

ORIGINAL RESEARCH ARTICLE

The boundaries of education: using mobile devices for connecting people to places

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This discussion paper explores pedagogy beyond the boundaries of tertiary institutional classrooms through a sociocultural lens that examines the history of a small-town community.

In doing so, this paper discusses the principles informing the study and exploratory stages, and is not intended as an empirical research paper. Rather it outlines the use of mobile technologies to enhance the documentation of the sociocultural story of a community and as such presents a potentially transferable framework for utilising mobile mixed reality (MMR) to create authentic informal learning environments.

This paper utilises (mobile) mixed media to document the historical, industrial and community growth and demise of a small town called Patea in Taranaki, New Zealand. Using practice-led methodology through a heuristic inquiry approach, the aim of the study is to demonstrate how MMR technology can be used to document the historical events and workers' narratives of the town and then be gifted back to the town as artistic educational material for future generations.

As an example of a 'new genre of public art', this paper reflects on the collection of multiple forms of media capturing recorded interviews and the communication of the spoken word, mobile phone filming, drone footage, 360-degree photography/film, site recordings and the memories of what a place could be to create a new form of educational augmented reality/virtual reality (AR/VR) audio visual portraiture. The author argues that the use of MMR to form a collection of AR/VR short film poems creates powerful portraits of the people who worked in the now abandoned cool stores and freezing works at Patea.

Keywords: drone; 360-degree; AR/VR; film poem; lifelong learning

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Introduction

If learning is a lifelong experience, then the way this project understands learning is that it also exists within community outside of formal institutes and thus becomes an engagement with museums, libraries and the town. When I discuss pedagogy, I am referring to this as a pedagogy that is applied to communities and not just institutions; thus, part of this pedagogy becomes the town, museum, library and in doing so becomes greater than the education system within tertiary institutions. Equally the

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rationale for the study lies in a concern with art having political agency when it operates and is exhibited inside the communities of people whose lives are being interpreted. In such instances, the day-to-day community becomes the context of the artworks in preference to the arguably rarefied white walls of the art gallery.

Using a variety of mobile filming techniques such as Mobile Phones, Gimbals (hand-held stabilisation filming devices) Quad Choppers (for elevated film shots) and small Hand-held Digital Recording Devices (for interviews and atmos/background noises) I am able to navigate freely around the town without attracting too much attention. The purpose of this is to produce a series of Augmented Reality and Virtual Reality (AR/VR) short film poems¹ expressing not only the visual content but also the paralinguistic nature of speech as an emotional resonance within the participants' recollections to create portraits of the people and the town of Patea.

The final pieces will be available for viewing through QR² codes printed posters placed on exterior walls within the town of Patea via an augmented application using global positioning system (GPS) mobile technology. Thus, stories of the town will appear as mobile-device-activated narratives that offer a historical educational artistic response to social recollection for a community-enhanced learning environment. In doing so, it aims to connect people to place using AR/VR film poetry.

Significance of the study

This research project is part of a longitudinal study that is concerned with expressing workers' stories through a series of mobile technology-created film poems that focus on the eroding forces of time, materiality of the elements of the town and the workers' narratives of the town. As such, this paper discusses the findings to date from several interviews that have led to the creation of several film poems and how educational technology can have an impact on the sociocultural milieu (Bachmair, Pachler, and Cook 2009) of a community.

The rationale for the study lies in a concern with art having political agency when it operates and is exhibited inside the communities of people whose lives are being interpreted. According to Grodach, such orientations help to 'build social capital for individuals and may reinforce the social networks that enhance involvement and economic development within a community'. The approach may also 'increase the potential for interaction and collaboration across cultural sectors' (Grodach, 2011). Sharp defines this approach to art generation and exhibition as 'new genre public art', arguing that it can operate as a means of 'connecting' a community. He suggests this is because it is a more participatory form of public art practice, wherein artists move to 'engage with communities and existing social struggles, to develop collaboration and dialogue with residents' (Sharp 2007).

Situated paradigmatically as a post-positivist inquiry,³ this study is practice-led.⁴ As artistic research, it constitutes a specific orientation where the researcher is subjectively concerned with the generation of visually and typographically poetic artefacts. Klein argues that in artistic inquiry the researcher's subjective perspective is constitutive because experience can only be negotiated intersubjectively. He argues that if 'art' is a mode of perception, then artistic research is a *process*. Within this, reflection on artistic practice takes place 'at the level of artistic experience itself' (Klein 2010).

This research project proposes four significant contributions. Firstly, it fuses typography, narrative, location imagery, sound and paralinguistic to demonstrate how certain concerns of art and design might be employed to draw attention to the human condition.⁵

Secondly, the study creatively expands on discourse surrounding typography as emotive⁶ by considering the erosion and decay of letterforms as generative of meaning. Thus, instead of type being treated as a constructed (additive) medium, it is examined as subtractive such that the process of erosion and erasure becomes generative devices.

Thirdly, it explores the potentials of AR/VR. Using user-generated mobile devices viewers will be able to interact with spaces in their town and in so doing, have exposed layers of their community's historical narrative currently not in the public domain and in doing so expands on the idea of pedagogy as life-long learning within the community.

Finally, the research nominates the storied lives of workers as artistic artefacts and in so doing relocates them beyond the realm of historicisation where they are often positioned.

Methodology

In the creative processing of this research, the methodology of heuristic inquiry has been employed and it is referred to by Moustakas as 'internal search through which one discovers the nature and meaning of experience and develops methods and procedures for further investigation and analysis' (Moustakas 1990).

A heuristic inquiry offers an approach where one may evaluate and adapt the research process as required (Ings 2011; Schön 1991). Working through practice as well as the internal pathways of the self, the participant-as-researcher applies tacit knowledge, life experiences and aesthetic sensibilities to generate new perspectives (Douglass and Moustakas 1985; Scrivener 2000). The rigorous processing and questioning of created experiences, while not linear, offers potential for unanticipated discoveries and for experimentation in areas where no current formula exists (Borgdorff 2009; Griffiths 2010).

Thus, a heuristic inquiry involves a process of discovery through trial and error and the ability to critically 'feel' one's way forward using intuition and insight (Kleinling and Witt 2000). As referred to by Duncan (2004), 'the insider' can experience an involvement and empathy and understanding of the situation and bears the signature and voice of one's personal interpretation (Clandinin and Connelly 1994). Accordingly, as Sela-Smith notes, heuristic inquiry 'requires that the participant-as-researcher focus on the feeling dimension of personal experience to discover meanings embedded therein' (Sela-Smith 2002). An example of the working process is presented in Figure 1.

Literature review

Historical and artistic documents relating to Patea's freezing works and cool stores

A diverse body of archived material supports this study, adding contextual background to interview data. Among these documents are certain creative texts that also illustrate responses to both Patea and its physical environs.

One of the earliest publications about Patea is the Sir John Coode report of 1897, where he records the proposed redesigning and structure of the sea bar and the layout of the town of Carlyle (Patea). In this report, the plan drawing shows the layout of the construction works proposed. Of particular use to the research are press cuttings

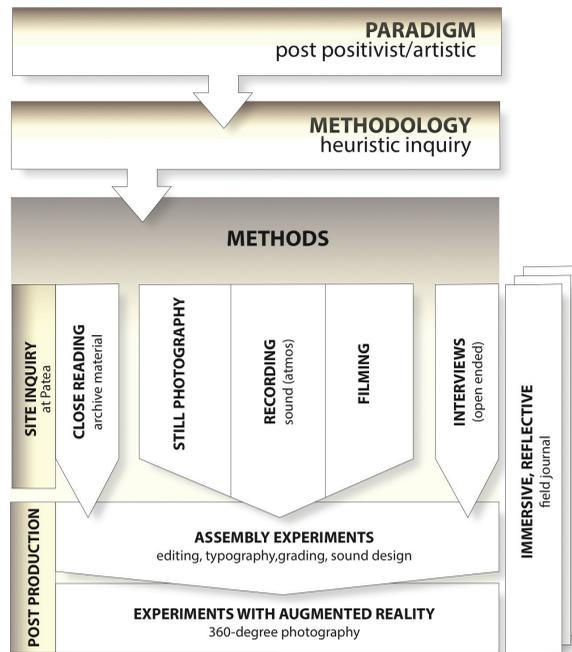


Figure 1. Research design showing relationships between the post-positivist paradigm, the heuristic methodology and methods employed in the research. D. Sinfield, July, 2017.

archived between July 1982 and June 2009, which is held by the Aotea Utanganui Museum. These provide information related to the industrial strikes, the factory's closure, the fire in 2009 and the subsequent demolition of the buildings. The reports are drawn principally from the *New Zealand Listener* (July 1982) and the *Taranaki Daily Times* (June 2009).

The Patea Heritage Inventory Report (2000)⁷ offers a useful historical account of the town, specifically its amenities including the post office, bank, hotel, hospital, churches, power station, library and abandoned structures, such as the old river bridge and the freezing works and cool stores. The report outlines the history of the buildings and the historic and architectural value of a town that grew as a consequence of the meat works.

Grimes and Young published a paper entitled 'Spatial Effects of 'Mill' Closures: Does Distance Matter?', where they did a comparative impact analysis of factory closure in small New Zealand towns (including Patea) considering major infrastructure shock and adjustment dynamics including long-term negative population growth and employment. The paper suggested that a significant detrimental issue for Patea was the town's population age group who had a high level of home ownership. In the period of post-factory closure, this became a factor that stifled migration responsiveness (Grimes and Young 2009).

Volkerling's article 'Decline and Transformation' considers the economic growth of New Zealand's export of frozen lamb and the subsequent economic demise of its post-war economic reorganisation with Britain and Europe during the 1980s. The article offers some useful statistics relating to growth and employment figures (Volkerling 2012).⁸

Reynold's report (2013) to the Taranaki Regional Council offers a useful analysis of soil contamination at the Patea freezing works. The report was based on an extensive site investigation that recorded significant levels of hazardous materials including large amounts of asbestos, lead, zinc, heavy metals, ammonia and underground fuel tanks. As a result of the report, funding was approved for the removal of the contaminants and tanks. However, plans for a more extensive clean-up were hindered by a fire that broke out on the 6th of February 2008. Because the main buildings were primarily constructed of wood, the fire quickly spread, destroying most of the site, with the slaughter house to the east being significantly damaged and a number of buildings to the west of the boiler house being completely destroyed (Reynolds 2013).

The use of mobile mixed reality (MMR) helps bring these historical artefacts back to life for today's community, creating the basis for learning from the past in a non-linear, non-traditional manner. This approach aligns with the concept of learner-determination or 'heutagogy'. Heutagogy, as defined by Hase and Kenyon, focuses on learner's experiences and can deal with problems and environments rather than simply building competence for a set series of tasks. In this respect, self-determined learning or heutagogy can replace the traditional forms of classroom education and place this as lifelong learning within the environment of the community (Hase and Kenyon 2001, 2007). This can be seen as relying upon discovery and personal narratives captured in texts for the community where they have originated from and can be seen as the community replacing the classroom in this respect. This can be further expanded by identifying curriculum within the community as a series of rules and tasks learned through experiences as a lifelong learner rather than a set formula created to be managed as a form of pedagogy.

Brown explores new forms of pedagogies that can be redesigned and can serve as a new pedagogical viewpoint, and can be extended past the classroom. He notes 'a profoundly social construction of understanding enabled by the Internet. The demand-pull approach draws students into a rich (sometimes virtual) learning community built around a practice. It is passion-based learning, intrinsically motivated by either wanting to become a member of that community of practice or just wanting to learn about, make, or perform something. Formal or informal, learning happens in part through a kind of reflective practicum, but here the reflection comes from being embedded in a social milieu supported by both a physical and virtual presence and inhabited by both amateurs and professionals' (Brown 2006, pp. 23–24). These concepts of new forms of learning informed the development of the project and the core story-telling artefacts, such as the poem films.

The poem film

Poem films are sometimes called poem short films or cinematic poem short films.

Broadly, the poem film is a visual, spatio-temporal text that uses a flow of images and spoken or written poetry (in the form of static or moving typography).

The history of poem film may be traced back to artists like Man Ray, Hans Richer and Louis Delluc, and poets like Herman Berlandt, Allen Ginsberg and Lawrence Ferlinghetti. The crossover between poets, artists and filmmakers has created distinctive relationships between words and imagery that have added rich dimensions to traditional, written, lyrical form.

The poem film may be seen as a subgenre of film with its fusion of image and spoken or written word used to create what William Wees called a 'Poetry-film' genre. Wees has noted that 'a number of avant-garde film and video makers have created a synthesis of poetry and film that generates associations, connotations and metaphors neither the verbal nor the visual text would produce on its own' (Wees 1999). These texts are often characterised by their non-linear narrative style of editing and flow of images and spoken words, although linear narration and editing have been used to good effect in certain instances.⁹

Since the beginning of the 21st century poem films have been the focus of a number of dedicated festivals, including the Literaturwerkstatt/ZEBRA Poetry Film Festival (Berlin and Seoul), the Felix Poetry Festival (Antwerp), the Rabbit-Heart Poetry Film Festival (Worcester), the Roma Poetry Film Festival (Rome), the Cin(E)-Poetry Festival (California) and the Sadho Poetry Film Festival (New Delhi). The media form has also featured in television series of poetry films and has been the subject of a number of academic theses (Kim 2010; Leropoulos 2009; Speranza 2002).

Methods

In activating the heuristic approach to the inquiry, methods are employed. Although they are discussed separately here, they operate in relation to each other. This said, the first six methods are concerned with data gathering from (or about) Patea, and the last two relate to postproduction methods permeating both categories in an immersive, reflective field journal.

The methods are:

FIELD DATA

- Close reading of archive material
- Still photography
- Filming (Using mobile devices such as phones and quad choppers)
- Atmos and sound recordings
- Participant interviews
- Immersive, reflective field journal

POSTPRODUCTION METHODS

- Assembly experiments
- Experiments with augmented reality and 360-degree photography

The research uses three primary methods of recording the freezing works and cool stores: still photography, filming/moving image and sound.

Still photography

A Sony RX100 MKIV is the camera that is widely used in the field because it is small and capable of fitting into the palm of one's hand and can be carried easily inside a jacket pocket and can be activated quickly. It shoots at 20.1 mega pixels, giving it a high depth of resolution when enlarged. It also has very good moving image settings such as 4K and S-Log. Still photography is used both for reference material and as background plates that can have image details animated and typographical responses

integrated. Furthermore, the use of an iPhone 7plus linked with a Zhiyun gimbal has proven to be valuable piece of equipment for both still and moving image footage.

Filming/moving image

A variety of high-end cameras are used, but depending on the setup and environment they can bring their own problems. To this end, smaller more mobile compact and lighter equipment is used in the field where access and safety are the main concern.

The Black Magic Pocket Cinema Camera (given a lot of the shooting is in ruined buildings) is capable of recording RAW cinematic level footage in very low light conditions with minimal image noise distortion. This means that it has a wider capability for post-production experiments. The Sony RX100 MKIV also shoots moving image at 4K and has the capacity to capture data in slow motion up to 1000 fps. The camera also records in S-Log, giving a wide range of image depth information for a variety of post-colour grading. In addition to these cameras, the use of a GoPro is useful because it is waterproof and ideal for situations where one needs to record visual data from hard-to-get-at places, such as under the wharf or from a kayak in the river.

Moving image material constitutes the largest volume of data used in film poems and comprises shots that may usefully transition into each other and can constantly be attentive to horizon lines, perspective, movement and vanishing points.¹⁰ Examples of this are presented in Figure 2.

Atmos sound recordings

When traveling in the field it is important to use small and compact high-quality mobile digital sound recorder devices to gather audio material that can be used later in the poem films.

The use of high-end mobile digital sound recorder (Zoom) set up on a tripod to gather audio material. This provides much cleaner sound to work with because it does not pick up secondary material like hand movements on the device. Sound recording from the surrounding area where filming has taken place can be used as supplementary to the imagery. These recordings are often of empty rooms with just



Figure 2. Screen shot of the original GoPro footage before and after the post-production footage. In an experiment, accessible at: <https://www.youtube.com/watch?v=gzJ3GDlewFY&feature=youtu.be>, one can see how the stability and camera pitch have been adjusted in post-production. D. Sinfield, July, 2017.

a subtle atmos of the environment or the delicate sound of the wind rustling in the grass. These recordings are useful as devices for reinforcing the sense of dwelling and indwelling in the poetic work.

Participant interviews

In terms of recording personal narratives the process of reflective interviewing is used and it can be seen as a form of engaging with the interviewee. This form of interview is activated by a small number of ‘focus questions’. Responses to these questions are ‘reflected back’ to the participant by using ‘reflection catalysts’ that enquire into what the participant ‘remembered’ about Patea freezing works. This approach to drawing narrative forward often elicits a more deeply ‘resonant form of narration’. The use of reflective interviewing to gather and exhume recollection and emotional responses to participants’ associations with the Patea freezing works is often seen within the data and thus it is the importance of emotion in these interviews that one encounters the paralinguistic response that resources typographical treatments in the poem films.¹¹

Immersive, reflective field journal

The site visits create emotional impressions. These are sometimes intangibles where notions of self and the site become mingled. In this regard, Bateson suggests, ‘the mental world – the mind – the world of information processing – is not limited by the skin’ (Bateson 1973).

Broadly, while in the site the adoption of the ‘indweller’ (Polanyi 1958) takes place. In this regard, one can walk, stand, sit and listen to ‘feel’ the absence and occupation of the building and as such it draws its presences and absences into oneself and dwells within them before one begins to record the physical material. While the processes of thinking and feeling are not always explicit, one can find it useful to concurrently employ what is described as an immersive, reflective journal. In this case, one records photographs, moving image footage, and sounds from the site. These data are gathered while one walks through and sits and contemplates within the locations. One *feels* the spaces and environs and writes notes and poems to oneself in the journal. This document also contains technical data including camera settings (so the setups can be replicated if necessary).

The immersive/reflective approach can help to record data and process one’s thinking and designs in a slow, reflective manner that allows it ‘to become immersed in the world and potentials of the image’ (Ings 2015). Here, one’s thinking becomes dialogic. It will converse with the data and its connections. Ings suggests that in this process ‘one thinks in tone and weight, emphasis and potential. Ideas are coloured and light and their parameters are nuanced. Images operate with a more flexible grammar than words and one is able to connect possibilities in very abstract and intangible ways’ (Ings 2015).

Experiments and discussion

Assembly experimentation methodology

Field data are collected (film and sound recordings of the Patea coast, river and the areas surrounding the abandoned freezing works) to construct poetic reflections on

memory and emotion. The design and editing of the film footage uses Adobe Premiere Pro and Adobe After Effects software and is constructed over a number of weeks, and developed into a series of experimental short poem films.

In these cumulative drafts,¹² experiments with typography are undertaken in differing ways depending on the paralinguistic tone of the interview. The construction of the typeface in Adobe After Effects¹³ and placed directly onto the filmed footage provides a sense of form and structure that one can immediately see the results.

These assembly experiments combine reflection ‘on and in action’ (Schön 1991), supported by a form of indwelling (Moustakas 1990). This bifurcate process enables the outcomes to draw out connections with the self and the environment (Patea and the people interviewed).

Experiments with augmented reality

Once the poem films take form as completed drafts, one can ask of them, ‘how might mobile AR enhance the experience of viewing this work, and in so doing link the poetic response to the community from which it emanates?’ At this stage, these experiments have not been undertaken but are intended to experiment with a range of approaches, which may include printed literature, posters, street signs or shop signage. These artefacts will act as triggers that will cause the augmented information to play.

Drone filming and photography

Drones are used to access difficult-to-get-at places, such as the eroded freezing works factory and the wharf on the Patea river. As shown in Figure 3, the building and wharf structure has rotted and eroded and would have been very dangerous to walk upon. Also, using the drone has enabled the filming from the middle of the river and panning back whilst elevating the drone upwards to reveal the entire site. This can be seen in the film poem ‘Works’ and can be accessed at the link <https://vimeo.com/276572781> (link to video has been deleted for review purposes).

Mobile phone filming and photography

Like high-end filming equipment, the use of mobile filming equipment such as the iPhone 7plus attached to a handheld Zhiyun Smooth 4 gimbal is also useful. This has



Figure 3. Frame grab from the poem film *Works*. David Sinfield, January 2018.



Figure 4. Frame grab from the poem film *Gone*. David Sinfield, January 2018.

several advantages. Firstly, it brings a certain amount of covertness, which is particularly helpful when one is in the public domain and one does not want to attract too much attention to the situation. Secondly, as this equipment is quite small, it can be ready to handle in all instances and takes very little setting up. Linked with the Zhiyun phone app also permits the use of 4k filming and frame rate speeds of up to 120 fps within the iPhone, making a very professional and versatile setup. An example of this is presented in Figure 4. The full use of this equipment can be seen in the film poem '*Gone*' and can be accessed at the link <https://vimeo.com/276568448> (link to video has been deleted for review purposes).

360-degree photography

Future directions

Future stages of the project will also experiment with 3D virtual reality head-mounted devices (HMD). This is a type of surround-visual data headset that can be used to view panoramas that offer a 360-degree view of a conceptual or physical area. These experiments will be undertaken to ascertain the potentials of communicating a sense of immersion, linking the viewer with the context of the town's past and present through the use of MMR. This research project started in 2016 and has included workers interviews, numerous photographic shots, and filmed using high-end movie cameras and drones. Artefacts produced to date include the design of 12 typefaces, five poem films, posters and typeface style sheets. In February 2019, the project will focus on Patea town as a site for showing the works using augmented reality activated via printed posters that will be placed throughout the town. These specific areas within the town will be to hang approximately 5–10 posters presenting the research project to the community. Each poster will have a different design on it pertaining to that specific narrative and film poem. Each poster will have an augmented moving image element that will be activated via a QR code or an element within the designed

poster that will activate a moving image file on the viewer's mobile device. Initial experiments with the 'Layar' application have been conducted for this purpose as it is relatively easy to use and free to download for the viewer.

The project will culminate in an evening at the museum in Patea with an informal presentation of the research project. The presentation will comprise an insight into how the work was made and will be projected via a data projector. The researcher will discuss various techniques into how the works were created showing examples of the preliminary works. The presentation will be followed by a questions and answers period whereby the audience can ask the researcher questions about the project. Also at this event will be displayed a series of artistically produced photographic works from this research project and will be hung in an exhibition space within the museum. These works will also be gifted to Aotea Utanganui as a thank-you for the contribution to this project together with the poem films created.

Conclusion

This paper discusses the start of a research project that explores the use of MMR to identify and document authentic community narratives – in this context, the subject is workers from a discarded freezing works and the impact upon the town. Building on this framework has seen the project expand and take on a different approach, whereby it has identified certain needs within the community. It is often taken for granted that because one lives in a small community, one may be aware of the history and background of the community. This is true to some extent, but there is also the need for these events and oral histories to be gathered for the existing community educational rights and also for the future generation of the community. Using MMR has enabled the researcher to document these narratives and the town's environment in such a way that has been less intrusive than what could have been done using a team of people and large filming equipment. The author argues that the use of MMR provides a powerful platform for capturing and re-enlivening historical artefacts to create an authentic learning experience that links the past and present communities, and this framework could be utilised by sociocultural researchers in a variety of contexts and informal learning environments.

Notes

1. Broadly, the poem film is a visual, spatio-temporal text that uses a flow of images and spoken or written poetry (in the form of static or moving typography).
2. A QR code is a series of black and white squares that can be identified as a link to a World Wide Web page.
3. While positivists believe that the researcher and the researched are independent of each other, post-positivists accept that theories, background, knowledge and values of the researcher can influence what is observed. This research project does not presuppose an objective, quantifiable, approach but rather explores diverse perceptions of lived experiences. It accepts that human knowledge is not based on irrefutable foundations, but rather upon human conjectures.
4. Practice-led research is a process where practice and reflective thinking synthesise and feed off each other. In this article, it is used to describe a process where the designer pursues thinking by a process of making and this leads to further questioning and new discovery.
5. The project considers the content and paralinguistic nature of recorded interviews of local people, the palimpsestic (Basu 1997; Bender 1998; Lukas 2005), kinetic typography

(Brumberger 2003; Helfand 2004; Hillner 2009) and memories of place. The research project exercises type as a nuanced and temporal voice that might speak for ‘storied lives’ through its ability to respond to the expressive texture and values of the recorded voice. The study underpins the development of a series of site-specific, poetic, typographical projections that recycle spoken narrative back into a local community as artistic works.

6. Writers like Mackiewicz have proposed that typeface personality can impact the rhetorical nature of an artefact (Mackiewicz 2004). This idea has been extended by Stöckl who argued that typography not only encodes language but also conveys meaning that carries emotional values (Stöckl 2005). As an extension of this, Stöckl also claims that type can assume pictorial qualities; Brumberger also adopts this position, arguing that readers assign personality and emotional attributes both to typefaces and to passages of text (Brumberger 2003). The data from her research support arguments that typefaces have personas, and from this she argues that typography can convey not only visual texture and mood but also rhetorical stances that vary in their emphasis.
7. South Taranaki District Council, *Patea Heritage Inventory* (2000), pp. 41–44.
8. For instance, in 1933 the growth of the freezing works at Patea reached the peak, with nearly 1000 workers employed per season, the majority (almost 70%) being Māori. By 1939 Britain was receiving 80% of New Zealand’s meat and dairy produce. However, with Britain joining the European Economic Community in 1973 and subsequent barriers being imposed on trade outside of Europe, Patea became the victim of a steady decline in exports.
9. In the 15-min, linear narrative poem film, *Boy* (Ings 2004), the story of a young male prostitute is expressed through typographical incursions that silently narrate both an opening and closing poem. The film’s story is also permeated by lyrical statements and flickers of *bog speak* (the underground slang of prostitutes). The actor’s voices have been muted, drawing the audience closer to the story where kinetic type enables the protagonist’s thinking to become ‘visually audible’.
10. It is often important to maintain a constant horizon line and in some cases this has to be adjusted in post-production. In one of my experiments, I kayaked on the Patea river next to the freezing works using a GoPro camera. The device was attached to the side of the kayak, making the footage very unstable.
11. These interviews are recorded on a high-end Zoom digital sound recorder with Phantom microphones and data are processed in Adobe Sound Studio.
12. By a ‘cumulative draft’, it is referred to a text that changes inside its self.
13. Adobe After Effects is a digital visual effects software, for motion graphics, and was developed by Adobe Systems Company.

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