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Harmonics: Frequencies of Inheritance from Scotland to Aotearoa, New Zealand

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ABSTRACT: I am a first-generation immigrant from Scotland who moved to Aotearoa, New Zealand as a young child. Using the metaphor of ‘harmonics’, which comes from playing the cello, I consider the ‘frequencies’ I have inherited through two women in my ancestral lineage. This work is grounded by theories of non-linear time, such as ‘quantum entanglements’ and ‘hauntings’, primarily through the work of Karen Barad. My writing theorises an approach to tracing family histories using these ideas from quantum physics alongside ‘harmonics’ as an analytical tool. This method explores how frequencies of inheritance can be tracked through generations and what this might mean for immigrants who do not live in their ancestral lands. In my writing, I recall stories and memories, pad them with historical literature about what was occurring societally at the time, and analyse them through embodied and place-based theories. Towards the end, I finish by elucidating how the ‘harmonics’ of these stories ‘sound’ through me, in poetry. Our ‘I’ is a story of entanglements; our ancestors are the metaphysical and genealogical dust in which we are coated.

String Theory

Malcolm Guite¹

In the beginning,
only this,
a sound.

A sound
whose waves expand,
whose echoes still expend
themselves in riffs of time and space,
in overlapping amplitudes of bliss,
pattering into patterns, into persons, into us,
conscious harmonics, singing face to face.
Resounding into music now, we trace
in touches of a single string, our source,
flowing in everything, for everything
in the beginning, in the end,
is only this,
a sound.



Introduction

You have to *feel* a harmonic on a cello. Harmonics are the alchemical notes produced when weight and levity are balanced, and two frequencies meet. Inspired by Tim Ingold's 'Thinking Through the Cello',² this genealogical writing begins by theorising an approach to tracing inheritances using 'harmonics' as the analytical tool through Barad's³ quantum entanglements and Derrida's⁴ hauntology. Harmonics may also be positioned as affect, sensations that are unnamed condensations of thought and feeling.⁵ To help me tune into affect/harmonics, I also lean into MacLure's⁶ notion of tracing data that glows or affects wonder. I stretch this idea to consider how 'glowing data' may not be visual but a body-based resonance.

What I am offering in this article is a challenge to the traditional methodologies mobilised in family history research by crafting an embodied process of knowing and feeling our stories, alongside archival material. I acknowledge the unconventional nature of this analytic method, however, I argue that it offers researchers increased scope in which they can come to understand their ancestors by intentionally noticing how these ancestors continue to live through us and our identities. I mobilise theories from new materialist scholars, specifically leaning into Karen Barad and their ideas of quantum entanglements to demonstrate how this moment is connected to all other moments and how we are collections of inherited stories.⁷ I am using Baradian theory as an explanatory model, in the sense that I am 'constructing a hypothesis about unobservable processes that can be used to explain observable phenomena.'⁸ In this paper, what this means is that I have created a theoretical and methodological tool of 'harmonics' to explore how my ancestral stories (unobservable processes) form parts of my identity (observable phenomena). Through this theoretical and methodological tool, I use cultural practices (playing the cello and writing poetry) as a new way of examining the resources of the immigrant and how we can connect to our homelands and the stories from our homelands in material ways.

I am a first-generation immigrant to Aotearoa, New Zealand. I am also a therapist and educator who was first trained in anthropology. Through all these layers, I desire to explore the cultures of self.⁹ I am infused with and inherit, laced with theory and historical scholarship.¹⁰ In this work, I trace memories and stories to my ancestral homelands of Scotland through ghostly ancestors who sound through my body as harmonics. In this work, I make sense of Barad's theory of quantum entanglements by recognising that my ancestors live(d) and are enacted across multiple spaces and temporalities, materially and culturally. I inherit and enact the reverberations from wider cultural frequencies, as the past is the present we continue to receive.¹¹ This work examines notions of becoming and inheriting, demonstrating a research methodology that traces how two female ancestors in my lineage, one from my paternal line, Sadie Malone (née Sarah Smith), and one from my maternal line, Eleanor Alice McInally (née Manson), find expression through my being. I trace their lineages through the Northern Irish towns of Ballymena, Kirkwall on the Orkney Isles, Glasgow on the mainland of Scotland, and the West Coast towns of Muirkirk, Ayr, and Troon.

At the end of this piece, the harmonics in these cultural and ancestral stories are written as an event-poem.¹² Particular attention is paid to how the harmonics matter to and through theory. I trace how harmonics, the cultural stories and experiences we inherit through space and time, matter and are connected to rich lineages that, as a Pākehā immigrant (an Aotearoan New Zealander of European background), I do not want to forget, take for granted, or reduce to dust. Fitzpatrick¹³ states that contemporary Pākehā identity emerges between country/ies of origin and country of birth, always entangled with ideas of the Other. Therefore, to be here in Aotearoa as an immigrant means simultaneously making and re-making, dismantling and re-building, in order to feel 'settled' and at home.¹⁴ Tracing the harmonics is not about pinning things down into neat linear categorisations. It is about considering how our histories and memories have been inherited and are continually made through our complex engagements with the world because our 'I' is a story of entanglements.¹⁵ My ancestors are the metaphysical and genealogical dust I am coated in.

Thinking-with a Cello and Karen Barad

In 2019, I leaned into my decade-long dream of learning the cello (Figure 1). I had just completed my master's degree and had the space and time to commit to a new creative endeavor. Through my master's, cello music was my companion. I have heard that the cello is the instrument closest to the human voice in tone, range, and vibrato. Parkin¹⁶ confirms this by saying it is because the cello encompasses the entire range of the human voice, from low C to high C. A skill I learned early in my playing was finding harmonics at points along the strings corresponding to the 'folds' that would form if you bent the string into 2, 3, or 4 equal parts.¹⁷ Cellists call the points where harmonics sound nodal points. You find nodal points, where the harmonics sound, with a lightened touch, by sliding your left hand down the neck on the fingerboard. While your left finger pad gently presses the string, your right-hand draws the bow across. *You have to feel a harmonic.* Harmonics sounds entirely different from the cello's usual deep, woody resonance. It is almost flute-like as if the instrument had been alchemised and moved into the woodwind section, where breath is the tool for music-making. The balance of weight and levity allows these exquisite distortions to sound and for something different to break through.

I am inspired by Ingold's¹⁸ 'Thinking Through the Cello' as my cello has helped me think with and through ancestral inheritances. I position the harmonics as the pieces I inherit through space and time, 'announcing my place in the family of things'.¹⁹ During my early cello-playing days, finding harmonics was like discovering something spectral. It was not only the sound quality that moved me but the feeling of the sounds arriving. This feeling, still able to be conjured up, invites me to consider the relationship between the sounds my cello can make, theories of quantum physics, and genealogies. I am not a physicist, but I have been moved by the theory of physicist and contemporary feminist scholar Karen Barad,²⁰ who invites me to see how space, time and matter are entangled to produce material and cultural worlds. Barad is influenced by the scholarship of French philosopher Jacques Derrida,²¹ who theorised the term *hauntology*, where time collapses, and memories and associations from the social or cultural past haunt our minds like ghosts. Barad is also influenced by the Danish physicist Niels Bohr,²² who proposed the theory of wave-particle duality in quantum mechanics, recognising that physical entities (light and electrons) can possess wavelike and particle-like characteristics. I make sense of these theories through Barad by acknowledging that my ancestors live(d) and are enacted across multiple spaces and temporalities, materially and culturally. These temporalities sound through my being and scholarship in different ways, as harmonics.



Figure 1. Photograph of Cello. 2019. New Zealand. Photographer, Naomi Pears-Scown. Private collection of Naomi Pears-Scown.

Which Stories Matter?

In this work, I pay homage to my maternal nana and mother, who, desiring to overcome gendered disadvantages, engaged in tertiary education. These events changed the rules and laws governing my maternal lineage, shifting the potential trajectory of my life, and allowing me to write this paper.²³ My parents chose to leave their homelands of Scotland and immigrate with my brother and I in the early 1990s to Aotearoa, New Zealand. I note the absence of my parents and maternal nana in the ancestors I am to write about, though their presences are infused throughout, both in their telling of these stories to me or their living through them. All three are still alive, so their stories are veiled to maintain ethical practice and confidentiality. I know my parents' desire to immigrate was entangled with the desire immigrants have held forever: the chance for a better life. I also know it is not a simple reduction to that reason alone, which Sleeter²⁴ reminds me of. Akomolafe²⁵ positions that *"The world can only be spoken about incoherently, not because we do not have all the details but because the details themselves show up only in traces, in residue, in hints of what might yet to be or what might yet have been. Burrowing deeper will not bring us closer to the essence of things or home at last; it will only generate more dust"*. I do not know nor will ever know the whole story of why we immigrated, but I know I am coated in my ancestors' metaphysical and genealogical dust because of it.

As I met with the ghostly remains of the two ancestors I chose to write about, I had to consider which harmonic to play and which stories to tell based on what I remembered and could access as I went along.²⁶ The thing about family stories is that there is never one truth about a person because the past was never simply there, to begin with, and the future is not simply what will unfold; knowledge and memory grow and are enfolded along the paths we choose to take.²⁷ In this work, I have chosen to trace the harmonics that have sounded the loudest to me through my memory, affect, and enaction, in an autoethnographic sense,²⁸ or as MacLure²⁹ would say, I am tracing the harmonics that 'glow', through me.

Affect theory, in a post-qualitative sense, sits nicely in the realm of considering how genealogical stories are transpersonal flows of energy that collapse the binary of exterior/interior, instead paying attention to the sensations that are unnamed condensations of thought and feeling.³⁰ The means whereby these concepts get into the work and how I deploy them was a process of critically considering which parts of the theory met the living realities of the family histories, or, as Haraway³¹ would say, where the 'thoughts were thinking the thoughts'. It was not a linear, cause-and-effect process of the theory being applied osmotically to the story, but a process of sensing what would enhance, diffract, or open up new channels of meaning, and being guided by these moments of resonance. This was not a passive but an intentional process of plugging the theory in³² to see what new insights could be explored.

The two stories I present in this work offer two ways that family history and genealogical stories may be recorded and transmitted. One is through practices of inscription (archival memories), and the other is through incorporating practices (embodied memories).³³ These two kinds of 'memories' hold different potentialities for how we can come to know and read our ancestral pasts. On my maternal side, where most of my kin are university-educated, a living family member has created and keeps a detailed genealogical website with records of births, deaths, occupations, and relationships going back seven generations to the late 1700s. I first discovered Eleanor in these archives when I was 19 years old. She appeared to me as an outlier when everyone else's place of birth, death or residence lay within the Ayrshire district for all seven of these generations. She, however, was born on the Orkney Isles and was the only ancestor I could find on the genealogical website who came from elsewhere. I felt a strong kinship tie to her and her story, not because I knew her, but because I also did not live in my ancestral lands and lived on an island at the end of the world. The first time I ever had a conversation about Eleanor with my mother (her granddaughter) was when I was writing this article and wanted to find out when she died. However, I feel as if I have known Eleanor since I was 19, after creating a fiction of who she was in my mind and how we were alike. The archival records of her life on the genealogy website helped me to construct a plausible narrative about what the context of her life would have been like in Orkney, Glasgow, and Ayrshire. I have come to know Eleanor through the records and the research I have done.

Stories are transmitted orally on my paternal side, where most of my kin are not university-educated. This is also the Irish side of my family, where oral storytelling is part of the cultural milieu. There are no formal genealogical or archival records, no one is the keeper of family history, and all stories are shared verbally and carried in the memories of those still alive. I know the stories of my gran, Sadie, because I knew her, loved her, spent time with her, and heard about her life from my father and his four other siblings. While I can offer genealogical sources for Eleanor's life, I can not do so with the same academic precision as Sadie, as these memories are embodied. I know her through my memory and the anecdotal and oral information from other family members that has been sedimented in my body over time. I am aware that this kind of record-keeping and storytelling means there is the potential for details to be lost or change over time and for bias, contractions, and embellishments to colour certain stories, depending on who tells the tale.³⁴ I am curious about what each practice of recording and transmitting family history can offer us as different ways to inherit our pasts.

I signal the harmonics in these two ancestral stories as a kind of affective bookmark to demonstrate where I can see myself through them/ them through me. Metaphysically, the harmonics point to the cultural 'waves and particles' that my body is made from, that I draw upon to tell the stories of my life/our lives.³⁵ This way of working also draws upon Sleeter's critical family history framework.³⁶ I have listened to and written the stories using my body as the receiver and conduit. Davies³⁷ notes that the human body is radically open to its surroundings and can be composed, recomposed, and decomposed by other bodies. She refers to her Spinozian leaning, stating that identity can never be viewed as a final or finished product since our bodies constantly interchange with our environments. I lean this way, harmonising Sleeter, Davies, and Barad, to recognise that quantum entanglements demonstrate how this moment is connected to all other moments.³⁸ My ancestors are present in the threads of my mind, the tips of my fingers, the motion of my feet, the sound of my voice, the decisions I make, and the spaces I inhabit.

I acknowledge that parts of this methodology for tracing family histories are unconventional in that I am tracing both practices of inscription (archival memories) and incorporating practice (embodied memories).³⁹ However, the unconventional nature of the work creates spaces for me as a researcher to consider how our identities are a collection of all the stories we have inherited from those that have come before - embodied *and* archival.⁴⁰ In this work, hauntology, performed through the method of harmonics, provides a way to remember our past and

interrogate how it speaks to our present.⁴¹ How we see and understand our worlds, the beliefs we build our understandings on, and the stories that inform our being and sense-making in the world are all haunted by our ancestors and what we have inherited from them.⁴²

This work answers the call from Cameron,⁴³ who invites us to pay attention to singular, specific historical experiences and events. Sleeter⁴⁴ also said that our parents and grandparents are worth scholarly attention as they have been actors in history, making choices as they left their homelands and settled here. I heed this advice, knowing that stories are one of the ways we make sense of ourselves. As a researcher interested in identity, culture, and inheritances, I move into interrogating my narrative inheritances by critically analysing and illuminating how these stories are embedded in particular contexts and geographies that ripple forward to me and who I can be now.⁴⁵ I pay attention to two female ancestors and consider how they lived, their decisions, how they were helped or hindered by unequal social relations, and the values or ways of life they passed down to me.⁴⁶ Hall argues that it is vital to understand how historical and societal forces structure and determine the terrain, in the sense that they define the horizon of possibilities I live within now.⁴⁷

Waves (sound) and Particles (matter)

They are in my being, my ancestors intoning.

Waves (sound)

The Scottish lilt I hear and can mimic, a home-coming and loss
 The first piercing note of bagpipes making me want to cry
 Words coming from my mouth that my husband asks the meaning of
 Taken-for-granted vocabulary (often referring to the many variations of weather, a particular proclivity of the Scots)

Particles (matter)

Tartan - lines and patterns, grids of belonging and dislocation
 Fair skin, blue eyes, Celtic bones
 Deft stitching fingers, tracing home(s) (Figure 2 & 3)
 Dust on my grandmother's watch, her particles on my wrist
 Oatcakes and shortbread crumbs tasting like my aunt's kitchen



Figure 2. Photograph of Aotearoa Home Cabins. 2024. New Zealand. Sewer, Naomi Pears-Scown. Private collection of Naomi Pears-Scown.



Figure 3. Photograph of Isle of Skye Tapestry. 2020. New Zealand. Sewer, Naomi Pears-Scown. Private collection of Naomi Pears-Scown.

Sadie MALONE (née Sarah Smith) (1922-2015)^{48,49}

We took family trips to Scotland regularly throughout my childhood, always at Christmas, except one summer when my papa died, and I saw Scotland in its summer glory. We always spent most of our time in Troon, where my parents grew up and many relatives still live. Ahmed⁵⁰ describes migration as a purposeful estrangement from specific places and periods in our lives, an intentional dislocation that remains imprinted on our bodies. I was imprinted with a sense that Troon was the strangely longed-for but left home that I could not re-enter for reasons I could not quite understand. I was nostalgic for a version of the town that only existed at Christmas time (Figure 4). It was a place I did not know if we were staying or going from.⁵¹ *Harmonic 1: The sound of a nostalgic memory from a previous home.*

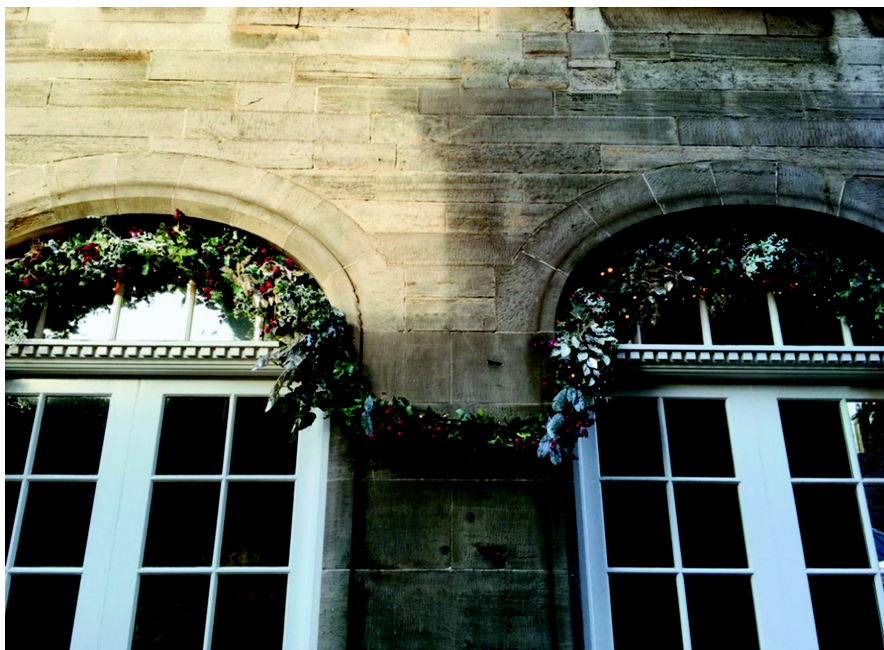


Figure 4. Photograph of Christmas in Troon. 2017. Troon. Photographer, Naomi Pears-Scown. Private collection of Naomi Pears-Scown.

Troon is in the South Ayrshire district on the West Coast of Scotland. Longstanding migratory patterns exist between Ireland and the West Coast of Scotland due to the geographical closeness and shared Celtic ancestry.⁵² The migratory patterns increased between the 1840s and 1920s due to the Great Famine⁵³ when many Irish moved to Scotland in search of work, which was the case for both paternal great-grandfathers who settled in Troon. Records show that many Irish stayed on the West Coast, close to the ports where they disembarked, due to illness, having no money to travel further, or having relatives with whom to connect.⁵⁴

The word 'Troon' comes from a Brythonic or Pictish name having linguistic connections to the Welsh *trwyn*, meaning nose or cape, which geographically makes sense, given the way the town juts out into the Firth of Clyde. It is possible that the earliest Gaelic form of this name was *An t-Sròn*, the nose or headland.⁵⁵ Being a cape made it ideal for a port, and thus, a thriving shipbuilding industry developed in the 19th and 20th centuries, which serviced the two World Wars and beyond.⁵⁶ The men who worked at the Ailsa Shipyards, which included my grandfather, two uncles, and father, built around 600 boats.⁵⁷ Ingold⁵⁸ notes that landscapes take on the meanings and appearances of people, and people develop skills, knowledge, and identities concerning the landscapes in which they find themselves. This was very much the case for the people of Troon, particularly the working class (of which many were Irish immigrants, grans kin), who lived close to the shipyards in council estates and formed a community and identity around it. This was where my gran raised her four children.

Gran had an impish, childlike soul and a wicked sense of humour. She remained creative and social until her death at 93,⁵⁹ when she still lived independently and knitted granny squares for a charity that made premature baby blankets. There must be something about squares, rectangles, and repetition.⁶⁰ *Harmonic 2: The sound of inherited craft practices that my hands know how to do.* Gran divorced her abusive husband in the 1970s when it became legal on the grounds of mutual consent.⁶¹ When gran died, my father gave me her ruby ring, which she bought for herself after the divorce, one of the only extravagant things she ever purchased. Gran worked as a cook and cleaner at a local hotel for most of her adult life, cycling to and from her job at dawn and dusk to put food on the table. This was the gender norm of her time, given that she was divorced and did not stay home as a housewife, her only option was a low-paid manual job as she had no education beyond the age of 13.⁶² *Harmonic 3: The sound of how female education shapes life's trajectories.*

Gran grew up in poverty as the daughter of Irish immigrants from the small town of Ballymena and valued modesty and frugality (as many Scots do), but particularly so because of her Christian faith since her 'treasures were stored in heaven, not on earth',⁶³ a scripture she often quoted through my childhood. While this is a biblical reference, it also references two Scottish philosophers from the Enlightenment, David Hume and Adam Smith, who believed frugality and economic prudence were ways of sacrificing present advantage for more significant returns in future.⁶⁴ Despite this, Gran purchased her ruby ring after divorcing her husband, whom she had been married to since she was 18. I would not have said my Gran was a feminist in the traditional sense of that world, having grown up in a conservative, Christian, patriarchal culture. However, her divorce always struck me as being particularly audacious and valiant, and perhaps the post-war era oriented her towards safeguarding her and my father's emotional well-being (her only child still at home), a cultural turning point noted in Britain at the time.⁶⁵ She reminds me that stories are always political.⁶⁶

I had admired gran's ring as an adolescent, which she had remembered. *Harmonic 4: The sound of material inheritances that matter.* I also inherited her practical, silver, analogue wristwatch. It had not been cleaned when I inherited it, and between the stretched metal strap were layers of her dust and essence, which now wrap my wrist (Figure 5). There is something poetic about dust, the micro-particles we make and inhabit the world of.⁶⁷ Each dust particle carries a unique vision of matter, movement, collectivity, composition and infinite darkness.⁶⁸ *Harmonic 5: The sound of skin holding skin and knowing to whom you belong.* Going to grans house as a child was a treat, as I generally left with a pocket full of trinkets and enough coins to buy a chocolate bar. *Harmonic 6: The sound of generosity despite frugality.* I think my father was her golden child, as she was delighted that he had moved his family to a paradise she could only dream of, even though her ethnic kin were immigrating to Aotearoa in large numbers during her lifetime between 1840 and 1950.⁶⁹ Though Scottish influences are pervasive throughout Aotearoa, they remain one of the least studied of the country's major ethnic groups. Gran would have loved it here.



Figure 5. Photograph of Ring and Wristwatch. 2024. New Zealand. Photographer, Naomi Pears-Scown. Private collection of Naomi Pears-Scown.

Eleanor Alice MCINALLY (née Manson) 1913-1999^{70,71}

My maternal great-grandmother, Eleanor, was born in Kirkwall on the Orkney Isles in the Outer Hebrides. Most Orcadians historically and currently live in Kirkwall, a tidy and functional town of study stone buildings. The Orkney Isles are said to be the 'Heartland of the Neolithic North', having some of the oldest archaeological stone circles, cairns, ancient villages, and temple complexes.⁷² In the pre-war era, when Eleanor was on the Isles, the community was supported by an economy of crofting, agriculture and fishing. Currently, the economy relies on the North Sea oil and fishing industries.⁷³ The Orcadian dialect that Eleanor would have spoken is a Norse/Scots amalgamation derived from Lowland Scots, with a degree of Norwegian influence from the Norn language.⁷⁴ This language was richly responsive to the land in which it is spoken, as words are ingrained into landscapes, and landscapes are into words.⁷⁵

The beginning details of Eleanor's life were concealed for many years. When it eventually leaked out at her funeral, it caused a rupture of tectonic force in my family story. She was illegitimately conceived by one of the men in the household for whom Eleanor's mother, Jessie, was a domestic servant at the time, which Eleanor's birth certificate records.⁷⁶ Jessie was the middle child of seven: six girls and one boy. During her early years, Eleanor was absorbed into and raised by this large family, a common cultural practice in rural Scottish communities so mothers could continue to work.⁷⁷ Life on the isles was challenging in Eleanor's early years as the potato blight, which had ravaged Ireland and reached the Islands and Western Highlands of Scotland by the mid-1800s. This led to much poverty, and by the early 1900s, landlords were increasing rent, clearing tenants' land, and filling the land with sheep to meet the demand for wool in Lowland Scotland and England. Many Highlanders and Islanders immigrated to Canada, Australia, or Aotearoa, or moved to the Lowlands around this time, hoping for better prospects.⁷⁸

World War One broke out a year into Eleanor's life in 1914. The seafaring Orkney men joined the navy, and the Scapa Flow, a body of water surrounded by Orkney islands, was the body of water chosen for the Royal Navy base.⁷⁹ The 578 Orkney men who were killed during the war left the island with a population imbalance and devastating hardships for those who were left trying to maintain labour-driven industries.⁸⁰ Many women left the Isles to find work on the mainland, as Jessie and two of her sisters did in 1922 when Eleanor was nine.⁸¹ The four of them fixed their eyes on the horizon while crossing the unpredictable and dangerous Pentland, heading to Glasgow.

The waters around Orkney are home to seals, porpoises, Orca, pilot whales, and basking sharks.⁸² The same seas are prone to whirlpools and eddies, depending on the tides and wind, and one whirlpool just north of the isle of Stroma, in the Orcadian archipelago, is called 'The Swelkie'. According to Viking legend, this natural tidal whirlpool is called 'The Sea Witch's Wheel' and is caused by a witch turning a mill that grinds salt that keeps the sea salty. The Swelkie is also the name of a Scottish Country Dance, which makes a whirlpool pattern.⁸³ In these isles, there are intimate connections between archeology, mythology, language, landscape, animals, water, and dance. The ferry trip through the Swelkie with the Orca changed Eleanor's life, my life, forever. *Harmonic 7: The sound of water that carries our stories from one place to another.* While Glasgow became her new home, Orcadians also migrated to Aotearoa, particularly to settlements on the South Island, where these kinship clusters made valuable contributions to settler infrastructure.⁸⁴ What would have happened if Eleanor had been in that Orcadian group who moved here sooner than I did? Davies⁸⁵ notes that the grains of ourselves are not so separated from the landscapes in which we are enfolded, and perhaps Eleanor's Orcadian dust, the Swelkie whirlpool, and the story of the Viking sea Goddess were always to find a way here, to Aotearoa. She did arrive eventually, through me.

The shipbuilding yards on the River Clyde in Glasgow were at the height of their production during the years spanning the two World Wars, where they built warships.⁸⁶ The city's industry was ignited by welding sparks and thrummed with the sound of rivets and heavy boots. Men on both sides of my family worked in Glasgow at points. For four generations on my paternal side, men were labourers (from my father, going back to his great-grandfather) in joinery, welding, gasworks, riveting, and railway. On my maternal side, three generations of men (my uncle, grandfather, and great-grandfather) worked as electrical engineers, mining engineers, and metallurgical chemists.⁸⁷ I imagine the three Manson women and the child Eleanor arriving in this soot-filled, bursting, masculine city so far from their life in the wild North Sea. The women had to prove their industriousness and resilience to survive. *Harmonic 8: The sound of a hard work ethic from women who wanted to live.*

Eleanor grew up in this city and reached young womanhood, likely working in the industrial textile factories.⁸⁸ During her late teenage years, she met Thomas Watson McNally, who studied engineering at Royal College in Glasgow and was from the mining town of Muirkirk in the Ayrshire district.⁸⁹ By the late 1930s, they were married and settled in Ayr with three children named Irene, Archibald and Peter. After the war, tuberculosis rates in Scotland remained high,⁹⁰ and Thomas contracted it, dying in 1944 at 32 years old.⁹¹ Eleanor was left to raise their three young children alone and work in low-paying shopkeeping roles, as was her gendered disadvantage under the oppression of patriarchy.⁹² In her grief, I wonder if Eleanor ever considered moving back to the Orkneys, her place of origin and (be)longing.⁹³ *Harmonic 9: The sound of landscapes that will always be our homes, even in absentia.*

My memories of my papa Archie (1938-2004), Eleanor's son, are of a grey, in-pain, shuffling, hoarse man. He died when I was 11 from a stroke after being an alcoholic, chain smoker, and diabetic for most of his life. His body was the physical field site upon which the harsh world he lived and created inscribed itself in painful ways.⁹⁴ He and my nana visited us in Aotearoa the year before he died when I was ten. Papa gave my brother a film camera and me a brass pen. I felt the injustice of the gift, interpreting his favouritism for my brother, who received, in my child's mind, the more exciting gift. However, in retrospect, it was a perfect foretelling of our futures – my brother is a musician with a passion for photography. I am an academic with a proclivity for brass pens (Figure 6), which I use alongside classical music to think, deepen, read, and write into creative, theoretical, and methodological worlds.⁹⁵ *Harmonic 10: The sound of refined musical tastes that opened up worlds.*

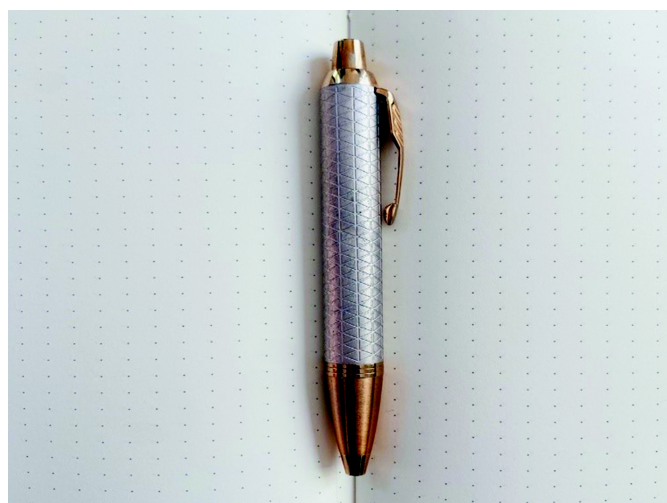


Figure 6. Photograph of Brass Pen. 2024. New Zealand. Photographer, Naomi Pears-Scown. Private collection of Naomi Pears-Scown.

Discussion: Tracing Harmonics

In this final section, I will tease out the harmonics I have identified in my cultural and ancestral stories, paying particular attention to how they matter to and through theory. I have sifted them into a poem as a place to track the harmonics. The format leans into a 'call and response' framework, as the harmonic poem reads in the right column and the theoretical analysis in the left column. The analysis is a response to and extrapolation from the poem, attempting to move it beyond the deeply personal. In post-qualitative research, poetry can be enacted to disrupt binaries.⁹⁶ I use the method here as an 'event poem' that evokes my affectivity when considering my relationships with my ancestors.⁹⁷ I am not tracing answers but new ways to ask questions about who and how we become, taking account of the conditions of emergence.⁹⁸ My ancestors turned out to be very interesting strangers. kin unfamiliar, uncanny, and haunting.

The analytical tool of harmonics has helped me see how ancestral inheritances can appear in minute spaces and more significant markers around which we shape our lives. As a Pākehā immigrant to the lands of Aotearoa, I do not want to forget, take for granted, or reduce to dust the importance of these soundings, particularly as Scottish people became part of the dominant colonial group in this country. Indeed, the term Pākehā came into being as an identity with colonisation.⁹⁹ To connect, in an ongoing way, to our unique heritages and stories is to challenge colonial agendas that desire to sanitise and erase.¹⁰⁰ To be here in Aotearoa, as a Scottish immigrant now, is to simultaneously remember the scars of colonisation this land bears and re-make a sense of home.¹⁰¹ Tracing harmonics is about considering how our histories and memories have been inherited and are continually made through complex engagements with the world.

To begin, let me offer a poetic analysis of the performative and affective aspect of my cello playing.

I perch on my stool, ready, my legs straddling the body.

My left hand cradles the neck, fingers poised over the fingerboard.

My right hand holds the bow, perpendicular to the strings, feeling the pressure needed. A balance of gravity and levity to sound harmonics.

I bow and hear the harmonic sound of a nostalgic memory from a previous home.

It resonates through my chest.

I bow and hear the harmonic sound of inherited craft practices that my hands know how to do.

It resonates through my hands.

I bow and hear the harmonic sound of how female education shapes life trajectories.

It resonates through my mind.

I bow and hear the harmonic sound of material inheritances that matter.

It resonates through my ring finger.

I bow and hear the harmonic sound of skin holding skin, knowing to whom you belong.

It resonates through my wrist.

I bow and hear the harmonic sound of generosity despite frugality.

It resonates through my pocket.

I bow and hear the harmonic sound of water that carries our stories from one place to another.

It resonates through my belly.

I bow and hear the harmonic sound of hard work ethic from women who want to live.

It resonates through my shoulders.

I bow and hear the harmonic sound of landscapes that will always be our homes, even in absentia.

It resonates through my feet.

I bow and hear the harmonic sound of refined musical tastes that open up worlds.

It resonates through my ears.

Listen, listen, let me tell you what else I hear from the women who made me.

Harmonics: The Women Who Made Me

A ferry fought the North Sea
Isles faded into ghostly haunted loss

Derrida's¹⁰² Hauntology speaks of the return or persistence of elements from the social or cultural past and how complex histories and stories are continually haunting our identities.

A land of absentia
Living in memory long after

Places can exist in the minds of people who belong to them long after they have left, begging the question, how may we simultaneously belong and not belong?¹⁰³

Grey-shaped grief projected onto
Land specters ahead
Land coughing smoke-promising-warmth
Smoke entering lungs, staking claim
Demanding a tax
Bodies entangled with weather

The climate is not an externality. Humans co-produce and co-effect it through actions like burning fossil fuels that change the chemical composition of our atmospheres and their temperatures.¹⁰⁴

Soot-stained fair skin, coal-lined flesh
Violent coughing to violent words
Traces of blackened hand marks
Impressed upon close-orbiting bodies

Human bodies are shaped by histories, which are performed intergenerationally through behaviour, posture, and gesture.¹⁰⁵

Bodies of hunched, blackened shapes
Sedimented history bodies
Crushed by pressure to make
Boats and engines to feed industrial machines insatiably demanding coal
The bodies did not know how to unfurl
In a world-knot in motion

Haraway¹⁰⁶ notes that there are no pre-constituted subjects and objects in this world, only, in Butler's¹⁰⁷ terms, 'contingent foundations'. How we position ourselves and recognise our active roles in the unfolding of things matters.¹⁰⁸

In crushing pressure, there is potential
For rubies and diamonds
Sparkling in blue eyes
And on soot-covered fingers
Light diffracting outward
Waves and particles of tiny revolts

Kristeva's¹⁰⁹ analysis of 'tiny revolts' invites consideration of small freedoms that can ripple out and involve researchers in ongoing practices of deeply questioning the conditions.

I feel the rainbows on my skin
On places not touched by soot
I was taken to different lands
Before marks could be made

'Home' is a term that can be loaded with ambiguity, dissonance, and danger, particularly for immigrants who leave their homelands for 'better' or 'different' lives.¹¹⁰

I am a tourist in my homeland
 An apparition of what could have been
 An embodiment of two Island nations
 On opposite sides of the hemisphere
 Duel-homes
 Duel-citizenship
 Duel-cultures
 Duel-selves
 It is not one story or the other
 Both were and remain true

Our life tides overlap
 These women and I
 Ebbing and flowing through matter
 Shortbread crumbs
 Ruby ring
 Wristwatch
 Christmas lights
 Knitting needles
 A brass pen

I write and understand 'home'
 Differently, now
 After listening to the song lines
 The harmonics
 The quantum leaps

Three generations
 The order of things reworked
 I am vibrant with their matter
 I am covered in their quantum dust

*Bennet¹¹¹ theorises how humans are
 enfolded within the grains of
 landscapes and how bodies and lands
 are intimately entangled in
 genealogical and geological stories.*

*Barad¹¹² writes about there being
 'infinitely more within', which, with
 Haraway's¹¹³ notion of it 'mattering
 what stories we tell other stories with',
 I theorise that we can only begin to
 see what is 'within', what is 'telling
 stories through us' when we begin to
 closely look, challenge, critique, and
 consider how we are the ways that we
 are. The quantum realm gifts us
 microcosms within microcosms.*

*Indigenous Australian theorist
 Yankaporta¹¹⁴ writes about song lines
 that were created with land. They are
 creation stories. They are sung and
 memorised so travellers can come to
 know ancient routes and wisdoms.*

*Bennet's¹¹⁵ theories of 'vibrant matter',
 or 'thing power', articulate how there is
 a vibrant materiality that runs
 alongside and inside humans. This
 gives weight to an analysis of political
 events that positions non-human
 things as having more force than
 traditionally afforded them.*

Conclusion

You have to feel a harmonic. This is how I began this writing, and it is how I end it. In this writing, I have demonstrated how noticing the affective harmonics in our bodies illustrates how lineages and genealogies are living, dynamic, and present, not simply fragmentary things in the past. History is present in all that we are.¹¹⁶ I illustrate this as an immigrant, as someone who did not grow up in my ancestral homelands but has considered how these homelands and people matter through me, nonetheless. This mattering 'announces my place in the family of things'¹¹⁷ and demonstrates the hauntings that collapse binaries of exterior/interior, past/present, you/me. The analytical tool of harmonics has helped me see how inheritances from ancestors can appear in tiny fragments and significant choices. Indeed, my ancestors are present in the threads of my mind, the tips of my fingers, the motion of my feet, the sound of my voice, the decisions I make, and the spaces I inhabit. This work has demonstrated how we may learn new ways to ask questions about who and how we become, taking account of the conditions of our emergence.¹¹⁸

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