Barber Swindells

Mining Couture

A Manifesto for Common Wear
Essays

Margaret Dominiak
1972 National Coal Queen

Inhale/Exhale

The Jacket

Ruminations with Shelly Goldsmith
In 1971 my husband, who, of course, worked in the mines came home from a social event and said, "Oh, by the way I've just entered you into a competition", the Yorkshire Coal Queen competition, which I had never heard of before. It was a competition within the mining community which was held annually at a dance hall. This year it was at the Mecca in Wakefield.

It was just a dance at the local Mecca and four girls were picked out of the competition, one of them being me, one of them being my friend Susan and then there was a couple I didn't know. We were all put forward to the Yorkshire final which was at the miner's gala in Thornes Park, Wakefield. We didn't live so far away from Wakefield so we got our glad rags on....

All women think about what they wear, especially if they are going into a competition. I lived very close to a lady who used to have a dress shop and I always remember she was a bubbly lady and I used to talk to her as a teenager. The shop was in the town of Normanton, right in the centre. I remember saying, "Right, I'm going in for this competition. What have you got in that I could make a splash, make myself look really nice?" I went through the rails. In the heat of the moment found my own thing, which was a petticoat type dress with a bib. In those days they were all in, but when it got to the Yorkshire final I had to buy something new. So I went to our neighbour's dress shop and she fitted me out with turquoise shoes. I bought a big white dress and it was very short because the mini skirt was in and it had big puff sleeves with different colours—turquoise, browns and oranges. It was absolutely fabulous... I loved that dress. Then I looked for earrings, which were a perfect match to the shoes. I gave a bit of thought to the Yorkshire competition!

On the day of the Yorkshire final there was Arthur Scargill in the park, you know, and there was the band playing and crowds sat watching the competition and beauticians there to make you up and judges to judge the competition. They picked three out. My friend Susan came third and I didn't know who came second, and I came first which meant I would be in the national final! From June 1972, I was Yorkshire Coal Queen and then I entered the national at the end of September so there were three months to get ready for that competition.

What am I going to wear for this? So me being me, I don't buy the first dress I come to. I want a bargain but it must be of good quality too. So I went to Leeds and there was a big store there, Selfridges, one of the big stores, when Lewis's was in its heyday. The July sales were on and I went in and saw this white dress gathered at the front with like diamante, long and sleek. And I saw this dress in the sale and it was something like £40 proper price and I think I got it cheap, cheap. I thought that was ok, white, diamante. I was quite a stunner in them days because I had long hair and I thought if I put my hair up that would be ok. The same with the bathing suit, I found a white one. I don't know why it was white but I had to find white shoes, so I went to Doncaster thinking at the time there were big, thick-heeled shoes that didn't do anything for your legs. I thought these won't do and somebody said there was a shop in Doncaster that still sold stiletto heels. The stiletto emphasised the calf of your leg, although this wasn't just a beauty competition. It was all about the personality of the girl and how she tackled her tasks with the National Coal Board and whether she could be a celebrity and an ambassador for the Coal Board. So there were a lot of things to take into consideration. Anyway, I found all the gear (on the cheap!) and packed my case and we were off to 'Skeggy'.

We went on the Coal Queen train to Skegness. There was a parade through the streets, parading the last year's winner, who was Judith Hargreaves, who I made a very good friend of, and of course she was on the float.

The Saturday night was the competition. We had to be in our places. We had got our numbers and it was a big theatre, with pictures of each girl. They didn't
have video in those days, so they had slides coming up when the girl went on stage and we had three appearances. We had one with the evening dress, one when we were interviewed on stage and then one with the swimsuit. Then all the girls came on together as a finale at the end.

Mick Milligan was the compère of the miners’ camp and he stretched out the announcement of the winner, asking, “So who is going to be the Coal Queen of 1972?” and everybody was waiting, quite a big audience really. There were cameras and news cameras and everybody there waiting. The thing about it was that I forgot to put my number on my arm— I was number 12—and I thought I haven’t got a cat in hell’s chance here so I’m sat back in my chair. There was a pretty girl from Wales, I remember her, she was only 18 years old and I thought she’s got a good chance of winning—so when they called me out, I couldn’t believe it!

We had had this interview a few hours before and they were looking for somebody who could talk to people, who could represent the Coal Board, who had a sense of humour, lots of things they were looking for. Derek Ezra, who was in charge of the Coal Board at that time, and his wife were heavily involved in the Coal Board too. There were six judges altogether, three men, three women and they were firing certain questions at us and they knew you could cope with the workload. Basically I think I won the competition because I was more mature. I was 24 years old, which meant I was one of the oldest girls in the line up. I think that my maturity and ability to cope with the work fixed it for me.

When I was National Coal Queen I used to try my best to do anything that the Coal Board asked me to do because I enjoyed the work and I enjoyed the people that I was dealing with. I went to Acton Hall Colliery to do an underground trip and he was sat at the top in miner’s clothes and I was dressed in a mini skirt before I got changed. I’m just chatting with him, we were having a bit of a laugh and I’m just pointing at him and one of the photographers got a fantastic photograph.

They brought this rose out called ‘The Living Flame’, so I had to go and have some photographs taken and I chose the dress that I won the Yorkshire final in, the little white one with the fancy puff sleeves and it looked fantastic against the colour of the roses. The Living Flame had the orange colour that I had in my sleeves. And of course everything that I did was in the Coal News. Everything was publicised, so I had a fantastic time in all.

There were Coal Queen reunions in later years. Yvette Shilton was the girl who won in 1976. That was the first year it was held in Blackpool at the Imperial Hotel. So it was getting bigger and bigger as the years went on and so I wanted a really nice dress. I put a lot of time in thinking about the colours and whether the dresses suited me.
I bought a blue floral dress for the reunion in 1976. It’s what I used to call a handkerchief dress because it is constructed in layers of fabric like handkerchiefs going into a series of V’s into the centre of the dress, layering down to the floor. It also had turquoise in the floral (turquoise is my favourite colour) and I think that’s what attracted me to it, as it stood out against my strong auburn hair. It was made of light chiffon, I like chiffon and I just thought it was very striking at the time, which was why I bought it.

— Margaret Lister (formally Dominikak), interviewed by Professor Paul Ward, Jun 2012
Inhale / Exhale

inhale

“When you write, you lay out a line of words. The line of words is a miner’s pick, a wood-carver’s gouge, a surgeon’s probe. You wield it, and it digs a path you follow. Soon you find yourself deep in new territory. Is it a dead end, or have you located the real subject? You will know tomorrow, or this time next year.”

exhale

At the Hayward Gallery in 2009 the French artist Annette Messager installed a room of breathing fabric forms. The 2006 work, titled Inflated-Deflated, is described as a “wheezing, heaving mass of inflatable body parts and fanciful creatures.” The rhythmic movement of Messager’s fabric organs and limbs offered mesmerising viewing.

Viloma Pranayama requires the yogi to consciously pause the exhalation of breath, creating ‘space’ in the rib cage as the lungs deflate. Breath control is a notoriously difficult exercise: one part mental discipline, one part physical control. Pausing breath is a luxury, a mental challenge tamed by those above ground, living with air to spare.

In 2004 Annette Messager’s installation Sous Vent (Wind Back) appeared at the Couvent des Cordeliers in Paris. Within the space of the former convent a low level black fabric canopy was activated by fans. Beneath the billowing fabric surface an illuminated landscape of plastic limbs and masks moved in and out of focus. The cycle ended. Fabric settled, lights below extinguished. And then the air arrived again.

inhale

In 1976 an Auxiliary Ventilation Unit was fitted at the Snibston Colliery as part of the national noise abatement regulation. The ‘silent’ fan lives above ground now. In its former life, the fan would have been crucial to the circulation of air underground, an iron lung of sorts. Barber Swindells’ Ventilation Dress takes on the form of this equipment. Air pumped into the sculpture gently seeps from seams in a cycle of inflation and deflation that makes the form feel quietly alive.

exhale

Outside, on a bitter winter day, the Auxiliary Ventilation Unit lies frozen in time on the museum grounds. It is one of a number of oversized shapes, extracted from below the earth in an effort to give us a sense of the scale of machinery that existed beneath our feet as part of the complex network of tunnels and tools that made up the mine. Above ground, the equipment dwarfs the body. But it exists in paralysis now—the motion and noise of previous decades of production difficult to imagine.

inhale

Inside, my breath warms again. The rusted metal fan is replaced with a floral print pattern: innocent, light. This material is a counterpoint to the darkness of the mine’s underground-scape.
The pattern is far from accidental, first appearing on a summer dress worn by the 1972 National Coal Queen, Margaret Dominiak, at the 1976 Coal Queen Reunion. In Barber Swindells’ version the original floral repeat is disrupted, comprised of snap shots from the pattern, noticeable in the sharp lines of the photographs edges. It is a new type of scrapbook now: a photo album reshuffled.

The dress once bore witness to another side of mining: a community bound together by a distinct, shared identity. The lightness of this pattern—the clear sense of celebration—represents the antithesis of work clothes. DH Lawrence, for instance, writes of his childhood memory of “great rolls of coarse flannel and pit-cloth which stood in the corner of my grandfather’s shop when I was a small boy, and the big, strange old sewing-machine, like nothing else on earth, which sewed the massive pit-trousers.”

Can we compare a seam of coal to the seams of cloth? I imagine coal seams must have a grain and cut like a cloth; ways coal will bend and chip and go and ways it won’t. Perhaps anything natural has that sort of history to it, how it is laid down. In the expanded field of craft, many would argue that a computer programmer is the craftsperson of the current generation. But there is also something to be said for the operators of mechanical tools—the interfaces—who accumulate their own forms of tacit knowledge. Craft does not have to be rose-tinted-knitting-needles-by-the-fire…

Ventilation Dress suggests a domestic shape. It belongs to the home: a place of rest and recovery from the miner’s labours underground. The close communities of the collieries have long vanished from the social fabric of modern lives. But amidst the predominantly negative stories we associate with a life of mining, this is a narrative largely overlooked: a sense of place and purpose, solidarity born by a community of shared risk and labour.

I can’t see where I should rest myself within the Ventilation Dress. I can see the beginning of a seat, the fold of an arm, but the form then changes and my entry point is illusive. Perhaps this is only fair. This is not my experience to share, but a history to learn.

— Professor Jessica Hemmings, February 2012

The Jacket

Textile Art Curator June Hill and Barber Swindells are at the National Coal Mining Museum for England (NCM), Wakefield. We are in the museum archive surveying a man’s jacket that once belonged to a miner. The jacket is laid upon an inspection table; we wear white cotton gloves so we can handle the jacket.

The jacket is evocative of British industrial heritage and a historical period dominated by the heroic toils of heavy labour. The jacket has a number of all-over stains, which look like wax drippings and this may give a clue to the era it was made in. In the early nineteenth century it was common to use candles as a light source, strapped to a helmet or hat. Metaphorically, as a candle of thought, we too now view the jacket through our own flickering thoughts and perceptions.

At the risk of sounding insensitive we acknowledge a certain type of ruinous beauty from the jacket’s rich history. Other than the wearer(s) memory (which we assume is no longer with us) it is a history that will always remain unknown, but something of the miners’ daily experience remains imprinted in the cloth. June states that it is not uncommon in a museum archive to have items that don’t have a great deal of provenance and you are left to imagine and make deductions upon the item’s history and realise it is from a very different time. We reflect on why someone would keep it when it is so thrashed, threadbare and ragged, and seemingly could fall apart if one tried to wear it again. As an item of work clothing it may not have been regarded very highly; instead of disposing of their personal everyday clothes when new ones were bought, miners would often wear these as pit clothes. They would travel to the pit, work their shift and return home in the same clothes. The clothes would be dirty, damp and smelly and the miner would have to wait until he or she got home before being able to wash in a tin bath in front of the fire. Normally old work clothing such as this jacket is thrown away and rarely finds its way into a museum archive, which is why as curators and artists we become excited about its ‘narrative of wear’.

It is difficult to date the jacket because this type of clothing didn’t change for decades. Of course there is forensic technology today that could locate the date of the jacket exactly but that may feel like an invasion into its qualities of human spirit; all three of us are drawn to the mystery of the jacket, that the not knowing may have as much emotional and subjective value as scientific knowledge. It may have once been a valued personal fashion item and then passed through generations of family members for years before ending up as work clothes. The buttons down the centre of the jacket seem to have been sewn on at a later date when compared to the condition of the jacket itself, which along with all the alterations, darning and mending, suggests the jacket might have been worn by different owners over a period of time.

June reflects upon the beauty of not having the information as this makes you work harder in trying to ‘relive’ the jacket, to use your imagination and embody the history of the cloth, to summon a past life once more. In this sense, weaving yourself into the material reveals an altered state of being in time, to absorb the expanse of time in cloth for a deeper reasoning to our inspection. Our perceptions seek a union between past wearer and present on-looker; we each suggest how viewing the jacket makes you reflect upon your own clothes, and how we wear them and use them, and leave a trace in cloth of our lives, a tracing of our history and imprint in cloth of our particular bodies.

The jacket wearer may well have had to literally peel the jacket off his or her back each evening because of the accumulation of sweat on cloth and due to the physical nature of the work in high temperatures. The additional fabric inlays on the back of the jacket, and the close proximity of the jacket to the skin indicates the garment almost became a protective second skin. We acknowledge the wearer and the jacket have both been pushed to extremes; the actual material construction of the jacket has been pushed as far as it can go.
The work clothes that would have been used for coalmining might not look prepossessing for somebody else but a woollen jacket may well have a quality the miner would value because it sustained a body in a harsh environment.

We can only imagine what this man, boy or woman went through each year, but we imagine that they would be thinking about the different types of coal they were trying to extract, about production and salary, and about trying to avoid serious injury. The notion of craftsmanship arises in thinking about the relationship between mending and altering the jacket, protecting the body, and the repetitive process endured in extracting the coal. This may not be considered a pretty or refined craftsmanship, but nevertheless it required a real sense of skill in using the fabric to prevent sores, bruising and even injury. The narrow tunnels probably contained lots of jagged edges, it is easy to imagine how parts of the body can be bruised by the constant crawling and knocking against the hard coalface, particularly in tight conditions. There are all sorts of repairs and fabric inlays, some stitched with twine and some with woollen thread that we imagine more than one hand was involved in mending and darning. The jacket has probably passed through many hands and different lives over the course of its life.

June suggests an emotional value to the jacket, a family may have held onto the jacket for posterity, or if the person died in an accident then it is a valued item by which someone may be remembered; a kind of reliquary, to somehow keep a loved one in close proximity. We are aware of overcompensating for the condition of the jacket, and our anxieties are probably unfounded, but the jacket does contain a real sense of cost in terms of the body, and also in terms of a family and the home absorbing and enduring the physical nature of coalmining; of children breathing in dust, of the endless battle with laundry, and of the real injuries sustained year after year. We imagine the tenacity of the wearer and how that is manifested in the physicality of the jacket, the continuous rubbing on all parts of the torso and the sheer physical drive and determination to just keep going day after day, down narrow seams digging and picking at the coalface. We know it was their livelihood, but these people probably did not have much choice beyond a life down the pit.

We notice a rusty safety pin stitched on to the lapel and ponder the nature of the hole across the back of the jacket, perhaps the wearing of a knapsack containing a metal lunchbox or a heavy tool bag. Once at the bottom of the shaft the miner had to walk great distances to and from the coalface and this could be quite an uncomfortable journey. The jacket is tailored and has a lining that appears to be fine cotton, we imagine when new it would have had a sense of style. This miner’s jacket also has architecture about the way it was constructed and we imagine how the robustness of the jacket’s inner construction equally reflected the strength of character of its previous wearers. The sleeves have seemingly been cut at the cuffs or they may have been cut or sheared by the action of digging or collecting coal. Perhaps they were cut to ease the wearing of large industrial gloves.

There is a papery lining to one of the pockets, and the material of the pocket itself seems different to the rest of the jacket, something utilitarian and customised in the way the pocket has been hand stitched onto the jacket; perhaps an additional private place to store personal possessions like the tally, a photo or a letter. A quiet moment of reflection; the jacket evokes profound feelings, to seek parity of existence over death, peace over toil and a sense of wonder over being and time. Dimly, we witness a human reality laid cleft to the core through dust and torn cloth. We slowly wrap the jacket in tissue paper and return it to its storage box. In silence we watch the box being returned to the museum storage racks, where it comes to rest alongside all the other coalmining artefacts.

— January 2012
Barber Swindells visit the textile artist Shelly Goldsmith in her studio in Ramsgate. The studio contains a table and in the centre of the table sits a large lump of coal. The coal was a birthday present for Shelly from her husband. As part of the present Shelly was able to choose the coal by visiting an open-cast mine in Wales. Also on the table is a computer, and on the computer is a series of images of Shelly selecting her lump of coal. In one image she is standing on top of a spoil heap with two miners, they are looking across the open-cast mine; they each wear overalls and a helmet.

SG Shelly Goldsmith CB Claire Barber SS Steve Swindells

SG So this is the coalmine where I selected the coal from... you know in this photo you can see the seams in the landscape. From the high viewpoint on the ridge you could see the different layers of coal, and different geological strata. It was like looking at a history of time. I was seeing the mine as a burial ground, and a burial ground that has a direct relationship to the geological aspects of the landscape. The landscape, and the coalmine within it, became a metaphor for the body. I also perceive the mine as an aspect of the interior self, which might reference parts of the body. So the open-cast mine was a record or snapshot of time, and yes, how the body changes through time.

A lot of my work utilises Rorschach prints. Rorschach is like a hidden visual code that allows clinical psychologists to interpret the emotional wellbeing of individuals. The commission I've just completed for Public ArtHouse in Tunbridge Wells is all about text scripted in short-hand, which some people can read and others can't. The point of all this is you have to dig deep into the self to understand how we live and see the world. In relation to the Rorschach prints I've been absolutely fascinated with the patterns of seams and darts on garments, I imagine them as a door to the wearer's psyche. The seam is the point where your emotions flood out. Yes, I think the seam in clothing is a join where something of a person's interior being may seep into the cloth. These bits of cloth, and where they join, appear like a closed world, and maybe I read too much into them, but in an imagined world a seam or darts can be a point where human emotion floods out to leave a trace or stain on the garment.

I've also worked with The Forensic Science Service when examining clothes and I wondered what it would be like to look at stains from another perspective, to think how another discipline may scrutinise or read a stain. In this respect I was thinking of the open-cast coalmine as a stain on the landscape. So when I was standing on the edge of this mine with these two miners I was thinking how we are all looking at the same thing but probably seeing it quite differently. I was thinking of all the dead trees and animals that are buried in this ground... I was thinking of lots of buried histories. Histories of sentient beings buried in geological histories.

SS ... of past living beings becoming coal, like this piece on your table. The different coal strata you mention remind me of entropy, and of Agnes Denes' *Book of Dust*, where the amount of thermodynamic energy eventually reduces all living things to dust.

SG Yes, if I understand this correctly every living thing on earth is being worn away and will in time be turned into dust... so we too will also become part of the earth. What fascinates me about seeing the coal strata is the idea of past life, of animals and forests embedded in geological history, of trying to understand or imagine what has taken place on earth, on this particular spot (pointing to the image) where I'm standing. When you think of the natural geological events that have unfolded in this place in Wales it's quite remarkable, and then here we are, opening the ground up and extracting coal. As artists, you know, we have the capacity for our imagination to take off, and I imagine this lump of coal on the table as alien matter. I think it is from another time and perhaps from another dimension of the world from the one we inhabit today. In this sense I see coal as such a provocative material.
One thing that has always struck me about the Welsh national anthem, is its title, “The Land of my Fathers”, which makes me wonder if it’s a conscious lyric about literally acknowledging that their ancestors make up the earth which the present coalmining communities inhabit.

Yes, it’s about history, people and place. Your Mining Couture project reminds me of how society and the media have forgotten all about coalmining and the communities around it. Again I’m thinking about life and death and how we have all that machinery to keep us alive and yet accidents still happen. We can’t choose to be spared. I’m thinking about those Chilean miners who were recently trapped and how it brought the plight of mining back into media attention; when you see how far underground the miners are working it’s just an amazing thing to consider this is someone’s daily life. … We can’t begin to imagine what these miners must have been feeling when they finally surfaced after such a long time of being trapped underground.

We have this recording on CD called Miners’ Stories, and there is one miner talking about how he sees beauty in a rose petal, and how he loves flower arranging. Above ground they all seemed to be looking for something to endorse life.

Yes, I think they were looking for a delicacy in life and nature that was simply not attainable deep in the coalmine; perhaps their senses towards life were richly heightened above the ground by what they had to endure below ground.

Well, there seemed nothing delicate about the ravages of the open-cast mine, and I imagine the deep mines must equally be harsh uncompromising places. You know, it takes millions of years of layer upon layer of dead matter to develop and we exhaust it in a relative short space of time; I think the exhaustion of coal is a sign of our greedy civilisation.

Chris [Shelly’s husband] was saying yesterday how technology might be able to resolve our resource needs in the future but he also lamented how everyone today inhabits a technological private space when walking down the street, they were all either plugged into personal stereo or talking and texting on their mobile phones. Through technology people seem to be able to ignore those around them; so perhaps even the idea of civility is changing through our engagement with technology. The irony is technology might appear as an indicator of civilised society but it seems to encourage uncivilised behaviour, or how we respond to others in public spaces.

… so technology might bring forth uncivilised manners? I think this is interesting because the notion of civility is something we have nurtured and developed over a period of time and now there is a danger that we may erode it through our desire to be in a personal technological space.

Time and again I see people on the bus or in a shop queue seemingly refusing to make eye contact because they are talking on the phone to someone else and I see this contributing to a breakdown of our communities. Technology has allowed us to speak to someone in another part of the country or another part of the world, [Goldsmith’s parents and siblings live in the US], which is amazing but sometime it seems as if we have lost the capacity to acknowledge the person next to us. You know the miners depended upon each other underground, for their safety and also for achieving production levels that kept the mine operating. This interdependency appeared to translate itself above ground so the community worked for each other, and I can imagine how they were very close-knit.

In this commission we became interested in work wear and how particular features of work wear gave the worker a sense of identity in the community, such as the milkman, postman, nurse…

Well interestingly one of the uniforms today that still commands a level of tailoring is the policeman’s uniform. I like the fact they still make details like the lapel and the crafted pockets on the shirts, which I guess is not ultimately required now? My next door neighbour is a nurse and she looks fantastic in her uniform. I think it would be a shame if clothing details should be reduced for streamlined purposes.

People wearing contemporary uniforms will claim manmade fabrics are easier to wash and drip-dry but they use so much chemical production with these
Mining Couture

Ruminations with Shelly Goldsmith

fabrics it’s horrendous. Dumping manmade fabrics in landfill is a real problem, these polyesters are derived from plastics and they will not break down in the same way natural fibres would do. It makes me wonder how manmade fabrics in landfill will affect future earth strata. I suppose there is a move now to use biodegradable nylons and polyesters but even so we’ve already left a lot of non-biodegradable fabric in the ground. One can imagine a multi-coloured layer of nylon shirts, crimplene trousers and polyester dresses pressed into our land.

The sticking point in all this is we all get seduced into consumption, into buying more clothes. In this studio I have baskets full of second-hand clothes that have hand-stitched repairs. I think that the sign of the hand on the garment through sewing is important, which I’ve noticed people seem to be doing less and less. Today if clothing becomes torn or damaged people tend to discard it. In these second-hand clothes you can see how the wearer had a personal relationship to their clothes through sewing alterations and darning, and they had a sense of craft in making their clothes last longer. (pause).

So is the idea of the book to ask “where is the art in Mining Couture?” I’ve often asked myself where does a piece of work start and finish.

CB That question is something that is very familiar to Barber Swindells. We had lots of discussion on “where is the work?” and “where is our collaboration?” in relation to our different backgrounds and individual past work. In brief, we have both worked the question itself to maintain a sense of openness of what is possible in the type of commissions we have been engaged in.

SS Initially we used to meet at work to talk about what we were trying to achieve, we would spread files, images and notebooks across the cafe table, and so we referred to ourselves as tabletop artists. We would video and document these meetings and acknowledge how a conversation over a cup of coffee is itself a kind of sketch. We have become quite disciplined about recording each meeting but it makes me wonder if the consistency of video recording is somehow defaulting to everything we do has to become a notional piece of work or ‘artefact’? My concern is whether there is a place in practice which will always resist reification.

CB I do like recording the meetings; I think it’s important in keeping track of where we are in the work. Initial discussions centred on tracing something that already exists, something that is already out there whether it is an object, person, community or particular narrative. So to answer your question Shelly, what is of interest in Mining Couture is the point where a frisson between mining and fashion starts to emerge…and how that unpredictable sense of rub between different entities provides the energy for a potential new thing to emerge, whether it is physical, technical or conceptual.

— December 2011

1 The Rorschach inkblot test is named after Swiss psychologist Hermann Rorschach. He created the inkblot test in 1921. Rorschach is a psychological test in which a person’s characteristic and emotional functioning is tested in response to viewing ten images. The intention of the test is to provide data about cognition and personality variables.

2 To paraphrase Denes… entropy is forever increasing in the universe. Life is powered by a sun that has lived millions of times longer than the humans and the cycles we see are tiny ripples in a system that takes billions of years to run down… every time a thing is born and later dies and decays, the world does not return to where it was before the cycle.

3 “Old Land of My Fathers”, (Welsh translation: Hen Wlad Fy Nhadau) is the national anthem of Wales, more commonly referred to as “Land of My Fathers”. The words were written by Evan James and the tune was composed by his son James James in 1856.

4 The rescue of 33 miners from Chile’s San José mine in May 2011 after 69 days trapped underground was a triumph shared with the whole world through live media coverage.

5 Mines of Memory, oral history CD, Snibston Discovery Museum.