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EMOTIVE TRACTION

Philippe Campays^a

Alannah McCormich^a, Matthew Randell^a

^a Victoria University of Wellington

Philippe.campays@vuw.ac.nz

This article focuses on elements of intangible heritage, site specific to the provincial area of Benneydale, New Zealand. It renders a photographic series portraying the historical episodes of community experiences and memory through an artistic lens. The vast emotional capabilities of these episodes construct a contemporary product shaped from history. It does so by merging historical data, narrative, emotional content, and the physical condition of the architectural space of a community hall.

The project situates itself between the tangible aspect of architectural heritage and the intangible heritage defined by stories and collective memories. Its goal is to provide experiential environments within which the viewer is engaged to better understand the notions of heritage, identity and place attachment.

Introduction

The traditional data collection of historical records, drawings, paintings, photographs and texts recording events illustrative of an era may provide an insight into the depth of cultural heritage of communities. This paper offers an innovative method developed in order to further grasp the notions of heritage, collective memory, identity, and place attachment. It employs the process of drawing from a community's reflections and emotive responses.

This text particularly looks at the case of Benneydale, an old mine settlement located in central North Island of New Zealand and its community hall, central to collective memories. A series of drawings emerged from initial stories shared by community members and the authors alongside a focused conventional research. This study of Benneydale is considered to be illustrative of many other communities throughout the country and possibly Australasia.

The process presented here involves drawing that serves as a tool to represent the spatial experience of heritage but also as a method to understand culture. It does so by merging a rendering of the physical condition of an architectural space with historical data, narrative, and emotional content. The project sits between the tangible aspect of architectural heritage and the intangible heritage defined by stories and collective memories. The goal of this process is to provide community with experiential environments to encounter space through a virtual reality expression of its collective memory.



FIGURE 1: PROGRESSIVE TRAINING OF GRIEF 0.7

Initial Stages

The process of consultation with the community reveals that communication of historical data with emotional integrity needs a collaboration of several vital elements. It exposes the fact that visual documentation, alongside data extracts and human recall sometimes brings about conflicting as well as collaborative accounts. A cultural group of many characters, of different levels of permanence within the community, depicting, representing, or portraying a community group is an argument asking for conflict from its myriad of personalities. As Christina MacKay (1974) suggests that a community is a 'constellation of personalities – community is not a fixed or static entity, it is constantly changing'. This situation can

enhance the emotional capacity of a community's dynamics. It is proposed that honest reality and misunderstandings of community narratives can in fact be contributors to the making of a visual communication of historic depictions, as much as formally recorded historical accounts do.

In this study, critical emotive periods found in the community's narrative provide the beginning of an illustration of historic context. Through multiple conversation between Benneydale community members and between community and one of the authors (2) emotive periods start to emerge from the narrative and be defined by keywords such as vulnerability, optimism, fellowship, perseverance. The authors develop a first visual representation that merges both the community narratives and its recorded timeline. The categorised archival timeline of the community members' emotive adjacencies brings forth a better understanding of the community's memory of events but also some confusions and an unclear historical representation.

This paper proposes that the conflict between different sources of information may in fact provide realistic metaphors of community culture. Exploring the myriad of adjacencies between self-representation of historical data and the cultural transitions depicted through the development of time and technology produces a unique experimentation based on geometry and a network of emotions.

This project's output and methodology in producing the finalised imagery endeavours to express both tangible and intangible heritage through challenging forms of conventional media outlets of historical interpretation. The formation of expression and overall artistic depiction in digital representation of the intangibility residing within the architectural space of Benneydale community hall is derived from the emotive drivers earlier mentioned as historical episodes of emotional experiences: Vulnerability, Optimism, Fellowship, in the period defined in the narrative as 'season of Prosperity' and Acceptance, to be guarded and perseverance in the 'season of Salvage'.

The photographically produced work resulting from an initial process seeks to challenge the viewer. In a second drawing, the angle of production represents a three-dimensional computer modelling system based on space constraints alongside site realities of the community hall (Figure 2) which will be later juxtaposed with generic media sources of past emotive community responses. Some initial challenges are encountered in this endeavour. An exhibition of the work, a first output of this research brings forth the questioning of the interpretation of archival data and the use of visual mediums. It further highlights the need for questioning the value of emotive adjacencies and tag-lines in a historical representation of heritage. The step-by-step process of this methodology, its presentation format in relation to a desired interpretation, and its interactive nature may generate some confusion, as there may be wonder and clarity for the somewhat warped presentation of raw archival information. Current community members will also perhaps question its dark vignette edging, its production of geometric mass. The pragmatic and simple process is its underlining advantage of drawing viewers forth in regards to question the value of emotive adjacencies and in its questioning of visual interpretation in the depiction of heritage. It is here proposed that the production of digital images and their intangible weighting is an important strategy to best communicate the complexities found in past historic periods and their related emotions.

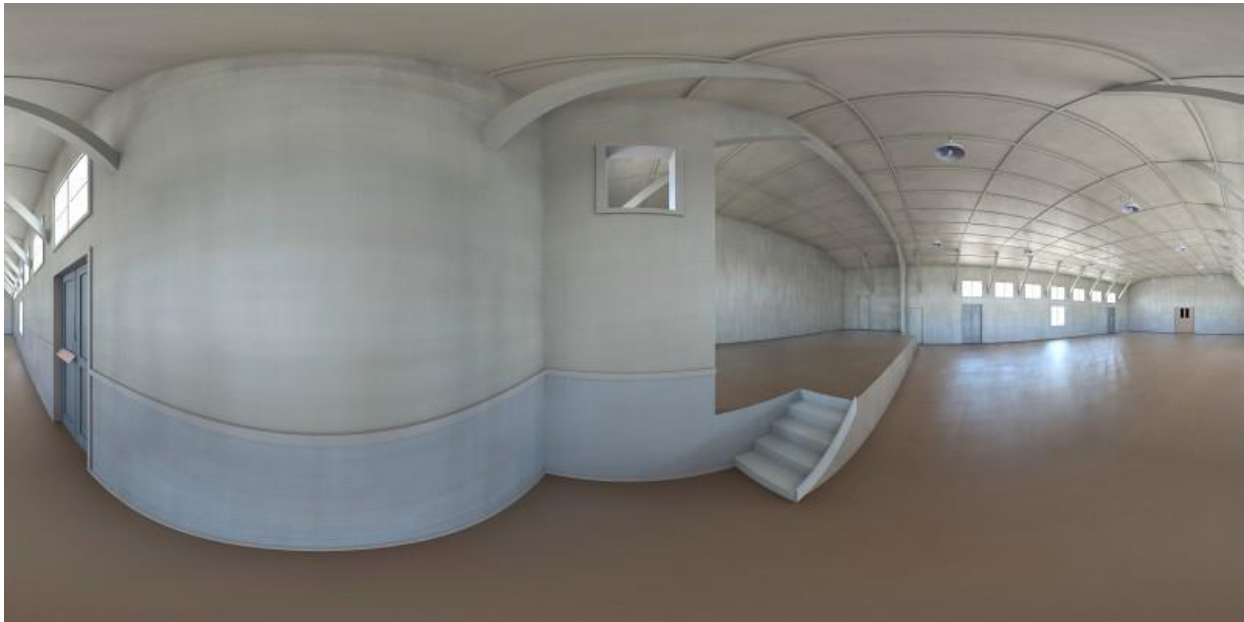


FIGURE 2: THE BENNEYDALE COMMUNITY HALL. THE SPHERICAL EQUIRECTANGULAR RESULTS FROM 3D RECONSTRUCTION AND CLOUDING PROCESS

One can argue that the domains of architectural reproduction, conservation, preservation, restoration are limited avenues of exploration of the tangibility of heritage. Such tangible heritage cannot always preserve and conserve the parts of architecture that make intangible heritage. It is offered that the representation of collective emotional experiences associated with the place may alleviate this deficiency. This mode of representation will further beg questions and contradictions - making it a vital ploy in the means of generating interaction from exhibitor, producer, viewer and wider audience contributors in their experience of the wholeness of heritage.

The process of making

As previously mentioned, the agenda of this work is to represent historical episodes of emotional experience with reference to the specific community of Benneydale, New Zealand.

The hypothetical method is broken down into three sections: (i) digital reconstruction of the interior of Benneydale Community Hall and high resolution rendering of equirectangular spherical views to act as inputs to subsequent processes, (ii) experimentation with manipulation of these views to act as scaffolds with which Google's deep dream neural network is used to 'train' emotion into, and (iii) lastly the experimentation with the geometric results of these productions with game technology.

A pragmatic process is set in place

A traditional digitalisation process occurs through translation of historic blueprints constructed in orthogonal views in CAD software. It however evolves into a process of photo-matching in perspectival space in order to retrieve material colours and textures, as well as allowing for the inclusion of non-orthogonal information (furniture, wear-and-tear, piecemeal surface additions). This model is then passed into cloud rendering software to generate extremely high resolution cube maps, which can be imported into virtual reality mobile applications.

In a first stage of process of inputs, emotive adjacencies within a six-part breakdown of history for Benneydale elevate the stories and narration of the cultural group, offering a depiction of historic cultural heritage preservation. Adjourning common heritage among the collectives, as earlier mentioned provides tension and cohesion within identity and representation. However within this research this provides the ignition for desired questioning in the background within the production of the work.

Emotive adjacencies breakdown in two parts: the beginning of the New (Season of Prosperity) and the Beginning of the Change (Season of Salvage). Each part contains three emotions. In the Beginning of the New, the emotions of Vulnerability, Optimism and Fellowship are explored. In the Beginning of the Change, Acceptance, To be Guarded and Perseverance are the focus. Each emotion is attributed a distinct lineal historical period.

Each period is defined as follows:

In the first season, (i) The period of Vulnerability, from 1931 to 1939 entails the early days of Benneydale. It illustrates a tight knit dependable community, closed off with restricted travel, reliant on external counterparts and each other. (ii) The period of Optimism is from 1940 to 1946. 1940 provides the most prospective point in the archival records of Benneydale with the State purchasing the Mangapehi Coal Mine. Purpose built for the State Coal Mine, Benneydale is the development of Mr Cecil.H Benney, secretary of the mines from 1940 until 1949, and Tom Dale the Mines Superintendent. Benneydale credited in their namesake for their interest in its early development and the evolution of a 'model town'. Growth and wealth reaped the region bringing an abundance of population and dignitary visitors. (iii) The period of Fellowship [1947- 1961] is a time of increased technological development with permission for the pictures (movies) to be screened on a Sunday which becomes an evolving industry arose alongside the expansion of farmland, timber and coal.

In the second season (i) The period of Acceptance (1962 – 1970) saw the closing of the coal mine subsequently from a fire. Grief and the fading of the bountiful spirit of place and community, inevitably undermined the tight knit town, economically supported and populated by the mine. Dispersal of the community is apparent in vast archival records. Accepting their fate many moved on, whilst others persevered and remained in the settlement. (ii) To be Guarded period of 1971 to 1998 is a time where challenges arise at every given step. Research illustrates a breakdown between common motive and collective values. The unity of community begins to fracture with multiple unsuccessful attempts at regeneration. (iii) Finally the period of Perseverance (1998 – Present) is a time where Benneydale is a quiet, low key provincial community, that recognises the past as the past. Currently small and content, it is a grounded soulful community proud of their genuine small town New Zealand resilience.

The experimentation correlates with phases of community emotion in relation to a historical timeline, unashamedly assuming that the collective emotional experience of the community can be compartmentalised for the purpose of this exercise.



**FIGURE 3: DEEP DREAM IMAGE (PART) PROCESSED WITH CERTAIN LAYERS EXAGGERATED).
SOURCE: THE INTERNET**

In a second stage of exploration, the authors view the internet as a source of imagery, providing a vastness of interpretations of emotions with the ability to collect an overflow of visual information. Networking current data and retrieving past catalogued archives for formatting these emotional adjacencies requires filters of an artistic lens crafted for an interactive response.

First this project will simply seek images which aim to represent the emotions named in a search engine: Optimism, Fellowship, Grief and Abandonment. The chosen criteria for the inclusion of an image in a series of inputs is that such image features human bodies, secondly, that these bodies inhabit a recognisable space, and lastly that there is no additional or superfluous information (such as words directly related to the emotion the image is trying to convey).

Fortunately for this research an existing process occurs. Google's recent *Deep Dream* source code has been deployed into websites to experiment with the visual output from the isolation of certain layers of the neural network. To explain succinctly, this neural network is the result of years of training by humans through the uploading and tagging of visual information to the internet. This allows the network to identify a 'dog' or 'car' or human 'face' in any particular image. If the layer that the network uses to identify a 'dog' is isolated, and inputs are recursively fed through the network, the viewer is able to see what the network believes a 'dog' to look like such as in figure 3 above. Instead of simply isolating layers of the neural net, it is possible to use images as 'style' references. This is called 'deep style'.

We are now able to progressively 'filter' the interior space of Benneydale community hall with reference to elements and textures within the accumulation series, as if the neural network is extracting dormant or invisible features, on an emergent basis.



FIGURE 4: ONE OF MANY IMAGES CONSIDERED IN THE TRAINING SERIES OF GRIEF. SOURCE: 537395 (PART), THE INTERNET.

Process trial: grief

In a process trial, the authors apply findings in *Deep Dream* to the original 3D reconstruction of the community hall. Figures 1, 5 & 6 illustrate part of the progressive training of interior space with the *Grief* accumulation series, noticing remnants of previous input images, for example, elements inspired in Figure 4, emerge in Figures 5 and 6 respectively.

Throughout the process layers of macro and micro detailing begin to format an image, Perhaps unrecognisable as the once beginning interior space the connection of layers progressively filters dormant details to a heightened awareness communicating invisible features integral to the space and its intangible characteristics.



FIGURE 5: PROGRESSIVE TRAINING OF GRIEF 0.1



FIGURE 6: PROGRESSIVE TRAINING OF GRIEF 0.5

Process: production of emotive periods

Realities and Perception

In history the narratives of triumphs, demise and resilience evoke a sense of nostalgia between the relationship of people and place. Identities are constructed and reconstructed, events and characteristics of place define the evolution of place identity, which later contribute to heritage. Visual images provide a snapshot process of emotion, looking into 'another' world, we seek to correlate and understand from when the image was captured. Responsive to what we can depict, emotional attachment recalls hierarchy of detail within a set image.

It has been argued that interpretation of emotion and cultural narration with its contribution to history and cultural heritage is not without its discrepancies. Technology and manipulation of imagery within this methodological process to form 'Images of Cultural Resilience' highlight the myriad of adjacencies relying upon the agenda of the work to critically question its emotive reality and portrayal of infinite detail. As described earlier the agenda of this work is to express the historical episodes of emotional experience in parallels with past snapshots and within a straightforward breakdown of process manufacturing. This allows the modern world to comprehend adjacencies of intangibility to the tangible constraints that remain today, questioning the authenticity of details unseen, but effectively powerful.

Some of the process outputs are here presented as still images of virtual reality renderings (figures 7, 8 & 9). Three images from the six major emotive adjacencies developed from collective memories are presented.



FIGURE 7: VULNERABILITY (1931-1939)



FIGURE 8: FELLOWSHIP (1947-1961)

Taking the output of the cumulative processing above, we are able to generate experiential environments which contribute to further information mixing. Game engine technology is used to map each emotion onto a surface, with which scripts are used to distort the images.

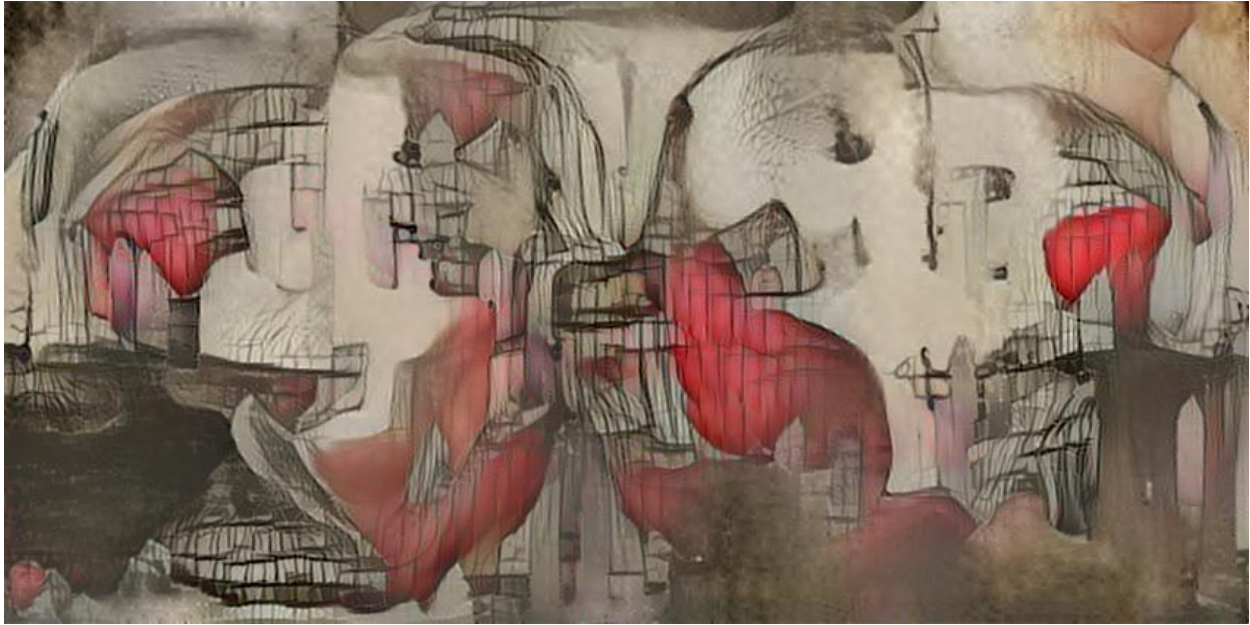


FIGURE 9: TO BE GUARDED (1971-1998)

The use of this game engine provides the opportunity to morph between states, allowing the potential for mixed spatial reading, and unforeseen geometrical results. For example the end rendering (figure 10) morphs between 4 emotions. The resulting virtual reality experience of the community hall is of emergence in a visual rendering of collective memory.

Conclusion: forefront of reality

Manzo & Perkins (2006) in their paper 'Finding Common Ground: the Importance of Place Attachment to Community Participation and Planning' highlight: "place is the forefront to our lived experience, it is the critical element in which place-related attitude, behaviours and feelings are constructed". Visual interpretation of our lived experience is often documented with static imagery such as photography in conservation or preservation attempts. Static imagery, however often only depicts our means of interpretation of historic cultural heritage; for example photographs document tangible heritage of a fixed time. Such certainty is challenged when visual data distills intangible responses in a singular moment. A framed interpretation may be provoked as there is no clarity for what information has been cropped out by its frame. Perhaps in its rarity, the contrary emotion to an entire narrative is captured with an ill-fated frame, for then how do we distinguish a valid meaning?

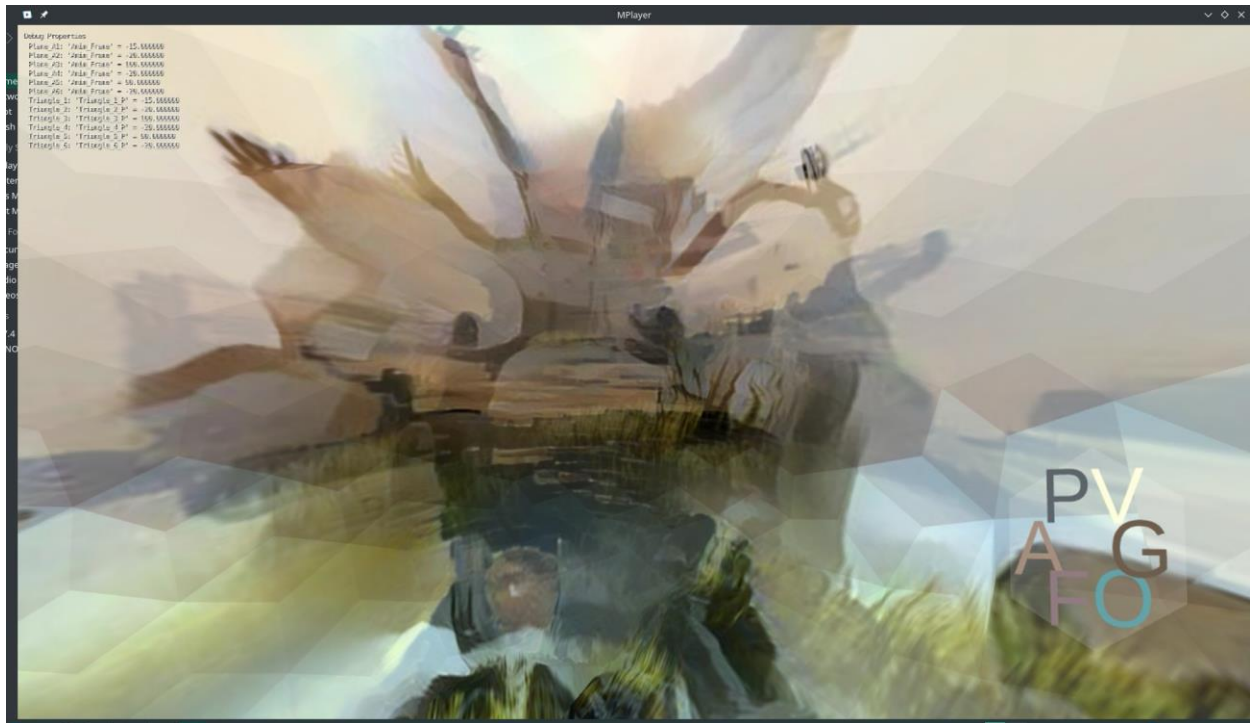


FIGURE 10: VULNERABLE, OPTIMISTIC, ACCEPTANCE MORPH

The artistic lens of the series of photographic drawings developed in this project tests the means of historic representation and the unique qualities that tangible and intangible heritage interpretation can offer. A pragmatic series of developed work is produced through a multiple lens overlays of archival research, historic blueprints, existing stories and historical records coupled with a communal emotive imagery. This photographic production test interpretations of lived experience with intangible effects. Overall producing digital interpretation of historic blueprints with emotional weighting provides a pragmatic abstraction of historic data in which evolves in an emotive attraction.

Emotional connection, intangible constraints of our being as humans, generates magnetic attraction to trace heritage and to recognise our identity. While we may form respect for past emotive hardship, we cannot easily connect with these periods of time on an emotional or plausible level.

This paper offers a project of representation and a direct engagement in its virtual reality expression, that has the capacity to enable the viewers to re-engage with such past periods and places. The Benneydale community will shortly experience the produced visual work. Their own understanding of heritage through the expression of their collective emotive memory will be a further test for this drawing endeavor and the subject of further accounts. It is hoped that the presented work will be of great value in understanding the nature of heritage while enabling a stronger sense of identity and of cultural and place attachment.

References

- Bailey, G. H. (1982). *Drawing and the Drawing Activity: a phenomenological investigation*. Ph.D. Thesis, University of London.
- Ashworth, G.J. and G. Brian, G. (Eds.), (2006) *Senses of Place: Senses of Time*. Aldershot, England: Ashgate Publishing Limited, Print.
- Mackay, C. (1974). *A Community Centre for Riversdale*. Bachelor of Architecture, University of Auckland.
- Manzo, L.C., and Perkins, D. (2006). Finding Common Ground: The Importance of Place Attachment to Community Participation and Planning. *Journal of Planning Literature*. 20. 4: 335-350. Print.
- McCormick, A. (2017) *Reconciling the Poetics in Rural Architecture*. Masters of Interior Architecture, Victoria University of Wellington.