry has not really diversified its offerings; and although with higher quantities came some fresh imagery, the vast majority is still much of the same portrait of representation that fails to meet diverse cultural and aesthetic fluctuations (2003, p. 208).

The need for diversification is linked to Lam's (2008) critique that new approaches are needed to contextualize the experiences of people's everyday lives where cultural, social, and economic issues overlap. These approaches should not be confined to static, geographic, or state defined boundaries, instead embracing multicultural and collective forms of exchange (Lam, 2008). Lam notes that the scholarly pursuit of the notion of *hybridity*, "how cultural forms and practices intermingle and traverse across social boundaries," has left the bonds of academia and cultural theory and is actively driving the discourse of the "corporate sector, media industries, and grassroots producers and consumers" (p. 217). Lam (2008) states that conglomeration of media across multifaceted platforms and delivery networks has increased the flow of content transnationally, while "on the other hand, digitally empowered consumers are increasingly transgressing the role of passive end user of media products and becoming active participants in reshaping these products and directing their distribution through amateur cultural production" (p. 218).

This idea of new agency inherent in and negotiated by contemporary consumers and audiences is a theme that runs throughout the discussion of globalization. Lam also claims that the literature examining the effects of globalization argues that youth, in particular, rely on these sites of media and pop culture as important spaces for engaging with cultural objects and imagery and developing new social connections. Lam (2008)

claims that "bi-cultural" identities (Arnett, 2002) are increasingly common and no longer isolated to immigrants or migrants but any youth that regularly interact with multiple forms of global and local culture.

Lam points out that contrary to the passivity normally associated with youth engagement with media, current interaction is a mixture of consumption and production that enlivens popular material culture and lived experience (2008). Lam (2008) goes further to state that interaction also takes place between youth, forming groups that share, discuss, mentor, collaborate, and give advice regarding media and information resources. Lam points to a number of studies arguing that they display associative identities and mutual practices that cross geographic, state, and ethnolinguistic borders involving global-local fusions and disrupting a singular correspondence "of culture and ethnicity and thrive on hybrid innovation to create new forms of competence and knowledge and to reach a wider audience" (2008, p. 222). Again Lam (2008), citing numerous studies, claims that youth are not just recipients of these global forces but active agents in its dissemination, deconstruction, and assimilation, giving rise to authentic exploration of a multitude of challenges and concerns that begin to elaborate on the conditions of growing up and forming identity in a globalized networked society.

Embong (2011) claims that globalization melds identity, media, and culture in a complex web with each enacting on the other. Embong also comments on the market-driven nature of globalization that has loomed large for the last few decades, pushing the consumption of lifestyles manifest in sites like McDonald's and Disneyland and representing new cultural tastes that slice through geographic domains able to settle

wherever the desire and demands have been manufactured (Sturken & Cartwright, 2001). Embong (2011) describes three schools of thought surrounding globalization; *homogenization*, *heterogenization* and *hybridization*, with *homo* being a new form of cultural imperialism, *hetero* as leading to more diversity and claims that different cultures respond differently to the same stimulus, and *hybrid* as the fusion of multiple cultures into new cultural forms (Embong, 2011; Kellner, 2002). Embong suggests that trying to slot globalization's effects into any one of these schools of thought is risky and an oversimplification of a very complex process. Embong (2011) argues that the "global, the national and the local—situated at different extremes and representing different interests and forces—exist continually in an uneasy, asymmetrical relationship with on-going tension, contestations and resistance, but also with accommodation, adaptation and adjustments" (p. 15). Still he concedes that due to an imbalance of power, the global exerts dominance over the local and national. Like Lam (2008), Embong claims that despite this hegemony there is still agency among local actors "who may contest and resist global domination, or who may decide to negotiate, accommodate, adapt and appropriate aspects of the global, resulting in some kind of cultural hybridisation as its means of engaging or negotiating with globalisation" (p. 15).

Kraidy (2002) also discusses the notion of hybridity, albeit from the quite different perspective of a theoretical imperative, stating that, "Ontologically, whereas a descriptive approach sees hybridity as a clear product of, say, global and local interactions, I believe that hybridity needs to be understood as a communicative practice constitutive of, and constituted by, sociopolitical and economic arrangements" (p. 18). As laid out by Kraidy (2002), hybridity is a complex and contested theoretical concept heavily laden with values

and definitions imposed by cultural, post-colonial, and communications studies. Therefore, the terms as I employ them in later chapters relate mainly to "visual cultural hybridity" (VCH), focusing on forms of visual representation, to distance itself from the underlying tensions present due to overzealous cross-disciplinary theorizing that is based mainly on textual analysis and few case-based studies that largely ignored what was/is actually transpiring socio-culturally on the ground.

Browne et al. (2014) mention diaspora and globalization as mechanisms for cultural hybridity—people living in other cultures having two (or more) cultural/ethnic arenas in which they function, eventually blending them together, creating new identities. Mass media exposure to the attitudes, beliefs, consumer culture, fashion, etc. exacerbate globalization, claims Browne et al. (2014). Browne et al. also state that postmodernism views allow for individuals to choose from a much larger range of identities and culture than ever before, which could explain declines in "national" identity for more global ones (i.e., European). They concede that globalization can also undermine the concept of nationality, allowing adoption of any identity or image an individual pleases. Browne et al. (2014) also argue that identity is now more fluid and interchangeable than ever, claiming that leisure, consumption, and lifestyle now have a larger impact on identity, reiterating Lam (2008) and Embong's (2011) claims. They provide the example of holidays no longer being about where one wants to go but reinforcing a particular identity or lifestyle, showing how successful or creative one is (Browne et al., 2014). Of course, image sharing online comes into play here as these identities are reinforced via imagery over social media, again projecting that lifestyle image of oneself to others. Class, race, and gender, they claim, no longer dominate the formation of identity. Rather, mass media and its

pressure to consume and the creation of desire offer up a plethora of global lifestyle

choices via popular culture information and imagery (Browne et al., 2014), allowing us to

"shop for an identity," picking and choosing the characteristics we desire and creating a

new image of "self" as easily as putting items in a cart. Advertisements for consumer

products are rife with symbolism, and the purchasing of them can be seen as an act of

embodiment of the lifestyles they represent. [1]

Arnett (2002) claims that adolescents play an integral role in globalization because

they are mature enough to explore, take risks, and transgress social norms since they are

not yet situated in societal roles the way adults are. He claims they show more curiosity

than in global cultural multimedia forms, which Arnett says gives them a foot in the door

towards adopting other beliefs and systems that are not locally derived. Again linking to

the commercial-consumer notions mentioned above, Arnett state youth are also prime

targets for marketers, and advertising is thus tailored towards attracting them to global

culture and brands that represent trendy lifestyles (2002). Growing up in this type of

electrified global capitalist atmosphere can lead to identity confusion, Arnett (2002)

contends, where localized traditions and values do not hold the same appeal as the hyper

reality streaming online which could lead to lasting negative effects. Above all, growing up

in a globalized world in a rapidly developing nation presents a dramatic challenge for youth

as they attempt to form worldviews and negotiate between local and global ways of

knowing.

---

[1] Unfortunately this is one of the questions that was not asked on my survey; *what types of foreign products do you buy*? It could have been very illuminating and certainly added to the data analysis. In hindsight, however, we must remember that the addition of more questions lengthens the survey and can lead to non-completion.

In terms of what or how we learn from these global flows of information, Beaudoin (2008) claims that Internet news consumption has positively grown general international knowledge as well as increased news consumption among its users. Not only has globalization broken down geographic barriers, it has made people more aware of those barriers and physical places than ever before. With powerful mapping, GPS and satellite imaging technologies, those with access no longer have to imagine "other worlds" but can explore them from the comforts of home. The multimodality of the Internet has allowed users to structure their learning in nonlinear formats that best suit their individual strengths, including visual learning. This personalization and self-control over learning environments can be seen as a significant motivator and predictor of increased knowledge retention (Beaudoin, 2008). The benefits of learning from and in a globalized context are also exemplified by Tavin and Hausman's (2004) student-led projects that deconstructed various commercial forms and representative global brands to unveil the embedded meanings, values, and associations contained within the ideas and material objects exported around the world.

As evidenced above, globalization cuts through disciplines and cannot be housed under any single field of study nor conform to a simple definition or set of effects. What is clear, however, is that globalization intersects culture, commerce, consumption, and society at various levels; these effects are also illuminated when taken into the context of technology, visual culture, and a push for more imaged-based social research. As we move from global notions of technology, culture, and the ubiquitous image into aspects of learning and education, we begin to see how all these elements come together, with imagery as a central tenet, to shape identity and provide opportunities for criticism,

reevaluation of existing paradigms, and visions of future directions for more comprehensive understanding.

The Image in Learning

As we continue to digest the previous sections on visuality in culture and research, and imaging in the context of technological innovation and as catalysts and conveyors of globalization, it becomes increasingly clear that we gain a tremendous amount of context and understanding from visual imagery. The effects of image consumption are manifest in our present (and future) daily lives and can impact our decisions, cultures, economies, and nation states. Next, I discuss the image in terms of its educative value and calls for more robust visual/media literacy programs of study.

The earlier observations of Hudson (1987) on the importance of the visual world and its implications for technology and vice versa bear closer scrutiny when seen in the context of how much was consumed just over a decade ago, with the average college grad having read less than 5000 hours, spent 10,000 hours playing video games, and 20,000 hours watching TV, then adding to that another 10,000 hours on computer (Prensky, 2001). Considering those statistics in relation to newer forms of social and image media, the figures have since exploded, and Duncum (2014) recently states that 72 hours of video were uploaded to Youtube per minute in 2012, which is equivalent to 100 years of video per day; of course, those figures are even higher today and continue to grow along with the

expansion of the Internet and its penetration into new regions. As Prensky so accurately declares, "We need to invent digital native methodologies for all subjects, at all levels using our students to guide us" (Prensky, 2001, p. 6). That need is no less great today in education and in research than it was fifteen years ago.

In contemporary society Chung (2005) claims that people, particularly children, are heavily influenced by various types of media. In turn, the things people talk about, lifestyles they live, and products they consume are directly related to what they *see* portrayed or advertised in these media. Through the combination of visual and textual ads and slogans companies not only convince people to buy certain products, but also construct false or misleading ideals and realities surrounding the use of these products. Therefore, Chung urges that art education play a central role in giving children the critical tools necessary to properly understand what is being visually conveyed and thereby aid them in making informed decisions in an "image saturated environment" (2005, p. 19). In a similar vein, Herne (2005) comments:

> Children and students in school increasingly present a tacit understanding of media literacy drawing on their regular media consumption, albeit as consumers rather than producers. All this has a pressing influence on the school curriculum and educators are posed the challenge of reflecting these changes (p. 7).

The activities described in his study demonstrate children's ability to adapt to the use of technology and their willingness to take on the conceptual role of assigning meaning to images through the use of captions, which according to some of the investigators reflected a development of the students' visual vocabulary and enhanced their

interpretation of imagery (Herne, 2005). These types of activities support more careful

consideration of visual and media literacy learning beginning at a very young age and

emphasize how visual and media literacy can be developed through hands-on image

production and group activities that draw on lived experience and popular culture.

Abromov (2008) also notes that despite the phenomena of the digital age making

the transfer of visual material via technology and the Internet instant and proliferative,

visual disciplines can sometimes be late in adapting and taking advantage of these new

opportunities (p. 281). With a focus on photographic arts, he claims that the shift in the

ontology of the photographic image in the digital age will noticeably influence all

contemporary images, both in production and the effortlessness (and instantaneous)

manner with which they can be used to globally communicate. He also claims that

traditional boundaries between different art media are dissipating, which makes the

teaching of and the creation and reading of these images in all areas of art, design, and

visual communication valuable in both traditional and new media (Abromov, 2008, p. 288).

Regarding who or where this learning should take place, Addison (1999) remarks

that the study of visuals has in the past been wrongfully slotted into a textual perspective of

image interpretation that is unable to reconcile a multiplicity of meaning and senses

contained within the creative industry that produces the signs and symbols that constitute

our day to day lives:

The meaning of technological images cannot be simply understood in terms of what

has been called "visual literacy", which has generally meant the semiotic reading of

signs and symbols...the concept of visual literacy is an attempt to force images to fit

illegitimately into a structuralist analysis of literary texts that tends to narrow visual meaning. Rather a broad view of creative production and interpretation in relation to multiple meanings and visual qualities is called for if we are to understand and teach about the use of images in contemporary life (Freedman, 1997, p. 7; also cited in Addison, 1999).

Addison points to systems such as semiotics to provide meaningful ways in which to examine the relationship between words, images, sounds, and the other sensory modes whose use occurs simultaneously across multimedia, the use of which is ever increasing and which Addison argues will challenge the dominance of the verbal, dislodging it from its privileged perch (1999). The visual world offers us numerous instances for everyday interpretation that include, architecture, clothes, advertising, facial expressions, and body gestures—all of which are forms that Addison argues should be integral to curricula (1999). Today there has been lots of progress made towards this. Students create meaning through their daily interactions with each other and those people and objects outside of institutions they attend, which parallels the type of meaning made by interacting with and creating works of art. Aguirre (2004) comments that many in the field of art education are attempting to position their work in more interdisciplinary contexts that include visual studies and visual culture, including popular culture, advocating a "trans-disciplinary" approach. In light of this change, she argues for a dismissal of art education that only deals with the traditional skills of production and related technical skills, shifting to a focus on the interpretation and deconstruction of visual works that leads to the development of visual literacy. Like many other scholars mentioned here, Aguirre laments:

In postmodern art education there exists a general tendency to channel all the activities of analysis and aesthetic interpretation through the elaboration of critical texts. The textual has an absolute primacy over the visual and this is rather paradoxical in an educational context which deals with the communicative power of the image (Aguirre, 2004, p. 266).

Although some may argue that today this claim dissipates significantly, elements of Aguirre's lament still bear reflection. Avgerinou and Ericson (1997), having also discussed the ubiquity of visual mass media and the messages contained within them, note the importance of the generation growing up within this context to not just be passive consumers of these messages. Students need to be taught the basic skills that will allow them to discern between real and superfluous, necessary and gratuitous, ultimately being able to better determine the validity of information that they are seeing and decide its value. They provide a good theoretical overview including, Visual Perception, Research on Hemispheric Processes, Visual Imagery, Cognitive Styles, and Visual Language (Avgerinou and Ericson, 1997, p. 285). All of these point to the importance of the visual in our cognitive, perceptual, and social development and the impact they have on our understanding and how we function in the context of everyday life.

Allen (1994) cites important examples of media outside the traditional fine arts practice in having a significant influence on the way we interpret images such as cinema. Visual narratives and the use of camerawork portray characters and people in a certain way, which affects our interpretation and opinions of them. He goes on to include all forms

of mass media communication (including new media), stating, "The deregulation of broadcasting and the development of increasingly cheap and sophisticated multi-media technologies for work and leisure make it increasingly important that we can handle visual information as part of a complex package of ideas and ideologies" (p. 134). He further strengthens his argument by pointing out that although we would like fine arts media to play a more important role, they cannot compete with the presence of mass media as potent visual artifacts of people's daily lives, questioning whether painting, drawing, and printmaking, etc., can alone provide a fully inclusive education in visual and media literacy, a point that is shared by Delacruz (2009).

Harris (2006) claimed ten years ago that images were both higher in demand and in circulation than text, and since the advent of smartphones (roughly around the time of publication), it is easy to see how this pattern continues to intensify. Harris also points to the need for teachers who must make way for the increasing influence of visuals in their classrooms:

> In the streets, on screens, across our webs, the visual is primary. Icons erase words from desktops, textbooks have become drenched in images . . . information seekers use computers, televisions, and telephones—almost simultaneously—in what seems to be an almost constant swirl of search-find-search again activity (2006, p. 213).

Harris (2006) emphasizes the need for us to be aware and astute when consuming the images all around us, calling for critical examination of the source of visual information that penetrates our everyday lives and the intentions of its creators. Harris (2006) also makes valid points about how image placement in newspapers, magazines, novels, etc. can

affect or manipulate our opinions and interpretations of the accompanying texts. Harris

contends that teaching students how to evaluate the various design elements that shape a

"text" and attribute different perceptions is not as complex a task as it might seem (2006).

Harris also suggests that visual information could aid learning for those whose primary

mode of communication may not be based in traditional verbal-textual, such as dyslexics,

the hearing impaired, and functionally illiterate adults.

Past disparities in visual and media literacy were inherent in Sinker's (1996)

criticism that textual data has always trumped all other forms and that little credence has

been given to visual data in research or education. Almost two decades later and after

significant changes, Rose (2015) still notes that despite increased interest and study of

visuals, there still exists no comprehensive overarching guide to their use in research.

Sinker (1996) long ago realized the value of visual methodologies, with one example being

to help new immigrants in acclimating to new cultures. She notes that photographs become

tools of expression and communication that personalized students' everyday lives in visual

representation that could better be understood cross-culturally. Sinker (1996) points out

that systems of evaluation at that time did not accurately consider the implications of these

visual studies and were therefore too often dismissed, which leaves us to wonder what was

ignored, what we lost, and what might need to be reevaluated and reflected upon today.

She asserts that "a combined application of media education in art and English and ideally

other subjects too, allows for deeper explorations of . . . fundamental communication issues

and presents a cross-fertilization in the curriculum which more accurately represents

contemporary culture" (Sinker, 1996, p.64-65). Of course, some of these past criticisms are

what have driven and continue to drive many attempts at addressing and overcoming the mistakes of the past.

Spalter and van Dam (2008), much like Harris (2006), state that decreasing costs and ubiquity of communication technologies almost omnipresent in everyday life have provoked educational institutions to finally begin to assess the crucial role that visual and media literacy will play in society. They provide examples that many professions have now come to rely on visual interactions and communication, stating that images enhance and deepen cognitive understandings of our world (Spalter and van Dam, 2008). We need only look to space, where the search continues for habitable planets, or to medicine, where a visual endoscopic journey through our body helps us to see problems in real time, or to virtually walking down a street in a country we have never visited by using Google's *Street View*. Spalter and van Dam (2008) state that this rise in visual communication is due to new graphics interfaces being able to not only represent our world, but allow us to interact and manipulate it. They continue to reiterate the importance of critically interpreting this volume of visual consumption because of the ease at which images can be spread, altered, and accessed globally and instantaneously, arguing that unlike previous visual innovations in technology such as the printing press or television communications, technologies can be used, manipulated, and altered even by casual users (Spalter and van Dam, 2008). One only needs to consider the changes in photography alone and its process of capturing and developing being an intensive and time-consuming activity that was once the realm of professionals; now anyone with a cell phone can perform most of those formerly complex tasks that were once restricted to darkrooms.

So as we consider imagery and technology in the context of learning, both formal and informal, it becomes abundantly visible that despite many changes in attitudes and practices there is still much to be done regarding the learning of visual and media literacies as well as developing a flexible and continuously evolving paradigm that can incorporate the seemingly exponential and ubiquitous simultaneity of technology and images in a global context. The next section attempts to slot some of these concerns into the framework of critical social theory and helps to provide a lens with which to constructively and critically analyze and make sense of these issues guided by my research questions.

Theory

For the better part of the last century and the centuries that preceded it our ways of knowing, social perspectives, understanding of reality, and worldview have been shaped by the ideas surrounding positivism (Bohman, 2012; Corradetti, 2011; Giroux, 2011; Kincheloe, 2008). The theorists, scientists, artists, and educators who subscribe to this traditional view sought universal truths to explain all the questions and issues that have plagued humankind. They believe that an objective truth could be realized for each problem and that by uncovering these truths through scientific methods they could build a framework of knowing that would mirror reality (Bohman, 2012; Corradetti, 2011).

Giroux (2011) traces the word *theory* to its original meaning in the ancient Greek notion of the search for truth and justice, and states that if we were to embrace positivist assumptions, our questions regarding the social construction of knowledge, data gained from subjective values, philosophy, insight or intuition, and other non-scientific

frameworks would be branded as irrelevant. To contest these narrow and often dualistic views of traditional positivistic inquiry, theorists broke with a predictable waltz for a less rigid and liberating tango; thus, critical theory (CT), aka critical social theory (CST), was formed.

Critical theory derives its roots in the first half of the twentieth century from the Frankfurt School of thought—notably Horkheimer, Habermas and Adorno, among others (Corradetti, 2011; Kincheloe, 2008). The Frankfurt theorists believe that a reconstructed form of the social sciences would lead to a more egalitarian and democratic society (Kincheloe, 2008). Corradetti (2011) describes critical social theorists' main interests as differing from earlier "traditional" scientific and social theories in its rejection of positivism and opposition to the idea that there are universal laws that govern an "objective" world and see knowledge as a truthful mirroring of reality (Bohman, 2012; Freedman, 2000).

One of the main points of contention in critical theory is the idea that knowledge is objective, and critical theory challenges the epistemic status of knowledge with the claim(s) that knowledge is rooted in historical and social processes and can only be obtained from progressive individuals (Corradetti, 2011). Critical theorists, claims Corradetti (2011), assert that using a framework of knowledge as a mirror to the world is impractical and actually seeks to separate knowledge from actions such as transformation, politics, and personal and social emancipation. Instead, critical theory presents itself as a functional or practical method for critiquing ideologies, where knowledge itself becomes a kind of social critique that can hopefully bring about change, increasing consciousness and enhancing self-reflection (Giroux, 2011; Kincheloe, 2008).

Kincheloe (2008) describes critical social theory's main interests as an inquiry into issues of power, justice, economy, race, class, gender, religion, and culture and how these elements interact to construct a social system, so it is understandable why CST is daunting for both teachers and researchers to accommodate. Kincheloe (2008) admits that critical theory is difficult to pin down, as there are multiple forms of the theory all constantly changing and evolving, making them extensive and resistant to explicitness and often leaving room for divergence and disagreement. Still it could be argued that such a narrowing down would be antagonistic to its core values of multiplicity and pluralism.

Bohman (2012) posits that critical theory provides us with the descriptive and normative basis for social inquiry aimed at decreasing authority or dominance and increasing freedom in any form. This democratic approach to knowledge, he claims, opens up communication to allow free expression and participation, which places individuals at the centre to construct their own history and social reality. Corradetti further contends that since "some knowledge is strictly embedded in serving human interests, it follows that it cannot be considered value-neutral and objectively independent" (2011, p. 15; Giroux, 2011; Kincheloe, 2008). Kincheloe states that the role of a social theory should not be to tell us how to see the world but aid us in devising questions and strategies for discovering it (2008).

Critical theory has numerous implications for the study of media and visual culture; however, the focus here is on its capacity to inform general pedagogy, andragogy, and life-long learning and the significance it holds for helping to question and reflect a complex and contemporary reality bound in social contexts, made global and ubiquitous with

technology.

Critical Theory and Pedagogy

Gude (2004) claims that at the turn of the 21st Century art educators' primary concerns were still the universal elements of design, developed during the rise of modernism over a century earlier, emphasizing formal principles of design that fail to reflect the complexity of contemporary culture or adequately teach students the skills to engage with rich multicultural perspectives.

Art is socially constructed (Dorn, 2005; Freedman, 2000), and as Kincheloe (2008) states, critical pedagogy is grounded in the social views of justice and equality and takes the stance that education is inherently political at all levels, claiming that most educational systems of organization and evaluation were developed from a single cultural perspective, which has extended social stratification (Giroux, 2011). Sometimes those theorists developing pedagogies don't realize the political tenets, such as the status quo of fact-based, teacher-centered learning, entrenched within them (Corradetti, 2011; Kincheloe, 2008).

"Good critical pedagogy dictates that I start where they [the students] are and teach them in ways that are culturally relevant to them" (Kincheloe, 2008, p. 28). This is an important consideration because methods of studying visual culture and art that work in rural Newfoundland or Nunavut may not work at all in Montreal and vice versa. Differing geographic contexts are unavoidable and must be accommodated (MacDonald, 2010), as

"teaching and the production of knowledge always encounters multiple inputs and forces" (Kincheloe, 2008, p. 29). All human experience is defined by uncertainty. The better students and teachers understand where education takes place and where their art comes from, "the more they appreciate the complexity of the process" (Kincheloe, 2008, p. 32).

Giroux's (2011) concept of critical pedagogy in schools also extends to a broader critical public pedagogy produced within cultural apparatuses. Both serve as interventions "dedicated to creating democratic public spheres where individuals can think critically, relate sympathetically to the problems of others, and intervene in the world in order to address major social problems" (p. 13). This is a worthy mantra not just for the arts, and its success in practice can be seen in Montreal-based community programs such as LOVE[2] and JUMP, which emphasize a variety of arts-based and socially relevant youth programs. Gude (2004) claims that an arts curriculum based on connections with the social, community life (Sullivan, 2009), and diverse practices yields more engaged students who use art as investigation for "understanding the art of others and seeing their own art making not as exercises, but as research that produces new visual and conceptual insights" (p. 8). A similar insight is later reiterated by Castro (2012) in observing how youth used networks to analyze the artworks of fellow students and strangers alike to inform their own artistic production.

---

[2] LOVE (Leave Out Violence) is a Montreal-based community organization that engages with at risk youth to communicate, collaborate, and promote messages of non-violence through a variety of creative, media-based programs: http://quebec.leaveoutviolence.org/

Theory and Study

Keeping these prominent issues surrounding the development and use of critical social theory in mind, the relationship between my chosen methods and theoretical framework push examination of Tapia's (2008) observations that critical theory is in a prime position to flush out the powers binding organizations and individuals who are no longer isolated from peripheral forces. How these ties function and serve to both disseminate and assimilate through flows of imagery are of principal focus as the very nodes and networks (Castells, 2001; Barney, 2004) that circulate and control the flow of information are being used to gather participants and collect data. I have chosen Critical Social Theory as the principle lens with which to plan and assess the nature and impact of learning taking place via imagery over the Internet. However, I have also considered touching on Network Theory (NT) that involves the structures and hierarchies that organize the Internet in society.

Kincheloe (2008) provides an extensive (but not exhaustive) list of significant aspects of critical theory and pedagogy, three of which have an immediate connection with the arts. The first is a *Focus on the relationships among power, culture and domination*; this includes popular culture with its TV, film, games, Internet, and other media that play an increasingly important role in student's lives. Kincheloe argues that mass media has changed the way culture operates, stating that cultural epistemes of the 21st Century are already significantly different from those of just a few decades ago with hyper-reality blurring "boundaries between technological and non-technological spaces and their relations to ideas of time, community, self and history" (2008, p. 57). Art education is in an

excellent position to deconstruct these popular forms of cultural imagery and the changes taking place via technology as it always has often, if not always, been at the forefront of technological changes and cultural trends (Stankiewicz, 2004, 2003). Just as art historians recognized the power, politics, and persuasiveness of ancient Egyptian rulers' stern faces and god-like figures to be examples of visual forces of domination that have continued to this day (in one form or another), so should art educators continue to push examination and modes of deconstruction that address contemporary forms of visual cultural manipulation and misrepresentation that seek authority and control (Eisner, 1984).

Another key aspect of critical theory that Kincheloe proposes is the "Centrality of interpretation: Critical hermeneutics", which involves "Making sense of what is being observed [photo, painting, advertisement, etc.] in a way that communicates understanding" (2008, p. 57). Artists need to do this all the time; everything is made sense of in relation to something else in the world, and important questions are raised on the purpose and methods of interpretation. Lastly, Kincheloe remarks on the "Role of cultural pedagogy" in critical theory and states, "Cultural production can often be thought of as a form of education, as it generates knowledge, shapes values and constructs identity" (2008, p. 58). Here he again draws attention to technology and mass popular culture, calling for educators to acknowledge the learning that takes place there. Addison(2010) also notes that educators tend to work within a modernist canon neglecting contemporary conditions and claims that youth, just like artists, can appropriate popular products and "use them as a vehicle for expression" (p118). Macdonald contends that a critical agenda "needs to be as pluralistic as the contemporary art and design which constitute its context" (2010, p.52) drawing from philosophy, media, cultural, and feminist perspectives.

Of course, in addition to searching for homogeneity, hybridity, and plurality of cultural forms, one must also look for difference (or what is absent; Rose, 2012). As Kincheloe states, "Difference in the critical constructivist context is a tool to change the world, not only a concept connected to issues of tolerance and diversity" (2008, p. 124). Although my intent is not to be "world changing," I hope that I have set in motion a new pace of change, as least in the way we study and learn from imagery in society. Critical and constructive "researchers study the ways difference is constructed by historical and social processes, in particular, the ways power works to shape meaning and lived expression of difference" (Kincheloe, 2008, p. 124). In that sense, I intend to reveal possible sources that aid in the construction and change of social meaning, particularly with regard to visual culture to attempt to isolate flows of visual dominance, whether they be state, media, or otherwise and see what forms they are currently taking.

Aiming to counter a mostly western-centric perspective, my study appeals to an international audience to capture and be informed by local knowledge in the form of imagery from multiple social, geographical, and cultural milieus in contrast to colonializing frameworks where discourse is "monological in their dismissal of histories and the cultural concerns of non-western people" (Kincheloe, 2005, p.125). As I argued earlier, it would be an incredibly difficult task to learn how societies interact, assimilate, produce, and consume imagery based solely on artworks alone. In order to achieve a better understanding of the how and why of certain image-based phenomena, it needs to be first examined in its broadest and simplest forms. As Kincheloe (2005) contends:

The effort to understand the political realm and the domain of educational politics

in 21st century western societies cannot be accomplished outside of an

understanding if the power of previously (ignored) dismissed cultural and "mere

entertainment" venues such as TV, film, pop music, video games, computers and the

internet (p.76).

Although not directly seeking polity per se, I also want to consider the politics of

imagery; that is, how do certain images become an authority in and of themselves, driving

cultural reforms, economics, and consumerism, and how does this influence people's day to

day lives and interactions outside of their borders online? As Leonardo (2010) points out:

The economy is no longer only a set of material extra-discursive arrangements in

the economic sense but the circulation and control of cultural matter such as the

means of communication, as well as extra material elements, discursive elements,

like norms and values (p. 28).

In the context of my inquiry, who has influence over or control of the flows of

information and cultural capital? This is especially interesting when considering the setting

of the Internet, the digital divide and the technological mediation that occurs from start to

finish when accessing any information in the online world. Castells (2010a), adding to the

importance of tracing this mediation, remarks that "the media, and particularly audiovisual

media in our culture, are indeed the basic material of communication processes. We live in

a media environment, and most of our symbolic stimuli come from the media" (p. 364).

Kincheloe suggests that these communications are under the control of "the dominant

power bloc" that use "movies and other media representations to expand its influence" (p.

75). While there may or may not exist a universal hegemonic type of media power that controls visual culture directly, critical and social theory will aid in tracing whether or not concentrations of power are at work and are able to manipulate and divert flows of information for their own self-interest, especially online.

Another crucial insight made by Tapia is that critical theory drives home the fact that "organizations are not isolated entities immune from external influences. It involves the understanding of the power relations within an institution and an understanding of how the institution functions in, and is shaped by, the outer world" (2008, p. 35). This can be applied in the context of globalization, questioning what is being produced and learned and by whom; scrutinizing which outside forces might be exerting undue influences, whether intentionally or not. Dorn (2005) warns that style, as promoted by corporations, use the social sciences to determine the "impact of imagery in the minds of consumers" (p. 51); therefore, if the arts do not continue to push for and rally behind critical research and examination of visual culture, we will be forced to adhere to trends, values, and aesthetics set by big business and people who care little for the arts or its potential for individual and social development. This has both national and international effects and impacts among globalized societies. Embracing critical social theory and pedagogy allows the doors to be opened wider and more light shed on the issues mentioned here.

Network theory

Since I made use of the Internet as my principal tool for data collection and

participant recruitment, I also gave consideration to issues surrounding the use of and participation on the Internet. Castells (2001) remarks that despite huge concentrations of Internet dominance in large metropolises, these areas of "knowledge generation and information processing, link up with each other, ushering in a new global geography, made up of nodes and networks" (p. 229). This suggests that even when data seemingly originate dominantly from one region, they are nonetheless connected; urban to rural, country to country through various networks. Castells suggests that due to the privileged relationship between media and the Internet, it (ICT) has become a communicative method of cultural expression as well as transformative media for cultural practices (2001). Some of these types of cultural practices, specifically practices of "looking" are examined by Castro (2012) using macro-networks to reveal how youth interact with imagery connected through social media. Castro, who also draws heavily from Castell's works, states that "…complex systems are useful for rethinking learning and teaching through digital media as networked, decentralized, and emergent" (p. 154). These statements bode well in the context of my study as I sought, in part, to uncover forms of transformation and representation of cultural practices, in the form of imagery, via networked communication technologies.

As it is noted in the observations and studies of Barney (2004) and Castells (2001), the networks that connect and diffuse culture and information across the globe, although not of principal concern, do play a very important secondary role when studying and using the Internet. Castells (2010b) posits that cultures in the age of information cannot be rendered in terms of the structure and subtleties of the network society alone, stating, "It appears that our societies are constituted by the interaction between the "net" and the "self," between the network society and the power of identity" (p.388). Coupling critical

and social concerns with attention to the ways in which these issues play out globally via technology gives my study a more balanced approach to investigate more broadly across the "territorial unevenness of production" and "differential value-making that will sharply contrast countries, regions, and metropolitan areas" to discover the "segmented" and "distinct spaces" that are defined by differing time regimes (Castells, 2010b, p. 390). As Castells (2010b) claims, "The dream of the Enlightenment, that reason and science would solve the problems of humankind, is within reach. Yet there is an extraordinary gap between our technological overdevelopment and our social underdevelopment" (p. 395), and I also sought, at least in part, to make inroads towards a balancing of these developments. Thus, Network Theory played an important supplementary role in the initial set up and technological considerations for my study and later in the critical analysis and examinations of the complex interplay of visual culture and information communications technologies.

Theory Summary

As Prosser and Schwartz (1998) point out, "Debates regarding the appropriate relationship of theory to practice, a quandary inherent in any research process, reflect the difficult times in which qualitative researchers work" (p. 115). Therefore, by collecting images from a wide cross-cultural swath, I hope to begin to sketch a blueprint for a better understanding of how we learn visually and how we construct and interpret the images of everyday life, lessening this quandary and hopefully adding to the potential for similar

research in the future.

Although critical theory is not without its deficiencies, it is hard to deny the significance it holds for art education by elucidating the social context within and around the production and practices of art and the potential it has for learning experiences that can be transformative and emancipatory. Freedman points out that with recent fluxes in visual culture and its "relationship to social conditions that give social perspectives of art education their urgency. . . may be one of the reasons for the increased interest in both understanding visual culture and re-constructionism in our field" (2000, p.323). MacDonald (2010) also promotes a critical approach as the best equipped to handle the multiple narratives and contextualizing them in the art classroom. This may be due in part to critical theory's shifting of the traditional power relationship between student and teacher to a more balanced and equal plane, seen as essential in adult education (Merriam et. al., 2007). Yet embracing critical pedagogy does not mean a complete scrapping of the creative core of the arts. Addison believes that "art education can be both creative and critical, an education of possibility through which individual students learn within a community of practice" (2010, p.113).

One thing is certain in my mind, and it is that as educators, researchers, and artists we can no longer accept a dualistic, overly simplified and culturally isolated view of the world. "We can be against critical theory or for it, but, especially at this present historical juncture, we cannot be without it" (Kincheloe, 2008, p. 46).

Summary

As I have discussed it in this chapter, the image, although now seeing increased interest from scholars, theorists, and practitioners in recent years, has often only played a secondary or supplementary role to traditional research paradigms. Imagery has always been of importance, and previous studies do indicate this but with scopes that are limited by domain, methods, or findings to very specific outcomes and foci. The importance of the image is made stronger when considered in the context of visual culture, encompassing our daily lives and intricately and intimately linked to our identity development and individualism. These issues are then compounded by the paradigm of globalization and its transcultural outreach that is propelled and supplemented by both imagery and new technologies, spelling consequences for learning and education if we do not make further inroads in tackling these large, looming, and ever expanding contentious concepts. To help process all of these concerns, I call upon critical and network theory to make connections between dominant power brokers of the visual, cultural, technological, and shifting economic territorialities and flow of information that connect, divide, and coerce in a push towards modernity that should usher in a new era of shared cultural capacity, but not without first critically analyzing and exposing the systems in which we are embroiled.

In the next chapter I link the methods used to carry out my study with the concerns I raised in this chapter and take the reader through the many, and at times convoluted, steps in the development, testing, refinement, and final execution of this international visual cultural study.

METHODOLOGY

"Analysis of visual records of human experience is a search for pattern and meaning, complicated and enriched by our inescapable role as participants in that experience" (Collier, 2001, p. 35).

Introduction

In this chapter I describe the methodology and procedures employed in this study. I explain my reasoning behind my chosen methodology, Visual Content Analysis (VCA), give a brief history of its origins, the tensions it creates for a qualitative study, and how I extended current uses of VCA to include reflexive interpretation, with visuality as its guide.

What follows is the description of how I developed the methodological framework for my study, how I tested my methods during two earlier pilot projects, and how these projects and their initial discoveries led to the creation of this larger international study. The ambiguity of content analysis, a principal methodology in my study, is discussed in terms of its applicability, suitability and incompatibility for research of a visual nature and how it was coupled with other more visually based methodological concerns to provide a more fully developed "imagocentric" visual content analysis methodology that addresses the cultural and contextual aspects of visuality. This chapter also discusses the online platforms known as crowdsourcing sites, the use of qualitative analysis software, and the benefits and limitations of both crowdsourcing and online research in general.

Overview of this chapter:

- **Methodological Choice**: choosing a suitable methodology

- **Content Analysis and Visual Content Analysis**: extending the methodology

- **Setting and Participants**: recruitment, crowdsourcing

- **Methods**: survey design, pilot studies, appropriateness, drawings as data,

- **Data analysis**: use of visual content analysis, stratified sampling, NVivo

- **Credibility**: inter-coder test, ethics

- **Conclusion**: summary of methods and introduction and lead-in to findings

Methodological Choice

After I had completed my first pilot project (McMaster, 2012), I presented my findings at the International Visual Literacy Association's 44th annual meeting. This being my first conference in academia, I sought out advice and feedback on my project and its potential to develop into a larger study for my dissertation. After presenting my project and attending several talks related to visual literacy, I saw a presentation by Professor Ian Brown of Wollongong University, Australia. He spoke about "Voices of Children," a photo-voice project he and several other researchers (Brown et al., 2010) had completed. The project involved sending disposable cameras to schools in several countries around the world and asking children to document their lives, which gave them an opportunity for expression through imagery. After his talk, I seized the opportunity to speak with him during the break. I asked him for specific details about his project, described my own pilot

study, and probed for feedback and suggestions on how I might proceed in terms of theory and methodology if I were to continue my line of inquiry based on that pilot. Professor Brown described Content Analysis as one of the methodological tools he and other researchers who had done similar projects used (Brown, personal communication, 2011). In particular he mentioned Lutz and Collins' (1993) study, *Reading* National Geographic. In their study Lutz and Collins (1993) examined the images published by *National Geographic* over several decades to see what kinds of themes could be revealed. Using a Content Analysis Methodology they uncovered many underlying themes about how the purveyors of *National Geographic* portrayed "otherness" in relation to foreign cultures around the world. It was this study that began to solidify the content analysis research methodology as a suitable one for my study. After further research, I reviewed Rose's (2012) very insightful "Visual Methodologies," along with several other comprehensive visual methodological references (Banks, 2001, 2007; Pink, 2013) to investigate my options for developing this study. Although these texts outlined several interesting and potentially apposite paths for my inquiry, they all led me to the same conclusion, which was that a visual-content analysis would be the best way to structure this study. The simplest explanation for this is summed up by Rose's (2012) short description of content analysis in a chart comparing various visual methodologies: "any sort of images but in large numbers" (p. 45). It was the large amount of image data that I sought to collect that set my study apart from using other methodological frameworks. In the following section I elaborate further on why I made this choice and how it helped lead to the kinds of knowledge and discoveries I hoped to uncover.

In order to better understand the rationale for my methodological choice, it is worth revisiting my research questions:

- What tensions emerge between local and global ways of interpretation and meaning construction when participating online?
- To what degree does visual culture influence or change commonly accepted ideas specific to geography and culture into normative global ideals?

First, in order to look at a globally dispersed group of participants, I needed to access a large number of people across many countries and get them to produce multiple images (seven each), resulting in very large initial collection of images. If I had initially approached this bulk of imagery from an interpretative standpoint, I might have simply chosen the most fitting images that confirmed my expectations or my earlier pilots' results, often referred to as "researcher bias." Another reason to avoid confirming my expectations was that I was also looking for new knowledge that could be derived from studying images. Regarding the pursuit of new knowledge within the image, Collier (2001) states:

> All of the elements of an image may be important sources of knowledge through analysis, if only we can identify them and sort them out. The challenge is to responsibly address the many aspects of images, recognizing that the search for meaning and significance does not end in singular "facts" or "truths" but rather produces one or more viewpoints on human circumstances, and that while "reality" may be elusive, "error" is readily achieved (p. 36).

Thus, to identify salient portions of the data and organize the images in a way that would later allow participants' interpretations to come through, I first needed to put some

distance between me and the images and avoid directly interpreting them. This is where

the structure and methodological rigidity of content analysis was key in forcing me to look

at each individual image, whether or not it held specific interest for me or my questions,

cautiously coding and organizing each one in relation to the whole. Doing so made sure I

was not ignoring what Rose (2012) terms "invisible opposites," meaning showcasing only

the images and related codes that had higher frequency counts, which required me to

reflect on what participants did not represent. This process led me to a much more

purposeful selection of images for my final analysis and allowed me to follow up with an

interpretative approach that looked at online participation, meaning making, language, and

culture. These concerns also helped me make connections between regions and

participants, giving full consideration to how participants might have come to produce

these images and the knowledge inherent in the images themselves and their sites of

production, or the "human circumstances."

Therefore, in order to properly investigate what sort of tensions exist between local

and global ways of visual meaning-making, and in what ways it might be possible for visual

culture to influence commonly held notions and ways of life across geographic boundaries,

an approach extending traditional content analysis research methodologies was needed.

Visual methodologies, although seeing increasing interest since I began this study, are still

an outlier or afterthought when it comes to most academic research designs (Rose, 2012).

This is not to say there is not significant research into visual images and their effects; it is to

say that much of this research looks mainly to other text-based studies and in its

presentation is wholly or almost entirely textually presented with few images for the

reader to begin to make their own connections or interpretation.

What follows is an overview of content analysis and its methodological foundations, which reveal paradigmatic tensions, and my reconciliation of those tensions by pushing the visual and folding it into a flexible design that better resembles the process of a qualitative Visual Content Analysis methodology.

Content Analysis (CA) and Visual Content Analysis (VCA)

Content analysis

In her chapter, "Content analysis: Counting what you (think you) see," Rose (2012) defines CA as "methodologically explicit" and concerned with analyses of "cultural texts in accordance with 'the ideals of quantification and natural science methodology'" (p. 82). It was developed by social scientists between the world wars to distance itself from more "woolly" qualitative interpretative designs and study the burgeoning field of mass media journalism (Rose, 2012). At that time, researchers wanted to examine what was said, read, and broadcast to millions of people, and CA was touted as a methodological approach that reflected the sheer volume and scale of mass media (Rose, 2012). Mayring (2014) also comments on this paradigmatic conflict, inherent in CA, between qualitative and quantitative designs, stating, "On the one hand stands a rigid positivistic conception of research with a quantitative, experimental methodology, on the other hand an open, explorative, descriptive, interpretive conception using qualitative methods" (p. 6). Mayring criticizes this methodological dichotomy and defines Qualitative Content Analysis as a

"mixed methods approach (containing qualitative and quantitative steps of analysis)" advocating for "common research criteria for qualitative and quantitative research" (p. 6). Banks (2007) also describes Content Analysis as a formalist analytical methodology, and like the aforementioned scholars, points to the inescapable friction between two research paradigms. Despite this he states that the two can be compatible, "A sample of material, or the categorization of material can be made in a formalist and rule-governed way, and then subsequently subjected to more interpretivist analysis" (Banks, 2007, p. 44).

These approaches described above are similar to what I did in this study: beginning with a more explicit methodological approach, "useful for dealing with a large and complex dataset" (Rose, 2012, p. 85), before moving on to a reflexive, interpretative approach that is interested in the audiencing, "production sites of meaning making," and "cultural significance of images," which Rose points out are gaps that critics of CA have identified (2012, p. 86). In the next section I detail further gaps and tensions of the content analysis methodology and describe how I attempted to reconcile these issues by focusing on the rich potential of visual interpretation, guided by my research questions and the social aspects of critical theory.

Visual content analysis

Although Visual Content Analysis is a relatively new term, its use does not denote anything particularly new or innovative. As described in the literature (Mayring, 2000; Bell, 2001), VCA basically means applying the procedural components of traditional content

analysis to visual materials but still relying on CA's quantitative underpinnings. This makes the recent use of VCA more of a methodological prefix than a new methodology that describes a visually based form of content analysis. As it has recently been used, VCA is best summed up this way:

> Visual content analysis is the process of deriving meaningful descriptors for image and video data. These descriptors are the basis for searching large image and video collections. In practice, before the process starts, one applies image processing techniques which take the visual data, apply an operator, and return other visual data with less noise or specific characteristics of the visual data emphasized. The analysis considered in this contribution starts from here, ultimately aiming at semantic descriptors (Worring and Snoek, 2009, p. 3360).

The definition of traditional content analysis parallels the above description with the substitution of "text" for "image." "Text" in this instance is used more broadly to encompass written, verbal, and other forms of communication. At its most basic, content analysis is simply a methodology concerned with counting the frequency of words in a specific text or across multiple texts. When used to describe visual inquiries, content analysis is usually limited to the analysis of photographs (Rose, 2012) and/or photographic images that appear in mass media such as magazines (Bell, 2001). To counter a perceived "misuse" of this methodological branch, I wanted to extend the application of VCA with the hope that it may lead towards the development of a more complete methodology that better addresses the "visual" in content analysis and pushes VCA as a prime methodology for an image-based qualitative study that goes beyond analyzing solely photographic or

mass media evidence. Therefore, in the context of my study I view VCA as a visual

methodology that emphasizes the image data as equal to or exceeding the value of that of

the textual data collected (Prosser, 1998; Rose, 2012; Mitchell, 2011).   This image data is

intricately linked and bolstered with a visual cultural lens filtered through critical social

and network theory, and the primary concern of my study was to "see" worldwide

representations of culture and "look" for variation and homogeneity in an increasingly

visually dominant online environment and its effects on an international community of

users. In this sense my approach attempts to counter Collier's (2001) observation that,

"Perhaps the least known research potential of images is their use as vehicles to knowledge

and understanding via the responses they trigger" (p. 46).

　　　To extend the existing methodological framework, I began with methods from

content analysis, using them as a starting point for data analysis before moving on to more

interpretive analytical techniques described by Banks (2007), Rose (2012), Pink (2013)

and Bell (2001). As stated by Bell (2001) and others (Cho and Lee, 2014; Mayring, 2014)

content analysis has no clear or universal procedure. It is dependent on the type of study,

and even then researchers do not all agree on the exact methods and steps one takes when

beginning the analysis phase. One of the more cited (and updated) texts on content

analysis by Mayring (2014), while providing a good overview of where content analysis

originated and elucidating various approaches past and present, does nothing to address

methods for the analysis of visual material culture and either makes content analysis's

methods seem so general as to be applied liberally or so specific as to exclude any

considerations of imagery. His sole focus is on analysis of verbal and written texts.

However, Mayring (2014) does make an important point that "content analysis is not a

standardized instrument that always remains the same; it must be fitted to suit the particular object or material in question and constructed especially for the issue at hand" (p. 39). This recognition was invaluable for me, as even texts such as Rose's (2012), entirely devoted to considerations of visual methods, fell short in terms of their visual material considerations by excluding drawing as a method of elicitation and image making. Bell's (2001) contribution is also useful in understanding the general tenets and structure of content analysis. Much like Mayring (2014), he describes content analysis with positivist jargon (hypothesis, variables, etc.) since his chapter is also focused on quantitative CA. Bell (2001) does, however, admit to this limitation of quantitative content analysis and mentions Adorno's sentiment that "culture is, by definition, not quantifiable" (p. 24). This again is in line with other criticism (Banks, 2007) that traditional content analysis sterilizes its representations from their cultural contexts, an issue that could not be and was not ignored by my methodology, analysis, and procedures. I employed reflexivity throughout my process, constantly reconsidering the social-cultural context that helped produce the imagery, carefully reviewing and researching aspects of participants' countries, as well as their use of the Internet and consumption of media programs. Unfortunately, many of the good examples provided by Bell (2001) for the use and structuring of content analysis are also restricted to examples like comparative hypothesis, looking specifically at mainstream media imagery—for example, comparing the number of men or women who adorn the cover of specific magazines within a temporal period. This use of CA would certainly be more appropriate for a follow up on my project analyzing the media examples listed by participants to determine the extent to which they display similar representations as provided in their drawings. This approach, however, was not suitable for my study.

Here it is important to note that content analysis is not concerned with individual image's meanings (like semiotics) but images groups (or categorisation of images) as a whole. Lee and Cho (2014), who sought to reduce methodological confusion, suggested that for content analysis to be used effectively it should be a reductive and selective process that focuses on key elements of the data that pertain to the research questions. My guiding questions were again crucial, along with critical social theory, in helping keep me on course and looking for links to the human cultural experiences and dominant sources of influence.

Rose (2012) also points out numerous issues with using content analysis. She uses Lutz and Collins (1993) as an example, in that they, by following a very rigid statistically driven quantitative model, may have overlooked details that did not reach high enough coding frequencies. The main problem she has with content analysis is its focus on counting frequencies of occurrence and how a phenomenon simply occurring frequently is not necessarily an indicator or descriptor of culture. We have to consider what is not represented, or the "invisible opposites," what could be missing and why? (Rose, 2012). When critiquing Lutz and Collins' (1993) methods, Rose (2012) notes that their use of content analysis did not necessarily mean discarding the richness contained within the images in favour of a quantity of codes nor exclude following up with more appropriate qualitative methods. As Lutz and Collins (1993) state, content analysis does help uncover patterns that may be hidden to more chance interrogations as well as insulate the researcher from confirmation bias-searching for the images that conform to preconceived notions or expectations. Rose lists a further weakness of CA, noting that it cannot focus adequately on certain elements of the image. Instead, she claims, it "focuses almost exclusively on the compositional modality of the site of the image itself. It, therefore, has

little to say about the production or audiencing of images . . ." (2012, p. 86). Although the audiencing of the images in my study is more complex (due to its online nature), I did indeed concern myself with the sites of production and how living in these regions and participating online may or may not have influenced the drawings provided.

Banks (2007) also sees no objections to applying more formalist methods of content analysis to help sample and categorize visual materials and following this up with a more interpretive analysis. He contends that CA is too often governed by positivism and points out that the category and coding procedures are fairly open to bias and therefore distant from the objectivity generally espoused by CA. In looking closely at content analysis studies, such as Ball and Smith's 1992 analysis of fashion trends, Banks criticizes the study as absent of context and meaning related to the images; for instance the "why" (2007), something I could not afford to neglect. Mirroring some of Banks' (2007) recommendations, Bell (2001) also suggests that content analysis can "be used to provide a background 'map' of a domain of visual representation" (p. 27) with which the researcher can follow up with more individualistic qualitative analysis such as ideological, psychoanalytical, metaphoric, historical, and social contextual considerations. "Content analysis alone is seldom able to support statements about the significance, effects or interpreted meaning of a domain of representation" (Bell, 2001, p. 13), which is why I did not take Banks' (2007) or Rose's (2012) suggestions lightly. Again I reflected on the social milieu of participants and looked for visual representational connections among drawings and on the Internet that might influence or better elucidate the site where they produced the images.

This leads me to another point of contention regarding content analysis, which is the distinction between manifest and latent content. Banks (2007) argues that they are not properly defined by content analysis, manifest being basically what one literally can unambiguously see in the image and latent being the symbolisms and meanings attached to what is seen. In my study, the latent content may have been difficult to realize without the manifest content analysis first pointing me in the direction of emerging patterns. This process of manifest-latent content was closely reflected in how my study unfolded and is detailed further in my section on coding. This approach allowed me to identify the emerging patterns unearthed by the content analysis coding, which then opened the imagery up to being analyzed in terms of cultural context and meanings that were driven by critical social and network theory and guided by my research questions. These theories aided my considerations of normative versus hybridized or homogenized social practices represented in the images and helped to question the dominant sources of information described in the participant surveys. They also aided in investigating how flows of information may enter and travel within different geographic regions, exert influence, and filter into new visual cultural domains.

Although Banks (2007) criticizes content analysis for avoiding discussions of meaning and claims that content analysis often ignores or purposely sets this aspect of analysis aside, he reiterates that content analysis can serve as a precursor to the analytical technique that is followed up by another method that better reflects the study's data and research questions. He also criticizes the manufactured nature of formalist types of analysis, describing their outcomes as "inevitable" due to the fact that criteria are set forth to define the data. It is then structured by a rigid procedure that leads to results that are

produced rather than discovered. This, Banks claims, can be quite an uncompromising approach that does not allow for prudent reflexivity that can be vital to analyzing and understanding qualitative image data (Pink, 2013; Mitchell, 2011). Therefore, to be sure reflexivity was paramount, I took pauses throughout the development and deployment of my methodology, analysis, and procedures to go back and reflect on my questions and the direction they demanded, using critical social theory for signposts on my path of inquiry.

Bell (2001) provides three overarching types of questions that content analysis is good at addressing, and while the first two (visibility in media and bias in media) do not apply, the third, "historical changes in modes of representation" (p. 14), is close to what I hoped to elaborate on. As Bell clarifies, "To conduct a content analysis is to try to describe salient aspects of how a group of texts (in our case, images or visual texts) represents some kinds of people, processes, events, and/or interrelationships between or amongst these" (2001, p. 25). The people, in this case, are those who participate in specific online communities and hail from particular geographic regions, the processes concerned are how images may flow via digital and other media and exert influence, and the interrelationships among all of these are those the study wishes to uncover. Perhaps the most poignant observation of content analysis or any visual analysis' success or usefulness is to question, "Does the analysis yield statements that are meaningful to those who habitually 'read' or 'use' the images?" (Bell, 2001, p. 25). In that respect I believe that my study has made considerable foray into not only thinking about how we can analyze images but has also yielded insights into trends in global visual representations. Bell (2001) claims that content analysis alone cannot reveal how viewers value or understand particular media but can show what "is given priority or salience and what is not" (p. 26), what and how

representations are connected and help uncover the patterns between them. It was these last elements with which I was principally concerned and why I framed my study using a visual content analysis methodology.

In summary, my research framework was developed by first grounding it with a traditional content analysis methodology that gave me a rigid framework to deal with the large complex dataset of images my study needed to gather. This also gave me the distance necessary to reduce bias that might occur if I was to jump directly into reflexive interpretation. Then, guided by my research questions, relevant theory, and the gaps identified by both content analysis and visual methodological scholars (Banks, 2007; Bell, 2001; Mayring, 2014; Rose, 2012), I extended and merged the tenets of traditional content analysis with a reflexive and interpretative approach. This addressed the methodological issues, positioned visuality as central, pushed interpretation of the rich social characteristics in the images, and gave prominence to the perspectives and contexts of my participants. Thus my research framework, as developed and defined here, is a *qualitative visual content analysis methodology*. In the following sections I outline how I enacted it in an online environment, collected my data, prepared the data for analysis, and coded the images, before reducing the image dataset to a more manageable and purposeful sample where I performed my main interpretive analysis.

SETTING (site of research)

Since I conducted this study online the figurative setting could be considered a

"virtual environment." However, the actual physical settings of participants are unknown but could be considered to be highly individualistic and are speculated to range from Internet cafes, public spaces (including libraries) using mobile devices, and home or corporate offices. As noted by Dunn (2002) Granello and Wheaton (2004), Griffiths (2010), and Lefever et al. (2007), the efficacy of online data collection is every bit as credible as traditional methods and provides researchers with many additional benefits in contrast to traditional in-person studies. The researcher and participants are not restricted by the confines of time and place (Griffiths, 2010; Lefever et al., 2007). Data collection can proceed asynchronously, which is particularly advantageous when trying to reach an international audience, meaning that time zones and cost prohibitive travel are no longer concerns (Granello and Wheaton, 2004; Griffiths, 2010). Griffiths (2010) also points out that increased anonymity has been found to improve participant self-efficacy, revealing details that may not be as readily shared in-person (i.e., income, personal habits), as well as to reduce researcher bias present in an in-person study. In my study, the participants chose both a time and place that was convenient and conducive for them.

For this study, sample sizes from my earlier pilot studies were used as a starting point (McMaster, 2012, 2015). In each of my two pilots, data collection took place over three to four weeks in order to reach the desired number of participants, capped at thirty. Based on the overall response to my pilots, I wanted to ensure I completed a more rigorous study as well as reach at least a few participants from each region (as determined by continental, state, and/or cultural divisions). I determined that three to four months would be necessary and would continue until that time limit had been exhausted or when the initial cap, set at a maximum of 1000 participants, was reached. After the allotted time

neared its conclusion I wrapped data collection up with roughly 300 participants having responded, and I also noted a point of "saturation" as described by Josselson and Lieblich (2003), ending data collection once the results become redundant, claiming this as a prudent method of achieving the sample size.

Although over 500 people responded to my survey, many of them were rejected, mainly for not providing the requested drawings. As described later in the procedure section, a pool of roughly 300 participants was narrowed down several times (due to erroneous data) until all superfluous data was removed, to a final number of 225 participants. As was my goal, I was to able achieve representation from all major continental and cultural regions with excellent participation from most regions, except East Asia and Sub-Saharan Africa. I speculate the reasons for lower participation from these areas to be access to the Internet (for many African countries) and/or awareness of the crowdsourcing network I used (for Korea and Japan). In total I reached participants from 61 countries.

Methods

As Rose (2012), a leader in visual methodological exploration, explained, despite the massive volume being published on the "visual," there remain few guides to "possible methods of interpretation and even fewer explanations of how to do those methods" (p. xvii), and I struggled to reconcile both the former and the latter issue. To satiate this methodological gap, I conceived a hybrid methodology to alleviate this tension and build

upon existing frameworks in an attempt to take the methods in a new visual direction. Of course to do so meant that I first had to choose an appropriately fashioned research framework that was open to imagery and interpretation and had room for modification. Based on what I hoped to accomplish, collect a large amount of image data, and after seeing what other researchers had done, I selected content analysis as an appropriate starting point to structure my inquiry and build in visuality and qualitative interpretation.

Prosser and Loxley (2008) also point out that visuals in research, in general, were scarce only 20 years ago. However, due to a surge in Internet usage the current ubiquity of imagery has been catalyzed and led to significant and complex research questions addressing new contexts across disciplines. They stress that examining these emerging global themes and issues via a visually based heuristic is crucial for the understanding of the nature of the image in our daily lives. As McGuigan (1998) insists, "Methods should serve the aims of the research, not the research serve the aims of the method" (p. 2), and that is at the heart of both image-based research and my study.

Text and interviews may well be able to elicit and represent significant emotional responses from participants; however images can unearth even more powerful and direct emotional and cognitive representations as well as unanticipated reactions (Prosser and Loxley, 2008; Bagnoli, 2009). Unanticipated and more visceral, visual contributions from participants are an important component of image-based research and my study.

Drawings as Data

The form of image data I chose for this study was drawing. As Bagnoli (2009) posits, drawings aid in cases where participants find it hard to express themselves verbally in addition to facilitating the investigation of "layers of experience that cannot easily be put into words" (p. 548). Bagnoli further supports the idea that a focus on the visual allows oral deficiencies to be resolved and includes a deeper scope of experience which could otherwise be overlooked, stating, "A creative task may encourage thinking in non-standard ways, avoiding the clichés and 'ready-made' answers which could be easily replied" (2009, p. 566). The notion of graphic development is further linked to cultural indoctrination by the findings of Pariser, Kindler & van den Berg (2008), who state, "The symbol systems relevant to graphic development are generally based on mark-making tools that function mostly in the two dimensional medium and that are sanctioned by the relevant cultural milieu . . . "(p. 294). I hoped that my survey would elicit drawings from geographically distinct cultural milieus and reveal how such "sanctioning" might take place in the eyes of the subjects participating online.

I also sought, in part, to provide further support for a more mainstream use of visual research and provide an alternative narrative to the more logocentric designs often found in academic disciplines (Sinker, 1996; Delacruz 2009). This I hoped could provide additional challenges to dominant text or verbally based inquiry. In order to break from more traditional confines, I had to employ visual methods in a variety of ways and drew upon a combination of methods and examples from several prolific researchers in related disciplines. To begin with I had to choose a single medium for the collection of image data.

Although my background in photography made still images a natural choice, photos as data in my study would have been problematic for a few reasons. The first is the audience that I wanted to reach and the technological limitations of possessing and using a camera with competency, not to mention the inability of controlling the quality of submitted photos for consistency. Control in this sense meant that I would not be able to ensure properly exposed or in focus photographs, not to mention that I would probably have to post-process images for consistency in size for the analysis. The other problem was that photos, while descriptive of what exists in a given environment and indicative of personal tastes, may not be able to convey the perceptions and imagination of the participants adequately. Therefore, I chose drawing as the medium to more readily access participants' views and perspectives with the hope that they would more closely reflect the types of visual images that people might use, or imagine, as representations for the words presented to them to draw. Drawings, unlike photos, would also allow participants to roam freely within any temporal period of experience and draw from their past as well as the present.

Eitz, Haysy and Alexa (2012) extol the property of drawing as a universal mode of communication: "Since prehistoric times, people have rendered the visual world in sketch-like petroglyphs or cave paintings. Such pictographs predate the appearance of language by tens of thousands of years and today the ability to draw and recognize sketched objects is ubiquitous" (p. 1). This ancient method of symbolic representation appeared before recorded history in the caves of Lascaux and Altamira and allows the rendering of abstract thoughts into visible visual representations. Reviewing over 100 years of research on drawings and their ability to elucidate our perceptions and representations of our world, Strommen (1988) reveals that although there is no set framework or theory that can be

unilaterally applied to drawing analysis, there is little doubt left as to the power of drawings to convey thoughts, emotions, and interpretations of solid and abstract concepts. As Yamada-Rice (2010) noted, while children in her study were enthusiastic about multimedia use, they also enjoyed drawings to express themselves and continued making sense of concepts gleaned from TV and DVD use, also stating they were keen to talk at length about the drawings. Selwyn et al. (2009), who also focus on children's drawings, noting the various advantages of drawings in conveying emotion, understanding, and the expression of ideas not easily transmitted verbally or in writing. They also note the growing interest in data collection of this type as a burgeoning sociological inquiry, stating that drawing as a method of data collection has also been employed to explore "educational issues such as teacher–child relationships, bullying experiences, views of learning difficulties and behaviour problems, experiences of the journey to school, views of the classroom environment, and perceptions of sport education" (p. 912).

Chen also sees the capacity for drawings to reveal everyday cultural symbols, and designs, stating that "children's drawings reflect their perceptions of, and participation in, their environments, societies, and cultures" (1995, p.17). This latter claim is precisely what I hoped to elicit from my participants—to catch a glimpse of what influences, conscious or otherwise, different regional environments, cultures, and societies had on commonly shared cross-cultural concepts pertaining to everyday life. And although Yamada-Rice (2010) and Chen (1995) are referring to children in their observations, I do not think it is too much of a gap to also consider these same effects as applied to adults. Adoniou (2014) has also pointed to a significant body of research that indicates drawings reach far beyond art and aesthetics and encompass meaning-making and social interactions. Adoniou's study

notes the importance of the visual-verbal relationship in cognitive processes and how students' drawings aided in creating better, more comprehensive written non-narrative or explanatory information by first mapping the instructions via drawings. This last point is particularly significant because the students in the study all came from non-English backgrounds, just as my participants did, and one of the most important criteria for choosing drawing was that limitations of personal expression were minimized. Brown (1992) also points to the fact that plenty of research has been carried out that supports the claim that culture influences children's graphic expression, also noting its universality and potential for assessing ideas and perceptions of their creator. However, my study, unlike Brown's (1992), seeks to capitalize on "conceptual stereotypes of representation" (p. 16), to elicit participants' preconceived notions of the words provided, which represent familiar, everyday concepts.

Rule and Harrell (2006) draw upon numerous interdisciplinary studies in espousing the usefulness of drawing as a method to unlock the unconscious, clarify perception, and enable literacy as well as being a therapeutic device. In their study on pre-service teachers' attitudes towards math, they used drawing as a gateway to unearth the anxiety felt by students and found it allowed them to reflect upon negative emotions, resulting in students being able to shift attitudes towards the positive by drawing and sharing their experiences. Mays et al. (2011) found that when drawings were used in a study that focused on female perspectives on HIV testing, it indicated, like Bagnoli's (2009) argument, that drawings can provide significant insight into a participants' thoughts and reveal things that would not come about via traditional text surveys. The researchers state that "respondents' productions of visual representations provide a window into themes that are not easily or

comfortably expressed through words" (Mays et al., 2011, p. 3).   Mitchell & Weber (2005), in looking at different ways to perform self-study through imagery, found that "drawings provide people with a good opportunity not only to reflect on their personal feelings and attitudes toward people and situations but also to express the group values that are prevalent within their specific cultural environment" (p. 304).

As I mentioned earlier, while it is clear that drawing as a mode of exploration for my inquiry was the most suitable, a concrete methodology that employed the use of drawing elicitation and analysis was lacking. So as previously discussed, I examined Content analysis (CA) as it has been used in similar studies; however, their similarities were superficially related only in terms of "dealing with a large and complex dataset" (Rose, 2012, p. 85). Eventually I determined that CA was a good starting point with which to frame this study and structure my data collection and initial analysis. However, due to the gaps discussed by leading scholars (Banks, 2007; Bell, 2001; Mayring, 2014; Rose, 2012), I needed to add more direct connections specific to the image-based method I used, drawing elicitation, and I had to extend existing methods to follow the direction set out by my research questions. This also allowed me to extend existing methods of data collection and image-based analysis to place them within an appropriate social theoretical context that could reveal more meaningful cross-cultural discovery. What follows is a description of my methods of deploying *Visual Content Analysis* (VCA), an attempt to strengthen the qualitative aspects of CA and merge them with more interpretative visual analysis methods, drawing from the visual methods described by Banks (2001, 2007), Rose (2012, 2015), Pink (2013, 2011), and Mitchell (2011).

Image-based Survey (Data Collection)

To trace these transformative and interconnected relationships I enlisted participants from diverse geographic backgrounds. Participation in my earlier pilot studies was facilitated through the use of *Amazon Mechanical Turk* (Mturk), a paid online crowdsourcing application that allows individuals or groups to recruit registered users to complete tasks by making the tasks visible and searchable on their website. Although academic studies and attention given to this service as a research tool has been increasing in recent years, to date few studies have been conducted on the service itself. Mturk derives its name from a fake 18th Century mechanical chess-playing apparatus called "Turk" and was created on the premise that despite rapid advances in artificial intelligence, there are still tasks that require the skills of human ingenuity (Aytes, 2011).

Figure 4: How it Works (requester.mturk.com)
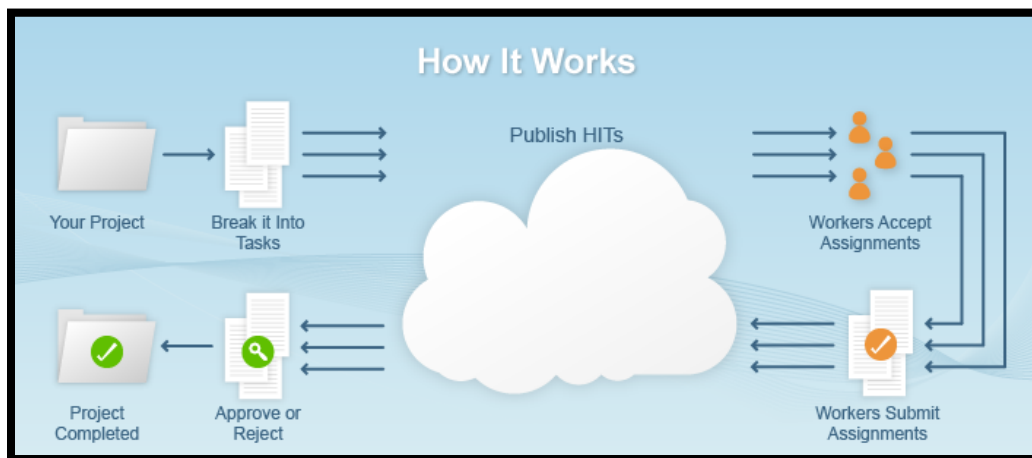
To explore images on a global scale a networked source of participants from backgrounds as diverse as possible needed to be used for recruitment, since physical travel to and financing of stays in a variety of distinct global regions would have severely constrained and limited the scope and number of regions that could be included (Beaudoin, 2008). Although there are now numerous crowdsourcing platforms available online, the platform that reached the largest global audience was thought to be Mturk, which, according to Amazon Web Services (2010), had over 500,000 registered workers in over 190 countries worldwide. This seemingly meant unprecedented access to participants in almost all regions on earth that are networked. Being networked was also an important factor for my study, as only those with Internet connectivity or access and a fair grasp of technology were able to participate. To alleviate language barriers participants would be able to view the survey in their own language via instant translation software. I accomplished this by verifying the participant's Internet browser language and using it as the preferred language. Participants could also choose another language[3] by clicking the "national flags" icon on the side of the survey, if desired. Once a particular task has been published on the Mturk platform, the process of recruitment and data collection can be seen in Figure 4, and further images of its setup and look can be seen in Appendix B.

---

[3] Yet viewing language in another way strengthens my study's ties with globalization as recent Internet usage statistics suggest that still English dominates the Internet with a 62.4% penetration rate and an estimated 1.3 billion worldwide users, 25.9% of the total, are engaged in the use of English online in one form or another (Internet World Statistics, 2011). It should be noted that other sources assess penetration rates differently however they all agree that English continues to dominate.

Participants

Although there exists scant literature on who the people are that contribute to these crowdsourcing platforms, several useful studies were conducted on the users of Mturk, which I originally slated to be the source for my participants, commonly referred to as *crowdworkers*. Buhrmester, Kwang, and Gosling (2011) made several findings as they tried to discover more about the people who participant in crowdsourcing tasks online:

> (a) Participants are slightly more demographically diverse than are standard Internet samples; (b) participation is affected by compensation rate and task length, but participants can still be recruited rapidly and inexpensively; (c) realistic compensation rates do not affect data quality; and (d) the data obtained are at least as reliable as those obtained via traditional methods (p. 1).

They also found that crowdworkers often complete these tasks for enjoyment, which is also supported by my earlier pilot (McMaster, 2012). Buhrmester, Kwang, and Gosling's (2011) finding on the demographics of these "online communities" being more diverse is also supported by Ross et al. (2010), citing that participants come from over 50 different countries. Furthermore, their research debunks some general criticism (Aytes, 2011) concerning participation on crowdsourcing platforms like Mturk being directly or solely linked to monetary compensation and seems to counter some of the findings of Ross et al. (2010), which indicated that about 18% of workers relied on Mturk for income. Despite this fact, Buhrmester, Kwang, and Gosling, (2011) found workers willing to

complete tasks for almost nothing (one cent), suggesting monetary gains were not their

primary motivation[4]. In addition to this discovery they also found that the amount of

reward provided for a task did not affect the quality of the data, which is also supported by

my earlier pilots (McMaster, 2012, 2015), where it was found that the level of

compensation effected only the total elapsed time taken to gather participants and

complete the study. Further, Eitz, Haysy, and Alexa (2012) also found the vast majority of

their 20,000 participants recruited for their drawing recognition project reported that they

enjoyed the task.

Survey

The instrumentation or survey development was based on the previously discussed

pilots (McMaster, 2012, 2015) and informed by research surrounding the effects of

globalization (Ergil, 2010; Levin Institute, 2013). For demographics (age, sex, income,

residence) many suitably structured surveys already existed, so I merged the most basic

questions into the survey along with specific ones concerning this study (see Appendix A).

I added additional open-ended questions to learn more about where the images for the

drawings may have originated and what types of media consumption the participants

engaged in. I was mainly concerned with foreign TV consumption and Internet use. My

initial pilot studies (McMaster, 2012, 2015) were used as templates for the data collection

process, the design of the survey, and selection of the words for representation. Some, but

---

[4] This survey's compensation rates were between 10 and 25 cents, altered according to user satisfaction surveys and degree of participation in certain regions.

not all, of the drawbacks and limitations I discovered in my earlier pilot studies were, therefore, addressed and reasonable preparations made to overcome them.

One example of an earlier limitation was the method used to gather uploaded images and ensure that all survey questions were answered. This was accomplished by coding a custom HTML form. Another was minimizing the time and effort spent by participants to complete the survey and avoid "drop-outs" (Buhrmester, Kwang, and Gosling, 2011) by providing clear and detailed instructions with examples.

Rejection of Mturk design

As previously stated, I had originally chosen Mturk to implement the online survey and recruit participants. However, in contrast to my pilots, this study's requirements were far more robust and sought both more images and further demographics. This required a coded HTML form using Mturk's proprietary programming language. I hired a third party programmer to transform the text survey into a fillable form and integrate the attachment/upload of the requested images upon completion simultaneously. This would also allow organization of the participants' data accordingly via individual file folders.

However, once the HTML form had been designed and was ready to publish, I discovered that Amazon (the parent company of Mturk) had changed its policy regarding its users (requesters and workers), making it now necessary for both them and me to possess a US tax number (TIN). The reasons for this, mainly to combat money laundering, are elaborated further by Ipeirotis (2013). The use of Mturk had to be scrapped because

both the worldwide audience whom I sought for participation and I were now restricted from using the Mturk platform[5]. As a result, I had to find a comparable crowdsourcing platform to replace it.

Word Prompts

The set of word prompts I used in this study were the catalysts provoking visual representations from the participants. The number of words chosen that participants were asked to represent reflected the time thresholds for completion of crowdsourcing tasks as described by Buhrmester, Kwang, and Gosling (2011), who state that participants tend to drop off starting around the 20-minute mark when completing tasks.

Word choices stem from critics and scholars' emphasis on the cultural impacts of globalization such as effects on gender roles and jobs (Ergil, 2010) as well as traditions, food, clothing, and housing (Levin Institute, 2013), attempting to elicit ritual practice and culturally significant visual representations. The word sets I chose for these purposes are shown in Table 1.

Table 1: Revision of Word List

Preliminary Word List	Modified Word List
1) Clothing	1) Fashion
2) Food	2) Meal

---

[5] *It should be noted that since the completion of my study Mturk has found ways to once again include those previously excluded registrants mentioned above.*

3) Funny	3) Comedy
4) Housing	4) Home
5) Man	5) Working man
6) Marriage	6) Working woman
7) Meal	7) Marriage
8) Stylish	
9) Traditional	
10) Woman	

The list on the left of Table 1 is the original set of words[6] piloted on CrowdFlower; the list on the right is the revised set of words that was narrowed and modified based on the initial responses (elaborated below). As proposed during the design phase, I used my original pilots' results (McMaster, 2012, 2015) as a guide to set up this survey, and, as was necessary in this case, I eliminated words in order to provide participants with a task that was less time consuming or demanding. Furthermore, I instructed participants to produce images that they saw as most accurately depicting the given words. I also asked them not to worry about the quality of their drawings or the intended audience.

In terms of how an image was deemed acceptable, Willats (2005) defines an effective representation as one in which "… something specific can be seen and recognized clearly and unambiguously" (p. 14). Suffice it to say with regard to my survey, all

---

[6] Despite collecting dozens of good responses to this initial test survey on CrowdFlower, these results were discarded and not included in the analysis since not only was the word list modified but also the wording of several questions.

participants who followed the project protocols and uploaded the correct number of images along with a completed survey were included in the data. Below in Figure 5 is an example of an image that was not acceptable for this study[7].

Figure 5: Example of a rejected image
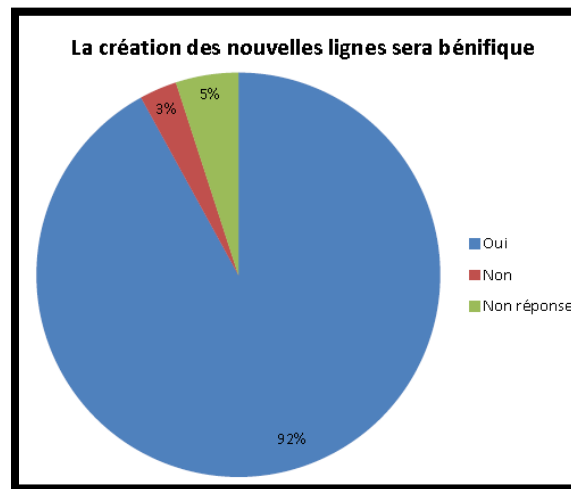

New Crowdsourcing Platform

After revisiting Mturk's competitors and alternatives I selected another crowdsourcing platform called *Crowd Flower* (CF). Most of the alternatives dealt only with text-based projects and surveys, and since images were imperative to my study's success, I quickly ruled them out. CF was the only platform with a large enough membership that could also accommodate requests for images. The workflow for CrowdFlower is much like Mturk, with the exception of an approval/rejection phase and a user feedback survey (present in CF but absent in Mturk) that gives the requester an idea of individuals' opinions

---

[7] Other examples of rejected images included mostly copyright images from the Internet, some addressing the word sets, some simply random images collected in haste.

of the survey. An example infographic is provided by CF in Figure 5 to illustrate how a task is processed.
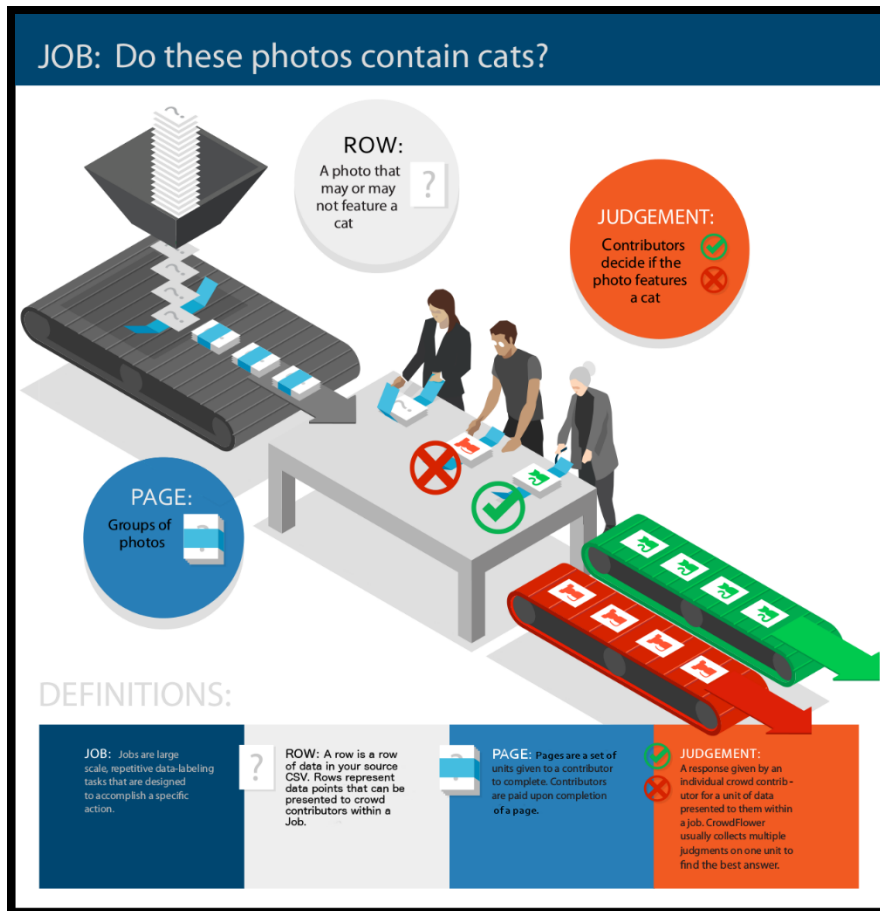
Similar to Mturk, Crowd Flower has its own programming structure, though unlike Mturk it could not handle attached/uploaded images natively so image gathering would have to be self-hosted, meaning that CF would merely do the crowdsourcing while the data would have to be handled by my own personal server (in this case my website). Thus, I had

to hire another programmer to construct a fillable form with image attachments that would also organize the data for each participant into individual folders, each assigned a unique user ID for easier analysis later.

After the new design was tested and complete it was registered with CrowdFlower, and a request was created to gather participants. The initial survey and its 10 requested drawings were published at http://www.untitledartist.com/survey/. As mentioned earlier, I used Google translation to identify participants' browser language and automatically translate the instructions into what was assumed to be their native tongue. I made the wording of survey questions as simple as possible to make the translations unambiguous and straightforward.

I also made attempts to advertise the survey independently by way of various online communities and classified forums around the world and used social media and direct email requests to universities in regions on each continent. These pursuits were met with very limited success. I gathered only a handful of participants through social media (Facebook) and received zero responses from the other avenues, except a refusal from a Korean university to forward my request due to its internal policy. Using CrowdFlower, however, it was immediately clear that not only was a global audience being reached, the completion of the survey also exceeded Mturk in expedience, gathering the hundred requested participants within a few days. It was also found that CF appeared to have a much more diverse membership worldwide, whereas it was noted previously that Mturk has a disproportionate membership from South Asia (McMaster, 2012, 2015).

When I reviewed the data collected, however, I discovered that only 20% of participants submitted the requested drawings along with a fully completed survey. The other 80% had either not completed the survey or uploaded erroneous images that were photos (likely copyrighted) or images that had no relation to the requested drawings (i.e., a single desktop screenshot uploaded ten times). Again I found a major difference between Mturk and CF. CrowdFlower lacks a stringent quality control system of requester approval or rejection of its contributors' submissions. I had to undertake further measures to improve the survey's readability, emphasize the need for participants to follow the instructions more carefully, and ensure that those who completed the survey could not complete it a second time. I set up an IP block to record participants' IP addresses and store them for comparison so that if they reached the survey a second time they would not be able to complete it, or even view it.

After I made these changes I launched a second, much smaller request for only thirty participants. Example drawings from previous pilot studies (McMaster, 2012) were also provided as examples of the types of images expected to be uploaded and red text added to dissuade the uploading of photos (see Figure 6).

Figure 7: User's task view of survey
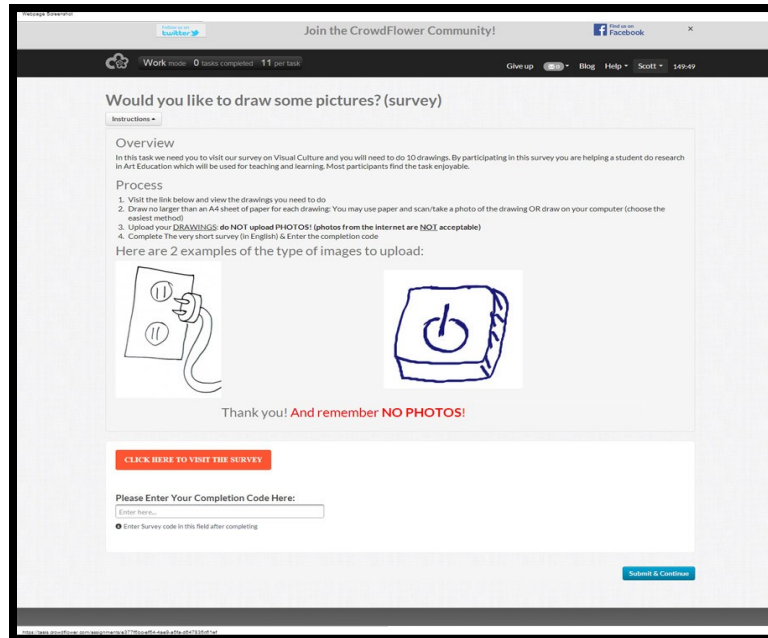
Although the data quality did improve, poor data submitted still surpassed that of good data. After a basic analysis of the participants' responses and the survey rating system (contributor satisfaction rank, shown in the bottom right, Figure 7) provided by CrowdFlower, I determined that the number of drawings being requested exceeded the time participants were willing to devote to the survey.

Figure 8: "Dashboard Task View" for the initial survey in CrowdFlower
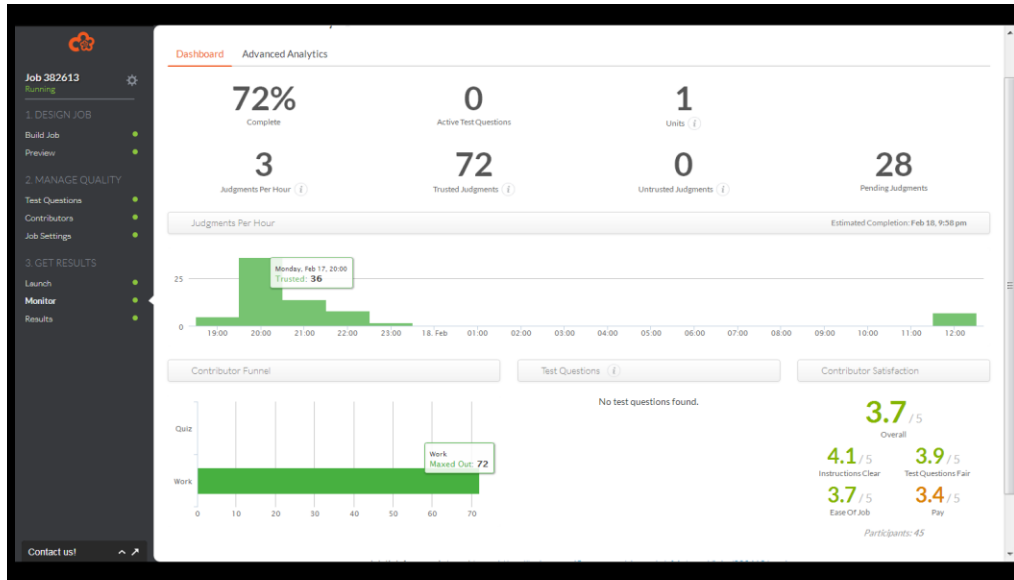
So I revised the word list and narrowed it down to seven (shown earlier in Table 1); afterwards, I launched further requests in smaller batches with a maximum of 15-20 participants. This change again improved the quality of data received, but further tweaking of how the survey was advertised was necessary to continue to achieve enriched and more consistent results.

In order to reach people from specific geographic regions, I changed the title for the survey into major languages of each region to improve searchability on the site and used Crowd Flower's "survey filter tools." I filtered up to fifteen specific countries at a time to bolster numbers from certain regions that had not yet been represented in the data. On the contrary, certain countries also had to be filtered out after sufficient numbers of participants had already been gained. I also filtered certain countries due to the consistently poor data received; in these cases the "contributors" on CF appeared to have essentially rigged the system (possibly exploiting a loophole) so that they could exhaust surveys (such as my study's) numerous times, collecting the reward without successfully

completing the survey. I assumed these people were able to do this by disguising their IP addresses using a VPN[8] and by holding multiple accounts. I also suspected, judging by sudden rises in poor data, that contributors might have been able to communicate among one another—possibly on a message board, forum, or private groups—sharing information to target externally hosted surveys and lax quality controls.

Figure 9: Early rendering of the survey showing the first section and how images were uploaded

---

[8] To reiterate, IP address means Internet Protocol address and gives your computer a physical address in order to connect and direct the flow of information to and from your home or office computers. VPNs are virtual private networks that allow a computer's physical address on the Internet to be altered and appear as if from a different location and computer.

Eventually, I discovered that the only tool available to me in order to avoid these types of contributors was to "flag" contributors who did not complete the survey correctly, meaning that they would be restricted from further participation in any survey published by my CrowdFlower account. This was cumbersome as it had to be done individually, and a reason (a minimum of 25 characters in length) had to be provided to justify the flagging. Yet this was also not completely effective since even those participants who provided good data were again taking the survey, and despite them delivering another set of drawings, they had to be excluded from the data collection. Therefore, after this realization, when each subsequent survey was completed all contributors, regardless of the data, had to be flagged. The reason given for all was, "*I do not want further tasks completed by this contributor.*" Still, due to the inadequacies of the CF system, this issue not only plagued my data collection but continued to disrupt my data analysis because what was initially perceived to be about 300 participants I then narrowed down to 225, as duplicate participants were weeded out visually by drawing and survey comparisons (discussed further in data analysis section). The creation of a webpage (described below) to organize and physically map all the participants helped me to finalize this refinement process as drawings and survey data were uploaded one-by-one with careful scrutiny of each, in addition to software employed online to categorize, search, and more easily compare the data for discrepancies that were not available via NVivo or desktop folder viewing options.

I concluded data collection by referencing my earlier pilot studies (McMaster, 2012, 2015) confirming that a similar data set had been achieved: "Adequacy is achieved when you have obtained enough data so that the previously collected data are confirmed (saturation) and understood" (Sage, p.114). Worthy of note are two regions that returned

few or no participants: Sub-Saharan Africa and East Asia. I believe that the former was due to much lower Internet penetration (Internet World Stats, 2011) in the region, and the latter (having no participants from Korea and Japan) advanced internally focused Internet networks that simply saw little penetration or popularity of the crowdsourcing platform(s) being used.

Data Analysis

Coupling this crowd-sourced approach described above with image-based research methods provided an alternative form of data collection that valued imagery as a cultural signifier supplying artefacts that symbolize understanding and identity (Prosser, 1998). Central to my analysis was identifying parallels that link visual culture and globalization augmented via the Internet, examining if a homogenizing effect on visual representation was detectable and traceable. Building upon two successfully executed pilot studies (McMaster, 2012, 2015) this design takes into consideration the limitations that were revealed, such as language barriers, which skewed the type of participant recruited. In this larger thesis research, I added the option of offering the task in a participant's local language using embedded translation software. My earlier research also revealed some compelling links between non-western cultural participants' visual representations of concepts such as *marriage* using distinctly iconic western forms. Unlike past intercultural research that appropriated existing imagery to represent diverse cultures, I asked participants to visualize their understanding of themselves and their world.

However, before I delve into my detailed analysis that began via coding, I first need to describe in detail the image and text data I gathered and the steps necessary to prepare these two sets of data (drawings and surveys) for a primary analysis, using Computer Assisted Qualitative Data Analysis Software (CAQDAS).

Along with the imagery collected, a short survey (see Appendix A) was used to gather demographics and information such as Internet use and media consumption. I took measures so that as many cultural groups or regions as possible were represented; these measures included regional filtering tools available through the crowdsourcing platform. My survey sought rich details and descriptions from multiple perspectives, while at the same time drawing out themes and isolating dominant ideologies (Babbie, 2010; Lutz and Collins, 1993). Areas of interest within the data, such as representations that clearly deviated from local norms, were identified using visual content analysis, and further interpretative visual analysis was conducted. CA was used to identify patterns within the data through the use of NVivo, a Computer Assisted Qualitative Data Analysis Software (CAQDAS) that helped organize visual and demographic data into easy to manage segments according to the meaning ascribed by participants and dominant patterns that emerged by coding the images in the program. NVivo aids in the development of codes, cross-referencing and comparing participants and their data, and is used cross-disciplinarily to analyze, organize, code, and develop themes with multiple forms of data such as texts and visual imagery.

Survey Preparation

In order for the analysis to begin, all image and text data first had to be downloaded from the server and then the individual survey text extracted, cleaned, and organized into a single spreadsheet in preparation for import into NVivo (NV), the CAQDAS. Each text file contained only the number of the question and the answer given. A typical survey answered in English looked like the following example:

Table 2: Example Survey Answers

1) Female

2) 30-39

3) Greek, 2 (Greek, English)

4) Under $10,000

5) phd student

6) Postgraduate degree

7) Cyprus

8) Nicosia

9) 8

10) www.youtube.com, www.facebook.com, http://scholar.google.com/

11) Childhood memories from the ivillage, drawings i used to make as a kid

12) The voice Uk

13) ph****1@hotmail.com

In order to create the spreadsheet, the numbers were deleted and small grammatical errors corrected; i.e., in the above example, the typo "ivillage" was changed to "village." The thirteenth question concerning email or user ID was not included in the spreadsheet. Another consideration was that since the survey was presented to each person in their native language, some responded in kind, meaning the survey answers had to be translated before inclusion in the spreadsheet. Following is an example of a survey completed in Swedish, pre- and post-translation, with translated portions shaded:

Table 3: Translation of non-English surveys

1) Male	1) Male
2) 18-29	2) 18-29
3) svenska	3) Swedish
4) $50,000 - $74,999	4) $ 50,000 - $ 74,999
5) teknik	5) Technology
6) College graduate	6) College graduate
7) Sverige	7) Sweden
8) Uppsala	8) Uppsala
9) 3	9) 3
10)Tre	10) Three
11)Minne	11) Memory
12)TV	12) TV

Since Google Translate was used for the initial survey translation, it was again used to translate the answers, ensuring consistency. If there was any uncertainty of a particular word or sentence, a secondary translation was sought using a different translator to confirm its credibility. As far as the accuracy of the survey's translation was concerned, it appeared very successful, with answers corresponding logically with the questions. Only one participant remarked that a question was not fully understood, and that was only a single question out of the 13, so answers given in a foreign language are considered to be highly accurate. It is also worthy of note here that despite the survey being offered in participants' native language, many still provided all or partial answers in English, further supporting the earlier claim that English dominates the Internet (Young, n.d.; Graham and Zook, 2013). I discuss the role of language further in the Findings chapter.

After I created the spreadsheet I imported it into NVivo. I then followed the preliminary steps for setting up a qualitative data analysis project and basic queries run to test the appropriateness of the spreadsheet's data to work successfully in the NVivo environment. Upon testing, I found that the spreadsheet had several issues after I imported it into NV. The primary issues I found had to do with capitalization and spelling. For example, one participant may have capitalized their native language or country, while others did not. One participant from Vietnam wrote "Ha Noi" and another "Hanoi," with each answer being treated a separate case by NV despite representing the same answer from two different participants[9].

---

[9] Several iterations of correction and import of the spreadsheet and flushing out of these discrepancies had to be carried out; this is due to the fact that NV does not allow editing of the dataset after import (a rather perilous shortcoming). Another issue was that NV could not handle number ranges provided for question nine (avg. hours spent online per week), so if a participant's answer was "5-8" hours, it was averaged into "6.5" so that it would be

Image Data

      After the text survey data had been prepared and organized, the next step was to prepare and organize the corresponding image data or drawings for analysis and uploading to NV. Unlike the text data, the image data required much less preparation before it could be uploaded to NV. A few file extensions had to be changed to meet NV compatibility, and some files had to be scaled down, as they were much larger than the requested 300kb. Lastly, a few of the participants' files had to be edited, as the clarity of some scanned drawings was poor. This meant importing into Photoshop and adjusting the brightness and contrast or sharpness to emphasize the lines and negative space so they could be recognized alongside other drawings.

      Images were first removed from their original folders and placed in a single folder for ease of access and then uploaded to NV in batches of about 10, which appeared to be the limit of the program, meaning that the 1700+ images took some time to process. After all images had been uploaded, they had to be coded and associated with the correct participants and their survey answers. This was done by selecting each group of seven drawings and matching them to the participant ID. After this was completed, NV's "Gallery" function was used to create image galleries or "categories" for each of the seven

---

handled correctly by NV. These issues represented hundreds of individual edits within the spreadsheet. The last issue found had to do with spacing. Some of this spacing was left from pasting the translated segments of text and some from the editing process. When extra spaces occurred in the data, NV again treated each instance as a separate case, so that "Hanoi" and " Hanoi" (the latter with a space in front) were not counted as being the same. Eventually this iterative editing process reached a suitable conclusion and analysis continued.

images for comparison and organization and in order to proceed to the coding phase. Here original word set served as the initial categories that grouped the imagery.

After the seven galleries had been created, each gallery was analyzed for the initial and emergent codes that best represented aspects of each drawing.

Online Database

Despite the NVivo software being designed to handle a large amount of data and having numerous analytical applications, the process of using NV was cumbersome and unintuitive at best. The software is prone to corrupt files, and executing even simple queries required numerous repeated steps and screens. Although NVivo is competent at compiling statistics and connecting certain aspects of the data, unravelling the relationships between the images and the survey data proved more elusive.

I conceived that a secondary database should be set up that would allow more immediate and less time-consuming filtering of the data. This permitted me to tease out more relationships within the data. A basic WordPress content management website (CMS) had already been set up for the initial data collection, so it was logical to use this to set up the second database. This database would not only serve the analysis, but also later function as a visual representation of the project and dissemination of the data that allowed direct connections to be made among demographics, geography, and representation. To accomplish this, two additional software were needed. One was an interactive custom map that could display the locations of all participants (city and/or

country) along with their images and a link to a detailed *Participant Survey Page* that would display all other relevant data, including category links between the data.

Figure 10: World Participant Map
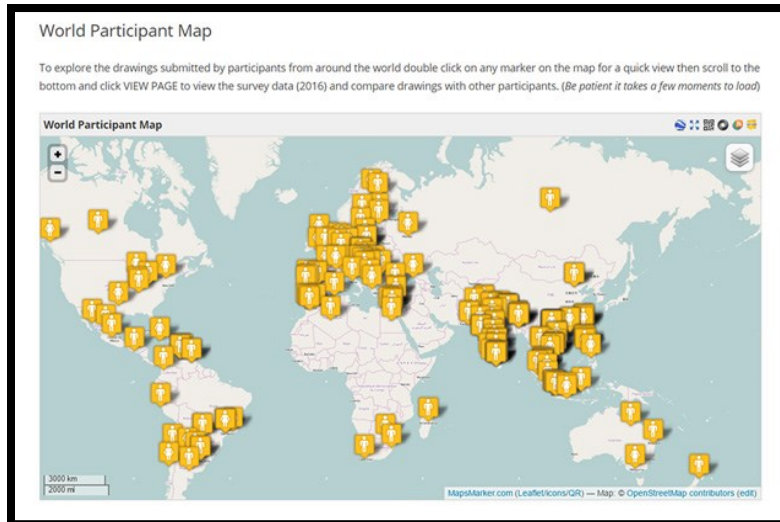
Viewing imagery on the *World Participant Map* allowed for quick referencing of nearby state and regional participants. I could then do further examination by clicking on the *Participant Survey Page*, which allowed for easy searching and filtering of individual participants, regions, demographics, and so on. On this page the complete survey answers along with the seven drawings could be seen and related participants shown below, revealing further associations grounded in the data. Using these software allowed me to create further data structuring and custom categories, along with tagging, so that once categorised and tagged I could cross-reference the participants according to their answers or demographic data and thereby compare and contrast the drawings by social-economic status, age, region, language, etc.

Figure 11: Participant Survey Page
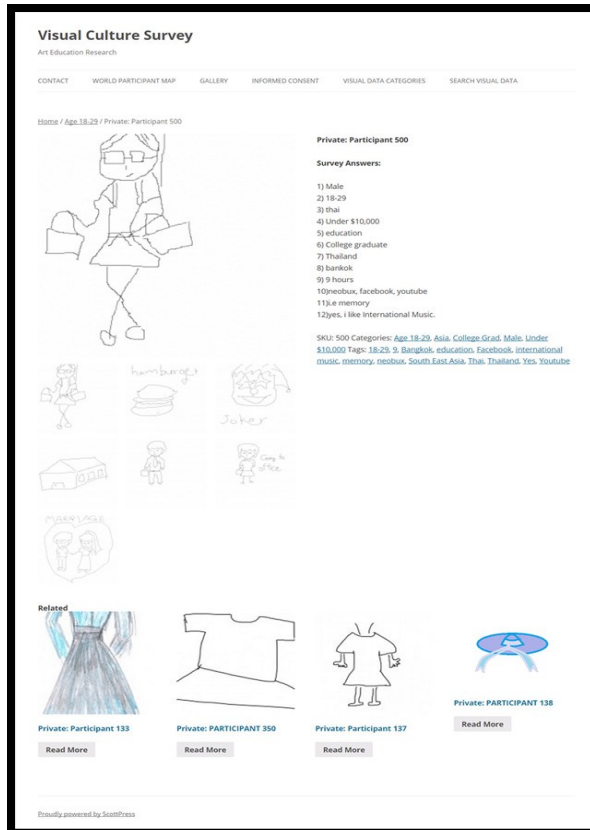
Detailed Analysis

A subset of questions that helped provide some guidance for this visual inquiry and analysis have been laid out in Stanczak's (2007) *Visual Research Methods*:

1. What driving assumptions about the role of power or the translation of visuals across cultures can be assessed in each project?

2. Do we assume different or similar meaning when we view images of different eras and from different hands?

3. How do we clarify these distinctions in the questions we ask or the interpretations we make of these texts?

4. What supporting or corroborating data might we seek out as we assess these distinctions?

5. How are aesthetic assumptions or truths bound up in the process of image making, selecting, and reading?

6. How will auto-driven projects document how certain populations experience hypermedia or advertising? (p. 18)

Therefore, with the consideration of these questions, I took a reflexive and interpretative approach to image analysis. Reflexivity in this instance is best described as reflecting on "how you as a critic of visual images are looking" and by "thinking carefully about where we see from" to inform how we are seeing (Rose, 2012, p. 17). It also stresses the "inseparability of personal and professional identities" (Pink, 2013, p. 42), again rebuffing positivist notions of objectivity and highlighting the importance of my positionality, background as an artist, and training as an image maker. Rose (2012) has pointed out that users of content analysis, such as Lutz and Collins (1993), linked their categories or coding strategies with their theoretical concerns. Considering Lutz and Collins' (1993) study *Reading* National Geographic, which also analysed imagery in a global context, I took their coding units (p. 285) into consideration. However, their data format was photography, and therefore I eliminated those units that may not easily translate to drawing analysis, such as "vantage point." Within these units, two overarching categories were considered: *individuals* and their *visual representations* (drawings).

Individual participant analysis considered the following:

- World location

- Gender of participant

- Age or gender (if people are depicted)

- Ethnic and/or language group

- Social-economic status (SES)

Visual Representation analysis considered the following:

- Ritual focus

- Dress style (local or western)

- Urban vs. rural (if dwellings or towns are depicted)

- Wealth indicators (if drawn)

- Technology depicted

- Memory vs. copying (drawing source)

The next step was to ensure that my codes were able to meet Rose's (2012) criteria for explicability, meaning that two different coders or researchers would end up with the same results if coding the imagery independently. For Lutz and Collins (1993), 86% agreement was reached between their two coders; for my study, since drawings are far more abstract than photographs, I aimed for a level of 70% agreement between two

different coders. I used Cohen's Kappa to determine this agreement, and according to Stemler (2001), between 61-80% is considered "substantial" using that formula, while McNamara (2005) puts the lowest value for Kappa at 70% as reliable, indicating 75% and above to be highly reliable or excellent. In order to accomplish this, each coder viewed a portion (10%) of the participant's images, coded them from within NVivo, and was asked to select the codes they believed to apply to each image; these codes were then compared with NVivo's "Kappa Coefficient Tool" to determine the extent of their agreement. The two coders were also invited to submit their own codes as elicited by the data to allow coding to be further grounded in the data. I describe this process in more detail below.

An important consideration brought forth by Rose (2012) when thinking about coding procedures is that "numbers do not translate easily into significance," stating that frequency often takes precedence over rarity and that "certain representations of what is visible depend on other things being constructed as their invisible opposite" (p. 72). Therefore, I also paid attention to what was not shown, which in the case of my earlier studies (McMaster 2012, 2015) proved to be revealing when I looked for traditional or ritual signifiers in drawings and found few. The possibility of substantial disagreement was also considered here, and if such a case occurred where the coders do not have sufficient agreement, the process would have begun again until the desired level of agreement was reached.

Coding

In defining and describing various methods of research design, Creswell (2003) puts forward three simple steps in preparing for data analysis and interpretation. Step one is to "organize and prepare the data for analysis" according to the type of materials collected. Step two is "read through all the data" to "obtain a general sense of the information and reflect its overall meaning (p. 191). The last step is a detailed analysis using a coding process, organizing the information into manageable chunks then taking the materials (images, text, etc.) and further categorizing them "in vivo," from the Latin meaning "in a living thing." In the case of my study, it reminds me that my purpose is to connect the visual materials back to my participants and their lived experiences and perspectives. The term "in vivo" also relates to the computer assisted qualitative analysis software I used, called NVivo, used for a large part of my analysis and described earlier in this chapter. What follows is the *first* iteration of the emergent coding structure for the three key survey questions, then the seven drawings. Next to each code in brackets is the number of references coded followed by the criteria for assigning each code; some codes overlap (i.e., *Colour*). Unlike typical CA studies that begin with a collection or sampling of images, my study began with already defined categories in the form of the word set used for drawing elicitation, to which participants then responded with their own imagery. In this sense, the overarching categories had already been framed, and coding proceeded in several stages from these categories.

In terms of what portion of the data necessitates analysis, I followed Saldaña (2008), who states that, "Others, if not most, feel that only the most salient portions of the corpus

merit examination, and that even up to one half of the total record can be summarized or deleted, leaving the primary half for intensive data analysis" (p. 15). This is close to what I did in my analysis; to begin I coded all of the images, then I selected segments of the data (or participants) for the second round of coding, after which I narrowed them down even further to isolate pockets of significance within the participants' image data. Saldaña (2008) suggests coding the overt social meanings (beliefs, values, actions, etc.) directly and notes that there will always be instances of inconsequential data throughout and to code these as "N/A". Prosser (2007) in laying out a brief guide and glossary for researching with images lists one term that is particularly integral to my study, *Indexicality*, defined as the property of the context-dependency of signs, hence the need to explore meaning-making in which the placement of a sign in the material world is central (p. 3). Indexicality was important when I performed both the initial coding and the interpretative analysis of my participants' images, connecting both obvious signs, such as a crucifix, and not so obvious signs, such as knives and forks. It was this consideration of context and the meaning-making it might have produced in the images I collected that prompted me to thoroughly investigate multiple sources of influence for each participant's cultural setting. This meant looking at the dominant languages, religions, foods, history, and other relevant information for each country. This additional path of research helped me to determine whether or not a particular sign present in an image was typical of a specific milieu or not and led me to other important discoveries concerning the role of language and the Internet, discussed in the Findings chapter. It is here where critical social theorization comes into play as it was useful in framing my indexicality and pointing me towards sources of dominant representation—visual, textual, and cultural.

Survey Codes

The following represent the most popular answers to the last three open-ended questions about participants' drawings and their sources of media consumption. Codes were generated using the survey questions, and participants' answers and responses are counted in brackets. It should be noted that codes generated directly from the text were not subjected to the inter-coder's scrutiny, as they were generated using word frequencies and not subject to multiple interpretations as images are.

Table 4: Open Survey Question Codes

DRAWING. Q: Where did the drawing come from?	• Memory (134)
	• Cultural (35)
TV. Q: Do you watch foreign TV, if yes what?	• Yes to Foreign TV (163)
Web use. Q: What are the top 3 websites you use?	• Facebook (92)
	• Google (76)
	• Youtube (58)
	• Yahoo (27)

Drawing Codes

The following tables represent the basic coding structure generated from the participants' drawings based on iterative stages of coding, with these representing the first stage. Code counts are given in brackets, and additional sub-codes spun off from larger codes are included below code descriptions.

Table 5: Fashion Codes

IMAGE 1: **Fashion**	
Atypical clothing (4)	*i.e., non-western or from a different time period*

Clothing (120)	*Any simple item of clothing: dresses, shirts, skirts, hats, etc.]*
	
	    o Hat [only] (11) *[only drew a hat and nothing else]*
	
	    o Hats (32) *[drew a hat as part of an "ensemble" of clothes]*

Colour (32)	*Used 2 or more separate colours in the drawing; not monochromatic.*
Female (63)	*Depicted female wearing clothes; indicated by long hair, dress, etc.*

Models/Runway (12)	*Depicted a female/model on a stage or runway; a fashion show.*

Table 6: Meal Codes

IMAGE 2: **Meal**	
Colour (59)	*Ibid; see above*
Fast Food (56)	*hamburgers, hotdogs, fries, pizza, soft drinks, etc.*
Hamburgers (34)	*circular, depicting meat between buns, with or w/out lettuce, etc.*
non-western (6)	*depicting local dishes; i.e., chopsticks, banana leaf, no utensils*
Other (15)	*unidentified foods (blotch of colour), abstract drawings*
Pizza (10)	*circle with triangular divisions and/or circular toppings*
Plate setting (48)	*plate with forks/knives/spoon; in western style arrangement*
Steak (9)	*a slab of meat with "bone" in a "T" or circle form*

Table 7: Comedy Codes

IMAGE 3: **Comedy**	
Clown (28)	*typical clown from popular culture; big nose, hat, curly hair*
Characters-other (11)	*unidentified characters; possibly comics or unknown TV shows*

Colour (32)	*Ibid*
Happy-smiling faces (74)	*simple emoticon of happy face or smiling head*
Mask of Comedy (30)	*theatrical mask of comedy*
Performance (40)	*persons depicted on stage or in front of an audience* ○ Stand-up Comedian *(12): single person standing on stage with mic*
Slap Stick (8*)*	*"Chaplin" physical style gags; pie in face, banana peel on ground*
Television (11)	*person(s) watching TV or TV depicted with people on screen*

Table 8: Home Codes

IMAGE 4: **Home**	
Colour (46)	*Ibid*
Detached House (201)	*house drawn by itself without neighbours* ○ Houses and Objects (48): *house drawn with surroundings— trees, driveway, fence*
FAMILY (8)	*[parents with children alone or in front of home]*
OTHER (9)	*[objects of a house, outdoor scenes, unclear scenes]*

Table 9: Working Man Codes

IMAGE 5: **Working Man**	
BLUE COLLAR (115)	*indicates physical/factory labour*
Tools-Manual Labour (93)	*depicts a tool or tools and/or physical labour*
Colour (32)	*Ibid*
Other (10)	*figure, object or face without any action*
WHITE COLLAR (91)	*office workers, suit/tie, sitting, desks* o Computer-Brief Case (66): *computer and or briefcase depicted*

Table 10: Working Woman Codes

IMAGE 6: **Working Woman**	
Colour (30)	*Ibid*
Domestic (28)	*kitchen, vacuum, laundry, baby, etc.—stereotypical "female" chores*
Office (92)	*desk and or computer, reception, etc.*
Teacher (18)	*desk with blackboard, apple, students, books*

Table 11: Marriage Codes

IMAGE 7: **Marriage**	
Colour (36)	*Ibid*
Couple (41)	*two persons, hand holding, kissing, faces gazing*
Family (12)	*couples with child/children/baby*
Non-western (4)	*non-Judaeo-Christian ceremony*
Rings (51)	*2 circular bands or a single engagement (diamond) ring*
Western wedding (124)	*church/chapel, typical Judaeo-Christian ceremony*

Table 12: Coding Process

Coding process
Categories (defined by word set) →*Codes* (1-3 stages: emergent fr. Categories/images) →*Themes* (fr. Categories/images, codes/theory) *Concrete* →----------- (manifest) ----------→--------- (latent) ---------→ *Abstract*

Inter-coders and Credibility

Although no universal set of procedures exists for qualitative visual content analysis

(or other forms of CA) and despite the grounds for inter-coder credibility in qualitative study undergoing more criticism (Banks, 2007) for its structure being handed down from a positivist quantitative paradigm, I still deemed it necessary to implement a dual coding comparison to ensure initial coding was reasonable and suited this project's aims and linked to the overarching inquiry.

First, the final dataset of 225 participants was again narrowed down to the most relevant regional cases. Guided by the research questions that sought representations that confirmed or contrasted from expected local pictorials, I determined that a purposeful sampling needed to be employed, and Asia was chosen due to my experiences in the region as well as much of the most robust data having originated from there. This meant that the reduced sample was now 106 participants from the aforementioned regions. In addition, using the same rationale, the number of images to be analyzed in this subsequent analysis was also reduced from seven to three, choosing those words eliciting the most vigorous graphic representations. The words chosen for further analyses were meal, home, and marriage.

According to the literature (McNamara, 2005), a random sampling of 10% of the total is acceptable for the purpose of inter-coder credibility. Therefore, 12 participants were chosen along with their corresponding 48 images. In order to make a random selection of the sample, the 106 participant IDs were fed into a number randomizer and the first twelve numbers selected. Then the same steps were followed as described earlier to edit the spreadsheet, import into NV, and then add the images and galleries, connecting them to the appropriate participant IDs. The initial set of 25 codes was selected for

comparison and setup in NV in alphabetical order. Two coder IDs were also set up for each person to differentiate what was coded. The goal was to reach "substantial" Kappa agreement as described in the literature, which meant a value of between 0.61-0.80 (Stemler, 2001).

The two persons selected to do the coding comparison were both from the faculty of fine arts and department of art education, and although similarly educated came from quite different backgrounds, cultures, and languages. Both coders were trained first on the use of NVivo, how to apply the codes to the images, and how to add any new code if they felt it was warranted. Coders were then briefed on the coding structure (description of each code to be applied) and research questions to guide the application of codes and addition of any new codes. Coders completed their work separately one after the other. The total time elapsed for training and coding was approximately 4-5 hours.

After coding was complete, I implemented NVivo's coding comparison query to check the level of agreement. Unfortunately, NV calculates Kappa on a per code basis, meaning it compared every image source to every available code, resulting in 1296 lines of comparison but not delivering a final Kappa agreement figure. In order to process these numbers, I researched and used a Kappa calculator in the determination of the final level of agreement. I found a suitable statistical calculator on the website of The National Institute of Water and Atmospheric Research (NIWA), a New Zealand based scientific firm. The numbers that were input into the calculator were garnered as follows from the NV coding comparison results, shown in Table 13, and the resulting agreement of the calculation is shown in Table 14.

Table 13: NVivo Inter-coder Results

Present-Present:	*total # of <u>A & B Agreement</u>* = **49**
Present-Absent:	*total # of <u>A's but NOT B's</u>* = **31** *(Coder 1)*
Absent-Present:	*total # of <u>B's but NOT A's</u>* = **9** *(Coder 2)*
Absent-Absent:	*total # of <u>Neither A nor B</u>* = **1207**

Table 14: Kappa Results for 2x2 Interrater Table

Rater A	Rater B	
	present	Absent
present	49	9
absent	31	1207
kappahat = <u>0.6942</u>, (kappa+ = 0.8346. kappa- = 0.5943) s.e.(0) = 0.0273, s.e.(kappahat) = 0.0455		

The resulting Kappa agreement met with expectations and was deemed substantial at 0.69, lending credibility to the coding structure in place, and the analysis moved forward.

Ethical Considerations

Although important considerations have recently arisen about the use of crowdsourcing, they do not appear to apply directly to the context of my study. Critics such as Aytes (2011) as well as Fort, Adda, and Cohen (2011) argue that the conditions on Mturk are unfair due to the impossibility of unionization, no guarantee of reward for HITs that are properly completed, and no system in place to address employers' (requesters') misconduct, overall heavily favouring the requester. Irani and Silberman (2013) have made numerous claims about the callousness of Mturk's system, pointing out that there is not even so much as a rating system for workers to turn to, if and when a requester chooses to dismiss their submission. While these claims are valid, her proposal for some sort of union that could span more than 100,000 members in over 50 countries is farfetched, to say the least; alternatively, a system of arbitration for amounts as little as ten cents spanning thousands of completed tasks would also never be feasible. And while it is easy for a researcher to overcome this issue by having a clear protocol for what is acceptable and impressing this upon potential participants, the points made about Mturk specifically were rendered moot, since as described previously the Amazon policy change effectively made its use impossible for my study (US federal law basically excluding those without a Tax Identification Number from using Mturk).

These claims are further depreciated when compared with general Internet-based tasks such as public surveys, which millions of people do every day, worldwide, for the benefit of both business and non-profit organizations and receive no compensation at all. Amazon still does not seem to have any sort of arbitration in place on Mturk, most likely because of reasons I described above, and while a rating system for both requesters and workers could alleviate this issue, it is not within the scope or concerns of my study. In the end I used CrowdFlower, which not only has a rating system for its workers to use to grade requesters, but as evidenced by CF's platform their system presents an almost polar opposite to Mturk in that workers have found ways to exploit the system and provide poor, some might even consider offensive (pornography), data, not just once but repeatedly targeting surveys where it is easier to do so. Despite this, I was responsive, as demonstrated earlier, to the concerns of participants and altered the survey and number of images required to address a lower "contributor satisfaction rating" garnered from the initial ten-image survey (see Figure *7*).

Further still, I also addressed the main issue raised by critics by giving careful consideration to what is submitted by participants. In my first pilot study (McMaster, 2012) I rejected only those submissions that clearly did not read the task's guidelines (i.e., uploading a copy of the study's informed consent form in place of the drawing that was requested), and even some of the submissions which should have been rejected were approved (compensated) because they were included in the report as examples of what was not useful data.

I considered the risks to participants in my study to be almost non-existent. Not only did I provide enhanced anonymity due to the online and crowdsourced nature of data collection, I also found that despite that many participants (mainly students) were completing these tasks for monetary purposes, my original pilot studies (McMaster 2012, 2015), in addition to others (Eitz, Haysy and Alexa, 2012), found that many participants enjoyed doing the drawings and also used these platforms as a sort of informal learning and general indulgence to pass the time. This is also evidenced by my study's participants with the time, detail, and care many people devoted to their drawings, adding many elements, colours, and factors to enhance their aesthetic or clarity. Participants in my study were actively contributing in this way, and in contrast to past studies of colonization, appropriation of other cultures' visual representations are avoided here; instead I asked for the thoughtful input of those involved, their opinions and perspectives, placing significant value on what they envisioned and how they interpreted it.

Summary

The need to use unique techniques and methods to properly explore visually based phenomena remains crucial as existing procedures often still rely on best practices that hail from positivist paradigms. Many methods cannot by themselves explain the more intricate and elusive details inherent in a visual image nor begin to provide an interpretation of what collections of images may mean outside of quantifying instances of certain occurrences among them. As described above my need to supplement the initial visual

content analysis with a secondary reflective and interpretative analysis was exemplified in my inquiry and is supported by the literature surrounding both visual methodologies and content analysis in general.

My image based survey evolved from my two previous pilots, and I began with recruitment, using a crowdsourcing platform along with a personal website to both disseminate the survey and provide online tools for image and survey data collection. After I fine-tuned the online survey and became accustomed to the new crowdsourcing technology and its intricacies, I successfully reached the threshold for a global group of participants. Although the pilots allowed for considerable issues to be addressed and overcome, there were still numerous unforeseen hiccups along the way that required further problem solving and time to alleviate. Drawing as a method of visual data collection turned out to be very fitting for what the study hoped to achieve in terms of visual representations and lends further credibility to previous studies that found drawing to be a democratic, empowering, and magnifying medium for participants' perspectives.

Through the use of stratified sampling (Rose, 2012), I chose the region of Asia and its participants for the final detailed case analysis, and this process is described more fully in the next chapter. Despite visual content analysis proving useful in isolating trends in visual representation and survey responses, which helped narrow down the sample, it faltered in its ability to provide reasons why participants responded in the way they did and with the images they did. Thus, an interpretative analysis of recognizable iconography and symbols was necessary to consider contextual relationships between participants' locations and the images they drew, as well as the popular media they consume.

The CAQDAS program NVivo was also a useful, albeit cumbersome, tool that mixed well with a content analysis and intensive coding structure. NVivo's analytical tools helped to reveal the relationships between the image and survey data as well as identify the most and least pervasive trends in the visual representations. NVivo also aided in determining the credibly of the visual content analysis coding structure by allowing two coders to apply the same coding structure to the images, reaching a successful margin of Kappa.

In the next chapter, I present cases in a country-by-country descriptive analysis, showcasing most of the prominent types of representation, which is followed by the most popular images received and some overarching themes that emerged from these groupings of images. The Findings point to the Internet and global flows of information and media consumption as catalysts for change and possible sources of not just a homogenizing force influencing visual representation, but hybridizing forces and perhaps glimpses of deeply ingrained social-cultural traditions and perspectives on important life events and customs that may be changing.

FINDINGS

Introduction

The chapter is an in-depth description of the majority of image and survey data collected for this project. It begins with the profile of a representative participant from the study based on the survey responses. This is then followed by a descriptive country-by-country analysis of male and female participant images. The most impactful and significant three of the seven images (meal, marriage, and home) are then analyzed in terms of the themes that emerged from the visual content analysis and successive/iterative coding phases. I then discuss relationships between the countries, survey responses, and imagery with regard to the most and least prevalent imagery and the reasons why certain images may be more or less represented in the data. From these analyses I consider the possible reasons why the data was represented as it was and in what ways the Internet, local, and global media powers and flows of information may be influencing both the images drawn and an overall homogeneity of representation from distinct, diverse, and time honoured cultures but also considers tensions created with new hybrid visual forms. I discuss the Internet as a globalizing force beyond commerce and in contrast to popular belief that the flow of visual cultural information is predominantly west to east. Instead, my findings suggest that it is not as direct as once thought but slowly flows and dissipates within regions from dominant economic and cultural powers, filtering through porous virtual borders via popular visual cultural productions and consumption of various media content.

Overview:

- Representative participants' profile

- Detailed summary of survey results

- Comments on participant cases country-by-country

- Analysis of three main words, looking at common themes

- Discussion of key findings in relation to guiding questions and common threads that arose during data analysis

- Discussion of the findings to bring everything back into the context of the study's aims

Analysis and Examples

Narrowing the sample

As described in the Methods chapter the survey resulted in 225 participants who both provided good image and survey data; this meant all seven images were provided and all survey questions were adequately answered. The resulting image data numbered over 1500 individual drawings done in either computer-assisted or traditional pen or pencil. The countries of origin were 61 in total and reached every major regional or continental division with the exception of small Pacific Islands; participation from sub-Saharan Africa and the Middle East were also low (see Methods)[10].

Although I initially coded all images, after the early coding stages and Kappa results I decided that more representative images that addressed the research questions need not include

---

[10] The countries listed in the original sample are as follows, in chronological order of participation: Cyprus, France, USA, Brazil, Australia, India, Portugal, Sweden, Italy, England, Indonesia, Russia, Egypt, Philippines, Bangladesh, Pakistan, Spain, Romania, El Salvador, Vietnam, Hong Kong, Venezuela, Yugoslavia, Argentina, Finland, Slovak Republic, Serbia, Sri Lanka, India, Croatia, Poland, Greece, Bosnia, Austria, Macedonia, Chile, Mexico, Singapore, Venezuela, New Zealand, Netherlands, South Africa, Paraguay, Peru, Estonia, Turkey, Jamaica, Canada, Morocco, Nepal, China, Hungary, Colombia, Belgium, Taiwan, Germany, Georgia, Thailand, Algeria, Malaysia, Madagascar.

participants from all regions. As described by Mayring (2000) and Rose (2012), a stratified sample was sought, meaning that I sampled from "subgroups that already exist in the dataset" (p. 89); in this case these subgroups were those participants belonging to the regions of Asia. Asia here includes all of Eastern, South East, and South Asia but does not include Central Asia or Russia. This geographic area was selected because of my familiarity with the region, having lived and travelled extensively there, as well as the region being the furthest, culturally, from Euro-North American traditions, religions, and languages. This region also had a significant number of participants and rich data from which to analyze. This resulted in a final 106 participants and preliminary 742 drawings. However, the successive coding also revealed that not all drawings were equally significant or revealing in reference to the research questions. Words such as *comedy*, while interesting in part, did not speak of flows of information from different regions and did not appear to reveal any frictions between local vs. global ways of knowing or appear to represent specific and useful cultural icons or markers. Therefore, based on my driving questions and the richness evident from the coding procedures, I narrowed the images down, again using stratified sampling, to the representations of the three words *meal*, *marriage*, and *home*. These representations not only contained the frictions between local vs. global but also referenced specific and important aspects of daily life that are often culturally ingrained.

As I discuss later in this chapter, male participants significantly outnumbered females by approximately four-to-one. Despite this discrepancy I thought it prudent to provide an equal voice that better represented these populations and countries. So for the purposes of this chapter (not the entire analysis) example cases are presented from both male and female participants from each country with the exception of several countries that did not receive any female participants, in which case only the male case is shown. I chose these cases by selecting participants by their ID number from the spreadsheet (some from early in data collection, some from later), then a single

male/female case was selected from each country to be discussed below in *"Detailed Cases by Country."*

Participant Profile

Based on my reduced sample of 106 participants I developed a synopsis of the typical participant from my study, followed by a detailed summary based on the demographic data reported and image research conducted on the countries and region of Asia in Table 15. Viewing the demographics at a glance, we can make the following generalizations that the average participant was:

- **Techno savvy**: Participants are familiar with networked computers beyond basic functions, able to use digital drawing tools and scanners, and are probably accustomed to more complex and technical tasks than the ones completed for this survey.
- **Educated**: Participants have more than a high school education, a majority possessing a college degree, some with postgraduate and some with college experience; many either are students or recent grads (based on age).
- **Young**[11]: The majority of participants reported being younger than 29 (reflecting the median age for many of the Asian countries surveyed).

---

[11] Most participants fall into the age group Arnett (2002) calls "emerging adulthood," a period of self-discovery and formation of worldviews that is spurred and extended by globalization. This group, in addition to the adolescents that follow after them, are also the cherished targets of marketing firms for global brands because of their more open attitudes and lack of fixed worldviews or societally assigned roles that adults often have (Arnett, 2002), which potentially signifies this demographic as an important cultural driver in terms of adapting and creating trends.

- **Multilingual**: Nearly half of the participants reported being able to speak two or more languages, not including English; only 38 reported speaking just one language (ex: English).

- **Urban**: Less than ten participants reported living outside major urban areas (smaller than 500,000).

- **Online**: Participants spend on average eight hours each day online; many are engaged in part-time microtasking jobs or other work that utilizes networked computers.

- **Visual Consumers**: Participants engage in foreign visual culture via the Internet and often consume foreign TV show programs from the region and abroad; this also means they have access to the media in order to consume.

<p style="text-align:center;">Table 15: Summary of more significant reporting's from the participants' surveys</p>

	Survey Summary	Notes
1) Gender	(82/106) participants were male.	The lower female participation is discussed later in this chapter.
2) Age	(69/106) participants were aged 18-29, (27) being aged 30-39.	Only (4) participants were age 40 or older.
3) Language	(23) Participants identified English as one of their spoken languages. Of these (12)	It should be noted that although some did not state English as a

	also reported speaking English as their sole language, a significant portion (45) reported being multilingual in two or more languages (except English), and (38) reported being monolingual (excluding English).	spoken language, they did answer the survey in English; this is discussed further in the section on the *Role of language*.
4) Social Economic Status	Roughly half (51) of participants cited their annual wages at under $10K, and while considerably low compared with western standards, these incomes do represent (statistically) the average wages within much of the region in general and closely resemble those with respect to each country. It is not entirely surprising since so many reported to be students that incomes would be lower since they may be working only part time or new on the job market.	Except for Hong Kong ($36K+), Malaysia ($10K+), Singapore ($51K+) and Taiwan ($30K+), all other countries have average annual incomes of less than ($7K), with half who participated in the survey living in countries with an average annual income of less than ($3K) (Nation Master, 2012).
5) Occupation	As previously mentioned, many participants reported "student" as their occupation (34/106) with the second most frequently reported job being	Also, worthy of note is "self-employed/employed/employee" (16) and (5) teacher/education. Only (2) reported being unemployed

	participants who cited a technology related occupation (15).	
6) Education	Almost half of participants said they were "college graduates" (51), with another (16) citing "some college," (16) reporting being "high school graduates" and (15) saying that they either had a "postgraduate degree" or had "some postgraduate work."	Overall these point to a fairly highly educated group of participants, but also comment on the number of newly educated youth who may be struggling to find work despite their education.
7) Ethnicity (country of origin)	There can be no substantial observation made on ethnicity since the survey was not proportional (nor did it intend to be), but in terms of numbers of participants, Vietnam had the most successfully returned surveys with (25), followed by India with (18) and Indonesia with (11).	Countries that returned between 5-10 surveys were Malaysia (7), Nepal (7), Philippines (7), China (6), Sri Lanka (6), Pakistan (5), and Bangladesh (5).
8) Residence (urban vs. rural/ local vs. expat)	The vast majority of participants live in highly urbanized areas, many living in the national/regional capitals or their suburbs. There were only 7 participants who cited living in smaller cities (Est. < 500K) or rural areas: Kandy, SL (110K+)/Daklak, VN	There were also a handful of participants (4) who reported living as expats in another country.

	(330K)/Halong city, VN (221K)/Hung Yen, VN (rural)/ Nagapattinam, IN (102K)/Nagercoil, IN (224K) Maros, ID (rural).	
9) Time spent online	The average amount of time that participants reported to spend online was (7.9) hrs/day, with the greatest being (15) hrs and lowest being (2) hrs.	It should be noted that some reported (24) hrs or more, and it is assumed that the participants may have meant per week.
10) Frequented Websites	Aside from other crowdsourcing websites that were frequently reported in participants' top 3 visited/favourite sites, the most popular by far were Facebook (49), Google or Gmail (45), Youtube (27), Neobux (21), Clixsense (18), Yahoo (14), Probux (12).	Considering Google is the parent company of Youtube, it gives their popularity a commanding lead over all others with (82) instances of it and its subsidiaries as a "top 3" site.
11) Drawing Source	A majority of participants said that Memory (70) and Culture (9) were the sources for their drawings; others cited books, imagination, TV, and the Internet as sources for their drawings.	As noted later in the Google image search results section, there was more than one image found in the results that were also clearly drawn by participants.
12) Consumption	(85/106) participants answered "Yes …" to having consumed foreign TV	Notable mentions were

of Foreign Programming (TV)	programming. The most frequently cited genres were sports, news, and documentary.	CNN, Discovery, Big Bang Theory, Hollywood, and Game of Thrones. Korean and Japanese drama/comedy were also mentioned, along with American shows, as sources of foreign consumption.

Detailed Cases by Country

The selection of the following cases comes from the purposeful sampling of the larger data set that constricted participants to those from Asian countries. In order to make a meaningful yet relatively unbiased selection, I looked at the spreadsheet of the remaining 106 participants, then using the "find all" command I selected two cases per gender from each of the fourteen countries, two males/two females, by copying down the participants' IDs (four countries, however, did not have any female participants).

Then using those 39 IDs I selected one case per pair of participants (1M/1F), which best represented the overall data collected as well as addressed the research questions. This resulted in 24 cases in total with 10 pairs of male/female participants from 10 countries and 4 male participants from 4 countries that had not received any female participants.

It should be noted once again that in this dataset female participants were underrepresented (1/4) compared with males. However, despite this discrepancy, I thought that including a more diverse selection of cases and therefore perspectives outweighed a fractionally accurate representation of the dataset as a whole.

Each country is presented below in alphabetical order with its cases and discussed in terms of imagery, country-wide statistics (to place the country within the online population), and demographics pertaining to the three words represented. I also compared images from each country represented to each of their most popular search engine's image results for each of the three words. I did this so I could assess what, if any, traces of the drawn images could be connected to either the image search itself or links to websites of influence or even direct connections, as it was with a couple of participants in my study.

BANGLADESH

Despite its large population and small landmass Bangladesh has very low Internet penetration compared with its neighbour India, but the study still gathered five participants from this country. Due to this small fraction of the population having Internet access, media influences are thought to mainly come from more traditional sources such as terrestrial/satellite TV, print media, and advertisements. However, it should be noted that the country has only one terrestrial TV station, yet TV remains the most popular medium, meaning it relies heavily on broadcasts from India and elsewhere (BBC, 2016). The government is also known to filter and block websites it deems undesirable (BBC, 2016).

This consumption (whether TV or online) is noted by both participants below, claiming to watch the US channels of TLC and Discovery.

Like most of the countries surveyed, Bangladesh's most popular search engine is a localized version of Google[12], which is noted as one of the top three websites visited by both participants.

Country Stats*

- Population: 168,957,745 (CIA, 2015)

- Median Age: 24.7 (CIA, 2015)

- Internet Connectivity: 10,867,567 users

- Internet Penetration: 6.86%

- Share of international users: 0.37%

- Main search Engine: www.google.com.bd

* [http://www.internetlivestats.com/internet-users]

---

[12] Google dominates the world market share of Internet browsers. It has done this by successfully creating "localized" Google Chrome browsers, which are available in each country's official language (in addition to English) and provide search results on a country-by-country basis. These localized search engines also come into play and are elaborated on further later in this chapter.
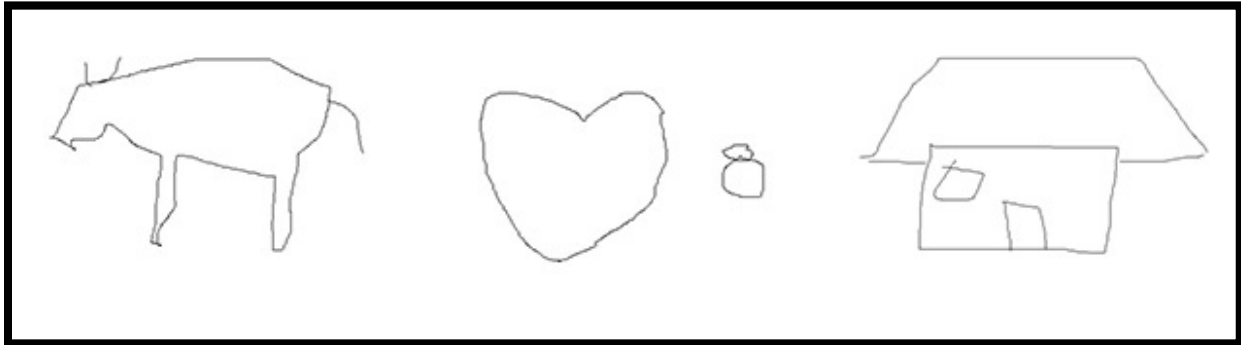
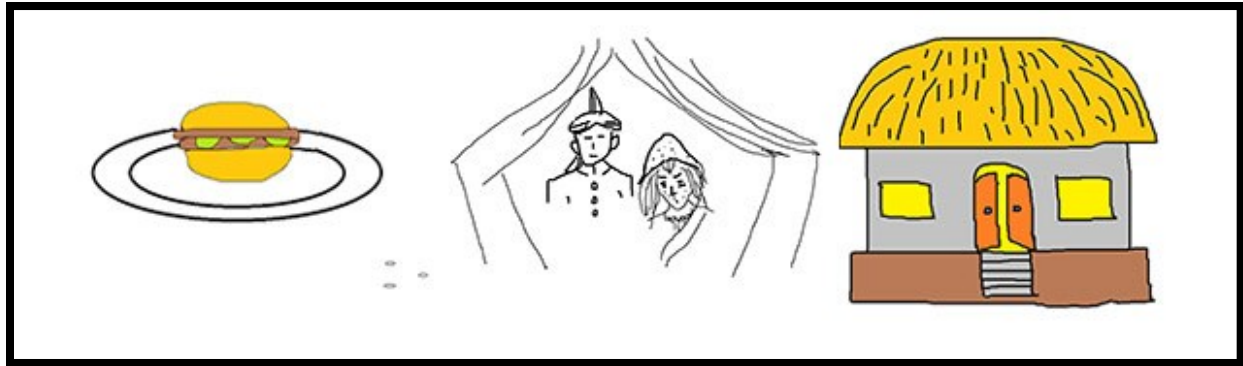| Participant 206 survey responses					
1) Female	2) 18-29	3) Bengali, 3	4) $30,000 – $39,999	5) education	6) College graduate
7) Bangladesh	8) Dhaka	9) 8	10) google, Alibaba, yahoo	11) mind	12) Yes, TLC

These simple line drawings are similar in style to many other submissions but are still able to convey a succinct representation. The drawing of the word *meal* shows what is thought to be a water buffalo (common in the region); the image was also tagged with the word *meat*, a common food staple. The image of *marriage* is a little harder to make out but was fairly common compared with other entries for the word, showing a heart and what appears to be a diamond engagement ring but may also be another type of ring. It is worth noting that Bangladesh is almost 90% Muslim, with the remaining practice being Hindu and a tiny fraction of "other," and that diamonds are not a typical jewelry as part of either tradition (see summary on marriage images below for more). The image for *home,* although a single detached house, as the majority are, is not as typical as most submissions as it has the elongated-overlapping roof. Still it is interesting to see this depiction, as Bangladesh is

extremely densely populated, and few people except for the wealthy or those living in rural

areas would live in this type of home.

Participant 307 survey responses					
1) Male	2) 30-39	3) Bengali, 2	4) Under $10,000	5) Private Service	6) College graduate
7) Bangladesh	8) Dhaka	9) 4	10) Clixsense.com, prothom-alo.com, google.com	11) memory	12) discovery channel

This participant's drawings are interesting for contradictory reasons; while he is

one of the few people who submitted traditional representations or localized drawings, he

has also submitted an iconic hamburger, readily linked with the West, fast food, and the

USA. The image of marriage appears to be a traditional or Muslim ceremony with local

dress, depicting a man and woman with curtains decorating the background and no other

symbols present. *Home* is also shown as what appears to be either a rural or traditional

home, perhaps not from the modern period. Although it is a single detached house, it deviates from the majority of more generic homes drawn, with its use of colour and detail to indicate the thatched roof. The use of colour from this participant, and in the study in general, is quite varied and interesting. It is curious as to why no colour was used for the word marriage, as the image for ceremonies found online depicts vibrant and colourful dress.

Here we see that while colour was used to create *meal* and *home*, *marriage* is only in black and white. Of his seven drawings only one other, comedy, used colour; the reasons for this and other participants' use of colour can only be speculative, but perhaps it is for emphasis, to indicate a preference, or simply for fun.

CHINA

Of all the Asian countries surveyed China is one of the more unique cases due to its recent history and strict government controls, which created what is known as the *Great Firewall of China*, a massive online surveillance system that monitors and filters what its Internet users are able to access in and outside of China based on certain communist party criteria. This means that Chinese users typically are not able to access many foreign websites, particularly news sites, in addition to Google and other mainstream search engines and some social media providers. This is done in an effort to control information, specifically any information that exposes negative views of the ruling party or the promotion of certain democratic reforms.

Due in part to this status, and considering localization, Baidu is the main search engine provider for China's Internet users and was used for the follow-up image search comparison.

Country Stats*

- Population: 1,367,485,388 (CIA, 2015)

- Median Age: 36.8 (CIA, 2015)

- Internet Connectivity: 641,601,070 users

- Internet Penetration: 46.03%

- Share of international users: 21.97%

- Main search Engine: http://www.baidu.com/

* (http://www.internetlivestats.com/internet-users)
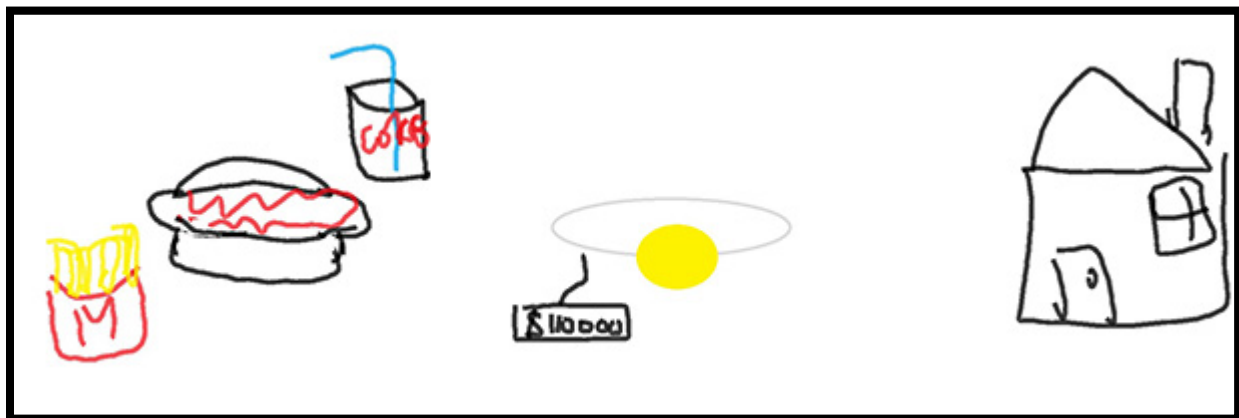
Participant 330 survey responses

1) Female	2) 18-29	3) Cantonese	4) Would rather not say	5) Sales	6) High school graduate
7) Chinese	8) Hong Kong	9) 4	10) Youtube	11) Life	12) Internet

In the above graphic, we see this female participant's representations of *meal*, *marriage*, and *home*. Although real brand names were actually underrepresented in the image data, in this instance for the word *meal* the participant has clearly indicated a McDonald's meal with French fries, Coke, and a skewed hamburger. McDonald's has been established in China since the 1990s (see infographic) and has over 2000 outlets today (see infographic), but this is still less than its neighbour Japan, the first Asian country to open a McDonald's, and having roughly 3100 restaurants (McDonald's, n.d.).

The image she drew for *marriage*, although not typical of the responses, is quite similar to other images drawn of engagement and/or wedding bands, and as the price tag indicates there is a clear monetary connection. Her drawing of *home* fits within the most typical response from a majority of participants, displaying a single detached house. In this case, the drawing also displays the additional element of a chimney, which also appears in nineteen other drawings.

Finally, her survey responses give us some clues as to possible sources of influence for her drawings. She indicates "life" as the source, which is quite broad, but her responses to her top websites being Youtube, as well as seeming to indicate she watches foreign TV online, provide us with some possible visual cultural flows of information.
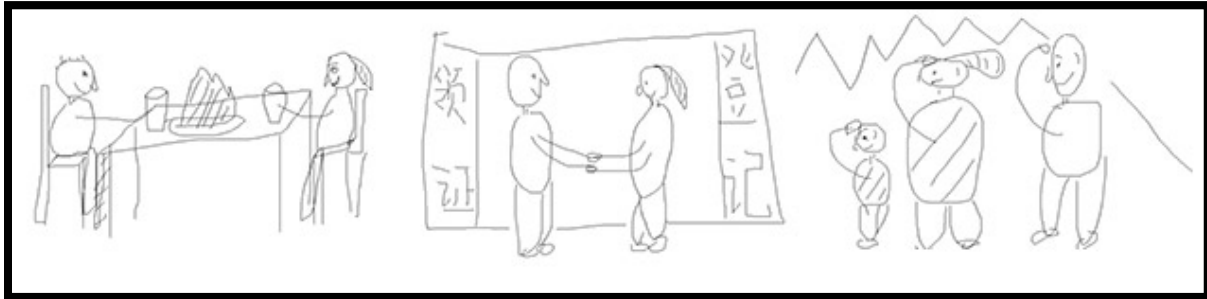
Participant 478 survey responses					
1) Male	2) 30-39	3) Chinese	4) $ 30,000 - $ 39,999	5) Procurement	6) College graduate
7) China	8) Beijing	9) 9	10) Baidu / microblogging / East Hongyun Action Network	11) Memory	12) unbiased

In the case of this male participant his responses are representative of a smaller portion of survey responses in that the image of *meal* has no specific cultural indicators, instead appearing more neutral. The image for *marriage*, although clearly making some sort of reference to local traditions, also does not present any icons either local or global beyond the Chinese characters making up the background. The last image is one type that only a handful of participants returned for the word *home*. As discussed elsewhere, 94/106 participants drew a single detached house in response to this word, leaving this image of a

family walking in countryside/mountains unique among the drawings while not providing any particular icons or tropes.

This participant's survey also reveals little as to drawing source/motivations, citing only local websites frequented and memory as the source for drawings. He does, however, spend more than the 9 hours a day online, compared with the average response of 8 hours.

HONG KONG

Hong Kong, like its larger ruling body China, is also a unique geo-political area due to its recent colonial past and "semi-autonomous" status within China. Unlike its larger counterpart, however, Hong Kong has much higher Internet participation (almost double) and a higher degree of media freedom (although as seen in recent protests this is tenuous). Another detail about Hong Kong is that although it has almost 90% Cantonese speakers, English is also a recognized official language (CIA, 2015), a vestige of its British past.

Google is the most used search engine, in contrast to China where it is blocked, indicating that users here potentially have access to more foreign media and news.

Country Stats

- Population: 7,141,106 (CIA, 2015)

- Median Age: 43.6 (CIA, 2015)

- Internet Connectivity: 5,751,357 users

- Internet Penetration: 79.22%

- Share of international users: 0.20%

- Main search Engine: http://www.google.com.hk/
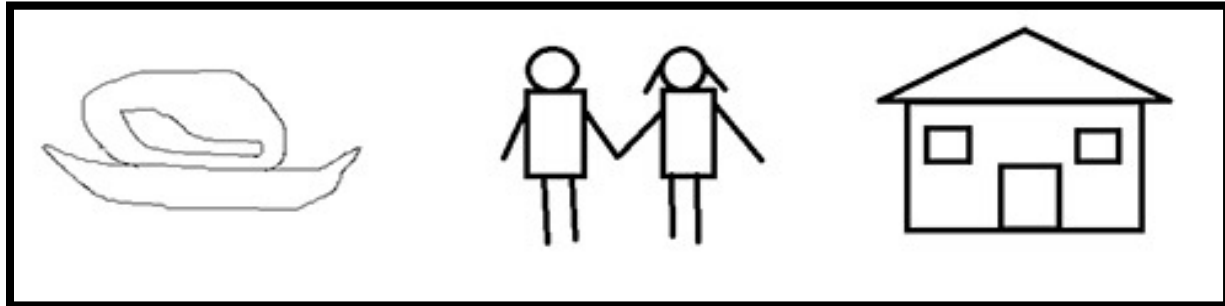
Participant 199 survey responses					
1) Male	2) 30-39	3) Chinese, 2	4) $50,000 – $74,999	5) technology	6) College graduate
7) Hong Kong	8) Kowloon	9) 5	10) yahoo, google	11) memory	12) yes

For the word *meal,* this image appears to show a steak (turned on its side in skewed perspective), indicated by the bone (or fat) in the middle, which corresponds to other participants' drawings of steaks. Of course, in an international city such as this, it is not hard to find a steak house, with dozens noted on a cursory Google Maps search. The image drawn for *marriage* is fairly neutral, simply depicting a male-female union with no other iconic or symbolic elements. The third image of *home* is typical of what most participants submitted, a single detached house with a square frame, door, symmetrical windows, and a

triangular roof. Again, like many Asian metropolitan areas, this type of home would be

difficult to see let alone come by with 30% of residents living in public rental apartments

(HK Gov.) and with a reputation of some of the most expensive housing the world.

Figure 17: Participant 338
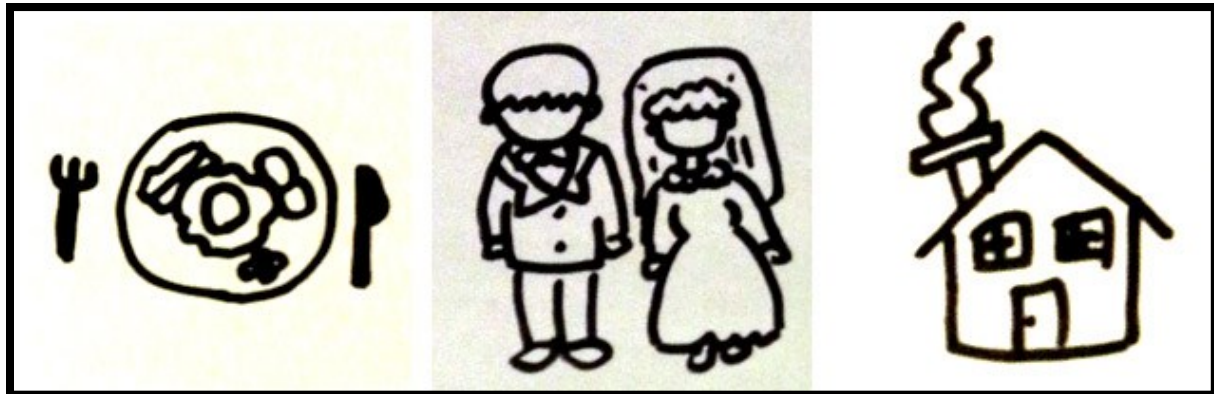
Participant 338 survey responses					
1) Female	2) 18-29	3) Cantonese, 3	4) $50,000 – $74,999	5) Graphic Designer	6) College graduate
7) Hong Kong	8) Toronto, Canada	9) 10	10) N/A	11) My interpretations of the terms given	12) Yes. Korean/Japanese Variety/Music shows and Japanese animation

This participant is one of only a handful who reported residing in a country other

than the one they stated they were from; being an expatriate may or may not have

influenced her drawings. The first drawing is certainly not typical of Cantonese cuisine and

appears to be a standard western breakfast plate with knives and forks in lieu of chopsticks, however, one might argue that this, too, could be a vestige of colonialism or a result of living in Canada, and this could also be said for the image drawn for *marriage*, displaying a traditional western tux and gown. The *home*, although similar to many houses found in Canadian towns and cities, doesn't quite resemble a typical Toronto home, most being tall and narrow. The chimney, which was one of many additional codes generated, adds an extra element not typically found in Asian homes.

This participant also reports watching Korean and Japanese shows, two powerful purveyors of economic and cultural clout in the region and may also be important sources of media influence, not just in Hong Kong but in many Asian countries. This prospect is discussed in more detail in the findings and discussion sections.

INDIA

One of the fastest growing Asian economies and populations is also well known for its burgeoning tech sector, which along with its multilingual workforce has been host to numerous business outsourcing and has produced a boom in software developers and technology service exports (CIA, 2015). Although Hindi is the dominant language spoken by almost half of the country, "English enjoys the status of subsidiary official language but is the most important language for national, political, and commercial communication" (CIA, 2015). This no doubt is an important factor in media influence. India has over 150 million homes with televisions, and several local TV stations have US parent companies such as

CNN (BBC, 2016) and are coupled with hundreds of local and foreign terrestrial/satellite broadcasters thousands of multilingual newspaper dailies, and favour many popular foreign networks such as Facebook, Google, Yahoo, and Youtube (BBC, 2016). These no doubt all contribute to the influences media may have on residents and possibly those that participated in this study.

Country Stats:

- Population: 1,251,695,584 (CIA, 2015)

- Median Age: 27.3 (CIA, 2015)

- Internet Connectivity: 462,124,989 users

- Internet Penetration: 19.19%

- Share of international users: 8.33%

- Main search Engine: www.google.co.in

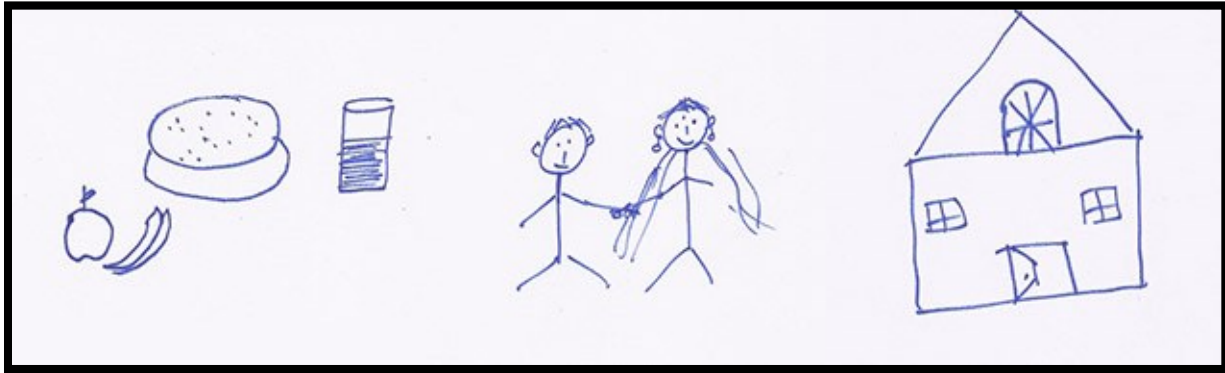**Figure 18: Participant 366**

Participant 366 survey responses

1) Male	2) 18-29	3) English, Hindi	4) Under $10,000	5) Student	6) Some college
7) India	8) New Delhi, India	9) 8	10) facebook.com, probux.com, twitter.com	11) memory	12) Yes. Shows like breaking bad and HIMYM

Like his counterparts in China and Bangladesh, this participant has also drawn a fast food hamburger for *meal* and judging by the colour scheme of the drink, the likelihood that it is McDonald's is high. India also has a large patronage for the golden arches, and it is reported to serve over 320 million people per year and contributed to a growing trend in people eating out (Kannan, 2014). The founder of McDonald's in India fell in love with the chain during a visit to Japan as a child, where he had his first milkshake. This image may even be featuring the Chicken Maharaja Burger, which replaced the Big Mac on India's fast-food menu (because cows are considered sacred, beef is not popular). The drawing for *marriage* also depicts western style dress, although a somewhat unconventional short sleeve shirt for the man. Again the *home* drawn here is not one you would likely find in most of the country, with its bountiful yard and forest in the background. This participant also does not apply colour equally to all drawings.

It should be noted that two recently popular American shows, a sitcom and crime drama, are watched by this participant.

Participant 360 survey responses					
1) Female	2) 30-39	3) Telugu. 3 languages	4) Under $10,000	5) self-employed	6) Postgraduate degree
7) Asian	8) India and Hyderabad	9) 5 hours	10) timesofindia.com, indiatimes.com,easy moviesindia.com,een adu.net	11) memory	12) Yes. Grey's anatomy, friends, one tree hill

This female participant's image for *meal* is an example of some of the more neutral drawings received in that the picture does not indicate any particular local or foreign foods or icons. The round objects could be pizza, poppadum, or a crudely drawn sandwich; the fruit and drink also provide no cultural context. *Marriage*, on the other hand, while imprecise, shows a couple, and it could be a veil or gown, but the dot on her forehead may also indicate a more traditional icon (Bindi). However, the home drawn cannot be rectified with typical local dwellings in India.

INDONESIA

Although television still rules the media in Indonesia, Internet use has grown dramatically and resides as the number two media source. The country is known for its active Twitter and Facebook social media users and being the largest Muslim country in the world as well has being a very diverse country with hundreds of local languages (BBC, 2016).

Country Stats[13]:

- Population: 255,993,674 (CIA, 2015)

- Median Age: 29.6 (CIA, 2015)

- Internet Connectivity: 53-78,000,000

- Internet Penetration: 20.4 % -30.5%

- Share of international users: 1.6%+

- Main search Engine: www.google.co.id

---

[13] Of the country profiles included in my study Indonesia was the only one for which conflicting data was found regarding the total number of Internet users and penetration rates. Therefore a range is given from the two most reliable sources, World Internet Statistics and Internet Live Stats. Unless specifically mentioned all other stats listed throughout this section came from Internet Live Stats.

Participant 387 survey responses					
1) Female	2) 30-39	3) Indonesia, 3 languages	4) $30,000 – $39,999	5) self-employed	6) College graduate
7) Indonesia	8) Malang	9) 8	10) yahoo, clixsense, facebook	11) my memory	12) I don't like watch TV.

A stylized hamburger and fries appear again to represent the word *meal*, the only difference here being a coffee cup/saucer, which usually doesn't accommodate this type of fast food but is available at places like McDonald's. For *marriage,* we see a well-drawn couple in western wedding garb complete with the bride's bouquet of flowers. The bouquet is yet another iconic element that could reinforce the westernized interpretation of this image. Last, we see the most common representation drawn for *home*, with the added icon of the chimney.

Participant 351 survey responses					
1) Male	2) 40-49	3) Indonesia	4) $ 10,000 - $ 19,999	5) self-employed	6) High school graduate
7) Sundanese	8) BANDUNG	9) 10	10) Google, Yahoo, CNN	11) Television	12) News

This participant's drawing of *meal* is one that appears to refer to more localized traditions indicating a bowl of soup being eaten with chopsticks and occurred less frequently in the image data. The image drawn for *marriage*, however, appears more ambiguous as no concrete icons or symbols are included to clearly indicate the type of ceremony it may reference. The groom appears to have a suit on, while the bride is wearing a gown and her head covering could be a veil or a hijab, indicating a Muslim rather than Christian style marriage. The representation of *home*, although in line with the most common submissions, also appears to have other stylized content; this may be some sort of local or other trend in design; however, it could also be due in part to the

limitations/options of a particular computer aided drawing software.

MALAYSIA

Although Malaysia is highly developed in South East Asia, the portion of its citizens who are online is still low, especially when compared with its neighbour, Singapore, with double the portion of its population having access to the Internet. This may in part be due to the government's known discomfort with a media that is more difficult to filter and control as traditional media are (BBC, 2016). This means filtering content from foreign sources both on and offline, as Malaysia has some of the strictest censorship laws in the world, although they probably still do not parallel China's. Like its neighbour, Indonesia, it also has a large Muslim population, making up roughly 60% of the country.

Country Stats:

- Population: 30,513,848 (CIA, 2015)

- Median Age: 27.9 (CIA, 2015)

- Internet Connectivity: 12,150,362 users

- Internet Penetration: 40.25%

- Share of international users: 0.42%

- Main search Engine: www.google.com.my

Participant 490 survey responses					
1) Female	2) 30-39	3) Chinese	4) $30,000 – $39,999	5) teacher	6) Postgraduate degree
7) Malaysia	8) Malaysia	9) 8	10) fb, neobux, twitter	11) memory	12) yes, drama

This female participant has also portrayed a hamburger for the word *meal*. This one, however, seems not to indicate fast food with the inclusion of the plate. The couple in the image of *marriage* does not seem dressed for a formal western wedding, with the man looking more like a prom date than a groom, and the woman's dress similar to more contemporary wedding dresses. *Home* again defers to the norm with no other elements included.

Participant 497 survey responses					
1) Male	2) 18-29	3) Mandarin, 4 languages	4) $20,000 – $29,999	5) Student	6) Postgraduate degree
7) Malaysia	8) Selangor	9) 8 hours	10) Facebook, Ayuwage, Google	11) books	12) CSI

What appears to be an animated piece of toast or slice of bread was drawn for *meal* by this male participant. While bread cannot be claimed as western, sliced bread of this kind certainly does not enjoy the popularity in Asia, a region largely preferring rice[14], as it does in the west. The drawing may also represent some unknown cartoon or advertising mascot. This image of *marriage* is more formal than the previous one and clearly shows western style dress on the bride and groom, along with the added bouquet. *Home*, here

---

[14] According to the IRDC, Asia produces and consumes 90% of the world's rice: http://www.idrc.ca/EN/Resources/Publications/Pages/ArticleDetails.aspx?PublicationID=565

with a skewed attempt at perspective, is also typical.

NEPAL

After a fairly turbulent history just before and after the turn of the century, Nepal became Asia's newest republic less than a decade ago. Much like its southern neighbour, Nepal is also about 80% Hindu. Local and English language newspapers are available, and Indian films are quite popular. Facebook and Twitter also enjoy popularity here (BBC, 2016).

Country Stats:

- Population: 31,551,305 (CIA, 2015)

- Median Age: 23.4 (CIA, 2015)

- Internet Connectivity: 3,411,948 users

- Internet Penetration: 12.13%

- Share of international users: 0.12%

- Main search Engine: www.google.com.np
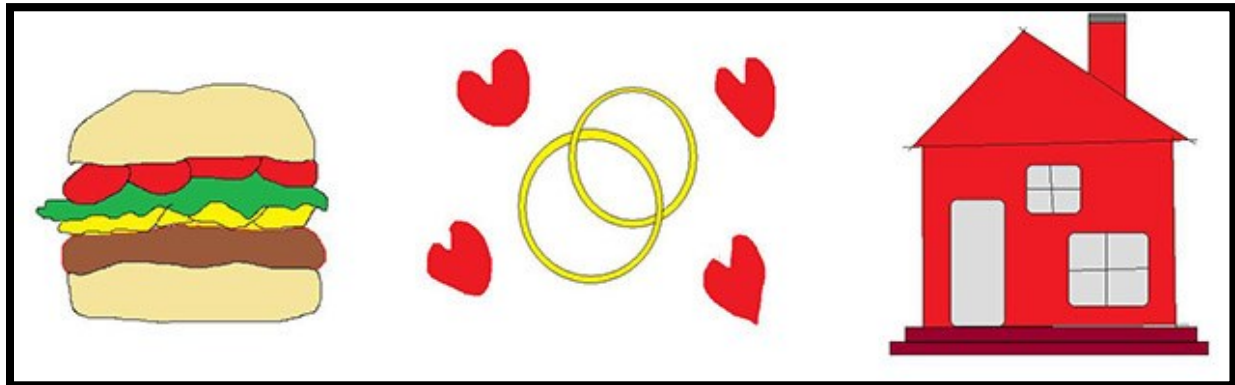
Participant 446 survey responses					
1) Male	2) 18-29	3) nepali,3	4) $40,000 – $49,999	5) self-employed	6) College graduate
7) Asian	8) Nepal	9) 10	10) google, - 175 -crowdflower, youtube	11) memory	12) Internet

A colourful burger once again represents this participant's *meal*. Interlocking rings adorned by hearts are used for the word *marriage*. The *home*, all in red, is typical, save for its unique monochromatic colour dominance.

Participant 377 survey responses					
1) Female	2) 18-29	3) I speak Nepali. I speak three languages.	4) Under $10,000	5) student	6) Some college
7) Nepal	8) Lalitpur	9) 6	10) pinterest, stumbleupon, funsubstance	11) TV	12) Yes, dramas, documentary, news, movies and music videos. English, Indian, and Korean shows.

Unlike the previous hamburger, this one seems to indicate a full fast food *meal* with fries and soft drink; a plate appears, but it could also indicate a tray. This image of *marriage* does not leave much to be questioned, with a cross splitting the couple who appear to be in western dress, and a subsidiary image indicates the finger for the wedding bands, another

element included. *Home* is typical and formed with only geometric shapes. Again we see colour playing a role but not in the image of marriage. This participant also reports watching various foreign TV programs, including English, Indian, and Korean ones, which may well be sources of media influence.

PAKISTAN*

Compared to its South Asian counterparts Pakistan has the lowest portion of its population online and is cited as having little media freedom (BBC, 2016). Television dominates, and the state tightly controls access to and filters media in the public sphere, which blocks popular social media sites like Facebook, Youtube, and Twitter. Pakistan is almost entirely Muslim at just under 97% of the population.

Country Stats:

- Population: 199,085,847 (CIA, 2015)

- Median Age: 23 (CIA, 2015)

- Internet Connectivity: 20,073,929 users

- Internet Penetration: 10.84%

- Share of international users: 0.69%

- Main search Engine: www.google.com.pk
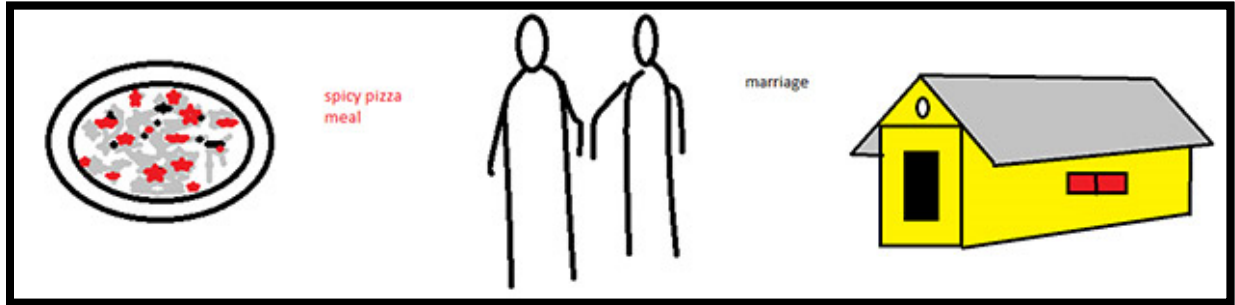
Participant 412 survey responses					
1) Male	2) 18-29	3) Urdu	4) Under $10,000	5) Government	6) College graduate
7) Asian	8) Pakistan	9) 4	10) Facebook, Neo Bux, Crowdflower	11) Memory	12) Big Bang Theory, Office, Reign

Certainly not a typical South Asian dish, pizza was clearly drawn (and labelled) for the image of *meal*. A quick online search of local listings shows that not only are American pizza chains present in all major cities, one local business listed on Google Maps, Pakistan even calls itself "Pizza Hat." The drawing for *marriage* is rather ambiguous and does not seem to denote any particular cultural or regional elements. *Home*, while very similar to most entries, does differ in its elongated structure, which may or may not relate to local building styles. There are three western TV programs consumed by this participant.

*There were no female participants from this country.

PHILIPPINES

This island nation is also unique among the Asian countries surveyed due to its Spanish colonization and later American occupation. The Philippines is also a minority in Asia, being a majority Christian country with 83% of its people being Catholic. This undoubtedly has had deep influences upon its language, government, and media (BBC, 2016). The country has a young and booming population who, like many other neighbouring countries, enjoys the most popular social media networks.

Country Stats:

- Population: 100,998,376 (CIA, 2015)

- Median Age: 23.2 (CIA, 2015)

- Internet Connectivity: 39,470,845 users

- Internet Penetration: 39.43%

- Share of international users: 1.35%

- Main search Engine: www.google.com.ph

Figure 27: Participant 156
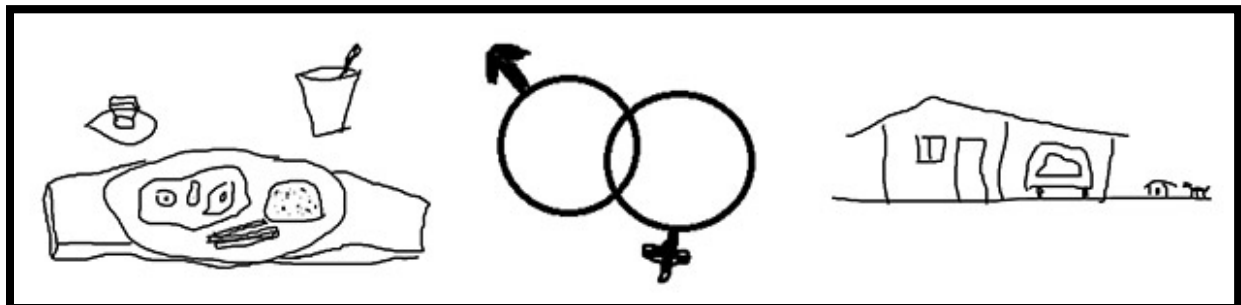
Participant 156 survey responses					
1) Female	2) 30-39	3) English, Tagalog, Malay, Indon, Ilocano,5	4) Under $10,000	5) none	6) College graduate
7) Philippines	8) Malaysia	9) 22	10) crowdflower, clixsense, gmail	11) my own	12) yes

The image for *meal* is somewhat abstract and appears as miscellaneous items with a mug, possibly breakfast. For *marriage*, although not easily made out, a couple is facing a priest in a church or chapel with a cross between them. This is not surprising when compared to the other countries in the survey due to the country's colonial-Catholic ties. *Home*, while similar, is less descriptive than the others and has the added elements of a family, which was also included in a few other submissions.

Figure 28: Participant 217

Participant 217 survey responses

1) Male	2) 18-29	3) Filipino, two	4) $10,000 – $19,999	5) engineer	6) College graduate
7) Philippines	8) Calamba City	9) 4	10)ClixSense.com, olx.com.ph, facebook.com	11)memory	12)yes, suspense series, movies

Again this *meal* appears to be a western style breakfast with bacon, eggs, and toast. *Marriage* is simply indicated as a union between a male and female; the circles interlocking may also symbolize rings. Lastly, the image for *home* looks like something from the North American eighties with its carport and even includes a doghouse.

SINGAPORE*

With over four million Internet users and three-quarters of them on Facebook, Singapore is no stranger to the online world. It is, despite its strict media controls, a media hub in the region (BBC, 2016). Along with Mandarin, Tamil and Malay-English are also official languages and spoken by 30% of the country. As in many other Asian countries, Buddhism is widely practiced by its citizens, but there are also large minorities of Christians and Muslims as well.

Country Stats:

- Population: 5,674,472 (CIA, 2015)

- Median Age: 34 (CIA, 2015)

- Internet Connectivity: 4,453,859 users

- Internet Penetration: 80.73%

- Share of international users: 0.15%

- Main search Engine: www.google.com.sg

Figure 29: Participant 261

Participant 261 survey responses					
1) Male	2) 30-39	3) Mandarin, 3	5) Hospitality	4) Would rather not say	6) Postgraduate degree
7) Singapore	8) The Netherlands, Rotterdam	9) 4	10) tweakers.net, nos.nl, nu.nl	11) Memory	12) Yes, documentaries / colleges

It should be noted that this participant is one of two from Asia who is not a resident but an expatriate in another country—in this case, The Netherlands. Without knowing the

extent of his life abroad, it cannot be determined how this coloured his perspective in terms of the drawings and other media influences that may play roles here.

The first image for *meal* seems to indicate a hybridized plate with a mixture of fish, chicken, vegetables, and a large leaf (common in Singapore/Asian cuisine) accompanied by a knife and fork. The triple-decker cake, an icon of contemporary western weddings, drawn for *marriage* is adorned with a bride and groom. The *home*, while typical, is interesting because it would be unusual to find this design in either Singapore or the Netherlands (at least in cities) with its tall, famously narrow homes.

*There were no female participants from this country.

SRI LANKA

Although its portion of Internet users is low, Sri Lanka continues to grow as the country moves away from its recent civil war. Like its neighbour, India, it also has colonial connections but differs in its religious makeup, with a majority 70% being Buddhist but also having visible minorities of Hindu, Muslim, and Christian. The government runs/owns many of the media outlets, which broadcast in Sinhala, Tamil, and English, and also filters or blocks independent news sites (BBC, 2016).

Country Stats:

- Population: 22,053,488 (CIA, 2015)

- Median Age: 32.1 (CIA, 2015)

- Internet Connectivity: 4,267,507 users

- Penetration: 19.9%

- Share of international users: 0.15%

- Main search Engine: www.google.co.lk

Figure 30: Participant 233

Participant 233 survey responses					
1) Male	2) 40-49	3) Sinhala, two languages	4) $10,000 – $19,999	5) self-employed	6) Trade/Technical/Vocational training
7) Sri Lanka	8) Kadawata city	9) more than 12 hours	10) www.thegoldenquotes.com, www.sxc.hu,www.ebay.com	11) memory	12) elen show

For the image of *meal* we have what appears to be a glass of wine accompanied by a plate of miscellaneous food. For the drawing of *marriage* we have what seems to be western style wedding dress; however, it appears to be unique to some other temporal period. *Home* is again reminiscent of North American 1980s style housing, with what appears to be a segmented bay window.

*There were no female participants from this country.

TAIWAN

In comparison to its big brother, China, Taiwan is not only a highly media saturated and technologically innovative country, it is also considered one of the freest media environments (BBC, 2016). With a high penetration of Internet use and over 85% of its population with cable TV, multi-media influences abound. A mix of Taoism and Buddhism is practiced by 93% of the country, with a small minority of less than 5% Christian.

- Population: 23,415,126 (CIA, 2015)

- Median Age: 39.7 (CIA, 2015)

- Internet Connectivity: 18,687,942 users

- Internet Penetration: 80%

- Share of international users: N/A*

- Main search Engine: www.tw.yahoo.com

Figure 31: Participant 443
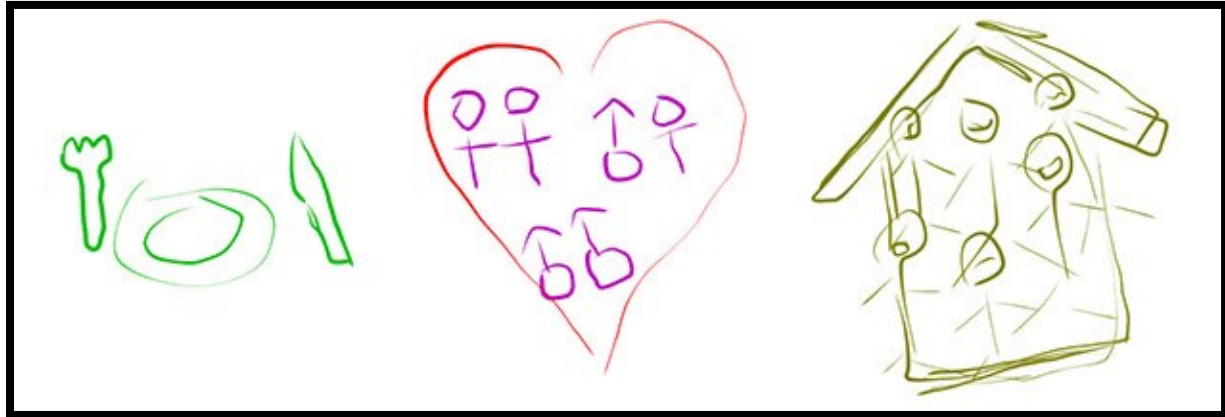
Participant 443 survey responses					
1) Female	2) 18-29	3) Chinese. 2 languages	4) $30,000 – $39,999	5) Student	6) Some college
7) Taiwan	8) Taiwan	9) 8	10) Google, Youtube, ClickTrackProfit	11) Culture Image	12) Youtube

All three of these participants' images are rather simple and lean slightly towards the abstract. However, it is interesting to note the knife and fork drawn in a country where the chopstick is king as well as the open interpretation of *marriage* being of any two couplings regardless of sex. *Home* can be seen as a single detached dwelling with a family juxtaposed into its structure.
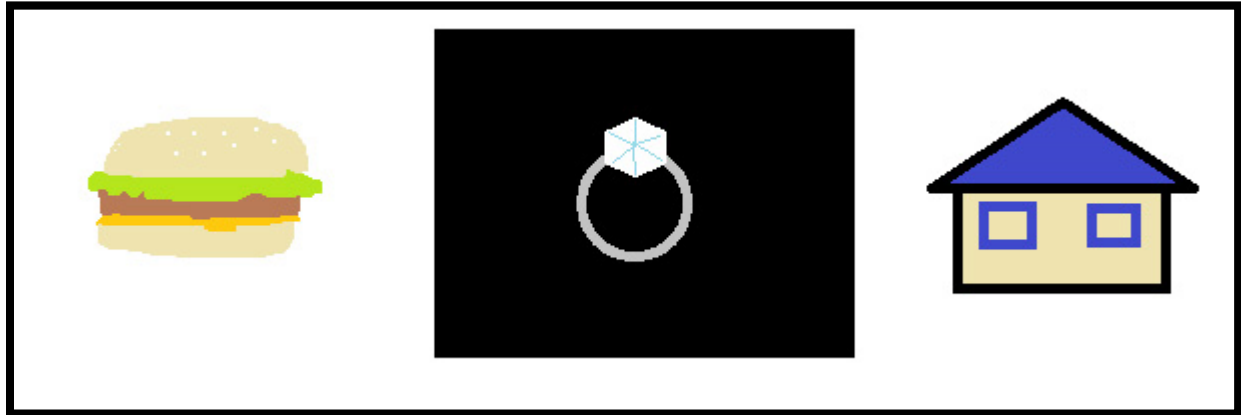
Participant 413 survey responses					
1) Male	2) 18-29	3) Chinese	4) $ 10,000 – $ 19,999	5) Engineer	6) College graduate
7) China	8) Taiwan	9) 5	10) google, yahoo, clixsense	11) feeling	12) yes

Here the burger is once again embraced in this drawing for *meal*. A solitary diamond ring represents the word *marriage*, and *home* is typical, except for the lack of a door.

THAILAND*

The only Asian country to fully evade colonial rule has largely been controlled by the military since the monarchy stepped away from power before WWII; the government and military continue to control much of the media (BBC, 2016). Facebook is the number one social media, but hundreds of sites were blocked after the last military coup, so media access/influence is strictly orchestrated (BBC, 2016). Thailand is majority and officially

Buddhist (94%), with a few visible minority religions of less than 5%. English as a second language is also prominent among the elite (CIA, 2015) in this popular tourist destination.

- Population: 67,976,405 (CIA, 2015)

- Median Age: 36.7 (CIA, 2015)

- Internet Connectivity: 19,386,154 users

- Internet Penetration: 28.84%

- Share of international users: 0.66%

- Main search Engine: www.google.co.th

Figure 33: Participant 500

Participant 500 survey responses					
1) Male	2) 18-29	3) Thai	4) Under $10,000	5) education	6) College graduate

7) Thailand	8) Bangkok	9) 9 hours	10) neobux, facebook, youtube	11) memory	12) yes, I like International Music.

This participant's submission also falls within the more common representations of fast food *meal*, western style *marriage,* and single detached *home*.

*There were no female participants from this country.

VIETNAM

Similar to its communist neighbour to the north, Vietnam and its media are also tightly controlled by its one-party government; bloggers are forbidden to promote and share developing news stories, and other "incongruous" subjects and sites like Facebook are routinely blocked (BBC, 2016).

- Population: 94,348,835 (CIA, 2015)

- Median Age: 29.6 (CIA, 2015)

- Internet Connectivity: 39,772,424 users

- Internet Penetration: 42.97%

- Share of international users: 1.36%

- Main search Engine: www.google.com.vn
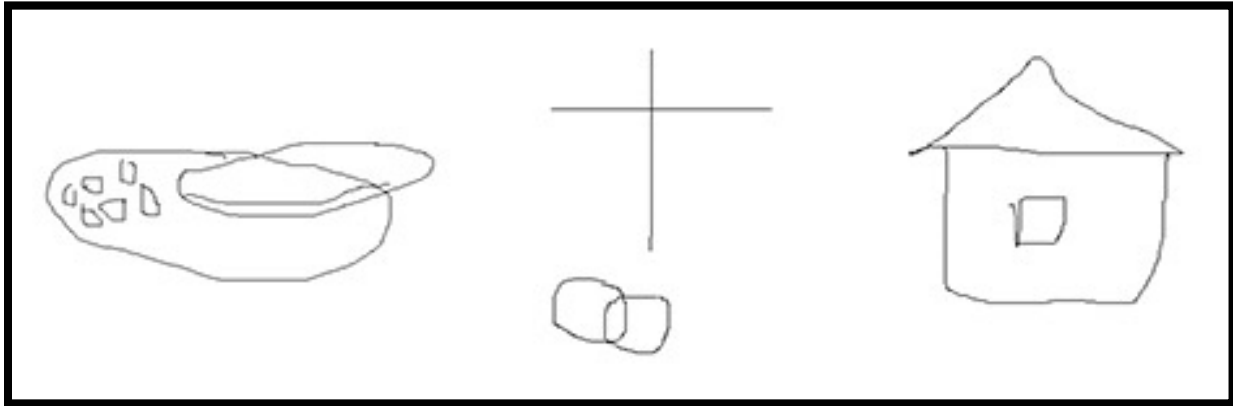
Participant 202 survey responses					
1) Male	2) 18-29	3) Vietnamese, English	4) Under $10,000	5) Teacher	6) College graduate
7) Vietnam	8) Ho Chi Minh city	9) 4	10) yahoo, google, BBC	11) memory	12) On the Internet, Music show

The first image of the word *meal* cannot readily be made out; it appears to be a slab of meat with vegetables. The image of *marriage* is much clearer, with a Christian cross overlooking a pair of wedding bands. *Home* is typical.

Participant 197 survey responses					
1) Female	2) 18-29	3) Vietnamese, 4	4) Under $10,000	5) employee	6) College graduate
7) Vietnam	8) Vietnam, Ha Noi	9) 6 -8 hours	10) youtube.com, Facebook.com, google.com	11) Memory, Books, culture	12) Yes. I watch cooking shows, master chef, films . . .

Here we have one of the fewer images that show a localized *meal*: a bowl of noodles with chopsticks and sides. *Marriage* again is very much a western styled bride and groom dress. *Home* follows the norm but has the added elements of the sun and the family, perhaps providing a more complete vision of the word.

The Findings

The surveys and image data were analyzed using NVivo 10 and visual content

analysis, meaning that iterative stages of codes were applied, checked for credibility, and

then the frequency of these codes counted and cross-referenced with the open answers and

demographics from the textual survey. One of the most significant visual discoveries I made

among the drawings collected was that of the representations of marriage, a pivotal life-

event, provided by participants from non-western, Asian countries. The images depicted

show an overwhelming prevalence of western style dress, icons, and/or ceremonies, chiefly

in the form of tuxedos and white wedding gowns. This supports earlier findings (McMaster,

2012, 2015) that suggested a homogenization of visual imagery could be occurring,

spurred by globalization and hastened by the Internet. The other words also showed a

similar frequency of non-localized iconography in their representations. For example, in

my 2012 pilot study, there were three images from women in three different countries who

all drew a shoe crushing a bug underfoot for the word "oppressive" (McMaster, 2012). It

should be reiterated that despite collecting surveys from 61 countries, the main analysis

was limited to South, South East, and East Asia, which resulted in an analysis of 106

participants' visual surveys. What follows is a general breakdown of the three main images

analyzed and the most common findings from the drawings across various demographics.

What I don't mention here is when frequencies of occurrence within the drawings

are relatively stable across a particular demographic—i.e., if both males and females drew

cakes equally for the words *marriage* or *meal*—I would not discuss it here. In contrast, I do discuss frequencies that are transregional because similarities between countries are important in making connections between distinct cultural milieus and flows of information and possible influence.

ANALYSIS OF THE WORD *MEAL*

There were some notable differences between male and female representations of the word *meal*. Most interesting were the codes *fast-food*, such as hamburgers, drawn by women almost four times as frequently as men, while males represented non-western foods in kind. Another observation was that for the codes *Coke*, *McDonald's*, *sandwich*, and *pizza*, only the 18-29 age group drew these elements in their images. Again income did not hold any significant discoveries, and this is in part due to not having as many participants in the middle- to upper-income brackets, so it is difficult to make any comparisons. The word *wine* was drawn only four times, two of which were in the two lowest income brackets, while the other two were the highest income bracket.

Figure 36: Hamburgers represented across different countries
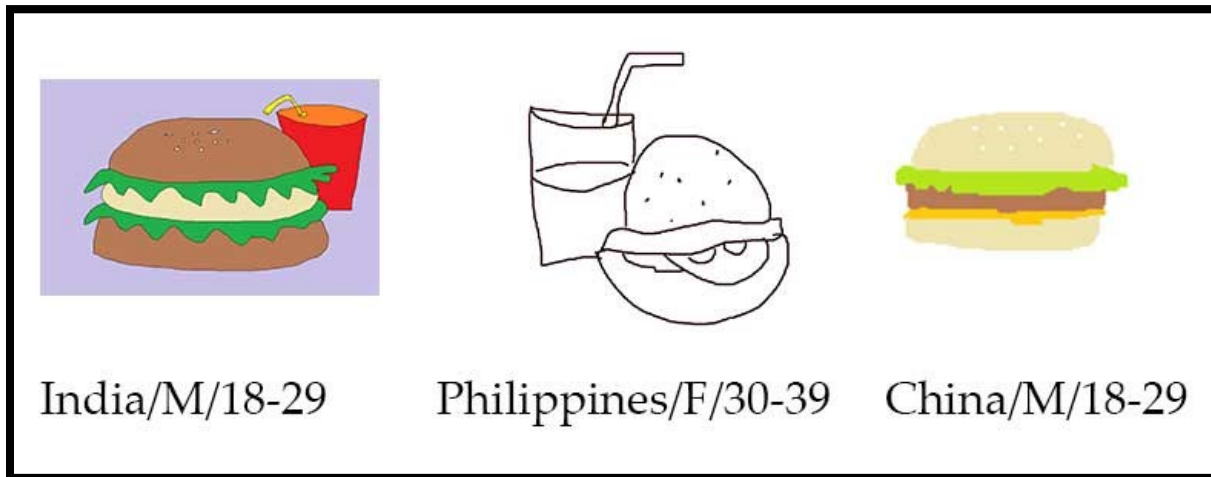
The word *meal* as drawn in different countries revealed hamburgers to be drawn more often in Nepal and Indonesia, whereas Vietnam drew none; other countries drew a hamburger roughly 20% of the time. Fast food was also drawn at the same rate in Nepal, with much lower frequency elsewhere. The drawing of a plate setting (single plate with knives/forks) was most frequent in Indonesia and Sri Lanka with India close behind. This is significant because most of the countries listed do not set individual plates with knives and forks; instead, many dishes are usually set up in a communal fashion with smaller plates for each person. Chopsticks or no utensils (meals are eaten by hand) are also more common.

Although only a few brands like McDonald's and Coke were drawn, it is worthy of note due to the connection with the west; Coke was drawn only in India and China, whereas McDonald's symbols were drawn in India, Nepal, and China.

ANALYSIS OF THE WORD *MARRIAGE*

The most significant codes attributed with the images drawn of the word *marriage* were associated with the code *Western wedding* (see examples below), with almost half of all participants drawing this type of image. This is one of the more important discoveries, as all participants came from non-western countries, all within South, Southeast, and East Asia. Also important are those drawings that depicted a traditional or localized wedding. Only three drawings did this, and they were all done by men, somewhat reflecting what Rose (2012) would deem "invisible opposites," those visual representations that are underrepresented or not present at all. These types of outlying representations are discussed later at the end of this section.

Figure 37: Prominent representations of marriage
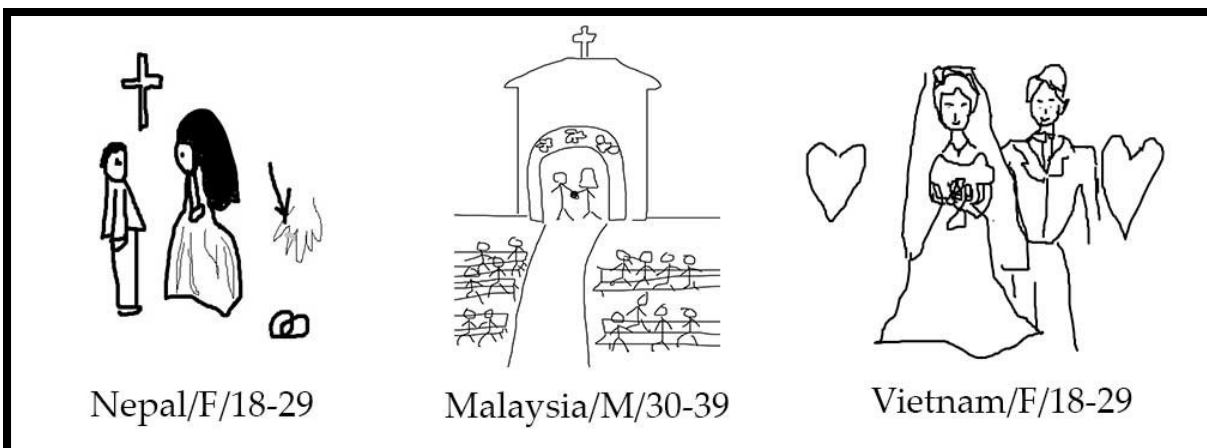
Both males and females drew western representations of marriage with similar frequency; however, it is worth mentioning that male participants were the only ones to

draw non-western or localized images. Another difference was that women generally drew rings as the whole image or part of their image more than twice as often as men did.

For the most part, age did not seem to have as many distinctions; however, only age groups 18-29 and 30-39 drew rings in their images, which may indicate popularity or a trend among those generations. The depiction of *love* by the drawing of a heart symbol was done mostly by age groups 18-29 and 30-39, with only one from older groups 50-64. These last two instances might indicate some changing views of the icons inherent in the practice of marriage, as younger generations appear to give more significance to *love* and the symbolism of *rings*. Overall, most representations of *marriage*, where figures are present, also seem to indicate unions of men and women, with only a few ambiguous examples that could be considered neutral with no gender depicted.

In terms of regional representations, the countries whose participants more frequently depicted western weddings were Indonesia, Sri Lanka, Vietnam, and Malaysia. Malaysia is also the only country in which participants did not draw rings, while Nepal drew rings most frequently. Christian symbols were underrepresented in the data overall but most frequently appeared in drawings from Vietnam followed by Nepal and Malaysia. The countries with the most frequent representations of *Tuxedo and Dress* were Indonesia, Sri Lanka, and Malaysia. The *love* symbol was represented by participants in all countries, except for Hong Kong.

To provide additional context on diamond rings in particular, it is worth mentioning that even in western cultures the diamond ring was not a fixture of engagement or marriage traditions for the general public before WWII (Francis-Tan and

Mialon, 2015). According to Ghilani (2012), through a series of deceitful advertising campaigns during the last world war, people were encouraged to buy "fighting diamonds" with the false notion that they would be aiding the war effort. Otnes (2003) states that this began just before the war with vigorous advertising campaigns in the 1930s that helped transform diamonds rings from a luxury item to staple commodity of the western marriage tradition. Otnes' (2003) editorial and selected readings, "explore how advertising defines lifestyle choices and shapes consumers' perceptions of goods, services, and experiences in constructing these lifestyles" (p. 6). This an important idea, equating the consumption of a commodity with romanticism and lifestyle, that I examine further in the discussion section.

ANALYSIS OF THE WORD *HOME*

Of all drawing prompts, the word *home* elicited the most homogenous results, with a single detached house represented across demographic categories and countries, meaning 90% of all drawings were of this type. The similarities across all categories were striking, although individual drawings did differentiate themselves in the number of details added to enhance the scene of the detached house. Examples of enhancements included gardens, chimneys, fences, colours, backgrounds, trees, people, and weather. These elements also generated more codes, and higher code totals assigned can indicate drawings and participant cases of particular interest, regardless of stylistic or artistic competence.
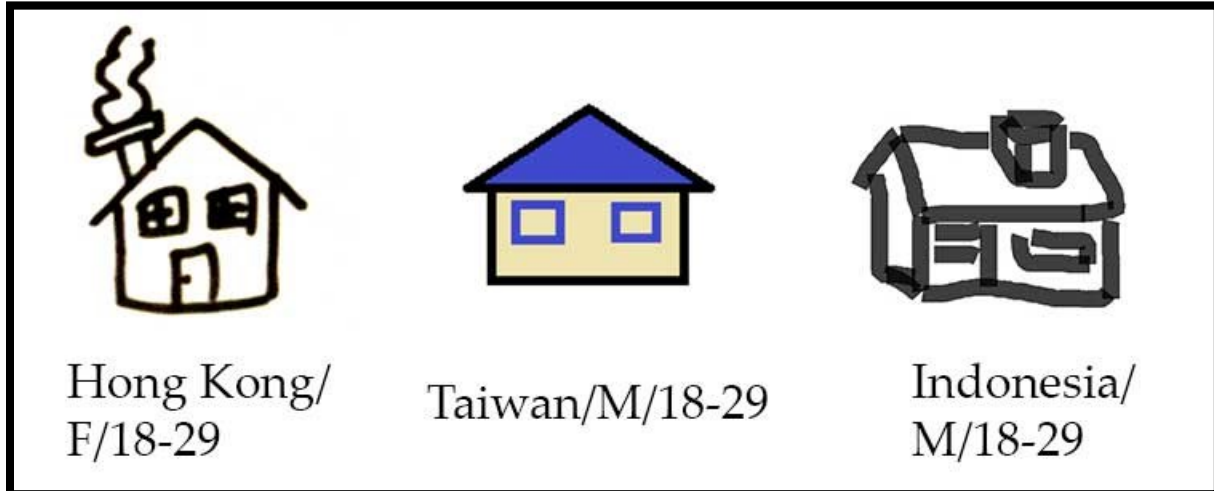
There were two countries that deviated slightly from the majority, those being

Vietnam and China (at around70%). In lieu of a detached house, the drawings were of

families or "other" elements (abstract, not easily categorized). The only other significant

deviation was those participants who drew "A-type homes" (atypical), meaning that the

homes were different from the majority of representations and appeared to depict a

localized style of home design or layout. Of these representations, Vietnamese participants

drew their detached homes as localized (3/18) or differing from majority most frequently,

while the other participants who drew similarly localized homes were Indian [15] (1/17),

Nepali (1/5) and Bangladeshi (2/5).

---

[15] A fairly recent article from the Times of India found that typical homes of Indians were roughly 500 sq. ft. in both urban and rural areas; this size equates to a 1 bedroom urban Canadian apartment. These sizes are in stark contrast with what most participants drew, all featuring single detached homes, many featuring yards and other "extras." Perusing their website further, many stories are carried from the US and abroad, particularly those of celebrities, providing yet another facet of how information and influence may flow.

These last examples are significant not just for deviating from the normal

representation but by providing localized cultural imprints or traditional representations

in their drawings, which could be seen as "sites of resistance" (Rose, 2012).

OUTLIERS

As mentioned earlier, the most frequent observations or codes should not always be

valued above all others, including those that are not present (Rose, 2012).

Figure 39: Outlier representations
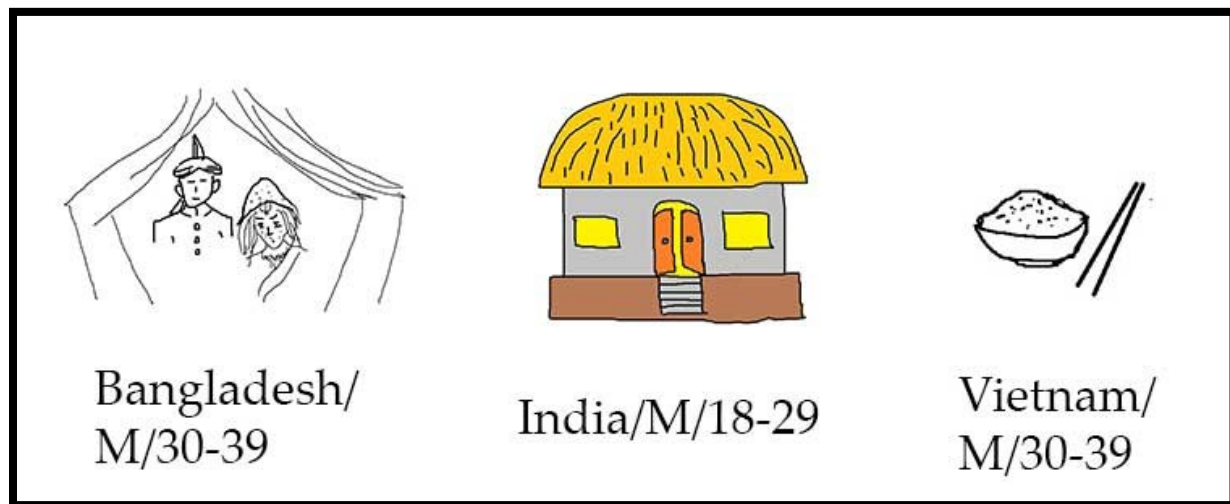
It is simpler to speculate as to why participants from non-western countries may

have chosen to draw images containing many non-localized or hybridized/western

iconography—exposure to TV, food chains, or commercials both on and offline—but for

this small handful of images (under 10%) the reasons may be more elusive. Was it a

conscious decision to represent something familiar and ignore other ideas, or, as many

remarked, did they come from memory or was it the first image that came to mind?

In the next section, I look at search engines as possible sources or, rather, links to

sources for some of the imagery drawn by participants before moving on to deeper

considerations of the Internet as a whole.

Localized Image Search Results

One avenue of exploration of possible image sources or influence, given that my

study took place entirely online, was to search the Web in each of the participants'

countries to see if there were any similarities or links to the images they drew or if there

were any exact matches. Using Google Translate, as I did for the original survey, I

translated each word into the major language of each country. Then, based upon market

research stats (some represented in Figure 39), I used the top local search engine to search

for each word and examine the results. Google is the predominant engine of choice across

Asia, with Yahoo (Taiwan) and Baidu (China) as the exceptions. Korea's preferred search

engine is also worth noting here, as its own homegrown provider Naver dominates with a

massive share over all other competitors. This may also serve to explain why it was hard to

recruit participants from Korea, as crowdsourcing companies may find it difficult to tap

into their market without the use of Google ads. "Search engines such as Google and social

networks like Facebook have algorithms designed to adapt to our activity and present

information based on our browsing history" (Castro, 2015, p. 2). This would mean that if

my participants watched a foreign program—for example, a Korean pop music show—

when they later search for a dramatic show to watch, a Korean one would likely come up in

results. While I cannot recreate what any of my participants might see if they conducted

similar searches, using these localized browsers does give me a sense of the types of

imagery out there that intersects the words from my survey and could stand as possible

signposts for indirect influences whose traces are shown in the results.

In order to view search results that would be similar to what my participants would

be able to access if they entered the same terms, I used localized versions of search engines.

As Castro (2014) points out, "An individual's physical location, the IP addresses' geographic

location, determines what we have access to online" (p. 406). What this meant for my

search is that when Google or Yahoo was used, the URL selected was the local one— i.e.,

www.google.co.in for India and www.google.com.vn for Vietnam. I also tested disguising

my computer's IP address by using randomized local IP addresses via the Hola VPN

plugin[16]. This plugin, once installed on Google Chrome, disguises browsers allowing

websites to assume you are viewing from specifically selected countries and provides you

with localized results. However, there were no changes in image results when using a

localized IP compared with a Canadian one. The reason for this, I speculate, is that Google

assumes that a user's browser language combined with country-specific URLs demands

localized results from that country and does not base results on IP address as is the normal

setting.

---

[16] Remember that VPNs (Virtual Private Networks) are used to assign a different physical IP address to your computer to make it appear as if it is in another location. The VPN "Hola" used here is a smaller snippet of software that is essentially "plugged in" or installed in an Internet browser to provide additional functionality, similar to an app installed on a smart phone. Hola no longer offers this feature for Google search results.

Figure 40: Top Search Engines in Asia (Rank Higher)
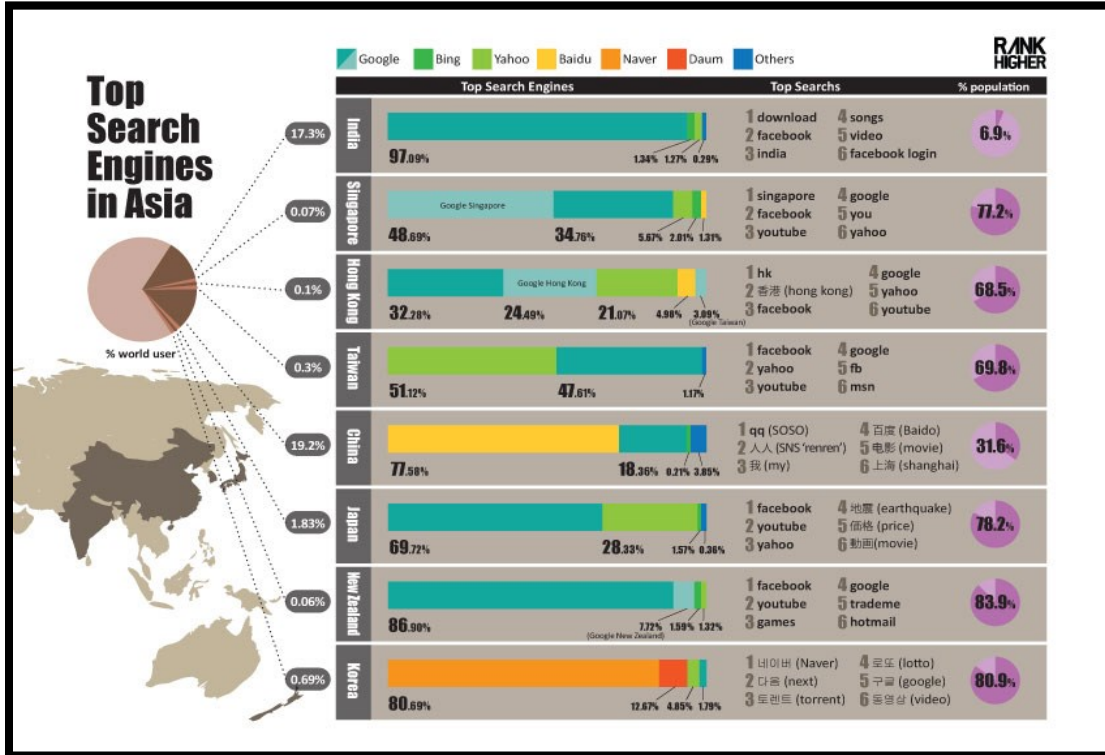
Using each country's local or localized search engine, I entered each of the three words, translated into the local languages. I took screen shots for the first page results, which meant limiting the view to the first several rows visible on my screen, without scrolling down further. Occasionally the words entered did not turn up the expected results. For example, in the case of Google Nepal the image results showed various events, the military, and other seemingly unrelated images for the word *meal*, so I used the next suggested translation (Google usually suggests several alternatives), which then displayed the anticipated images of different foods. Overall these image searches turned up mostly localized results for each of the words, with a few notable exceptions. What follows are brief summaries of what turned up on each search for each word. Some country's results

also have notes of what typical images were found and provide additional information on those.

Country/ Search Engine	Meal	Marriage	Home	Notes
Bangladesh: google.com.bd	All images were of local meals/ foods.	All images appeared to be traditional/local.	Quite a few mansions, some single detached homes, and a few traditional/local style homes	-
China[17]: **baidu.com**	Typical Chinese fare with the exception of one meal with knives and forks	Korean actors in western wedding dress, several cartoons of traditional marriage dress and the remainder western along with a few couple images/ large diamond ring cartoon	Many images of Chinese characters (in Mandarin), interiors of well-furnished homes, caricature of a Disney-styled western home	-
Hong Kong: hk.yahoo.com	Mostly images of typical dishes (buffets, round a la carte table), two images of hello kitty and two images of McDonald's (one Big Mac), sushi,	About 15 images of western marriage, several traditional ones, diamond rings	Ten cartoons of western style homes (1 local), half a dozen old style traditional to modern local style homes, remainder are	-

---

[17] Unlike other search engines Baidu delivered an eclectic image results page in contrast to the more homogenous results of other engines. Baidu also provided an image, although not directly connected to participants' drawings, which ties into what is thought to be an important visual cultural source from the region and is discussed in detail in the section that follows.

	and a glass of wine		Very modern homes including a few western ones with the rest being of mixed styles or concept homes	
India[18]: google.co.in	All traditional curries, naan, and dal with one individual dish having a knife and fork present, the only other exception being a white family sitting down for a western meal	All traditional/local styles with colourful dress	Eight homes are clearly images from the US/Canada, two cartoons feature a California style home, the rest are mixed style concept images	See *Footnote 17*
Indonesia: google.co.id	Odd results compared to other countries. Many advertising stock images of white people eating sandwiches, pasta, burgers, etc. Four images of traditional meal scenarios (eating with	Only a handful appear to feature local marriage; the remainder are hands, rings, flowers, and/or western style dress.	All but one are concept images.	Four of 23 images feature wedding bands (3/4 are gold); 3 images feature western hands, rings, flowers, and tuxedos;

---

[18] In stark contrast to other regional results such as Vietnamese ones, all images using Google India and Hindi returned pictures of traditional Indian(Hindu) weddings objects and clothing; bright colours, silk clothes, flower wreaths worn around the neck, henna paint, numerous bangles and multiple rings and head jewelry. Although the word marriage in Marathi did turn up some different image results they were consistent in content to the Hindi results, the notable difference being far more drawings/cartoons than in the Hindi results. The same could also be said for many of the results in Tamil however the traditional/local attire could be considered much more modest than the other search results with more solid colours. Although not appearing on the first page results as you scroll further down the results begin to show more men wearing western suits and more western plain clothes in addition to a single Tamil couple(assumedly) in a tuxedo and white wedding gown. The image is of a famous actress Meera Jasmin Thiruvananthapuram arranged marriage to Anil John Taittac (who is apparently Christian).

	hands) and one staged, looking more like a western table setting; a cartoon wearing traditional clothes but wielding a knife/fork, and similar western cartoons.			6 images show western ceremonies clearly; 1 features a Chinese couple (Malaysian Chinese); 4 images appear to show traditional/local marriage ceremonies
Malaysia: google.com.my	Very little difference from Indonesian results, not surprising since they share basically the same language.	Marriage: all traditional except 1 western style.	Design or concept homes similar to Indonesia's results	-
Nepal: google.com.np	Almost identical results as in India's	All appear to be traditional style.	Home results are similar to Malay/Indonesian ones; stock images (western homes)	-
Pakistan: google.com.pk	Very few photos of actual food, odd mix of images, French fries, the same white family from India (stock image)	Marriage: mostly traditional marriage images along with some images of groups/crowds	Odd mix of seemingly random images with a few western and local ones	-
Philippines: google.com.ph	Mostly local, with some food guide and stock images	Mostly western ones with western people, some pregnant cartoons, some traditional	Mixture of western local and homes from other places (3 traditional, 1 African hut)	-

Singapore: google.com.sg	Lots of stock images of food, pyramids, and pagodas	Mostly western, some stock images seen in China, couples, etc.	Shares images of cartoon western homes, characters	-
Sri Lanka: **google.lk**	Some western (6), some local, mostly stock images, 3 hands joining in marriage are shown, 1 is signing a marriage certificate, 3 images feature local/traditional dress,	Mixture of local, western, and other images		Fourteen of 27 images feature text on an image or only text (5), 1 image features the world's largest woman (from the USA), leads to an article about her preparing to lose weight for marriage
Taiwan: **tw.yahoo.com**	Burger, KFC, Hello Kitty, stock images, many local dishes	Lots of western images, a couple of traditional, rings, couples, etc.	Shared similar images with China's results, etc.	-
Thailand: **google.co.th**	All typical / local fare	Lots of western images, couple of traditional, Korean western image	All concept designs or stock images of homes	-
Vietnam: **google.com.vn**	One western family, stock images of Asian families, mostly local foods	No traditional, 1 in common with China results, all western, rings etc., images depict hand holding, silhouettes, and casually dressed couples (1 young/1 old), 8/25 images feature hands and rings, 6 feature tuxedos and dresses, and 2 others feature a flower as a ring and a couple wearing	All concept style homes except for one older, country-style, traditional home	Six of 25 images are clearly westernized, showing white couples/people/characters,

		rings while handcuffed, 1 image features a priest, 3 images feature only gold wedding bands, 4 images feature Asian couples (1 is a line drawing), 4 images emphasize "love" using hearts (2 photos/ 2 cartoons), 4 images show traditional western bouquets and 1 wedding figurine		

Cross Referenced Images

One discovery I made with this last image search was that the #1 image result (see Appendix D-14B, top left) for the word *marriage* using Vietnam's Google.com.vn was drawn by several participants (#211-India, #218-Spain, #269- India, and #375- India). The drawing is a cartoon of a male and female in a tux and dress with two hearts floating above or between them. Oddly this image did not appear in Vietnam's participant drawings, instead appearing most frequently in India's participant drawings, despite the fact that the image did not appear in Indian Google.co.in search results.
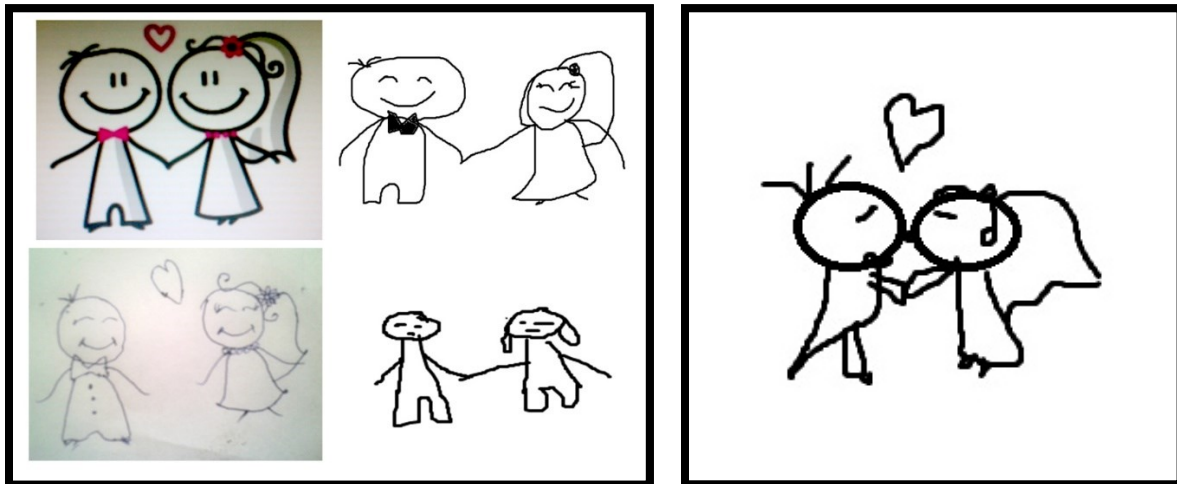
Figure 42: (right) Image from participant #187 (India)

Looking at Figure 41 (left) we see a copy of the original image circulating online (top left) followed by three other copies of varying skill. On the right, we see another image found to belong to a series that includes the image on the left and appears to be from a stock image film strip of cartoon characters getting married. The source for the first image result (cartoon couple) comes from a Vietnamese blog (on BlogSpot, a Google entity) and is featured in several articles on Christian marital issues of discord. The second image of a white couple in a hammock also leads to a Vietnamese-based website vtc.vn, a news site based in Hanoi; the article is about 10 tips on a good marriage. Another image in the first row of a white couple on their wedding day is also from Vietnam and comes from *lamsao.com*, a general interest and lifestyle website that features many images of white

women as well. Most, if not all, sites in this image search appear to originate from Vietnam and are in Vietnamese, making what is represented even more curious.

In addition to these more direct connections, there are also traces of icons commonly represented in participants' drawings such as burgers, rings, bouquet-flowers, western style marriage dress, and western style homes along with what appears to be a large number of "stock images," an industry which Frosh (2003) describes as full of boundary blurring visuals that showcase the privileged circulation of cultural products and lack the diversity to reflect the world in which they circulate.

Initially I thought that traces in the search results across national and regional image queries would be difficult to find and even more difficult to connect directly to my participants' drawings. However, as this last instance indicates, there are some significant connections between the pervasiveness of the Internet (Castells, 2010a) and popularity of particular representations of marriage, which I discuss further in the following sections.

Key Discoveries

Sources of Influence

The questionnaire portion of the survey is where I attempted to tease out some of the possible influences or explanations for the sources of participants' imagery by asking questions about what websites they frequented, if they watched foreign TV shows, and what they thought was the source for the image they drew. The most obvious source being their use of and interactions on the Internet, and even their participation on crowdsourcing

sites that ask them to explore non-localized websites. This may have an impact that reaches beyond the simple tasks they are completing. Most participants listed at least one microtasking site in their "top three," and other popular Internet locales were Google, Facebook, Youtube, Yahoo, and Twitter. The average number of hours reportedly spent online was about eight each day. Growing access to the Internet and an almost unfathomable repository of still and moving imagery from news and television programming to personal and public home video is exemplified in sites like Youtube and could act as a system of informal education, establishing, reinforcing, and transforming social models via the production, consumption, and circulation of imagery.

Foreign TV program consumption is something I also considered to be a mitigating source for the images drawn, with 77% reporting that they watched shows from other countries. Although this includes programs from other non-western countries, there were many more examples (sports, drama, news, and comedy) provided that are currently aired in North America and Britain. Unfortunately, this survey did not ask how often these shows were consumed. However, as many shows mentioned were or are currently series, it is quite possible participants watch with some regularity. The participants were not asked which media they viewed these shows on, but three answered, "*Yes . . . the Internet*" and since all of these participants are frequent or daily users of the Internet, many of the shows mentioned could easily have been viewed online. However, as I discuss briefly later, in smaller regions, pirating shows and movies by copying to DVD and VCD is also common in some countries (Kuotsu, 2013).

Looking at the "Tag Cloud" above we see the most frequently appearing words from the last three questions in the survey as larger and central in the cloud. Tag clouds are a method of quickly and easily visualizing textual data and giving us a broad overview of the dominant words used by displaying word size as a product of frequency (Funk and Castro, 2015). The survey data shows that (85/106) participants answered, "Yes . . . "(featured prominently above) to having consumed foreign TV programming. This is a very high percentage of participants, and the most frequently cited genres consumed were sports, news, and documentary. However, directly above "Yes" we see the most common answer to question 11, "What is the source for the images you drew?" to which the majority responded "Memory." There were also 10 instances where either alone or in combination

with memory participants added "TV" as a source for their drawings but did not specify any particular origin. This was also the case with "Web or Internet," which was also reported four times, along with "culture/cultural," reported nine times. So although most cited their memory as the source for their drawing imagery, this does not preclude media influences, and these mentions, although infrequent, given the nature of their participation online make for some very interesting links to popular media as direct or indirect sources or influences for their drawings. As Castells remarks, "The media, and particularly audiovisual media in our culture, are indeed the basic material of communication processes. We live in a media environment, and most of our symbolic stimuli come from the media" (2010a, p.364). It is my view that some of this symbolic stimuli seeps into the collective consciousness and can gradually manifest itself in material practices or, in the case of my participants, representations of material cultural practice.

In terms of TV consumption abroad Castells (2010a) points to the globalization of satellite broadcasting and the rise in worldwide popularity of networks such as CNN (noted by my participants), in particular the remarks of its penetration into the Asian market, specifically mentioning India as a prime example which is touched on later in this section. And although there were many recognizable and current western programs and media outlets mentioned by participants—such as CNN, *Discovery*, *Big Bang Theory*, Hollywood, *Game of Thrones*, and *How I met Your Mother*—specific sources within these programs are

myriad, and this does not include advertisements that may have also been consumed which could also be potent sources of visual cultural imagery and influence[19].

Drawing from Neil Postman's work, Castells (2010a) claims that society chooses its preferred media by the path of least resistance, or by the minimum effort required to produce a desired effect of contentment. For many people, particularly those who grew up with TV as the staple of visual media consumption at home, cable and satellite programming seem a strong contender for popular visual cultural exposure. However, as TV represented the death of the logocentric "Gutenberg Galaxy" (p. 360), so does the Internet represent the death of a central media of the home (where access exists). Castells states that only a few years after its release on the mass market, the TV became a cultural epicenter of society, in part due to its seductive method of sensory simulation of reality: "The predominant pattern of behavior around the world seems to be that in urban societies media consumption is the second largest category of activity after work, and certainly the predominant activity at home" (2010a, p. 362).

In the past, the TV set dominated this domain, and although TVs still reign, their connection to the world of news, shows, and music are mediated less and less by cable and satellite as smart TVs connect to the Internet and personal media such as laptops and tablets replace more communal methods of consumption. In the same way the TV dealt a blow to Gutenberg Galaxy, so does the Internet chip away at the traditional notions of television. Bowman (2013), makes reference to a similar condition he deems the "post-

---

[19] As I often noticed when consuming channels such as CNN, Discovery, and BBC Knowledge during my years in Korea, the commercials that accompanied most of the programs were also for foreign products and services; for example, foreign airlines and hotels as well as other foreign channels.

cinematic age," where new media have risen and supplanted traditional ones (via the Internet). "In other words, the rise of the post-cinematic context has transformed our lives in ways related to our day-to-day and moment-to-moment experience" (p. 44). Just as literature after film could never be the same, so, too, has cinema changed in the Internet age (Bowman, 2013), and the same also applies to traditional television. Of course this is not equally prevalent across the Asian countries surveyed, with varying rates of Internet penetration, however access to the Internet in Asia has increased over 1300% just this century and continues to grow in leaps and bounds with almost half of Asia now getting online (Internet World Statistics, 2015).

The Internet and Technology

Considering the influence of transnational companies and the popularity of their content abroad, it is not difficult to imagine that in addition to buying prized slots on network and satellite broadcasts, media entities would also seek to tip the scales in their favour when it comes to delivering content online. This has come to be known as the "net neutrality" debate: "Net neutrality is the principle that all data on the Internet should be treated equally, rather than allowing an Internet service provider (ISP) to pick and choose which content and content providers to which it will offer preferential treatment" (Osenga, 2013, p. 30). What this means for everyday users of the Internet is that big corporations such as Facebook and Google can pay ISPs additional sums in order to receive better bandwidth allocations and higher speed connections to their sites and affiliates, while

others (such as their smaller competitors) are stuck in the "Internet slow lane." This, of course, influences consumer behaviours in an age of rapid technological advancements, where expectations are to receive information seamlessly and instantaneously. Although this debate gives the appearance of being largely settled, at least in the US and Canada, one could easily envision what over a decade of deregulated Internet might look like, particularly in countries already known for having less than open policies regarding access to information online, as mentioned briefly in the "cases by country" section. I will not discuss the finer points of Net neutrality here; it is, however, worth noting, as I look at the Internet and the roles that nations and large economic blocks play in determining what is being delivered, how it is received and by whom.

The principle concerns regarding the Internet are the impact it is having on cultural change and the possible tensions it creates between local and global ways of knowing through mediation and delivery of information. However as Hassan (2004) contends, those tensions may not be so easy to find:

> Within the society, 'difference' in the form of real and substantive alternatives in worldview, in the meanings derived from symbols and practices, are increasingly hard to find. The spaces of difference that produce cultural diversity are being colonized by the onward march of informationization much more rapidly and comprehensively than traditional mass media was able to (p. 51).

This *difference* in the form of visual cultural representation was indeed difficult to find in my analysis, especially when looking at the results for the word *home*. Still it is represented in the very instances of traditional and local images that were provided and

does create both tension and resistance. Whether this is in part driven by technological interventions as Bowman (2013) claims, transforming the "cultural landscape in ways that have knock on (albeit unpredictable) effects on other forms of cultural production and reception" (p. 46), it must certainly have an effect on the types and pervasiveness of information sources, traditional or not. Beaudoin (2008) states that:

> "In addition to search engines and almost endless networks and layers of information position online news sites as an ideal tool for active learning. With little text on the main page of an online newspaper, news users need to click on links to access information in the form of text, image, audio and video" (p. 459).

Therefore, Internet news sites offer multimodal and non-linear forms of knowledge acquisition. Describing a National Geographic study, Beaudoin points out that people in the US who had accessed the Internet more recently fared much better in terms of recognizing global geography than those who do not access the Internet regularly (2008).

However, the information we access when browsing news sites or even watching a news channel such as CNN may not be what it seems. *Native advertising*, or content marketing as it is also known, is a new form of advertising that weaves brand promotion seamlessly into the content of the media it is being produced for (Poggi, 2016). It does this by creating faux news or telling a story and meshing the product between the storylines. An example of this is Subaru sponsoring and creating segments for CNN's "Heroes" series (Poggi, 2016), which honors everyday people for doing heroic things; it is certainly not hard to imagine the impact associating a car company with people considered heroic can do for brand image. On the surface, this may seem innocuous, but that is only if it is clear

that what is being presented is not a story but a commercial. As political and social satirist John Oliver (2014) states, native advertising is a very lucrative business that is changing the face of media and further blurring the lines between traditional journalism and commercial content as institutions like *Time* create entirely new departments dedicated to creating this camouflaged and invasive "native content." Oliver goes on to point out that research has shown that half of people surveyed cannot tell the difference between a native ad and traditional content (2014). With big names like Google already invested in native ad delivery models, it means these so-called "stories" could show up just about anywhere. As Hassan (2004) claims, the wider the scope and influence these digital networks have, the more deeply they encompass what we do which catalyzes its effects, in turn increasing the velocity and impact of its content. Hassan has provided us with a good example that links well to the image results from my study:

> Like the example of the halal meat-filled McHappy Meal in Kuala Lumpur, it is inevitable that Malaysians who are increasingly exposed to the global culture through the Internet, cable TV and so on will one day wonder if they may be missing out on something "cool" in the "Two 100% beef patties, sesame seed bun, American cheese slice, Big Mac sauce, lettuce, pickles, onions, salt and pepper" that comprise the global Big Mac (2004, p. 53).

Figure 44: Burgers drawn by Asian participants
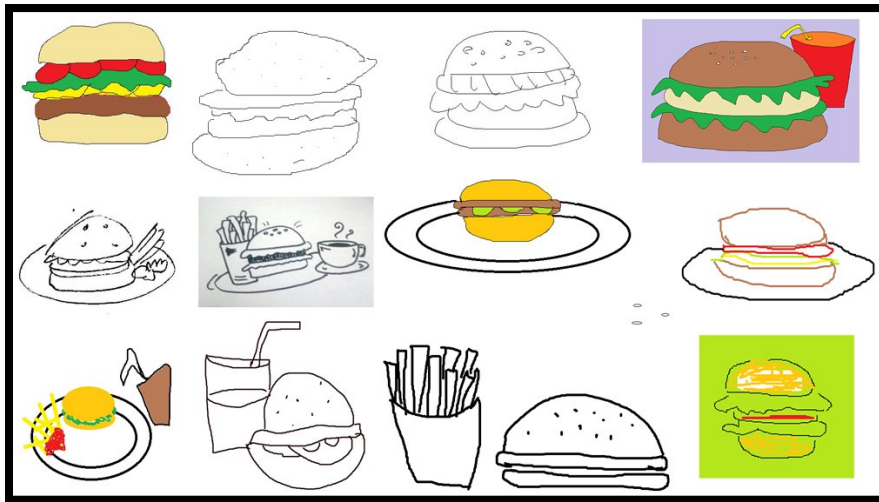
In the case of my Malaysian participant (#490), it is likely that this curiosity may have already gotten the better of her, along with quite a few other participants from neighbouring countries (see Figure 43). This could be for any number of reasons and from a variety of sources, but it may also be linked to what Castells (2010a) refers to as "the *pervasiveness of effects of new technologies*. Because information is an integral part of all human activity, all processes of our individual and collective existence are directly shaped (although certainly not determined) by the new technological medium." (p. 70). Here Castells indicates the impact that new technologies have in shaping not only our individual identities but our collective cultures and industries, and although seemingly benign, the appearance of foreign fast food industries does have an impact on at least the perception of concepts like *meal*, if only to provide an alternative vision of what a meal can look like. Of course, in order for people to know what a "happy meal" is, they must first be introduced to the idea, which points us to the influence multinational corporations can have transregionally, and Castells (2010a) claims that the greater the degree of globalization a

given company has, the greater the potential exists for connections inside national politics and business. He also posited the importance of these multinationals in creating and maintaining these globalized networks of information and labour, which without advertising may not be sustainable as the two have become precipitously interconnected in recent years.

In considering how these networks link together, Castells asks, "What glues together these networks? Are they purely instrumental, accidental alliances? It may be so for particular networks, but the networking form of organization must have a cultural dimension of its own" (p. 214). Therefore, in order to have global clout, these multinationals must become embedded within particular cultural milieus to become and remain economically viable and sustain the network links created. This is similar to the example of the big Korean oligarchies, or *chaebol*, (discussed later), which Castells (2010b) touches on as drivers of global cultural products. However, those cultures that are not for sale or have no cultural products to commoditize will be obliterated according to Hassan (2004). Delving further into what this cultural component may be, Castells describes a *multifaceted virtual culture* that comprises many values, social milieus, projects, and a "patchwork of experiences and interests" that circulate both through the minds of those networked and the network itself, constantly changing those minds as they transform and adapt the network itself (2010a, p. 215).

In a passage also emphasized by Rose (2012), Couldry (2009) speaks of transformations due to new digital technologies and the Internet:

The digitalization of media contents and the normalization in many societies of fast Internet access, whether from fixed points or via mobile devices, means that, in principle, every point in space is connected through mediated communication to every other point; and that connection is always potentially two-way, since either end may be sender or receiver (or both). As a result, one-way senders – specialist media producers/distributors –and one-way receivers – 'mere' consumers or audience members – become less common in their pure form, while hybrid sender/receivers, in some form at least, become more common (p. 438).

To what extent these roles described by Couldry (2009) are embodied by my participants is unknown. However, looking at their Top 3 most frequented or favorite websites reveals that foreign websites are much more popular or used more frequently than local sites, with over 210 foreign (or foreign owned) sites reported versus less than 60 localized websites. This concentrated flow of attention is noted by Webster (2014), who cites that the top websites account for the vast majority of user traffic and attention online, which is exemplified among my participants. Looking more closely at the most popular sites cited by participants, we see Google, Youtube, Facebook, Yahoo, and Microtasking sites dominate, reported in 190 instances. The dominance of these big names can clearly be seen in a comprehensive map of The Internet in Figure 45.

Figure 45 Screenshot of "The Internet Map" (http://internet-map.net/)

Not surprisingly these sites are intensely, possibly entirely, advertisement driven. They collect users' data and surfing habits in order to personalize ads for each individual, making these platforms very popular among some of the USA's largest corporations. Webster (2014) claims that advertisers are adept at exploiting audiences by "orchestrating influence" (p. 8). This is done through making one aware of a product, then creating affective needs or desires, ending with a call to action in which a click, purchase, or consumption occurs. Advertising funds much of global media today; in fact, over $1 billion was spent by Facebook advertisers alone (Edwards, 2012), and globally $500 billion is spent by advertisers worldwide, with the US leading the pack and the focus intensifying on Asia and Latin America (Webster, 2014). Not surprisingly this advertising clout and the fact that the largest corporations hail from the US contributes tremendously to the languages used to disseminate information, influencing user choices and decisions, again narrowing the scope of access online by promoting their language of origin, English.

The supremacy of these corporate interests embedded in and integral to the online world can create what Castells (2010b) describes as "social challenges against patterns of domination in the network society generally take the form of constructing autonomous identities" (p. 387). Yet how autonomous can identity construction be with so many powerful agencies vying for individual and societal attention and consumption? As Barney (2004) states, the online construction of identity is not constrained by the physicality of place or race, and the self is "no longer held hostage to their history than it is to their name, body or whereabouts" (p. 153), but this does not exclude being held hostage to supposed "manufactured desires" (Sturken & Cartwright, 2001). For my participants, this means they have the choice to project themselves to the online world as they please, associate with whom they please, and engage in virtual behaviours, leniencies, and practices that may be far from their everyday lives. In some cases, these may just be simple indulgences and guilty pleasures, but they may also indicate deeper manifestations of real life goals and aspirations or a desire to distance themselves from being cast based on the accidental circumstances of their birth and upbringing. Barney (2004) goes on to remark that observers of this situation comment that it brings increased freedoms and escape from prejudice, persecution, and societally imposed identity. "In the network society, rather than simply receiving an identity that 'naturalizes' or 'essentializes' arbitrary classifications of ethno-racial origin, geographic location and sexed bodies, people are technologically enabled to control the conditions of their own representation/identity" (Barney, 2004, p. 153). But what they do not have control over is how these choices may be presented and delivered to them by the various agencies that sponsor and regulate content.

It is not, however, Barney's (2004) or my contention that this is what is actually happening. Online anonymity and freedom is temporary and fleeting, and one must eventually return to the material world. It is with this return to everyday life that I was concerned, and I sought to investigate how people "integrate network technologies into their repertoire of communicative and social activity more generally, and many [researchers] have concentrated specifically on the question of whether and how Internet use affects patterns of social and community engagement both online and offline" (Barney, 2004, p. 162). Specifically, how does the use of, participation in, and consumption of online technologies and services influence visual cultural preference and/or practice, seeping out of the virtual or figurative worlds of the Internet and television to exert power over everyday life?

In the case of my participants could the consumption of, for example, dramatic programming from Korea that often features hybridized western style weddings gradually create similar trends in countries where it is consumed? Castells posits that "our societies are constituted by the interaction between the 'net' and the 'self,' between the network society and the power of identity" (2010b, p. 388). But what is the "self" actually interacting with on the "net"? As discussed earlier when researching the most prominent images turned up by localized search engines in participants' countries, similar imagery can be found among the rows of imagery that reflects what my participants drew, and some of these images can then be traced back to their country of origin, as in the following examples from Thailand and China. These examples provide possible leads as to the kinds of interactions that may occur.

Figure 46: Images from Thailand's Google search of the word *marriage*

In this screenshot taken from www.horoworld.com in Figure 45, the bottom image turned up in the image search from www.google.co.th and was one among many images of western style marriage. Following the image led to this website about horoscopes, with this particular page discussing the importance of choosing a wedding theme purporting these Korean stars as prime examples of what to emulate.

Tracing these images even further, we find that they originated from the Korean dramas *Mary Stayed out All Night* and *Love Rain*, respectively.

Although some might consider this image result as coincidental and question its possible impact, if we look at the top right-hand corner of this figure we can see that this website has followers in the hundreds of thousands across the social media platforms of Facebook, Twitter, and Google (all popular among my participants). This means that seemingly benign popular visual culture could have a widespread hub of attention in which to establish its brand of social-cultural visual presence, later leading to imitation, adaptation, and eventual hybridization of similar new trends in visual cultural material

practices.

In Figure 46 the photo appears in image searches from www.baidu.com, again one of many images of a western style marriage that far outnumber any visual representations of traditional local wedding ceremonies or marriage customs. Following the image to its source brought me to

www.gexing.com , an online youth community forum and personal interest site, and the headline above this and accompanying images reads, "*I want to have such a marriage, even if it is a fairy-tale . . .*" (translation). The image when traced further again reveals that it came from Korea, this time from a faux reality show called *We Got Married*, which pairs up Korean celebrities to simulate what it might be like if they got married. This points back to considerations of aspirational components embedded in imagery and begs consideration of to what extent these image protagonists help to shape the hearts and minds of those who choose to consume, fantasize, and share them, and to what degree could these aspirational dreams be satiated by manifesting themselves in actual practice?

The examples above and my own positionality and experiences from Korea and the region come back into play as some tentative connections are made between the drawing surveys, the search engine results, and a pop culture trend in the region called *Hallyu* or the

Korean Wave, which I discuss later.

Role of Language

English dominates the language of the Internet with a 30% share (Young, n.d.). As Graham discovered, studying Wikipedia's regional and multilingual articles, "The broad pattern is that some countries largely define themselves in their own languages, and others appear to be largely defined from outside" (Graham, 2014, para. 4). In short, dominant powers have articles written in their own language, whereas developing nations predominantly have articles about their own countries in English or in an adjacent regional power's language. As Graham and Zook (2013) found, the languages that make up information shape content and what is offered, in turn regulating who will access it: "These uneven linguistic geographies, in turn, influence the many ways in which place is enacted and brought into being" (p. 95).

As mentioned previously in the Participant Profile section, many participants answered the survey questions in English, despite the website automatically translating the survey into their browser's language and despite not indicating English was a primary language. After some investigation, I found that this was most likely due to participants using an English language browser. Another feature of the website that was built to host my online survey was the use of Google Analytics, which tracks visitor traffic to any website and gives detailed anonymous information on the visitor's location, time spent on site, whether or not they use a computer or mobile device to access the site, and the language of

the browser they used to view the site. Looking at this last detail reveals a remarkable finding.

Table 17: Language of browser visits to the survey

Country	Visits in English	Visits in Local/Other Language
India	129	2
Vietnam	38	**39**
Indonesia	54	**13**
Malaysia	33	1
Nepal	33	0
Pakistan	45	0
Bangladesh	39	0
Philippines	39	3
Thailand	16	4
Sri Lanka	19	0
Taiwan	1	**14**
China	1	**13**
Hong Kong	2	6
Singapore	1	0
Total	**450**	**89**

Table 16 (above) displays results that are rather surprising, with English language browsers dominating and guiding access to my survey. Out of the 14 countries listed, only

three had significant local language usage (in bold), with only two of them displaying what

one might expect from most Asian countries, with English being a small minority. A

secondary metric is looking at which browser was used, and again one stood out from the

rest of the software. Google's Chrome browser, once a newcomer a decade ago, now holds

the largest share of online browsing, and it appears this is no longer isolated to English

speaking countries. Over 60% of all visitors to the site used Chrome to view or access the

survey. It should be noted that the data used in the table above does not differentiate

between those who only visited my site and those who completed the survey. However, it

does help to explain the number of participants from non-English speaking countries who

completed the survey in English. This gives further credence to the idea of the *Googlization*

of not just the Web, but everything (Vaidhyanathan, 2011).

Vaidhyanathan (2011) argues that Google is profoundly changing and influencing

not just commerce but culture by regulating and delivering personalized search results

based on acquired data about an individual's Web surfing habits. This creates what Pariser

(2011) calls the *filter bubble*, a comforting cocoon of algorithmically driven search results

that simply reinforce the supposed preferences of the user instead of delivering fresh or

unknown information from new sources. As Castro (2014) points out:

> It is the potentialities created by the conditions assembled in a network of relations
>
> between human and non-human actors. In other words, when humans interact with
>
> non-human technologies new possibilities arise that are not exclusive to either
>
> party. It is in these dynamic relationships that humans adapt to digital code and
>
> digital code adapts to human behavior (p. 404).

The *filter bubble* and these new dynamics of codes and algorithms interacting with human users are in contrast to how Web searches used to work by providing first page results based on the general popularity of websites related to the search terms. Lieber and Weisberg (2002) also mention the role of the English language in promoting the primacy of America to lead in many areas pertaining to globalization, pointing to English as a catalyst in areas of politics (UN), commerce, and culture.

On an interesting end note, language also seems to have played a role (in contrast to the above examples) in the case of Kuotsu's (2013) study, where Korean serials dubbed in local languages seem to be accepted without question, and the effects of this appear to manifest in youth imitating the dress styles of those depicted in the shows. The example that follows seems to defy the role of language in other respects as well, as despite the distance, language barriers, and economic differences, Korean cultural products have thrived and become a transnational, pan-Asian trend that began last century and is ongoing today.

Hallyu(할류)- The Korean Wave

Instead of focusing on direct West-East flow of information and consumption that might be responsible for some of the symbols and icons contained within my participant's drawings, this analysis sought out more complex, nuanced, and subtle flows through multiple sources and countries both direct and hybridized that filter or percolate into a national and individual's visual cultural repertoire. In the survey responses there were

several mentions of consumption of Korean popular visual cultural programming by participants, citing dramas, music, and movies. Afterward during follow-up image searches connections were again made from the resulting imagery that tied directly to Korean dramas from at least two countries. Bringing in recent literature on the pan-Asian influence of the Korean cultural industry, not to mention my own positionality, I argue the *Korean Wave* or *Hallyu* appears to be a prime example of western cultural references in the form of Korean cultural hybridity that could be a formidable source for the types of images I received.

Since the late 90s Korean dramas have seen intense and increasing interest throughout Asia, first picked up by Chinese and Taiwanese broadcasters, then later spreading in popularity to Hong Kong, Taiwan, Singapore, Vietnam, and Indonesia. This phenomenon is commonly referred to as the *Korean Wave*, or *Hallyu* in Korean (Cho, 2011; Kuotsu, 2013; Shim, 2006; Ryoo, 2009). This interest in TV broadcasts paralleled new interest in K-pop as well as Korean cinema. Even interest in learning the Korean language increased over 60% in places like Singapore (Shim, 2006) and elsewhere (Kuotsu, 2013) in this same period. However, before the Korean Wave began things were quite different;

Until 1987, only domestic film companies were allowed to import and distribute foreign movies in the market. Under US pressure, in 1988 the Korean government allowed Hollywood studios to distribute films directly to local theatres and by 1994 more than 10 Korean film importers had shut down their businesses. This opening of the market to Hollywood majorly affected the vitality of the local film industry in general, such that the number of films produced annually fell from 121 in 1991 to 63 in 1994. In 1994,

Hollywood's market share in the local market reached 80%, up from 53% in 1987 (Shim, 2006, p. 31).

This change marked a period of intensive exposure, at least for moviegoers, in which Hollywood and its western storytelling had a significant impact on the visual and cultural practices of everyday Koreans. A rapid increase in foreign TV programming also made its mark during this period. One example provided by Shim (2006) was a decline in the tradition of "pansori" (tradition of folk music and storytelling), which Shim claims all but disappeared under American cultural subjugation. However, a film called *Sopyonje,* showcased this disappearing tradition of folk music and storytelling, reviving national interest in Korean culture, and prompted the government to invest in its cultural industries. This led to a short boom in support for the Korean film industry, also financed by Korea's large family run oligarchies, and to the adaptation of Hollywood techniques and strategies. It was suddenly halted during the IMF-Asian Financial Crisis before it rose again and was marked by significant appearances and awards at Cannes and other film festivals in the early 2000s; between 1997 and 2003 Korean TV exports alone tripled (Shim, 2006). By providing their own unique tweaks to Hollywood standards the Korean film industry demonstrated the power and liquidity of cultural appropriation and hybridization, which is also noted by Kuotsu (2013), who points out that what foreign audiences may consider "Korean-ness" is a form of hybrid cultural production to begin with.

Korea soon began to export 164 movies per year, and "Korean cinema especially won the hearts of Asian audiences, with sales to the Asian region occupying more than 60% of its total foreign sales; this resulted in Korea being touted as the 'New Hong Kong'" (Shim,

2006, p. 34). The Korean oligarchies were also quick to capitalize on these trends in other markets by hiring some of the most popular stars to peddle the electronics and goods offered by companies such as LG and Samsung in neighbouring China and Vietnam. Koreans began to see that culture could be as lucrative an export as cars and semi-conductors (Shim, 2006):

> Korean stars have had a big impact on consumer culture, including food, fashion, make-up trends, and even plastic surgery. It is not uncommon to find Asian youth decorating their backpacks, notebooks, and rooms with photographs of Korean stars. In the streets of Hanoi and Beijing, it is common to find young members of the 'Korea Tribe', or Koreanophiles, sporting multiple earrings, baggy hip-hop pants, and the square-toed shoes of Seoul fashion" (Shim, 2006, p. 29).

The popularity, claims Shim (2006), echoed the need to connect to shared values and sentiments that cannot be found in American cultural exports, a sentiment reverberated by Kuotsu (2013), Ryoo (2009), and Sung (2012). As described by Cho (2011), the success of the Korean Wave "stems from the fact that Korean pop culture does a good job of applying traditional and Confucian values to Western cultural forms" (p. 385). In particular, the notion of *filial piety*, a Confucian tradition of honouring one's elders, is a common identifying thread throughout these scholars' studies on why participants feel Korea better represents Asian values. Kuotsu (2013) claims it also makes more palatable "the 'vision of modernization' inherent in Korean popular culture . . . making it acceptable in some Asian countries" like communist controlled Vietnam (p. 40) and other authoritarian style countries like Thailand, to which we have already made tenable

connections. This leads us to Northern India, where, Kuotsu (2013) argues, the success of the Korean Wave, at least in pirated forms, is in part a negative resistance to the perceived imperialism of Hindi language and culture: "The media ecology in landlocked Northeast India has been augmented, giving rise to alternative avenues for imagining selves that are not offered by the official economy" (p. 580). Kuotsu suggests that "the enthusiastic engagement with Korean popular culture in Northeast India may be seen as imaginary aspirations for South Korea's rapid development" (2013, p. 583), and it is not a difficult stretch to assume that other nations also see adapting and hybridizing the cultural aspects of successful modernized Asian nations as aspirational.

However, it is not aspiration alone that is driving the Korean Wave, as evidenced in Sung's (2012) study. Taiwanese and Japanese also consume and identify with Korean popular visual culture even as far away as Vienna. Sung (2012) found that East Asian migrants in Austria regularly watched Korean programs (music videos, movies, dramas) as part of maintaining ties with their homelands and easing acclimation in their new homes. Taiwan is by most considerations nearly if not equally as successful as Korea in terms of modernization, and, of course, Japan led the way in Asia since rebuilding after WWII[20].

---

[20] On an interesting side note, while travelling in Japan, upon visiting a local Jazz café in Fukuoka, my wife and I noticed that on a small TV screen behind the bar a subtitled Korean drama was playing. When the owner found out we were visiting from Korea he was only too happy to bring out his homemade Kimchi (Korean traditional fermented cabbage—a national dish) and tell my wife who his favourite stars were. Also, in contrast to the age group mostly discussed here, youth, this gentleman was at least in his late fifties and on the surface not one you would expect to be enamoured by Korean programs, given generational gaps and vestiges of intense and lingering tensions from the Japanese colonization of Korea. Although anecdotal, it indicates that Hallyu is not entirely limited to youth and their tastes alone, something also supported by Sung's interviews with older generations of Asians (2012).

Getting back to Sung's (2012) findings, her participants cited consumption of Korean popular culture as a way to keep in touch with their friends and family back in Asia who were consuming the same media. Sung also notes that consumption of Korean shows led to literal consumption of Korean foods (echoing my anecdote), with her respondents stating they began to try Korean foods and patronize Korean restaurants. Finally, her study also found that the Internet played a pivotal role in enabling her participants to access the Korean content online (Sung, 2012).

Although there are only a handful of participants in my study from Asia who indicated a preference for watching Korean visual cultural programming, they are fairly well dispersed, coming from Indonesia, Hong Kong, Nepal, and Malaysia. This does not, however, preclude the remainder of participants from having consumed Korean shows and simply not reported it; i.e., "international music," as reported by participant #500 above, could include K-pop. Looking at the drawings of those who referenced Korean shows, at least for the word *marriage*, the image data clearly shows that all participants drew a western style representation. Of course, though I cannot assume that they are reiterating something they watched that is related to the Korean Wave discussed here, it does add, however small, an additional point of reference that fits among the patterns that have been so far revealed within my analysis. Still, if I take this finding as an accurate correlation between visual consumption and representation, what would the reasons be for making this type of image? Could it be, as some of the scholars have suggested (Kuotsu, 2013), that embracing this type of popular visual culture is seen as a progressive acceptance of modernity and advancement? In this case, embracing the tuxedo and white dress are not so much an endorsement of either western or Christian values but a rejection of what may be

considered outdated traditional values, such as arranged marriage, as described by Kuotsu (2013). By embracing, even if only in a drawing, what is perceived to be modern Korean marriage traditions, they are embracing the Korean's successful economic, social, and technological growth as portrayed on screen:

> In the face of ontological uncertainty, it may be argued, at the risk of generalization, that Korean films and serials that are largely invested with negotiating rapid modernization and embedded with virtues such as devotion, loyalty, humaneness, dedication, filial piety, morality and the affirmation of family as an institution have found a sympathetic viewership in Northeast India (Kuotsu, 2013, p. 589).

Kuotsu suggests that the reason for this sympathy is finding a kinship in how South Korea has come to grips with rapid modernization, portrayed via its popular visual culture, a modernization that is currently being undertaken in many regions of Asia such as the one she has studied here, one that seeks to contrast itself against what is seen as the dominance of Indian culture. This resistance, however, has not meant that the Korean Wave has gone unnoticed by Bollywood, with several copycat films capitalizing on the same plotlines as successful Korean films (Kuotsu, 2013).

In contrast to possibly creating resistant sites against perceived western cultural influences inherent in Hollywood and other western media, as became the case in Korea itself, Hallyu and its cultural hybridization could be seen under a larger "Asian cultural umbrella." This would mean that the mixture of key American ingredients present in the hybrid Korean formula may make those underlying themes or visual elements and material practices (such as a westernized wedding) much more palatable to their audience,

appearing to originate from a neighbouring country that shares in similar kinships, leaving those non-Asian elements uncontested or ignored.

Although these are very thought-provoking cases, and links between participant drawings, the Internet, and regional trends and media powers can be made, this is not to suggest that the case is now closed with the source of imagery solved. It is but one instance of a possible flow of popular visual culture that might be exerting influence on preconceived notions of rituals like marriage and how consumption can manifest itself, in this case in participants' drawings. It may also have some impact on actual visual material practices and the formation of new hybridized traditions. Although tangible effects in actual practice are absent from my study, we do gain some insight of what they may look like when manifest in actual practice by looking at Kuotsu's (2013) study.

In the case of Korean serials being dubbed in local languages, Kuotsu notes that this has led to observations of youth imitating Korean stars' fashion trends without a second thought (2013). In one instance a girl told Kuotsu in an interview that she identified strongly with Koreans racially, with the dubbed versions giving the serials a truly local authenticity. Whether or not Hallyu also leads to the western marriage practices and their visual materials as described in the previous section remains to be seen. Also, whether the 21st Century is, as Bowman (2013) tacitly claims, the century of "China and the Internet" is difficult to envision at this point, with no particular trends in my findings (with the exception of shared search engine results due to language). The reasons for such an economical and cultural giant such as China not yet creating its own Hallyu are probably due to its strict Internet regime, one party rule, and maybe that its vision of modernization

is simply not as appealing as the one Korea has put forward.

Discussion

In the last example of the Korean Wave, if we accept the consumption of Korean music, movies, and dramas as cultural commodities and the way in which Hallyu was instituted by Korea's *chaebol* (corporate oligarchies) certainly does make this the case, at least in part. Thus the consumption of these programs by individuals is akin to what Sturken and Cartwright (2001) term the *manufacturing of desire*. Although those who consume these shows are not necessarily buying any physical Korean products, they are buying into what they believe to be a distinctly Asian vision of modernization. In the context of my inquiry their view means that

> Images are a central aspect of commodity culture and of consumer societies
>
> dependent upon the constant production and consumption of cultural ideas about
>
> lifestyle, self-image, self-improvement, and glamour. Advertising often presents an
>
> image of things to be desired, people to be envied, and life as it "should be." As such,
>
> it necessarily presents social values and ideologies about what the "good life" is
>
> (Sturken and Cartwright, 2001, p. 189).

In this section I return to the image in society as it relates to my study's objectives and reassess my original questions:

1. What tensions emerge between local and global ways of interpretation and meaning construction when participating online?

2. To what degree does visual culture influence or change commonly accepted ideas specific to geography and culture into normative global ideals?

To do this I will discuss the results of my study more broadly and bring it into the context of global and cultural studies to view the image as a broker of sorts when trading in the commodity of culture. As the image increases in economic and cultural value in the age of information, what can it tell us about globalization, hybridization, and visual cultural representation and how do these ideas impact individuals and diverse regions of "difference"?

Local-Global Tensions

As revealed in both the image and survey data collected, and despite an overwhelming portion of data either wholly or in part showing markers of western symbols and iconography, there still remain "sites of resistance" (Rose, 2012) in the form of contrasting localized imagery that flouted the trend, creating tensions and negotiation. Of course, at the center of this negotiation is the Internet, the ultimate mediator and medium all rolled into one. It is simultaneously the conveyor and conveyance of globalization and global cultural commodities that are traded within the economic realms of identity and hybridity.

The Internet's rise to prominence and conveyor of, first and foremost, American

cultural and economic interest began with the Clinton-Gore investment in the technological

infrastructure to expand the Net and the opening up of US markets globally by getting out

of the way of private business, leading to a worldwide expansion in the 1990s (Castells,

2010a). As noted earlier, Lieber and Weisberg (2002) state that American primacy led in

many areas pertaining to globalization, and they also pointed to the English language as a

catalyst in areas of politics, commerce, and culture. Beaudoin (2008) sees the Internet as

an "inherently international medium" that has been "viewed as a significant contributor to

the globalization of the economy and culture, one that is unimpeded by national borders"

(p. 456). This statement is generally true, save for the country specific examples mentioned

earlier where the Internet and the information it holds are strictly controlled in some

nation states. However, one would have to agree with Hassan (2004) when he states, "Just

as there could be no network society (as we know it) without the economic imperatives of

capitalism, then so too there could be no globalization (as we know it) without the ICT

revolution" (p. 23). Obviously, ICT was crucial for almost all aspects of my study, from my

first explorations of the technology on Mturk to the creation of a website to host the survey,

for recruitment of participants, and for much of the reading and research; without it, this

study simply would not have happened. Another important point made by Hassan is the

economic factor integral to the Internet, which he claimed carries much of the power and

momentum and "to a very substantial degree, it underpins and facilitates the 'globalization'

of both the cultural and the political" (2004, p. 23).

Lieber and Weisberg (2002) examine "culture as a problem of identity in an era of

globalization" (p. 276), and while it is known that there are significant streams of literature,

particularly in post-colonial studies, that share this idea and point to the perils and pitfalls of culture under the weight of global capitalism and post-colonialization, I attempted a more neutral stance. Instead of focusing on globalization's apparent negative effects and seeing hybridity as cultural loss, I strived to hold a middle ground. I do not claim to know the hearts and minds of my participants, and therefore I cannot speak for them, but I did attempt to let their visual representations do this, at least in part. According to Lieber and Weisberg (2002), there are two distinct reasons for the apparent "cultural anxiety and turmoil":

> Material effects of globalization and modernity, including the consumer economy, the information revolution, and the mass media, provides both a window to the wider world and a challenge to traditional ways of doing things. The other, Western values, is often more profound in its impact, even though more intangible (p. 276).

Regarding this last statement, I argue that the impact of or manifestation of "western values" would indeed be difficult to recognize if one only conducted interviews and did solely text-based research into the problem. However, that is precisely one of the reasons why my study's focus on imagery and visual culture is so important, as my findings clearly show at least some tangible evidence, however tacit, that provides hints as to the possible and profound impacts that could be occurring.

Leach (1997) also comments on consequences of globalization as profound, further suggesting that "people's lifeworlds now expand beyond old borders, allowing them to break free of narrow localism, to aspire to acquire the trappings of capitalist success/excess, and to choose, if they wish, to relocate themselves across borders, real or

imagined" (p. 30). These trappings may take the form of objects indicated in some of my participants' drawings such as diamond rings and multilayer wedding cakes, and the notions of aspiration are quite clear in cases such as Kuotsu's (2013) discussed earlier. Leach (1997) also states that within local communities, people may feel powerless under the external forces that affect their daily lives and need to renegotiate and resituate themselves as changes take hold. Again this is demonstrated in the case of those Northern Indians, described by Kuotsu (2013), who rebel against the perceived forces of Hinduist Bollywood and its cultural domination, embracing the modernist views portrayed in Korean visual cultural exports.

Browne et al. (2014) mentions diaspora and globalization as mechanisms for cultural hybridity: people living in other cultures having two (or more) cultural/ethnic arenas in which they function, eventually blending them together and creating new identities. "People of all ethnic groups are drawing on a range of cultures to create either new hybrid ethnic identities (this is called 'hybridization') or multiple identities" (Browne et al., 2014, p. 53). It is difficult for me to say with any certainty that the images I collected in this study show clear uncontestable examples of the hybridity of culture. This is due in part to the nature of drawings and their details (or lack thereof) not lending themselves to the same exacting analysis that one could apply to a photograph. There also exists no database of images or any previous studies that have collected the range of international images, as this study has, to which I can compare them. Wilson and Wilson (1984) and Pariser et al. (2008), while interesting and inspiring for this study, are very specific in the nature and type of drawings collected, gathering only from within the age groups of children and adolescents and looking at only a handful of nations or just one country.

Despite this lack of any measure with which to compare these drawings, hybridity may indeed be exemplified in simple objects such as knives and forks or a glass of wine next to a meal in an image drawn by a participant who comes from a country where they normally eat with their hands or chopsticks and to whom a glass of wine with a meal is as far away from local as the country in which the drink is produced.

Ashcroft (2015) poses an important question that can be viewed in the context of my inquiry, "Is there any cultural product in this globalized world that lies absolutely outside the domain of intercultural exchange and transcultural dialogue?" (p. 8). This is something worth reflecting on as trying to come up with an example of a cultural product that is still outside the reach of globalization is difficult outside of some very unique and isolated cases (possibly Cuba or North Korea). Ashcroft goes on to remark that "it becomes clear that modernity, rather than a hierarchical and homogenizing western influence, is actually multiple and rhizomic, the consequence of a continual dialectic of local and global" (2015, p. 8). Modernity, as discussed earlier in the section on Hallyu, is an excellent example of this. As the pan-Asia regions continue their rapid development, many countries are looking to their neighbours and outside their borders, in general, to see what it might bring and seek examples of positive and progressive change as exemplified in Kuotsu's (2013) study. Ashcroft (2015) also questions to what extent "traditional" art production exists in modern times and whether or not in fact dilution, hybridization, and transcultural aesthetics are crucial to the survival of tradition and identity, a notion with which Hassan would probably agree (2004).

Looking more closely at who is playing an essential role within the expansion of globalization's effects and cultural exercises in hybridity, Arnett (2002) provides a likely group, stating that adolescents play a pivotal role in globalization due to the maturity to seek out information yet still being young enough to not be bound in social roles the way that adults (their parents) are. This relates well to the demographics of my participants, as they, too, are coming into adulthood, or as Arnett terms, and "*emerging adulthood* [roughly from ages 18 to 25 years]" (2002, p. 777), in their twenties and have not yet succumbed to pressures and expectations of the adult world:

> They tend to have more interest than either children or adults in global media—recorded music, movies, television, the Internet—and, to a considerable extent, global media are the leading edge of globalization, the foot in the door that opens the way for other changes in beliefs and behavior (Arnett, 2002, p. 774).

In fact, like the youth in the Northern Indian example, they may actively resist the normalized roles of adulthood as prescribed by local customs and the dominant ideologies. The largest and also youthful demographic of 18-29-year-olds from my study do seem to bolster this claim. Also citing a UN report, Arnett (2002) points out that this age group is of particular interest to marketing and advertising because of their attraction to global culture and brands. This brings us back to Webster (2014) and the "orchestration of influence" conducted and controlled by relatively few Internet juggernauts (Facebook, Google) that tracks a person's passage online and, in the case of my participants, possibly offer them enticing entertainment and cultural consumables that encourage both figurative and literal consumption. At the time his article was written Arnett (2002) mentioned that

the gulf that exists between the west and developing nations in technology and lifestyles was still significant. This claim diminishes as one considers all the advancements in the past decade with smartphone and social media, not to mention the continued trend of urbanization, with over half of the world's population now living in cities and surrounding suburbs, which is where the vast majority of my participants live.

Similar to Browne et al. (2014), Arnett (2002) states that most people develop a bicultural identity, with part stemming from their local culture and part chosen from global cultures. Again Kuotsu (2013) has provided us with a good example of this. Arnett (2002) goes on to describe that youth who grow up in this type of globalized atmosphere experience "identity confusion," or what some others have deemed delocalization, wherein traditional customs and values lack compelling interest for them. He states that this experience deepens the more cultural distance is apparent or the larger the gap is between local and global culture, suggesting that these effects can have lasting and sometimes negative impact on youth. Again touching on the idea of "emerging adulthood," Arnett (2002) notes a societal consequence of requiring longer and more technical training or a longer period of education before entering the workforce. This period is occurring much later than in previous generations, and this trend is extended via globalization, resulting in the median age for this transition now being in our late twenties, which also connects directly to the largest portion of my participants. As a caveat Arnett (2002) claims this phenomenon only exists for those who live in urbanized areas and have the financial means to indulge in this period of development; but this, too, can be countered by globalization's gains, with Kuotsu's (2013) and my own study posing problems for this claim, as even those in rural areas do not live unaffected.

Above all, growing up in a globalized world in which very few are immune to its effects, in combination with living in a nation of rapid technological and societal change, presents dramatic challenges for youth as they attempt to form worldviews and negotiate between local and global ways of life and understanding.

Visual Cultural Representations

In this section I discuss the meanings that are assigned to and derived from imagery, drawing from some of Hall's (1997) definitions and thoughts on representation, communication, and meaning. These insights are further tied into the aforementioned issue of globalization and the tensions it creates. I attempt to make some headway connecting the images my participants have provided and what it could mean for the symbolic concepts they draw upon when thinking of these words and their meanings.

One of the issues when it comes to the study of visual culture, and this is especially acute within the fine arts, is as Hall (1997) describes a standoffish biding of high culture vs. popular culture that, at least in the recent past, has been "the classic way of framing the debate about culture- the terms carrying a powerfully evaluative charge" (p. 2). This basically breaks down to high as good and popular as corrupt. Hall (1997) claims, "In a more 'social science' context, the word 'culture' is used to refer to whatever is distinctive about the 'way of life' of a people, community, nation or social group" (p. 2). I sought to take a snapshot of representations of people's ways of life in the form of the words presented to them. To do so I asked for drawings in the hopes of accessing what Hall

described as cultural meanings "in the head"; however, these meanings are not only symbolic signifiers in our minds, they also "organize and regulate social practices, influence our conduct and consequently have real, practical effects" (1997, p. 3). And while the practical effects are beyond the observations that can be made here, the common threads and themes regarding the west and hybridization point to real world possibilities. As Hall (1997) explains, "Visual signs and images, even when they bear a close resemblance to the things to which they refer, are still signs: they carry meaning and thus have to be interpreted" (p. 19). Hall contends:

> This is what children learn, and how they become, not simply biological individuals but cultural subjects. They learn the system and conventions of representation, the codes of their language and culture, which equip them with cultural 'know-how' enabling them to function as culturally competent subjects. Not because such knowledge is imprinted in their genes, but because they learn its conventions and so gradually become 'cultured persons' —i.e. members of their culture. They unconsciously internalize the codes which allow them to express certain concepts and ideas through their systems of representation—writing, speech, gesture, visualization, and so on—and to interpret ideas which are communicated to them using the same systems (1997, p. 21).

What happens when the system, conventions, and codes of a culture of representation are permeated by outside influences—i.e., foreign popular visual culture, and/or are contrasted with competing modes of representation not born in the local cultural milieu? If I agree with Hall's remarks that meaning is ultimately never fixed but

negotiated by socio-cultural and linguistic settings, then I can agree, as he did, that words can carry different meanings. It is then not much of a stretch to assume that these meanings can be renegotiated in light of new concepts, concepts that can be more easily conveyed via visual culture than language, from outside the local socio-cultural and linguistic settings. It is also worth pointing out that the words chosen for this analysis are relatively fixed within each milieu, meaning that in a given language they do not seem to have as divergent and highly contrasting meanings assigned to them compared with, say, *humour*, which has a range of meanings, styles and tastes.

Following this idea further, in what ways does consumption of foreign programs, as with my participants, reflect a search for and reimagining of their system of representation? Could elements of their drawings represent, to some degree, the unconscious internalization of new codes from foreign systems of representation? As Hall (1997) points out, meaning is not inherent in objects in the real world; it is constructed and produced, "the result of a signifying practice—a practice that produces meaning, that makes things mean" (p. 24). Objects are essentially meaningless until we assign the codes and concepts using our representational systems, which are usually anchored in our cultural milieu. Hall cautions that "we must not confuse the material world, where things and people exist, and the symbolic practices and processes through which representation, meaning and language operate" and points to "social actors" who use these systems from their culture along with language and other forms of representation "to make the world meaningful and to communicate about that world meaningfully to others (1997, p. 25). Therefore, the word *home* is meaningless until one applies to it the relevant codes from a system of representation. As seen in participants' drawings, they attached the symbols and

signifiers to their images that could bear the meanings from both local and global systems of representation. This might be a hybridizing of the system itself or a hybridizing of the meaning-making process when one tries to capture meaning by rendering it in the real world, even in just two dimensions. "Representation is a practice, a kind of 'work,' which uses material objects and effects. But the meaning depends, not on the material quality of the sign, but on its symbolic function" (Hall, 1997, pp. 25-26). Showcasing what these types of "practice" may look like and focusing solely on how students learn from each other's imagery within a social network, Castro notes that when students were asked, "How did they learn?", most of the participants suggested they learned from comparing images— those they liked and those they did not—as a way to see the differences. Some participants said they learned not from one particular image, but from the act of looking at the entire collection of images over and over again (2014, pp. 162-163).

Castro's (2014) observations give further credence to Hall's (1997) elaboration of systems of representation and how we refine and evolve the codes and meanings connected to symbolic forms inherent in whatever form we are presented with. How much of this symbolic function is inherent in these images or literally drawn in by my participants is difficult to assess, but the act of creating a drawing could precipitate tensions between competing systems and force one to choose one or the other or create a mixture of the two, resulting in hybridization, essential changing or modifying any previously fixed meanings. As Hall states, "Signs themselves cannot fix meaning. Instead, meaning depends on the relation between a sign and a concept which is fixed by a code. Meaning, the constructionists would say, is 'relational'" (1997, p. 27).

The next step here is to consider the work of the audience, my participants, in receiving and disseminating the messages contained within visual culture and how they draw from this imagery to assemble new signifiers in meaningful ways to incorporate them into pre-existing systems of representation. As Napoli (2008) suggests, we must also consider the audience as senders and "how the place of the audience as mass communicators is now being integrated into our media system, we are confronted with the issue of the 'work' that the audience engages in in the new media environment" (p. 511). So it is important to consider not only how my participants consume and internalize the text and imagery online, but also their "work" and how they themselves become producers and/or disseminators of similar imagery. This is especially important in light of the reported usage of Facebook, Youtube, and Google by my participants in numbers far surpassing any other sites reported. Online and through these media and mediators the work of the audience "becomes more concrete in an environment in which the creative work of the audience is an increasingly important source of economic value for media organizations" (Napoli, 2008, p. 511). As mentioned earlier, this is done through ads but also through the consumption and sharing of new stories, top ten lists, personal videos that contain brands, and in many other ways. Revisiting Hassan's (2004) example of an individual's sense of "missing out" on something they see, like a Big Mac; viewing friends posting links and images on social media feeds about a particular brand of clothes, a Korean drama, or a *Game of Thrones* episode may make those unfamiliar with the references to wonder what all the fuss is about. Napoli's (2008) statement can also be readily allocated within both the framework of crowdsourcing and microtasking sites, in addition to the general frameworks of social media, where the audience is invited to not

only consume but rank, rate, describe, categorize, translate, etc. numerous forms of commercial and business media sources, both monetizing and becoming monetized simultaneously. Individuals like my participants, who spend hours online each day, provide details of consumption and preference habits, which are monetized by Facebook and Google and used to tailor ads to those individuals as well as people who share their interest on various social media, exerting influence and encouraging further consumption and circulation.

Bowman (2013) argues there has always been some type of media saturation. The types and sources of domination have evolved and changed, along with their effects, since the "20th century when the US rose as a cultural, economic and hegemonic power via film, synonymous with the word 'Hollywood'" (p. 43). An example of the effects of this dominance, Bowman claims, is in the 'hegemonization' of literature such as bestsellers, which he states are clearly designed with the modes of Hollywood production in mind (i.e., books written so they can easily be made into film scripts). One of the effects of cinema is that of pacifying its audience and making them more susceptible to authority (Bowman, 2013). However, in the case of Kuotsu's (2013) study, the participants in Northern India consciously rejected the dominant national authority (Hindi culture) in favour of a Korean one, who they may have seen as a more attractive ambassador when it comes to modernizing in an Asian context. Another role, states Bowman (2013), is to exemplify dominant roles such as those of men and women, although Bowman is reluctant to state that because what we see, we do (replicating the acts/practices depicted) but states that these types of repeated viewings tend to normalize these beliefs and actions, accepting specific world views. In other words, repeated and regular viewings of the American sitcom

How I met Your Mother, in which the main character searches for his soul mate to marry, or

by watching the Korean reality show *We Got Married*, featuring popular Korean stars in

mock couplings, may serve to normalize these types of practices in the minds of the

viewers. Therefore, in order to popularize new artists/arts in whatever forms, they need to

reiterate previously established visual forms and narratives, and these patterns become

self-replicating in their pursuit of success, "In other words, what Adorno and Horkheimer

call the culture industry produces cultural and media effects, effects which play themselves

out in people's daily lives, fantasies, and desires" (Bowman, 2013, p. 53). Here is it worth

reconsidering the title taken from the Chinese website that the Korean wedding image was

traced back to, "*I want to have such a marriage, even if it is a fairy-tale . . .* " This

manufacturing of desire as described by Sturken & Cartwright (2001) could be manifesting

itself in the symbols and icons found within participant drawings such as bouquets,

diamond rings, tuxedos, flowing wedding gowns, single detached houses with sandboxes or

doghouses, and hamburgers (see Figure 46).

Figure 48: Popular symbols represented in various participant drawings (China/Indonesia/Vietnam)

In terms of my study, in what ways are participants constructing identity by embedding the drawings with "self-referentiality"? And in what ways do they see themselves (or wish to see themselves) in the context in which they draw? As Bowman argues "... surely one must factor oneself into whatever picture one is painting..." (2013, p. 57). Are the integration of these signs and symbols into these drawings evidence of a "visual and performative space of popular culture" that is "saturated with power" which "cajoles and coerces us to identify with some things and to dis-identify with others, and to "perform" ourselves according to the dictates of dominant cultural discourses about gender and ethnicity?" (Bowman, 2013, p. 61). What these dominant discourses are we cannot pinpoint with any certainty, but several examples are provided by Kuotsu (2013), such as the view of masculinity and one of her participant's remarks about preferring the gentler and romantic portrayal of Korean men. Without more intensive follow-up interviews with my participants, it is difficult to say to what extent these discourses may have taken shape when either thinking about or drawing the images requested and their place in my

participants' conceptions and in their lives, but there indeed must be traces of "self" worked into their images, even if they are far from what we might expect.

Browne et al. (2014) claims that postmodernism views allow for individuals to choose from a much larger range of identities and cultures than ever before, which could explain declines in "national" identity for more global ones (i.e., Asian, which a dozen participants from South and South East Asia did). They also conceded that globalization can undermine the concept of nationality, allowing adoption of any identity or image an individual pleases, of which there could be manifestations contained within my participants' drawings. Browne et al. also states that identity is now more fluid and interchangeable, claiming that leisure, consumption, and lifestyle have a significant impact on identity, and that consumer goods and individuals' product patronage now actively help shape identity. Brown states, "Through their leisure and consumption choices, people are shopping for lifestyles, and in effect buying and creating identities" (2014, p. 72). Bringing this idea back to the social media element discussed above, it is not difficult to see the assumption of Browne et al. (2014) in action across the online world:

> People now adopt different identities to meet the diversity in their lives—they no longer identify with class alone, but with ethnicity, gender, disability, race, religion, nationality, music, fashion designer labels, dress, sport and other leisure activities— they can 'pick and mix' to create whatever identities they wish (Browne et al. , 2014, p. 73).

They provided the example of holidays no longer being about where one wants to go but reinforcing a particular identity or lifestyle to show how successful or creative one is

(Browne et al., 2014). Of course, image sharing online comes into play here as these identities are reinforced via visual culture over social media, again projecting that image of oneself to others. Class, race, and gender no longer dominate the formation of identity; rather, mass media and its pressure to consume and the creation of desire offer up a plethora of global lifestyles via popular culture information and imagery. This allows us to "shop for an identity," with creating an identity as easy as putting items in a cart. This idea of buying into any identity is likely brought about by adverts for consumer products that are rife with symbolism, and purchasing them is an embodiment of the lifestyles they represent. Tie this into the large demographic of youth participation, and the importance of this age group being "emerging adults" (Arnett, 2002), and the relentless targeting by the big media giants (Webster, 2014) presents us with a scenario that is increasingly likely to produce the socio-cultural effects described in the literature and possibly exemplified in the drawings collected. Unfortunately, a question I did not ask on my survey is, *what types of foreign products do you buy*? The answers could have been very illuminating and are definitely worthy of future pursuits.

I cannot proclaim I have provided evidence that is unquestionably indicative of the changes occurring under the pressures of globalization catalyzed by the Internet. I have provided salient and interesting examples that show traces of homogeneity, heterogeneity, and hybridity as well as unveil some of the negotiations manifest in local global tensions scattered through the image data collected.

Summary

To summarize this most important and complex of the chapters of this project as it progressed through analysis, the first act was to focus on a single region in the world, Asia. I did this by stratified sampling (Rose, 2012), due in part to my positionality and familiarity with the region. Having lived and travelled there gave me tremendous insights, and my experience as a consummate observer, artist, and photographer also aided in identifying objects, icons, and themes that may have proved too elusive otherwise without my training and background. Another reason was the shared cultural and historical experiences in addition to sharing physical borders, so that flows of information, key themes, and discoveries could be more easily traced. A final reason for this regional selection was that the images submitted were the most robust in correlation with my research questions.

At the start of this chapter, I provided a participant profile, which gave another overview of the typical individual who chose to complete my survey. The profile indicates a youthful group open to global trends and interested in international information and cultures, pursued during large portions of their days spent online and interacting with many large social media players that many of us are more than familiar with already. Their drawings revealed striking patterns and themes of western and hybrid social-cultural symbols, icons, and forms as well as tensions when those images are contrasted against local-traditional imagery that deviated from the majority. The importance of the words chosen reflect close to universal concepts that are found in each culture and represent

fundamental daily and once in a lifetime events that are usually, or at least used to be, handed down from the local culture and deeply ingrained.

The Internet unsurprisingly was extremely important for my research, my participants, and the results of my analysis. Internet browsers such as search engines appear to have been mitigating factors influencing behaviours and mediating what and how people access information. The language in which one surfs the Internet also shows large discrepancies between the languages available or represented, with English dominating and impacting delivery and access to knowledge and information. In this sense, the Internet is seen as both mediator and ultimate medium, controlling the delivery and flow of information and creating hubs of attention. This is done in part by collecting users' data in order to analyze their habits and preferences, thereby providing them with information and options that tend to reinforce those habits that benefit advertisers, another factor that carries influence. Economic factors such as the multinational corporations facilitate, sponsor, and manipulate our usage of the online world.

These large companies also proved to be present in the interesting case of Korea's Hallyu, by sponsoring and promoting culture as a commodity to be consumed. And consumed it has been, becoming a pan-Asian force of cultural clout and a shining example of Asian modernity, hidden slyly amidst hybridized western practices. Hallyu provides a very salient example, along with some other case studies, as to how hybrid versions of culture are consumed and imitated or accepted in a realm that was once thought to be the sole domain of Hollywood and US influence.

Lastly, all of these factors contribute to local-global tensions and solicit negotiations. Within these tensions old systems of representation are called into question and contrasted against others. New codes, signs, and symbols are considered, adopted, rejected, and modified, creating new hybridized concepts and practices that begin to give us clues as to how cultures are interacting in a networked age of information on a global scale.

In the final chapter, I once again summarize the entirety of my project, touching on the most important threads and streams of discovery. This is followed by the implications my study holds for visual research, media, visual literacy, and educating through the arts and popular visual culture. This is followed by my suggestions as to the potential of following up on this project with further inquiries based upon what I found, as well as possibilities for online visual research and creation of imagery databases that collect and track the visual cultural changes occurring on a global scale. I also consider what this all means for education and the teaching and study of visual arts and media.

Conclusion

Introduction

In this final chapter, the project in its entirety is summed up as judiciously as possible, taking the reader through the process once again from background, development, and literature reviewed into the complexities of the methodology and the connections made during the analysis and findings. This is followed by several *Implications and Suggestions* that focus on the following areas:

- **Art, Education and Information Communications Technology (ICT):** Here considerations of how art and technology interact and affect learning are teased out and brought to bear upon the social world.

- **Socio-cultural Functions of Visuality:** This section emphasizes the importance of the visual within the social and cultural realms of our lived experiences and how these function to instruct and inform.

- **Multiliteracies:** Here is not just a call for visual literacy but a push for media and techno-literacies as well considerations of other ways of knowing not covered in my study.

- **Visual and Critical Research:** The visual methods used in this study are crucial to its success, and behind them are critical reflections and a focus on the social outside of the western perspective.

- **Future Directions:** This last section details a further visual ethnographic study based on my findings, and I propose field work to pursue some of the imaged-based leads inherent in the drawings of marriage.

My study concludes with the very last section, which contains my final remarks and a reflection on my project's meaning for me and for future research.

Summary of Study

Background

Crowdsourcing piqued interest in a new technology that seemed to hold great potential for new methods of conducting research and gathering data online and asynchronously; this led to the development of two pilot studies. The findings, while limited, indicated that this line of inquiry was leading the research towards a visual cultural phenomenon and was unquestionably worthy of more intensive study. Of course, this examination probably could not have occurred without my background and positionality, formed over decades of visual arts training and engagement, life and travel abroad, and copious consumption, analysis, and enthusiasm for visual culture.

Literature Review

The study, although born out of an artistic and educative research paradigm, intersected with many large, complex, and intriguing concepts and contradictions that hold interest and implications across transdisciplinary domains. The main overarching categories and themes as they related to my research questions and field of study are visual research, visual culture, information communication technologies, globalization, and visual education. All of these streams of scholarship are in and of themselves worthy of study in isolation; however, in the context of this study I focused on only the most salient themes that arose and made connections to my research questions and objectives.

Although visual research is nothing new, having been employed by anthropology for decades, it has not yet gained broad acceptance in the social sciences as an alternative method of inquiry that equals or rivals traditional text-based research (Rose, 2015). The studies and research that have been conducted (Banks, 2007; Rose, 2012, 2015; Pink, 2013; Wilson & Wilson 1984; Mitchell, 2011; Pariser et al. 2008) with a goal of examining or understanding visual production, media, and visual literacy are usually more narrowly focused and conducted on a smaller scale, either in participants or participating countries. Most have not attempted to study both the fixtures of visual culture and globalization, and I identified a clear gap during my study's development for the use of ICTs to unearth traces of underlying phenomena occurring at the intersection of visual culture and globalization propagated and propelled by communication technologies and media consumption.

Methods

Identifying that there was a clear gap in methodologies in terms of both employing visual and technological methods in their design, data collection, and analysis was, in essence, the easy part. Developing a methodological framework that adhered to previously researched guidelines, while at the same time addressing some of the deficiencies found, in addition to conducting research internationally and at a distance proved more harrowing.

When choosing a medium, drawing rose to the forefront due to its simplicity, accessibility, and ability to allow a participant's imagination to flow and temporal reflection to shine through. Even though numerous research has indicated drawings' benefits in exploring a number of topics from psychology (Rule and Harrell, 2006) to AIDS awareness (Mays et al., 2011), self-reflection (Mitchell & Weber, 2005), and emotions (Bagnoli, 2009), essentially making it a universal form of communication (Eitz, Haysy, and Alexa, 2012; Adoniou, 2014), there still exists no procedural guidelines to pursue a visual content analysis or any similar methodologies that employ drawing as the principal method.

As described by Saldana (2008), sample size was reached when data started to become redundant, meaning that there were no new regions being represented and that the images and textual survey data did not deviate from what had already been collected. In the end, I reduced the entire sample to only those participants from Asian countries, resulting in 106 participants from 14 countries for the final analysis. This was due to the richness of the image data and my familiarity with the region.

Analysis

After data collection ceased I needed to "clean" the image and survey data and prepare it for import into NVivo, the chosen CAQDAS capable of analyzing both image and textual survey data and uncovering the relationships between the two. This allowed for forays into the data that may have been overlooked if done by traditional analysis methods. A second database was also set up online to peruse the data using other techniques and begin the creation of an online version of the project with the intent to disseminate the study in a more interactive manner where viewers or readers can explore the project in a non-linear fashion.

Once image and survey were fully dissected, coding and intensive analysis began. Codes were derived from the manifest content in the images as well as the demographic survey data and open question responses. The original seven-word prompts functioned as the categorical placeholders. After an initial coding of all the image data collected, an inter-coder credibility test was successfully conducted and signaled that the coding process could continue. After iterative coding stages' prevailing patterns and themes began to emerge, data was narrowed to Asian regions for the final analysis where the most dominant themes could be concentrated on.

Findings

Participants' Profile

To begin with, the final analysis consisted of a reduced sample of 106 participants from South, South-East, and East Asia and over 700 drawings. The following is a summary of the profile that describes a typical participant:

- **Techno savvy**: Participants are familiar with networked computers beyond basic functions, able to use digital drawing tools and scanners, and are probably accustomed to more complex and technical tasks than the ones completed for this survey.

- **Educated**: Participants have more than a high school education, a majority possessing a college degree, some with postgraduate and some with college experience; many either are students or recent grads.

- **Young**: The majority of participants reported being younger than 29, and only a handful report being over age 40.

- **Multilingual**: Nearly half of participants reported being able to speak two or more languages, not including English; only thirty-eight 38 reported speaking just one language.

- **Urban**: Only seven participants reported living outside major urban areas.

- **Online**: Participants spend on average of eight hours each day online.

- **Visual Consumers**: Participants engage in foreign visual culture via the Internet and often consume foreign TV show programs from the region and abroad.

The other three questions on the survey asked which sites participants used most frequently while on the Web, where they believed the source for their drawings came from, and if they consumed foreign TV. Regarding the Top 3 sites visited most often, many participants reported western owned or operated sites such as Google and Facebook with far more frequency than localized sites. Most participants cited "memory" as the source for their drawings, while a few noted culture, Internet, TV, and books. Most participants also reported consuming foreign TV programs, which included regional programs from Korea and Japan as well as many western ones such as CNN and Discovery channel along with sports. These details, although not definitive, led towards some interesting discoveries.

Well over two thirds of participants answered that memory was the source for the drawings along with handfuls who reported that culture was also a source. Of course, this does not preclude memory of things seen on the Internet and TV, which is what the other questions gathered information on, with participants reporting that they spent on average eight hours a day online and frequented mostly western sites like Google, Youtube, and Facebook, all of which provide a wealth of still and moving imagery. Memory also does not exclude memories of television programming, which most participants reported consuming, including American sitcoms, dramas, news, sports, and regional drama and music shows.

The Internet provides a multimodal and nonlinear form of information delivery and knowledge gathering for consumption. As mentioned earlier, much of the Internet's expansion revenue is driven by marketing and targeted advertisements. Google and

Facebook have built their success upon their users' personal information shared through social media and emails by monetizing preferences and selling ad space in every nook and cranny they can find on our screens. Ads have become so ubiquitous that software written to block these ads from showing up in your inbox and on Facebook pages is now so popular that "ad-blocker blockers" have been created. This has also forced companies to come up with other methods of presenting consumers with new ads that won't be blocked. Enter "native ads," which disguise themselves as news or personal interest articles, with many viewers unable to differentiate. Hassan (2004) claims that enough exposure to ads creates doubt and leaves one with a feeling of loss, that they may have missed out on something. Castells (2010a) also confirms that the pervasiveness of the media helps to shape identity and daily existence of our collective cultures. He, too, pointed out the correlation between globalized multinational corporations and increased embeddedness in national agendas as an essential part of their survival strategy (Castells, 2010a). Bring this back to our Top 3 visited websites as reported by participants, and this pervasiveness becomes clearer under the ad-driven nature of foreign stakeholders and their self-referential system.

When examining the Internet, language also played a major role, as the browsers we use to access the content on the Web are tailored accordingly. English continues to dominate the online world, with over thirty percent of all sites (Young, n.d.), and Graham (2014) claims that large nations define themselves online in their native language, while small nations are defined in the dominant language of the region. This urged me to examine some other data that I had gathered, which tracked the analytics of visitors to my website that was set up to record the surveys. I also noted that many participants, despite receiving my survey translated in their local language, still filled in answers in English. Looking at all

the visitor data suggested that many people (including participants) actually visited my

website with an English browser (mostly Google Chrome); this assertion is backed up with

over four times as many visits in English than in regional languages. Slowly I began to make

connections between multinationals, ads, and language dominance as important factors in

shaping how and what we can see or find online. This reminds us of Vaidhyanathan's

(2011) worries about the "Googlization of everything" and Pariser's (2011) observations

on the *filter bubble,* an Internet that delivers to us a reinforced version of the world that we

already subscribe to.

Korean Wave

Still, the Internet and media industry are very large spheres of operation, and one

mode cannot dominate absolutely. Contrasted against the popular West-East flow of

cultural capital, the Korean Hallyu example provides us with an alternative and viable

secondary model of pan-regional influence. The rise in Korean visual cultural products

since the late 90s is a potent and fascinating case. A once-struggling nation rapidly

transformed itself and surpassed Japan in popularity of its cultural exports, with growing

fan bases in China, Singapore, Hong Kong (once a hub itself), and Taiwan. Kuotsu (2013),

Ryoo (2009), Shim (2006), and Sung (2012) all note themes of shared "Asian" values not

generally typified in US exports. Kuotsu (2013) also provides the case of Northern India,

with its thirst for Korea's version of adjusting to rapid modernization and displaying an

active resistance towards the dominant Bollywood ideals. However, examples of the

popularity can also be found outside of these nations in transition to modernity in Taiwan,

Japan, and even Austria. Sung (2012) found that Asians living abroad consumed Korean programming to stay connected with friends and family back home who were watching the same things, and this sense of regional identity was strengthened through bonding over their favourite dramas and music videos. Now let us touch on those search image results again for a moment and consider the connections made with marriage images and Korean dramas in lieu of the Korean wave.

Discussion

When looking at globalization and its effects, I began to see a complex intertwining of cultures, corporations, commodities, and consumption. Add to this the intricate peculiarities of the Internet, and parts of the picture become clearer, while others are shrouded as layers are pulled back only to reveal further substrate. As Hassan (2004) points out, networks could not exist without capital investment, and so, too, is the success and power of globalization not possible without ICT. This brings us back to the role of monetary supremacy and the economics that currently occupy the driver's seat and do much of the steering of the Internet. Lieber and Weisberg (2002) describe significant veins of literature that point to the strain of culture under the weight of globalization's effects. Browne et al. (2014) and Leach (1997) also comment on the effects of globalization as profoundly impacting identity, in part due to the "manufacture of desire" (Sturken & Cartwright, 2001) constituted through things like visual cultural commodities, and within these consumables images are central to depicting "life as it should be" (p. 189). Considering my research questions in the context of global culture, hybridity, homogeneity, and visual imagery, what tensions are apparent from the study of the images provided by the participants? Arnett (2002) suggests that these tensions can spur a bi-cultural identity.

When examining the images provided by my participants, these tensions may be manifest in the sites of resistance such as the minority of imagery that depicted local or traditional objects and scenes or others that appear as if they are melding different cultural elements together.

Representation

As Hall (1997) argues, the systems that children learn to determine the symbols and codes of a particular culture are learned through the practice of representation. But what happens when those systems are infiltrated by foreign symbols and codes that cause tensions and break with social-cultural norms? Hall (1997) contends that these systems of representation are not just "in the head" but have practical real world effects and applications. If we agree with Hall that meaning is not fixed and frequently renegotiated (1997), could the consumption of foreign TV programs in some ways be a search or journey of redefining traditional systems of representations? Could the drawings I received then be manifestations of new codes and symbols that have been internalized through regular consumption of foreign visual culture? Does the act of drawing elements of these external systems then create tensions, affecting the participant, between competing local-global systems of representation? If so, these tensions are further exacerbated through collective sharing, reproduction, and dissemination by individuals who have then become mediators and purveyors of new cultural content on social platforms like Youtube and Facebook. Bowman (2013) argues that surely individuals are embodied in some form in the images that they create, so participants' drawings could, in fact, contain plenty of self-referentiality and vestiges of manufactured desires. Consideration of these effects in the context of the relentless bombardment of youth by global corporate marketing strategies (Webster,

2014) presents us with an interesting scenario that could produce what I found in the image data.

Implications and Suggestions

As networked digital technologies continue to develop at near exponential rates, the only certainty today is that they consistently employ more visually based structures within which to frame and deliver traditional text-based information. Often described as image saturation, icons and symbols have displaced titles and keywords; these visuals grant us access to the digital realm as well as guide us towards foods, clothing, products, homes, schools, and everything in between; yet the true extent of imagery's influence on us is not fully understood. Furthering the study of sociocultural phenomena using image and visually based heuristics seems not only logical but essential to provoking, uncovering, and understanding the impact of imagery (Mitchell, 2011a, 2011b) in this "always connected," easily permeable realm as we shift towards a post-industrial knowledge economy (Kellner, 2002). Building upon my earlier pilot projects (McMaster, 2012, 2015), I sought not only to expose the potential effects of a visually dominant world on culture, but to further inform the complex relationship among image consumption, knowledge, and technology. These elements are profoundly influenced by global visual cultural and their delivery by networked digital communications, which intensifies their effects. These discoveries could contribute significantly to the development of new strategies to include visual culture in Canadian education and further bridge the gap between formal classroom education and

informal learning that is increasingly mediated by screens and taking place online. Advancements in communication media have augmented both the flow and dissemination of popular visual culture worldwide and continue to blur both geographic and cultural boundaries that were once thought to be static, intrinsic, and locally driven (Rose, 2015). Growing access to the Internet and an almost unfathomable repository of still and moving imagery from news and television programming to personal and public home video is exemplified in sites like Youtube and can act as a system of informal education, establishing, reinforcing, and transforming social models via the production, consumption, and circulation of imagery.

In the following sections, I elaborate on some of the implications this work has brought about as I provide tentative suggestions for their inclusion and consideration in existing paradigms of art, education, and research. I begin by re-examining art and education in relation to technology, then bring these ideas to bear upon socio-cultural applications and a call for increased attention to visually based research paradigms. Last, I propose a future research project that seeks to build upon this study's findings—in particular, to examine and find new material cultural practices that are emerging or manifesting in new geographic and cultural milieus.

Art, Education, and Information Communications Technology

In the past, many researchers have commented on the complex and sometimes estranged relationship that has existed between art and technology (Alvarez, 2007; Bruce

2007; Stankiewicz, 2004, 2003; Sweeny, 2008; Wilson, 2008). Bruce claims that they "fight as if the acceptance of one would spell the destruction of the other" (2007, p. 1355), and while there have been resounding changes at many levels in the nine years since that serve to bridge this supposed chasm between these fields, there still remains much to be done. Bruce also argues that teachers have to realize that the same kind of nonlinear storytelling qualities of ICT help us make sense of the world just like art does and see "art and technology as different sides of the same process of human creativity" (2007, p. 1359). This non-linear quality of both art and technology allows them to be exploited for cognitive and creative growth and challenge our previously held convictions and modes of thinking, doing, and acting. Further, technology is bringing about changes to how we learn. Castro (2014) states that "human communication is now asynchronous and ubiquitous in terms of access, interpretation, and production. These qualities are shifting the way we know and learn from others online" (p. 403).

Hudson (1987) points back to the industrial revolution when he claims education's basic function was to "transform pastoral peasants into efficient machine-minders." He goes on to claim that the needs of education are far from these meager beginnings and now stem from a "wealth of ideas, languages, systems, information-communication disciplines and technologies. New concepts, the information explosion, and technical change may leave traditional education in disarray unless we recharge and redirect it" (p. 272). Hudson suggests that considerations of art and technology with regard to our communications systems were rapidly evolving beyond our practices and understanding, the results of which, "as can be seen on the media, are often deplorable, because practitioners and

clientele are similarly aesthetically underdeveloped and functionally visually illiterate"
(1987, p. 279). Now, almost thirty years later, part of those two statements still rings true,
as Wilson (2008) recounts the often dismissive nature of his colleagues towards his
interest in technology in art, reiterating the need to consider what is forthcoming, not just
current, and asking more of students and educators on the whole regarding visual, media,
and techno-literacies. Far from us being trained to become efficient "machine-minders,"
machines are now minding us. Algorithms tirelessly track, study, and record our every
activity on networked devices, while actively learning from us and using that information
to create new code for itself to peer even deeper:

> Code is written now to adapt and customize human experience, from personalized
> book recommendations to news stories that are interesting based off of prior
> viewing habits. Digital code is not shapeless nor without some range of agency. It
> actively shapes experience online (Castro, 2014, p. 404).

So how do we respond to these essentially self-governing snippets of code that
seemingly know more about our online habits than we do? More important, how do we
counter the effects of phenomena like the *filter bubble* (Pariser, 2011), which leads us into
virtual echo chambers reflecting our own world views, opinions, and attempts at learning
in a contemptuous feedback loop that seeks to reaffirm, not challenge, comfort, not
constructively criticize? These concerns of "virtual navel gazing," refracted by a world of
online mirrors, become more troublesome when we consider that the economic backbone
of networked communications is advertisements (Webster, 2014). Castro's (2014) work

has asked us to carefully consider these unseen and often unknown dynamics that mediate our experiences with and how we learn from each other, arguing that content delivery can have little to do with substance and has more to do with popularity and quantity of views (Castro, 2014). This, Castro (2015) claims, should make us wonder about what these "hubs of attention" are passing over, and consider what ideas, knowledge, and representation are being marginalized or suppressed in the creation and maintenance of these dominant hubs and flows of information. One example discussed earlier in the Findings section is how dominant languages shape content and representation and in all likelihood will smother the smaller pockets of linguistic uniqueness surrounding them and the potential of the cultural capital contained therein.

Castells (2010a), describing ICT's development in the past few decades and the paradigm of technology, states that since the beginning of this techno-transformation in the mid-70s up to the 90s "it appears that society as a whole, business firms, institutions, organizations, and people, hardly had time to process technological change and decide on its uses" (p. 86). As embodied by my participants, the majority are youths engaged in emerging technologies and the knowledge economy, adept in multimodal online global exchanges. Discussing how technology shapes and transforms culture, Castells (2010a) states that "because culture is mediated and enacted through communication, cultures themselves—that is, our historically produced systems of beliefs and codes—become fundamentally transformed, and will be more so over time, by the new technological system" (p. 357). He points to the importance of the multimodality of human communication and how it is realized for the first time in history in these new technologies.

This idea also links to Hall's (1997) conceptual structure of visual representation of codes and symbols systems, strengthening claims that technology is affecting the way we produce and consume knowledge and information via technology.

Considering these effects more broadly, Carpenter and Taylor state that technology both provokes and mediates our world view and daily lives, claiming, "Ours is a techno-mediated culture that has changed forever the way we see, understand, and deem relevance in our lives." (2003, p. 48). They suggest that we need to adopt student-centered and constructivist style methods of instruction using interactive multimedia technology to embrace this shifting paradigm (p. 53). Discussing their earlier study's results, they note how using ICT in art education fostered self-directed learning and empowerment of student's self-efficacy. The technologies used by Carpenter and Taylor (2003), although far surpassed today, allowed the seamless combining of text, images, video, and sound to make engaging creative possibilities. The end result in Carpenter and Taylor's (2003) project also allowed the work to be viewed non-linearly, whereby a person can "simply jump in" at any point and explore (p. 43), a quality also noted by Snyder and Bulfin (2007), who described any research in the electronic arts to be value-laden and contested, making universal acceptance difficult. Add to that the socially constructed nature of reality and technological mediation that now takes place, and the need for not just media and visual literacy becomes apparent, but so does a need for techno-literacy. This presents us with significant opportunities for critical engagement and offers up new applications for those with special needs who do not perform as well in traditional text and numerical or orally based learning. Throughout these considerations, we must not forget that technology itself

also needs to be critically studied, and the skills learned through and with technology will help students cope with an ever-increasing information-laden and highly visual environment in which technology can be used for both promoting traditional arts and spawning new media.

Kellner and Share (2009) in the previous decade claim that "before most children are 6 years of age, they spend about 2 hours per day with screen media, something that doubles by age 8, and before they are 18 they spend approximately 6.5 hours daily with all types of media" (p. 281). As these children they spoke of are now young adults, this figure could easily be much higher, as the youthful majority of my participants reported spending a hair under 8 hours per day online, which may or may not include other types of screen media consumption such as the foreign television programs that many reported watching as well. Rideout et al. (2005), who conducted a large survey of media use of students aged 8-18, found that over three-quarters had an IPod or multimedia player, two-thirds had a cell phone, and over half had portable gaming devices. One thing these three media have in common today is that they all have network capacities allowing connection to the Internet, and of course all are susceptible to advertisements. This makes it important "now more than ever, that children need to learn how to critically question the messages all around them and how to use the vast array of new tools available to express their own ideas and participate fully" (Kellner and Share, 2009, p. 281). Carrington (2005) also cited by Kellner and Share, presses this further, stating that "the emergence of new media texts situates contemporary children in global flows of consumption, identity and information in ways unheard of in earlier times" (p. 22). This prompts us to reflect on the identity impacting

role of ads and the youth population that is a highly sought after audience for corporate interests' wares (Arnett, 2002). This also reminds us of Kuotsu's (2014) example and the effects of phenomena like the Korean Wave.

Some of these proposed conditions have already been enacted in examples such as Singapore, where learning ICT has become compulsory at all levels and in scholastic subjects including art (Kan, 2009). Kan portrays how students, through computerized animation, connected with visual storytelling, which allowed them to confront, depict, and share their feelings that exemplified their social milieu by working through a form of popular visual culture. Kan (2009) and Carpenter and Taylor (2003) likewise take note of the self-guided features inherent in techno-learning and how this enables students to gain confidence by solving problems free of the instructor. Ferneding (2007) contends that educators sometimes take media and technology at face value without carefully questioning the values embedded within them. In consideration of visual culture, she claims that we need to carefully consider our assumptions about ICT and what it says about our cultural sphere (Castells, 2010a). Artists should use reflexivity to deconstruct the anxiety, utopian ideals, and visual codes surrounding ICT and stop seeing ICT as just a tool. They should recognize the creative possibilities as well as dehumanizing implement of control, making it distinct from other media (Ferneding, 2007). In studying youth engagement with social media and the process of looking and making art via networks, Castro (2012, 2014, 2015) has given us a glimpse of the possibilities of taking on these issues in a critical and creative manner. This is important with children spending many hours a day with screen media, pushing us to focus more on techno-media literacy and

theory as networked media is now an indelible descriptor of our social experiences and culture. Alvarez (2007), like other scholars (Ash, 2004; Delacruz, 2009; Stankiewicz, 2004, 2003), warned of technophobic approaches and would likely support the types of methods discussed above as instrumental in creating a critical, creative, and technologically literate net generation.

Delacruz (2009) notes "an important shift in art education technology pedagogy—a concern with cultural citizenship in an age of global media" (p. 263) and goes on to say that this pedagogy taken into the art room can forge connections among art, technology, common good, and justice (p. 264). She claims that recent studies show youth use a magnitude of multimedia technologies for numerous goals, in widely creative ways, with ease, exemplified by many of my participants in how and what they access and in the many creative ways they drew their representations. "Coupled with cultivation of a sense of social justice, political know-how and a disposition toward public engagement, art education in the connected classroom becomes a tool for social change as student public opinion is forged" (p. 265). She also adds that art can aid in the bridging of ethnic divides and create a communal identity and empathy for each other. This is an important issue in an increasingly globalized world with many regions, such as those represented in my study, rapidly modernizing and striving to re-contextualize their cultural milieu and question age-old traditions in light of new models from outside their borders. Addison (2010) shares similar views, suggesting it is vital to consider digital and other new media in creative practice and in the context of global communications, ideas also supported by Delacruz (2009), who calls for these issues to be tackled head-on.

It is not difficult to realize that technology plays an important role in our contemporary life; that art and technology have always had an intimate and reciprocal, sometimes estranged, relationship; and that despite the challenges mentioned, is in a good position to explore and exploit new and emerging technologies. As evidenced by participants' reported habits, youth are born into a thriving, globally interconnected digital world and well versed in contemporary technologies and multimodal forms of media consumption. The arts are in a good place to provide the analytical and critical frameworks necessary to make sense of transcultural and boundary crossing visual forms and need to embrace ICT wholeheartedly.

Crowdsourced Education

In terms of the technology I used in this study, aside from the data analysis tools, the most powerful component was the crowdsourcing that allowed me to make connections across continents and cultures. Crowdsourcing could be an intriguing starting point for future endeavours in both artistic and educational inquiry. Thinking back on the projects of Aaron Koblin that in part inspired my study, we get an indication of the types of participatory collaboration that can take place in asynchronous and online settings. Taking it a step further and eliminating the anonymous aspect of his participants opens up the possibilities for the transcultural production of intensely complex artworks that transcend place and challenge culturally shaped perspectives.

Why not then take this a step further and imagine a crowdsourced classroom with

as many teachers as students, or consider Richard Baraniuk's (2006) concept for remixed

textbooks? Books could be crowdsourced, transcultural, and multilingual, portraying global

perspectives and providing challenges to linguistic and culturally rooted ways of knowing,

with real-time updates and no budget constraints depriving us of wonderful, colourful

visuals. Castro (2014) argues that difference helps to shape learning, particularly in the

fine arts, by looking at other's work that deviates from one's own. Could glimpses of this

difference be embedded in the essence of crowdsourcing networks, as those who

participate are encountering tasks outside the realms of what is typically delivered to them

via Google's algorithms? Is the answer to countering the dominance of these feedback loops

of information creating new networks and methods of searching that break from the

predefined individualized templates currently in play? Consider Castro's call for a code of

difference as another possible solution (2014). These sorts of ideas also speak to critical

pedagogy's quest for a more democratic education that should ultimately be cautious and

wary of ties with corporate entities whose motives do not always parallel the best learning

outcomes.

However, how does one get away from the monetization that current crowdsourced

platforms employ to gather and connect individuals? One answer is to steal a rather fitting

phrase from McGill's Claudia Mitchell, to create "networks for change" that utilize open

source platforms like Ushahidi's crowdsourcing tools to reach out and establish new

networks for creative and collaborative exploration, networks such as those examined by

Castro (2012, 2015) that have already shown the potential for constructive and critical teaching, learning, and looking.

Socio-cultural Functions of Visuality

It is quite clear how technology can influence and impact many aspects of our learning, knowledge attainment, and behaviour; however, technology's effects could not or would not be so pronounced without taking into account the socio-cultural aspects of visuality.

Freedman (2000) claims that the recent evolution of visual culture and its relationship with the social milieu pushes an urgent need for social perspectives of art education and accounts for the increased interest in visual culture and redefining aspects of our field. One message Freedman states that has "been continually reinforced" is that "art education is increasingly important in societies built on expressive freedom that are rapidly shifting from text-based communication to image saturation" (2000, p. 324), and this message is even more significant today. Freedman goes on to say that despite the importance of meaning, which has always been crucial to art, "it has not always been reflected in education. Instead, curriculum has often focused on form and technical skill, as opposed to content" (2000, p. 316).

An example of pushing social perspectives might be found in the activist art of Barbra Kruger and the Guerrilla Girls, who, claims Chung, use the same methods as

advertisers, recognizing "the power of mass media in contemporary society and the ways in which images and language from television, films, the Internet, newspapers, and magazines serve as key conduits through which modern citizens learn about the world" (2005, p. 21). "Students make art not merely for its formal, technical, or even private value, but to communicate about social issues in social ways" (Freedman, 2000, p. 323). Today students do this through a multitude of online social software technologies, Instagram, Snapchat, Deviant Art, etc. Again we need to reflect on the role of advertising discussed in my findings and how it is interwoven in today's online world, as described by Arnett (2002) and Webster (2014), who indicate youth as suffocating in a whirlwind of ads overt, sly, and disguised. Examples of this could be the marriage image turned up on Baidu linked to mock-couplings of Korean pop stars and the longing for a fantasy marriage despite the recognition of the fiction, which shows the power and persuasiveness of ICT (Castells, 2010a) when mixed with manufactured ideals from advertisers.

Chung (2004) conducted a small-scale study with junior high school students and had them analyze, deconstruct, and refurbish cigarette ads. She found that the students were aware that the ads contained positive and encouraging messages, despite not immediately recognizing the ads were for cigarettes. Later, by refurbishing the ads with Photoshop, the students injected what they thought the actual use of cigarettes entailed, relating them to death, aging, depression, etc. instead of the original intentions of the ads to deliver a light, happy, warm feeling and a sense of belonging. This type of activity shows that the benefits of including popular visual culture, particularly ads, in art education can bring about a more heightened awareness of what is being said and how students are being targeted as consumers.

Some of Chung's (2004) observations are paralleled by Hsiao's (2010), specifically relating to the role of images, dealing with teacher approaches and appreciation of art through picture book creation. This fosters creative thinking and helps develop problem-solving skills relevant across disciplines, claims Hsiao (2010), who supports the idea that visual awareness can come from art appreciation and image production, which can increase and enhance children's abilities to link visual similarities between different cultures. This relates to Eisner's ideas on art and visual culture:

> Thus, the argument for moving from art education to the study of visual culture is that if we are able to shift our teaching practices, our curriculum content, and the aims of our field, it will be more socially relevant to the real needs of students in the 21st century (Eisner, 2001, p. 7).

Aguirre (2004) also discusses art as a cultural system, drawing more emphasis on art and our social structures, calling for more constructivist methods to be used in art education (citing Freedman); art education that is socially constructed could deepen students' comprehension about the "immense power of visual culture, the social responsibility that comes with that power and the need for the integration of creative production, interpretation, and critique in contemporary life" (2004, p. 263). Ultimately Aguirre's (2004) position is how the aesthetic experience or interpretation of an artwork, whether it is fine or pop art, can be positioned within our contemporary lived experiences. Cultural, social, and political aspects interact and construct our everyday lives, and aesthetic understanding should position us directly within these influences without a concern of origins of fine art or popular art.

Dorn (2005) claims that art is socially constructed because "it is created within networks of people acting together" (p. 46). This idea relates well to the Castro's (2012) study on social networks: "When participants were asked how they learned on the site, almost all described learning as something that took place through looking at and responding to images, videos, and texts online: 'Well, it's like how I learn from lurking on deviantART I suppose. Seeing other people's works, I find myself analyzing what works and what doesn't'" (p. 160). Dorn states that for postmodern and critical educators any object that can initiate discourse of a social or political issue can be art, and "its utility is subject to the views of those engaged in discussing it" (p. 30). In this sense, he views art as more of an event rather than just an object. Dorn (2005) claims that theories developed under postmodernism allow for the legitimization of art whose sole purpose can be to challenge the system under which it emerged. This can be seen well before both postmodern and critical theory in the works of Dadaist readymades, the most infamous of which is Duchamp's (1917) *Fountain*, which was a contemptuous critique of the process upon which organizations confer or define what art is. Dorn also promotes similar critical theorists ideals of a plurality of truths and social realities. Dorn notes that mass and popular culture serve to dissipate the barriers of class based traditions and tastes that support the high vs. low cultural distinctions of the past, which subscribe to an elitist world view, paralleling Hall's (1997) observations.

Reflecting on Dorn's statements in the context of my research questions begs consideration of networks of individuals now connecting through crowdsourcing, social

media, and other online platforms globally and how the interaction of these geographic and culturally diverse regions are in the process of challenging existing models and constructing new social realities. Think about the example representations provided by my participants and the seemingly dissolved barriers of class or locally based traditions hinted at in hybrid and homogenized drawings of homes and marriage. What are these participants' pluralities of truth now telling us about the shifting cultural tides awash in globalism?

To make a more structured or formal connection between the two concerns, Duncum (1993) points out that the visual arts have several rudimentary social functions which seem to be analogous across cultures:

This gives rise to the possibility that they [the visual arts] are rooted in the nature of human cognition and societies … What is certain is that in our society children, even from a very young age, are motivated spontaneously to produce images for reasons which closely correspond with the functions of images in our society (1993, p. 215).

Literacy educators remain largely preoccupied with words, and art educators are equally preoccupied with static images. Issues that need to be considered involve the techniques of intelligibly moving from image to image and the variety of relationships between images and language (Duncum, 1993, p. 219). For those reasons, Duncum contends that the visual arts play a crucial role in education and society and are an intrinsic

part of our culture. He proposes five functions of the visual arts, which have been extended to include visual culture and the discoveries from my findings:

1. **Substitution:** a need for pleasurable looking and recreating the world through representation to better understand it. In some of my participants' drawings, this substitution may be manifested in forms of modernity from other nations, such as wedding ceremonies, or in the case of Northern India, in choosing alternative forms of visual culture and relating to external cultural examples (Kuotsu, 2013).

2. **Narration:** also provides pleasure, instructs and informs, helps create identity, and helps to construct what is socially acceptable, dealing with both humorous and serious issues. We can relate narration most easily to TV and cinema but should also consider advertisements that suggest, persuade, coax, and lure one towards a specific cultural commodity, helping to create new facets of identity (Arnett, 2002; Browne et al., 2014; Hassan, 2004; Sturken and Cartwright, 2001), and the roles of power and ads has already been discussed in the mechanics of this project.

3. **Embellishment:** "Embellishment provides visual pleasure and thus enhances the quality of life, but it can also obscure ideas"…Other forms of embellishment include design and decoration as well as adorning funerals and weapons with pleasing characteristics in order to "avoid consideration of their purpose" (Duncum, 1993, p. 219). An example of this from my data might be the drawing of single detached homes in places where they are either not present or the realm of the super-rich. This may also be extended to elaborate

marriage traditions and the obsession with diamond rings, rare even in western culture before World War II, with less than 10% of engagement rings containing a diamond compared with 80% at the end of last century (Francis-Tan and Mialon, 2015).

4. **Commitment/persuasion:** Duncum discusses how images are used to persuade and reinforce certain ideas and ideological commitment in societies where they become the status quo, the messages within these images being second nature or common sense to us. As Hassan (2004), Embong (2011), and Sturken and Cartwright (2001) point out, images can serve as a projection and maintenance of a lifestyle or the illusions of such, bringing us back to the diamond and its successful psycho-social fusion with romance (Sundie et al., 2008) via intensive, and deceitful, advertisement campaigns (Ghilani, 2012). Duncum states that "providing students with the critical skills required to resist attempts at visual persuasion which are not in the students' best interests are perhaps the most important skills formal education can deliver" (1993, p. 222).

5. **Personal expression:** Although it is often seen as a means of differentiating an individual from others and promoting one's uniqueness, Duncum claims that even within these individual forms of self-expression and personal achievement people are "constrained by media, available techniques, prevailing ideas, and the pressures and process of a stratified society. Even the basic notions of individualism, of personal expression and response, should be seen as social constructions serving dominant interests" (1993, p. 223). This again relates to the importance of the visual in socially constructing our own realities and making sense of the realities of others. However, in

contrast to Duncum's claims, Kuotsu's (2013) examples of expression or expressive choice

can be in the form of discontent and dissent with the dominant cultural regime, hinting that

technology and increasing access to a world of differing cultural possibilities offers

opportunities for resistance to dominant models.

Duncum's examples of the important roles that the visual arts play in our society

and everyday lives cross-culturally and throughout history certainly support an increased

focus and concentration on students' awareness of embodied meaning disseminated by

visual media and ultimately a literacy of images, the media through which they reach us,

and their interaction with other modes of learning and networked communications. These

points were also iterated much earlier by Eisner (1984) who states:

Art education for social and cultural awareness can have, as it were, two utterly

different emphases. One emphasis, as I have already indicated, is to help students to

learn how and why visual message systems are formed. The point, overall, is to help

students become increasingly critical of the ways in which vested interests are

served and how small groups of individuals manipulate and manage the population

at large through various forms of control: advertising, architecture, product design

and the like (p. 260).

This critical awareness now needs to be extended to incorporate technology and

how it mediates our interactions with society through multimodal information and comes

layered with a variety of interests, investments, hidden values, and sometimes unclear

motives. It is not difficult to envision the study of visual culture beginning early in education, and there are many good examples of this. Study could start with exercises like Hsiao's (2010) image appreciation enacted in early schooling, be followed up by projects during elementary education that begin to manipulate images using technology such as Herne's (2005) postcard examples, then move to more critical examination, deconstruction, and ad busting as in Chung's (2004) cigarette ad project, as well as including networked and visually based projects such as Castro's (2012). These activities could then use global sources of imagery to create art exchanges for intercultural exploration, paving the way for socially enlightened visual and media literacies using technology that helps to break down barriers and biases.

Multiliteracies

As the intricacies and complex interactions of the social, visual, and technological come together, a call for visual and media literacy cannot be enacted without also calling for social, economic, and techno-literacy as well. In what was a very different era than today Hudson (1987) argues that with all the advances made in technology and the supremacy of visual processes he estimates that over 85% of all knowledge is attained visually. Today, considering a plethora of visual information platforms online, it is no stretch to assume that this portion is even higher. Currently, although many strides forward have been made, there remains much room for improvement in research and educational contexts.

Being visually literate in today's world means that people are not only able to interpret the constructs of visual culture within the context of their lives, but they can also better understand the technologies surrounding them that are intrinsically visual as well as unearth the motives and hidden connections that are in place to deliver innovation and maintain culture commodification. This entails expanding literacy to consider the network across which information flows, recognizing the dominant powers and post-colonial aspects of language and how this affects our online discoveries, or in fact whether they are true discoveries at all.

Herne (2005), in a literacy project similar to that of Chung's (2004), shows that images (postcards) can be deconstructed and then narratives for these images constructed by groups of young students relating to Duncum's third function of visual art (1993). The activities described in that study demonstrated children's ability to adapt to the use of technology and their willingness to take on the conceptual role of assigning meaning to images through the use of captions, which according to some of the investigators reflected a development of the students' visual vocabulary and enhanced their interpretation of imagery. These results support more careful consideration of visual literacy learning beginning at a very young age. This emphasizes hands-on image production, and group activities that draw on lived experience and popular visual culture are essential in the pursuit of visual literacy.

Of course, there is no standardized approach that can be applied to engage one in critical literacy, so we must draw from a wide selection of methods and criteria such as

Abramov's (2008) methods of image deconstruction technique. Abramov describes three levels of meaning: Factual, Interpretive, and Conceptual (2008). Factual refers to the literal objects that are immediately recognized—people, cans, building products, etc. Interpretive alludes to common associations we have with the objects pictured—meanings of colours, domesticity, urban, rural. Conceptual denotes the hidden or underlying connotations of the pictures that convey values—cultural and ethnic—positive or negative emotions, etc. These interpretative aspects described by Abramov (2008) are similar to the secondary analysis of my image data: *Factual*—A particular image was drawn for the word *meal*; *Interpretative*—The meal appears to be western in origin; *Conceptual*—The image could represent hybridity, modernity, and aspirations for change manifest in literal consumption of a particular product. Here one may easily recognize a bridge from my research to the classroom.

Yamada-Rice's (2010) study of children's use of visual multimedia exemplifies Presnky's (2001) term *digital natives*, tech savvy at a young age and keen to interact and explore new devices for their own endeavours. Yamada-Rice (2010) has also noted a lack of enthusiasm for research on multimodal learning and visual modes of meaning making. Her data suggest:

Primarily visual-based media are already well utilised in the home, with the following included in four-year-olds' lives; DVD (100%), drawing (96%), picture books (93%), television (82%), websites (61%), cameras (54%), mobile phone cameras (36%), drawing-based software (36%), visual email (22%) being used weekly or more frequently, and webcams (28%) being used monthly or more

(p. 357).

Since that time tablets have become ubiquitous, and it is not hard to observe

children on public transportation and especially on long flights with a thin rectangular

screen between their hands, their eyes transfixed on colourful characters and ears engaged

with bleeps, bloops, and blurps. This raises the importance of not only educating children

on the thoughtful use of these devices, but also educating their parents in choosing apps

that not only provide respite but also engage children in critical learning. This would likely

be supported by Knight (2010), who argues that "it is a common acceptance that

contemporary schoolchildren live in a world that is intensely visual and commercially

motivated, where what is imagined and what is experienced intermingle" (p. 236). Knight

views visual literacy in its present state to be more of a passive form of informing students

of the contextualization of visual materials. She notes that visual literacy is often placed

outside the art curriculum in programs such as English, noting that those outside visual

arts may not possess the same ability to properly decode or deconstruct the understated

and hidden meanings rooted in contemporary works. Knight (citing Rogoff 1998) suggests

that a failure to acknowledge mass media's visual influence by teaching how to understand

and contextualize all forms of visual culture may leave students unable to make

connections to their lived experiences of ads, Internet, and LED screens if they are largely

confronted with mostly European masters and modern art that is too far removed from

their own time or realities. Instead students can readily relate to foreign visual cultural

programs from other countries despite the barriers of language and geography. As I

discovered in some of my image data, youth have a thirst for visual culture outside the

physical and cultural boundaries of an individual's milieu, manifest in Web surfing habits,

music, and TV programming consumption. Knight (2010) also calls for a more interdisciplinary approach to visual culture and a pluralistic examination of popular and postmodern culture, which bring us to remarks by Callow (2013) who states:

> The parameters of school literacies have been significantly extended with the rapid cultural and technological changes in literate forms of communication in recent years. Predominant among these is the growing impact of images in an increasing range of texts and the shift from page to screen-based literacies. Learning materials in school subject areas are changing, texts of popular culture are being seen as important curriculum resources (p. 1).

Callow (2013) claims that crucial to the explanations of image-language interaction and understanding in traditional and technological models across subject areas is "understanding that the ways in which these resources are deployed are mediated by the cultural and socioeconomic positioning of the participants" (p. 2). Callow (2013) emphasizes the need to re-evaluate our curricula to cope with emerging technologies and multi-literacies, noting the trends that set images in ever increasing prominence on both traditional and electronic forms. "In order to become effective participants in emerging multiliteracies, students need to understand how the resources of language, image and digital rhetorics can be deployed independently and interactively to construct different kinds of meanings" (Callow, 2013, p. 8).

Stankiewicz (2004) also makes an important argument of the inseparability of visual literacy and technology dating back to our ancient ancestors' technologies of cave

paintings. She even goes so far as to remark that art education can be a component of power, becoming a "virtual technology for social control" (p. 88). She also argues that technology for mass media reproduction would have had little impact without the development of technology for the dissemination of images (magazines, postal service, and advertising). This again supports the argument for the more vigorous study of visual culture in the classroom since visual literacy and technology operate under its banner. Stankiewicz (2004) claims the primary concerns for literacy were originally religious and political so that people could read the bible and vote. She goes even further to state that literacy has often been used as a means of socio-economic control limited to those within a certain class, and art, a once frivolous pursuit, had also been reserved for the upper classes. So in a sense visual literacy has important ramifications that art is beneficial to all learners across socioeconomic classes and academic disciplines and again points to the possibility of art and technology's democratic effects.

Eisner (1986) calls for artistic and sensory literacies, claiming that the arts play an intricate and imperative role in reasoning and developmental growth. In particular Eisner makes a case for the role of the senses in the interpretation of our world at large and our ability to create flexible concepts that can translate abstract concepts to concrete understanding, arguing that words alone are "meaningless noise or marks on paper unless their referents can be imagined" (p. 59). He provides us with a poignant example of giving a group of students a task in music, poetry, or visual art and each of them creating something different that explores the task in a thoughtful and critical manner, for which each individual's perception could be deemed "right." Contrast this example with a typical

math problem, given to the same group of students but for which each person should come up with only one answer (Eisner, 1986). This shows us that developing multiliteracies are crucial to understanding the complex, multifaceted, and infinitely layered amalgam of cultural, technological, economic, social, and sensory information consumed, produced, and shared on a global scale every hour of every day. However, in order to promote multi-literacy and become "multi-literate," we must not rely on in-service educators to do all the heavy lifting. We must recognize much work still needs to be on the research end of the equation to provoke, uncover, and understand the pluralistic nature of our existence that cannot be reduced to singular or dualistic modes of thinking that are constricted by paradigms of the past. Kincheloe (2008), on the other hand, argues that teachers need to become involved in the "culture of researchers" (p. 17) instead of relying on expert knowledge from privileged institutions, also becoming aware of the consequences of school reforms and how they affect power relations, challenging top-down content standards.

Visual and Critical Research

As previously mentioned, even those champions of visual methods and ethnography who have made tremendous strides in reconfiguring research methodologies (Banks, 2001, 2007; Pink, 2013; Rose, 2012) have overlooked the possibilities of drawing as a research method or tool, and scarcely does the term "drawing elicitation" occur (though Bagnoli, 2009, does use the term "graphic elicitation"). Therefore, the methods and procedures I used throughout this study were in a lesser sense also seeking to provide further alternatives to the often logocentric preferences of academia. Although I acknowledge that

this study, too, falls under the structure of a traditional dissertation, I hope it has added a

few new steps on the pathway towards a more complete and inclusive visual and

methodological paradigm. Admittedly, since the start of my pilot projects (McMaster, 2012,

2015) I have noted more and more studies and literature on these issues. Still there

remains much to be accomplished and many more possibilities to be examined.

Unfortunately, positivism still blankets diverse forms of knowledge, as well as the

methods to attain that knowledge under an all-encompassing code of universality and

predetermination (Kincheloe, 2008). Kincheloe (2008) states that positivists believe that

there is no difference between the methods by which knowledge is produced in the

physical sciences and that produced in the humanities. Such guidelines would constrain the

study of sociology under the laws of physics. Positivist social and behavioral scientists

remove themselves and their subjects from their cultural milieus and study them in

conditions as close to a laboratory setting as possible, missing the key data derived from

the human context (Banks, 2007). My study, in a sense, attempts to get closer to the human

context without actually being there, while at the same time allowing the asynchronous

aspect of participation to encourage contributors to take part in whatever context they saw

fit with as little influence from me as possible. Although Giroux (2011), like Kincheloe

(2008), asserts that "intellectual inquiry and research free from values and norms are

impossible to achieve" (p. 27), so recognition of bias through intensive introspection and

professional reflection is required to enhance these pursuits.

One such pursuit might be the creation of image databases specifically for education,

academics, and researchers to use, cross reference, and compare. As Beaudoin and Brady

(2011) point out, "For a number of professional user groups in the academic and creative disciplines, visual information plays a central role in the work they complete" (p. 24). They go on to argue:

> The most critical challenges facing the image users in this study were the inadequate availability of, and access to, appropriate visual content to meet their needs. Codified collection development practices similar to those for print collections do not exist for visual materials, so there is no standard against which to judge the holdings of an institution or a database (p. 32).

Developing these types of visual and multimedia repositories should be a key goal across disciplines that intersect the visual to avoid redundancies, share breakthroughs, and provide a clearer picture of what has been accomplished with links to the "how." Some of the implications of my study, at least regarding the sourcing and organization of images worldwide, could be used to serve and create these types of databases and encourage more visual data collection in interdisciplinary contexts. And although there is evidence of these systems already in existence, they tend to be fragmented and institutionally isolated, not easily searched and indexed against other forms of knowledge. Development of open source organizational tools that mimic functions such as Google's reverse image search would be an exceptional tool to add to such an international repository.

Such endeavours to connect and disseminate imagery might answer Eisner's (2008) call for unfettered perception, which pleas for us to understand, not just recognize, that we are fixated on labeling and classifying an object, or phenomena under the constant

constraint of time, which he believes is necessary to disregard in order to truly see. "I would argue that the limits of language in no way define the limits of cognition" (Eisner, 2008, p. 27). I overcame most of the limits of language in my survey by using machine translation, and of course I always considered imagery at each and every stage of the design and implementation. This again begs reconsideration of the limits language and its domination as the unparalleled mode of human communication that champions and shapes our intellectual quests for understanding. Of course, this reconfiguration cannot proceed without reflective critical and social theories that seek to construct, not just divide and categorize.

Freedman (2000) claims that regardless of how the term critical theory has been used, from the first poststructuralist challenges to positivism to the study of curriculum on the basis of socio-economics, the common thread has always been social, arguing that art has become more social and through critical reflection and social discourse also more democratic. "Critical social theory is a form of critique, and critique is a constructive force in arts communities precisely because it opens a discussion that might otherwise be closed" (Freedman, 2000, p. 321). It also helps to carefully analyze the cultural works and values of foreign and indigenous art and artists giving them their due complexity and consideration beyond western perspectives, which is similar to what I carried out in this study. This positions critical social theory as essential in the study of global visual culture, and socio-cultural issues are integral to art education and the issues inherent in globalization.

Tapia (2008) claims that if the tenets of critical theory are brought to bear on museum education, then issues of identity, authority, power, and socio-political forces can be interrogated and placed within the context of the everyday lives of visitors and students. This framework conflicts with formalist and aesthetic approaches to art education, which see art as something that transcends the everyday and should be enjoyed for its own sake. Formalism proponent's primary concerns, in terms of art education, were and are discrimination over deconstruction. They believe that being able to appreciate and discern between "high" and "low" art somehow infused in the viewer skills that would resonate in daily applications. The basis of their arguments, according to Tapia (2008), is ultimately that education is not necessary to have an aesthetic experience. She further suggests that these claims do not have a place in a globalized and multicultural society and assume that the aesthetic value of artworks is universal and ignorant of race, class, and culture. This again asks us to dispense with the debates of high versus low art, recognizing that "In the world of art, postmodernist critical analysis is characterized, for example, by the effacement of the boundaries between art and everyday life; the collapse of hierarchical distinctions between high and popular culture" (Tapia, 2008, p. 40). Thus postmodern ethnography (Tapia, 2008), under which I would include visual ethnographic research, marked the beginning of researchers stepping down from a positivist position of privilege. Doing ethnographic research today means recognizing that we live in a globalized, multicultural, engendered, and technologically influenced contemporary society, all points at the heart of my study.

Bresler states that "in research, dialogue with the data is crucial to expanding perception and conceptualization" (2006, p. 60), and I believe that my dialogue with the data is evident, from the design and implementation to the visual methods employed for successive analyses, and ultimately in making the connections between sometimes small and indistinct visual icons in the drawings to real world manifestations from which they may have been derived or influenced. None of this would have been possible using solely traditional and text-based research and analysis. Despite the recent surge in visual studies and increased interest in visual methods, these methods solicit further clarification, modifications, methodological stability, and promotion so that their use can be seen easily across disciplines. This should be a goal of visual arts, educational research, and academia in general.

Future Directions

This section details a possible future research project to follow up on my findings. Based on my main analysis, restricted to Asia, this study is set to explore those countries where the image data indicates there may be actual new cultural practices emerging that resemble those representations presented in participants' drawings. This proposed study focuses on the word *marriage* and would begin by analyzing the hybridized marriage ceremonies of Korea, which have been in practice for decades, to trace the roots of this visual unification of East-West matrimony before seeking out other Asian cultures where

this practice may now be emerging, just as it did some time ago in Korea.

Global Visual Culture and the Hybridization of Ceremony: The Evolution of Marriage in Asia

In order to study these types of relationships, I aim to examine established and emergent patterns of western and/or hybridized marriage ceremonies in Asia. I will again draw from my personal lived experience in East Asia to aid in reflecting on and recognizing the importance of imagery (Mitchell, Dillon, Strong-Wilson, Pithouse, Islam, O'Connor, Rudd, Staniforth & Cole, 2010).

Building upon this thesis and my earlier findings (McMaster, 2012, 2015), where I suggest variations of homogenization and hybridization of visual imagery is occurring, hastened by the Internet, I have identified several regions that display similar visual representations of marriage ceremonies, as I have observed and participated myself, in established cultural practice in East Asia. Crowdsourcing and image elicitation (Mitchell, 2011b) were key in identifying this phenomenon, allowing a broad international and multilingual inquiry that has pointed to several regions in which this phenomenon is likely manifesting. By continuing to employ visual methods in the form of participant-driven image elicitation, a future study can seek more in-depth examples by observing, collaboratively creating, and jointly analyzing the images captured in the form of photos, drawing, and/or video (Mitchell, 2011b). This proposal aims to more fully investigate global notions of identity, place, media consumption, and participation in global visual

culture. I will accomplish this by exploring and documenting representative examples through several image-based ethnographic case studies. My proposed study is guided by the following key questions:

- What can be learned from established hybridized visual cultural practices, such as westernized marriage, in a Korean/Japanese context that may help us understand how, when, and why these types of cultural trends will emerge and become established in new regional contexts such as India /Vietnam?

- What justifications, if any, do individuals make as to the selection, adaptation, and practice of specific trends in foreign (non-localized) visual culture?

- How do individuals cultivate identity and cultural practices, on and offline, in countries of rapidly developing social and technological change amidst the backdrop of a perpetually shifting and porous globalized landscape?

Theoretical Framework

Critical social theory and network theory would continue to help frame the study and to question associations between construction/deconstruction, image representation/meaning-making, and how these visual media are introduced and consumed (Calhoun, 2007; Kincheloe, 2005; Leonardo, 2004). Critical social theory coupled with network theory help to examine and uncover central links and flows of information and artifacts within media, society, and culture. Inclusion of these theoretical paradigms will also help recognize the presence of dominant ideologies across cultures, sometimes in the form of post-colonialism (Ashcroft, 2015), and identify authoritative sources of

authorship within local popular visual culture. This framework also helps to focus on how an individual is introduced to and engages with images in relation to underlying power structures and flows of consumption (Crossley, 2005; Kincheloe, 2005). Lastly, critical social theory is instrumental in recognizing researcher bias through self-reflexivity (Morrow and Brown, 1994), maintaining openness (Leonardo, 2004), and stressing making links among competing and frictional interdisciplinary perspectives (Kellner, 2002).

Methodology

As was the case in this thesis, it is important to consider not only how individuals consume and internalize visual culture, but also how they themselves become producers, disseminators, and/or users (Rose, 2015) of similar imagery by participating in westernized marriage ceremonies and then sharing the imagery they create online. That is why my future inquiry would involve not only making and examining imagery, but also collaborating in the production of visual representation (Mitchell, 2011b) to reveal the links between the material, the social/symbolic, the cultural (Banks, 2001, 2007), and the digital (Rose, 2015). To begin, I would conduct precursive case studies in Korea, where the hybridized "western marriage" phenomena is established and has been occurring for many years (Park, 1997; Goldstein-Gidoni, 2001). Based upon the visual representations and surveys collected in this thesis, the regions of South and South East Asia have been identified as areas where the phenomenon is likely emerging, if not already occurring with regularity. Of these regions, I have selected India, Indonesia, Nepal, Sri Lanka, Taiwan, Thailand, and Vietnam from the data to pursue 1-2 case studies.

Each case study would involve documenting and interviewing people who are preparing for marriage and have chosen a hybridized or westernized ceremony (in lieu of/ in addition to a local/traditional one). I would elicit images in the form of drawings (Theron, Mitchell, Smith & Stuart, 2011), photos (Mitchell, 2008; Moletsane, Mitchell, De Lange, Stuart, Buthelezi, & Taylor, 2009), or video (Milne, Mitchell & De Lange, 2012) created by both the participants and me (Mitchell, 2011b), guided by my research questions, to document and isolate the dominant visual representations of the ceremony in addition to the local community and other visual cultural artifacts (Rose, 2015). The form of image-making done by the participants would suit their interest, the situation, or comfort with the media (Mitchell, 2011b). Likewise, I would use media according to the situation, following opportunities, and consider location, discretion, and cultural norms (Banks, 2007; Mitchell, 2004, 2008, 2011b; Pink, 2013; Rose 2012). Based on these considerations, participants and researcher would document pre/post ceremony events in addition to the marriage itself. Before beginning, participants would decide on which media they would prefer for each stage and be trained on specific media if necessary. Afterwards, the participants and I would meet and review the images gathered, identifying the most impactful ones and discussing the reasoning behind those choices, as well as which images best represent the participants' perceptions and which ones they will share online, recognizing the participants' right to choose what is disseminated (Mitchell, 2011b; Pink, 2013; Rose, 2012). All of these decisions and procedures seek to further extend existing visual methodologies as this thesis did.

I will intertwine and juxtapose participant images with my own, drawing from my extensive knowledge as a practitioner of photography and visual arts and the design and findings of the doctoral and pilot studies (McMaster, 2012, 2015). Not only can this image elicit and encourage practices of creation/documentation that are often already commonplace, it also invites the participants to engage as co-collaborators, valuing their lived experience and perception as integral to the process of unbundling our shared visual cultural exchange (Bagnoli, 2009; Banks, 2007; Mitchell, 2011b; Mitchell, Weber & O'Reilly-Scanlon, 2005; Pink, 2013; Rose, 2012). This engagement with my future participants extends the vital portions of my thesis framework by providing additional opportunities for participants' voices to be heard and for them to become active collaborators in the telling of their stories.

Final Remarks

So here we are at the end of an arduous, exciting, and thought-provoking journey to which I had initially never really given any thought, even as I was nearing the completion of a master's degree. Revisiting my time in Korea, I certainly never thought I would be writing about the influence of Korean dramas and pop stars on Asian culture, let alone be proposing to go and study the visual culture of wedding ceremonies in any form. Reflecting on how it all came together, it is actually quite amazing how so many small observances, tidbits of advice, classes, conferences, and chance meetings led me to the technology, the methodological beginnings, a collection of thousands of images from people all over the

world, and a set of questions that unearthed a rich series of images that have given me new insights into the vast cultural, technological, and visual world.

To summarize, here are what I believe to be the most salient points I have tried to make throughout this project. First, textual and numerical research and analysis are far from sufficient for studying visual based and multimodal phenomena and will result in an incomplete understanding of a problem. Second, the impact of the information communication technologies on us as individuals, as distinct nations, and as a global community grows exponentially each year and spells profound changes for every facet of our socio-cultural lives on many levels, and these impacts are no longer confined to borders, geography, or nation states. This is why it is important to more thoroughly integrate ICT's study in art, culture, and geography in our schools at all levels as a mode of understanding with which the world has not yet fully come to grips. Third, without understanding how visual cultural information flows and influences us, we are leaving personal, scholastic, and political decisions to be highly impacted by corporate interests and their economic ad-driven imperatives. Graduating from school without studying visual cultural and having an understanding of how the visual impacts our lives, intersecting technology, culture, and commerce leaves individuals incompletely educated and unprepared for the tremendous changes that lie ahead. Finally, the dissipation of cultural practices, some hinted at in in my findings, through hybridity and homogenization driven by the "Internet of things" and propped up by consumerism will continue paralleling the dissolution of minority languages due to the strength of the Roman-alphabetized organization of the Web and its corporate benefactors. Although the end results of this

trajectory cannot be assured, this could spell disastrous effects for the unique and sometimes fragile cultures surrounded by dominant cultural forces that may not readily recognize what they are swallowing whole as we propel ourselves ever forward into the age of information.

At the onset of this study I began with the idea that the visual was the epicenter of this research, and for the most part it was. Still, as I progressed through the various stages and began to see all the intersections of the visual and technology, globalization, culture, and meaning-making, I was pulled in many directions of further inquiry, seeing not just the visual's impact on these elements, but also their influence on the visual and a complex relationship that warrants more attention. All things being equal, it is really about representation interacting in transmodal forms—changing, evolving, innovating—and what it means to experience and learn in our pluralistic and multifaceted world.

References

A-D

Abrahmov, S.L. (2008). Media literacy: Reading and writing images in a digital age. In M. Alexenberg (Ed.), *Educating artists for the future, Learning at the intersections of art, science technology, and culture* (pp. 271-290). Chicago: University of Chicago Press.

Adams, L.L. (2008). Globalization, universalism, and cultural form. *Comparative Studies in Society and History*, *50*(3), 614-640.

Addison, N. (1999). Who's afraid of signs and significations? Defending semiotics in the secondary art and design curriculum. *Journal of Art and Design Education*, *18*(1), 33-39.

Addison, N., Burgess, L., Steers, J., & Trowell, J. (2010). *Understanding art education: Engaging reflexively with practice* (1st ed.). London: Routledge.

Adoniou, M. (2014). Drawing conclusions: What purpose do children's drawings serve? *Australian Art Education*, *36*(1), 84-105.

Aguirre, I. (2004). Beyond the understanding of visual culture: A pragmatist approach to aesthetic education. *Journal of Art and Design Education*, *23*(3), 256-269.

Alexander, A., & Sharma, M. (2013). (Pre)determined occupations: The Post-Colonial hybridizing of identity and art forms in third world spaces. *The Journal of Social Theory in Art Education*, *33*, 86-104.

Allen, D. (1994). Teaching visual literacy—Some reflections on the term. *Journal of Art and Design Education*, *13*(2), 133-143.

Alvarez, D. (2007). New perspectives in art education and new technologies in Spanish

    speaking countries. In L. Bresler (Ed.), *International handbook of research in arts*

    education (pp. 1353-1354). Springer: Dordecht, The Netherlands.

Amazon Web Services (2010). MTurk CENSUS: About how many workers were on

    Mechanical Turk in 2010? Reply to posting on official Amazon forum by Amazon

    employee. Retrieved from

    https://forums.aws.amazon.com/thread.jspa?threadID=58891

Amburgy, P. M., Knight, W. B., & Keifer-Boyd, K. (2006). Revisioning the self-portrait and

    still-life as visual culture. In P. Duncum (Ed.), *Visual culture in the art class: Case*

    studies (pp. 73-80). Reston, VA: National Art Education Association.

Arnett. J. J. (2002). The psychology of globalization. *American Psychologist*, *57*(10), 774-

    783.

Ash, A. (2004). Bite the ICT bullet: Using the World Wide Web in art education. In

    Hickman, R. (Ed.). *Art education* 11-18. NY: Continuum International Publishing

    Group.

Ashcroft, B. (2015). Towards a postcolonial aesthetics. *Journal of Postcolonial*

    Writing, *51*(4), 410-421. doi: 10.1080/17449855.2015.1023590

Ausburn, L. J., & Ausburn, F. B. (1978). Cognitive styles: Some information and

    implications for instructional design. *Educational Communication and Technology*,

    26(4), 337-354.

Avgerinou, M., and Ericson, J. (1997). A review of the concept of visual literacy. *British*

    Journal of Educational Technology, *28*(4), 280–291.

Aytes, A. (2011). Cognitive labor, crowdsourcing, and cultural history of the

mechanization of the mind. *Leonardo Electronic Almanac*, *17*(1), 119-127.

Babbie, E.J. (2010). *The basics of social research*. Belmont, CA: Wadsworth.

Bagnoli, A. (2009). Beyond the standard interview: The use of graphic elicitation and

arts-based methods. *Qualitative Research*, *9*(5), 547–570.

Barabási, A. L., and Albert, R. (1999). Emergence of scaling in random networks.

Science, (286), 509-512.

Banks, M. (2001). *Visual methods in social research*. London: Sage.

Banks, M. (2007). *Using visual data in qualitative research*. London: Sage.

Barney, D. (2004). *The network society*. Cambridge: Polity.

Beaudoin, C. (2008). The Internet's impact on international knowledge. *New Media

Society, 10*(3), 455–474.

Beaudoin, J. E., & Brady, J.E. (2011). Finding visual information: A study of image

resources used by archaeologists, architects, art historians, and artists. *Art

Documentation: Journal of the Art Libraries Society of North America*, *30*(2), 24-36.

Beckman, K., & Smith, S.N. (2006). Cross-cultural understanding through visual

representation. *Colombian Applied Linguistics Journal*, 8, 137-151.

Bell, P. (2001). Content analysis of visual images. In van Leeuwen and Jewit (Eds.).

Handbook of visual analysis. (pp. 10-34). London: Sage.

Bohman, J. (2012). Critical theory. *The Stanford Encyclopedia of Philosophy* (Spring

Edition), Edward N. Zalta (ed.). Retrieved from

http://plato.stanford.edu/archives/spr2012/entries/critical-theory/

Bolin, P. E., & Blandy, D. (2003). Beyond visual culture: Seven statements of support for
material culture studies in art education. *Studies in Art Education*, *44*(3), 246-263.

Boughton, D. (1986). Visual literacy: Implications for cultural understanding through art
education. *Journal of Art & Design Education*, *5*(1-2), 125-142.

Bowman P. (2013). *Reading Rey Chow: Visuality, postcoloniality, ethnicity, sexuality*. NY:
Peter Lang.

British Broadcasting Corporation (2016). Country profiles. In *Asia-Pacific*. Retrieved
from: http://news.bbc.co.uk/2/hi/country_profiles/default.stm

Brown, I (1992). A cross-cultural comparison of children's drawings. *Visual Arts
Research*, *18*(1), 15-20.

Brown, I. M., Lysaght, P., & Westbrook, R. S. (2010). Voices of children: An international
project where children have a voice through image and text. In L. Waxman (Eds.).
Art and design for social justice symposium & 15th anniversary, Kids' Guernica Peace
Mural Project (pp. 89-91). Tallahassee, FL: Florida State University.

Browne, K., Blundell, J., Law, P., Whalley, M. (2014). *Sociology for A2 AQA*, (2nd ed.).
London, UK: Polity.

Bruce, B.C. (2007). Technology and arts education. In L. Bresler (Ed.). *International
handbook of research in arts education* (pp. 1355-1360). Dordecht, The Netherlands:
Springer.

Calhoun, C. (2007). *Nations matter: Culture, history, and the cosmopolitan dream*. London,
Routledge.

Capstick, A. (2011). Travels with a Flipcam: Bringing the community to people with dementia in a day care setting through visual technology. *Visual Studies*, *26*(2), 142-147.

Callow, J. (2013). The shape of text to come: How image and text work. Sydney, Australia: Primary English Teachers Association Australia (PETAA), Buckingham: Open University Press.

Carrington, V. (2005). New textual landscapes, information and early literacy. In J. Marsh (Ed.). *Popular culture, new media and digital literacy in early childhood* (pp. 13-17). London: Routledge Falmer.

Castells, M. (2001). *The Internet galaxy: Reflections on the Internet, business, and society*. Oxford: Oxford University Press.

Castells, M. (2010a). *The rise of the network society*. Cambridge, MA: Blackwell Publishers.

Castells, M. (2010b). *End of Millennium*. Blackwell: Oxford, UK.

Castro, J.C. (2012). Learning and teaching art through social media. *Studies in Art Education*, *53*(2), 152-169.

Castro, J.C. (2014). Conclusion: The code we learn with. In Venkatesh (Ed.). *Educational, psychological, and behavioral considerations in niche online communities.* (pp. 402-408). IGI Global.

Castro, J.C. (2015). Visualizing the collective learner through decentralized networks. *International Journal of Education & the Arts*, *16*(4), 1-30.

Chen, L. (1995). A critical examination of cultural influences on children's drawings from Mid-western United States and Taiwan. *Marilyn Zurmuehlin Working Papers in Art Education* 13, 13-19.

Cho, Y. (2011). Desperately seeking East Asia amidst the popularity of South Korean pop culture in Asia. *Cultural Studies*, *25*(3), 383-404.

Choe, S.G. (2006, May 23). Wal-Mart selling stores and leaving South Korea. *New York Times*. Retrieved from:

http://www.seoul.co.kr/news/newsView.php?id=20060816008011

Central Intelligence Agency. (2015). Country Profiles. *In The world factbook*. Retrieved from https://www.cia.gov/library/publications/the-world-factbook/docs/profileguide.html

Chung, S.K. (2005). Media/visual literacy art education: Cigarette ad deconstruction. *Art Education*, *58*(3), 19-24.

Collier, M. (2001). Approaches to analysis in visual anthropology. In van Leeuwen and Jewit (Eds.). *Handbook of visual analysis*. (pp. 35-60). London: Sage.

Corradetti, C. (2011). The Frankfurt School and critical theory. *The Internet Encyclopedia of Philosophy*. Retrieved from http://www.iep.utm.edu/frankfur/#SH2a

Creswell, J. W. (2013). *Research design: Qualitative, quantitative, and mixed methods approaches*. New York: Sage.

Crossley, N. (2005). *Key concepts in critical social theory*. London: Sage.

Delacruz, E. (2009b). Old World teaching meets the new digital cultural creatives. *Journal of Art and Design Education*, *27*(3), 261-268.

Delacruz, E.M., Arnold, A., Kuo, A., & Parsons, M. (2009a). *Globalization, art and*

education. Reston, VA: National Art Education Association.

De Lange, N., Mitchell, C., & Stuart, J. (Eds.). (2007). *Putting people in the picture: Visual methodologies for social change.* Amsterdam: Sense.

Desai, D. (2005). Places to go: Challenges to multicultural art education in a global economy. *Studies in Art Education, 46*(4), 293-308.

Dorn, C. M. (2005). *Art education: The development of public policy*. Miami, FL: Barnhardt & Ashe.

Dorn, C. M., & Orr, P. (2008). *Art education in a climate of reform: The need for measurable goals in art instruction* (Illustrated ed.). Toronto, ON: Rowman & Littlefield Education.

Doy, G. (2005). *Picturing the self: Changing views of the subject in visual culture*. NY: Palgrave Macmillan.

Duncum, P. (1993). Children and the social functions of pictures. *Journal of Art and Design Education*, *12*(2), 215-225.

Duncum, P. (2001). Visual culture: Developments, definitions, and directions for art education. *Studies in Art Education*, *42*(3), 101-112.

Duncum, P. (2002). Theorizing everyday aesthetic experience with contemporary visual culture. *Visual Arts Research*, *28*(2), 4-15.

Duncum, P. (2005). Popular culture and ten kinds of integration. In M. Stokrocki (Ed.). *Interdisciplinary art education: Building bridges to connect disciplines and cultures*. (pp. 107-120). Reston, VA: The National Art Education Association.

Duncum, P. (2006). *Visual culture in the art class case studies*. Reston, VA: NAEA.

Duncum, P. (2014). Youth on YouTube as smart swarms. *Art Education*, *67*(2), 32-36.

Dunn, R.S. (2002). *An examination of online qualitative research methods.* Faculty

publications and presentations. Paper 89. Retrieved from

http://digitalcommons.liberty.edu/educ_fac_pubs/89

E-I

Edwards, J. (2012). Meet the 30 biggest advertisers on Facebook. *Business Insider*.

Retrieved from: http://www.businessinsider.com/the-30-biggest-advertisers-on-

facebook-2012-9

Edwards, W. (1982). Something borrowed: Wedding cakes as symbols in modern Japan.

American Ethnologist, *9*(4), 699- 711.

Edwards, W. (1987). The commercialized wedding as ritual: A window on social values.

Journal of Japanese Studies, *13*(1), 51-78.

Efland, A.D. (2005). Problems confronting visual culture. *Art Education*, *58*(6), 35-40.

Eisner, E. W. (1984a). The role of the arts in cognition and curriculum. *Journal of Art &

Design Education*, *5*(1-2), 57-67.

Eisner, E. W. (1984b). Alternative approaches to curriculum development in art

education. *Studies in Art Education*, *25*(4), 259-264.

Eisner, E. W. (1986). The role of the arts in cognition and curriculum. *Journal of Art &

Design Education*, *5*(1-2), 57-67.

Eisner, E.W. (1992) 'Curriculum Ideologies.' In P.W. Jackson (Ed.). *Handbook of research

on curriculum* (pp. 302–326). NY: Macmillan.

Eisner, E.W. (1997). The promise and perils of alternative forms of data representation.

Educational Researcher, *26*(6), 4-10.

Eisner, E. W. (2001). Should we create new aims for art education? *Art Education*, *54*(5), 6-10.

Eisner, E. (2002). *The arts and the creation of mind*. Harrisonburg, VA: Yale University Press.

Eitz, M., Hays, J., & Alexa, M. (2012). How do humans sketch objects?. *ACM Trans. Graph*., 31(4), 44-1. doi: http://dx.doi.org/10.1145/2185520.2185540

Elkins, J. (2000). *How to use your eyes*. NY: Routledge.

Embong, A.R. (2011). The question of culture, identity and globalisation: An unending debate. *Kajian Malaysia*, *29*(1), 11–22.

Ergil, D. (2010, March 21). Social and cultural impacts of globalization. *Today's Zaman*, Retrieved from: http://www.todayszaman.com/columnist-204938-social-and-cultural-impacts-of-globalization.html

Feldman, E.B. (1982). Art in the mainstream: A statement of value and commitment. *Art Education*, *35*(5), 6.

Ferneding, K. (2007). Understanding the message of the medium: Media technologies as an aesthetic. In L. Bresler (Ed.). *International handbook of research in arts education* (pp. 1331-1352). Dordecht, The Netherlands: Springer.

Fisch, M. (2001). The rise of the chapel wedding in Japan: Simulation and performance. *Japanese Journal of Religious Studies*, *28*(1/2), 57-76.

Francis-Tan, A., & Mialon, H. M. (2015). "A diamond is forever" and other fairy tales: The relationship between wedding expenses and marriage duration. *Economic Inquiry*, *53*, 1919–1930. doi: 10.1111/ecin.12206

Freedman, K. (1997). Visual art/virtual art: Teaching technology for meaning. *Art Education*, *50*(4), 6-12.

Freedman, K. (2000). Social perspectives on art education in the US: Teaching visual culture in a democracy. *Studies in Art Education*, *41*(4), 314-329.

Frosh, P. (2003). *The Image factory consumer culture, Photography and the visual content industry*. London: Berg.

Funk, C., & Castro, J.C. (2015). Visualizing discourse: Making meaning from data. *Visual Inquiry*, 4(2), 123-132.

Garland, I. (2012, May 12). Lost in translation: The hilarious foreign signs that don't get their English quite right. *Daily Mail*. Retrieved from: http://www.dailymail.co.uk/news/article-2151137/Lost-translation-The-hilarious-foreign-signs-don-t-English-quite-right.html

Giroux, H., and Pollock, G. (2010). How Disney magic and the corporate media shape youth identity in the digital age. Retrieved from http://www.truth-out.org/archive/component/k2/item/91087-how-disney-magic-and-the-corporate-media-shape-youth-identity-in-the-digital-age?Itemid=228article

Ghilani, J. L. (2012). DeBeers' "Fighting Diamonds": Recruiting American consumers in World War II advertising. *Journal of Communication Inquiry*, *36*(3), 222–245.

Giroux, H. A. (2011). *On critical pedagogy*. NY: Continuum.

Goldstein-Gidoni, O. (2000). The production of tradition and culture in the Japanese wedding enterprise. *Journal of Anthropology*, *65*(1), 33-55. doi: 10.1080/001418400360634

Goldstein-Gidoni, O. (2001). Hybridity and distinctions in Japanese contemporary commercial weddings. *Social Science Japan Journal*, *4*(1), 21-38.

Goldstein-Gidoni, O. (2005). The production and consumption of 'Japanese Culture' in the global cultural market. *Journal of Consumer Culture*, *5*(2), 155–179.

Graham, M., & Zook, M. (2013). Augmented realities and uneven geographies: exploring the geolinguistic contours of the web. *Environment and Planning A*, 45(1), 77-99.

Graham, M. (2014). How well represented is the MENA region in Wikipedia? *The Policy and Internet Blog*, Oxford University. Retrieved from:

http://blogs.oii.ox.ac.uk/policy/how-well-represented-is-the-mena-region-in-wikipedia/

Graham, M., & Zook, M. (2013). Augmented realities and uneven geographies: exploring the geolinguistic contours of the web. Environment and Planning A, 45(1), 77-99.

Gude, O. (2004). Postmodern principles: In search of a 21st Century art education. *Art Education*, *57*(1), 6-14.

Hall, S. (1996). The question of cultural identity. In Stuart Hall, David Held, Kenneth Thompson & Don Hubert (Eds.). *Modernity an introduction to modern societies*. Oxford, UK: Blackwell.

Hall, S. (1997). The local and the global. In Anthony D. King (Ed.). *Culture, globalization and the world-system: Contemporary conditions for the representation of identity*. Minneapolis, MN: University of Minnesota Press.

Hall, S. (1997). *Representation: Cultural representations and signifying practices*. London: Sage.

Hand, M. (2014). From cyberspace to the dataverse: Trajectories in digital social

research. In Sam Hillyard (Ed.) Big data? Qualitative approaches to digital research.

Studies in Qualitative Methodology, *13*, 1-27.

Harper, D. (2002). Talking about pictures: A case for photo elicitation. *Visual Studies*,

17(1), 13-26. doi: 10.1080/14725860220137345

Harris, B.R. (2006). Visual information literacy via visual means: Three heuristics.

Reference Services Review, *34*(2), 213-221.

Hartwig, S.G. (2003). Surveying psychologists' public image with drawings of a "typical"

psychologist. *South Pacific Journal of Psychology*, *14*, 69-75.

Hassan, R. (2004). *Media, politics and the network society*. NY: Open University Press.

Herne, S. 2005. 'Download': 'Postcards Home' Contemporary Art and New Technology in

the Primary School. *Journal of Art and Design Education 24*(1), 5-19.

Hoe, N.G. [나길회] (2006, August 16). Native speaker teacher headaches[막가는 원어민

강사 골치]. *Seoul News* [*서울신문*]. Retrieved from:

http://www.seoul.co.kr/news/newsView.php?id=20060816008011

Holt, D. K. (1995). Postmodernism: Anomaly in art-critical theory. *Journal of Aesthetic

Education*, *29*(1), 85-93.

Hsiao, C. (2010). Enhancing children's artistic and creative thinking and drawing

performance through appreciating picture books. *Journal of Art and Design

Education*, *29*(9), 143-152.

Hsieh, H-F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis.

Qualitative Health Research, *15*(9), 1277-1288.

Hsu, Y.H. (2014). Analyzing children's drawings. 21st Century Academic Forum Conference at UC Berkeley, CA, USA. Vol. 2, No. 1. ISSN 2330-1236.

Hudson, T. (1987). Current issues in art and design education: Art, science and technology; Some initiatives for change. *Journal of Art & Design Education*, *6*(3), 261-283.

Hwang, T.T., & Sun, B.Q. (2016). The impact of the Internet on global industry: New evidence of Internet measurement. *Research in International Business and Finance,* 37, 93–112.

Internet World Statistics (2015). World Internet Usage and Population Statistics [Data file]. Retrieved from http://www.Internetworldstats.com/stats.htm

Ipeirotis, P. (2013). Mechanical Turk account verification: Why Amazon disables so many accounts. Retrieved from http://www.behind-the-enemy-lines.com/2013/06/mechanical-turk-account-verification.html

Irani, L. C., & Silberman, M. (2013, April). Turkopticon: Interrupting worker invisibility in amazon mechanical turk. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (pp. 611-620). ACM.

K-P

Kan, K.H. (2009). How Singapore adolescent students transform their secondary school art experience. *Visual Arts Research*, *35*(2), 51-66.

Kannan, S. (2014, November 19). How McDonald's conquered India. *BBC News, Delhi*. Retrieved from: http://www.bbc.com/news/business-30115555

Kellner, D. (2002). Theorizing Globalization. *Sociological Theory*, *20*(3), 285-305.

Kellner, D., & Share, J. (2009). Critical media education and radical democracy. *The Routledge international handbook of critical education*, 281-295.

Kincheloe, J.L. (2005). *Critical Constructivism*. NY: Peter Lang.

Knight, L. (2010). Why a child needs a critical eye, and why the art classroom is central in developing it. *Journal of Art and Design Education*, *29*(3), 236-243.

Knowles, M. S. (1980). How do you get people to be self-directed learners? *Training and Development*, *34*(5), 69-99.

Koblin, A. (2006). *The sheep market*. Retrieved from http://www.aaronkoblin.com/work/thesheepmarket/

Kraidy, M. M. (2002). Hybridity in cultural globalization. *Communication Theory*, *12*(3), 316-339.

Kuotsu, N. (2013). Architectures of pirate film cultures: Encounters with Korean Wave in "Northeast" India. *Inter-Asia Cultural Studies*, *14*(4), 579–599.

Kwan, M. (2002). Feminist visualization: Re-envisioning GIS as a method in feminist geographic research. *Annals of the Association of American Geographers*, *92*(4), 645-661.

Kurzweil, R. (2009). *A university for the coming singularity. Themes: How we learn*. TED Conferences, Filmed February 2009; Posted June 2009. Retrieved from: http://www.ted.com/talks/ray_kurzweil_announces_singularity_university.html

Lam, E.W. (2008). Culture and learning in the context of globalization: Research directions. *Review of Research in Education*, *30*, 213-237.

Lapenta, F. (2011). Geomedia: On location-based media, the changing status of collective image production and the emergence of social navigation systems. *Visual Studies*, *26*(1), 14-24.

Leach, B. (1997). Culture, globalization and the politics of place: Introduction. *Anthropologica*, *39*(1/2), 3-5.

Lefever, S., Dal, M. and Matthíasdóttir, Á. (2007). Online data collection in academic research: advantages and limitations. *British Journal of Educational Technology,* 38(4), 574–582.

Lieber, R. J., & Weisberg, R. E. (2002). Globalization, culture, and identities in crisis. *International Journal of Politics, Culture, and Society*, *16*(2), 273-296.

Leonardo, Z. (2004). Critical social theory and transformative knowledge: The functions of criticism in quality education. *Educational Researcher*, *33*(6), 11-18.

Leonardo, Z. (2010). *Handbook of cultural politics and education.* Boston: Sense.

Levin Institute (2013). Globalization 101. Retrieved from http://www.globalization101.org/cultural-impacts-of-globalization/

Loveless, A. (2003). Making a Difference? An evaluation of professional knowledge and pedagogy in art and ICT. *Journal of Art and Design Education*, *22*(2), 145-154.

Lutz, C.A., & Collins, J.L. (1993). *Reading* National *Geographic*. Chicago: University of Chicago Press.

Machida, S. (2012). Does globalization render people more ethnocentric? Globalization and people's views on cultures. *American Journal of Economics and Sociology*, *71*(2), 436-469.

Makarechi, K. (2012, January 18). David Hockney's iPad art on display at Royal

Academy. *The Huffington Post*. Retrieved from

http://www.huffingtonpost.com/2012/01/18/david-hockney-ipad-art-royal-

academy_n_1214382.html#

Maney, G.M., Woehrle, L.M., & Coy, P.G. (2005). Harnessing and challenging hegemony:

The U.S. peace movement after 9/11. *Sociological Perspectives*, *48*(3), 357-381.

Mayring, P. (2014). Qualitative content analysis: theoretical foundation, basic

procedures and software solution. Klagenfurt: Institute of Psychology and Center for

Evaluation and Research.

Mays, R.M., Sturm, L.A., Rasche, J.C., Cox D.S., Cox, A.D., & Zimet G.D. (2011). Use of

drawings to explore US women's perspectives on why people might decline HIV

testing. *Health Care Women Int.*, (14), 328–343. doi:

10.1080/07399332.2010.510585.

MacDonald, S.W. (2010). Post-it culture: Postmodernism and art and design education.

In Hardy, T. (Ed.). *Art Education in a Postmodern World: Collected Essays*. (pp. 227-

235). Portland, OR: Intellect Ltd.

McDonald's (n.d.). In *Wikipedia.* Retrieved on May 2016 from:

https://en.wikipedia.org/wiki/McDonald%27s

McGuigan, J. (1998). *Cultural Methodologies*. London: Sage.

McNamara, J. (2005). Media content analysis: Its uses, benefits and best practice

methodology. *Asia Pacific Public Relations Journal*, *6*(1), 1–34.

McMaster, S. (2012). New approaches to image-based research and visual literacy. In

Avgerinou, Chandler, Search, and Terzic (Eds.). *New horizons in visual literacy:*

Selected readings of the International Visual Literacy Association, 43 (pp.122-132). Siauliai, Lithuania: SMC Scientia Educologica.

McMaster, S. (2015). Visualizing research: Crowd sourcing technology for global understanding. *Visual Methodologies*, *3*(1), 18-34.

Merriam, S.B., Caffarella, R.S., & Baumgartner, L.M. (2007). *Learning in adulthood*. San Francisco, CA: Jossey-Bass.

Milne, E.J., Mitchell, C., & De Lange, N. (Eds.). (2012). *Handbook on participatory video*. Lanham, Maryland: Alta Mira Press.

Mirzoeff, N. (2009). *An introduction to visual culture*. London: Routledge.

Mitchell, C. (2004). Theorizing dress stories. In *Not just any dress: Narratives of memory, body, and identity*. *Counterpoints*, 220, 251-272.

Mitchell, C. (2008). Getting the picture and changing the picture: visual methodologies and educational research in South Africa. *South African Journal of Education*, *28*, 365-383.

Mitchell, C. (2011a). What's participation got to do with it? Visual methodologies in 'girl-method' to address gender based violence in the time of AIDS. *Global Studies of Childhood, 1*(1), 51-59. doi.org/10.2304/gsch.2011.1.1.51

Mitchell, C. (2011b). *Doing visual research*. London: Sage.

Mitchell, C., De Lange, N., & Moletsane, R. (2014). Me and my cellphone: Constructing change from the inside through cellphilms and participatory video in a rural community. *Area*. doi: 10.1111/area.12142 / ISSN: 1475-4762

Mitchell, C., De Lange, N., Moletsane, R., Stuart, J., Buthelezi, T., & Taylor, M. (2005). Giving a face to HIV and AIDS: On the uses of photo-voice by teachers and

community health care workers working with youth in rural South

Africa. *Qualitative Research in Psychology*, *3*(2), 257-270.

Mitchell, C., Dillon, D., Strong-Wilson, T., Pithouse, K., Islam, F., O'Connor, K., Rudd, C.,

Staniforth, P., & Cole, A. (2010). Things fall apart and come together: Using the visual

for reflection in alternative teacher education programmes. *Changing English, 17*(1),

45-55.

Mitchell, C., Weber, S., and O'Reilly-Scanlon (2005). *Just who do we think we are?*

Methodologies for autobiography and self-study. NY: Routledge-Falmer.

Moletsane, R., De Lange, N., Mitchell, C., Stuart, J., Buthelezi, T., & Taylor, M. (2007).

Photo-voice as a tool for analysis and activism in response to HIV and AIDS

stigmatization in a rural KwaZulu-Natal school. *Journal of Child and Adolescent*

Mental Health, 19(1), 19-28.

Moletsane, R., Mitchell, C., De Lange, N. Stuart, J., Buthelezi, T., & Taylor, M. (2009). What

can a woman do with a camera? Turning the female gaze on poverty and HIV/AIDS

in rural South Africa. *International Journal of Qualitative Studies in Education*, *22*(3),

315-331*.*

Moletsane, R., Mitchell, C., & Smith A. (Eds.). (2012). *Was it something I wore? Dress,*

materiality, identity. Cape Town: HSRC Press.

Mondal, S.R. (2007). Globalization and anthropology. *Indian Anthropologist*, *37*(2), 93-

98.

Morrow, R.A, & Brown, D.D. (1994). *Critical theory and methodology.* London: Sage.

Müller, M.G. (2008). Visual competence: A new paradigm for studying visuals in the

social sciences? *Visual Studies*, *23*(2), 101-112.

Napoli, P. M. (2008). Revisiting "mass communication" and the "work" of the audience in the new media environment. McGannon Center Working Paper Series, 24.

Oliver, J. (2014, August, 3). Last Week Tonight with John Oliver: Native Advertising. *HBO*. Retrieved from:

https://www.youtube.com/watch?v=E_F5GxCwizc&feature=youtu.be

Otnes, C.C. (2003). From the guest editor: Special issue on advertising and consumer culture. *Journal of Advertising*, *32*(1), 5-6.

Pariser, E. (2011). *The filter bubble: What the Internet is hiding from you*. New York: Penguin Press.

Pariser, D., Kindler, A., van den Berg, A., Dias, B., Liu, W.C. (2007). Does practice make perfect? Children's and adults' constructions of graphic merit and development: A crosscultural study. *Visual Arts Research*, *33*, 96-114.

Pariser, D., Kindler, A., van den Berg, A., Dias, B., Liu, W.C. (2008). Drawing and aesthetic judgments across cultures: Diverse pathways to graphic development. In Hanns Martin Trautner & Constance Milbrath (Eds.). *Children's understanding and production of pictures, drawings, and art*. Toronto: Hogrefe & Huber.

Park, C. (1997). Consumption in the Korean wedding ritual: Wedding ritual values, consumer needs, and expenditures. *Journal of Family and Economic Issues*, *18*(2), 191-209.

Pauwels, L. (2000). Taking the visual turn in research and scholarly communication key issues in developing a more visually literate (social) science. *Visual studies*, 15(1), 7-14.

UNESCO (2014). Country Profiles: Republic of Korea. Datacenter, UNESCO. Retrieved

from: http://www.uis.unesco.org/DataCentre/Pages/country-

profile.aspx?code=KOR&regioncode=40515

Pink, S. (2011). Amateur photographic practice, collective representation and the

constitution of place. *Visual Studies*, *26*(2), 92-101.

Pink, S. (2011). Images, Senses and Applications: Engaging Visual Anthropology,

Visual Anthropology: Published in cooperation with the Commission on Visual

Anthropology, 24(5), 437-454. doi: 10.1080/08949468.2011.604611

Pink, S. (2011). Sensory digital photography: Re-thinking 'moving' and the image, *Visual

Studies*, 26(1), 4-13. doi: 10.1080/1472586X.2011.548484

Pink, S. (2013). *Doing Visual Ethnography*. London: Sage.

Poggi, J. (2016, January 4). Turner seeks to become one big native ad platform.

Advertising Age. Retrieved from: http://adage.com/article/media/turner-seeks-big-

native-ad-platform/301959/

Prensky, M. (2001). Digital natives, digital immigrants. *On the Horizon*, *9* (5), 1-6.

Retrieved from Jack Prensky.com.

Prosser, J. (1998). Image-based research: A sourcebook for qualitative researchers.

London: RoutledgeFalmer.

Prosser, J., & Schwartz, D. (1998). Photographs within the sociological research process.

In John Prosser (Ed.) *Image-based research: A sourcebook for qualitative researchers*,

(pp. 115-130).

Prosser, J. (2007). Visual methods and the visual culture of schools. *Visual Studies*, *22*(1),

13-30.

Prosser, J., & Loxley, A. (2008). Introducing visual methods. *ESRC National Centre for Research Methods Review Paper*, NCRM/010 October.

Purinton, E. F. (2008). A girl's best friend: Engagement rings, expectations, and consumer behavior. *Proceedings of the Society for Marketing Advances* (pp.114-120).

R-Z

Razvi, M. (2006, October). *Image-based research: Ethics of photographic evidence in qualitative research.* Paper presented at the Midwest Research-to-Practice Conference in Adult, Continuing, and Community Education, University of Missouri-St. Louis, St. Louis, MO.

Rexhepi, J., & Torres, C.A. (2011). Reimagining critical theory. *British Journal of Sociology of Education*, *32*(5), 679-698. doi: 10.1080/01425692.2011.596363

Roberts, D. F., Foehr, U. G., & Rideout, V. (2011). *Generation M: Media in the lives of 8–18 year-olds*. Menlo Park, CA: Henry J. Kaiser Family Foundation.

Rose, G. (2012). *Visual methodologies: An introduction to researching with visual materials*. London: Sage.

Rose, G. (2013). On the relation between 'visual research methods' and contemporary visual culture. *The Sociological Review*. doi: 10.1111/1467-954X.12109

Rose, G. (2015). Rethinking the geographies of cultural 'objects' through digital technologies: Interface, network and friction. *Progress in Human Geography* (Online First). Retrieved from http://oro.open.ac.uk/43319/

Rule, A.C. and Harrell, M.H. (2006). Symbolic drawings reveal changes in preservice teacher mathematics attitudes after a mathematics methods course. *School Science and Mathematics Journal*, *106*(6), 241-258.

Ryoo, W. (2009). Globalization, or the logic of cultural hybridization: The case of the Korean wave. *Asian Journal of Communication*, *19*(2), 137-151.

Saldaña, J. (2015). *The coding manual for qualitative researchers*. London: Sage.

Schreier, M. (2012). *Qualitative content analysis in practice*. Thousand Oaks, CA: Sage.

Schwab-Cartas, J., & Mitchell, C. (2015). A tale of two sites: Cellphones, participatory video and indigeneity in community-based research. *McGill Journal of Education, 49*(3), 603-620.

Scott, C. (1999). *The spoken image: Photography and language*. London: Reaktion Books.

Selwyn, N., Boraschi, D., and Özkula, S. M. (2009). Drawing digital pictures: An investigation of primary pupils' representations of ICT and schools. *British Educational Research Journal*, *35*(6), 909–928.

Shim, D. (2006). Hybridity and the rise of Korean popular culture in Asia. *Media, Culture & Society*, *28*(1), 25-44.

Sinker, R. (1996). Work in progress: Some issues around research into evaluation and progression within photography and media education. *Journal of Art & Design Education*, *15*(1), 59-71.

Smith, Mark K. (2008) 'Informal learning,' the encyclopaedia of informal education. Retrieved from www.infed.org/biblio/inf-lrn.htm

Snyder, I., and Bulfin, S. (2007) Digital Literacy: What it Means for Arts Education. In L. Bresler (Ed.). *International handbook of research in arts education* (pp. 1297-1310). Dordecht, The Netherlands: Springer.

Spalter, A. M., and van Dam, A. (2008). Digital visual literacy. *Theory Into Practice*, *47*(2), 93–101.

Spencer, S. (2010). *Visual research methods in the social sciences: Awakening visions*. London: Routledge.

Stanczak, G.C. (2007). Visual research methods: Image society and representation. London: Sage.

Stankiewicz, M. A. (2003). Between technology and literacy. *Journal of Art and Design Education*, *22*(3), 316-324.

Stankiewicz, M. A. (2004). Notions of technology and visual literacy. *Studies of Art Education*, *46*(1), 88-91.

Stemler, Steve (2001). An overview of content analysis. *Practical Assessment, Research & Evaluation*, *7*(17). Retrieved from http://pareonline.net/getvn.asp?v=7&n=17

Stokrocki, M. (2007). Art education avatars in cyberspace: Research in computer-based technology and visual arts education. In L. Bresler (Ed.). *International Handbook of Research in Arts Education* (pp. 1361-1380). Dordecht, The Netherlands: Springer.

Strommen, E. (1988). A century of children drawing: The evolution of theory and research concerning the drawings of children. *Visual Arts Research*, *14*(2), (13-24).

Sturken, M., & Cartwright, L. (2001). *Practices of looking: an introduction to visual culture*. NY: Oxford University Press.

Sullivan, G. (Ed.). (2009). *Art practice as research: Inquiry in visual arts* (2nd ed.). London: Sage.

Sundie, J. M., Gelb, B.D., & Bush, D. (2008). Economic reality versus consumer perceptions of monopoly. *Journal of Public Policy & Marketing*, *27*(2), 178-181.

Sung, S.L. (2012). The role of Hallyu in the construction of East Asian regional identity in Vienna. *European Journal of East Asian Studies*, II, 155-171.

Sweeny, R. (2008). Unthinkable Complexity: Art education in networked times. In M. Alexenberg (Ed.). *Educating artists for the future, learning at the intersections of art, science technology and culture* (pp. 86-101). Chicago: University of Chicago Press.

Tan, L., & Guo, L. (2010). From print to critical multimedia literacy: One teacher's foray into new literacies practices. *Journal of Adolescent & Adult Literacy*, *53*(4), 315-324.

Tapia, J. M. (2008). Poking holes in the oil paintings: The case for critical theory in postmodern art museum education. *Visual Arts Research*, *34*(2), 35–44.

Tavin, K. (2003). Wrestling with angels, searching for ghosts: Toward a critical pedagogy of visual culture. *Studies in Art Education*, *44*(3), 197-213.

Tavin, K. (2005). Hauntological shifts: Fear and loathing of popular (visual) culture. *Studies in Art Education*, *46*(2), 101-117.

Tavin, K., and Hausman, J. (2004). Art education and visual culture in the age of globalization. *Art Education*, *57*(5), 47-52.

Taylor, P.G., & Carpenter, B.S (2007). Mediating art education: Digital kids, art, and technology. *Visual Arts Research*, *33*(2), 84-95.

Theron. L., Mitchell, C., Smith, A., & Stuart, J. (Eds.). (2011). *Picturing research: Drawings as visual methodology*. Rotterdam: Sense.

Toku, M. (2001). Cross-cultural analysis of artistic development: Drawing by Japanese and U.S. children. *Visual Arts Research*, *27*(1[53]), 46-59.

Vaidhyanathan, S. (2011). *The Googlization of everything (And why we should worry)*. Berkeley: University of California Press.

Van Leeuwen, T. (2001). Semiotics and Iconography. In van Leeuwen and Jewit (Eds.). *Handbook of visual analysis*. (pp. 92-118). London: Sage.

Vivienne, S., & Burgess, J. (2013). The remediation of the personal photograph and the politics of self-representation in digital storytelling. *Journal of Material Culture*, *18*(3), 279-98.

Webster, J.G. (2014). *The marketplace of attention: How audiences take shape in a digital age*. Cambridge: MIT Press.

Willats, J. (2005). *Making sense of children's drawings*. Mahwah, NJ: Erlbaum.

Wilson, B., & Wilson, M. (1984). The themes of children's story drawings: A tale of four cultures. In R.W. Ott and A. Hurwitz (Eds.). *Art in Education: An International Perspective*. (p. 7). University Park, PA: Pennsylvania State University Press.

Wilson, B., & Wilson, M. (1987). Pictorial composition and narrative structure: Themes and the creation of meaning in the drawings of Egyptian and Japanese children. *Visual Arts Research*, 13(2), 10-21.

Wilson, S. (2008). Beyond the digital: Preparing artists to work at the frontiers of technoculture. In M. Alexenberg (Ed.). *Educating artists for the future, Learning at the intersections of art, science, technology and culture* (pp. 29-45). Chicago: University of Chicago Press.

Winkler, D. (2009). Visual culture and visual communications in the context of globalization. *Visible Language*, *43*(1), 4-43.

Worring, M., & Snoek, C. (2009). Visual content analysis. In Ling Liu & M. Tamer Özsu (Eds.). *Encyclopedia of database systems* (pp. 3360) USA: Springer.

Yamada-Rice, D. (2010). Beyond words: An enquiry into children's home visual communication practices. *Journal of Early Childhood Literacy, 10*(3), 341–363. doi: 10.1177/1468798410373267

Young, H. (n.d.). The digital language divide: How does the language you speak shape

your experience of the internet? The Guardian, Retrieved on July 2016 from:

http://labs.theguardian.com/digital-language-divide/

APPENDICES

Appendix A: Full Survey Questions

Here is the original survey for this study. The words eliminated from the revised survey have been crossed out and replacement words indicated next to them. Revised survey questions are also shown next to the original ones which have been crossed out.

For each of the following words please draw <u>the first image that comes to mind</u> that you think best represents the word. Do not worry about the quality of the image; it is <u>not</u> important. Just draw as best you can. You may use arrows to help emphasize something, <u>but do not write on the drawing</u>.

1) ~~Clothing~~ → Fashion
2) ~~Food~~
3) ~~Funny~~ → Comedy
4) ~~Housing~~ → Home
5) Man's work
6) Marriage
7) Meal
8) ~~Stylish~~
9) ~~Traditional~~
10) Woman's work

Please upload your images here *(file type: jpeg, png, gif / size limit: 300kb)*

(~~10~~ 7 image upload buttons)

1. *image 1*
2. *image 2*
3. *image 3*
4. *image 4*
5. *image 5*
6. *image 6*
7. *image 7*
8. *~~image 8~~*
9. *~~image 9~~*
10. *~~image 10~~*

If you have finished uploading your drawings please fill out the survey below and submit the HIT.

1. What is your gender? *(radio buttons: only 1 answer)*

*FEMALE   * MALE

---

2. What is your age? *(radio buttons: only 1 answer)*

*18-29   *30-39   *40-49   *50-64   *65 or over

---

3. What language do you speak most often at home? How many languages do you speak? *(text answer)*

---

4. What is your household income? (Approximate US$)*(radio buttons: only 1 answer)*

*Under $10,000   *$10,000 - $19,999   *$20,000 - $29,999   *$30,000 - $39,999

*$40,000 - $49,999   *$50,000 - $74,999   *$75,000 - $99,999   *Over $100,000

*Would rather not say

---

5. What is your job? (Student, education, self-employed, banking, government, technology, etc.) *(text answer)*

---

6. What is the highest level of education you have completed?   *(radio buttons: only 1 answer)*

*some high school   *high school graduate   *some college   *trade/technical/vocational training

*college graduate   *some postgraduate work   *post graduate degree

---

7. What is your country of origin? (ethnic/ancestral origin) *(text answer)*

---

8. In what country and town/city do you now live? (your residence) *(text answer)*

---

9. Did you use an online image to draw from? *(radio buttons: only 1 answer)* YES NO   N/A

→ How many hours a day do you use the Internet? *(text answer)*

10. ~~If you answered "Yes" to question "9," where did you find the image to draw from? (List the search engine and website used to find the image.)~~ *(text answer)*

→ What are your 3 favourite websites?

11. ~~If you answered "No" to question "9," where do you think the image you drew came from? (i.e., memory, cultural image, TV, book, etc.)~~ *(text answer)*

→ Where do you think the image you drew came from? (i.e., memory, cultural image, TV, book, etc.) *(text answer)*

12. Do you watch foreign shows on TV or the Internet? What do you watch? *(text answer)*

13. Please add any additional comments about this study or information you feel may be relevant. Thank you! *(text answer)*

Appendix B: User's view of a list of tasks on Mturk

The following image is an example of what participants on Mturk would see if they searched for tasks using the key word *words*.

Appendix C: Major Religions of Asian Countries Surveyed

The following information has been summarized using the CIA's *World Fact Book regarding the countries mentioned in the analysis*: https://www.cia.gov/library/publications/the-world-factbook/fields/2122.html

Bangladesh	Muslim 89.1%, Hindu 10%, other 0.9% (includes Buddhist, Christian) (2013 est.)
China	Buddhist 18.2%, Christian 5.1%, Muslim 1.8%, folk religion 21.9%, Hindu < .1%, Jewish < .1%, other 0.7% (includes Daoist (Taoist)), unaffiliated 52.2% note: officially atheist (2010 est.)
Hong Kong	eclectic mixture of local religions 90%, Christian 10%
India	Hindu 79.8%, Muslim 14.2%, Christian 2.3%, Sikh 1.7%, other and unspecified 2% (2011 est.)
Indonesia	Muslim 87.2%, Christian 7%, Roman Catholic 2.9%, Hindu 1.7%, other 0.9% (includes Buddhist and Confucian), unspecified 0.4% (2010 est.)
Malaysia	Muslim (official) 61.3%, Buddhist 19.8%, Christian 9.2%, Hindu 6.3%, Confucianism, Taoism, other traditional Chinese religions 1.3%, other 0.4%, none 0.8%, unspecified 1% (2010 est.)
Nepal	Hindu 81.3%, Buddhist 9%, Muslim 4.4%, Kirant 3.1%, Christian 1.4%, other 0.5%, unspecified 0.2% (2011 est.)
Pakistan	Muslim (official) 96.4% (Sunni 85-90%, Shia 10-15%), other (includes Christian and Hindu) 3.6% (2010 est.)
Philippines	Catholic 82.9% (Roman Catholic 80.9%, Aglipayan 2%), Muslim 5%, Evangelical 2.8%, Iglesia ni Kristo 2.3%, other Christian 4.5%, other 1.8%, unspecified 0.6%, none 0.1% (2000 census)
Singapore	Buddhist 33.9%, Muslim 14.3%, Taoist 11.3%, Catholic 7.1%, Hindu 5.2%, other Christian 11%, other 0.7%, none 16.4% (2010 est.)
Sri Lanka	Buddhist (official) 70.2%, Hindu 12.6%, Muslim 9.7%, Roman Catholic 6.1%, other Christian 1.3%, other 0.05% (2012 est.)
Taiwan	mixture of Buddhist and Taoist 93%, Christian 4.5%, other 2.5%
Thailand	Buddhist (official) 93.6%, Muslim 4.9%, Christian 1.2%, other 0.2%, none 0.1% (2010 est.)
Vietnam	Buddhist 9.3%, Catholic 6.7%, Hoa Hao 1.5%, Cao Dai 1.1%, Protestant 0.5%, Muslim 0.1%, none 80.8% (1999 census)

Appendix D: Search Engine Image Results

Screenshots have been used as per current copyright laws and according to company guidelines, such as Google's, who do not require permissions for unaltered screenshots of their products: https://www.google.com/permissions/using-product-graphics.html

1-A) China Baidu: Meal

1-B) China Baidu: Marriage

1-C) China Baidu: Home
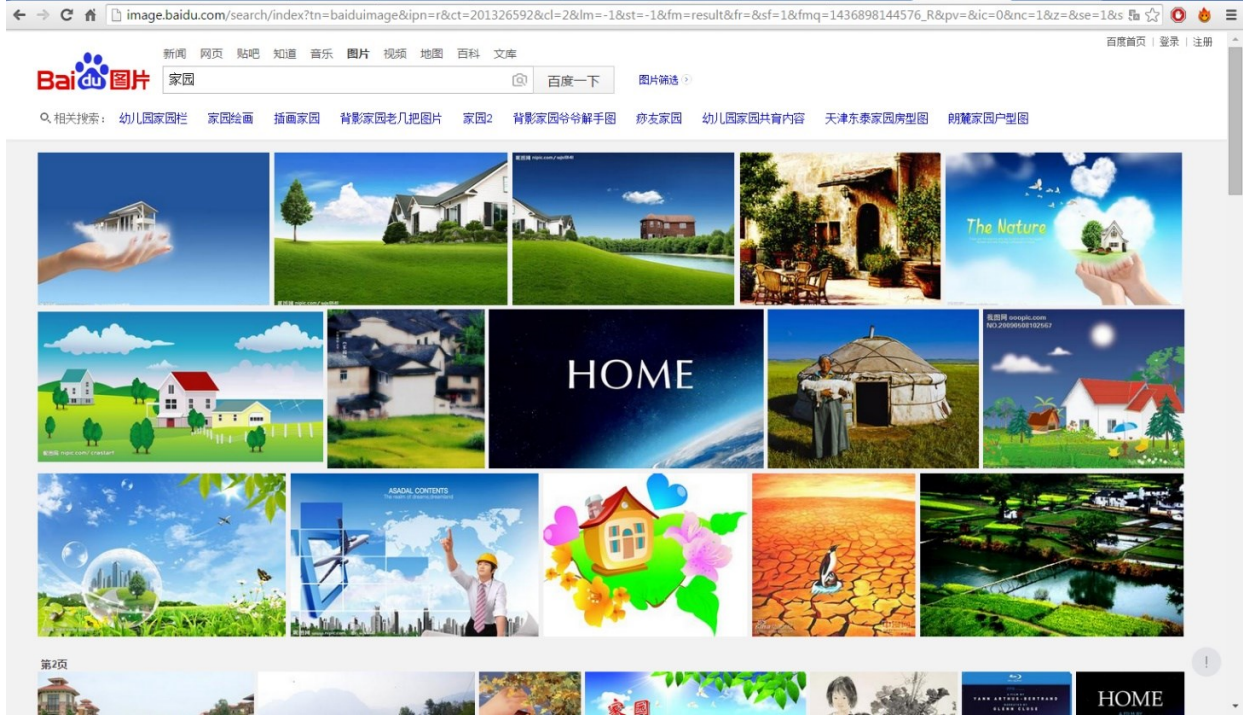
2-A) Bangladesh Google: Meal
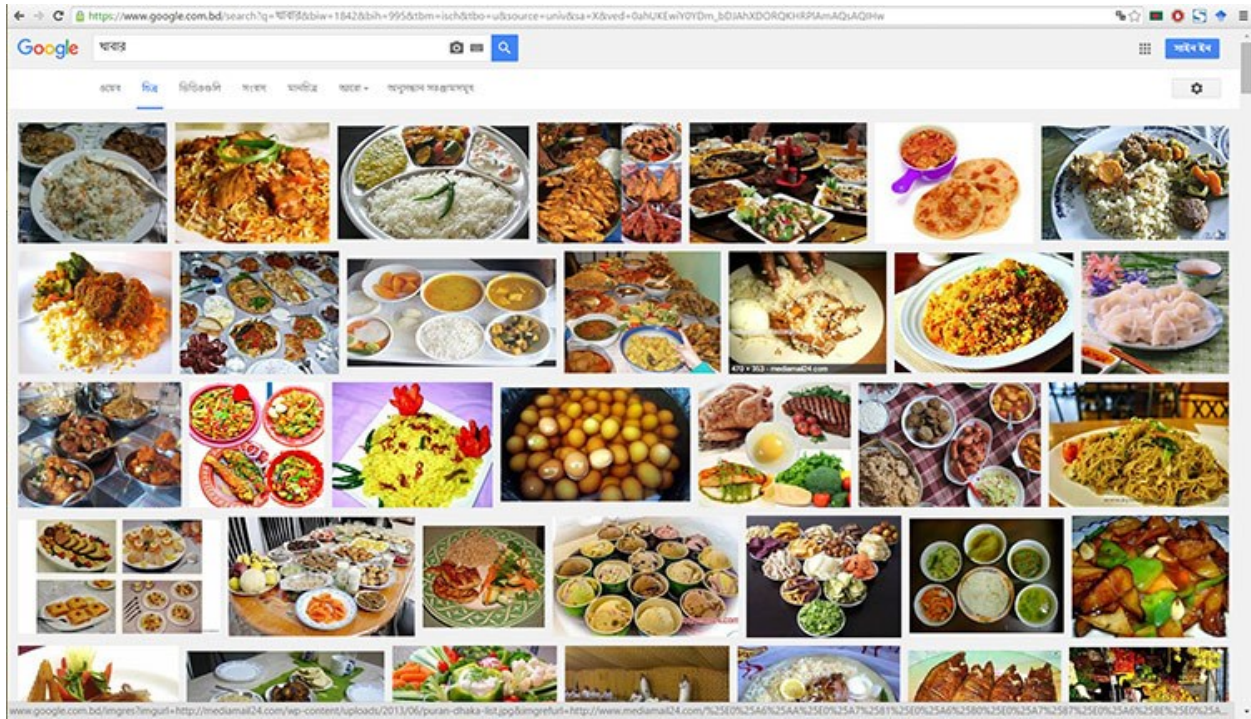
2-B) Bangladesh Google: Marriage
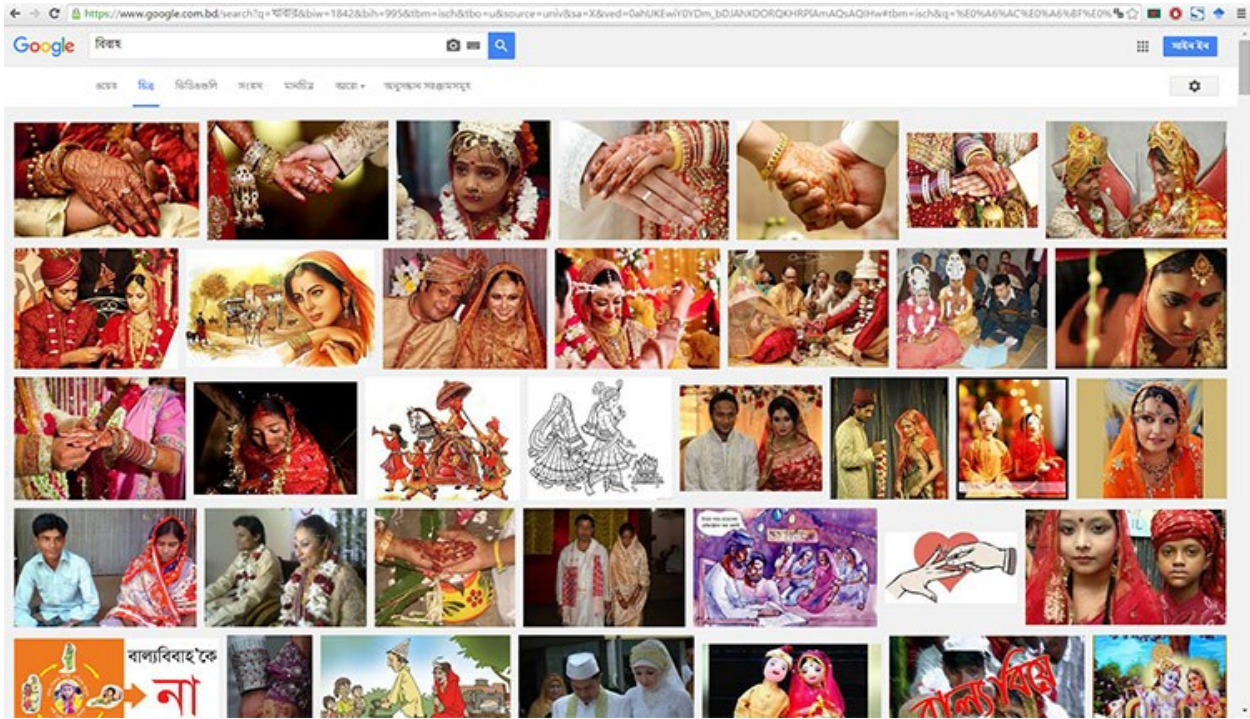
2-C) Bangladesh Google: Home

3-A) Hong Kong Google: Meal

3-B) Hong Kong Google: Marriage
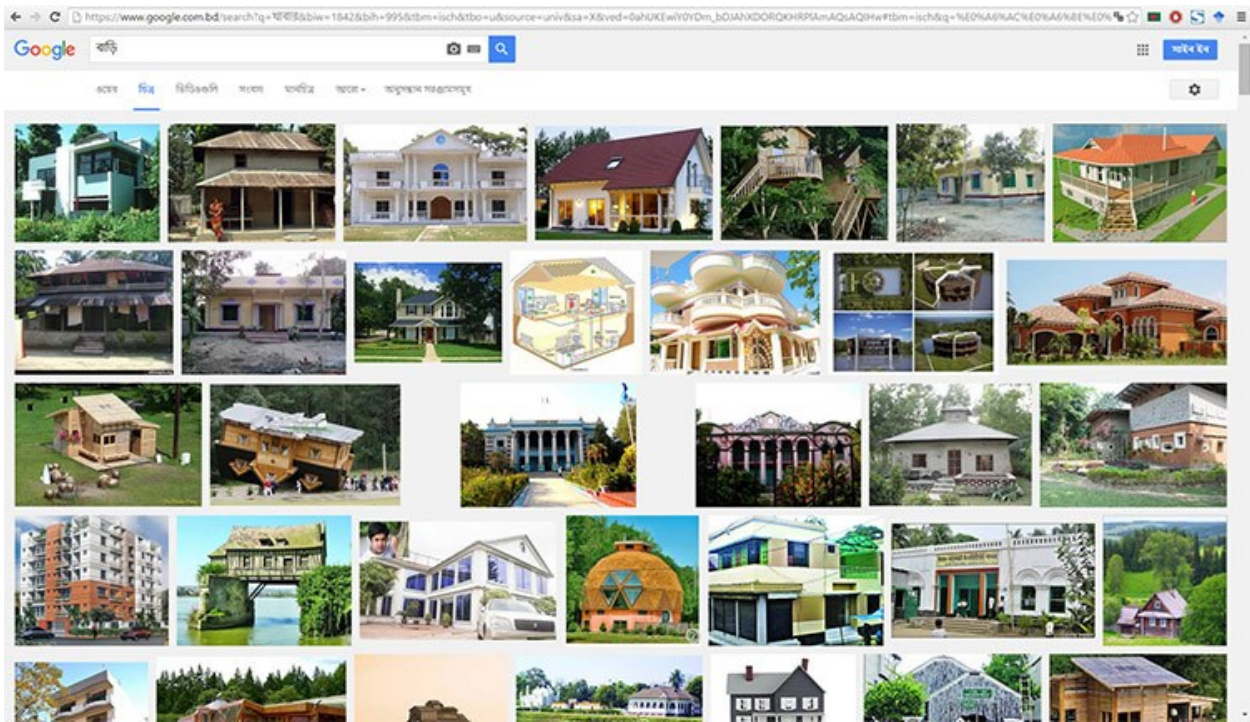
3-C) Hong Kong Google: Home
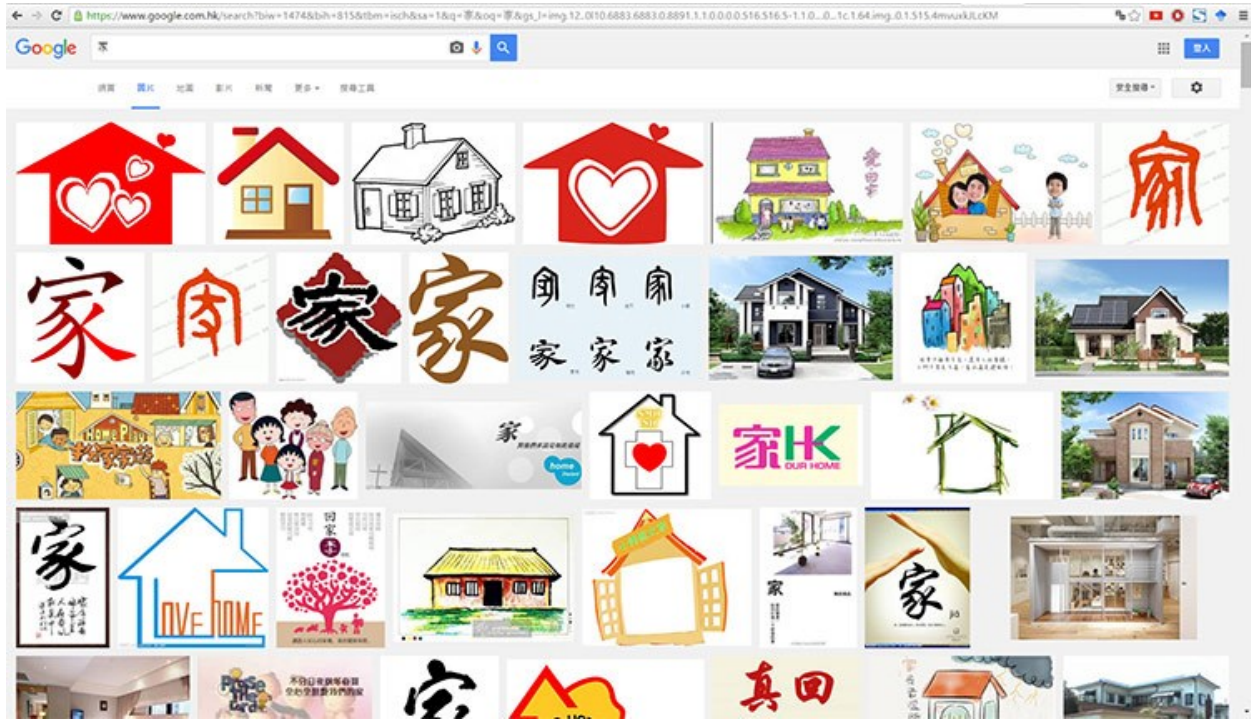
4-A) India Google: Meal
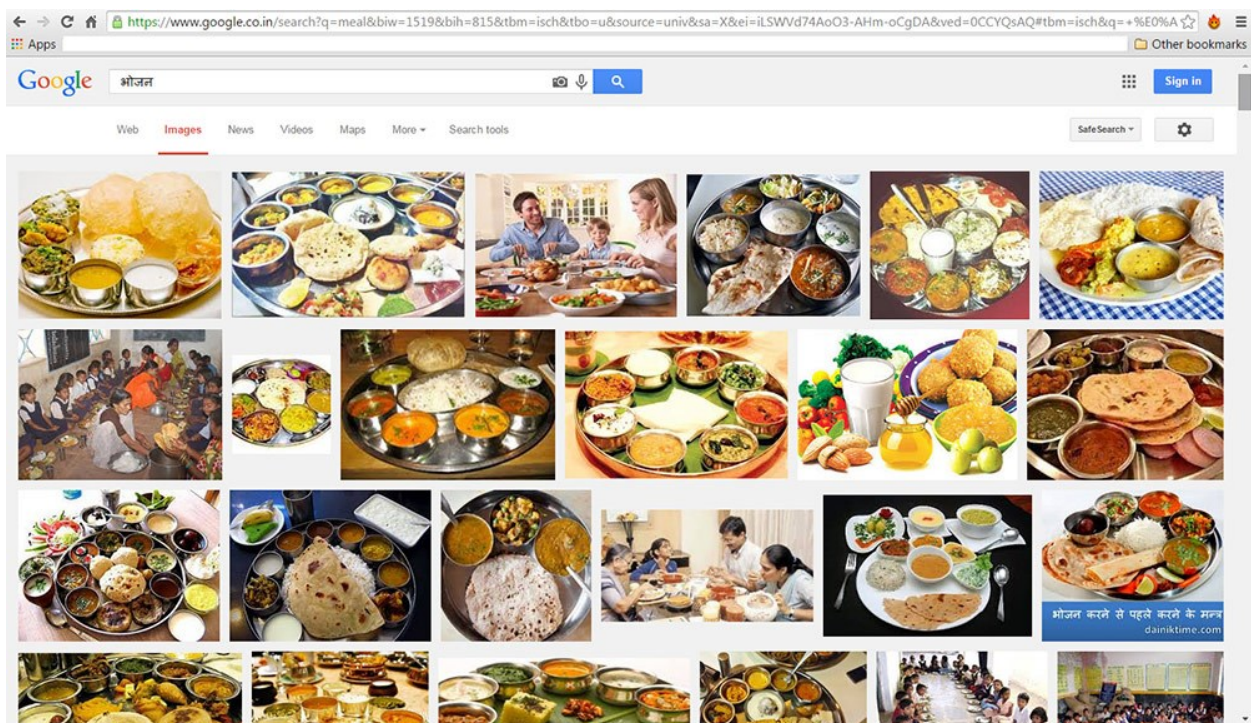
4-B) India Google: Marriage
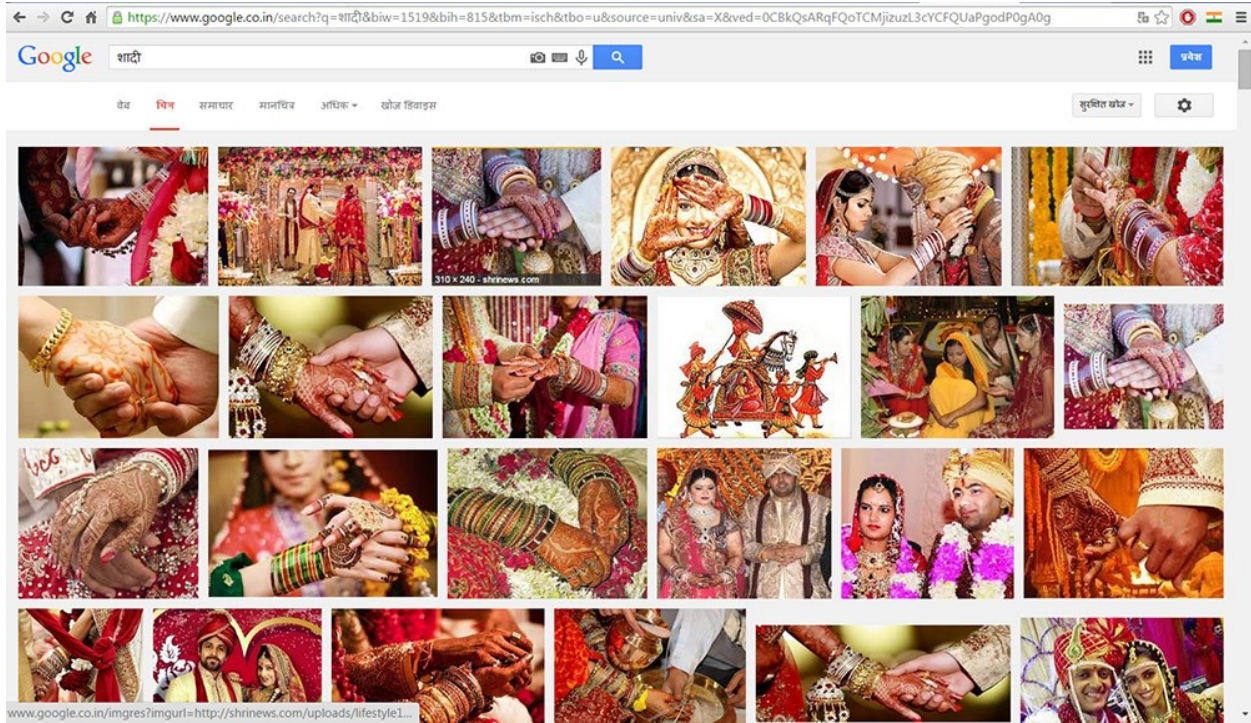
4-C) India Google: Home
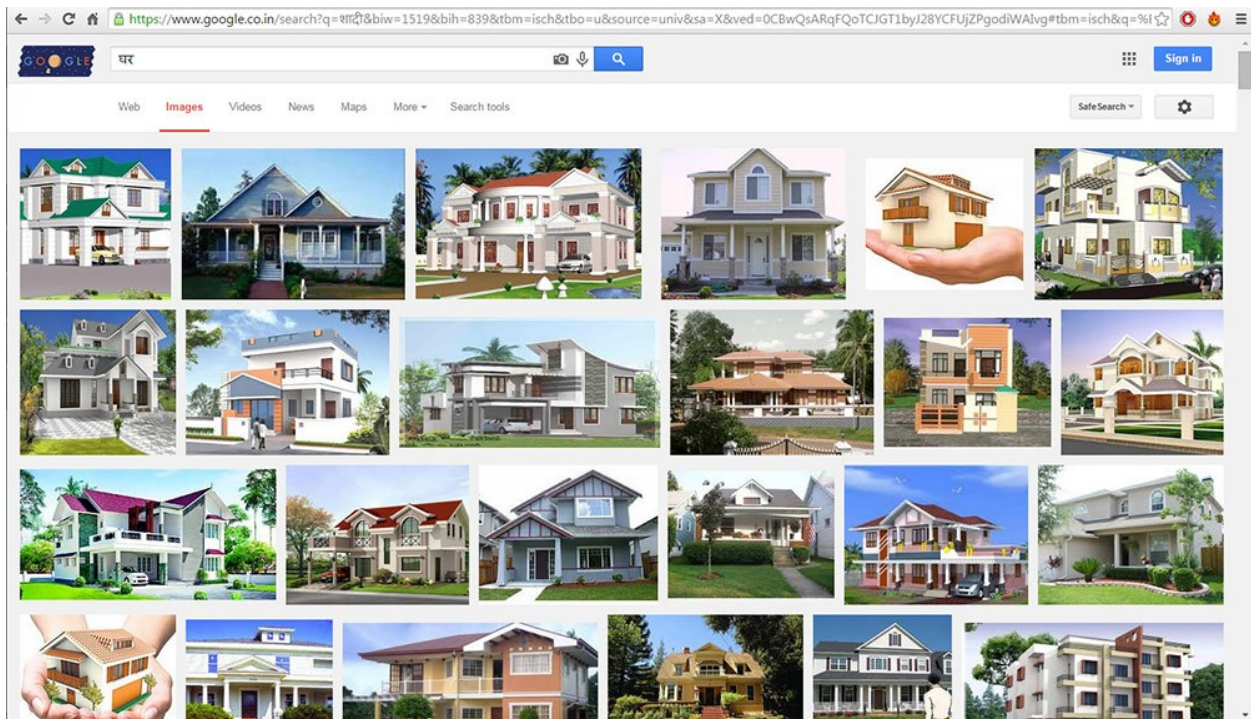
5-A) Indonesia Google: Meal
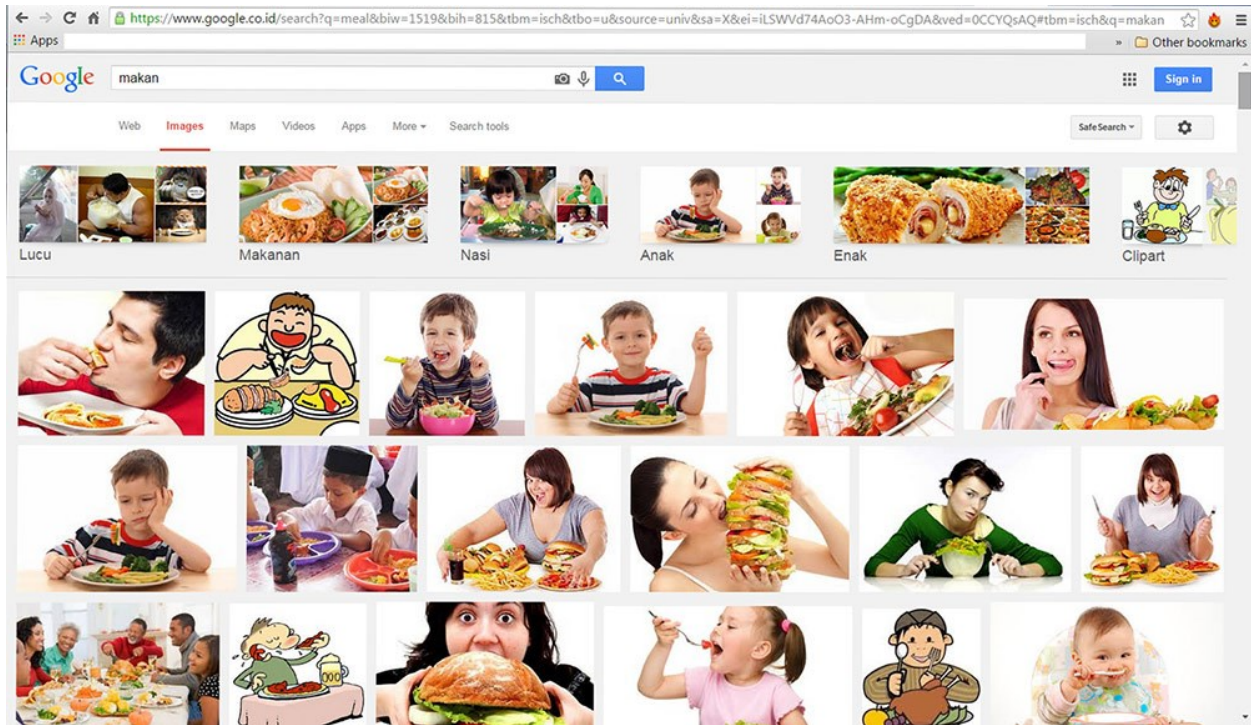
5-B) Indonesia Google: Marriage
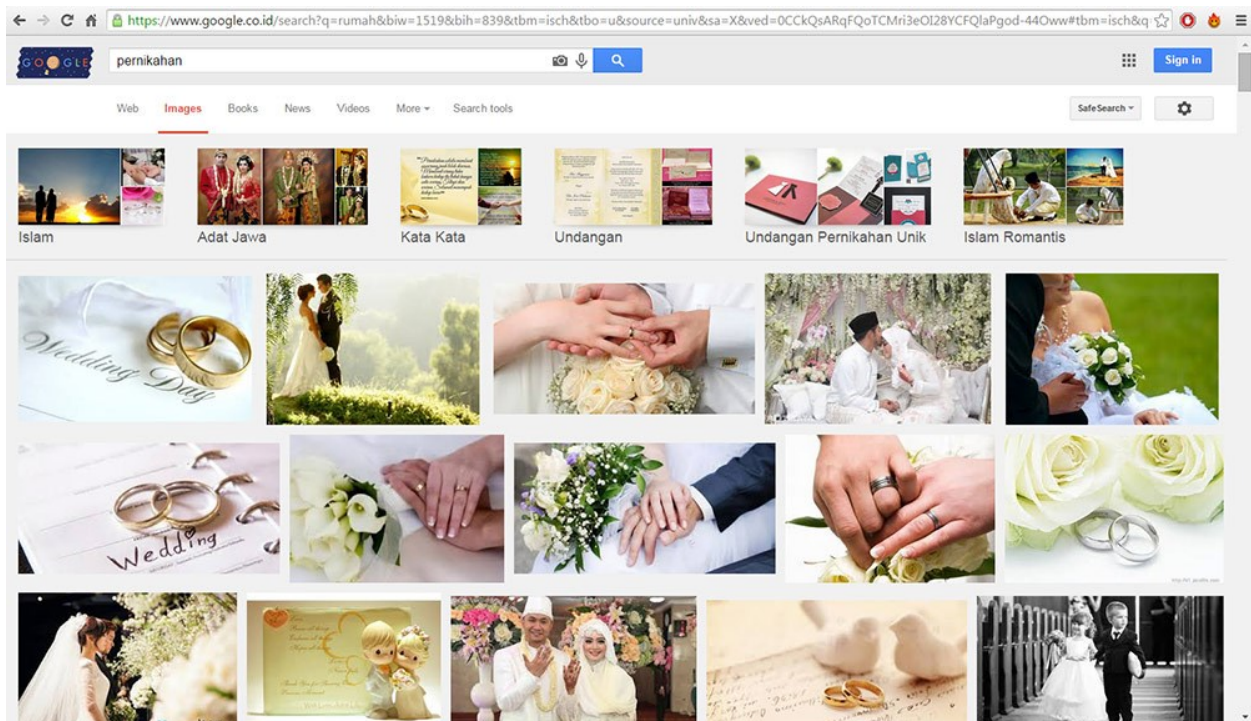
5-C) Indonesia Google: Home
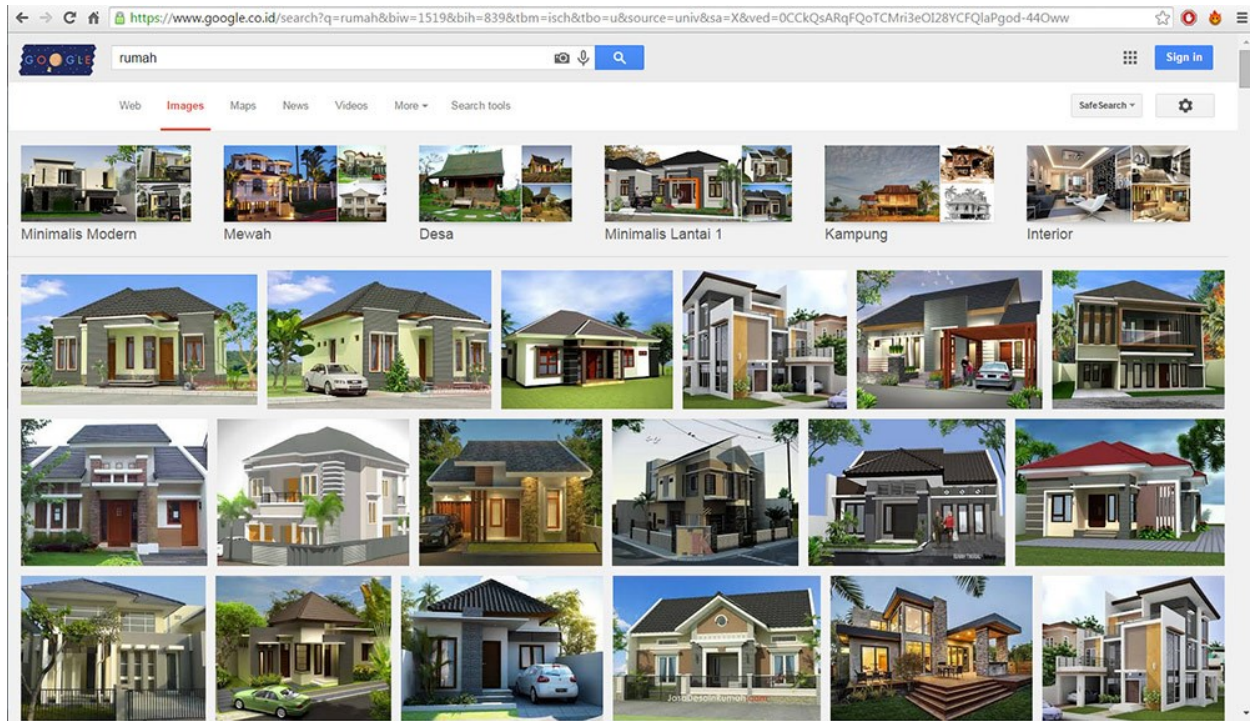
6-A) Malaysia Google: Meal
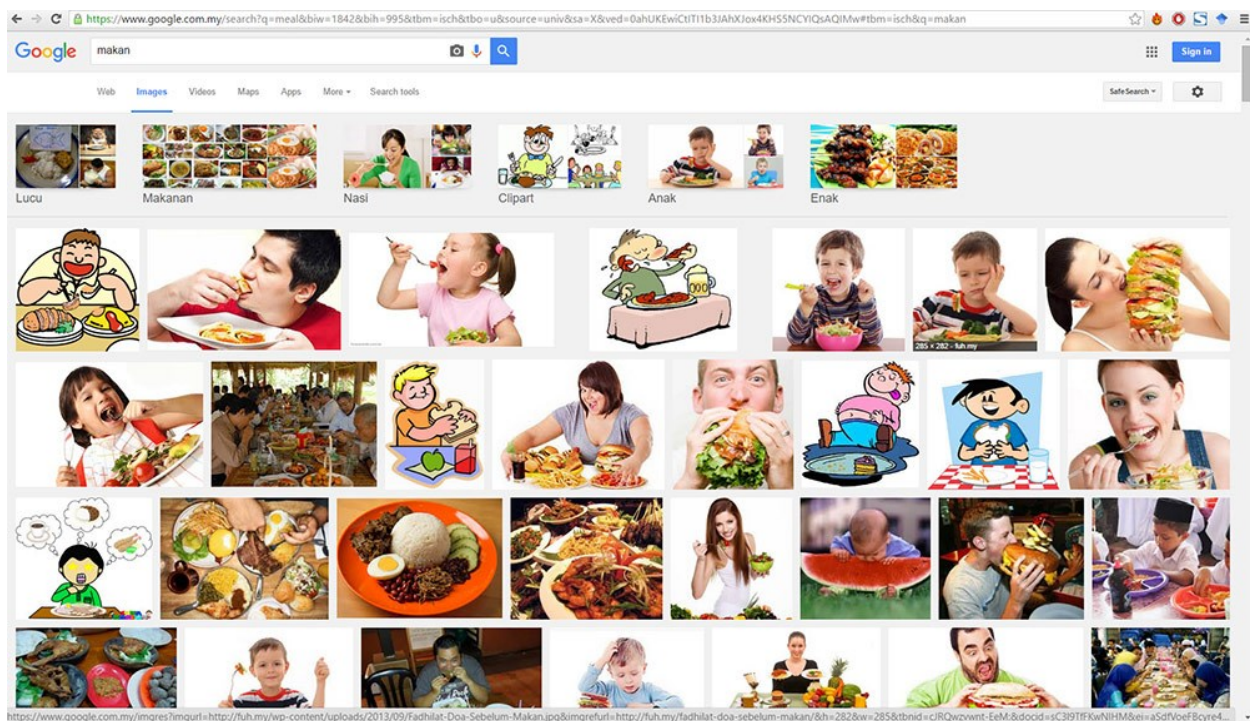
6-B) Malaysia Google: Marriage
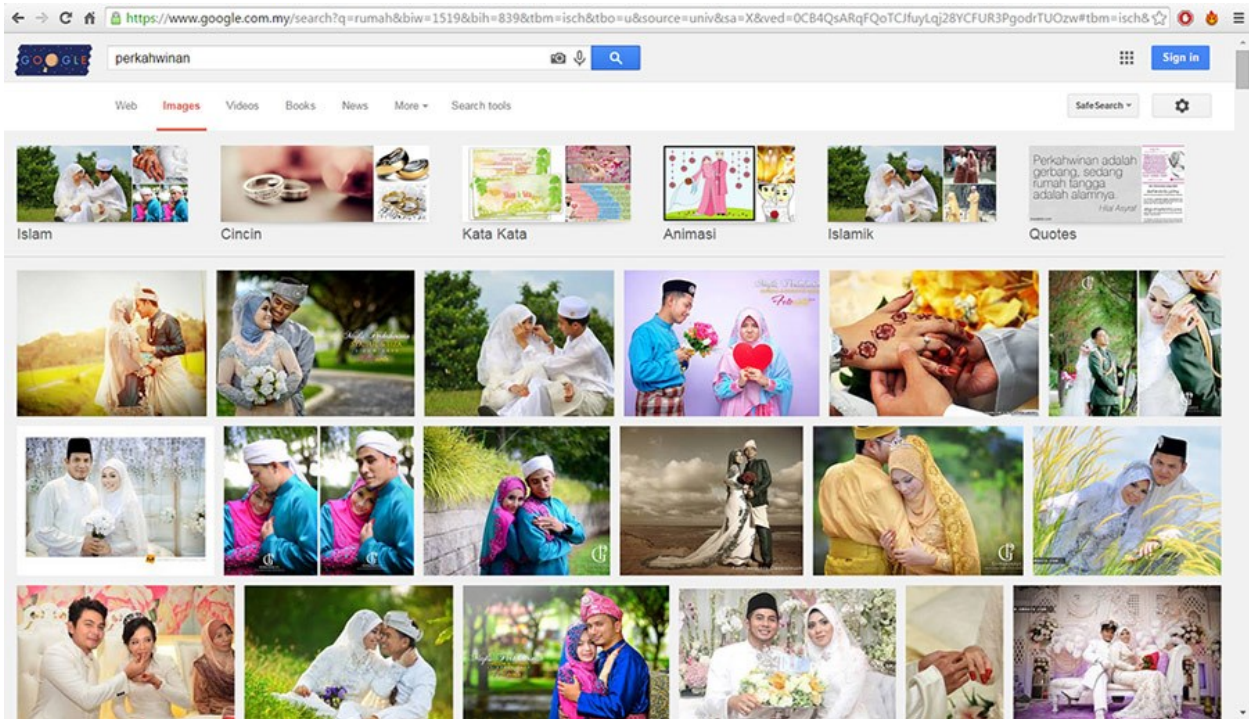
6-C) Malaysia Google: Home
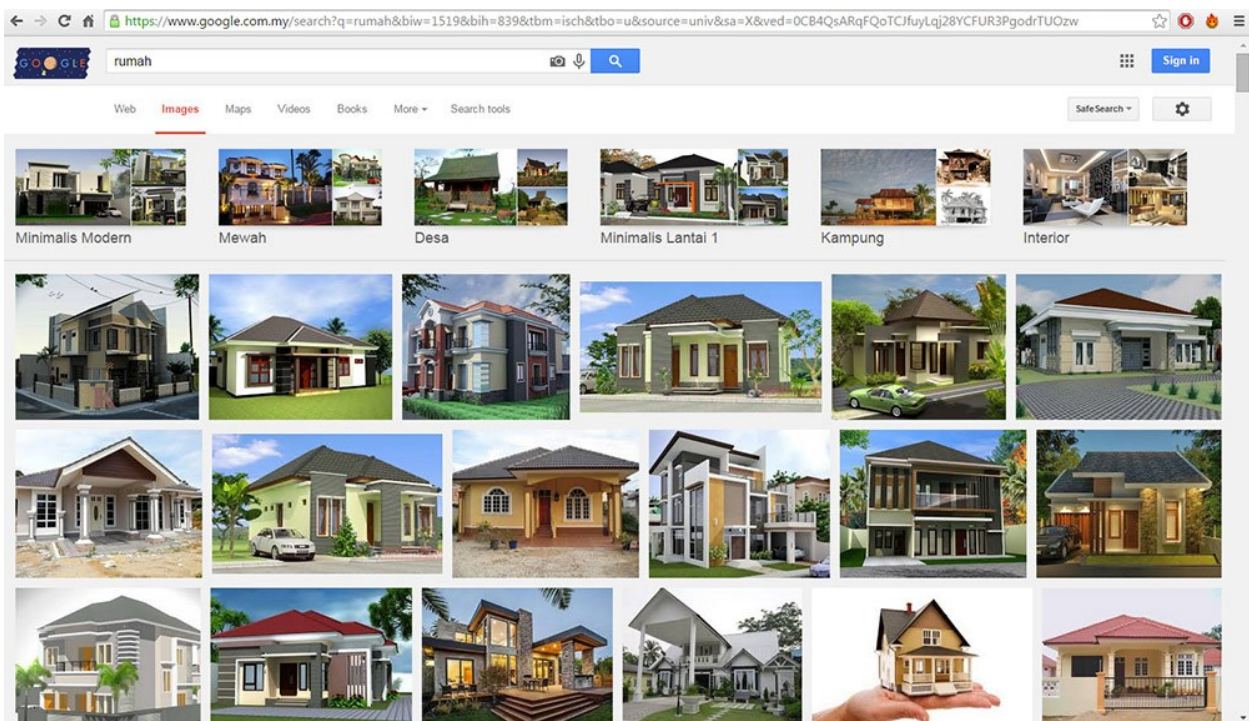
7-A) Nepal Google: Meal
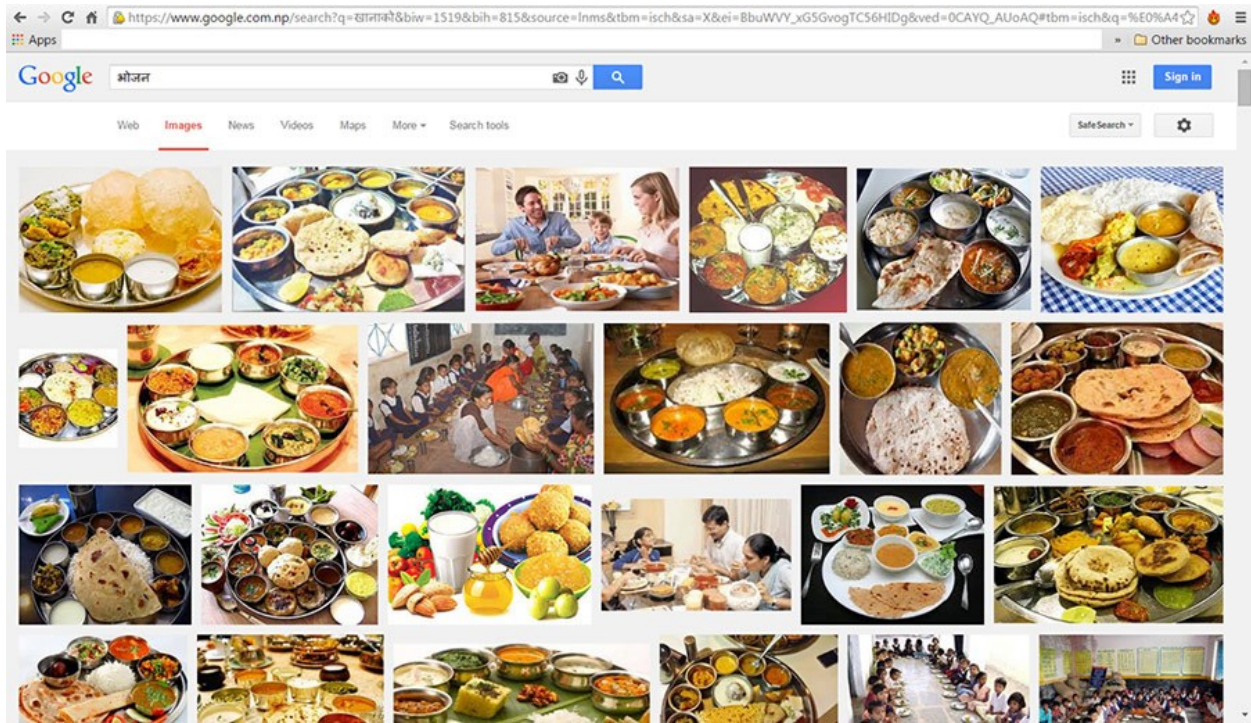
7-B) Nepal Google: Marriage
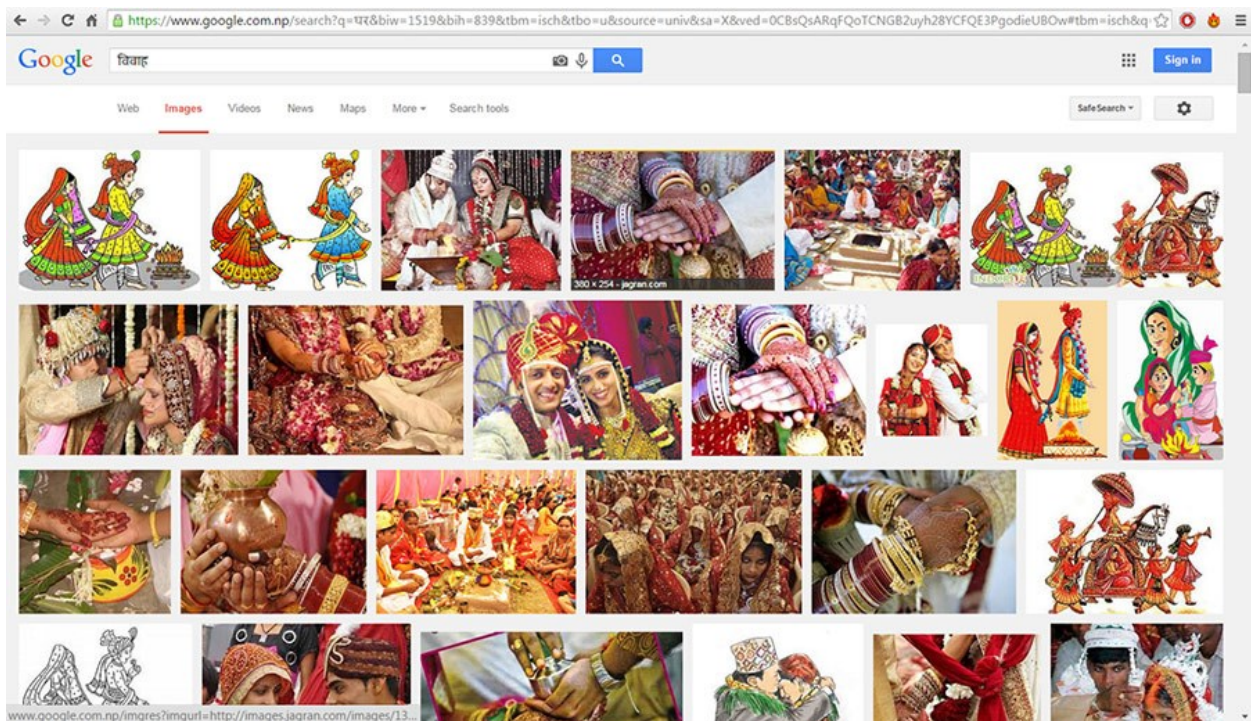
7-C) Nepal Google: Home
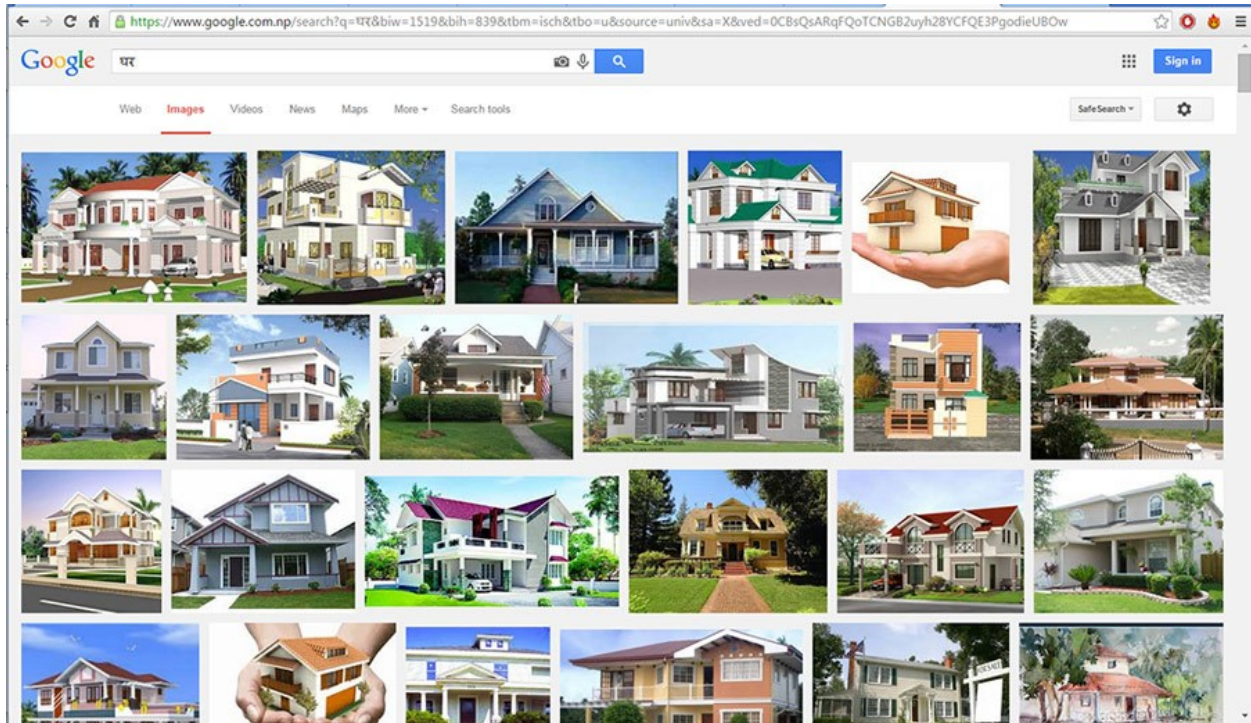
8-A) Pakistan Google: Meal
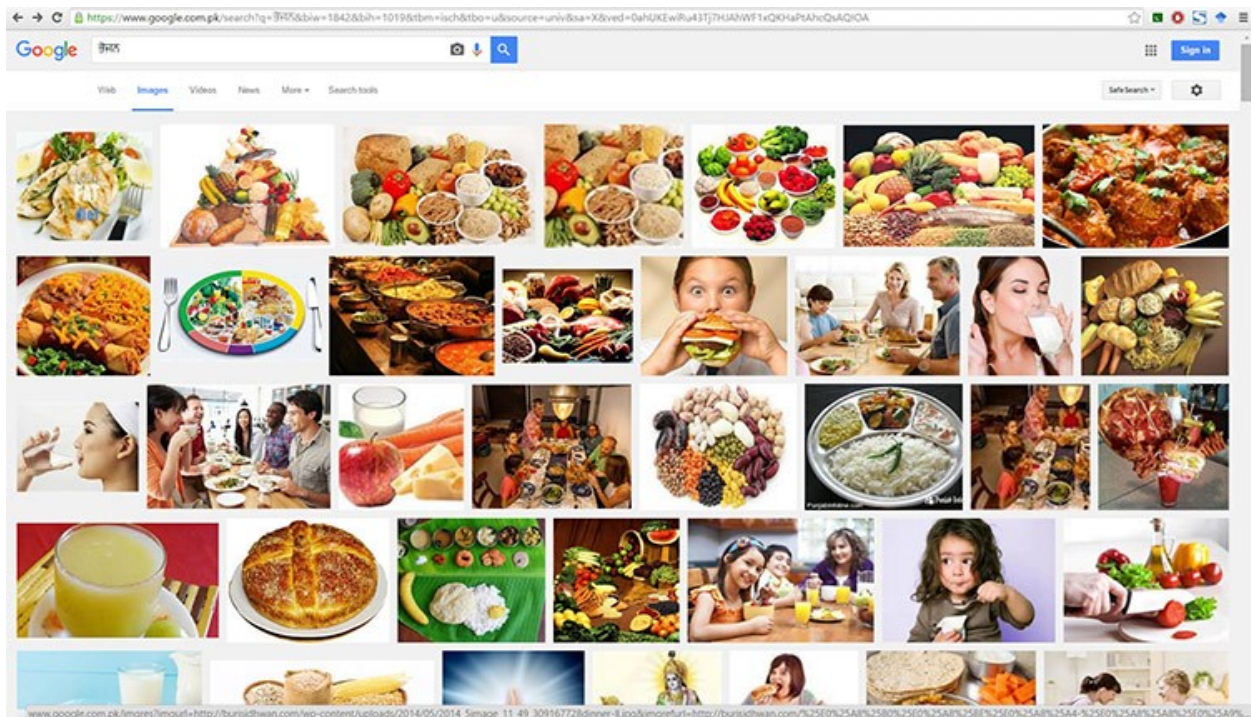
8-B) Pakistan Google: Marriage
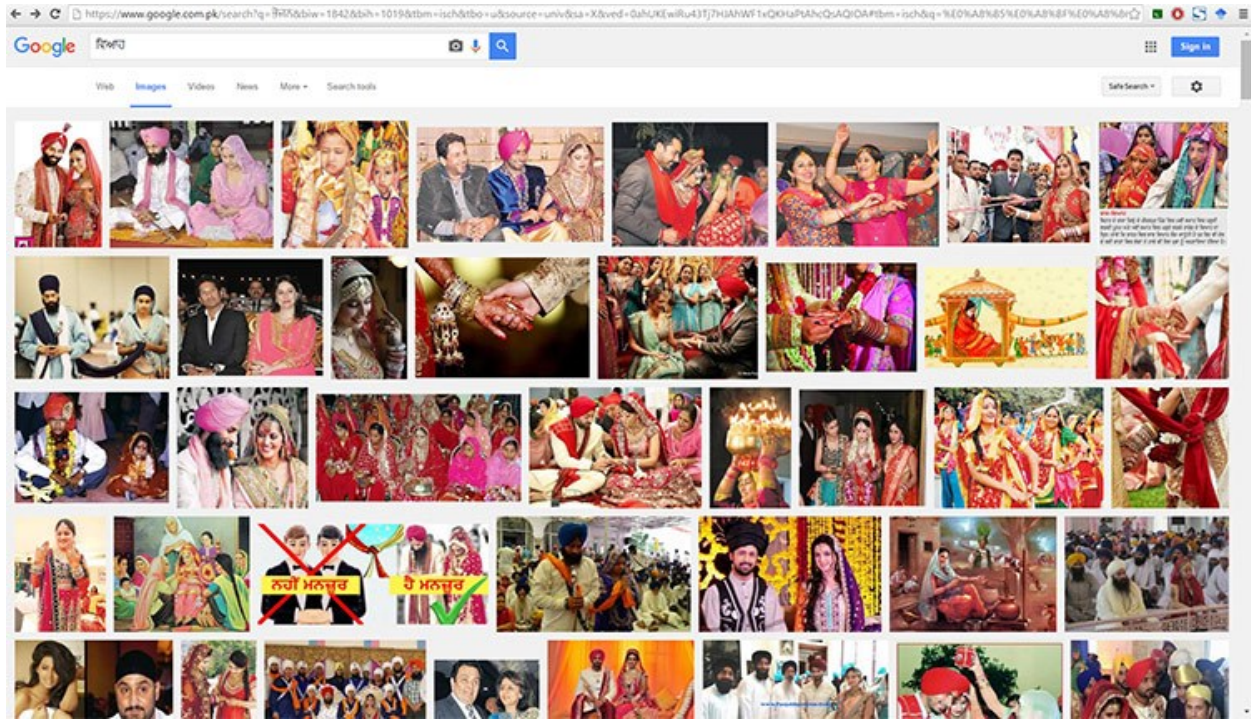
8-C) Pakistan Google: Home
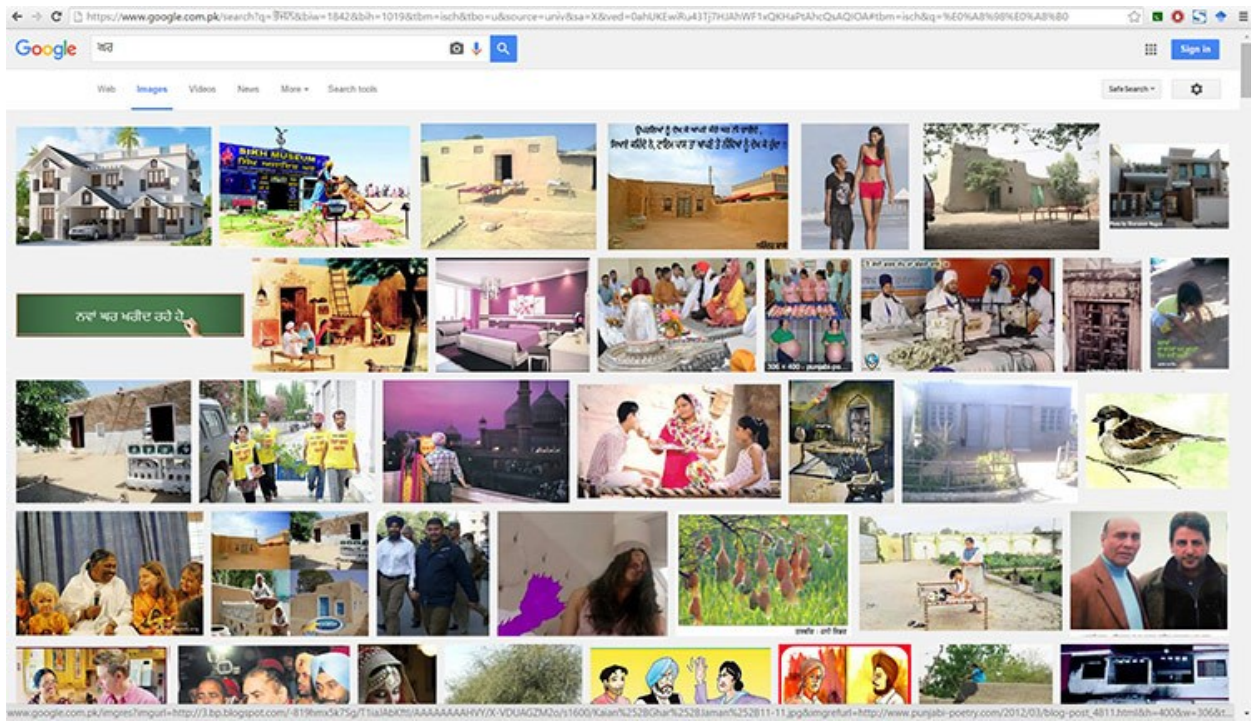
9-A) Philippines Google: Meal
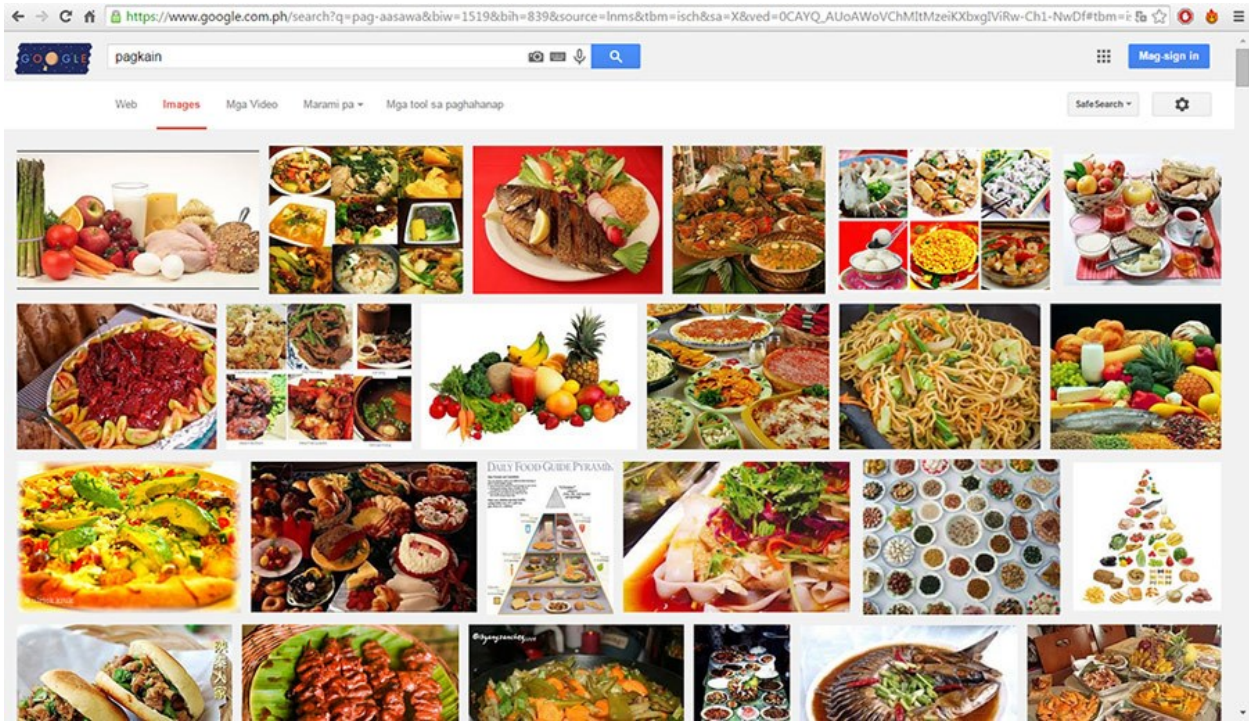
9-B) Philippines Google: Marriage
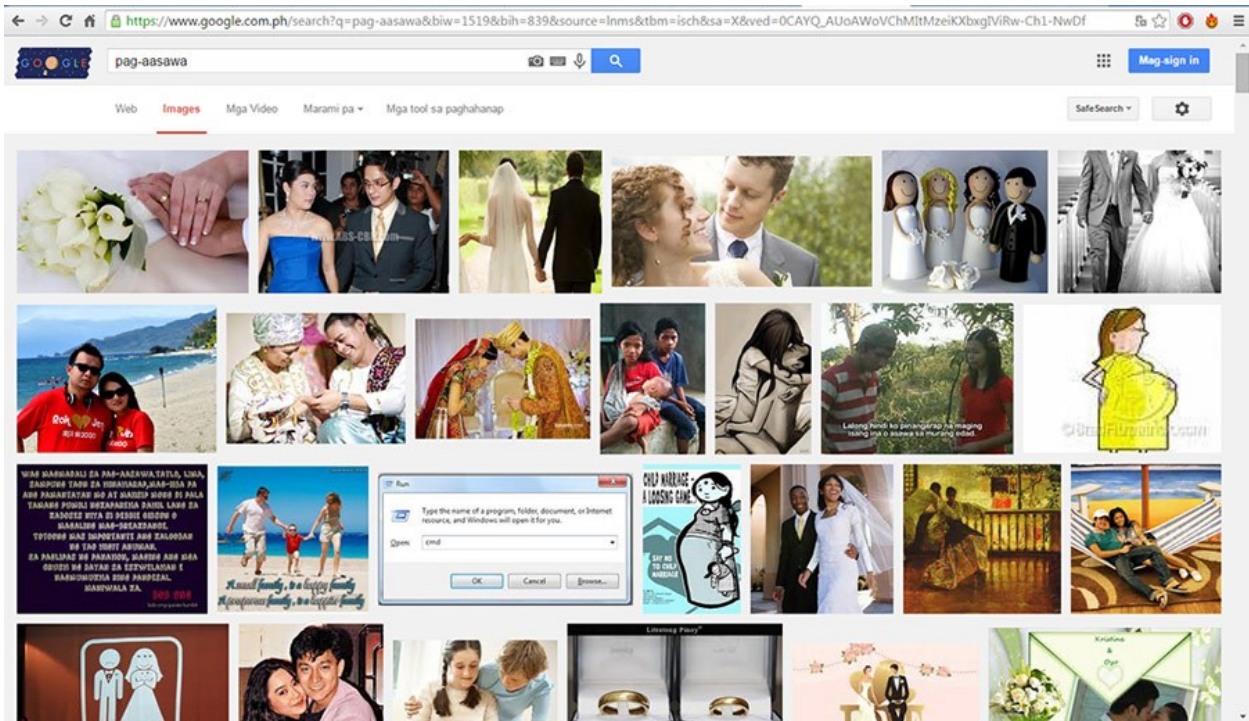
9-C) Philippines Google: Home
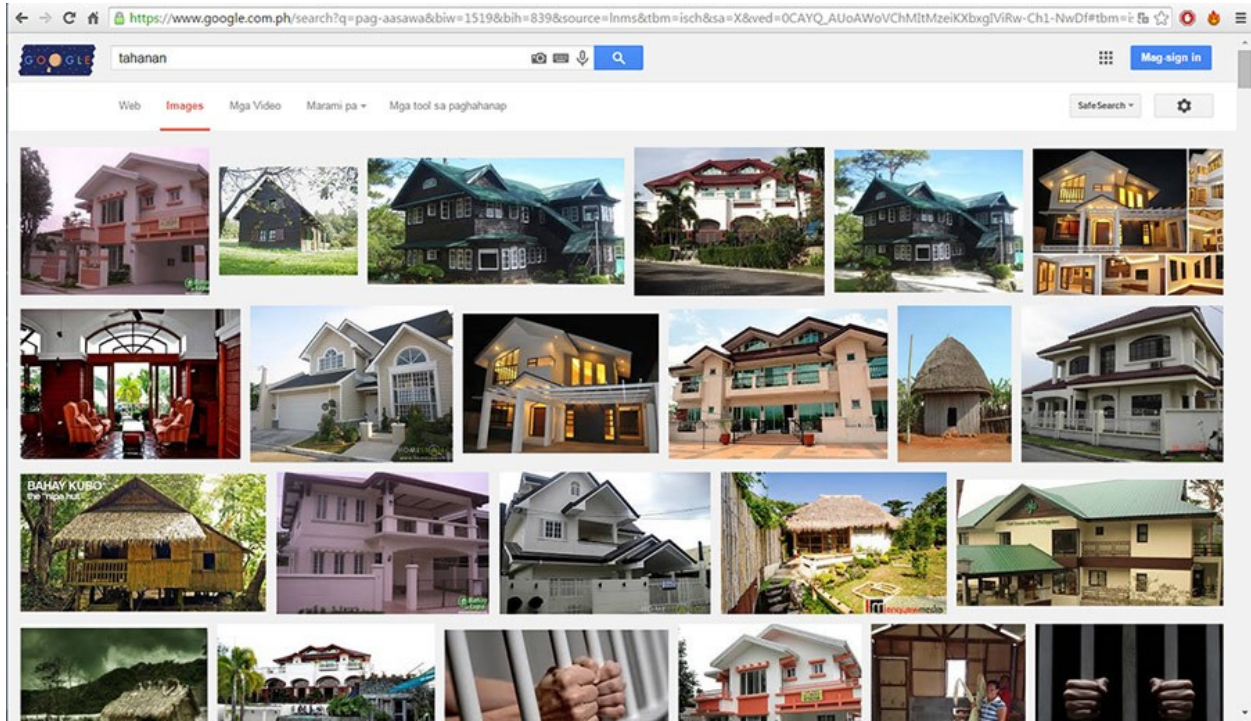
10-A) Singapore Google: Meal
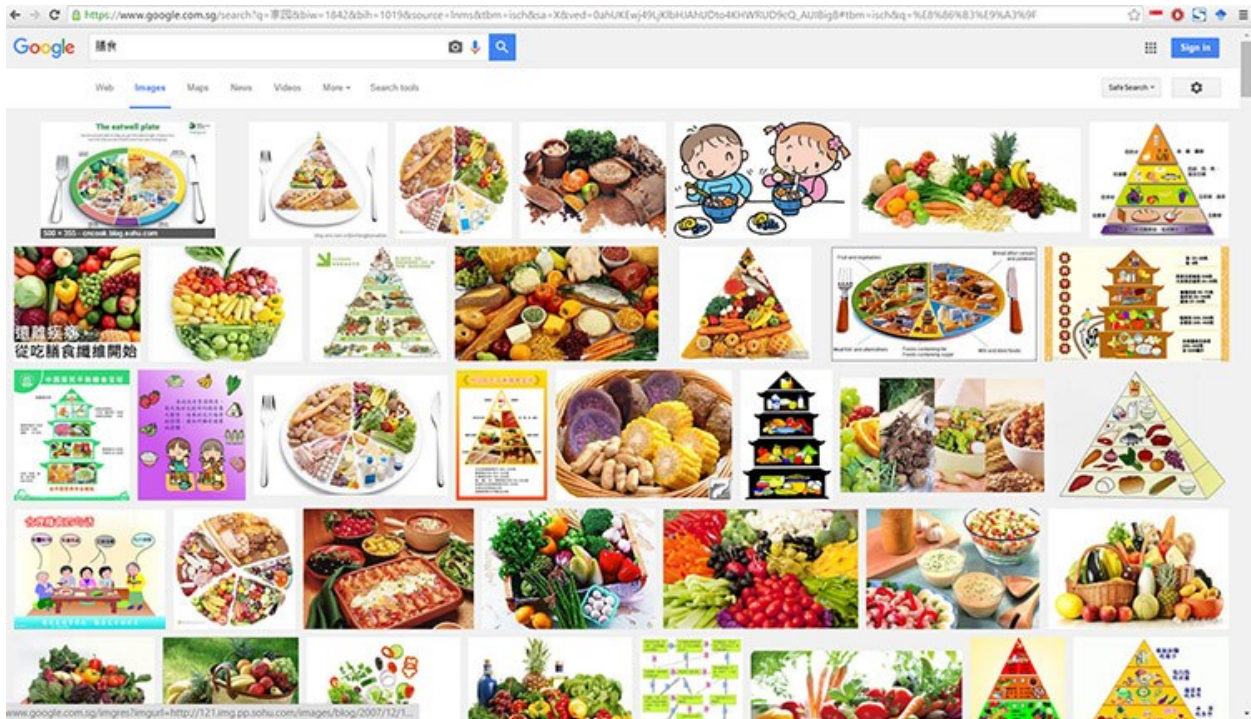
10-B) Singapore Google: Marriage
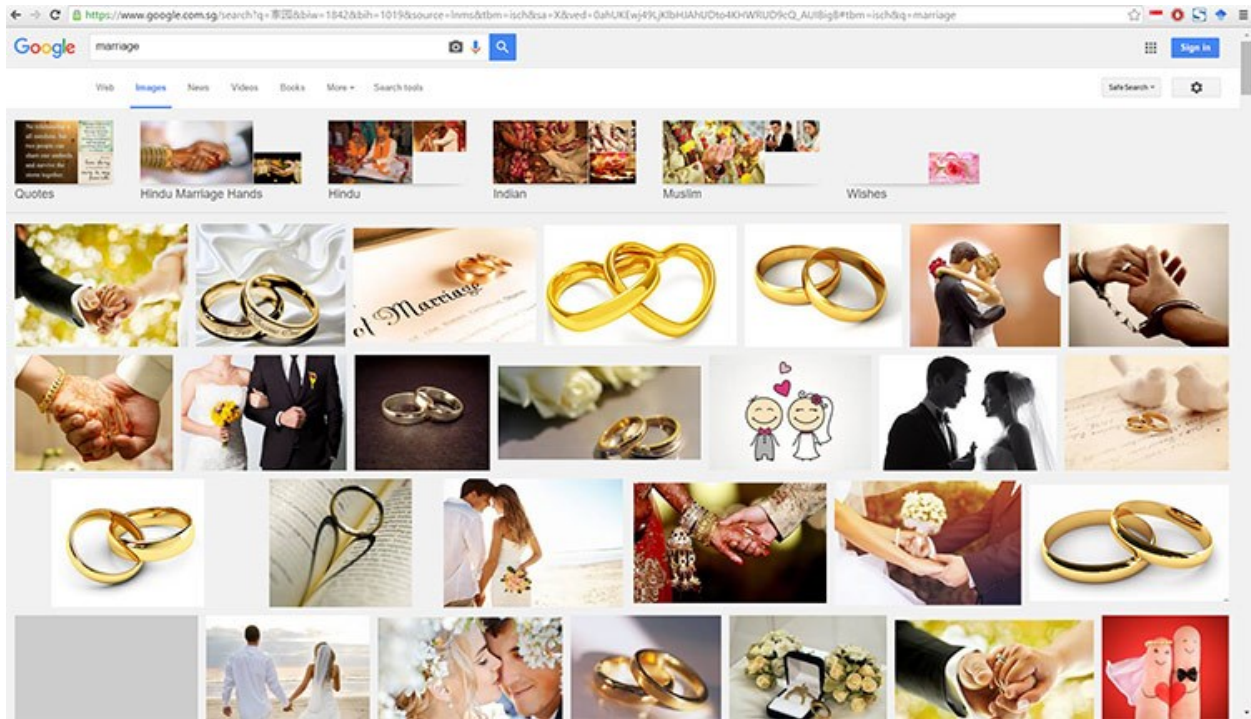
10-C) Singapore Google: Home
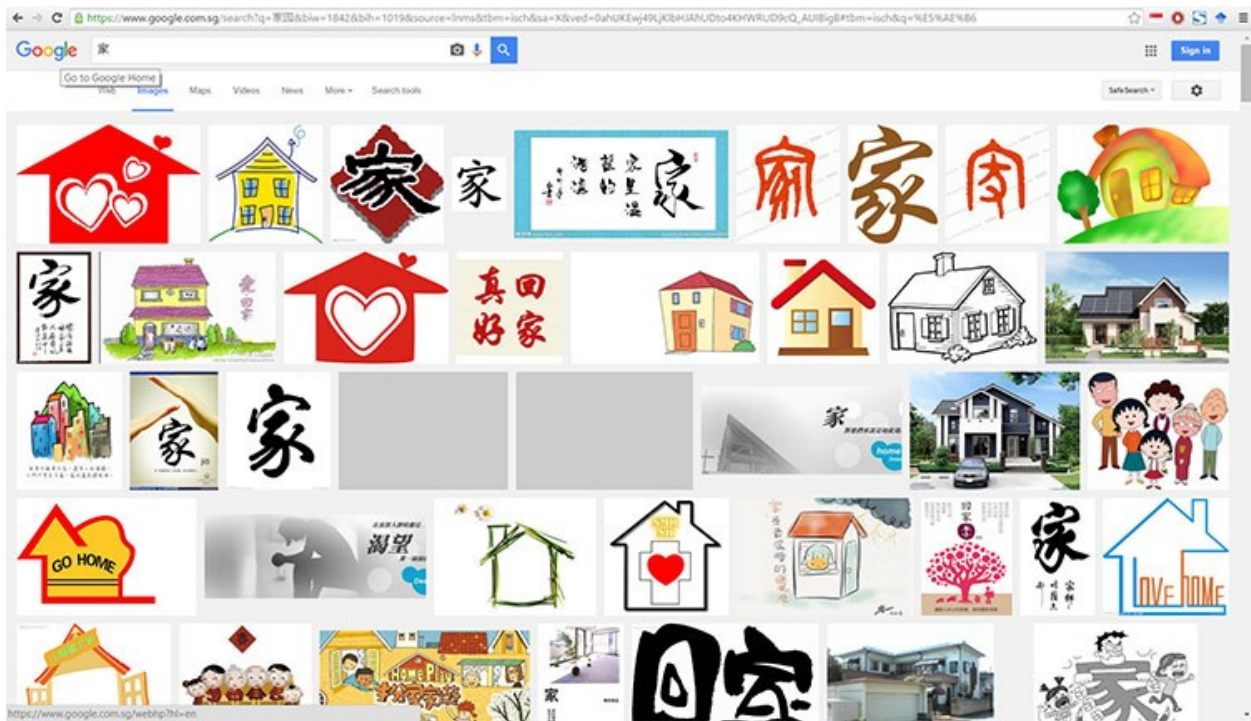
11-A) Sri Lanka Google: Meal
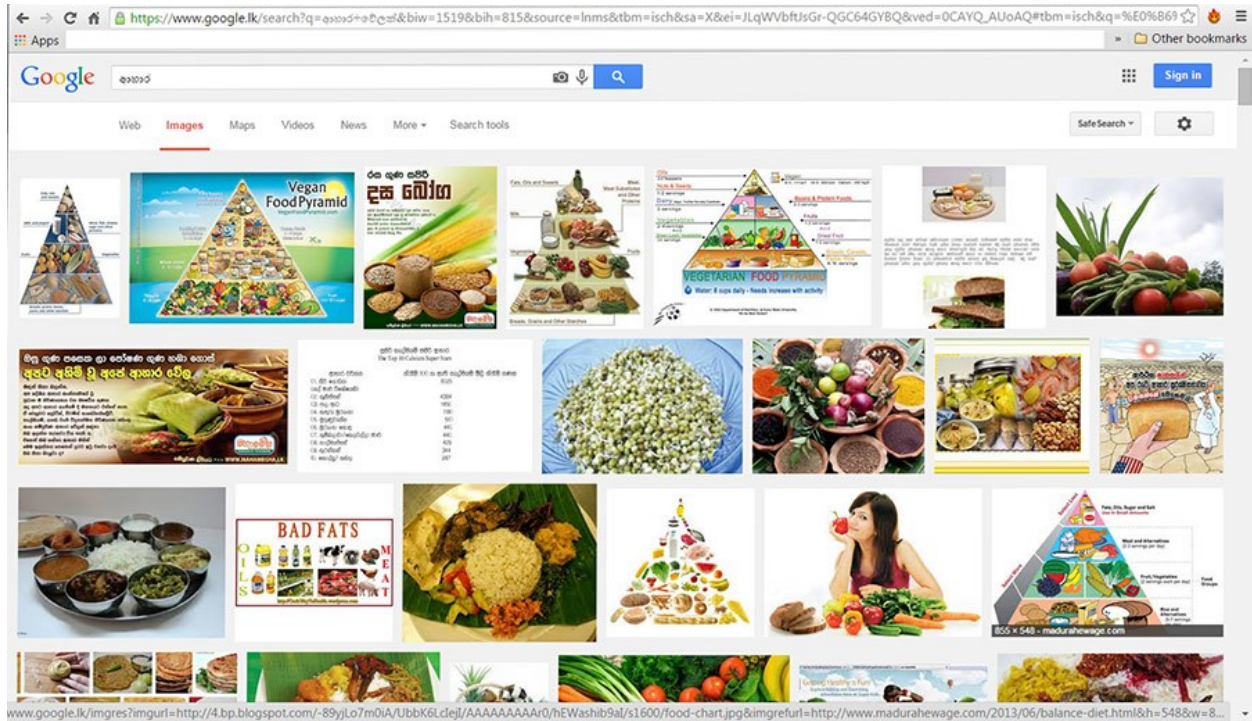
11-B) Sri Lanka Google: Marriage
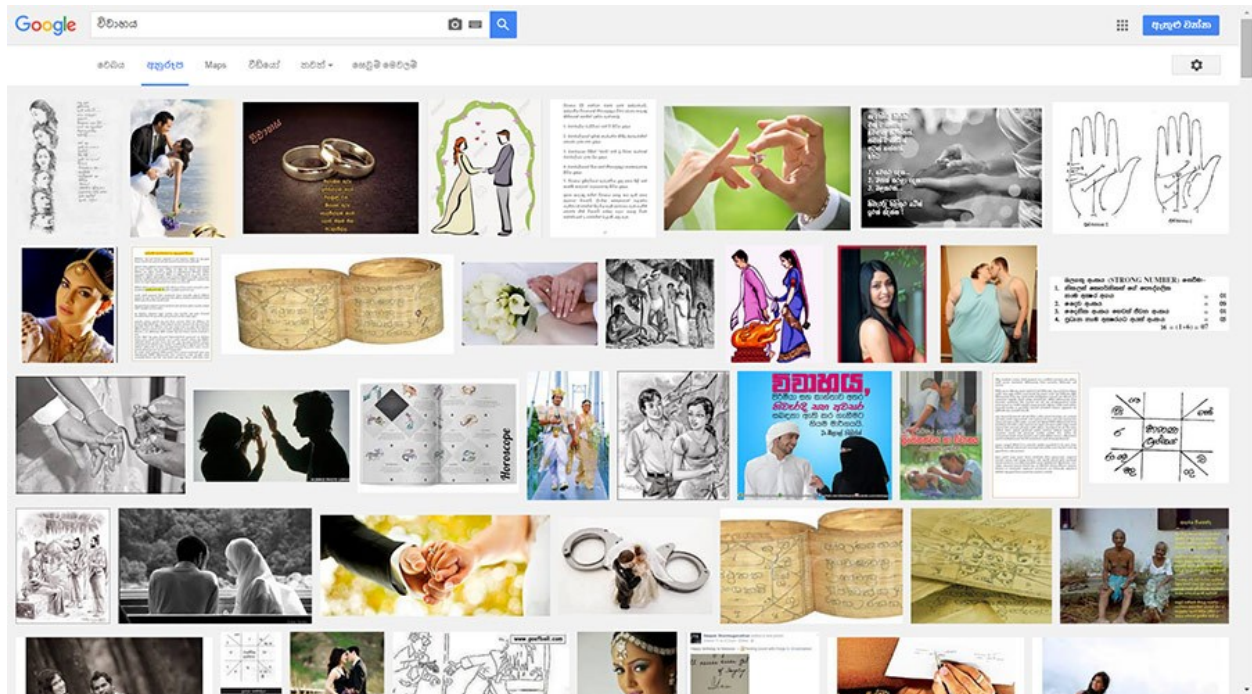
11-C) Sri Lanka Google: Home
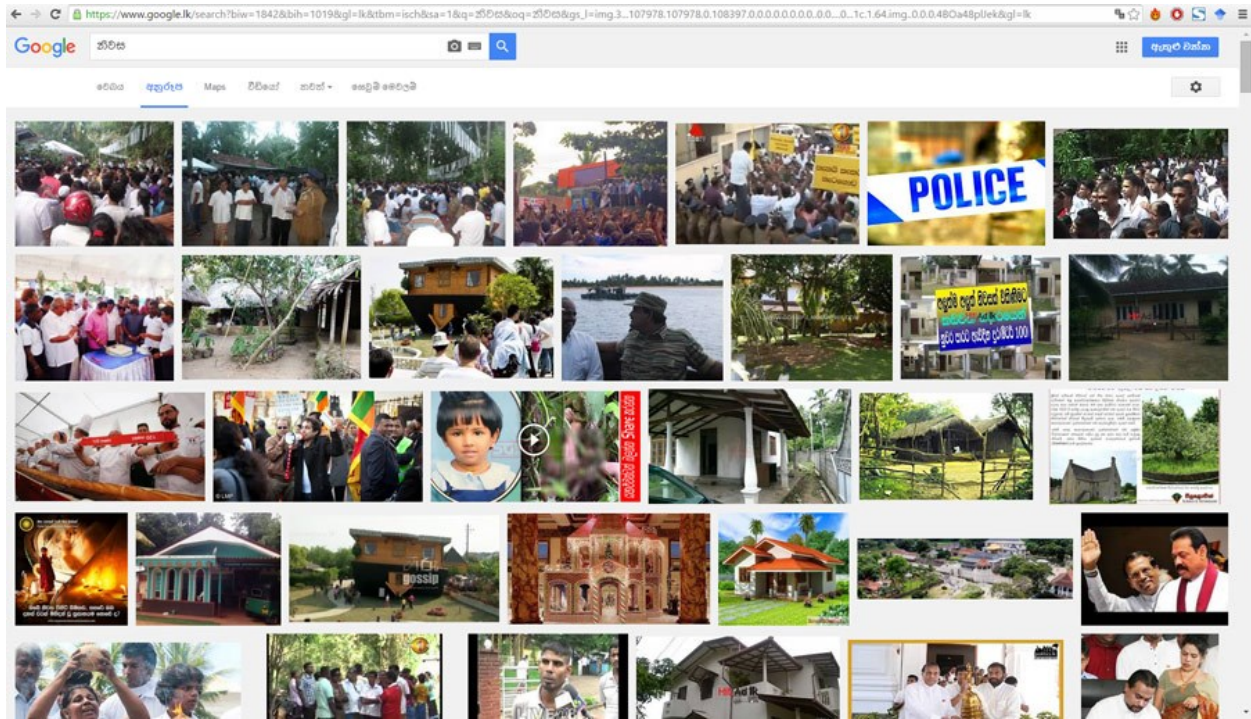
12-A) Taiwan Yahoo: Meal
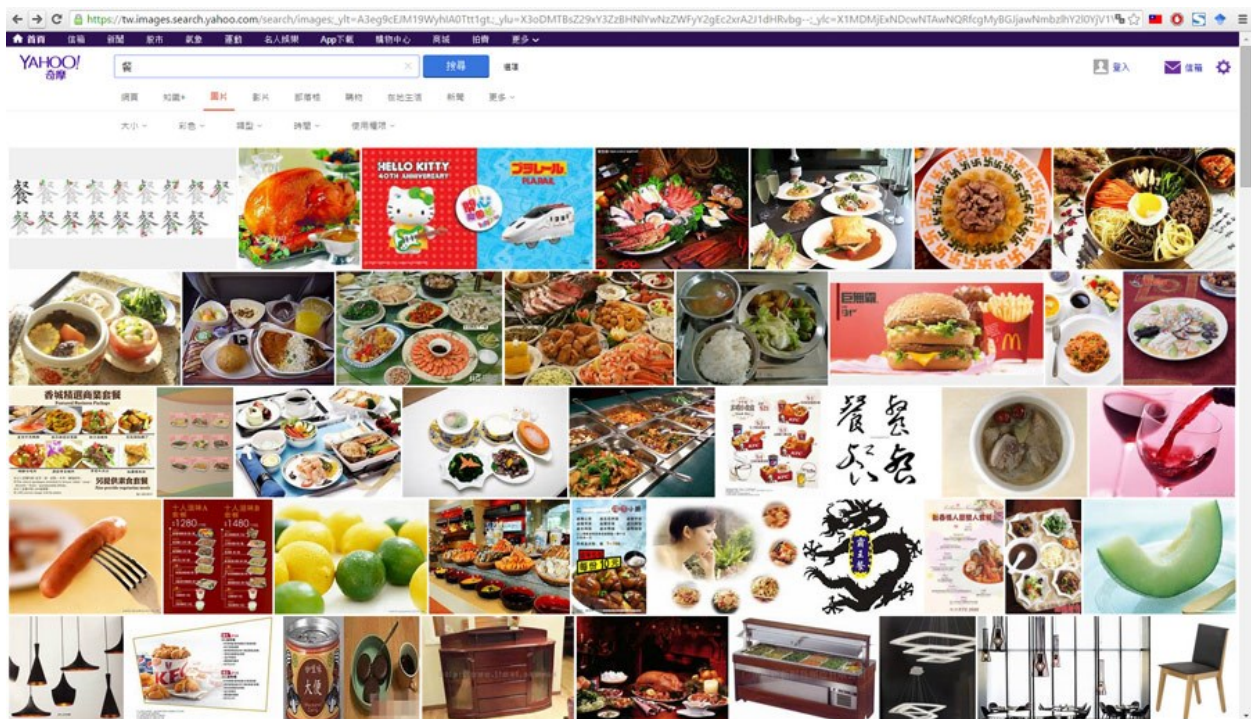
12-B) Taiwan Yahoo: Marriage
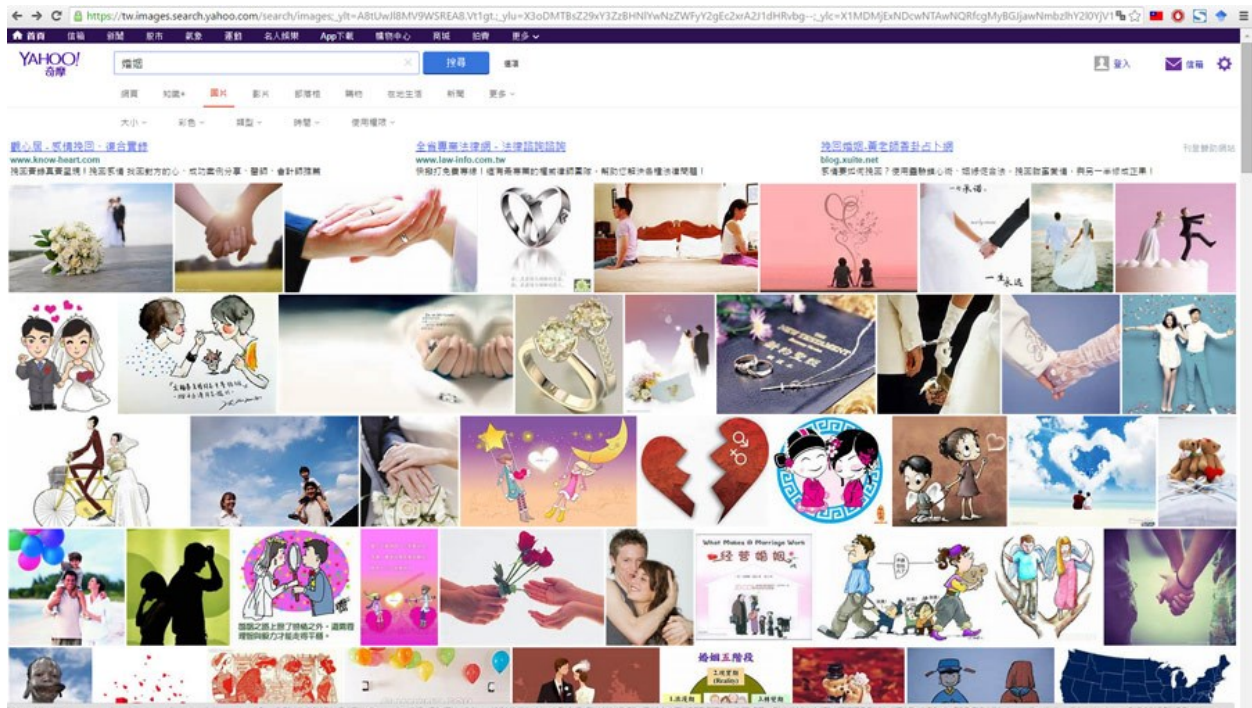
12-C) Taiwan Yahoo: Home
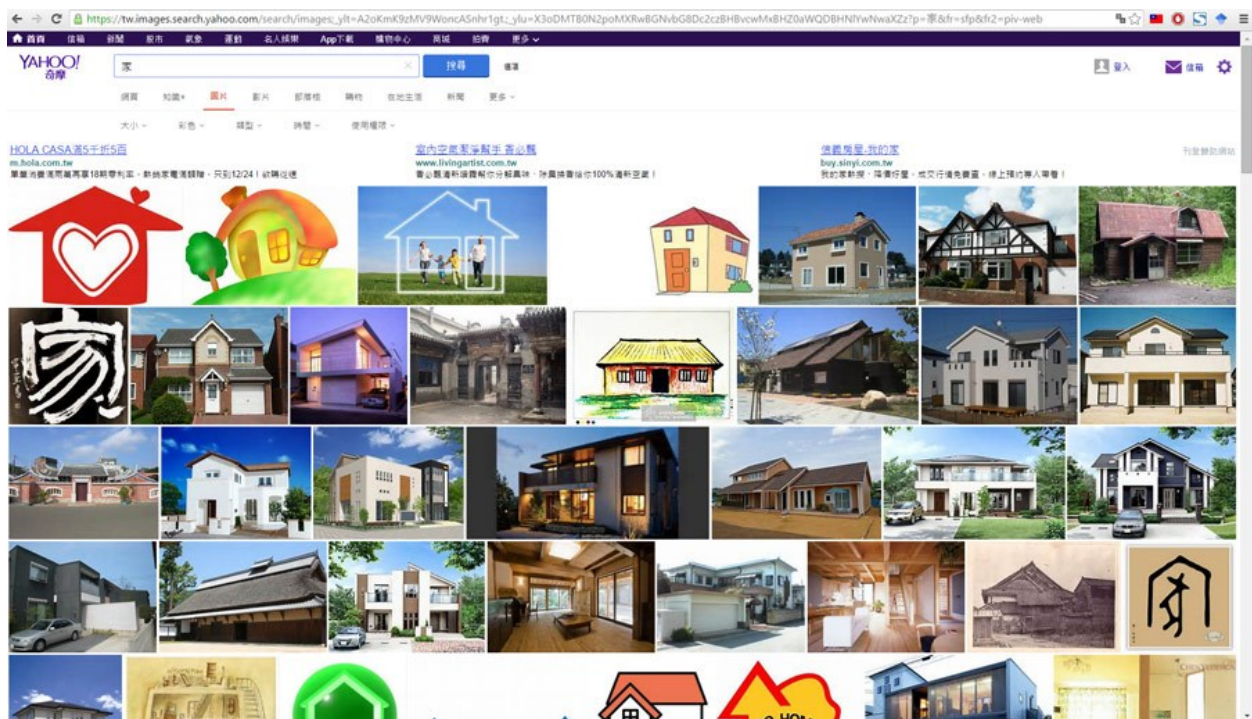
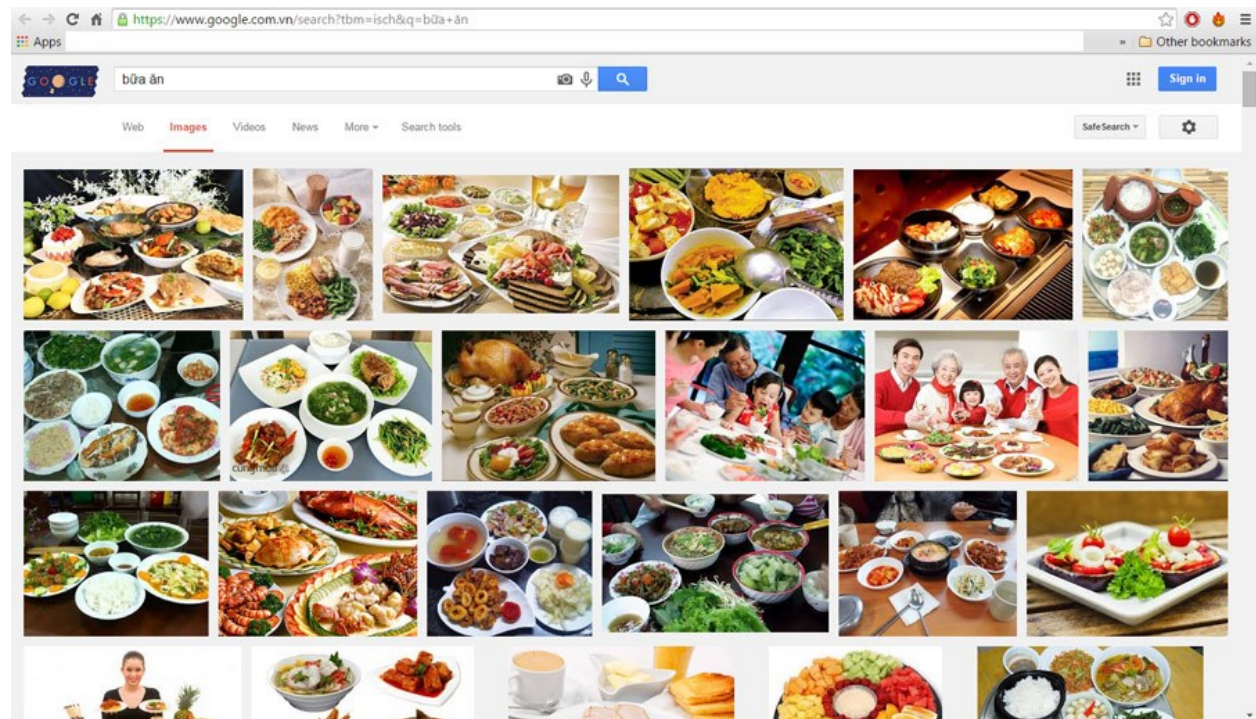## 13-A) Thailand Google: Meal
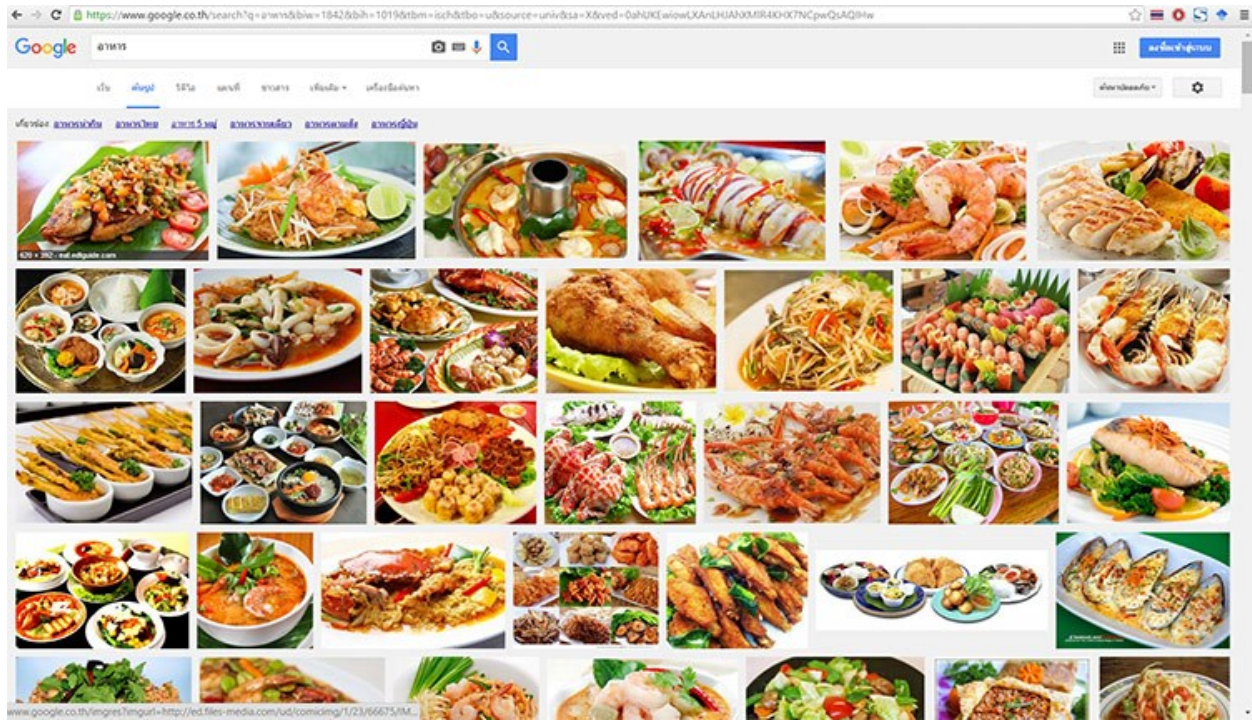
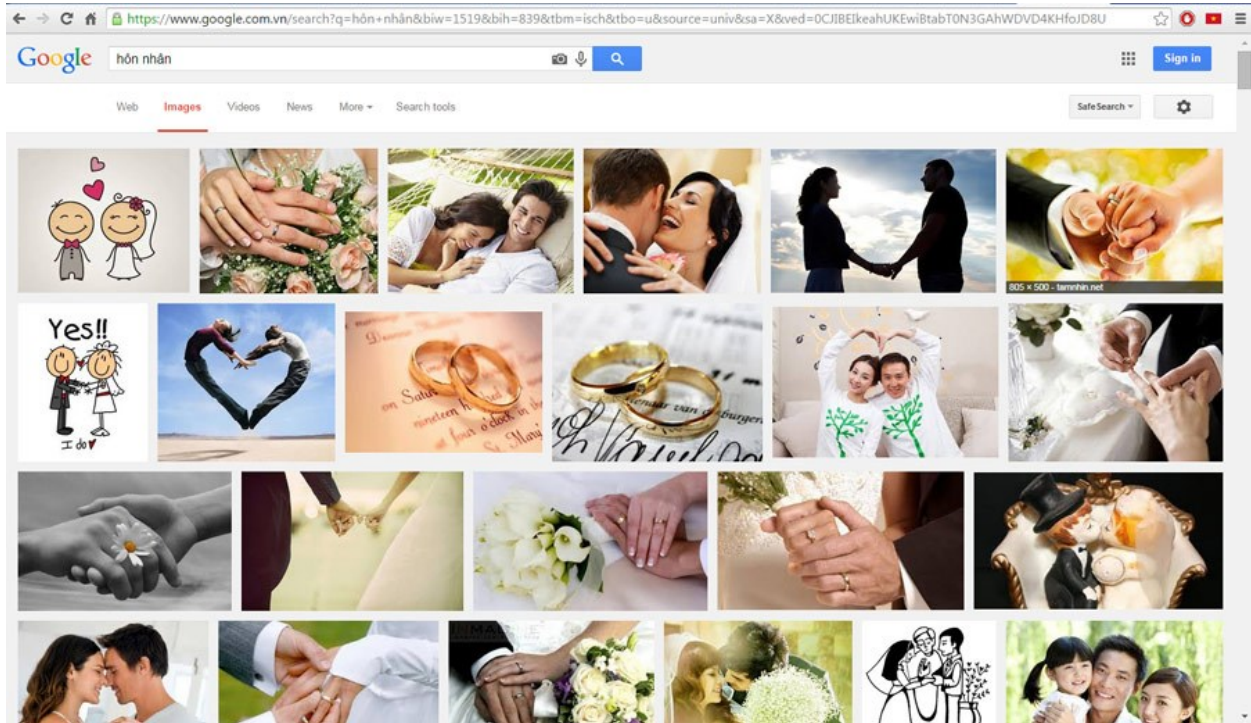## 13-B) Thailand Google: Marriage
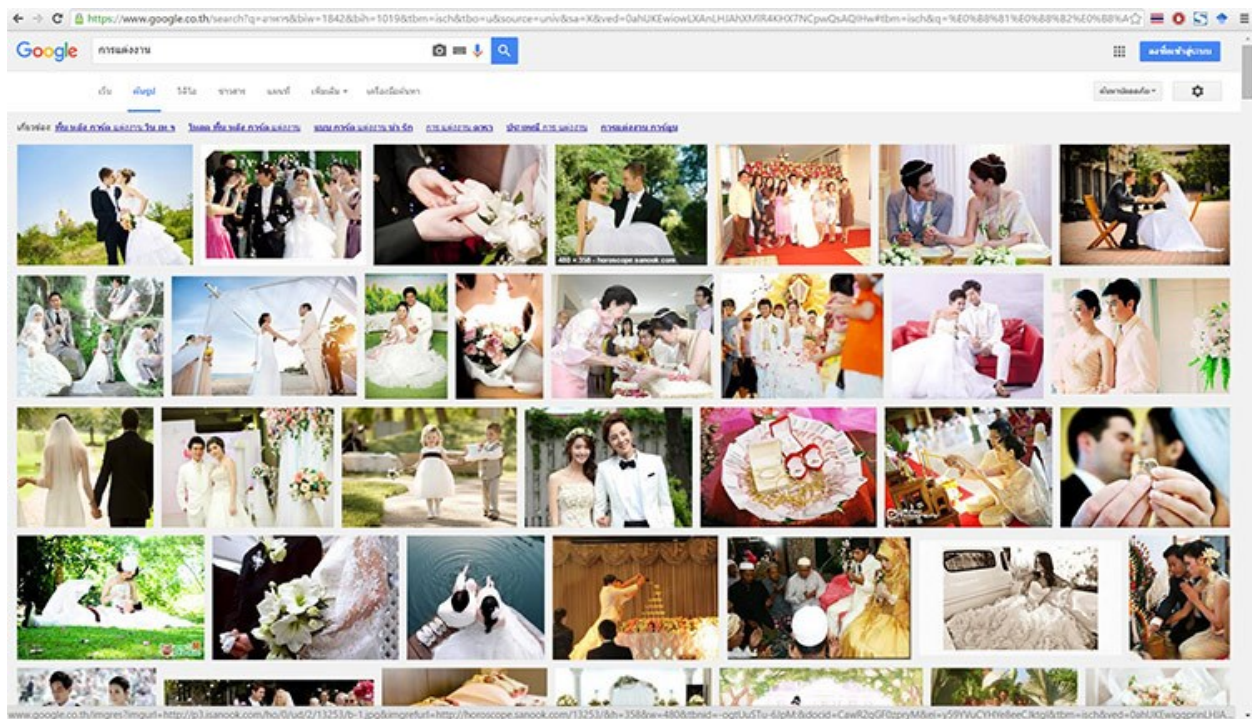
13-C) Thailand Google: Home
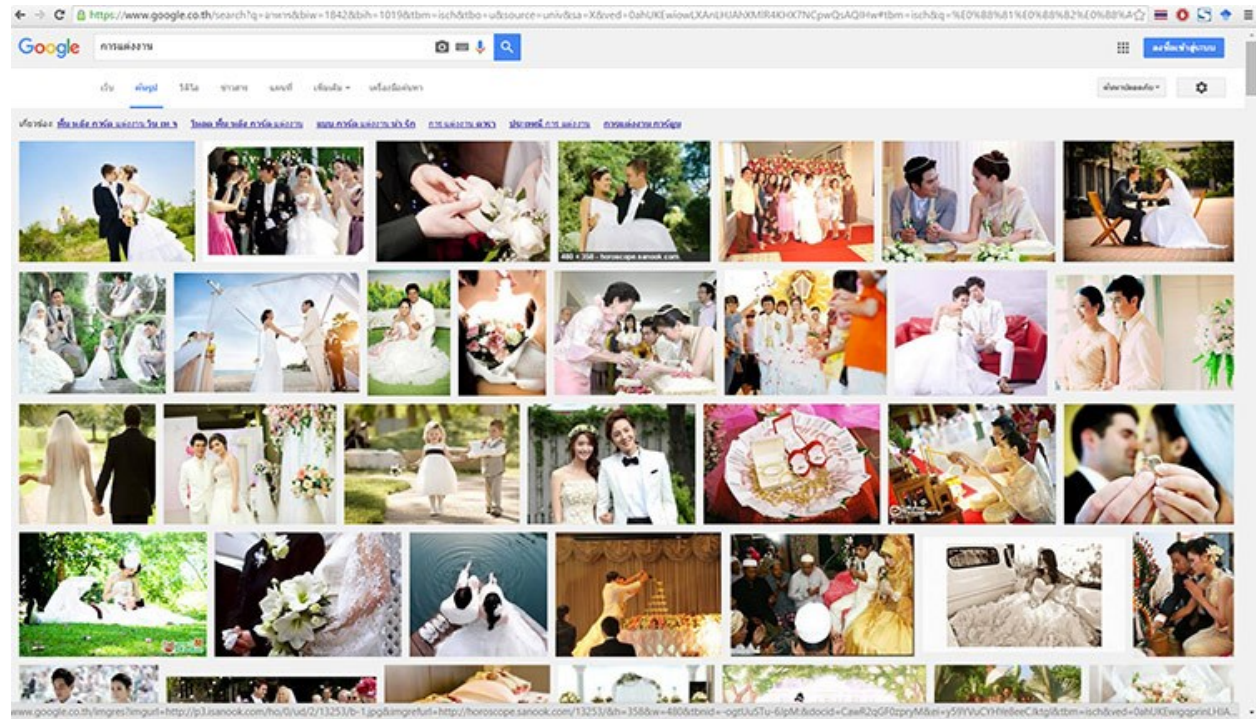
14-A) Vietnam Google: Meal

14-B) Vietnam Google: Marriage

14-C) Vietnam Google: Home