

## Talking backwards in a land without shadows

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### Abstract

*In 1838 The Society for the Diffusion of Useful Knowledge issued its first engraving of the islands forming New Zealand. The preceding year my ancestors had come ashore on these same islands, creating the starting point for this journey. In this article, I have traversed a tiny section of the terrain around mimesis from which I have fashioned maps that chart interweaving conversations, one of which is a reflection on the participatory project, *My Personal Cloud* (2016). Focusing on concepts that hover between mechanical and sensory understanding I have considered the notion of yielding-knowing as a means of letting go of established learning strategies. I aim to draw attention to sympathetic magic's educational potential. In doing so, I have scuffed the surface of a number of ideas leaning into the poetic and notions of being inhabited. These lungs suffuse with the taste of clouds; I allow sensing to replace seeing as my words yield to the unspeakable.*

Keywords: re-enchanting, mimesis, yielding-knowing, magic

### The Society for the Diffusion of Useful Knowledge: The First Story

*In early 1837 I arrived here, inside the belly of a dream.*

The Society for the Diffusion of Useful Knowledge (SDUK) had not yet charted the likeness of these islands. Although they had begun disseminating progressive ideas across the globe eleven years prior, pressed into the pages of a monthly supplement known as, *The Penny Magazine*. This ambitious nineteenth-century educational project sought to make simple scientific laws and principles widely accessible, especially to those of the lower social classes. Fusing usefulness with the reductive to create a utilitarian science, a handy saw-toothed tool for dominating nature and cutting through ignorance.

*Tugging at the dogleg of time, my ancestors Richard and Elizabeth Banks have come ashore at Kororāreka, where they will remain until the 11 March 1845 when Hōne Heke and Kawiti retake the land. Here is where my story begins, at the inner edge of an island caught by the corner of the sea, a place of magic*

It would be nearly two more years before cartographic effigies of Aotearoa produced by The Society for the Diffusion of Useful Knowledge were published and ready for dissemination into school rooms across the globe. (The SDUK published their first map of Aotearoa, entitled 'Islands of New Zealand' on the 26th of November 1938) Engraved lines, etched with sanctified names and cryptic symbols, orientate us to true north. A place where ownership is a power asserted as much on the spirit as it is on the body.

There are obviously lines of all kinds in the real world, but they are quite different from lines on maps because maps represent the world as essentially static and thus hide the fact that the real world is continuously changing, its constituents interacting in manifold ways. (Herva, 2010, pp. 338).

Within this *geography*, (from the Greek *geōgraphia*, earth + writing) nature yields stories rich with imagining, revealing a history of encounters where the animate and inanimate interact through forms of sympathy, analogy and resemblance (Herva 2010, Thomas 2004, Foucault 1970). In this place, useful knowledge has not yet been co-opted by reductionism; the physical world is inhabited by magic, creating a geography of time as meaningful as any future form of representation. "Glaciers portrayed as sentient beings in these stories seemed to be, in the felicitous phrase of French Anthropologist Claude Lévi-Strauss, "good to think with" (Cruikshank, 2004, pp. 8).

SDUK's cartographic map provides an image of this land, invoking the Laws of Similarity and Contagion. The symbolic establishes a mimetic relationship with what it depicts, the earth's surface viewed as territory, a diagram of European expansionism, a very particular history. Map lines connect us, through the ether, to places we may never traverse. The cartographer's art, plotting latitude and longitude, drawing a likeness that has the power to change the course of our interwoven histories. In this act of sympathetic magic (where things act on each other at a distance through a secret sympathy) the map imbibes its source, colonial power, becoming a map of conflicts, of wars to come.

...magic is not about belief, superstition or the supernatural in any conventional sense. 'Magic', ... is 'based on a unique type of consciousness: the awareness of the interrelatedness of all things in the world by means of a simple but refined sense of perception' (p. 12). Magic, then, is not some esoteric force but a mode of bonding and 'being one', so to speak, with a richly interconnected world. (Herva, 2010, pp. 327 citing Glucklich, 1997).

Though regarded as the "mirror of nature" (Rorty, 1979, cited by Harley, 1989, pp. 5) the modern (eighteenth to the twentieth century) cartographer's mechanistic line has failed to circumscribe the emotional territory of *affect* - where the mute face of the image turns its visage toward meaning, yielding its unspoken essence. This *other* world is the place that we seek "...a 'not cartography' land where lurked an army of inaccurate, heretical, subjective, evaluative and ideologically distorted images" (Harley, 1989, pp. 5). This nonconformist terra incognita where the contingencies of touch trace the contours of silence.

## Being and Becoming Stardust

*In the belly of a dream, I am a curled frond at the heart of the giant Mamaku. Lulled by the songs of the winds. Here the eyes of nature have not (yet) been picked out, variables to be weighed and measured. Instead, I have merged into this place, not by stealth or camouflage but through apperception, subsumed within intersecting narratives.*

Inside this cosmology, humans transform into occupied landscapes. “Encounters come in many forms” (Cruikshank, 2014, pp. 10). Sensing replaces seeing, and words yield to the unspeakable. Offering an interstice by which counter-narratives may enter, scientific concepts turning in upon themselves, and notions of plottable space dissolve. In the grip of such magic, nature airs its many voices and “...the body separates itself from thought, the individual breaks the boundary of his skin and occupies the other side of his senses” (Cailliois, 1984, pp. 30). Swirling memories obnubilate the seer, sight bending to the knowledge of touch.

*Immersed in the roiling shadows cast by clouds that foretell the coming storm. Here the temporal and the spatial congeal in a strange tongue, a sensuous locus. Time quivers.*

Once named matter is no longer unencumbered, stilled by language, it sits inert becoming a perfect specimen for the scientific gaze. However, nature is not an object, it responds, mocking our efforts to constrain its physical presence, weeds grow in the shadowed earth. As the fragmentary scrutiny of science casts its cataract eye downward toward the cauterising lens of tunnel vision, there is mischief afoot, as Anthropologist Michael Taussig (1993) assures us, in the kingdom of the real. Devilry too was stirring in the seventeenth-century writing of Margaret Cavendish (1666) *The Description of a New World, Called The Blazing-World*. “Lenses can produce a magnified image of a louse, but not of a whole whale; they can operate in light but not in darkness; they can enhance one sense but are of no use to any of the others” (Cavendish, 1666, cited in Classen, 2005, pp. 81).

*A desperate twitching of the fingers, I am trying to button closed the gap that has opened betwixt the letting go and the cleaving to, between these islands and the sea forming a gulf of sky. An unendurable space of endings and beginnings, light and shadow. I ask myself, “What does it mean to see in this dense and tangled place?”*

It’s not surprising ...that we now find it difficult to believe that rocks, mountains and other landscape features like glaciers might listen when the very conditions of the Western material and cultural world are underpinned by language that rejects that possibility. (Cruikshank, 2014, pp. 4).

Searching for mnemonic clues to remind me that there is meaning, and onus bound to inhabitation. Groping for understanding using the sight of a touch, remembering as performance (Ingold, 2011). A kinaesthetic drawing of the landscape, a variant geography where contours are ridges on the tips of my fingers, reading yields to sentience. Touching unspools the mysterious, opening a cleft for questioning. “Is tomorrow today?” (William

asked his parents, five years of age) “It seems that what modern thought has done to place - fixing it to spatial locations - it has done to people, wrapping their lives into temporal moments” (Ingold, 2016, pp. 3).

Touch, with all its bodily associations, the skin chafing on the material world, touching and being touched also calls forth memory and yearning, yielding to a different way of knowing. Surfaces colliding produce the sounds of hearing, light the touch of sight, the tongue licks the earth and explodes with taste, lungs expand and burn with the rasping air. Every aspect of our being connected through inhabitation (from Latin in- ‘in’ + habitare ‘dwell’). Dwelling-in, where the stars conjoin and atom by atom are reborn through a *secret sympathy*.

*In this hand, where the Kākā screeches, I am the dust of stars long dead. Interconnected, I will become the cosmos when I too die. This is my story, time and space dissolve in the belly of the dream. Through touch, I may learn to speak again.*

Many astrophysicists today agree...and even claim that the atoms that we are made of, that everything is made of, are the remnants of stars that exploded billions of years ago. Indeed, ...the atoms of your left hand most likely come from the dust of a different star than those of your right hand. (Maurette, 2018, pp. 71).

## **Yielding-Knowing**

*I have cast aside the proverb seeing is believing.*

Words alone fail to capture the magic inherent in the unfolding of comprehension, what is required is an active yielding to otherness, “the self losing itself, sinking, decomposing into the surrounding world” (Taussig, 1993, pp. 46). *Yielding-knowing* (Horkheimer and Adorno 1987, Taussig 1993) expounds a way of knowing that does not require ‘objects’ to adapt themselves to suit our perceptions of them (Marks, 2000). This then is a questioning-knowing, where the optic no longer reigns over the sensorium. Divesting oneself of the conviction that by grasping the visual edges of the world the unknown will cease to exist. Yielding-knowing refers to knowledge gained by mirroring the world we inhabit (Taussig, 1993) rather than imposing our understanding on it. Yielding to the Other engages the capacity for learning through our mimetic faculty.

*On these islands, where the sea endlessly turns on itself, imitative practices bespeak a way to learn. I am the stars, and they are me.*

The mimetic offers us a “...soulful power derived from replication” (Taussig, 1993, pp. 3). The knitting together of subjective and objective, manifesting intertextual threads rich with diverse narratives. Pooling the imagination contained within the DNA of the classroom, provoking unexpected and oblique connections, teaching and learning conjoined. Knowledge, when unbuttoned from instruction, has a porous quality, soaking into the replicating force of magic. Why not harness this way of perceiving to challenge

contemporary educations territorial dominion? Breaching the “ephemeral border” (Abrams) that situates learning in the division “between our sensing bodies and the sensuous earth” (Abrams, 1996, pp. 256).

*The interior of the world inhabits me; I am a filament woven from a double helix my substance born from breathing in. Here then, we can tell stories where the welkin shelters inside our lungs producing a new language with which to speak the air.*

## Sympathetic Magic

Sympathetic magic relies on the idea that *things* (in the broadest possible sense) act on each other at a distance through *a sympathy* (a chemistry) borne on an invisible ether. Science too hypothesises that things physically affect each other through the near vacuum of space. However, the modern Western-self prefers to claim that science is rational and all else is irrational, the domain of Otherness. There is strident opposition to the use of the word *magic* in relation to knowledge. To suggest that we might employ it to understand the everyday presupposes a suspension of the rational and forewarns a return to systems of belief. The supernatural reappears in its guise as the homunculus. Belief is a torturous thing; we may say we believe and yet not act by those beliefs. Tamar Gendler (2007) proposed differing categories of belief, coining the term *aliefs*.

To have an alief is, to a reasonable approximation, to have an innate or habitual propensity to respond to an apparent stimulus in a particular way. It is to be in a mental state that is (in a sense to be specified) *associative*, *automatic* and *arational*. (Gendler, 2008, pp. 557).

Eugene Subbotsky (2014) in his article *The Belief in Magic in the Age of Science*, attempts to account for the mysterious propensity of ‘rational’ people to subconsciously retain a fear of evil spells. In his experiments and subsequent texts, Subbotsky advances a theory that dissolves a direct connection between magical thinking and magical belief. Subbotsky states that magical thinking “...is commonly viewed as “the play of the imagination” and thus does not contradict our scientific beliefs” (pp. 3) in contrast he claims “...belief in magic implies that magic might have real-world effects” (Subbotsky, 2014, pp. 3). He also advocates magical thinking as an educational tool because of its effect on learning, asserting that magical thinking is akin to creative thinking. Subbotsky points to cognitive experiments that support this notion, stating that the addition of fantasy into the learning environment can strengthen logical thinking, however, the “...benefits of children’s engagement in magical thinking are more likely to show up in the domain of creative thinking, perception, and memory, rather than in the domain of common problem solving” (Subbotsky, 2014, pp. 6).

Anthropologist, Stanley Tambiah (1990) proposes that a primary aim of magic is the production of dramatic effect, as such magic’s efficacy derives from the ability to create conditions which are meaningfully transformative for the person or persons subject to it. Though Tambiah does not separate magical thinking from magical belief, his location of it within spectacle and effect resonates with many of the contentions put forward by

Subbotsky about the “[f]acilitative effect of fantasy contexts on children’s performance on cognitive tasks” (Subbotsky, 2014, pp. 6). Additionally, Taussig (2011) ascribes three stages to sympathetic magic’s transformative effect. The first occurs when an image retains a relationship with what it portrays. The second establishes the mimetic between the body of the creator and the image. Lastly, the third station happens when the mimetic relationship between the maker and the image extends outward, into the ether. This third station is important to my story because the image, in its finished form, continues to exercise power over those who encounter it. Magic viewed in this way may, or may not, be located within the realm of the spectacle. Either way, it seems to me, that magic could easily slip, like air, between the pages of education. “[B]elief in magic is a fundamental feature of the human mind, which is present throughout history, cultures, and the lifespan, and may have important implications for education and communication in the modern world” (Subbotsky, 2014, pp. 12). How then can we attune this understanding of magic to fit within the cartography of the modern classroom?

### **The Threshold of Despair**

*In this terra estrange magic takes possession of my waking dreams. Find me in this viridescent place where my image merges with the forest. Folded in a sensuous sympathy with time.*

I have associated sympathetic magic with yielding-knowing, because each requires an act of letting go of the mechanistic, but if we follow this path what awaits us? This notion of giving over to the senses feels like pandemonium. What would happen to the kingdom of the real, to the regime of civic education if we could gain the requisite knowledge through the activation haptic acuity? “To *become* and to *behave like something else*” (Benjamin as cited in Taussig, 2011, pp. 23, my emphasis). Yielding-knowing begins with simple acts of letting go, even for a moment, freeing the mind to wander and wonder. Sensing though is not sufficient; it is not the established or normative way to know. Learning in this manner would invite questions, like slippery eels of doubt gliding through the murky waters of the curriculum. How then can educators transform understanding into wonderment using sympathetic magic? Let us propose introducing scientific concepts into the primary school curriculum (5 to 12 years of age) using yielding-knowing. Exercising mimesis by “...breaking down and superseding fixed and superficial thoughts” (Taussig, 1993, pp. 44 quoting Hegel, 1967). Acquiring knowledge by letting go of concepts that situate science within a particular worldview can create a *turn*. With skilful hands, this turn can then be used to guide learners back toward the essence of what needs to be taught and learnt. Mimesis provides a wonder-filled route to learning about everyday things. Like closing your eyes and imagining the dust from ancient stars that make us who we are. Reaching out and capturing stardust in a jar filled with water. Real or unreal, the ensnared dust of timeworn stars begins the learning process, evolving through storytelling into the empirical world of scientific concepts - an educational approach that follows the threads laid down by time.

...the catalog [referring to a register of the elements, for example, carbon, hydrogen, nitrogen, oxygen, phosphorus, and sulphur, regarded as the building blocks of all life on Earth] also demonstrates a clear human connection to the skies. As the famous

astronomer, Carl Sagan said, “we are made of starstuff” Many of the atoms which make up your body were created sometime in the distant past inside of stars, and those atoms have made long journeys from those ancient stars to you. (Hail Science, 2017).

There it lies, waiting, furred within the spell cast by the Alchemists and Magicians of history, imagination and scientific knowledge entwined. Even Sir Isaac Newton in his writing, *Opticks* (1730), accorded seven colours to the rainbow in line with the seven notes of the octave. This similitude emphasises Newton’s foundational belief in “the ancient Pythagorean doctrine of cosmic harmony” (Henry, 2008, pp. 3). Our human impulse to be more than just oneself, to exist in relation to the Other, requires a sentient world where correlating musical notes with the colours of the rainbow releases the imagination to drift amongst the hues and tones of understanding. No charts delineate this territory. This unmapped land proffers an ideal place for learning, and in our waking dreams, we may discover an alternative curriculum.

We spend a third of our lives in thought unrelated to present tasks, and spontaneous thought seems to be as necessary to semantic memory function as sleep. It has been found to be crucial in emotional processing and decision making, and it should be viewed as an essential part of human cognition. (Eschenhofer, 2011, pp. 167).

*In my empyrean dream, I am braiding you this story. The things that we hold fast envelop more than meaning in their grip. That memories require a letting go and cleaving to, like the breath of the ancestors who form the ancient Kauri forests of our dense and knotted existence. I call this magic.*

It has been said that “[m]agic is seen as a false or failed science, and its primary flaw is its assumption that the world of reality functions according to the same principles as our thoughts” (Rosengren, Johnson & Harris, 2000, pp. 2). Fluid and unpredictable, thoughts are difficult to categorise into their constituent parts. We, therefore, perpetuate a cauterising of the imagination in case this mercurial infection should spread.

Dias and Harris (1988, 1990) reported that embedding a logical task within the make-believe imaginary context improved 4- and 6-year-old children's ability to make correct logical inferences from counterfactual premises, as compared with the tasks presented within a normal, matter-of-fact context. (Subbotsky, 2014, pp. 6).

Thought’s, radiating outward like spells, are capable of conjuring comprehension from our senses and understanding from daydreams. “The explanation of magic must be as rich and as vivid as the phenomena itself. It must hang on the twin pegs of description and explanation and sway from one to the other” (Glücklich, 1997, pp. 235). With imagination rubbing the flesh of knowledge raw, I offer you my second story - recalling the magic of clouds.

*In this waking dream, I am simultaneously self and other — United with the wind in a long sigh that crosses the threshold of despair.*

## **My Personal Cloud: The Second Story**

*I have unpicked this filament. In the unspooling, magic's breath, cupped inside the palms of our joined hands, unfurls.*

In 2016, a multidisciplinary team, initially comprised of three air quality scientists and the F4 Collective (of which I am a founding member) shaped a number of participatory projects for primary school children living in west Auckland, My Personal Cloud was one. The question of how to engage children in thinking about air quality required due consideration, after all, what is air? It has mass and weight while being nebulous and unfixed. It has no colour nor smell; it is unseen.



**Figure 1:** *Video Still (from a one-second portrait) My Personal Cloud 2016. © [F4 Collective].*

One year before My Personal Cloud in 2015, the historic Paris Agreement on climate change was signed by nations from across the globe. The Paris accord signalled international recognition of the impacts that our warming planet is, and will continue to have, on the animate and inanimate world we inhabit. From a human perspective our young, the children of this planet will increasingly be the most vulnerable to anthropogenic climate change (The United Nations Framework Convention on Climate Change, 2017). What maps can we devise to aid our navigation of these flooding waters? I suspect not maps that depend on true north, with a meridian line that divides us. These maps will need to be reversible, skin touching skin, (the welkin reaching down, entering our lungs and touching our very core) sensory maps.

Allegorical maps predate the development of imperial cartography. Though numerous, few are more famous than the seventeenth century metaphoric *Carte du pays de Tendre* of

Madelaine de Scudéry. These maps of love hint at the subversive potential for images of territories to disclose the likeness of terra sentient (this *feeling-land*). However, I am not suggesting a cartography drawn from map-lines, a two-dimensional imitation of the earth, though it would be sufficient for the creation of sympathetic magic. I am hungry for more than an impression; I desire a kinaesthetic map. A recording of the tactile passage of time more in keeping with the fluid nature of the essential substance that supports our cohabitation, the air we breathe. "...the haptic involves a sense of reciprocity. ...Conceived as such a pervasive enterprise, the haptic sense actually can be understood as a geographic sense in a global way" (Bruno, 2002, pp. 254).

## **The Colour Green**

*Reciprocity, this breathing in and out, requires a kinship of enchantment, a visceral to and fro between the border of life and death.*

My Personal Cloud enfolds a human history captured in haptic interactions, a three-dimensional topographic map of emotions (Bruno, 2002). Scientific knowing seeping in through the haptics of smell, this wondrous touching and being touched by scent. Diana Young (2005) in her essay *The Smell of Greenness: Cultural Synaesthesia in the Western Desert*, discusses the interwoven correspondence of our perceptions. The colour green and the analogous smell of the land after rain creates a colourised scent that inhabits the body. "The greenness - odour synaesthetic correspondence underpins fundamental concepts about the creation of time and the nature of personhood" (Young, 2005, pp. 73). The coiling of senses, suggests Young, establishes a mimetic form of synaesthesia. Coupling sensory experiences constitutes a sentient map-making, the navigation of which facilitates a crossing over of body and land, the passage of one into the another. Smell being that indefinable essence which escapes from matter (Howes, 1987, Gell, 1998). With smell, the olfactory epithelium stimulates electrical impulses connected to the limbic system triggering emotional responses and initiating memories.

Smells are thus ideally suited to expressing the notions of contagion or action at a distance. And the reason for this, ... is that they are always 'out of place', forever emerging from things, that is, crossing boundaries. In this respect, smells are much like the subjects of passage rituals: they "cannot be defined in static terms." (Turner, 1967 cited in Howes, 1987, pp. 408).

## **A Sensory Balm**

*In this state of cleaving to and a letting go I unclasp these last traces of you, the nucleus of your memory concealed within the exhalation of my breath.*

Standing on the rooftop of Te Uru Waitakere Contemporary Gallery, situated on the rim of the Manukau Harbour, the Waitakere Ranges at its back, the city of Auckland (New Zealand's largest city) sprawling below, a group of nine-year-old school children draw breath. Using their noses to sniff for memories. Handling tiny bottles filled with common

smells, they call out names for material substances whose essence is released as odour. In this liminal state of sensing, air is transformed (in part) from abstraction to narrative. Air, invited in as scent, expands outward as sensory journey. Returning to the education space adjoining the gallery the students talk about the atmosphere, their collective imaginations taking hold. Proceeding to make, their hands manipulate materials envisioned as metaphors for air. Organic sheep's wool donated by a local business is the matter from which they fashion their personal clouds. Encircling their simple cardboard armatures with feathery fleece, every cloud becomes a manifestation of its creator. The process of constructing emplaces the maker within a tangle of affective experiences (Pink, 2017). The child's sense of the incorporeal nature of clouds, their voluminous size, and ceaseless motion, the depth of the heavens, is reconfigured. A "sensuous sense of the real" (Taussig, 1993, pp. 16) these mimetic clouds settle into the personal space of the child, they embrace the unknowable.

To get hold of something by means of its likeness. Here is what is crucial in the resurgence of the mimetic faculty, namely the two-layered notion of mimesis that is involved - a copy or imitation, and a palpable, sensuous, connection between the very body of the perceiver and the perceived. (Taussig, 1993, pp. 21).

The clouds swathed together suspended from the roof of the gallery became effigies - clustered copies, forming shadowy banks, altering the makers understanding, the physical environment and the audience. Magic made manifest; it's transformative power emanating through interconnections, secret sympathies entwining maker, imitation, site and the other - their effect spooling out beyond the confines of the gallery, uniting the "viewer with the viewed" (Taussig, 1993, pp. 24) in a sensuous embrace. Correspondence between the vagueness of air and the fathomable topography of the hand-made creates a visceral, tactile way of knowing. Sympathetic magic (imitation and contagion) threads through the mimetic object, inhaling power from its source, the enigmatic air that envelops us. These child-sized clouds levitate above the harsh, ostensibly concrete space. This human-made environment is angular; it reverberates with a brassy din. Introducing the clouds into this cornered landscape altered the acoustic territory, absorbing sound, and softening the visual field, enticing the outside in. Teenagers, strangers in this land, began to meet after school in the gallery sitting with their friends under this imitation sky. Visitors to this new world came and stayed, to such an extent that the gallery positioned bean bags so that people could lie back and look up. Inhabitation, a dwelling-in, transformed a sterile place. Contagion, released from the floating assembly, yielded an aural landscape which digested sound, the inherent noisiness of the material world dissipated in silence. A sensory balm, borne from imitation, altered the physical and metaphysical environment creating a felt relationship. These drifting miniatures, cloud allegories, spoke of subject and object, self and other, of sciences instrumental dialogic and the ineffable power of nature. As archetypes, they opened up the narrative space of meaning. Taussig (1993) discussing Walter Benjamin draws on a small piece of text located in Benjamin's writing *Berlin Childhood Around 1900*, that speaks of the mimetic properties of clouds.

I did what I had to do to gain a foothold in life. Early on, I learned to disguise myself in words, which really are clouds. The gift of perceiving similarities is, in fact,

nothing but a weak remnant of the old compulsion to become similar and to behave mimetically. (Taussig, 1993, pp. 95).

### **Folding, Pulling Apart, and Knitting Into**

The clouds gathered in multiples reinforced the participatory nature of the project. Alone, one might hold wonder hovering above a bed or classroom desk but massed they are so much closer to the original, highlighting the potency of interrelatedness. Secreted within the clouds are other forms of sympathetic magic, for example, poiesis. The act of making something born of the hand, while playful and evocative, is also a yielding-knowing. Each object different in form seals within itself a giving up, a yielding to the air through the act of assembling its likeness. This is a sensory language, not a verbal one. Learning to form and construct the armature and to bind it with wool required a level of dexterity. Many of the clouds were loosely woven and unstable, apt to come adrift. This lack of perceived ability to make a 'sound' object, a solid copy, was one of the most beautiful aspects of the mimetic. Unconsciously the children mirrored of the 'true' nature of clouds, their constantly moving form. "Sometimes clouds are very unruly. They appear to be a little of this and a little of that" (Spaceplace, 2018).

Milky bonds of attraction, borne along on the earth's atmosphere, clouds call forth a sensuous knowing; folding, pulling apart, knitting into, twisting, squeezing, impelling, and coercing. Activating materials in a mirroring of the original transform's haptic exploration into scientific understanding. "The air, once the very medium of expressive interchange, would become an increasingly empty and unnoticed phenomenon, displaced by the strange *new* medium of the written word" (Abrams, 1996, pp. 254). An intersubjective conversing, a contagion that begins as a breath of air and winds itself into a material conversation through the touch of tiny hands. Forming and reforming meaning through a sensory narration that conjures strange places within which to dwell, in opposition to "...a directional, nonreversible view of history [that] implies a past in which contemporary technologies and social arrangements were less strongly developed" (Thomas, 2014, pp. 18).

*Unpicking the map of time so carefully crafted under the scrutinising eye of the cartographer. Breathing in as I talk, I am speaking backwards, filling up with the world, as both an object and a subject.*

Drawing inward an imperial European history that has determinedly placed humans at its centre. Unspeaking the words that have been spoken, untying this history in a magic reversal. Achieving this may require a darker form of sympathy for one who speaks backwards is casting a spell, unbuttoning the sea from the land, letting go. Filling the world with shadows where written words loosen their suzerain hold over knowledge - words, map-lines, histories all running backwards. "This landscape of shadowed voices, these feathered bodies and antlers, and tumbling streams - these breathing shapes are our family, the beings with whom we are engaged, with whom we struggle and suffer and celebrate" (Abram, 1996, pp. ix).

## **Conclusion**

Though not journeys end, this terrain where “shadowed voices” (Abram, 1996, pp. ix) whisper seems a good place to rest awhile and consider. The movement of beliefs through history, a slow excoriation, the scraping of skin from the surface of knowing. Searching for certainty that adheres to the rules of quantifiable empirical testing serves some well. However, beyond the boundaries of measuring and observing lies the imagination, vital in this empirical world. The ability to postulate scenarios as complex as the Big Bang Theory, which attempts to explain the existence of the Universe, requires imagination. The filaments of knowledge, endlessly knotting, form a tangled knowing. In 2018 cosmological researchers posited “...the hypothesis that the Big Bang was actually a bounce preceded by a long period of contraction” (Wolchover, 2018). Part of this matted world is mimesis, a repeating rather like a pattern that forms on the membrane of knowledge. This incessant re-covering “...not similar to something, but just *similar*” (Caillois, 1984, pp. 30) opens a chink within which we can wedge magic. Learning is not an easy task, it takes forever until the last breath, and when that breath has ceased, it is picked up by another. Like the Big Bang Theory starting as an expansion and now taking the form of a contraction - the exhalation and inhalation of a Universe. Eternally tugging at the edge of time we are wandering in a dreamlike waking state. Voyages undertaken in daydreams have been regarded as a slippage from reality, however, we now find that these journeys facilitate semantic memories necessary for everyday knowledge acquisition. That letting go, may bring us closer to the essence of what we need to comprehend. Perceiving coexistence is not the prerogative of the eyes, touching and being touched gives sound to colour. This recourse to the sensorium offers us a means to situate the landscape of education within the unfamiliar and the curious. Connecting the self to the cosmos through simple acts that bear traces of wonder. Magic conveyed through secret sympathies, necessitates an “...unstoppable merging of the object of perception with the body of the perceiver” (Tausig, 1993, pp. 24). Casting spells in a land without shadows.

*In early 1837 I arrived here, inside the belly of a dream, and when I die, I will return to the air from which I was born, fragments of stardust, this is our story.*

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