Seeing Within, Without, Across and Between: Stories from Cross-Cultural Photographic Exchange

MICHAEL CHEW
Chulalongkorn University

Introduction

'The real voyage of discovery consists not in seeking new landscapes,
but in having new eyes.'

(Proust 160)

Images and Environmental Care

In one day, over 1.8 billion digital photographs are uploaded to the internet globally (Meeker 62), while approximately 200 species may become extinct due to human collective planetary impact (UN-Environment 160). The phone in your pocket can instantly share these images and stories around the world, but how often are we actually exposed to different ways of seeing outside of our sphere of comfort?

Everyday acts of care for the environment happen all around us, yet remain largely invisible against the blockbuster images of natural disasters or nature documentaries (Hawken 2). As how we see influences what we feel is possible and how we think about taking action, I am curious about how photography can help visualise these invisible caring acts, connecting them across far flung places to open up windows into other worlds, lives and relationships. Through doing so I hope to inspire expanded acts of care outside the lens and what it frames.

This paper explores this through considering experimental photo-letter exchanges between youth in Bangladesh and Australia as part of a broader cross-country environmental photovoice project. The rich images and text from these cross-cultural exchanges invite multiple analytical approaches to tease out their meanings – firstly from a quantitative, content-counting perspective, then a qualitative, thematic approach. They illuminate some of the environmental and social-justice dimensions of the themes of health, aesthetics and visuality that recur throughout the photo-letters. While these letter exchanges and other participatory methods evolved significantly throughout the inquiry, their effectiveness ultimately relied on, and were expressed through, the unique embodied place-based materialities and relationalities that were characteristic of each physical site.

Personal Background

Growing up with an Anglo-Australian mother and a Malaysian-Chinese father I was always curious to understandcross-cultural differences. I discovered the potential of photography to explore these dimensions after running photography workshops at a disadvantaged boy's home in Kolkata, India, and exhibiting their images in my hometown of Melbourne,

Australia – where I saw how these boys' images intimately challenged first world perspectives on poverty and agency. Subsequently facilitating international volunteer programs deepened my appreciation for, and exposed me to, transformational learning in the face of local environmental and social justice issues, negotiating my own relative privilege and positionality with the perspective that we are all in "spaceship earth" together (Fuller 11).

Environmental and Rpresentational Crises

We currently face unprecedented global environmental crises which are threatening the biosphere and survival of life on our planet (Steffen et al. 2). Proliferation of photographic images in global and local media spaces have been rising in parallel with these crises and play a critical role in communicating both our environmental situation and responses to it (Priest 6). While photography has contributed to encouraging material consumption and its associated environmental impacts, it has also been a powerful means for influencing positive environmental change (Schneider and Nocke 294). However engaging as a passive viewer of such photography can be less effective than active experiential engagement (Maiteny 303). In addition, the generic and abstract qualities of much common environmental and climate change imagery – melting ice-burgs, deserts, cyclones – render it less personally engaging and relevant (Boomsma, Pahl and Andrade 3).

Research Approaches

My research responds to these issues by using participatory action research to explore how adapting photovoice methods can facilitate alternative, locally engaged environmental behaviour change visualisations across various countries differing in cultural, environmental, and economic development levels.

Photovoice

This approach is based on photovoice methods, which encompass a wide-ranging field of image making practices for empowerment and advocacy. Participants document and co-share aspects of their lives through photographs, which become participatory sites for storytelling, reflection, and broader social or policy engagement with issues affecting them (Wang and Burris 372). It has the potential for the researcher to access glimpses into the community through the respondents' eyes (Cox and Benson 9). While there has been an expansion in the use of photovoice in many areas including health, gender, place-identity over the last two decades (Lal, Jarus and Suto 182), it has only seen limited use in exploring human-environmental relationships (Bennett and Dearden 6).

Umbrella Research Project – 'Portraits of Change'

My action-research inquiry used photovoice to explore how cross-cultural photographic engagement could provide insights into human-environmental relationships and

environmental behaviour change (Chew 2). It uses methods from design-based participatory action research to explore themes in the environmental humanities and social sciences, bringing them into conversation with each other, using a multi-sited ethnographic approach (Figure 1).

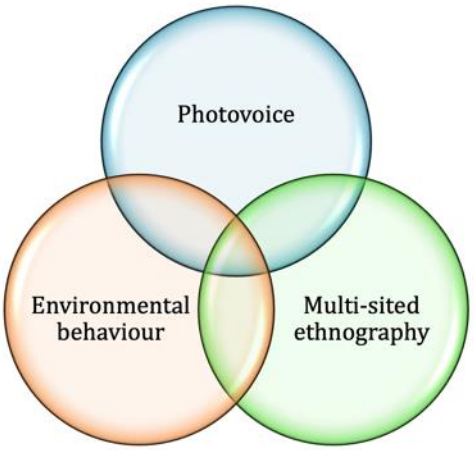


Fig. 1 Positioning of the project

I selected three countries to explore the photovoice methods – Australia, Bangladesh, and China – as they represented different economic development levels, environmental impacts, and cultural differences, influencing how environmental behaviours are performed and perceived (Figure 2). Given the changing participants and processes, the research was not comparative. Rather, I investigated how photovoice can be adapted across multiple sites, asking – 'What new possibilities could emerge for environmental behaviour change by taking these multiple sites into account?' In responding, I considered different spatial and temporal scales within and amongst the three sites.

Fig. 2 Photovoice sites

Adapting Photovoice Methods

A key challenge for this study was developing the appropriate methodological strategies that still align with the core values of Wang and Burris's seminal photovoice formulation, whilst being responsive to what methods are best adapted to the multi-sited context. Figure 3 shows the entire action-research process as it developed and evolved. I outlined this broadly in Chew (2), discussing the high-level themes emerging across all the research stages. For the purposes of this paper, I focus specifically on the ***(G) Photovoice dialogue*** stage that involves conducting a letter-writing and photo-story exchange between participants from Australia and Bangladesh, exploring how these letter exchanges contribute to new ways of seeing human/non-human relationships.

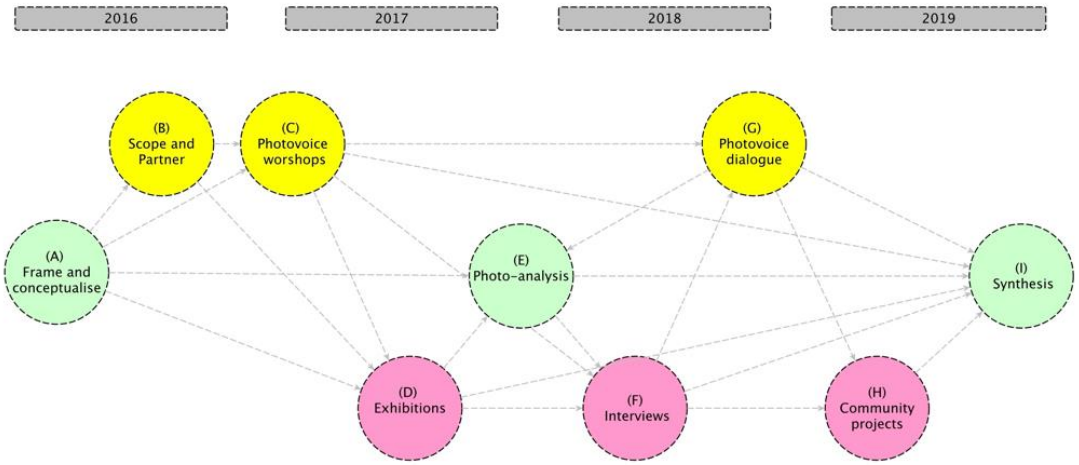


Fig. 3 Complete multi-sited photovoice program

Photovoice methods encompass a wide range of sub-methods or activities, with most following a subset of key activities (Evans-Agnew, Boutain and Rosemberg 3) shown in (Table 1), and illustrated in Figures 4-5. Initially, I followed a subset of these – B, C, D, E, F, H – when designing the photovoice workshops, which I subsequently evolved to suit the multi-sited context. Please note that the stages in Figure 3 are unrelated to those in Table 1.

Stage	Process
A	Issue identification
B	Recruitment of participants from groups whose voice on this issue may have been marginalised
C	Training in the issue(s)/problem(s)/aim(s), photovoice goals and outcomes, camera equipment, photography techniques, safety issues, ethical issues concerning privacy, public speaking, and advocacy
D	Photo-documentation by participants using personal cameras, photo-taking prompts, and sometimes journaling
E	Photo-elicitation discussions with participants in interviews and/or focus groups
F	Analysis (including sometimes the annotation of the photograph by the participant(s) with a title/caption)
G	Identification, recruitment, and engagement of policy makers and other stakeholders
H	Dissemination of findings/photographs to policy makers and other stakeholders in the form of gallery-style exhibitions, community discussions, Web sites, research journals, and appendices
I	Planning/mobilising/taking action for policy change

Tab. 1 Components of the photovoice process

Fig. 4 Photovoice workshop (photography)

Fig. 5 Photovoice workshop (photo-story development)

Photo-Letter Exchanges

While pen-pal projects have been long established in schools to foster improved literary, communication, and learning skills amongst participants (McCaffery 32), they have almost exclusively focused on cultural exchange rather than environmental engagement, with the exception of the 'Ecosystem Pen-Pals' project that connected US students with those in Pacific Islands over marine conservation, through letter exchanges, video conferencing, field guide development, and gathering physical conservation objects over the course of one year (Wiener and Matsumoto 41).

As my own project's timescale was far shorter, I selected letter writing from the above activities and developed a six session workshop series adapted from the previous photovoice workshops. This included a letter writing exchange between a primary and secondary school in Melbourne (Mt Waverley Secondary College, St Louis Primary School) and in Dhaka (Jaago Foundation Korail and Rayer Bazaar), illustrated in Figure 6. In this paper I focus on exchanges between one school from each site: in Australia this was Mount Waverley Secondary College (MWSC) in Melbourne, and in Bangladesh this was Jaago Foundation Rayer Bazaar (বাংলা: জাগো ফাউন্ডেশন), in Dhaka.

Fig. 6 Slide from project presentation outlining photo-pen-pals activities

I first ran photovoice workshops with the Melbourne schools, adapting the process to include a letter writing activity after students made their photo-stories. They then wrote letters to the Bangladeshi students including their individual background and relationship to their natural environments (Figure 7). A month later I ran workshops with these Bangladeshi schools, assisted by local and international volunteers. The Bangladeshi students selected from the Australian students' photo-stories and letters, writing reply letters of their own. Due to the complicated logistical issues involved in the exchange, not every Bangladeshi student was able to find a letter to match with, so some wrote generic reply letters to the whole class.

Fig. 7 Mt Waverley photovoice workshop and photo-stories

Photo-Elicitation Adaptations

A key part of the photovoice process involves creating spaces where participants can critically reflect on their own photographs. This is the concept of 'photo-elicitation', where existing photographs are used to stimulate discussion and dialogue from participants (Boucher Jr 10), allowing more scope for emergent themes arising from the participant rather than the researcher (Harper 10). I adapted the photo elicitation process in the second round of photovoice workshops to broaden this photo-elicitation from being solely focussed on the participant's own photographs from the *same* site, in order to further develop their own photo-story, to shift the focus and explicitly consider the participant's images from *different* sites, as a form of image-mediated, asynchronous cross-cultural dialogue. This broadened the relationships from the initially *vertical* participant-facilitator axis to connect the participants with each other *horizontally* through their photo-stories.

Textual context is critical in photo-elicitation, with the participant's written text providing anchors to engage with their photographs and reduce the possibility of the images being read solely from the viewer's own perspective. This is especially crucial in cross-cultural contexts where there is an additional risk of power-laden Western cultural assumptions – such as framing the 'developing world' as passive victims – being projected onto images by Western viewers (Mathews 193). By engaging in multi-site photo-elicitation, this risk is diffused as there is a more likely chance of greater symmetry between participants from Western and non-Western sites, each having the choice to engage with photo-stories from any site, as well as to contribute their own.

During photo-elicitation, my role as *curator* became more prominent, for instance in selecting images used for workshop presentation examples or handouts, that subsequently influenced participants. I first sourced photo-elicitation examples from the web – such as mainstream environmental engagement images such as tree planting, bicycle riding and so forth. Subsequently, as participants began to create photo-stories themselves, I drew these

examples from the growing photo-story collection, based on emergent and site responsive themes (Figure 8). This allowed for participatory cross-site visual engagement where participants could choose from a selection of photo-stories from any site and respond by relating them back to their own thoughts, emotions, and actions.

Fig. 8 Example of a multi-sited photo-elicitation process (China – Bangladesh)

Ethics

Ethical considerations are paramount at each stage of the photovoice process (Latz 106), and while this research was approved by a university ethics committee, additional consideration was given to specific ethical concerns including privacy, recruitment, and facilitation. I followed Wang and Redwood-Jones (570) proposed best practices on ethics, providing participants and, where relevant, volunteers with the following (Table 2):

No.	Process	Implementation
1	Consent forms including relevant permission to publish photographs or promote project goals	Provided in English and local language
2	Subject consent form	Provided in English and local language
3	Discussions and mentoring about the use of cameras, power, and ethics underlying photovoice	Included in first workshop and volunteer training
4	Written project background material	Provided in English and local language
5	Letter regarding project scope and camera use for relevant authorities	Provided in English and local language
6	Photographic prints that can be given to their subjects	Provided to participants where practically possible

Tab. 2 Ethical principles and implementation

Due to the ethical risks inherent in any photovoice process, as well as additional risks associated with a multi-sited inquiry – such as short timeframe and cross-cultural differences – I implemented additional ethical principles (Table 3):

No.	Principle	Implementation
1	Confidentiality (Photography)	Participants were briefed about the ethical implications of photographing subjects during both photovoice workshops
2	Privacy	Participants were advised about their identity and photo-stories being used or displayed in the reports or exhibitions and can withdraw at any time
3	Expectation management	The dissemination of cameras can create unrealistic expectations of further technological support or involvement. Therefore, the limits of the engagement were clarified with participants, and cameras were donated to selected local partners after the workshops concluded
4	Participant involvement	Participants were provided with clear choices about their involvement, including the right to withdraw from part or all of project activities, at all times

Tab. 3 Additional ethical principles and implementations

Results and Discussion

I gathered a large quantity of participant-created materials using the above methods, including workshop processes, personal reflections, written participant responses,

participant photo-stories, photographic and video documentation. These materials range from empirically-orientated (such as quantified participant responses), to more subjectively-oriented (personal reflections, photo-stories). Thinking of the data-analysis as an exploration in terms of a "*contact zone*" (Pratt 33) between different intersecting knowledge systems – such as environmental behaviour, and participatory processes – provides a way of navigating this complexity. Methodologically this invites two distinct analytical approaches – a broad-based empirical-realist 'counting' approach for a sense of overview (breadth), then a more focused relational-material 'seeing' approach to consider particular details (depth).

Part 1 – Content Analysis

I used descriptive coding to explore themes emerging from the letters (Saldaña 196). In the Australian set this involved initially identifying 54 different codes, which were then consolidated down to 14 broader themes (Figure 9). Students' personal interests (predominantly sport, singing, classes) was the most common theme. Environmental thinking was the next biggest theme after personal interest; out of which the sub-theme of 'environment is our only home' was seen in almost half, alongside 'thinking long term' – statements more consistent with a 'deeper green' thinking than instrumental environmentalism.

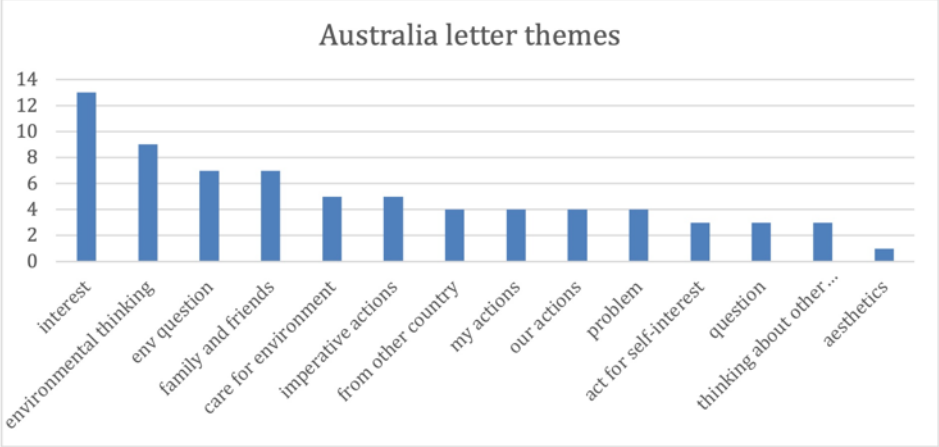


Fig. 9 Australian letter themes

In the Bangladeshi letter responses, I identified 30 codes, and distilled them down to 11 different themes (Figure 10). Family and individual interests dominated the letters, with family being more dominant than in the Australian group, potentially reflecting collectivist vs. individual cultural differences (Hofstede 229). With one exception, the Bangladeshi students did not reference the Australian students' individual details in their letters, suggesting the importance of identity expression and underscoring that such exchanges may need a longer time for participants to build up knowledge of each other across language and cultural differences (Barksdale, Watson and Park 42).

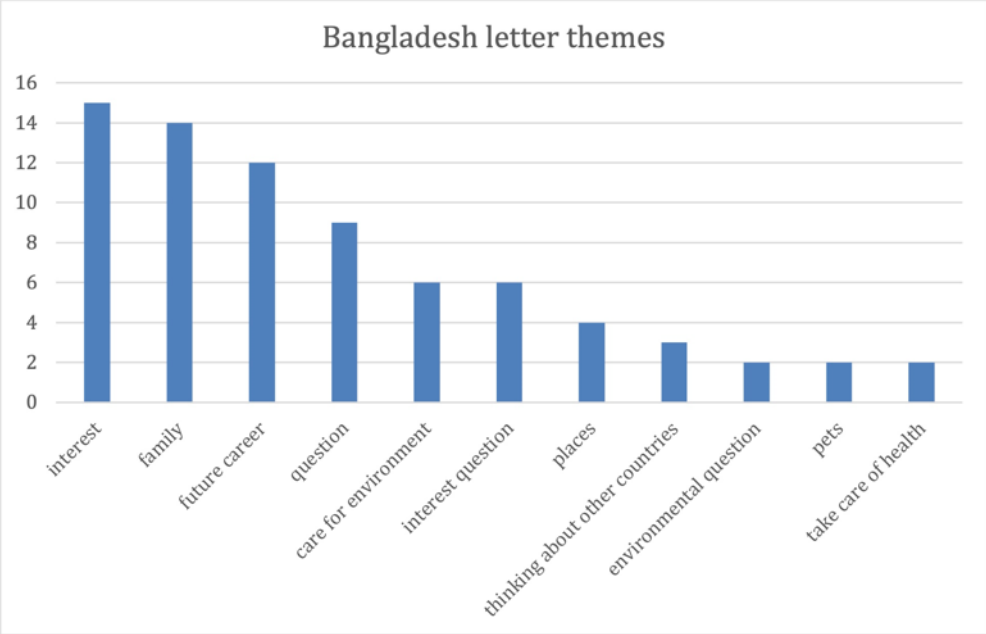


Fig. 10 Bangladesh letter themes

In contrast to this was the Bangladeshi students' tangible excitement on receiving the Australian letters and their photos-stories, which provided them with additional motivation to participate in the subsequent photovoice activities, compared with the previous round of workshops.

Limitations of Content Analysis

Rigorous data collection and management procedures are necessary for content analysis to make well-founded knowledge claims (Krippendorff 18). As many of the methods evolved during the course of the workshop rounds, this limited the efficiency of using this approach. However, there are deeper epistemological issues embedded in this approach. The very concept of 'positive environmental behaviours' tends to put the onus for change on individual actions rather than collective or structural change (Crompton 8). The act of counting discrete image elements also has an implicit assumption of the separateness of all actors. The realist approach assumes the camera is capturing a 'truthful' moment as it appears 'in reality' – which can be problematic when considering the constructed nature of the photo-stories. Furthermore, the counting approach can only count what is *in* the images – whereas what is *not* may also be important (Mitchell 31). In 'rewarding' the most photographed and most visible themes with attention and analysis, we may neglect the equally important yet difficult to visualise environmental engagements, such as air pollution (Harper 13).

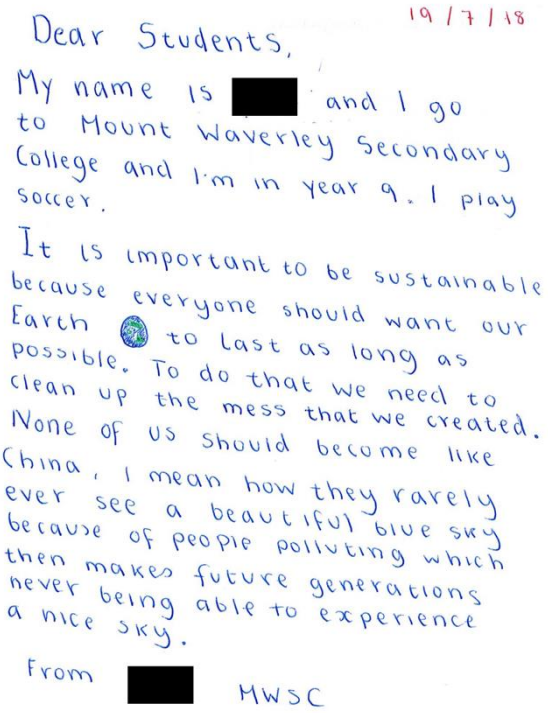
Part 2 – 'Seeing' Analysis

In this section I discuss how particular images and letters invite us to 'see' in different ways, as all images are culturally and politically situated (Berger 32). The presence of a high degree of subjective responses – those emphasising the participants' relationship with the environmental behaviour or the non-human actor (rather than simply documenting it) – suggests the importance of considering how the act of 'seeing' itself is invited through the photo-stories and letters.

'Fear of Losing the Blue Sky'

In this letter from MWSC (Figure 11), *Participant A* speaks about the fear of 'us' becoming like China – where one 'rarely if ever seeing the beautiful blue sky because of people polluting' – if we do not change our unsustainable behaviours. Although this reproduces a familiar trope in contemporary Western media representations of China (Zhao 66), this is affirmed by local Chinese perceptions (Wang 646). Photo-stories made by Chinese participants – such as *Participant B* in Figure 12 – visually highlight this fear of losing the 'beautiful blue sky', by implying the photographic act of capturing the sky's beauty should be an everyday reality, rather than a 'luxury'. Both perspectives invite us to consider the impact of *not seeing*, of 'making strange' one of the most familiar natural sights, the sky.[1]

Reflecting on the multi-sited relationships involved here invites us to take a step back to consider what is outside the frame – in this case the complex globalised material flows behind such local polluting impacts, since a significant proportion of this air pollution in China is actually due to manufacturing consumer goods for the export market (Zhang et al. 708); implicating the (Australian) viewer in both this literal visual opacity, as well as the ethical relationships implied in consuming such goods.



19/7/18

Dear Students,

My name is [redacted] and I go to Mount Waverley Secondary College and I'm in year 9. I play soccer.

It is important to be sustainable because everyone should want our Earth to last as long as possible. To do that we need to clean up the mess that we created. None of us should become like China, I mean how they rarely ever see a beautiful blue sky because of people polluting which then makes future generations never being able to experience a nice sky.

From [redacted] MWSC

Fig. 11 Participant A letter

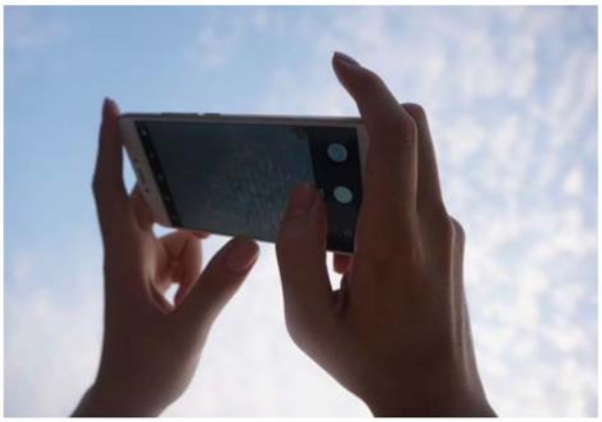


Figure 111 - Air pollution 2 (China)

We are so happy to see such a beautiful blue sky, and take a photo of it. But I want more. I want to have the happiness when every time I raise my head rather than the fear of losing it. Blue sky should not be the luxuries.

Fig. 12 Participant B photo-story

'Aesthetics and in/visibility'

Environmental aesthetics was another theme which emerged from the photo-stories and letters. Another MWSC student, *Participant C*, came from China to Australia one year prior to writing the letter. She writes about being shocked to see so much litter on the beach, and her motivation to protect the environment 'so I have a better picture to take' (Figure 13). I was personally first shocked when I first read this, finding the reversed priorities from in *Participant A*, and elevating aesthetics over environmental ethics. However, it made me reflect on my own behaviours – how many times had I moved a piece of rubbish to get a 'better' photograph? I had also seen many others doing the same thing – did this make it more acceptable? Even if I still 'did the right thing' by putting the rubbish in the bin afterwards, the action still represents the same mentality – the powerful visual craving for nature imagery 'untouched' by humans (Morton 160). The visual presence of rubbish can make nature 'strange' to us within the photographic frame – until we can restore familiarity by transferring human waste from inside the frame to outside – even though from a global perspective, there is no such place as 'away'. *Participant C*'s letter helped call out my own double standards. From the broader perspective, it invited me to consider all the acts of erasure that I had done, consciously or unconsciously during the broader action-research process.

A powerful critique of this approach is found through *Participant D*'s photo-story (Figure 14), which invites the viewer to see beyond the superficial nature aesthetics (trees by the roadside), to see the hidden pollution within (concealed factory emissions). The faces of

the subject are seen in ghostly reflections in the glass, calling attention to the viewer's role in these (mis)perceptions. This photo-story emerged as an effective example of illustrating surface vs depth meanings in visual communication through the photo workshops.

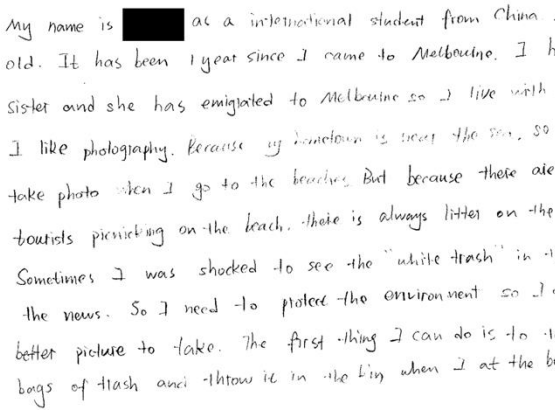

My name is [redacted] as a international student from China
old. It has been 1 year since I came to Melbourne. I h
sister and she has emigrated to Melbourne so I live with
I like photography. Because my hometown is near the sea, so
take photo when I go to the beaches. But because there are
tourists picnicking on the beach, there is always litter on the
Sometimes I was shocked to see the "white trash" in
the news. So I need to protect the environment so I
better picture to take. The first thing I can do is to
bags of trash and throw it in the bin when I at the b

Fig. 13 Participant C letter

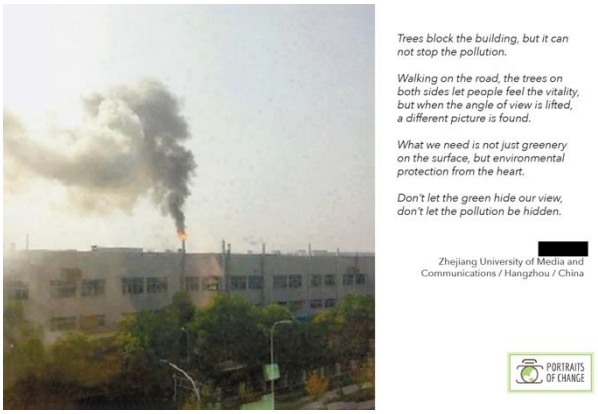


Fig. 14 Participant D photo-story

A further example of this theme can be found in the letter and photo-story of *Participant E*, from MWSC (Figure 15). While her letter had conventional, somewhat didactic environmental messages, her photo-story (Figure 16) invited a deeper consideration, speaking again about the visible natural beauty that is hiding invisible pollution. Furthermore, instead of the participants' faces in the frame as with (Figure 14), it instead shows the participant's hands as forming the photographic frame itself, implying our own responsibility and ability to shift the viewing frame ourselves.

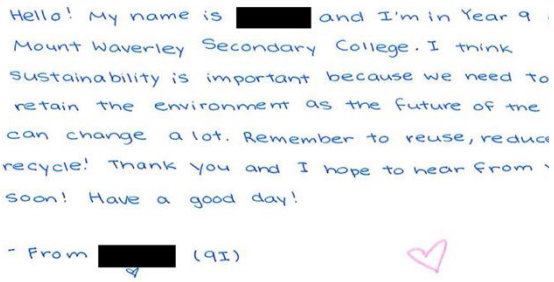

Hello! My name is [redacted] and I'm in Year 9
Mount Waverley Secondary College. I think
sustainability is important because we need to
retain the environment as the future of the
can change a lot. Remember to reuse, reduc
recycle! Thank you and I hope to hear from
soon! Have a good day!
- From [redacted] (9I)

Fig. 15 Participant E letter

Fig. 16 Participant E photo-story

'Seeing Health – 'Good' vs 'Bad' Plastic'

Divergences in the understanding of health highlighted differences in human-environmental relations visualised across the different sites. In one photo-story from

Bangladesh (Figure 19), *Participant F* advocates for spices to be sold in sealed plastic packets due to airborne pollutants, a stance directly contradicting most of the Australian students' photo-stories which advocate for less plastic, such as *Participant G* (Figure 18), whose photo-story depicts a similar type of plastic as a bane to nature that humans should remove. In contrast, the images of spice on the roadside show directly its exposure to airborne pollutants, communicating the environmental health perspective more effectively than words alone. It also highlights the environmental justice perspective; the Bangladeshi participants reside not only in a country with less adaptive capacity to such environmental risks, but also in more economically disadvantaged areas where health risks, like the litter in the streets, are more directly visible (and hence *visualisable*) than with their Melbourne counterparts. Two of the letters from Bangladeshi participants explicitly wish the Australian students good health, while this language is absent in the Australian letters; underscoring these implicit assumptions.

Fig. 19 Participant F photo-story

Fig. 18 Participant G photo-story

Participant H from Bangladesh created a photo-story (Figure 20) that spoke explicitly about the environment-health benefits she saw in having close contact with natural environments in Dhaka. When I asked her to share her motivations behind creating this photo-story at a public exhibition, she elaborated that she felt considerably freer in these natural environments. This is significant given participation in public space in Dhaka is highly gendered with various cultural limitations on women occupying public space (Lata, Walters and Roitman 322).

Fig. 20 Participant H holding up her photo-story

'We feel fresh when we see green'

If we live in a green place we can have a long healthy life. And in our leisure time we can go into the open sky and take in fresh oxygen. And we can take some fresh vegetable from fresh plants and be healthy.

'Politics and In/Visibility'

The broader political context of the participants' physical sites during the exchange also highlighted key multi-sited differences. In *Participant H*'s letter from Dhaka (Figure 21), she encloses a drawing illustrating local collective political struggle and asks the Australian student what this means for her own country, stating that it represents Bangladesh's present situation, while wondering about what the future holds. During this photovoice workshop period there had been specific tertiary student agitation and civil unrest in Dhaka demanding road safety regulation following avoidable student traffic deaths, with some of the local mentors telling me of being physically harassed by police en-route to the workshops themselves. While the Australian students may find this political context difficult to imagine, let alone visualise, the participant's use of drawing brought this viscerally to the fore. No Australian participant in these letter exchanges wrote or used their photo-stories to speak about the political context, with explicit political content only being expressed by the older participants, and even that rarely.

Fig. 21 Participant H letter

In China I was told by staff in multiple partner organisations that people may be hesitant about making photo-stories that could be perceived as criticising the government. These small yet significant anecdotes affirm that political dimensions influencing expression can be invisibly present, outside of the frame; and what is *not* shown in the photo-stories may be just as important as what is, as discussed in Mitchell (31). This is example that shows how building-in participation on the visual analysis side may add deeper cultural perspectives to multi-site photovoice by giving further space for participants to engage with stories from different contexts to their own.

However, we must be cautious to avoid jumping to simplistic understandings of different cultural contexts. The Australian student being addressed in the above letter was actually *Participant C* who was of Chinese background herself and had come from China one year prior to writing the letter. While the ethnic backgrounds of participants at the Bangladesh and China sites were almost all consistent with their geographical site – in Australia (Melbourne site) there was a wide ethnic variance amongst participants – for example ~90% of a tertiary-level workshop (Design for Social Impact) were actually Chinese international students. It is thus crucially important to be alert to the risk of essentialising ethnic identity in multi-sited inquiries – and to acknowledge the multiplicity of subject cultural positions.

Reflections

My Evolving Role

Throughout developing and facilitating these diverse participatory methods my role continually evolved from the 'home-base' of *designer/researcher* in designing and positioning the action-research, to *facilitator/trainer* in the workshop implementation, to *curator* in the photo-story audience engagement processes. However, rather than a smooth linear progression, I found myself oscillating between and amongst these positions as I traversed

the multiple sites. This encouraged self-reflexivity and emphasised that it was only through the multiple partial viewpoints at each site that I could begin to comprehend the whole practice, just as Haraway emphasises the importance of seeing from different 'standpoints'.

The Persistence of Materiality

As image-making and sharing can now be easily done online, the slower embodied photovoice practices may seem archaic and unnecessary. However, I found that these material processes were an essential enabling part of the photo-story creation, through the embodied participant engagement and specific spatialised interactions that underpinned them.

Imaging technology and access varied greatly across the various participants, yet all were grounded in material presence through the workshops. For instance, I physically carried the donated camera-phones from Melbourne to Dhaka on two occasions, where they were essential to the primary and secondary students taking photographs as they had no other means. At the same time, the tertiary students less than 2km away could take, create and discuss their photo-stories via their own camera-phones and social media, while the partner organisations in China found these +7 year old phones amusingly antiquated – their youth participants shot with the latest handsets and shared them instantly online through *WeChat*. Thus, it is important in a multi-sited approach to address such 'digital divides' both between and amongst different communities, with the technology being responsive to participants' needs (Chew 2).

However, although technology is necessary in photovoice image-making, it is far from sufficient. Rather it is actually the embodied, locally grounded, relational engagement with participants in and around the workshops that made all the difference – face-to-face ideation and dialogue, brainstorming and discussion, printed photo-stories passed around and considered by hand. While the images themselves can indeed travel further and faster online, they relied on all these material and relational processes for their unique means of production.

Following the children around through the narrow streets in the Korail 'slum' in Dhaka with their 'new' cameras (Figure 22), I was moved at the reverence with which many treated these camera-phones - which was the opposite of how they would be treated back home in Melbourne. Walking with them I felt my own senses expand beyond the camera in my hand.

Fig. 22 Participants photographing in Korail, Dhaka

Relationality and Involvement

Although the photo-letter exchanges were just one small part of a much larger project, the activities actually involved a dense relational network of multiple human actors – *participants* from differing countries navigating their way through their neighbourhoods whilst photographing, the host of *volunteers* and *mentors* assisting them in capturing images and discussing the resulting photographs, while *myself* and various *interns* were involved in the multi-layered co-designing of workshops and activities through continuous dialogues with the *partner organisations* scattered thousands of kilometres apart. These human actors were in turn embedded in broader more-than-human networks.

These kinds of entangled relations are symptomatic of the broader importance of relationships to participation in community-based engagement. Sustained engagement with communities can only come effectively through local partners with their deep community connections – the whole project involved working through 19 different local partner organisations of varying size and structure across three countries. Without their communities' connections, generosity of time, local expertise and ongoing trust in the project, the depth of these engagements would have been impossible.

This invites the ongoing question of how to adequately reciprocate these efforts. Providing the collective photo-stories across sites and secondary visual materials (such as posters and video documentation), as well as connections and training, proved to be much appreciated. However, greater time engagement would be more ideal with partner organisations to better integrate the program into their existing activities.

Approaching the analysis relationally - with a view to what kind of '*seeing'* was called for by the letters and photo-stories - invited me to relinquish my previous assumptions regarding what could be objectively known from the photo-stories. Instead, this helped me to re-learn my own ways of seeing what *subject*, *object*, *action*, and *relationships* meant in these varied contexts, and how these in turn related to environmental behaviours, including my own. Each photo-story became its own unique prism refracting - and diffracting - these lateral relations, inviting different ways of seeing, that in turn helped me visualise these different human-environmental relationships, and the subjectivities and agencies behind them, in novel and expanded ways.

Concluding Remarks

Wildfires had engulfed Australia shortly after I had returned from the last round of overseas fieldwork. Almost 9,000 kilometres away in Dhaka, winter was coming, in a year that has seen the most active cyclone season on record. A similar distance away in Beijing, the winter smog season approached. Globally, as the sun sets today, another 200 species become extinct.

This paper has attempted to outline the letter-exchange journey through a larger project spread across space and time, photographs and stories. Yet the power of this journey lies in the material ground below it, the territory which always escapes the map. I found this territory to be visceral – sweating in the narrow humid streets of Korail 'slum' in Dhaka, shivering while searching for NGO offices high in apartments across freezing Beijing, and wandering around the wide, flat playgrounds in Melbourne schools to the sound of cicadas. It has been through the embodied connections between and within these contrasting worlds – of people, cameras, photo-stories, letters – which have created spaces for encountering and witnessing different relationships with the natural world, and through this, the promise of different ethics of environmental care.

The photo letter-exchanges opened up connections across these differences, with their photo-stories sharing similar themes of fear and hope. Fear of their home, streets, waterways, and air becoming polluted, or concern for the animals and plants in their neighbourhood becoming hurt or sick. They hoped that their small acts of caring could inspire others, that somehow the adults around them could understand and feel the suffering of nature like they do, and want to join them in taking action. Connecting through each other's photo-stories and letters, they found glimpses of each other's lives. These provided rich, complex, discursive and embodied opportunities to think, feel and act beyond their cultural, linguistic and economic differences. The story-exchanges provided unique embodied spaces for thinking about their own environmental issues, relationships and behaviours in the context of young people their own age thousands of kilometres

away. This crucially allowed not only the cultivation of empathy within and between their human communities, but also small spaces for inter-species empathy – as many spoke from the voices of the plants and animals around them, asking for the opportunity to be seen, felt and heard.

NOTES

[1] I encountered this perspective personally whilst travelling in China prior to the study, where one of the Chinese university students I was cycling with at the time actually stopped and started crying at having seen a rainbow – she told me later that it was only the second time in her life to see one, due to the air pollution in her home city.

ACKNOWLEDGEMENTS

Authors and guardians gave permission for letters and photo-stories to be reprinted here, names have been concealed to preserve anonymity.

WORKS CITED

Barksdale, Mary Alice, Carol Watson, and Eun Soo Park. 'Pen Pal Letter Exchanges: Taking First Steps toward Developing Cultural Understandings.' *The Reading Teacher*, vol. 61, no. 1, 2007, pp. 58-68.

Bennett, Nathan James, and Philip Dearden. 'A Picture of Change: Using Photovoice to Explore Social and Environmental Change in Coastal Communities on the Andaman Coast of Thailand.' *Local Environment*, vol.18, no.9. 2013. pp. 983-1001.

Berger, John. *Ways of Seeing*. Penguin, 2008.

Boomsma, Christine, Sabine Pahl, and Jackie Andrade. 'Imagining Change: An Integrative Approach toward Explaining the Motivational Role of Mental Imagery in Pro-Environmental Behavior.' *Frontiers in Psychology*, vol. 7. 2016, 1780. https://doi.org/10.3389/fpsyg.2016.01780.

Boucher Jr, Michael Lee. *Participant Empowerment through Photo-Elicitation in Ethnographic Education Research: New Perspectives and Approaches*. Springer, 2017.

Cox, Andrew, and Melanie Benson. 'Visual Methods and Quality in Information Behaviour Research: The Cases of Photovoice and Mental Mapping.' *Information Research: An International Electronic Journal*, vol. 22, no. 2. 2017.

Crompton, Tom. *'Weathercocks and Signposts: The Environment Movement at a Crossroads.*' World Wildlife Fund. 2008.

Evans-Agnew, Robin A, Doris M Boutain, and Marie-Anne S Rosemberg. 'Advancing Nursing Research in the Visual Era: Reenvisioning the Photovoice Process across Phenomenological, Grounded Theory, and Critical Theory Methodologies.' *Advances in Nursing Science*, vol. 40, no..1, 2017, pp. E1-E15.

Fuller, R Buckminster. *Operating Manual for Spaceship Earth*. Estate of R. Buckminster Fuller, 1969.

Haraway, Donna. *Simians, Cyborgs, and Women: The Reinvention of Nature*. Routledge, 2013.

Harper, Krista. "Using Photovoice to Investigate Environment and Health in a Hungarian Romani (Gypsy) Community." *Practicing Anthropology*, vol. 31, no. 4, 2009, pp. 10-14.

Hawken, Paul. "Healing or Stealing." Commencement Address, University of Portland, 2009.

Hofstede, Geert. *Culture's Consequences: Comparing Values, Behaviors, Institutions and Organizations across Nations*. Sage Publications, 2001.

Krippendorff, Klaus. *Content Analysis: An Introduction to Its Methodology*. Sage Publications, 2018.

Lal, Shalini, Tal Jarus, and Melinda J Suto. 'A Scoping Review of the Photovoice Method: Implications for Occupational Therapy Research." *Canadian Journal of Occupational Therapy*, vol. 79, no. 3, 2012, pp. 181-190.

Lata, Lutfun Nahar, Peter Walters, and Sonia Roitman. 'The Politics of Gendered Space: Social Norms and Purdah Affecting Female Informal Work in Dhaka, Bangladesh.' *Gender, Work & Organization*, vol. 28, no. 1, 2021, pp. 318-336.

Latz, Amanda O. *Photovoice Research in Education and Beyond: A Practical Guide from Theory to Exhibition*. Taylor & Francis, 2017.

Maiteny, Paul T. 'Mind in the Gap: Summary of Research Exploring "inner" influences on Pro-Sustainability Learning and Behaviour.' *Environmental Education Research,* vol. 8, no.3, 2002, pp. 299-306.

Mathews, Sarah A. 'Mediating the Space Between: Using Photo-Elicitation to Prompt Cultural Consciousness-Raising.' *Participant Empowerment through Photo-Elicitation in Ethnographic Education Research*. Springer, 2018, pp. 177-200. https://doi.org/10.1007/978-3-319-64413-4_9

McCaffery, Rebecca. 'Birds across Borders.' *Science and Children,*vol.49, no. 7. 2012, pp. p. 31.

Meeker, Mary. *Internet Trends 2014*: Kleiner Perkins, 2014.

Mitchell, Claudia. *Doing Visual Research*. Sage, 2011.

Morton, Timothy. *Ecology without Nature: Rethinking Environmental Aesthetics*. Harvard UP, 2007.

Pratt, Mary Louise. 'Arts of the Contact Zone.' *Profession* (1991): 33-40.

Priest, Susanna. *Communicating Climate Change: The Path Forward*. Springer, 2016.

Proust, Marcel. *Remembrance of Things Past*. Vol. 5: Wordsworth Editions, 2006.

Saldaña, Johnny. *The Coding Manual for Qualitative Researchers*. Sage, 2015.

Schneider, Birgit, and Thomas Nocke. *Image Politics of Climate Change: Visualizations, Imaginations, Documentations*, vol. 55: transcript Verlag, 2014.

Steffen, Will, Richardson, Katherine, Rockström, Johan and Cornell,

Sarah Elisabeth. . 'Planetary Boundaries: Guiding Human Development on a Changing Planet.' *Science*, vol. 347, no. 6223, 2015. https://doi: 10.1126/science.1259855

UN-Environment. *Global Environment Outlook (Geo-6): Healthy Planet, Healthy People*. Nairobi: UNEP, 2019.

Wang, Caroline, and Mary Ann Burris. 'Photovoice: Concept, Methodology, and Use for Participatory Needs Assessment.' *Health Education and Bbehavior*, vol. 24, no. 3, 1997, pp. 369-387.

Wang, Caroline C, and Yanique A Redwood-Jones. 'Photovoice Ethics: Perspectives from Flint Photovoice.' *Health Education amd Behavior*, vol. 28, no. 5, 2001, pp. 560-572.

Wang, Guofeng. 'A Corpus-Assisted Critical Discourse Analysis of News Reporting on China's Air Pollution in the Official Chinese English-Language Press.' *Discourse and Communication*, vol. 12, no. 6, 2018, pp. 645-662.

Wiener, Carlie S, and Karen Matsumoto. 'Ecosystem Pen Pals: Using Place-Based Marine Science and Culture to Connect Students.' *Journal of Geoscience Education*, vol. 62, no.1, 2014, pp. 41-48.

Zhang, Qiang, et al. 'Transboundary Health Impacts of Transported Global Air Pollution and International Trade." *Nature*, vol. 543, no. 7647, 2017, pp.705-709.

Zhao, Xin. "How 'Public'is Communicated in China's Public Diplomacy: Communicating Environmental Justice in the Case of Air Pollution in China.' *Networking Knowledge: Journal of the MeCCSA Postgraduate Network*, vol.14, no. 2, 2021, pp. 65-94.