

PhD Seminar Report: Image-based Research

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## **Introduction: Project Overview**

“Today... we are living in one of the most artificial visual and image-saturated cultures in human history, which makes understanding the complex construction and multiple social functions of visual imagery more important than ever before” (Kellner, 2002, p82). With this research I continue to explore visuals, attempting to make sense of our diagrammatic and increasingly digital world. How do we interpret this sophisticated salvo of imagery that surrounds our day to day activities and what can be said about its influence on us? In the context of a globalizing information based society, what impact are images and popular visual culture having on our preconceived definitions based in our cultural milieus?

There is an important interplay between text and images (Clark and Paivio, 1991; Heiligmann and Shields, 2005; Lester, 2006) and the visual syntax of this relationship, manipulate our understandings of news, advertisements and day to day activities, playing on our previous knowledge; to perpetuate dominant ideals and persuade people to buy products or validate a particular message (Harris, 2006). This research seeks to further legitimate image-based research and the collection of data using online methods to further an understanding of visual literacy and culture and hopefully reveal strategies and ideas of how to learn with images and the new media delivering them to us. With these pilot studies I intended to extend and further build upon my original pilot study, ‘Drawing and Representation’, conducted last winter on Amazon Mechanical Turk (Mturk). I attempted to carry this out in several key ways:

1. Repeating a similar task drawing task on Mturk, but with a more careful word

selection as well as gathering more demographic information.

2. Testing the viability of using a video clip to gather feedback (interpretations) from participants about the nature of the clip presented.
3. Comparing the results of both these online tasks with duplicate offline (in-person) models, to further scrutinize the viability of online image-based research.

First of all a more careful selection of words was needed to create a more robust project yielding richer, less ambiguous, results. From several sets of words and after some feedback from my peers the words *meal*, *marriage* and *funny* were chosen for use as Human Intelligence Tasks (HITs) in this project. An additional 'pilot within a pilot', was also created to test the feasibility of gathering responses to a popular film; participants were presented with a video clip from a Disney film which has been widely criticized by academics of in the field of visual culture. Thirdly two offline studies, almost identical to those on Mturk, were conducted at Concordia University to compare with the data gathered online and determine how on and offline (in person) data gathering may differ and to lend further credence to online methods of qualitative image-based research.

### **Designing the HITS: Technical Difficulties and Coding Issues**

Initially I had thought that the HITs would be fairly straightforward to design, after all I was not adding much more to the task just a one page survey and surveys are one of the primary usages of Mturk. Still not long after logging in and browsing the list of HIT templates I realized that none of them would accomplish what I needed. So I used the same method as I did before and cut and pasted my survey into the HIT asking participants to do the same; cut and paste the survey along with the images they drew and then upload them. I knew that this was less than adequate as it was asking people to do quite a bit more work

and possibly work with several programs on their own computers. Based on the response rate and duration of my previous endeavor last term, I was not very optimistic.

A few days later, having only received two responses, I went back into Mturk to take another look at the templates to see if I could find a solution. I looked at a 'blank template', which is basically an example of possible survey formats which have radio buttons (only one answer), check boxes (multiple answers) and answer boxes (for short/long answers). These would not do, although I could edit the questions there were only three examples and I was unable to copy them (the buttons, boxes) to make new questions; also missing was the 'submit button' needed for participants to upload their images. Then I noticed there was an '*Edit Source Code*' option, meaning I could edit the HTML (hyper text markup language) code and more precisely manipulate the template. The only problem being that I am not overly familiar with HTML code. Still I was able to find, amongst the strings of seemingly nonsensical words, letters and numbers, the format code for each type of answer. So I copied this code and repeated it as necessary to complete both my surveys. Then I did some research on the 'submit button' (allowing users to upload files) on some HTML 'how to' sites and copied and pasted the code I found in my survey as well.

After publishing both surveys on Mturk, a day passed and it was evident that there was a problem with my new drawing task as I had not gotten any results at all. However slow, the more cumbersome drawing task was still getting some participants, but most had to be rejected due to either not having done the survey or drawings. Once the film survey was posted it had received all 30 desired participants in less than 24 hours. This was considerably faster (I was amazed) than my past experience with the drawing project which took more than four weeks to reach 27 participants. Yet there was one more caveat.

Although I had gotten the preferred number of participants for the film survey, the results were somewhat puzzling; I seemed to have all the answers, but there were only 3 questions! I quickly realized that because I had copied the code from the examples 1, 2 & 3 all of my questions, and therefore answers, were labeled or categorized as 1, 2 & 3 making much of the data difficult to decipher.

My first attempt at making sense of this jumbled data ended in frustration and I gave up hope of gaining any insight at all from this part of my project. Several days later I thought that there must be away of figuring out which answers pertained to which questions so I revisited the template to look at the code to see if there were some clues to help me interpret the data. Following a careful look through the code I discovered exactly where my errors were. Amidst the strings of code each question was labeled with a simple 'Q2' (Q+#), to illustrate what I was seeing I've pasted a snippet of code below, highlighting a question label:

```
<tr>
  <td valign="center"><input type="checkbox" name="Q2" value="Option1" /></td>
  <td><span class="Apple-style-span" style="border-collapse: separate; color: rgb(0, 0, 0); font-family: 'Times New Roman'; font-style: normal; font-variant: normal; font-weight: normal; letter-spacing: normal; line-height: normal; orphans: 2; text-align: -webkit-auto; text-indent: 0px; text-transform: none; white-space: normal; widows: 2; word-spacing: 0px; -webkit-border-horizontal-spacing: 0px; -webkit-border-vertical-spacing: 0px; -webkit-text-decorations-in-effect: none; -webkit-text-size-adjust: auto; -webkit-text-stroke-width: 0px; font-size: medium; "><span class="Apple-style-span" style="font-family: arial; -webkit-border-horizontal-spacing: 4px; -webkit-border-vertical-spacing: 4px; ">relationships</span></span></td>
</tr>
<tr>
```

The error is seemingly obvious now, however when viewed in the context of a dozen pages of code (which equal about 3 printed pages) the somewhat dizzying and dissuasive nature of working with code becomes more apparent. Still looking over the code and data I was able to salvage a lot more data than I previously thought. Within the pages of

responses, grouped by participant, even though only 3 questions were listed each time an answer was given a vertical slash | followed, therefore I was able to gauge all the short answer responses, however because many questions had multiple answers it was too difficult to figure out where one question ended and the next began. After seeing this I went back and fixed all the code and redid the film task, with 100% success! The drawing task on the other hand was a lost cause. After trying several different stings of code to fix the 'upload image' function and contacting the website support I was finally told that to get the answer and 'full support' I needed to become a premium member, meaning I had to pay a monthly fee. This would be fine later on when conducting a longer study with funding but at this point it was too late and quite disappointing.

### **Offline Pilot**

The offline portion of the pilot study was also not without its challenges. Having been so preoccupied with the coding and technical difficulties experienced with Mturk the in person data collection fell on the back-burner. When I went to book a room the first week of November was already over. Communicating to the office of fine arts via email proved slow and ended up delaying the desired day by almost a week. The date set for the in person session with participants was mid-month, and most likely clashed with many people's end of term schedules. Several emails were sent out to different departments in attempts to gather interested participants and postings were made on the main Concordia Facebook page as well as the graduate student pages. Still despite having possibly been read by hundreds or thousands of people, none replied. On the day of the pilot, fearing a

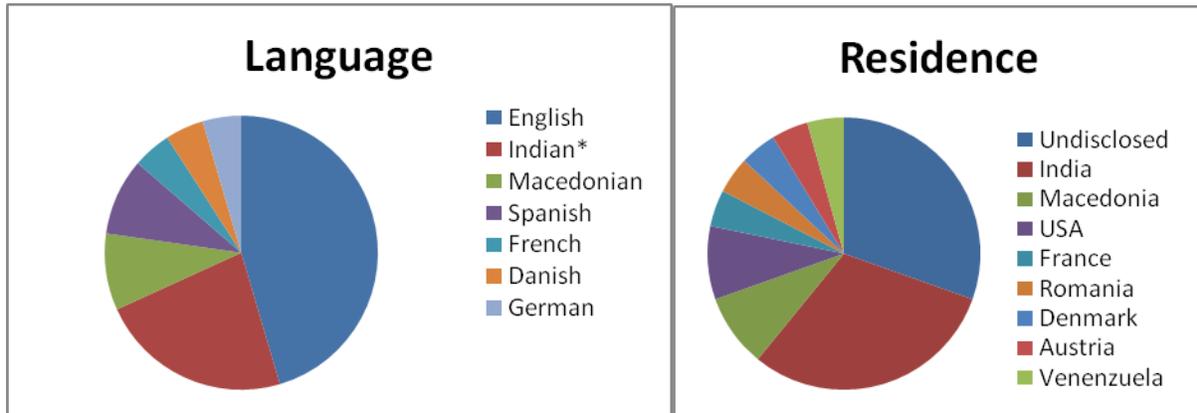
low turnout, I had a fallback 'plan B', wherein if too few participants showed up to room 6-735, then I would set up shop in the main lobby on Ste. Catherine and try to wrangle traffic from the student body and subway-goers alike. This too, proved futile. That same day the lobby was transformed into registration booths for winter convocation and there was a scarcity of seats, let alone tables and space to conduct my study.

Having exhausted contemporary methods of attracting participants I went the traditional route and placed a few eye-catching posters around the school and set up an easel, in the high traffic area next to the FOFA Gallery and the elevators, advertising 'popcorn and pilot project'. From these posters I did manage to get a handful of people over the course of 2 hours but this trickle soon stopped as the afternoon dragged on and I was forced to enlist some colleagues and friendly administrators to help me reach 10 participants (my minimum goal). All things considered this was not too bad since I had only hoped for between 15~20 people to participate. In person the participants had no problems reading and completing the survey.

### **Analysis and Comparison of 'On' and Off-line Data**

I collected extensive demographic data on social-economic status (SES): income, education, occupation, as well as age. Below I have highlighted the language and residence (or origin) of participants as I believe that these are probably the factors which contribute significantly to the understanding of the data and how it may have been influenced. Also of importance are the comments made by participants for both pilots in response to the open-ended request for 'please add any relevant comments/information'. What follows are basic graphics and point form summaries of this data followed by a discussion of the results and a comparison of the on and offline data groups.

*Online Group 1 (Film):*

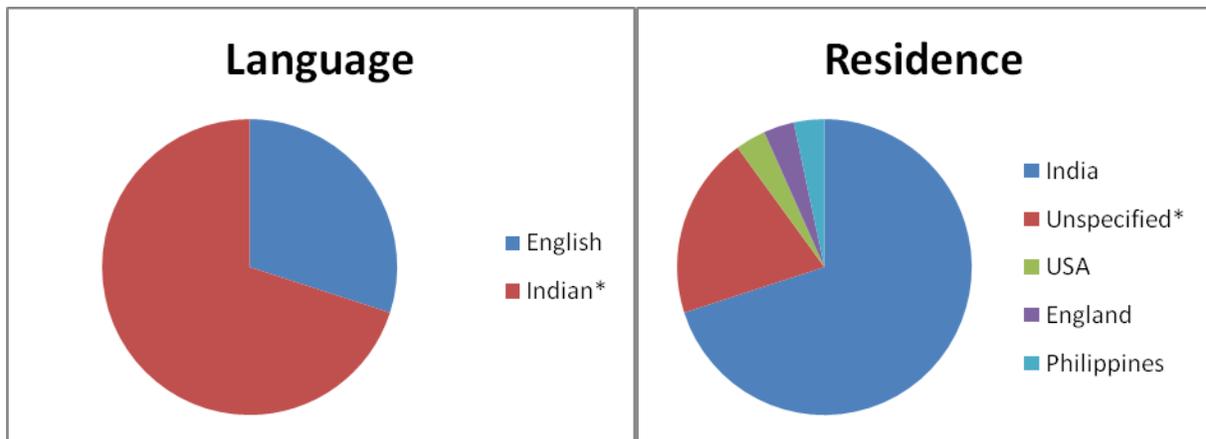


*\*Indian represents several regional dialects (Hindi, Tamil etc)*

From this first Film group, of the information that was salvageable (questions: 4, 5,6,12, 14, 15 & 16), the following data was gathered:

- Roughly half had seen the film before (13) and half had not (15).
- Of the people who had seen the film 9 watched at home, 2 in a cinema and 2 N/A.
- 6 classified the film as a comedy, 5 as a drama, 12 as animation and 5 as other.
- For question 7 one person commented, “They use gender as the hero’s weakness.”
- For question 9 one person commented, “There is no easy way to label it.”
- For question 12 most related the clip to Greek mythology with one person drawing a parallel with an Indian myth.
- In terms of their overall impression of the film clip, 21 were positive and 6 were negative.
- When asked why they used Mturk, 19 answered it was for money and 8 answered for fun/interest/spare time/knowledge.

*Online Group 2 (Film):*



*\*Indian represents several regional dialects (Hindi, Tamil etc)*

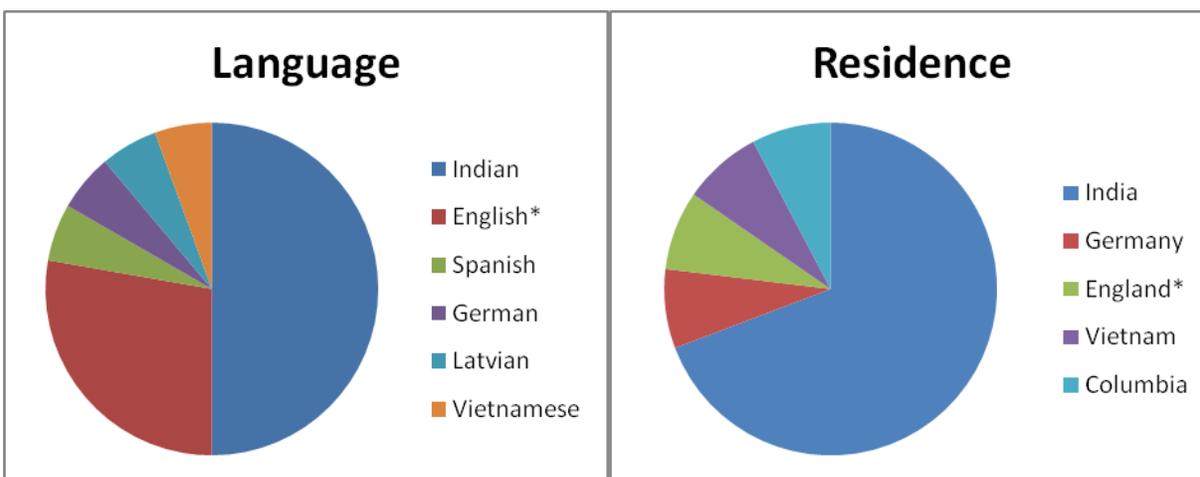
*\*those who specified English but no residence*

From the second Film group with the fixed (HTML coding) survey the following data was gathered, it should be noted that SES data was not gathered on this survey due to the lengthy film-based questions already present:

- Gender/age: 11 females and 19 males, all 30 participants were aged 18~29
- 9 were familiar with the clip and 21 were not.
- 6 watched it at home and 2 in a cinema
- Classification: 10 animation, 7 comedy and 9 drama.
- Film Message: 18 relationships, 8 gender roles, 4 consumerism and 9 other (revenge/ethics/anger)
- Characters depiction: 7 good/kind, 18 bad/evil, 6 indifferent and 1 other (selfish)
- Worldview of the filmmakers: 9 democratic, 5 socialist, 8 Christian, 10 capitalist, 3 authoritarian and 1 other (not sure).
- Moral influences: 3 religious, 4 political, 18 cultural, 1 corporate and 4 other (relationships).
- Cultural/ religious references: 6 African, 3 Asian, 7 European, 5 Latin, 13 Western and 2 other (Greek).
- Historical Context: 15 said the film was not related to any historical events with others citing Greek mythology.
- Symbolism: 5 religious, 14 male, 16 female, 6 racial and 1 other (skull).

- Overall impression: 28 positive and 2 negative.
- Use of Mturk: 17 money, 4 knowledge and 6 both money and knowledge.
- Comments: many people (15) had general comments, including thanks, interest and enjoyment. One person also commented on the interest of learning and interpreting from film.

### Online Group (Drawing):



\*Some specified both an Indian dialect and English

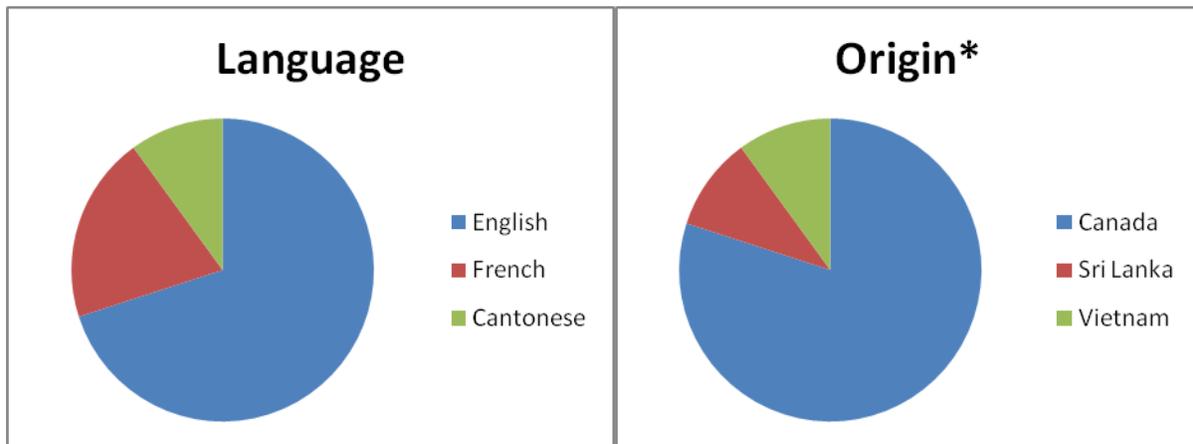
\*Originally from Latvia

For the online Drawing group the following data was gathered in addition to the 3 drawings for the words; *meal, marriage and funny*.

- Gender/age: 8 females and 7 males, 11 aged 18~29 and 2 aged 30~49.
- Income: 5= <\$10,000, 5= \$10~\$19,000, 1= \$40~\$49,000, 2= would rather not say
- Occupation: 4 students, 6 self-employed, 1 trainer, 1 photographer and 1 banker
- Education: 10 college graduates, 2 high school grads, 1 with some college and 1 post grad degree.
- Sources: 2/15 used an online image, citing Google and other English based websites as source material. The rest cited memory (5), culture (2), TV (2), stereotypes (1), books (2) and imagination (2) as sources for their images.

- In the comments section a handful wrote that it was very interesting or thank you and one enjoyed drawing.

*Offline Group (same for Film and Drawing):*



\*All participants reside in Montreal, Canada

From the offline group the following data was gathered from the Film survey (it should be noted two less participants completed the film survey):

- Gender/age: 3 females and 5 males, 3 aged 18~29, 3 aged 30~49, and 1 aged 50~65.
- 4 were familiar with the film and 3 were not.
- 2 watched at home, 1 at a cinema and 1 N/A
- Classification: 3 children's film, 4 comedy, anime 1 (product placement)
- Film Message: 4 relationships, 1 race relations, 2 consumerism, 5 gender roles and 1 other (slavery)
- Characters depiction: 1 good, 5 bad, 2 other (difficult to say/self-absorbed)
- Worldview of the filmmakers: 1 democratic, 2 Christian, 3 capitalist, 1 authoritarian, 2 other (derogatory/old world mentality)
- Moral influences: 2 religious, 2 political, 3 cultural, 4 corporate (comment: buy, buy buy)
- Cultural/ religious references: 2 European, 3 western, 1 Christianity, 2 Greek, 1 N/A

- Historical Context: 5 Greek myth, 1 good vs. evil, 1 no (inaccurate)
- Symbolism: 1 male, 3 female, 1 racial, 1 other (corporate), 3 none
- Overall impression: 3 funny, 5 dislike/offensive (comments: not app. For kids, shallow, stereotypical)
- Comments: clip was nice, out of context, not for children

From the offline group the following data was gathered from the Drawing survey:

- Gender/age: 4 females and 6 males, 4 aged 18~29, 5 aged 30~49 and 1 aged 60~64
- Income: 3=<\$10,000, 1=\$10~19,000, 2= over \$100,000 and 4 would rather not say
- Occupation: 6 students, 1 unemployed, 1 engineer, 1 researcher and 1 secretary
- Sources: 3 imagination, 3 daily life, 2 memory/culture, 2 TV
- Comments: 1 "love to draw!", 2 'fine with same sex marriage as well'

As stated by Lefever et al. ( 2007) and evidenced above, it seems clear that conducting research online (at least in this case) results in a more diverse sampling of people from a broader range of ethnic backgrounds and using a variety of different languages. In order to achieve this type of diversity with an in person study recruitment would have to be both intensive and precise, however the resulting data would be skewed do to all the participants residing in the same place and, for the most part, being exposed to the same types of visual cultural influences (imagery). Although there is still a large contingent from Indian this issue can be dealt with in a larger or long term study by filtering participants by region (a function recently discovered on Mturk). What follows is a preliminary comparison of the two models (film & drawing/on vs. off) and what the data reveals from each study also addressing the issue of validity of online research.

### *Film Task Comparison*

On the whole, the online and offline surveys were both fully completed with all participants seeming to enjoy the task. Watching a film clip and then thinking about it more carefully appears to have been a welcome break from regular day to day activities, whatever they may be. Overall the survey answers did not differ to a large degree, with similar responses for *how the film was watched*: most said on TV, *categorization*: most replied animation or comedy, *message*: most said relationships and gender roles, *symbolism*: most said female and *worldview*: most said capitalist. The main differences were in the overall impression of the film, both online groups were overwhelmingly positive (78% & 93%) whereas the offline group was negative (62%). The reasons for this, although purely speculative, might first be the cultural milieu of the participants; the negative responses coming from a setting (MTL) where gender issues are much more prominent and possibly more offensive to some participants and the online (majority) possibly immersed in societies which are still, for the most part, male dominated, so the objectified representation of female as subordinate may have gone unnoticed or simply not been as odious. A second reason for this, may have that online participants experienced a disconnect between the film and its dialogue. Since for many online participants English is a second language some of the finer details of the character's dialogue may not have had as much of an impact.

Yet another explanation might be, as Henry Giroux suggests (in *Mickey Mouse Monopoly*, 2001), "Disney makes a spectacle of innocence, it hides behind it, separating corporate power from corporate culture which creates a fantasy that never needs to be questioned" (1/5- 4:55). People grow up watching these films without ever realizing the leading and supporting characters portray various cultural and gendered stereotypes.

Looking more closely at the online responses those who did cast the film as indifferent or offensive were all from western countries (US, FR, AUS). This could indicate that western media consumers may take a more critical approach to film viewing, although more responses and perhaps a different survey is necessary to explore this idea further.

Although this film task was just testing the waters, so to speak, it seems there is an appetite for viewing and reviewing films. Based on the quick response rate, I believe that with continued planning and research this model could evolve to create a much more vigorous study. One last observation was that most participants who had seen the clip before had watched it at home, which although not significant for this part of the study it does indicate the sort of access other regions have to popular visual culture from the west right in their own homes, which I discuss more later in relation to the drawing task.

#### *Drawing task Comparison*

At a glance there was not much difference between the on and offline data for the drawing task; two noticeable distinctions are in the cleanliness of *on vs. offline* drawings and the completeness of the surveys. All the scans (done by myself) of the offline group are consistent in quality while a couple of the online examples have a cloudy or fuzzy look because of either improper scanning or photo capturing techniques. This however does not render the drawings unreadable and could be considered more of an aesthetic discrepancy. Meanwhile the online group tended to comment more (many expressing thanks or interest) and a lower percentage refused to disclose their household income, 13%, compared with the offline group at 40%. This last detail suggests that the added anonymity associated with participating online lends itself to the disclosure of more personal information, or less inhibition (Griffiths, 2010). It is also worthy of mention that despite

the amount of extra work required for the online drawing task, 15 finished drawings and surveys were retrieved from Mturk. This could also speak to the nature of the task being more enjoyable or interesting to participants.

Unlike my previous pilot, in this project I gathered more demographic details such as SES, occupation and where the images may have come from to create a clearer picture of the language and geographic setting of the participants. All this data proved very helpful in analyzing and deducing why I received the kinds of imagery I did and what may have been some of the factors to influence them. The words chosen this time were selected with hopes that they may evoke culturally significant representations that would either parallel local representations or ones that would display images in contrast to local traditions.

The word that elicited the types of responses I was looking for the most was *marriage*. All but one Tamil participant (and 1 other who equated marriage with bondage) represented marriage in a westernized context using either a man/woman in the midst of a ceremony in suit and dress or more simply with wedding bands or engagement rings all icons of western traditions.



Figure 1. Marriage as represented by an Indian, Vietnamese and Tamil participant.

As we look at figure 1 we can see the two representations that were most common and the third which was the only drawing representing a traditional 'Indian' marriage ceremony (Wikipedia, 2011). In addition some of the drawings for the word *meal* also suggest a more westernized perspective (see figure 2). Again focusing on the Indian portion of participants many of the meals drawn shown western place settings (plate/knives/forks) along with western foods like sandwiches and pizza when in India cutlery is traditionally not used and curry and rice dishes are predominantly found.

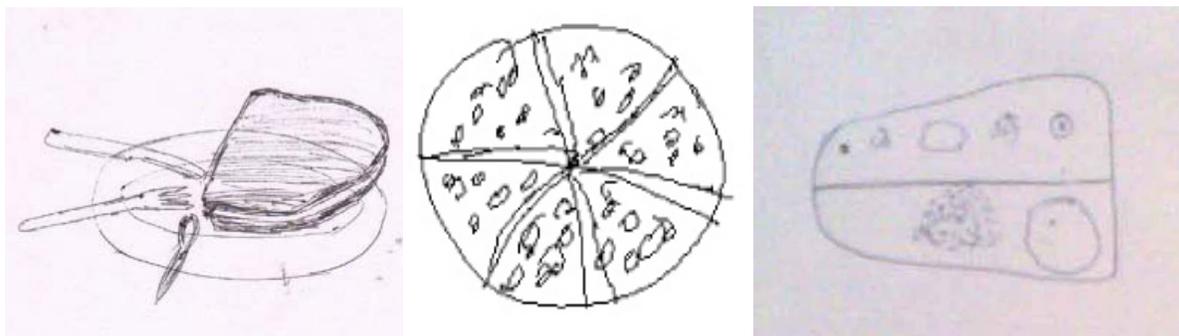


Figure 2: All three images come from Indian participants with only the third showing an Indian meal

Lastly although there was some indication of similarities using the word *funny* there does not seem to be the same types of cultural indicators as in the other two words, this may be because of the choice of the word, which I had hoped might elicit some images from popular media, movies or TV celebrities or icons. There was the exception of the clown represented across a few geographic regions however more research is needed to determine the extent to which these images may differ from local understandings of the clown. Taking a more critical standpoint one may ask if the participants provided me with westernized drawings, tailoring them to suit where they assumed I come from, however

nothing in the responses to question #11 indicate this to be true. Almost all participants wrote that the imagery came from memory, cultural stereotypes or their imagination.

While I hesitate to make broad statements about these results indicating a clear connection with and influence of western popular visual culture in non-western countries I do believe it suggests that this could be the case and that more study should be undertaken to examine this correlation further.

At the onset of this term I put forth three criteria from the literature which indicated the more advantageous nature of conducting online research. Here I revisit these points with regard to my pilot studies:

- **Geographical:** using online methods you can reach a much broader (and possibly more diverse) audience to recruit participants from (Lefever et al., 2007). Although the number of participants from each region is not evenly matched I still gathered data from almost a dozen distinct geographic locations (several more within India) as well as having participants who spoke 13 different languages (in addition to English) living in a variety of cultural settings.
- **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). This was definitely the case in the context of my project. My three online study tasks costs a total of about \$4.25 slightly less than the cost of the two metro fares I purchased just to travel to and from my offline study location. Add to that the cost of refreshments and printed materials and it becomes evident that online studies are far more practical economically.
- **Time and Place:** Traditional methods involve gathering people, booking or arranging a place to meet, 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 (where they contribute from) at their leisure and are less inhibited, thereby contributing more sincerely (which is shown in participants income disclosure), than they might be in person (Griffiths, 2010) and participating becomes less disruptive to their daily lives (Lefever et al., 2007). Earlier I described the process for conducting both the on and offline studies and while in the development stage the online study proved more time consuming and problematic due to my lack of knowledge of HTML, the actual data collection process was far more time consuming in person than online. Once the online task was ready for participants, I only had to wait and received daily email updates on its status. While in person I had to travel to and from school as well as sit and wait for participants to trickle in over the course of 6 hours.

- **Reward:** It should also be noted that 'reward' played a role in both studies. A reward of 5-10 cents was given to online participants, while in person people were offered an incentive of drinks and snacks to create interest in participating.

Technical errors notwithstanding, I think these projects were a success, not only in further legitimizing online research but by also providing salient examples of how image-based research can be used to further assess the possible impact and influence visual culture may be having on our preconceived concepts and culturally held beliefs.

### **Discussion**

Chiodo (2009) remarks that people use visualization to aid in the understanding and remembering of information, also noting that even though some people are able to produce vivid imagery in their minds their ability to render it in the form of a drawing may be lacking. The words used in this study are used to prompt participant's visualization process. What happens next may be what Chrosniak (2009) refers to as 'visual cultural

literacy', people search images that "communicate messages from or within [their] particular culture, current or past" (p.133). Although these images and their origin are grounded in the participants own culture many from non-western cultures used western icons to represent their concept of the words given, particularly when drawing the word *marriage*. What do these images say about their visual cultural literacy? Chrosniak (2009) also comments that schema (mental diagrams) can represent a range of imagery in our minds and we call upon this schema even for individual words in order to understand them. This schema is influenced and evolves in reaction to other's definitions (Chrosniak, 2009) and in the case of this study these schemas could be altered by exposure to popular visual culture in any number of ways in people's local environments through TV, news and advertisements, not to mention the internet.

Bringing this back to my participants, those who reside in developing countries yet chose westernized imagery to represent their schema may be related to their education and social economic status. According to Ives and Gardner (1984), the height of cultural influence occurs between 7 and 12 years of age and that youth begin to, "discover specific ways in which their specific culture modulates the basic domains of human experience: language, drawing, music sports, social norms and the like" (p.23). Wilson and Wilson (1984) also studied the drawings of 9 and 12 year olds and noted that, "the process by which children learn about the culturally unique world in which they must live is a process of reinvention wherein the symbolic artifacts provided by the culture are received and recycled in the children's own play, drama and drawings" (p.32). If we accept these statements as fairly accurate then it is not inconceivable that youth of this age can be greatly influenced by the images they see or are exposed to from popular visual culture.

Those participants mentioned above seem to have come from a more privileged middle class background, many of them college graduates, and all are likely to have had grown up with access to TVs, possibly internet, and the popular visual culture exported worldwide by countries like the USA. Many US and UK channels (CNN, BBC, Discovery etc.) have been broadcast in India since the 1990s with the additions of HBO, Disney, Teletoon and the History channel a decade ago (Wikipedia, 2011). In my own personal experience, living abroad in Korea, these channels were broadcast in English (sometimes with subtitles) and seldom contained advertising for local brands and often promoted other western channels.

Pinpointing precisely where and how people may have been influenced by popular visual culture is difficult even if one asks the right questions a person may not even recognize that they have even been influenced by imagery. Instead this influence may be ingrained over many years through subtle and repeated exposures to commercials, movies, news or other media and prove hard to trace to a single image let alone a single medium. In the case of my study TV seems a likely culprit to have supplied my participants with images that they may have drawn from, either consciously or unconsciously. This assumption provides an excellent place to develop and launch future investigations into visual literacy and visual culture.

### **Implications for Future Research**

This project has provided a great deal of valuable information with which to structure further investigations into visual representations worldwide. One of the more

important questions it raises is where these drawings, many of which have clear cultural signification, come from? If they are influenced by popular (western) visual culture what medium has been the most pervasive? How has local visual cultural literacy evolved or changed? The addition of more in-depth questions and follow-up probes into which media participants had access to growing up and what, if any, western ideals were readily adapted by them, their family and friends would provide more concrete evidence as to the power of visual culture to affect, what should be culturally ingrained locally, representations of certain universal concepts, such as marriage.

Another interesting, and somewhat unexpected, discovery in this project was learning why online participants used Mturk. While the majority simply answered it was in part or fully for monetary gain, 33% replied that it was in part a pursuit for knowledge. This suggests that sites like Mturk are not only places suitable for conducting research but they are also sites of self-directed and informal learning. Yet unlike most informal learning that takes place, unknown to those who engage in it (Merriam et al., 2007), these participants have recognized the site's potential for knowledge based activities and perhaps select tasks according not only to personal interest but also for the tasks to meet some sort of learning criteria. This type of activity could also be dubbed as experiential learning (Kolb, 1984) making use of both collective and personal experiences to add to or redefine knowledge. This insight could provide an added dimension to future studies in asking; how does participating in studies like this one, or sites like Mturk or other online crowd-sourcing sites provide opportunities for informal learning?

Technical and other challenges in the beginning made this project seem as if it would not achieve any significant results to guide further studies and development of a

thesis proposal. However the more time spent reviewing and assessing the data the more small discoveries are made and new connections to other work forged. Although limited in time and scope of analysis what has been realized is that Mturk and online research will certainly play an integral part, if not a central role, in the development of a larger study for my dissertation.

### **References**

- Chiodo (2009). *Visual Data: Process and Procedures for Educational Research in Social Studies*. In J.E. Pederson and K.D. Finson (eds.), *Visual Data*, 93-106. Rotterdam, The Netherlands: Sense Publishing.
- Chrosniak, P.N. (2009). Seeing what we Know, Knowing what we See: the Involvement of Visual Literacy in Learning. In J.E. Pederson and K.D. Finson (eds.), *Visual Data*, 133-150. Rotterdam, The Netherlands: Sense Publishing.
- Clark, J.M. and Paivio, A. (1991), Dual coding theory and education. *Educational Psychology Review*, 3(3), 149-210.
- Granello, D.H. and Wheaton, J. E. (2004). Online Data Collection: Strategies for Research. *Journal of Counseling & Development*, fall (82), 387-393.
- Griffiths, M.D. (2010). The Use of Online Methodologies in Data Collection for Gambling and Gaming Addictions. *International Journal of Mental Health Addiction*, 8, 8-20.
- Harris, B. R. (2006). Visual information literacy via visual means: three heuristics. *Reference Services Review*, 34 (2), 213-221.
- Heiligmann, R. and Shields, V.R. (2005). Media Literacy, Visual Syntax, and Magazine Advertisements: Conceptualizing the Consumption of Reading by Media Literate Subjects. *Journal of Visual Literacy*, 25(1), 41-66.

- Ives, S.W. and Gardner, H. (1984). Cultural Influences on Children's Drawings: A Developmental Perspective. In R.W Ott and A. Hurwitz (Eds.), *Art in Education: An International Perspective*. University Park, PA: Pennsylvania State University Press.
- Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. New Jersey: Prentice-Hall.
- 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.
- Lester, P.M. (2006). Syntactic Theory of Visual Communication. Retrieved on August 21, 2011 from: <http://commfaculty.fullerton.edu/lester/writings/viscomtheory.html>
- Merriam, S., Caffarella, R., Baumgartner, L. (2007). *Learning in Adulthood: A Comprehensive Guide* (3<sup>rd</sup> ed.). San Francisco, CA: Jossey-Bass.
- Mickey Mouse Monopoly, Dir. Chyng Feng Sun and Miguel Picker. Media Education Foundation, 2001, DVD. Retrieved from: [http://youtu.be/ljvRK\\_8Kr9s](http://youtu.be/ljvRK_8Kr9s)
- Wikipedia (2011). Television in India. Wikipedia, the free Encyclopedia, retrieved from: [http://en.wikipedia.org/wiki/Television\\_in\\_India#Television\\_channels\\_and\\_networks](http://en.wikipedia.org/wiki/Television_in_India#Television_channels_and_networks)
- Wikipedia (2011). Wedding ring. Wikipedia, the free Encyclopedia, retrieved from: [http://en.wikipedia.org/wiki/Wedding\\_ring](http://en.wikipedia.org/wiki/Wedding_ring)
- Wilson, B. and 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*. University Park, PA: Pennsylvania State University Press.

**Images from this study's drawing task can be viewed**

**at: <http://prezi.com/sphwertudibm/pilot-projects/>**