O Hudd Ei Ddoe

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Professor Myron Wyn Evans



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Authors OnLine Ltd 19 The Cinques Gamlingay, Sandy Bedfordshire SG19 3NU England

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THE PROLEGOMENON: FAMILY HISTORY AND GENEALOGY

(Collected Family Charts are found on www.aias.us on my personal page accessible from the home page by clicking on "Myron Evans"). Appendices are being added gradually with details (see end of this file).

In the direct line, my paternal great- great- grandfather Edward Evans is recorded in the 1851 Census as having been born in Llanigon in Powys in 1812. However, this is a recorder's error as the correct date from other records should be about 1802. My cousin Chris Davies kindly provided his date of death, 1874, in Cleirwy. Llanigon is a small village near Gelli Gandryll (Hayon- Wye), founded perhaps in the sixth century by the British Celtic St. Eigon. It was a centre of Dissenter learning for leading figures such as Howell Harris and William Williams Pant y Celyn. The 1841 Census records a labourer called Edward Evans, aged 40, living at "Great Hendon" in Llowes, just across the River Wye from Llanigon, and just south of Cleirwy, with two sons, Richard aged 12 and William aged 11. Also recorded there is Esther Beavan, aged 60, possibly the mother of his deceased wife. In the 1851 Census for Cleirwy he is recorded as aged 39 (sic), but from other records this as a recorder's error, and the age should have been 49. At the time (1851), he was a widower and is recorded as a farm servant working on a 70 acre farm called "Cwm" owned by 35 year old James Morgan and situated near Cleirwy. The latter is recorded as employing one labourer, Edward Evans, and James Morgan originated in Brilley in Herefordshire, just across the border and five miles from Cleirwy, now in Powys. Edward Evans is recorded as a widower, although the entry ("Widr") is very difficult to read. My great- great- grandmother Mary Ann Williams Cleirwy was erroneously recorded as then aged 19, born 1832, and

was a house servant in the same farmhouse. Parish records show that she was baptized on 20th June 1830. In the 1861 Census, Edward Evans is recorded as an agricultural labourer aged 57 (sic) but should be 59, married to Mary, aged 29 (consistently recorded with the 1851 Census when she was 19). They had a daughter Sarah aged 8, and lived in a cottage recorded as "Dolly Dingle" in Cleirwy, which is a short distance from Llanigon. This name probably comes from "Do^l y Pant", meaning "the meadow in the hollow or dingle". Mary Anne Ferris, the mother of the Labour Party Leader George Lansbury, was born in this same cottage. My cousin Chris Davies has also researched into the family history and found that Sarah (born1853) had at least six younger brothers, Alfred (baptized on 20th May 1855, died on 12th May 1856), Edward (baptized on 2nd December 1859, died in December 1859), Edward (born in 1863, my great- grandfather), Richard (born about 1864), John (born about 1867) and William (born about 1870), and he has also researched into the lineage of their mother Mary Ann Williams Cleirwy. Chris Davies found that Edward Evans and Mary Ann Williams were married on 20th November 1852 in the Parish Church of Brilley. In the 1851 Census, they were both working for James Morgan of Brilley, Herefordshire on his farm, "Cwm", near Cleirwy, Powys. Brilley is about five miles east of Bryn Gwyn, Powys, the village of origin of Mary Ann Williams in one Census, Bryn Gwyn being just north of Cleirwy. The marriage certificate has the signatures of both Edward and Mary, who were both literate therefore, but omits the names of both fathers. This ability to write is unusual for that era and for the rural poor, both were therefore educated. Their son Edward, my great- grandfather, could not write; this is known from the birth certificate of my grandfather William Evans which has the mark of his father, Edward. After my great- great- grandfather Edward Evans was widowed, he therefore worked in Llowes for a while then moved to "Cwm" Farm near Cleirwy to work for James Morgan. He had sons called Richard and William from both marriages. Chris Davies has found that his first wife may have been named Margaret, and that there is a Richard Evans baptized in

Cleirwy on 2nd November 1828 and William Evans baptized in Cleirwy on 1st August 1830. They would, therefore, have been of the ages mentioned in the 1841 Census, and the sons of Edward Evans by his first marriage. Also there is a Joseph Evans baptized on 13th July 1834 who may also have been a son of Edward Evans by his first marriage, but not mentioned in the 1841 Census.

Chris Davies has kindly forwarded some results of research carried out with

Paul Peet and Anthony Powell on Genes Reunited, the results of which are as follows. My great- great- grandmother Mary Ann Williams was born in 1830, baptised on 20th June1830 in Cleirwy. So the Census records for her are incorrect by two years. This often happens with the early Census records. Mary Ann Williams was one of at least nine children born to John Williams and Anne Langford. My great- great- great- grandfather John Williams was born in 1794 in Eaton Bishop, Herefordshire County and died in 1874 in Cleirwy, Powys. Anne Langford was born in 1793 In Herefordshire County and died in 1835 in Cleirwy. John and Anne were married on 16th March 1820 in Almeley in Herefordshire County. John became the gardener at the Vicarage in Cleirwy and is mentioned in Kilvert's Diary. The children of the marriage were as follows; Richard, born 1822, baptized on 15th February 1822 in Cleirwy, died in infancy aged six days. Richard, baptized on 20th July1824 in Cleirwy, died in 1874. He married Mary Rogers in 1859 at Llowes near Cleirwy and had at least four children. Richard followed his father as gardener in the Vicarage at Cleirwy and is mentioned again in Kilvert's Diary, which gives a valuable history of the day- to- day life of Cleirwy. Margaret was baptized on 28th November 1826 in Cleirwy. Thomas, baptized on 24th May 1829 in Cleirwy, became a coachman and innkeeper at the Glynne Arms, Hawarden. My great- great- grandmother Mary Ann was baptized on 28th November 1830 in Cleirwy. William was baptized on 21st August 1831 in Cleirwy. He became the innkeeper at the Crown Inn in Mold, about five miles from his brother's Glynne Arms. Walter was baptized on 11th November 1832 and died on 29th April 1900. He became the bailiff at Penwrolod Farm, a farm of 70 acres owned by his Powell father- in- law. He married Margaret Powell (born in 1839) in Llangenny on 14th May 1861 and they had at least three children. Stephen was born in 1833 in Cleirwy and married Margaret Davies (born 1838 in Rhayader) in December 1866. They had at least one child. James was born in 1835 and married Martha Hall (born in 1836 in Llanfilo) in Capel Maes y Berllan, Talach Ddu, Brecon (Aberhonddu). They had at least five children. My great- great- great- grandmother Ann Langford (later Williams) died, possibly in childbirth, in 1835. My great- greatgrandfather John Williams was remarried on 20th July 1841 to Gwenllian Lewis Defynnog (born in 1804, baptized on 1st January 1805), whose father was Thomas Lewis born about 1775 in Breconshire, (now Powys), and a farm labourer. Gwenllian died in 1869 at Cleirwy and John Williams died in the September quarter of 1874, aged 80. John and Gwenllian lie in St Michael and All Angels, Cleirwy. My great- great- great- grandfather John Williams

was one of at least two sons born to my great- great- great- great- grandfather Walter Williams, born about 1770 in Herefordshire County, a farm labourer. He married my great- great- great- great- grandmother Mary Collins (born 1772 in Herefordshire) at Clehonger near the city of Hereford on 21st June 1792. Mary Collins, later Williams, died on 19th June 1805 in Eaton Bishop, Herefordshire County.

It can be seen from the above that in the 1871 Census, Edward Evans (then aged only 8) is recorded as working for Stephen Davies at "Penwaelod" Farm (sic.), a farm of 66 acres. Walter Williams, brother in law of Edward Evans Llanigon, became the bailiff at Penwrolod Farm. It is probable that this farm was the well- known "Pen y Wyrlod" Farm (Genuki site for Llanigon) where a neolithic long cairn was discovered in 1972 and now maintained by CADW. "Pen y Wyrlod" means "Top of the Meadow", "gwyrlod" is an old Welsh name for "meadow". So it seems that Edward Evans Llanigon arranged for his son Edward Evans Cleirwy to start work at Pen y Wyrlod at an early age. The fact that Walter Williams worked at the same farm suggests that the farm may have been owned by relatives of the Williams family. This may also explain why Edward Evans Cleirwy did not have an education and could not write his name on the birth certificate of his son William John Evans Llanilo. Rapid population growth meant that large families had to be sustained, and eventually this population growth led to emigration into the industrialized communities of the time.

In the 1871 Census, there are two entries of relevance. Edward Evans Llanigon is recorded as aged 69, living in an entry "Cottage" with Mary aged 39, a charwoman (i.e. laundress). Living with them were their sons Richard aged 7, John aged 4 and William aged 1. The other 1871 Census entry records their eldest son, my great- grandfather Edward Evans Cleirwy, as being aged 11 (sic), working on a 66 acre farm called "Penwaelod" for the farmer Stephen Davies. From his marriage certificate and other Census records it is known that Edward Evans Cleirwy was born in 1863, so his real age in 1871 was only 8, about one year older than his younger brother Richard. The latter attended his brother Edward's wedding on 2nd June 1886, when Edward Evans was recorded as being 23 years old, and thus born in 1863. The eldest child Sarah Evans is not recorded in the 1871 Census. She would have been 18 at the time and was probably either married or in employment.

In the 1881 Census, there are again two entries of relevance. My great-great -grandmother Mary Evans is recorded as aged 45 (sic), but this should be 49 from other records. She had been widowed, lived in Broneth (Bronydd)

near or in Cleirwy and was the head of the household and a laundress. Only the youngest son William, correctly recorded as aged 11, still lived with the family. So my great- great- grandfather Edward Evans Llanigon lived from 1802 to before 1881. His eldest son, my great- grandfather Edward Evans Cleirwy, born in 1863, is recorded as being a 20 year old patient from Broneth in Llandrindod Hospital, Cefnllys. From other records his real age was 18. He was obviously unemployed at the time due to an unknown illness, and is recorded as a farm labourer. The Castle at Cefnllys was built by my distant ancestral cousin Roger de Mortimer and destroyed by my distant ancestral cousin Prince Llewelyn ap Gruffudd. It was later destroyed by Cynan ap Maredudd.

The 1891 and 1901 Censi both record Edward Evans Cleirwy as having been born in 1863 and his wife Mary Thomas was born in Cleirwy in about 1866. A marriage certificate is extant from which the following information is obtained. Edward and Mary were married in Mizpah Baptist Chapel, Llanfrynach on 2nd June 1886. He was 23 (born in 1863) and she was 21 (born about 1865 / 1866) and he was a farm servant. He lived at the time in Cwm Garw, Llanfeugan and she lived in Llanrhes (Church Row), Llanfilo. The marriage certificate shows, consistently, that my great- great- grandfather was also called Edward Evans, and was deceased at the time of the marriage, having been a labourer. My great- grandfather in the Thomas line was James Thomas, also deceased at the time of the marriage, and also having been a labourer. The marriage took place in the presence of Richard Evans, the younger brother of Edward Evans Cleirwy, and their older sister Sarah Jane Vaughan. She had been married to Rees Vaughan of Brecon on 5th November 1873 (information from Chris Davies). Rees and Sarah Vaughan moved to Treorchy in the Rhondda Valley just before 1891. Cleirwy (Clyro) is a mile or so from Llanigon and Y Gelli Gandryll (Hay- on- Wye (Gwy), now known as "the town of books"). There are remains there of a castle built by the Princes of Elfael, perhaps dating back to 1070.

The 1891 Census records my great- grandparents Edward and Mary Evans as living at Pen y Waun, Llanspyddid, outside Brecon, where Edward Evans was a 28- year old agricultural labourer, born in 1863 in Clyro, the same date as the wedding certificate. Mary Evans is recorded as being 25 years old, born in 1866 in Clyro. The 1891 Census records the eldest daughter E. Jane, (aged 4), born in Llanfigan (sic), i.e. Llanfeugan near Pencelli (LD3). It also records T. Edward Evans aged 1 (must be almost 2), born in St. David's, Breconshire, and Edith Mary Evans, aged 7 months. Llanfeugan

has a unique church, which can be dated as over 2,000 years old by the yew trees probably planted by Druids. The spelling "Llanfigan" means that the Silurian accent was probably used either by my great- grandfather, or by the Census clerk, (probably the latter because my great- grandfather is recorded in the Censi as speaking only English). The language of the family was recorded in the Census as English.

My great- great- grandfather James Thomas is recorded only in the 1841 Census as far as I have been able to find. He is then 4 years old, born in 1837 in Cleirwy, living in Broom Cottage, Cleirwy with his father Sackville Thomas, agricultural labourer aged 45, born in 1796, and his mother Jane Thomas aged 35, born in 1806. With him are William aged 12, George, aged 10 and Jane, aged 2. Their relation to Sackville and Jane is not recorded in the 1841 Census, but they are very probably sons and daughter. The 1851 Census for Cleirwy records Sackville Thomas aged 56 and Jane Thomas aged 45, with daughter Ann aged 15, daughter Eliza aged 9, son Edward aged 7 and daughter Jane aged 3. William, George, James and Jane of the 1841 Census are not recorded and so must have been in employment elsewhere by 1851. The Jane aged 2 of 1841 must have died, because of the use of the name aged 3 in 1851. The 1851 Census records Sackville Thomas as having been born in the small village of Huntington, not far from Cleirwy, and just inside Hereford on the Powys / Hereford border. The 1861 Census records Zachariah Thomas aged 73, of Clyro, born in 1788 in Clyro, agricultural labourer and head of household, living at Cwmbuthaf (sic) with his wife Jane Thomas of Clyro, then aged 55. They have a daughter Jane aged 13 living with them and a nephew John Price aged 5. This Census records them as having all been born in Clyro. The ages of the mother and daughter, both called Jane, are consistent with the 1851 Census. It is assumed that my great- great- great- grandfather was called Zachariah Sackville Thomas, born in or about 1788 / 1796 either in Clyro or Huntington, and that my great- great- great- grandmother was Jane Lewis, born in 1836 in Clyro. The 1871 Census records Zachariah Thomas as aged 82, a labourer born in Huntington, not Clyro as in the 1871 Census. His wife Jane Thomas is recorded consistently as aged 64, born in Clyro. They are recorded with grandson Robert Thomas aged 10 and granddaughter Mary Thomas aged 5. In the 1891 Census, they are not recorded. So it is concluded that Zacharaiah Thomas lived from 1788 / 1796 to before 1891, and Jane Lewis from 1836 to before 1891.

My grandfather William John Evans is recorded on his birth certificate as having been born on 21st July 1892 at Neuadd Trefithe, Llanfilo, the other side

of Brecon from Llanspyddid; the certificate bears the mark of Edward Evans, who was therefore illiterate, but it does not bear a mark for his wife Mary, who could have been literate, but unlikely. "Neuadd Trefithe" (if the census spelling of "Trefithe" is correct) means Trefithe Hall, so my great- grandfather Edward Evans Cleirwy was probably, and throughout his life, an itinerant agricultural labourer who looked for work on various farms. Neuadd Trefithe could have been the big house of a well- to- do member of the landed Gentry, or a farmer. The word "Neuadd" is spelled incorrectly as "Noyadd", suggesting that the census clerk did not understand the Welsh language.

The 1901 Census records the family as living at Close House, Llanywern, near Brecon, where Edward Evans is recorded as aged 38 (born in 1863), a "farmer (worker)", and recorded again as being born in Radnorshire (known from other records to be Cleirwy (Clyro)). Mary Evans is recorded as aged 35 (born in 1866). My paternal grandfather William John Evans (21st July 1892 – circa 8th June 1971) is recorded in the 1901 Census as living at the age of 8 with his family in Close House, Llanywern, Brecon, namely his brother Edward aged 11, his brother Ivor aged 10 months, his sister Edith Mary aged 10 and his sister Sarah aged 4. E. Jane Evans aged 14 is not mentioned so was probably already in employment.

William John Evans married Gwenllian Lodge (late Lodge, nee Potter), born on 28th January 1891 at Penwyllt Cottages, died in September 1944 and was buried at Callwen on 9th September 1944. The marriage took place on 17th September 1919, when they were both 27. He lived as a lodger in Kershaw Terrace, Penwyllt, and she lived in Y Greithig (The Scarry Place). This was the tiny end house (nearest the river) of a row of four made from a converted barn, also called "Y Grithig", just across the Tawe River from Craig y Nos Castle. He spoke English, perhaps with a few words of Welsh, and worked as a railway plate layer on the Swansea to Brecon line near Penwyllt Station, moved to Caehopkin, and died in Glyn Bedd Farm in 1971. He is buried in Callwen in an unmarked grave with his wifeGwenllian, my paternal grandmother, in Eglwys Ioan Bedyddwyr (St John the Baptist Church) Callwen. Gwen Potter (always known in the family as Gwenllian) was born on 28th January 1891; her birth certificate records her as being born in Pen Wyllt Cottages (now Powell Street), Pen Wyllt, Glyn Tawe, and she was the daughter of William John Potter, (3rd December 1856 / 19th February 1857–1929), a limestone quarryman, and Hannah Thomas of Henrhyd Isaf (1857–1935). The certificate bears the mark of Hannah Potter, who was therefore illiterate. However, it is known that William John Potter and his father David Potter (1831-91) were

literate. At that time, Pen Wyllt was a thriving industrial village. Pen Wyllt Cottages are now called Powell Street, and are still standing. Gwenllian was drowned while trying to cross a flooded river at the age of 53 in September 1944, six years before I was born. This information was kindly supplied in September 2010 by Mr Stuart Davies. William John and Gwenllian Potter had moved from Greithig to Melin Llech on Nant Llech below Sgwd Henrhyd (Henrhyd Waterfalls): www.cavinguk.co.uk/holidays/waterfalls/Nantllech. html and was returning from a visit to her daughter Blodwen at Glyn y Bedd Farm near Creunant. She and her daughter Nan (Hannah Mary) fell into the River Dulais below Glyn y Bedd while attempting to cross on a rope bridge. Nan was rescued but Gwenllian was tragically drowned, a great and lasting shock to her six children by two marriages, and of course to her husband William John. He moved to Glyn y Bedd Farm, and was there when I met him briefly for the one and only time in my life. William John died just as I was starting my final examinations at Aberystwyth, and the news was kept from me until I had finished. Henrhyd Isaf and Uchaf Farms are just above Sgwd Henrhyd, and Gwenllian's mother Hannah Thomas was born in Henrhyd Isaf. The railway from Pen Wyllt passed very close to the two Henrhyd farms (Isaf (lower) and Uchaf (upper)) and William John worked on this railway (now disused) as a plate layer. Gwenllian's first husband died in the Neath District in the December quarter of 1918, possibly in the great influenza pandemic of that year, and was called Frederick John Lodge. They were married on 18th December 1912, so Gwenllian was widowed after only six years. My half Uncle Frederick C. Lodge, was born in the September quarter of 1917 in the Neath District, and later lived in Clydach. He was conscripted, and became a Corporal in the 24th Foot, South Wales Borderers. He was not allowed to attend his mother's funeral, and this caused the whole family to be embittered at the Army. My half Aunt Blodwen M. Lodge, later Griffiths, was born in the June quarter of 1913 in Neath District, and lived at Glyn y Bedd Farm near Creunant, where I worked as a boy. Blodwen died recently in her midnineties. From conversations in the year 2010 with my Uncle Raymond there were three brothers and a sister at Grithig, children of William John Evans and Gwenllian Evans: William (the eldest), Edward Ivor (my father, 22nd April 1922- 2000), Raymond Vivian, (born in 1933), and my Aunt Hannah Mary (Nan, now Mrs Nan Stokes). Gwenllian Evans worked at Craig y Nos Castle, formerly owned by her family. There were two children of Frederick John Lodge and Gwenllian Lodge (nee Potter): Frederick C. Lodge and Blodwen M. Lodge as described already. Gwenllian Evans was drowned in 1944 while

trying to cross a river below Glyn y Bedd Farm near Crynant, and Nan Evans also fell into the river but was rescued. After that my Uncle Raymond was moved into the care of my father Edward Ivor at Banwen Farm near Craig Cefn Parc, then owned by John Morgan. He was a very hard taskmaster, paying Raymond Evans next to nothing and making him work at the horse and plough and delivering milk when still very young. In 1936, my father had started work in Nixon Colliery and so was paid. In 1944, he was still living at Banwen, having started work there in 1934 at the age of 12. So my father started work in the colliery when 14 years old.

Part of the following information was kindly made known to me in September 2009 by Stuart Davies and Dewi Lewis. My great- grandfather William John Potter was born at No 1 Pen Wyllt Cottages, now Powell Street, Glyn Tawe (the upper Swansea Valley) and my great- grandmother Hannah Thomas (1857-1935), was born in 1857 in Ystradgynlais District. They married in the June quarter of 1877. William Potter's father was David Potter (1831-1891), a quarryman at Penwyllt limestone quarry, born in Worth in Sussex in 1831, and who moved to Glyn Tawe in 1848 to become a warrener. He married Rachel Morgan (24th December 1837–1907), of the distinguished Morgan Family (see below), in the March quarter of 1856 according to Census records (information kindly supplied by Dewi Lewis in September 2009). David and Rachel Potter lived in Pen y Foel above Pen Wyllt, a two-room farmhouse, access to which was by rough track from lime kilns. There is little or nothing left of it now. This is information given to Stuart Davies by a distant cousin of mine. Pen y Foel in Penwyllt is at Grid Reference SN854153. On the website www.doctorwholocations.net/locations/penwylltinn it is possible to see the Penwyllt Inn, but no trace of a farmhouse above it seems to be visible. On the website www.jlb2005.plus.com/walespic/penwyllt/030705. htm there are photographs of the Penwyllt Inn. Pen y Foel was described to Stuart Davies as a two-room house on a hill just above lime kilns and overlooking the Swansea Valley. It was a quarter- acre smallholding and had 13 acres of mountain grazing, and apparently little or nothing of it remains. Access was by a rough path above the lime kilns. In the 1881 Census, No 1 Penwyllt Cottages was occupied by my great- great- grandfather, a lime burner, David Potter aged 50, Rachel Potter aged 44, Daniel aged 16, Rachel aged 11, Gwenllian aged 9, Caroline aged 6 and Harriet an infant. No. 6 Penwyllt Cottages was occupied by my great- grandfather, also a lime burner, William John Potter aged 24, Hannah aged 24 and Rachel aged 4. So by 1881 David Potter had become a lime burner in the nearby lime kilns of the newly

thriving Penwyllt industrial village high above the haunting wilds of Glyn Tawe on the newly built Swansea- Brecon line. At that time, Penwyllt had a well- developed industry of quarries, silica brickworks and lime kilns, as well as a railway and station, employing many people, but has declined by now to a village of twenty people only. Most of the village was demolished in the nineteen eighties. The road from Craig y Nos Castle to Penwyllt was partly financed by Adelina Patti, the great operatic singer, in turn for which she was given a private carriage on the railway and a private room in the railway station. The 1901 Census records 44 year old William John Potter now living in his father's house (David Potter's house), "Penfoel" (sic) i.e. "Pen y Foel", described further in this history. His wife Hannah (formerly Thomas) was also aged 44, and William John Potter is described now as a coal miner. Also recorded are their children: Mary Jane aged 22, David John aged 20, Daniel aged 17, Margaret aged 12, my grandmother Gwenllian aged 10, not Gwen as on the birth certificate, Caroline aged 8, William aged 5 and Blodwen aged 2. David Potter had died in 1891, so William John may have inherited Pen y Foel.

The University of Wales, Swansea has a local dissertation by Helen Mathews on Penwyllt, which may be accessed as reference 6 of the wikipedia entry on Penwyllt. It is called "Penwyllt Village, Growth, Development and Decline" (1991). On page 58 there is a chapter called "The Potter Dynasty". The dissertation cites source letters and the diary of my great- great- grandfather David Potter, now kept in Brecon Museum. David Potter initially lived in Cefn Cul when he arrived from Worth in Sussex as a warrener and, according to the dissertation, married Rachel Morgan at Callwen on 17th March 1856. She was living then at Y Deri and at that time David Potter was a labourer, no longer a warrener. In the dissertation, William John Potter is recorded by his father David Potter in his diary as being born at ten past six in the morning of 3rd December 1856. However, this conflicts with other records which have a date of birth of 19th February 1857. The dissertation states that David Potter was buried in Callwen on 2nd January 1892 and Rachel on 11th December 1907. These dates have yet to be confirmed by certificates. In the dissertation, William John Potter died at 3 Powell Street (the former Penwyllt Cottages) in 1929. So he was born at 1 Powell Street and died at 3 Powell Street. According to the dissertation, David Potter was a fine singer, and literate, as shown by his diary in Brecon Museum, and letters to his friend Blazey. Several of the Potters worked for Adelina Patti, Baroness Cederstrom, who is known to have encouraged musical people to attend her private theatre at Craig y Nos

Castle, once owned by my ancestor Morgan Morgan. I know from recent conversations in the Welsh language with my Uncle Raymond Evans that his mother Gwenllian Potter was a fluent Welsh speaker who also worked at the Castle. So it is probable that William John Potter and possibly David Potter were also Welsh speakers, so David must have learned at least some Welsh to converse with Rachel Morgan, who probably spoke only Welsh. It is known that her uncle, the industrialist Morgan Morgan, "The Squire of Craig y Nos Castle", spoke only Welsh. When he sold it to Patti the transaction was through an interpreter. The Morgan Family spoke only Welsh back to the time of their ancestors Thomas Awbrey, Cwnstabl Coch (born in 1299) and his wife of the Royal Celtic line, the Gentlewoman Nest (born in 1304) ferch Owain Gethin ab Owain, Lord of Glyn Tawe. Her coat of arms was apparently a deer springing forward but this should be confirmed by the College of Arms. The dissertation also records that Pen y Foel had two small bedrooms, an integral dairy and a deep well, but no access road to it.

In the 1871 Census, my great- great- grandfather David Thomas (born in 1818) was living at Henrhyd Isaf (a farm near Henrhyd Falls) in the Hamlet of "Ellen Bleak" (sic., could be a severe, almost incomprehensible, corruption of Coelbren by the Census clerk) and Banwen. He was a stonecutter and lived with his wife Hannah (born in 1819), his son Glyn aged 24, his daughter Hannah aged 14, his son David aged 8, and his daughter Mary aged 5. William Potter probably met Hannah's father at the quarry, which may have been owned then by the Morgan Family. The latter owned Abercra^f colliery and sold it before 1870. They bought it back in the 1880s after mismanagement by others. Hannah Thomas, my great- grandmother, was illiterate as we can see from her mark on the birth certificate of her daughter Gwenllian (born on 28th January 1891 at Penwyllt Cottages).

The following information on the Morgan Family was kindly made known to me by Stuart Davies in 2009. Rachel Potter (1838-1907) was born Rachel Morgan, the daughter of William Morgan, (1809 / 11-1902), who was born probably at Y Garth, Abercra^f, and died in 1902 at Rhongyr Isaf in Glyn Tawe. My great- great- grandmother Rachel Morgan Potter is recorded in the 1901 Census as a widow living with her daughter Caroline at 2 Pen y Bont Cottages. She was the eldest daughter of William Morgan (my great- great-great- grandfather), who married Anne Watkins (1816 / 1855), and who was the second son of David Morgan (Dafydd ap Morgan (1771 / 78 – 1869)), who married Gwenllian Powell (1785-1873)). The children of William Morgan (1809–1902) were Rachel (1837–1907), Gwenllian (1839–71), Elizabeth

(1844-1914), Mary (died in infancy), Ann (1848-1922), Daniel (died in infancy) and Jennet (1853-1935). William was a farmer all his life, and his wife Anne Watkins (1816-55) of Glan Twyni, Glyn Tawe, was the daughter of William Watkins of Ty Mawr, Abercra[^]f, a prominent mine owner and who helped found Ty'n y coed and Bethlehem chapels. Ty Mawr is still a wellknown house off the A4067, now a home for the elderly. William Morgan was the younger brother of Morgan Morgan (1808-89), who was a prominent figure in the Swansea Valley and who was High Constable in the 1860s. He was known as Squire Morgan, and purchased Craig y Nos out of chancery, previously having been owned by Rhys Davies Powell. He sold it two years later in 1878 to Adelina Patti, the great operatic soprano. After that it became the well- known Craig y Nos Castle (developed out of the original 1845 house). Anne Watkins was the younger sister of Mary Watkins, who married Morgan Morgan. My great- great- great- grandfather William Morgan was descended from Thomas Awbrey, Cwnstabl Coch (born in 1299), who married the Gentlewoman Nest ferch Owain Gethin (born in 1304) and descended from Bleddyn ap Maenarch, Prince of Brycheiniog. The youngest daughter of William and Anne Morgan was Jennet Morgan, (1853-1935), who became Mrs Griffiths and who lived in Number 1, "Y Grithig". Jennet's daughter Anne (1877–1976) was the mother of Tudor Watkins, MP for Breconshire, and subsequently Lord Glyn Tawe. Anne Morgan Griffiths lived to be 99 and three of her daughters are still living, two in their nineties, and one over 100 years old. William Morgan is buried in Ty'n y Coed, close to his father- in- law William Watkins. The children of my great- great- great- great- grandfather Dafydd ap Morgan (David Morgan) were Morgan, William, John, David, Elizabeth (1819-87), Thomas (1819-1904), Rachel, Howell (1823-64), Daniel (died in 1826), who lies in his parents' grave, and Daniel (1827-85).

The parish church at Ystradgynlais, St. Cynog, dates back to the fifth century, meaning that it was a Celtic establishment. Cynog was the son of Brychan Brycheiniog, Prince of Brycheiniog (born in 418 AD). Ynys Cedwyn Hall was a seat of Prince (Tywysog) Gruffudd Gw^yr, (and probably of the eleventh- century Prince (Tywysog) Bleddyn ap Maenarch) but passed into the hands of the Franklyns of Swansea. The daughter and heiress of Jenkyn Franklyn married William Aubrey, which is how the hall came into the possession of the Aubreys, and later the Goughs. "Gough" is an anglicized version of the Welsh "Coch", meaning "red-haired". The Gough family are able to trace ancestry to early mediaeval times. A young widow (first married to a Morgan Evans), and called Elizabeth Portrey, married Morgan ap

Thomas y Garth, Abercra⁶ on 19th February 1763, but this Elizabeth Portrey is not in the Ynys Cedwyn Estate Papers, through an oversight. However, there is a gravestone for her husband and herself that definitively identifies her, (photograph sent by Stuart Davies), and there is a memory of her in the Morgan Family, newspaper items and similar. Recently I looked at the photograph again, and by magnification of the image found that she died aged 91, and was born in 1734. There is an inscription in the Welsh language on the gravestone: ".... pedwar ugain mlynedd etto (sic) oherwydd, a nid ehedwn ...". It is also known that she lived at Ynys Cedwyn Hall, was literate and could write clearly. It is overwhelmingly probable therefore that she was the daughter of one of the children of Christopher Portrey of Ynys Cedwyn (1668 / 9–1701) who married Francise Pryse of the Wogan Family, descended from Gwgon ap Blegwrd ap Bleddyn ap Maenarch. These included Richard Portrey (1690–1729), who married Elizabeth Powel of Nant Eos in 1715; Christopher Portrey (1691–1752), John Portrey (died in 1742), the Rector at St. Cynog's, and Catherine Portrey who inherited the Estate and married William Gough, Gentleman in 1717. So the Ynys Cedwyn Estate passed to the Gough Family. There is also a Thomas Portrey who died in 1748, but his date of birth is not known (all of this is information kindly sent by Stuart Davies). I conclude that she was probably the daughter of Christopher Portrey the Younger, who was unmarried and about 43 years old when she was born. She could have been the daughter of the Rector, John Portrey, in which case the Church would have frowned on the matter. She could, therefore, have been baptized under her mother's name in or around 1734, but more likely the illegitimate daughter of a Rector would not have been baptized at all. The baptismal records of St Cynog for that era are poor, and many people who lived in that era do not appear in the records. My great- great- great- great- great- great- grandmother Elizabeth Portrey of Ynys Cedwyn Hall was held in much affection because of the number of anecdotes about her. The children of Morgan ap Thomas and Elizabeth Portrey were Elizabeth, Gwenllian, Angharad, Thomas, John, David Morgan (1778–1869) and Morgan.

It is known with certainty that their son Dafydd ap Morgan (David Morgan) was the father of Squire Morgan Morgan of Craig y Nos and William Morgan of Glantwyni, Rachel Morgan Potter's father, and was the grandfather of another William Morgan (1835–1905) of Tir Mawr (later Ty Mawr), Morgan Morgan's eldest son. The children of William Morgan (1835–1905) were Anne Margaret (1864–1942), Mary Gwen (1866–1903), Morgan Watkin (1868–1943, High Sheriff of Breconshire in 1917), Eliphaz Watkin

(1870–1944, who wrote a history of Abercra^f Colliery), Charlotte (1873–1961), Thomas (1875–1964, Tommy (who discovered the Dan yr Ogof Caves with his brother Jeff), Margaret Tirzah, Edwin (1880–1968), Jeffrey (Jeff, 1884–1955), and Howell Alfred (1886–1969, High Sheriff of Breconshire in 1930. Therefore, Morgan ap Tomos y Garth (1735-1805) was my great-great-great- great- great-gr

The following has been researched with accuracy by the distinguished genealogist, my cousin, the late Leonid Morgan, whose work has been written up in published volumes and extensive archival notes deposited in the West Glamorgan Archives and Ystradgynlais Library. Leonid Morgan (1927–2010) was descended from Morgan Morgan (1776–1823), the son of Morgan ap Thomas y Garth. The wife of Morgan Morgan (1776–1823) was Magdalene Hopkins. They had a son Edward Morgan, who married Mary Lewis. They had a son Morgan Morgan (1859–98), who married Elizabeth Williams. They had a son Edward Llewelyn Morgan (1897–1989), who married Mary Lewis, and their son was Leonid Morgan (1927–2010).

The father of Morgan ap Thomas y Garth (1723-1805) was Thomas ap Morgan (1690-1761), who married Elizabeth John (died in 1747). The father of Thomas ap Morgan was Morgan ap Thomas (died in 1749), who married Angharad Bevan, and his father was Thomas ap Morgan ap John (1600 / 1630–26th June 1689), buried in Callwen on 27th June 1689, descended from the Awbrey Family. His father was Morgan ap John ap Morgan (born about 1570), who was the son of John ap Morgan ap Richard Awbrey (born about 1530 and mentioned in the Ynys Cedwyn Estate papers), in turn the son of Morgan ap Richard Awbrey, who married Margred ferch Hywel Ddu in Tudor times. His father was Richard ap Jenkin ap Morgan Awbrey (born in 1470), who married Gwladys ferch Morgan ap Gwilym ap Henry of Cidweli. His father was Jenkin Awbrey (born in 1423), who married Gwenllian ferch Owain of the Royal line of Bleddyn ap Maenarch. His father was Morgan Awbrey Hen, Lord of Brecon (born in 1389), who first married Alice ferch Watkin, and secondly a daughter of Roger Vaughan. His father was Gwallter Awbrey (born in 1359), who married Gwenllian ferch Rhys. His father was Richard Awbrey (born in 1329), who married Crisela ferch Ffilib ab Elidir (born in 1333), and his father was the aforementioned Thomas Awbrey, Cwnstabl Coch, . The line this far is authenticated in Bartrum and Turner-Thomas. It may be

that Cwnstabl Coch's father was Thomas Awbrey (born in 1271) who married Joan ferch Trahaearn ab Einion Saes (born in 1274), again of the Royal line of Bleddyn ap Maenarch. His father could have been Thomas Awbrey (born in 1239), who married Joan Baron, but this was possibly fabricated to gain favour with the English King.

There is another Elizabeth Portrey Gough, the daughter of William Gough, a Gentleman of Wilsbery St Briavels in Gloucestershire, who in 1717 married Catherine Portrey of Ynys Cedwyn Hall. However, Sir Arthur Turner-Thomas, V.C., K. G. (Wales), G.C., historian to HRH The Countess of Wessex, has discovered recently that this Elizabeth Portrey Gough did not marry Morgan ap Thomas y Garth, my authenticated ancestor in the Awbrey line. In the Church Records, Morgan ap Thomas married someone else, also called Elizabeth Portrey, who lived at Ynys Cedwyn Hall, but who was probably a daughter of Christopher Portrey the Younger as discussed already. His sister Catherine Portrey's parents were Christopher Portrey of Ynys Cedwyn Hall (1668 / 9–1701) and Francise Pryse. His father was Reverend Richard Portrey of Cheriton, Vicar of Rhossili and Ystradgynlais (1638 – 91 / 95), who married Catherine Awbrey of Ynys Cedwyn Hall. The Reverend Richard Portrey's parents (married in 1631) were Christopher Portrey and Mary, daughter of Richard Seys of Boverton, in South Glamorgan. Catherine Aubrey's parents were Morgan Aubrey of Ynys Cedwyn Hall (1617-48) and Maysod ferch Walter Tomos Abertawe (Swansea), whose wife was named Margaret. Morgan Aubrey's parents were Morgan Awbrey of Ynys Cedwyn (died in 1632) and Margred ferch Tomos Games Aberbran, descended from Sir Dafydd Gam in the Royal Line of Prince Bleddyn ap Maenarch. This Morgan Awbrey was High Sheriff of Breconshire in 1616 and the Games family descends from Sir Dafydd Gam ap Llywelyn ap Hywel, knighted on the field at Agincourt (see below).

The Ynys Cedwyn Estate papers (1489-1945) are GB 0216 DDYc in West Glamorgan Archives in Swansea. The Hall may have been one of the houses of Gruffudd Gw^yr, Lord of Gower, who was descended from Prince Bleddyn ap Maenarch (died in 1093), the brother in law of Prince Rhys ap Tewdwr Fawr, the Queen's ancestor in the Tudor line. The Hall was inherited in the distaff line by the Franklyn family. The daughter of Jenkin Franklyn, Anne Franklyn of Ynys Cedwyn Hall, married William Awbrey of Palleg. This William Awbrey was the son of Morgan Awbrey of Palleg, who was disinherited by his father William Awbrey of Abercynrig and Slwch, who was the great- grandson of the aforementioned Morgan Awbrey Hen, Lord of Brecon (born in 1389). There is

an unproven claim in the Ynys Cedwyn Estate papers that Morgan Awbrey of Cathelyd (grandson of William Awbrey of Palleg, who married Anne Franklyn and thus acquired Ynys Cedwyn Hall) sold the Hall to Morgan Awbrey (died in 1632), who was the son of Ieuan Gwyn ap Morgan ap Richard Awbrey (active circa 1586), the grandson of the aforementioned Richard ap Jenkin ap Morgan Aubrey (born in 1470).

The Turner-Thomas site "Royal Celtic Genealogy" now has the Ynys Cedwyn line as follows from Morgan ap Richard Awbrey (born about 1500), who married Margred ferch Hywel Ddu. Their son of relevance to the Ynys Cedwyn line was Ieuan Gwyn ap Morgan Awbrey, who married Jonet ferch Watkin Herbert (descended from Bleddyn ap Maenarch). Their son was Morgan Awbrey of Ynys Cedwyn (died in 1632), who married Margred ferch Thomas Games (descended from Bleddyn ap Maenarch). Their son was Morgan Awbrey (1617-48), who married Maysod Thomas. Their daughter was Catherine Awbrey, who married Richard Portrey (born about 1638). Their son was Christopher Portrey of Ynys Cedwyn (died before 1702), who married Francise Pryse (whose mother was a Wogan descended from Bleddyn ap Maenarch). Their daughter was Catherine Portrey (died in 1733), who married William Gough, Gentleman of Wilsbery (1691-1773). Elizabeth Portrey, who married her cousin Morgan ap Thomas y Garth on 17th January 1763 lived at Ynys Cedwyn Hall. The line from Morgan ap Richard Awbrey (born about 1500) to Morgan ap Thomas y Garth (1735–1805) is as follows. John ap Morgan ap Richard Awbrey (born about 1530, Ynys Cedwyn Estate papers, conveyancing about 1600) to Morgan ap John ap Morgan Awbrey (born about 1570, Leonid Morgan) to Thomas ap Morgan ap John Awbrey (1600 / 1630-25th June 1689, Callwen Church Records) to Morgan ap Thomas ap Morgan Awbrey (died in 1749), who married Angharad Bevan and owned three farms, Gwenfach Forgan, Llwyn Turnor and Blaen Cwm (Leonid Morgan) to Thomas ap Morgan ap Thomas Awbrey (1690–1761), who married Elizabeth John, to Morgan ap Thomas y Garth (1735-1805), who married Elizabeth Portrey on 17th January 1763. Elizabeth Portrey had first married Morgan Evans (St Cynog Church records) and was a young widow when she married her cousin Morgan ap Thomas y Garth at the age of 29.

The most distinguished member of the Awbrey family in Tudor times was Dr William Awbrey (1529-95), second son of Thomas Awbrey of Cantref, who married Agnes, daughter of Thomas Vaughan. He was educated at Oxford, appointed High Sheriff of Breconshire in 1545, and was a Fellow of All Souls,

Principal of New Inn Hall in 1550, Member of Parliament, granted arms, and professor of civil law in 1553. He was buried in St Paul's Cathedral and was granted extensive lands by Elizabeth Tudor. He was the ancestor of the antiquary, John Awbrey. Ynys Cedwyn Hall was of great importance in South Wales in general. Richard Douglas Gough of Ynys Cedwyn Hall was High Sheriff in 1840, and his son Fleming Dansey Awbrey Gough of Ynys Cedwyn Hall was High Sheriff in 1895 and Lieutenant Colonel of the Breconshire Battalion of the South Wales Borderers. Their motto was "Nec ferrae terrent", "nor do wild beasts terrify".

Thanks to the accurate genealogy of the historian Stuart Davies, based on that of my distinguished cousin Leonid Morgan, I am able to prove descent as above, in an unbroken father to son line, from Thomas Awbrey Cwnstabl Coch (born in 1399) to William Morgan (1809 / 11-1902), then from his daughter Rachel Morgan (my great- great- grandmother), as described already. The slight uncertainty about Elizabeth Portrey (very probably also my ancestor) does not affect this proof. Morgan Awbrey Hen, Lord of Brecon (born in 1389) had two sons of relevance, Jenkin Awbrey of Abercynfrig and Thomas Awbrey of Ystradgynlais. Jenkin Awbrey had two sons of relevance, Hopkin Awbrey of Abercynfrig (circa 1460) and the aforementioned Richard ap Jenkin ap Morgan Awbrey. I descend over many centuries in two lines from the latter, whose son was Morgan ap Richard Awbrey, who married Margred ferch Hywel Ddu. The latter had two sons of relevance, Ieuan Gwyn ap Morgan Awbrey, who married Jonet ferch Watkin Herbert (also descended from Prince Bleddyn ap Maenarch) and the aforementioned Morgan ap Richard Awbrey. The line from Ieuan Gwyn is from his son Morgan Awbrey (died in 1632, High Sheriff in 1616), who married Margaret Games, also descended from the line of Bleddyn ap Maenarch. This line descends to the possibly disinherited Elizabeth Portrey as described already. The line from John ap Morgan ap Richard Awbrey (mentioned in the Ynys Cedwyn Estate papers) descends in a father to son line of Awbreys via his son Morgan ap John ap Morgan. His son was Thomas ap Morgan ap John (buried at Callwen), his son was Morgan ap Thomas ap Morgan (died in 1749), who married Angharad Bevan and who owned three farms, Gwenfach Forgan, Llwyn Turnor and Blaen Cwm. Their son was Thomas ap Morgan ap Thomas (1690-1761), who married Elizabeth John, and whose son was Morgan ap Thomas y Garth (1735-1805), who married an Elizabeth Portrey of Ynys Cedwyn Hall on 19th February 1763, mentioned in several independent sources as a young widow of Ynys Cedwyn Hall. The two lines therefore converge with this marriage of distant cousins.

This is of course true despite the fact that Elizabeth may have been illegitimate, obviously through no fault of hers, but a stigma in society of that time.

Hopkin Awbrey Abercynfrig (circa 1460) had three sons of relevance: Jenkin Aubrey (circa 1500), William Awbrey Abercynfrig (circa 1500) and Thomas Awbrey Cantref. Jenkin Awbrey had a son Charles Awbrey (circa 1530, High Sheriff, who died without issue). William Awbrey Abercynfrig disinherited his son Morgan Aubrey of Palleg in Ystradgynlais, whose son William Awbrey of Palleg married Anne Franklyn of Ynys Cedwyn Hall. She was descended from Gruffydd Gw^yr and thus from Prince Bleddyn ap Maenarch (died in 1092), who married Elinor ferch Tewdwr Mawr (Elinor daughter of Prince Tudor the Great, the Queen's Tudor ancestor) and grandfather of Prince Rhys ap Gruffydd whose arms are the main element of my own arms. Their grandson was Morgan Awbrey, whose son was Jenkin ap Morgan, Cathelyd, Llangyfelach, and whose son was Jenkin Morgan His son was David Morgan (circa 1730), whose son was Jenkin Morgan (circa 1750). Cathelyd was probably a large house with an Estate where there are two farms called Cathelyd Fawr and Cathelyd Fach here in Craig Cefn Parc, possibly farms of the Estate. My Newlands ancestors owned Cathelyd Fach at one time. The line from Thomas Awbrey Cantref is a famous one. His son was the eminent Dr William Aubrey (1529-95) described already. His son was Sir Edward Aubrey (High Sheriff 1583, 1589 and 1599), who married Joan Havard as described below. Joan Havard was born in 1559 in Tredomen near Brecon, and was the daughter of William Havard of Tredomen and a Vaughan mother, the daughter of Christopher Vaughan of Tretower Court, the oldest house in Wales, kept by CADW. (See more Vaughan history below.) Sir Edward Aubrey and Joan Havard had a son Sir William Aubrey, whose son was Edward Aubrey, killed at the Battle of Edgehill, and another son, the great antiquary John Aubrey. The names Awbrey and Aubrey were used interchangeably, and are of Norman French origin. William Awbrey of Abercynfrig (circa 1500) divorced his wife and disowned his children. It was his grandson William Awbrey of Palleg who acquired Ynys Cedwyn Hall through a marriage settlement with Anne Franklyn. Their son was killed in a family affray at Brecon Fair in about 1600, and their great- grandson was Jenkin ap Morgan. William's son Richard was by his second wife. Sir William Awbrey sold Abercynfrig and the ancient Norman Abercynfrig Estate was sold out of the Awbrey family, first to the Jeffries and then to the Lloyd families.

I obtained the definitive advice of the genealogist and historian Sir Arthur Turner-Thomas on the mediaeval Awbrey line. He is the genealogist and now the historian to my distant cousin, Sophie, Countess of Wessex (the wife of Prince Edward, Queen Elizabeth's youngest son) and on his suggestion the Bartrum online project was started. He advised that the line back to Thomas Awbrey, Cwnstabl Coch (born about 1299) is authentic and reliable and appears in Bartrum, but before that is not reliable. It is said (albeit unreliably) that the Aubrey line (Norman French spelling) initiates with Alexander de Alberico (Saunder de St. Aubrey or de Sancto Alberico, estimated to be born about 1030 in Normandy) who accompanied William 1 from Normandy but does not appear in the online Domesday book. William 1 was born in about 1028. This line should be clarified when the definitive Bartram Welsh genealogy (in about twenty-three volumes) comes on line in 2010. The albeit unreliable sources that are used for this line are on the Ariciu website www.geocities.com/janet-ARICIU/Aubrey.htm. They are as follows:

- 1) The web online and reading room (albeit a broken link).
- 2) Thomas Nicholas, "Annals and Antiquities of the Counties and County Families of Wales: Breconshire, Extinct Families of Norman Origin".
- 3) LDS FHC microfilm no. 104381, item 6, National Library of Wales film 6612.
- 4) The website <u>GEN-MEDIEVAL-L@rootsweb.com</u>, notably Lewis Dwn, "Visitation of Wales Llyfr Achau".
- 5) "Colonial and Revolutionary Families of Pennsylvania", Volumes I to III, Bevan Family.
- 6) Lloyd Manuscripts: Genealogies of the Families of Aubrey Vaughan.
- 7) "Welsh Records: Lancaster Pennsylvania" (New Era Print Company, 1912).
- 8) Lewis Dwn, "Notes of the Aubrey Pedigree, Vol. ii of "Visitation of Wales", p. 40.
- 9) College of Arms, Vincent Footnote (no. 136, folio 867).
- 10) Original mediaeval manuscript in All Soul's College, Oxford.
- 11) Debrett's Baronage.
- 12) Hannah Pitman, "Americans of Gentle Birth".
- 13) H. W. Lloyd, the Lloyd Manuscripts.
- 14) "The Genealogies of Glamorgan", p. 337.
- 15) George T. Clark of Tal y Garn, "Genealogies of the Older Families and of the Lordships of Morgan and Glamorgan" (Wyman and Sons, London, 1886).
- 16) Domesday Book for Richard de Clare, Earl of Tunbridge and Clare, Earl of Brion (eleventh century), and his son Gilbert de Clare Earl of Pembroke.
- 17) Thomas Allen Glenn, "Meirion in the Welsh Tract", Norristown, Pennsylvania 1896, p. 308.

- 18) Carr P. Collins, Jr., "Royal Ancestors of the Magna Carta Barons / The Collins Genealogy", published 1959.
- 19) Bartrum and Bartrum online (2009), in twenty three volumes. Some of the Aubrey line is given in the table Aubrey 1, p. 44 of volume 1, "Welsh Genealogies AD 1400 1500" (National Library of Wales, 1983).

Some of the following are my estimates as these sources are not clear in the earliest genealogy of the Aubrey Family. Turner-Thomas recently advised that there is no reliable link to the Carew or de Clare families. Saunders or Saunder is said to have been the brother of Eric of Boulogne, Earl Marshall of France, and also the brother of Alberic Earl of Bullen and Dammartin. The names Alberic and Alberico are Frankish in origin. The de Clare Family are well known to be Viking in origin and to trace descent to Charlemagne, crowned Emperor in 800 AD. Sir Reginald or Rinallt Aubrey, is said to have been given Abercynfrig and Slwch by Bernard de Neufmarche (Bernard Newmarch), and is said to have been the son of Saunder de St. Aubrey, and Reginald was born in about 1055 to 1060 in Normandy or France. He is said to have taken part as an active knight in the battle of Brecon in 1093. If this is true, he would have been about 30-35 years old in 1092. Sir Reginald's wife is said to have been Isabel de Clare, born in Normandy about 1073, but Turner-Thomas advises that this claim is unreliable. She is said to have been the daughter of Richard de Clare, (before 1035 to 1090) Earl of Brion and of Clare and Tunbridge, son of Gilbert Count of Brion, but again this claim is unreliable. The Ariciu site attributes a quote to the Domesday Book about Richard de Clare: "Tonbridge Richard of also called Richard de Clare and Richard FitzGibert son of Count Gilbert of Brion, Lord of Clare, Suffolk, Lord of Tunbridge Castle. Holdings in eight counties from Suffolk to Devon.", but Turner-Thomas is doubtful about this quote, and indeed dismisses it out of hand along with many websites on genealogy. It is clear, however, that Richard de Clare's son Gilbert de Clare is mentioned in the now online Domesday Book (under C of landowners) with the additional title of Earl of Pembroke. The son of Sir Reginald Aubrey and grandson of Saunder de St. Aubrey is said to have been Reginald d'Aubrey of Abercynfrig (estimated to have been born about 1080 to 1100), who married Anne, but according to Turner-Thomas this is unreliable. Their grandson (albeit unreliably) is said to have been Reginald Aubrey of Abercynfrig, born logically about 1165. His son is said to have been William Aubrey of Abercynfrig (born about 1199). Ariciu claims that he married Joan Gunter (born about 1210), descended from another Knight of Bernard de

Neufmarche. Their son is said to have been Thomas Aubrey of Abercynfrig (perhaps 1209-1300) whom Airuciu claims to have married Anne or Joan ferch Carew. This claim is cited as unreliable by Turner-Thomas. Their son according to Airciu was Thomas Aubrey of Abercynfrig, who married Joan ferch Trahaearn ap Einion, and the Norman line intermarries with the Royal Line of Bleddyn ap Maenarch.

This last claim appears to me to be more reliable, because both Bartrum and Turner-Thomas cite their son Thomas Awbrey Coch (the Red Haired) of Abercynfrig, known as Y Cwnstabl Coch (The Red- Haired Constable). He appears in the Turner-Thomas site "Celtic Royal Genealogy", which is a definitive, well researched site. Cwnstabl Coch was born probably around 1299. Bartrum and Turner-Thomas cite him as having married Nest ferch Owain Gethin ab Owain Glyn Tawe (upper Swansea Valley) and Gwenllian ferch Gwilym Wernddu, Gwent ("Gwilym" is corrupted to "Godwin" on the Ariciu site). Owain Gethin was born probably about 1260, because Turner-Thomas gives a date of birth of 1265 for a younger sister of his.

This link to Nest ferch Owain Gethin ab Owain definitively establishes my descent from Bleddyn ap Maenarch, Tywysog Brycheiniog (about 1024 to 1093), the son in law of Tewdwr Mawr, Tywysog Deheubarth, the Queen's ancestor. Bleddyn ap Maenarch (died in 1093) married Elinor ferch Tewdwr Fawr, (Tudor the Great), born in 1025. Nest was born in 1304, and her arms were "Azure, a buck springing forward argent, attired or". She might have lived in Ynys Cedwyn Hall itself. Owain Gethin is established in Bartrum as a descendant of Prince Bleddyn ap Maenarch as was the twelfth century Gruffydd Gw^yr ap Cydifor. Turner-Thomas establishes the line as follows: Prince Bleddyn ap Maenarch (about 1024 to 1093, born in Aberhonddu (Brecon)), married Princess Elinor ferch Tewdwr Mawr (born in 1025). Their son was Blegwrd ap Bleddyn (born about 1050 in Aberhonddu (Brecon), spouse unknown). Their son was Gwgon ap Blegwrd (born before 1090 in Brecon, spouse unknown). Their son was Cydifor ap Gwgon, Arglwydd Glyntawe (Lord of Glyntawe, born there about 1133, who married Mallt ferch Llewelyn Gw^yr (Gower)). Their son was Meurig ap Cydifor (born in 1167 in Brecon, spouse unknown). Their son was Gwilym ap Meurig, who married Cristin Turbeville. At this point, Turner-Thomas ceases to give dates for this line. Their son was Caradog ap Gwilym, who married Joan ferch Owain. Their son was Owain ap Caradog, who married his distant cousin Lleucu Gwyn ferch Einion Saes, also descended from Bleddyn ap Maenarch. Their son was the aforementioned Owain Gethin ab Owain . His daughter Nest

married Cwnstabl Coch. Turner-Thomas also mentions that Thomas Awbrey Coch and Nest ferch Owain Gethin had a son Richard ap Thomas Awbrey of Abercynfrig, who reliably married Crisella ferch Ffilib ap Elidir Ddu, Knight of the Holy Sepulchre (see also information below by Stuart Davies which is another source for this marriage). This mediaeval Awbrey information is given at the top of the table "Aubrey 1" on page 44 of volume 1 of Bartram's Welsh Genealogies AD 1400-1500 in the National Library of Wales. Information is also available from LDS FHC microfilm 104381 item 6 and film 6612 in the National Library of Wales. Ariciu also cites "Welsh Records", Lancaster PA, New Era Print Company (1912). These later Aubrey sources are probably known to scholars and are collected in a website by Janet Ariciu. Crisella was the daughter of Ffilib ab Elidir Ddu and Crisella ferch Seisyllt ap Llywelyn ap Moreiddig Warwyn. Ffilib ab Elidir Ddu was the great- grandfather of Sir Rhys ap Thomas, K. G., (1449–1525) who was instrumental in bringing Henry VII to the throne.

My own arms and rank of Gentleman were not inherited (because I am not in any direct father to son line from an Armiger), but won by merit on 7th July 2008 for distinguished contributions to Britain in science, and for numerous other achievements. Nevertheless, many of my ancestors were distinguished in many ways, and genealogy gives a profound sense of history. Slwch itself was described in a 1698 history of Breconshire by Hugh Thomas (also cited on a comprehensive website by Janet Ariciu). It was described as being half a mile from the then ruined and roofless chapel of St. Elyned, sister of St. Callwen, daughters of the late fifth century Brychan Brycheiniog. St John the Baptist Callwen, Glyn Tawe, with which several of my ancestors are associated, is built on the Celtic site of St. Callwen. The chapel of St. Elyned was situated on an eminence a mile to the east of Brecon and about half a mile from a farmhouse that was the original Aubrey Manor of Slwch. By 1698, therefore, it had been sold out of the Aubrey family.

Prince Bleddyn ap Maenarch and Prince Rhys ap Tewdwr Mawr were both killed in the Battle of Brecon in 1093, while engaging a superior, invading Norman army under Bernard Newmarch and twelve knights with their contingents. One of these knights was Sir Walter Havard, very probably my own ancestor too. Bleddyn ap Maenarch married Elinor ferch Tewdwr Mawr (Elen daughter of Tudor the Great, Prince of Deheubarth). Their son was Gwgon ap Bleddyn (born in 1090), whose son was Cydifor ap Gwgon (born in 1133), whose son was Gruffudd Gw^yr ap Cydifor (born in 1175) of Ynys Cedwyn Hall and other houses. Therefore, the name "Gruffudd

Gw^yr" (Gruffudd of Gower) first appears in the twelfth century. His son was Gruffudd Fychan ap Gruffudd Gw^yr. A later Gruffudd Gw^yr was involved in a 1287 rising against Edward 1, whose activities in Wales are well known to be despotic. This Gruffudd Gw^yr was probably the grandson of Gruffudd Fychan (probably born about 1200 give or take a few years).

The Awbrey Family (originally burghers or constables) married into the Royal lines of Wales many times. For example, Richard Aubrey (born in 1329) married Crisella daughter of Ffilib ap Elidir Ddu, the latter being a Crusader Knight of the Holy Sepulchre, born about 1280. He came from Crug, about a quarter mile from the seat of the Royal House of Dinefwr, now called Dynevor Castle. The original castle was a castle of the twelfth- century Prince Rhys ap Gruffudd ap Rhys ap Tewdwr, whose arms were a golden lion rampant. He was the direct ancestor of Henry VII Tudor, and I was granted this main element in my coat of arms (see www.aias.us). The later Rhys Family of Dynevor claim descent from the thirteenth- century Ffilib Ddu. In my arms, the golden lion rampant of the Prince Rhys ap Gruffudd (third son of Gruffudd ap Rhys ap Tewdwr Fawr), holds a sheaf of hay in silver representing my father Edward Ivor, who was a coal miner and hill farmer, and my direct paternal line. This sheaf of hay is modelled on the sheaf of wheat of Ceredigion County Council. These elements are superimposed on a pattern of black hills, representing Bannau Brycheiniog (the Brecon Beacons), taken from the arms of Rhydamman (Ammanford) Town Council. The motto is "Poer y Llwch o'r Pair Llachar", a line of my cynghanedd written in honour of the South Wales coal industry. It means "Dust pours from the fiery cauldron". The crest is the Celtic Cross of Nanhyfern rendered by the Windsor Herald, who designed it for the Arms of Penfro County Council. This denotes peace and goodwill to all Nations, and the Newlands branch of my family. It is supported by two red dragons rampant from the arms of my Alma Mater, the University College of Wales, Aberystwyth, now the University of Aberystwyth. My heraldic badge is a Norman helm of the eleventh century, of the type that appears in the Bayeux Tapestry, denoting descent from the Awbrey and Havard Families. Superimposed on the helm are two heraldic goutes (drops of liquid), denoting my foundation of the European Molecular Liquids Group at the National Physical Laboratory in 1980, and concentric rings denoting my inference of the B(3) field at Cornell University in the US in late 1991. I am told that it has recently been nominated again for a Nobel Prize. Originally I wanted a ring of quartz crystals instead of the rather militaristic Norman helm, but the latter accurately denotes Norman descent in two branches. My rank on merit now

is also the Armiger rank of Gentleman and I first appear in an international edition of the definitive "Burke's Peerage and Gentry" in 2009. Tommy and Jeff Morgan, the brothers who discovered the enormous cave system of Dan yr Ogof, (now the Welsh National Cave Centre) were two of the six sons of William Morgan, who was the eldest son of Morgan Morgan. William Morgan developed Abercra[^]f Colliery, and various quarries using the Swansea Canal. Morgan Morgan purchased Craig y Nos, and lived there with his wife Mary and son William and family. After the sale to Adelina Patti, it was the son William who really developed the upper Swansea Valley. The two Morgan brothers were therefore second cousins to my great- grandfather William John Potter. When William Morgan died in 1905 he left an estate of some £35,000 , (about a million pounds today). Tymawr, or Tir Mawr as it was originally, came into the family through Morgan Morgan's marriage to Mary Watkins, daughter of William Watkins. William Watkins developed Ty Mawr, and after him, William Morgan. After him the house was lived in by his widow and two of his sons, Eliphaz and Jeff Morgan. When Jeff Morgan died the house was sold out of the family and is now a nursing home. The Welsh National Cave System is owned by descendants of a sister of the Morgan brothers. Morgan Morgan also lived in an ancient house called Hen Neuadd (Old Hall) in the middle of Abercra^f when he owned the colliery in the 1860s. These references can be found in "The History of Abercra^f Colliery" hand written by Eliphaz Watkin Morgan and deposited in the National Library of Wales in Aberystwyth. This includes a section on the discovery of the caves by paddling across an underground lake in a corwg (coracle). Eliphaz was named after his grandfather Eliphaz Watkins Pwll Coedog in Glyn Tawe, whose daughter Mary Anne married William Morgan. Tudor Watkins, the Baron Glyn Tawe, was descended from this family. The dates are: Morgan Morgan (1808-89), Mary Watkins Morgan (1810 to about 1888), William Morgan (1835-1905), Eliphaz Watkins Morgan (1870-1944), Tommy Morgan (1875-1964), and Jeff Morgan (1884-1955). My father Edward Ivor Evans,lived from 1922 to 2000, so knew the two Morgan brothers as a boy as he recounted to our family.

William John Potter, (1856 / 1857–1929), my great- grandfather, was a lime burner at Penwyllt quarry. William John and Hannah initially lived in 1 Penwyllt Cottages above Craig y Nos. (Family History Film 1342288, Public Records Office RG11, Piece / Folio 5346 / 115, p. 10). His youngest sister was Harriet (1880-1972), who married William Davies and died in Tre Castell. Gwenllian was born in 1890, her sister Rachel in 1877, her brother David John in 1878 and her sister Mary Jane in 1879. The following information

was kindly made known to me by Stuart Davies in September 2009. The children of William John Potter and Hannah Thomas were Rachel (born in 1877), Mary Jane (born in 1879), David John (1881-1930), Daniel (1883-1939), Olivia (born in 1886), Margaret H. (born in 1889), Gwenllian (born 28th January 1891, my grandmother, recorded officially as "Gwen", but known in the family as "Gwenllian"), Caroline (born in the June quarter 1893), and Blodwen (baptized on 14th January 1901). All the children with the exception of Blodwen were baptized in Callwen Church on 2nd July1893. In the 1891 Census, they were all living at 7 Penwyllt Cottages. There are two birth dates for David John, 1878 and 1881, and two dates of death, 1924 on the gravestone in Callwen, and 1930 in the Parish records. David John married Mary (1896-1958), and their son was David John Leslie Potter (1921-92, buried in Callwen). Daniel Potter married Sophie Anne. A member of the Potter family has researched the origins of David Potter in Worth District in Sussex.

Penwyllt is now a cluster of houses in limestone and wild moorland around the disused Penwyllt Railway Station, which was built to accommodate distinguished guests of Adelina Patti, the famous operatic soprano who took up residence at Craig y Nos Castle. The station remains partly intact, but the elegant guest room is gone. My ancestor Morgan Morgan sold Craig y Nos to her in 1878, and she developed it extensively. The road was improved from Penwyllt Railway Station to the Castle below in the Swansea Valley. Today most of the few remaining houses in Penwyllt are still lived in and the nearby limestone quarry where my great- great and great- grandfathers Potter worked is still in occasional business. Patti was given a private railway carriage, and a private room in the station. Y Grithig is quite a large and well-known cottage now (it has been converted into a large modern house) because of the nearby Ogof Ffynnon Ddu, (sometimes called "Grithig Cave"), the deepest cave in Britain at 308 metres with 50 kilometres of passageways now known. "Ogof Ffynnon Ddu" has over 500 entries on google, with many spectacular photographs. The mouth of the cave is only about 40 metres from Grithig, where there is an outflow into the river Tawe. The cave contains paleolithic fauna and was first excavated around 1950. It was well known to my father Edward Ivor Evans, (born in 1922), who grew up at Grithig with his older half brother Fred, his older half sister Blodwen, his younger brother Raymond and younger sister Nan. My father would have been amused at claims that the cave was "discovered" in 1945. Craig y Nos Castle was the home of Adelina Patti, probably the most gifted operatic singer of that era. There is a historically

unique CD available of Patti made in 1905 when she was over 60 and her voice well past its best, but occasionally still of great technical ability. At the height of her fame, she was unrivalled by any operatic singer, and universally admired. Her style of singing goes back almost to Mozart. Given the mindless class distinctions of her time, she was by all accounts kindly and generous to the ordinary people of her adopted home in the haunting and most beautiful upper Swansea Valley. Across the valley is the extensive Dan yr Ogof and Ogof yr Esgyrn cave systems discovered by the two Morgan Brothers. These are known to have been inhabited by humans 4,000 years ago. These would have been even more amused to find that the caves were discovered in the twentieth century

My father started work as an unpaid farm servant on Banwen Farm near here at the age of about 12 in 1934, still common in those depression days of the thirties, then worked at Banwen Colliery before moving to Nixon Colliery. He looked after his younger brother Raymond, born in 1933, and the youngest of the family, who was moved to Banwen in 1944 after his mother died when he was only 11. Their great- grandfather Edward Evans Llanigon, and grandfather Edward Evans Cleirwy, probably started life in the same way, as unpaid farm servants, entirely dependent on the nature of the farmer for shelter, clothes and food. My father Edward Ivor therefore moved about fifteen miles down the Swansea Valley when still a boy. After the shock of my grandmother's drowning in the river crossing below Glyn Bedd Farm near Crynant in September 1944, my grandfather William John Evans moved to Banwen Farm to be taken care of by his stepdaughter Blodwen (I always called her Blod, a very kindly lady and a favourite aunt of mine). I was allowed to meet him there only once in my life, in the late fifties, for about fifteen minutes only, and he seemed a kind enough man, but subdued in a room of his own in the farmhouse. He was by other accounts cheerful as a younger man. He gave me a threepenny piece or a shilling (a silver-looking coin), I cannot quite remember which. I was great friends with my late cousin Dyson, Blod's son, and had a great time on Glyn Bedd. Later ,my father moved to this house in the village of Craig Cefn Parc after marrying my motherMary Jones in 1948. In about 1954, they moved to Pant y Bedw, a smallholding of about one and a half acres. My birth certificate records my father as a colliery shotman underground at Nixon Colliery, responsible for bringing down a face of coal using powder. Later, he became an overman at Lliw Colliery before being forced to retire at the age of about 40 by 30% pneumoconiosis.

Much of the following information on my Havard and other lines was

kindly provided by the editor Dewi Lewis of Clydach in 2008 and 2009. In the maternal line my great- great- grandfather was Thomas Jones of Llanbedr Pont Steffan (Lampeter) district. He appears in the 1881 and 1891 Censi as a coal miner living in Craig Cefn Parc, aged 50 and 60 respectively. Census records confirm this date of birth (1881 and 1891 Censi). His wife is recorded in these Censi as Mary, (born in 1836) in or around Craig Cefn Parc. The birth certificate of their sonTommy Thomas Jones (born on 17th September 1867) shows that she was my great- great- grandmother Mary Hopkin. From the 1841 Census she was probably the daughter of Daniel Hopkin Fagwr (born in 1811) and Hannah (also born in 1811, nee unknown). In the 1881 Census, there are four children, Ruth aged 15, Tommy Thomas Jones aged 13 (my great- grandfather, 17th September 1867–12th May 1938), Daniel aged 9 and Mary aged 6. In the 1891 Census, there are Thomas Jones aged 60, Mary Jones aged 55, Daniel aged 19 and Mary aged 16. In the 1901 Census, my great- grandfather Tommie Thomas Jones is recorded as living in Craig Cefn Parc, working as a coal miner and born in 1867. He is said to have been an engine driver or winding gearman, either in Hendy or Nixon drifts, Craig Cefn Parc. On the marriage certificate of my grandparents in 1918, he is described as a colliery repairer. His wife was my great- grandmother Mary Havard (27th September 1871–27th December 1938). Tommie Thomas Jones of Craig Cefn Parc married Mary Havard of Craig Cefn Parc on Christmas Day 1889 at Pontardawe Registry Office (GRO 1889, Q4, vol. 11a, p. 1291 and marriage certificate). He was a 22 year- old collier and she was 19. Both of their fathers were colliers. From a birth certificate Mary Havard was born on 27th September 1871 either at Ty Trawst, Cwm Cerdinen or Banc y Fagwr, Craig Cefn Parc. The certificate has the mark of her father Thomas Havard, a coal miner, who was therefore illiterate as were many of the rural poor in those days. In the 1901 Census, there are Tommy Thomas Jones aged 33 (born Craig Cefn Parc), Mary his wife aged 30 (born Craig Cefn Parc), and their children: Mary Hannah aged 11, Annie aged 8, Thomas (later Thomas Elim aged 6, my grandfather, (February 1894–26th September 1963), Ruth aged 4 and John T. aged 2. Later there were Lily Maud (1906-86) and Rachel, all of whom I remember. My mother Mary Evans (nee Jones, 1926-2002) was born on 12th February 1926 to Thomas Elim Jones, then a coal miner, and his wife Martha Jane Jones (nee Newlands, 2nd November 1894–7th. July 1969). She was the daughter of William Newlands of Penfro (1873–1st February 1933), an engine driver in Nixon Drift, and Elizabeth D. Hopkin of 7 Banc y Fagwr, Craig Cefn Parc (1875–30th November 1913)). She was probably the daughter

of David William Hopkin Fagwr (1844–26th August 1903) and Sarah, nee unknown (1840–14th February 1920). David William Hopkin was probably the son of William Hopkin Cwm Nant y Moel (born in 1823) and Elizabeth, (nee unknown, born in 1823). Records of the Hopkin Family of Rhyndwy Clydach go back to Ifan (Evan) Hopkin in 1628.

My mother Mary Evans, nee Jones (12 February 1926-August 2002), had one older brother, my Uncle William Mendleson Jones. (With so many Joneses middle names had to be imaginative and preferably musical.) Thomas Elim Jones later became Head Deacon of the Welsh speaking Elim Baptist Chapel, Craigcefnparc. His birth certificate records him as the son of Tommy Thomas Jones, a literate coal miner, and Mary Jones, formerly Havard, whose mark records her as illiterate. Thomas Elim was a composer of four- part harmonies, a conductor, "Capel Meister", and brass band conductor. So I grew up in this house surrounded by musical instruments, a small harmonium worked by foot pedals, and conducting batons with cork handles. By the time I was born in 1950, Thomas Elim Jones was already suffering badly from the dreaded coal miner's disease of black lung (pneumoconiosis), and could not walk very far without a walking stick and a respirator (called a "pump"). He died of this and complications, all too early, on 26th. September 1963, followed in a few short years on 7th July 1969 by his faithful wife, my grandmother Martha Jane Jones, nee Newlands.

My great- grandfather William Newlands (1873-1933) was born in the farm or small cluster of houses called Orlandon, in Pembroke in 1873. The 1881 Census records him as living, aged 4, with his father James Augustus Lewis Newlands of Orlandon Pembroke, aged 29, born 1852 / 1853, a farmer of 10 acres at Cathelyd Fach, Craig Cefn Parc. His father was James Combe Newlands, a mariner who died of fever in 1855. He was born probably in the Aberdeen area of Scotland. He married Sarah Lewis, daughter of an Orlandon farmer, in 1824. His father was James Newlands, a silk weaver probably from Aberdeen in Scotland, who married a Combe. The Newlands of Scotland probably originated in Norway, because the name can be traced to Caithness, Orkney and Shetland. Silk weaving was an industry of Aberdeen at that time, and Combe is a corruption of the Highland name Mac Thomaidh, or Mac Thomas, part of Clan Mac an Taoiseach (Mackintosh). The latter was part of Mac Donald Clan na Chattan, a powerful confederation of clans described with historical accuracy, for example, by John Prebble in his books. The name Hasguard is incorrectly recorded as "Liskard" in the 1873 Census. James Newlands' wife, my great- great- grandmother, was recorded as Martha

Newlands, aged 34, born in 1837, of Mathry in Pembroke, nee Martha James. There were also James aged 6, Thomas Hendry aged 5 and Elizabeth aged 1. Orlandon at that time was either a farm or cluster of houses between St. Bride's and Hasguard. Living with them was a brother- i law, Thomas Jones, and one or two farm servants (gweision fferm).

My great -grandfather William Newlands married Elizabeth D. Hopkin of Craig Cefn Parc (1875-1913), and had two daughters, my grandmother Martha Jane (1894-1969) Sarah Maud, (1897-26th March 1962), the younger sister of my grandmother Martha Jane, and the grandmother of my cousin Ellis Williams. When my maternal grandparents were married, both great- grandfathers were in the wedding photograph, but Elizabeth Newlands had died in 1913 and my great-grandmother Mary Jones, nee Havard (1871– 1938) was not in the photograph that I have. In the 1871 Census, James Augustus Lewis Newlands is recorded as aged 18, born in 1853 consistently with the 1881 Census. He was then a farm servant in Sandy Haven House, Haverfordwest (Hwlffordd). The 1851 Census records my great- great- greatgrandmother Sarah Newlands (nee Lewis), 27 years old, married and living in Orlandon near Hasguard, St Bride's. On the day of the 1851 Census, her husband James Combe Newlands was not present, and probably on a voyage. Also recorded is her older sister Mary Lewis, aged 37, unmarried, born in 1814. The 1841 Census records Martha James, aged 7, of Mathry, so Martha James was born in 1834 and was eighteen years younger than her husband, James Augustus Lewis Newlands.

The 1881 Census records the fact that my great- grandfather David William Hopkins (1844–26th August 1903) was born in 1844, in Craig Cefn Parc, and lived at 7 Banc y Fagwr, Craigcefnparc. He was married to Sarah (nee unknown) of Craig Cefn Parc (1840–14th February 1920). The Hopkins (should be spelled "Hopkin") family can be traced back to 1628 in Rhyndwyclydach when an Evan Hopkin is mentioned in a tax record (www.a-glamorgan-family.com/Rhyndwyclydach) along with William Griffith, Hopkin David, Owen ap Evan, David Morgan and Thomas William. In 1767, several members of the Hopkin family are mentioned as members of the Unitarian Chapel of Gellionen (now listed and founded 1692), notably David Hopkin and Evan Hopkin. In 1841, the members of the Baran independent chapel (founded in 1805) included Isaac Hopkin Tan y Graig, Llewelyn Hopkin Banc y Ffynon, William Hopkin Godre'r Garth, Hannah Hopkin Heol Ddu, Ifan Hopkin Cefn Parc (the farm that gives the name to Craig Cefn Parc) and David Hopkin Tan y Graig, My great –great- grandfather's daughter was my

great- grandmother Elizabeth D. Hopkins, (1875–30th November 1913) and who married William Newlands. Sadly, she died at the age at only about 37 or 38. Their daughters were Martha Jane and Maude Newlands. Martha Jane was my grandmother and married Thomas Elim Havard Jones, the son of Mary Havard. The same Census records my great- great- grandfather Thomas Havard (1840–1912) to be living then at 5 Banc y Fagwr, Craigcefnparc. His daughter Mary Havard was born on 27th September 1871 either at Ty Trawst Cwm Cerdinen, or 5 Banc y Fagwr, Craig Cefn Parc, and was my great-grandmother, the mother of Thomas Elim Jones. Earlier, Thomas Havard had lived in Ty Trawst, Cwm Cerdinen, and was born in 1840 in Ystradfellte. Both great- grandfathers were coal miners. The Hopkin family in this area goes back to Tudor times in the records of RhyndwyClydach, the earliest record of RhyndwyClydach being in the reign of Elizabeth Tudor.

Thomas Elim Jones married Martha Jane Newlands in Pontardawe Registry Office on 26th January 1918; they were both 23. He is described on the marriage certificate as a colliery rider, who lodged at 11 Eatham Terrace, Garnswllt while working in a colliery near there. She lived here at Bryn Awel House, built by her father William Newlands. Tommy Thomas Jones was then a colliery repairer, and William Newlands then a colliery engine man. The colliery rider was a man who looked after a journey of about 25 drams, hauled out of a drift with a continuous steel rope. The engine man was the operator of the haulage engine.

The marriage of my parents took place at Elim, Capel y Bedyddwyr, Craig Cefn Parc, on 2nd September 1948. My father Edward Ivor still lived at Banwen before moving here to Bryn Awel House and on the marriage certificate was a shot fireman who fired the blasting holes left by the miners using what was known as "pwdwr" or gunpowder. My mother Mary was born here and lived here, and at the time was a draper's shop assistant at Lewis Lewis in Swansea. They were 26 (Edward Ivor) and 22 (Mary). I was born here at Bryn Awel House on 26th May 1950. I bought it back into the family in 1992 and live here with my wife Larisa as the fourth family generation. My second cousin Ellis Williams lives "next door" with his wife Susan (really part of the same house), again as the fourth generation. William Newlands was our mutual great-grandfather. I am the grandson of Martha Jane Newlands and Ellis is the grandson of Sarah Maud Newlands. Ellis' father was the universally respected Diacon (Deacon) of Elim, Cenfyn Young Williams of Boncath, Sir Benfro (1930-22nd August 2010, named after the great preacher Jubilee Young), and Ellis's mother was Marbeth Hopkins (1934–28th October 2003) born here at Bryn Awel House, as was Ellis himself. Marbeth's father was Benjamin Ellis Hopkins (1900–25th February 1945) of Bettws. Both Sarah Maud and Marbeth were Licentiates of the Royal Academy of Music, being fine pianists and organists.

Apart from the Awbreys, my most ancient and best known lineage is that of the Havard Family of Wales, Normandy and Scandinavia (spelled without the r of the famous "Harvard", and unrelated to the Harvards). This is simply because records for the rural poor are quickly lost or are simply non-existent. Those of the aristocracy or landed gentry such as the main branches of the Havards are much better preserved. Thomas Elim Jones' mother, my greatgrandmother, was Mary Havard Ty Trawst, either of Cwm Cerdinen or Craig Cefn Parc, a Welsh speaking nonconformist protestant descended from catholic recusants of the seventeenth century. She was illiterate because her mark appears on the birth certificate of Thomas Elim Jones, and the daughter of Thomas (Twm) Havard, who was born in 1840. The 1841 Census records his father Morgan Havard aged 30 living above Arches Row in Penderyn, born about 1808-1811, working as a rail straightener. His mother Mary Havard is recorded as aged 25, with David aged 7 and Thomas aged 1. Arches Row is in HO 107 /1367 of the Merthyr Tydfil Registration District. Morgan Havard could, therefore, have worked in the notorious Hirwaun Cyfarthfa ironworks, where conditions were appalling.

In the 1851 Census, Thomas Havard is recorded as living with his grandmother Anne Knoyle in Ystradfellte because both his parents died in 1845. Anne Knoyle was married to Thomas Knoyle, (1773-1850), a miller and cooper, possibly of East or West Knoyle in Wiltshire because in the 1841 Census there is only one Knoyle recorded for the whole of England, in Wiltshire, and six of that name in Glamorgan in 1841. Anne Knoyle in 1851 is described as a pauper, widow of a miller. They had lived in Pont Felin Fach in Ystradfellte, now a ruin. Thomas and Anne Knoyle are buried in Ystradfellte Church. Thomas died on 19th December 1850 at Tai yr heol, Ystradfellte, cause of death unknown and reported by the mark of Elizabeth Jenkins, who was therefore illiterate. Ann Knoyle (nee Williams) lived from 1779 to 1865 and died on 17th July 1865 at Tai'n yr heol, Ystradfellte, cause of death unknown and unregistered, and again reported by the mark of Elizabeth Jenkins. Thomas Havard's mother Mary Knoyle, daughter of Thomas and Anne Knoyle, lived from 1812 to 1845 and died at the age of 33 in Merthyr, where Morgan Havard (1808-45) was an ironworker. On 29th January 1833, Morgan Havard and Mary Knoyle had been married in Ystradfellte. Morgan

Havard is therefore my great- great- great- grandfather and almost certainly descended from Sir Walter Havard, an eleventh century Norman Knight and Lord of Pontgwilym in modern Brecon. Morgan's father is possibly John Havard (spelled Havart) of Defynnog, a few miles only from Pontgwilym in Brecon, the land given to Sir Walter Havard in the eleventh century. However, further research is needed here. Morgan Havard (a labourer aged 37) died of typhus on 5th September 1845 in Penderyn District and his wife Mary aged 33 died on 29th July 1845 in Penderyn District of dropsy, or heart disease. Their son Twm Havard Ty Trawst, Cwm Cerdinen, coal miner, was therefore orphaned at the age of 5 in 1845. He married Anne Jones whose father was Morgan Jones in 1864 (Neath Registry). They went to live in Ty Trawst, a longhouse (Ty Hir) and small farm on the road out of the wild and hauntingly beautiful Cwm Cerdinen to Garnswllt, near Gerazim Welsh Baptist Chapel, which is situated out on the moorland. Thomas Havard died in 1912 at the age of 72 (Pontardawe Registry). At Ty Trawst and later in Craig Cefn Parc, Thomas and Anne had eight children: Morgan born in 1866 (who had eleven children), Dafydd born in 1868 (who had five children), Thomas born in 1870 (who had eight children), Mary born in 1872, my great grandmother, Ann born in 1975 (who had seven children), William born in 1877 (who had eight children), Elizabeth born in 1879 (who had three children) and Hannah (who had three children). My great -grandmother Mary Havard married Thomas T. Jones my great- grandfather, and they had several children, one of whom was Thomas Elim Havard Jones, my grandfather and Head Deacon of Elim Baptist Chapel in Craigcefnparc. Thomas Elim married Martha Jane Newlands of a Mathry family, and had two children, one of whom was my mother Mary (1926-2002), who married my father Edward Ivor Evans of Y Grithig, Craig y Nos (1926-2000) near Pen y Cae, Glyn Tawe.

In the Havard Family Forum (genforum.genealogy.com/Havard) there is a Havard line given from Sir Walter Havard to Sir John Havard to Sir Henry Havard to Sir John Havard to John Havard to Walter Havard to Madog Havard to Maredydd Havard to John Havard to John Havard to Jenkin Havard to Gwallter Havard to Roger Havard, who married Lleici Llywelyn to Gwenllian Havard, who married Jeffrey Gwilym Jenkin Madog of Llywel, only four miles from Defynnog (who lived in Elizabethan times). So the Defynnog branch is almost certainly descended from Sir Walter Havard. In one of the family charts on www.aias.us many marriages are recorded of Havards in the royal line of Prince Bleddyn ap Maenarch.

The Havard name is originally of Norse (Norwegian) origin (Havardr),

and means "Of High Worth" (Hoy Vardr). It is a common first name in contemporary Trondheim, for example, the area from which the Dukes of Normandy and Earls of Orkney originated. Therefore, its origins are probably in Norse mythology, which is very rich and highly developed. For example, there is recorded in the Norse Sagas a Thorstein Havardson who was a "great chief" on Sanday in the Orkneys. In contemporary times there is a Norwegian pop singer called Havard Abusland, who transliterates his name into Howard Maple. The Havard name is contemporary with or perhaps older than the Norman Conquest and arrived in Wales with Sir Walter Havard, whose Norman French name was Walter Havre de Grace (circa 1090). Havard is still a common surname in contemporary Normandy, notably the quite well known Havard Cornille foundry which cast the Liberty Bell to commemorate the Normandy Landings of 6th June 1944. Sir Walter Havard was a Norman Knight and was given the Manor of Pontgwilym, near Brecon by Bernard de Neufmarche en Lions (also known as Bernard Newmarch). Lower Pontgwilym Farm, (Brecon LD3 9LN, tel +44 1874 624914) may be the site of the original Manor House. So two branches of my family originate very close to each other in Brecon, about thirty miles north of here, but are separated by eight centuries. Bernard de Neufmarche, Ralph de Mortimer, and other Norman Barons rebelled against William II Rufus in favour of Robert Duke of Normandy, and attacked Brycheiniog. They built a strong castle on the north side of the Usk, near Brecon. According to the historian Theophilus Jones, the Knights included Sir Reginald Aubrey (but probably fabricated in the opinion of Arthur Turner-Thomas), Sir John Scull, Sir Peter Gunter, Sir Humphrey Ffrergill, Sir Miles Piegard, Sir John Waldebieffe, Sir Humphrey Sollers, Sir Richard de Boyes, Sir Walter Havard, Sir Hugh Surdman, Sir Philip Walwin and Sir Richard Paglin. These Barons and Knights ,therefore, destabilized the Norman frontier with Wales against the wishes of William I and William II . They defeated Rhys ap Tewdwr, who was killed in the battle (circa 1093). The grandson of Rhys ap Tewdwr, who was the Lord Rhys (Rhys ap Gruffudd ap Rhys ap Tewdwr, Prince of Deheubarth) was the direct ancestor of Henry VII Tudor and therefore of the present monarch, Elizabeth II. For some reason Bernard and his Knights got away with the rebellion, probably because they were militarily too strong for the Norman King. Bernard de Neufmarche de Lions married Nest ferch Caradog ap Trahaearn. The main element of my arms, granted on 7th July 2008, is the golden lion of Prince Rhys ap Gruffudd, the ancestor of Henry VII Tudor.

After this initial hostility towards Brycheiniog, the Havards contributed

quite well to Brecon society and became one of the most powerful families in the County of Brecon, which was established by the Normans to rename ancient Brycheiniog, now part of Powys. Several Havards are listed among the aristocracy and landed gentry in the contemporary Burkes' Peerage, but as usual in the Norman system, the first son inherited everything, with other children often becoming impoverished over time and disappeareing from recorded history. In the thirteenth century, the Havards founded the Havard Chapel in what is now Brecon Cathedral. The Dean of the Cathedral has kindly given me access to more records there, which I hope to research soon. The Havard Chapel is now the Chapel of the Prince of Wales' Own Regiment (sixteen Victoria Crosses), formerly the regiment of Wales, formerly the 24th foot South Wales Borderers and formerly the 69th foot who were present at Waterloo and every British battle of any significance. The Havards soon became completely integrated into Welsh society and adopted the Welsh language. The poorer Havards such as those in this village speak Welsh to this day, but the aristocratic Havards and the Havard landed gentry have lost the language - a typical linguistic pattern in history. At the Battle of Bosworth in 1485, for example, there was present, on the Tudor side, Thomas Havard, a Gentleman of Caerleon in Gwent. This is the battle that established the Tudor Dynasty. Again, in the sixteenth century, Joan Havard, born in 1559 in Tredomen near Brecon married Sir Edward Aubrey, showing a continuity of association between the Havards and Aubreys of the eleventh century mentioned as Knights of Bernard de Neufmarche. Joan's father was William Havard of Tredomen, and her mother was a Vaughan, a daughter of Christopher Vaughan of Tretower Court, near Brecon. Joan Havard was, therefore, descended from Sir Roger Vaughan, who married Gwladys ferch Dafydd. Sir Roger Vaughan was born in 1377 in Bredwardine in Herefordshire across the English border and died in 1415 at the Battle of Agincourt after being knighted on the field by Henry V. His father was Roger Hen (Roger the Elder) and his mother was Anne, daughter of Sir William Deveraux, another Norman family. One can see the characteristic mixing of Welsh and Norman names as the aristocracy intermarried. The father of Gwladys ferch Dafydd was Sir Dafydd Gam ap Llewelyn ap Hywel, born in 1351, and also killed at Agincourt in 1415. He is mentioned in Shakespeare's "Henry V". The metaphysical poet Henry Vaughan was born at or near Tretower Court in about 1621 and was known to be fluent in both languages all his life. He never left Wales after his education at Oxford. This shows that the landed gentry of that time had not yet lost the Welsh language, and so the Havards of that time were also probably bilingual.

They were catholic recusants. Recent research has shown that the Havards were a Viking family of some social status and their first settlement in Normandy was in Les Flamands near Neuf Marche, south of the town of Gournay en Bret between Rouen and Beauvais. Sir Walter Havard's arms were a bull's head with three stars. A complete list of descendants of Sir Walter Havard , very probably from a younger son, Peter, of Walter, was sent to me recently by one of my Havard cousins and is as follows. The names change from Norman to Welsh in some cases and there are some gaps.

Walter born about 1040, Lord of Pontgwilyn, Peter born in 1065, William born in 1090, William born in 1120, Walter born in 1150, William born in 1180, William born in 1210, Siencin born in 1240 (married Margred), Sion born in 1280, William born in 1325 (married Elizabeth), John born in 1360 (married Gwenllian), John born in 1360 (married Joan), William (?), Thomas born in 1440 (married Margret), John (?), Thomas born in 1440, Thomas born in 1469 (married Maud), Harry born in 1500 (married Katryan), David born in 1530 (married Joan), Robert born in 1585 (married Elizabeth), Harry born in 1640, David born in 1665, David born in 1690, William born in 1710, John born in 1735, John born in 1755 (married Mary), Thomas born in 1782 (married Anne James), William born in 1833 (married Lettuce James), John born on 12th June1872 (married Mary Griffiths), Peter Owen born on 31st July 1914, Richard Havard born on 15th March1935 of London. The direct line (oldest son of Sir Walter Havard) is as follows. For some reason the hereditary title of Norman Knight disappears after Sir John, and again the names change from Norman French to Welsh. Sir Walter, Sir John (married Anne Aubrey, daughter of Sir Reginald Aubrey), Sir Henry (about 1100), Sir John, Sir John, John, Jenkin (about 1200), Walter, Madog, Meredith (about 1300). At this point, I have data on two branches. The first is that of Joan Havard, who married Sir Edward Aubrey. This is Gwilym, Evan, Lewis (about 1400), John, John, William Havard of Tredomen (married Anne Vaughan), Joan Havard (Tudor times). The second branch is another son of Meredith called John, then John, Jenkin, Gwallter (Welsh form of Walter), Roger, Gwenllian (reign of Elizabeth 1.). I have some additional notes. Lord Walter Havard of Pontgwilym, the Norman Knight. His eldest son was Lord John Havard, who married Anne Aubrey. The children of Jenkin Havard were Walter, Isabel (married Thomas Dilwyn) and Ann, who married William Burchill.

Bernard de Neufmarche (about 1050 to 1125) was the cousin of William of Normandy (William the Conqueror). His great- great- grandfather being Richard I, Duke of Normandy (born in 933). Richard's second wife was Papia

d'Enverneu, and their daughter was Papia de Normandie, who married Gilbert de St Valerie (born in 977). Their daughter was Ada de Hugleville (born in 1011), who married Richard Fitz Gilbert (born in 1008). Their daughter was also called Ada de Hugleville (born in1025, Turner- Thomas site "Celtic Royal Genealogy"). She married Bernard's father, Geoffrey de Neufmarche (born in 1018). William of Normandy was the illegitimate son of Robert Duke of Normandy and Herleve, wife of Viscount Herluin de Comteville. Robert Duke of Normandy was the son of Richard Duke of Normandy and Judith de Rennes. Bernard de Neufmarche's paternal grandfather was Turketil de Neufmarche, guardian of William of Normandy. Turketil was murdered about 1040 to 1042 by hirelings of Raoul de Grace. Turketil's other son was Hugh de Morimont, and Turketil was the second son of Torf, son of Bernard the Dane, Regent of Normandy from 912. Bernard de Neufmarche was born about 1050. In 1084, Bernard is recorded as giving the parishes of Burghill and Brisop in Herefordshire. He died in 1125 and is buried in Gloucester Cathedral. His son Mahel was declared illegitimate, and his sons Ralph and Paine settled in the north of England. As far as I know there is no record of a marriage between the de Neufmarche family and the Havard family. However, Bernard de Neufmarche married firstly Nest ferch Osborn Fitz Richard (born in 1075), and secondly Nest ferch Trahaearn ap Caradog (born in 1079). Both were granddaughters of Gruffudd ap Llewelyn (born in 1011), who married Ealdgryth of Mercia (born in 1034), daughter of Aelfgar of Mercia (born in 1005). Gruffudd ap Llewelyn was descended from my ancestor Hywel Dda (born in 913) and from my ancestor Rhodri Mawr (died in 977).

Bishop William Thomas Havard of Neuadd Defynnog (1889--1956) became, by my count, the 113th Bishop of St David in 1950. He was born on 23rd October 1889, 3rd son of William Havard, a Chapel Deacon of Defynnog, and Gwen. He was educated at Brecon County School, UCW Aberystwyth (B. A. (Third class) in 1912 in history), St Michael's Llandaff and Jesus College Oxford (M. A. 1921) also D.D, D.T. He was ordained priest in 1914, and from 1915 to 1919 was a chaplain, mentioned in dispatches in 1916, Military Cross, 1917, Vicar of St. Mary Swansea 1928-34, Canon of Brecon Cathedral and of East Gower, consecrated Bishop of St. Asaph (1934), 113th Bishop of St David (1950). He was a powerful preacher in Welsh and English, often at the National Eisteddfod, rugby blue for Oxford, capped for Wales in 1919. He married Florence Aimee Holmes in 1922, and they had four children.

The original Norse spelling is Havard, (from Havardr) and occurs in South Wales and Normandy, as well as in Norway and Denmark. The name Harvard

(with an r) has a different etymology, and there is no evidence to suggest that the Havards and Harvards are related. As a matter of interest, the Harvards of Stratford- upon- Avon were apparently friends of the Shakespeare family, and the Harvard House in Stratford is a half- timbered Tudor house open to the public. Here lived the mother of John Harvard who founded Harvard University in the early seventeenth century.

The arms of Prince Bleddyn ap Maenarch are displayed in Gregynog Hall of the University of Wales, and as was the custom of the Welsh (i.e. British Celtic) Princes, traces his ancestry to pre Roman times, in his case Beli Mawr (a few years BC to 43 AD, the date of the Claudian invasion). This name may be derived from Adminius, son of Cunobelinus, a Celtic King of Britain. His son was Lludd Llaw Gyffes ap Beli who appears in the Mabinogion as Lludd Silver Hand. Beli was the father of Caswallawn, Arianrhod, Lludd and Llefelys. His son was Canallac ap Lludd, followed by Aballac ap Canallac, Owain ap Aballac, Brithgwein ap Owain, Dwfn ap Brithgwein, Oswedd ap Dwfn, Enyrudd ap Oswedd, Amalguelidd ap Enyrudd, Gwyrdwfi ap Amalguelidd, Owain ap Gwyrdwfi, Gwyrdoli ap Owain, Doli ap Gwyrdoli, Gwyrcein ap Doli, Cein ap Gwyrcein, Iago ap Cein, Tegid (Tacitus) ap Iago (born in 314 AD), Padarn Beisrudd ap Tegid, Edeyrn ap Padarn, Cunedda Wledig ap Edeyrn, Einion Yryth ap Cunedda, Llyr Marini, Caradog Freichfras (born in 470 AD, King of Gwent), Cawrdaf ap Caradog, Glou ap Caw, Hoyw ap Glou, Cynfarch ap Hoyw, Cyndeg ap Cynfarch, Teithwalch ap Cyndeg (born in 830 AD), Tegyd ap Teithwalch, Anarawd ap Tegyd, Gwendy ap Anarawd, Gwengy ap Gwendy, Hydd Hwgan ap Gwengy, Dryffyn ap Hwgan (married Crisli ferch Idwal), Maenarch ap Dryffyn (married Elinor ferch Einion), Bleddyn ap Maenarch (died in 1092, married Elinor ferch Tewdwr Fawr), then to myself in indirect line over a further 900 years.

The continuity of names over nearly 1,100 years from pre Roman Beli Mawr to Bleddyn ap Maenarch shows little or no Roman or any other influence. This agrees with the recent and important finding by Brian Sykes, professor of human genetics at Oxford, that the Celtic DNA is the indigenous majority over the whole of Britain (Wales, Scotland AND England) and the whole of Ireland and the other 6,200 islands of the British Archipelago. This DNA is essentially identical to that found in present day coastal regions of Spain and the Basque country, and originates about 6,000 years ago when Iberian fishermen were first able to build ocean-going boats to cross the Bay of Biscay. This was the result of five years of research using 10,000 volunteers from Britain and Ireland. The second most common indigenous DNA in Britain

is of Norse and Danish Viking raider and invader origin, and pre Norman. There is essentially no Roman, Saxon or Norman influence on the indigenous DNA of Britain. It is also known by advanced linguistic scholarship that proto Celtic emerged in Iberia (Spain and Portugal), as much as 12,000 years ago. Proto Indo European emerged more than 30,000 years ago on the Steppes. So the BC Celtic culture of Britain (the oldest Celtic culture) spread outwards from Britain over large parts of Europe, reaching maximum influence about 400 BC in hoards such as that of La Tene and Hallstat, and the proto Celtic language split into many different Celtic languages. In sub Roman Britain and in Ireland (never invaded by the Romans) this culture remained intact, and only very gradually disappeared in England and Scotland. In England, however, a small continental cultural elite and language predominated. The majority indigenous population (by DNA) of England, however, remained Celtic and is so to this day. The English are proud of what they remember in a semi- mythical fashion as King Arthur (Owain Ddantgwyn Arth), Boudica (Buddug), Caratacus (Caradog), King Lear (Llyr) and Old King Cole (Coel Hen Godebog). In Wales we know the meaning of the original Celtic words.

This is just a summary with no pretence either to professional scholarship or to belles lettres of what I know of my family history - the traditional overture to an autobiography.

Appendix 1: Direct Line.

Edward Evans Llanigon (1802—74) married firstly a daughter of Esther Bevan; 2) Mary Anne Williams (bornin 1830) daughter of John Williams of Eaton Bishop, Herefordshire County (1794–1874) and Anne Langford (1794–1835) son of Walter Williams of Herefordshire County (1770–1869) and Mary Collins (1772–1805).

Edward Evans Cleirwy (born in 1863) son of Edward Evans Llanigon and Mary Anne Williams married Mary Thomas Cleirwy (born in 1866) daughter of James Thomas Cleirwy (bornin 1837) son of Sackville Thomas Huntington and Cleirwy (born 1795 / 1796) married Mary Price of Cleirwy (born in 1807).

William John Evans Llanfilo (21st July 1892 8th June 1971) married

Gwenllian Lodge nee Potter, of Penwyllt (28th January 1891–9th September 1944) of the Royal Celtic Line.

Edward Ivor Evans Y Grithig (22nd April 1922–January 2000) married Mary Jones Craig Cefn Parc (12th February 1926–August 2002).

Professor Myron Wyn Evans Gentleman with Arms of Glyn Eithrym (born 26th May 1950) married 1) Laura Joseph (born in 1945), 2) Larisa Voronchuk (born in 1956).

Appendix 2: Direct Maternal Line

Tomos Jones Llanbedr (born in 1831) married Mary Hopkin Craig Cefn Parc (born 1834 / 36) daughter of Daniel Hopkin Fagwr (born in 1811) and Hannah nee unknown (born in 1811).

Tommy Thomas Jones Craig Cefn Parc (1867–1938) married Mary Havard Craig Cefn Parc (1871–1938) daughter of Thomas Havard Ystradfellte and Cwm Cerdinen (1840–1912) and Anne Jones son of Morgan Havard Ystradfellte (1808–45) and Mary Knoyle (1812–45) daughter of Thomas Knoyle (1773–1850) and Anne Williams (1779–1865) son of John Havard Defynnog from Sir Walter Havard Lord of Pontgwilym (eleventh century).

Thomas Elim Jones Craig Cefn Parc (24th February 1894–26th September 1963) married Martha Jane Newlands Craig Cefn Parc (2nd November 1894–7th July 1969) daughter of William Newlands Ordandon, Hasguard, Penfro (1873–1st February 1933) son of James Newlands and daughter of Elizabeth D. Hopkin Fagwr 5 (1875–30th November 1913) daughter of David William Hopkin Fagwr (1844–26th August 1903) and Sarah nee unknown (1840–14th February 1920) son of William Hopkin Cwm Nant y Moel (born in 1823) and Elizabeth nee unknown (born in 1823) from Tudor era Hopkin Family of Rhyndwyclydach.

Mary Jones Craig Cefn Parc married Edward Ivor Evans Y Grithig.

Professor Myron Wyn Evans Glyn Eithrym, born and lives in Craig Cefn Parc.

Appendix 3: Royal Celtic Line. Ancestral Genealogy by Generation to Prince Tewdwr Mawr; unless otherwise stated the source references are Bartrum, Turner-Thomas, Leonid Morgan and Stuart Davies.

Tewdwr Mawr ap Cadell, Prince of Deheubarth, Powys, Morgannwg (born about 977) married Gwenllian ferch Gwyn (born in 977), descended from Hywel Dda, Queen's Tudor ancestor.

Elinor ferch Tewdwr Mawr (born about 1025, Caerfyrddin), married Bleddyn ap Maenarch Prince of Brycheiniog (born about 1045–93).

Blegwrd ap Bleddyn (born about 1050 Aberhonddu), marriage unknown.

Gwgon ap Blegwrd (born about1090 Aberhonddu) married Gwenllian ferch Ffilib Gwis of Wiston, Penfro (Wogan Family).

Cydifor ap Gwgon (born in 1133), Arglwydd Glyn Tawe a Gw^yr, married Mallt ferch Llewelyn Fychan ap Llewelyn ap Gwrgan Cydweli ap Gwgan.

Meurig ap Cydifor (born in 1167) marriage unknown.

Gwilym ap Meurig m Cristin de Turbeville daughter of Enerod de Turbeville Crug Hywel, son of Payn de Turbeville (born about 1140) of Coity son of Gilbert de Turbeville (born about 1120) Crug Hywel, son of Payn de Turbeville (born about 1070) of Crug Hywel, died about1129. Battle of Abbey Roll.

Caradog ap Gwilym married Joan ferch Owain ap Cynharwy ap Llewelyn ap Moreiddig Warwyn ap Drynbenog ap Maenarch ap Dryffin ap Hydd Hwgan married Crisli ferch Iago of the Royal House of Aberffraw, Gwynedd.

Owain ap Caradog married Lleucu Gwyn ferch Einion Saes ap Rhys ap Hywel ap Trahaearn ap Gwgon ap Bleddyn ap Maenarch. Owain Gethin ab Owain, Arglwydd Glyn Tawe (born about 1260) married Gwenllian ferch Gwilym ap Jenkin (Herbert Lord of Gwern Ddu) ab Adam (born about 1190) ap Cynhaethwy ab Adam Gwent ab Iorwerth Lord of Beachley ap Caradog ap Meurig Penrhos, Herbert Family.

Nest ferch Owain Gethin, Gentlewoman with Arms (born about 1304), married Thomas Awbrey Cwnstabl Coch (born about 1299) son of Thomas Awbrey (born about 1271) and Joan ferch Trahaearn ab Einion (born about 1274).

Richard Awbrey (born in 1329) married Crisela ferch Ffilib ab Elidir (born about 1333).

Gwallter Awbrey (born in 1359) married Gwenllian ferch Rhys ap Morgan ap Hywel Goch ap Gruffudd ap Cadwgan Fychan ap Cadwgan Hen ap Gruffudd ap. Gwrgeneu ap Mabron ap Golwy Goch ab Eidio Wyllt ap Suthric Earl of Desmond and Nest ferch Tewdwr Mawr.

Morgan Awbrey Hen Lord of Brecon (born in 1389) married 1) Alys ferch Watkin ap Thomas ap Dafydd Llwyd ap Hywel ap Einion Saes (born in 1240) ap Rhys (born in 1185) ap Hywel (born in 1160) ap Trahaearn (born in 1130) ap Gwgon ap Blegwrd ap Bleddyn ap Maenarch. M 2) unknown daughter of Roger Vaughan Tretower Court and Gwladus ferch Dafydd Gam (bornin 1351) ap Llewelyn (born in 1330) ap Hywel Fychan (born in 1304) ap Hywel ab Einion Saes (from Bleddyn ap Maenarch).

Jenkin ap Morgan Awbrey (born in 1423) married Gwenllian ferch Owain ap Gruffudd ab Owain Gethin ab Owain (from Bleddyn ap Maenarch).

Richard ap Jenkin Awbrey (born in 1470) married Gwladus ferch Morgan ap Gwilym ap Henry Cydweli.

Morgan ap Richard Awbrey, Gentleman with Arms of Ynys Cedwyn (born about 1510-1599) married Margred ferch Hywel Ddu ap Dafydd Tew.

I am descended from two sons of Morgan ap Richard Awbrey or Aubrey (in the Norman French spelling).

First Line of Descent

Ieuan Gwyn ap Morgan ap Richard Awbrey married Jonet ferch Watkin Herbert of the Herbert Family.

Morgan Awbrey of Ynys Cedwyn (died in 1632) married Margred Games ferch Thomas Games Aberbraⁿ, descended from Dafydd Gam and Bleddyn ap Maenarch.

Catherine Awbrey of Ynys Cedwyn married Richard Portrey of Cheriton, Vicar of Rhosili and Ystrad Gynlais (1638–91 / 95).

Christopher Portrey of Ynys Cedwyn (1668 / 69–1701) married Francise Pryce of the Wogan Family and Bleddyn ap Maenarch.

Catherine Portrey of Ynys Cedwyn married William Gough, Gentleman of Wilsbery, St. Briavels (married in 1717). Her brother Christopher Portrey the Younger is probably the father of Elizabeth Portrey (1734–1825).

Elizabeth Portrey of Ynys Cedwyn married Morgan ap Thomas Awbrey y Garth (1735–1805) on 19th January 1763.

Second Line of Descent

John ap Morgan ap Richard Awbrey (born about 1530, Ynys Cedwyn Estate Papers).

Morgan ap John ap Morgan Awbrey (born about 1570, researched by Leonid Morgan, owned by Gwenfach Forgan, Llwyn Turnor and Blaen Cwm).

Thomas ap Morgan ap John Awbrey (1600 / 30–26th June1689, researched by Leonid Morgan, Callwen Parish records).

Morgan ap Thomas ap Morgan Awbrey (diedin 1749)married Angharad

Bevan, researched by Leonid Morgan.

Thomas ap Morgan ap Thomas Awbrey (1690—1761) married Elizabeth John, researched by Leonid Morgan.

Morgan ap Thomas y Garth (1735–1805) married Elizabeth Portrey of Ynys Cedwyn Hall.

David Morgan (1771 / 78—1869) married Gwenllian Powell (1785–1873).

William Morgan (1809 / 111902) married Anne Watkins (1816-1855) from Watkins Family of Glyn Tawe.

Rachel Morgan (1838–1907) married David Potter (1831–91).

William John Potter (1857–1929) married Hannah Thomas (1857–1935) daughter of David Thomas Henrhyd Isaf, Coelbren (born in 1818) and Hannah, nee unknown (born in 1819).

Gwenllian Potter (1891–1944) married William John Evans (1893–1971).

Edward Ivor Evans (1922–2000) married Mary Jones (1926–2002).

Professor Myron Wyn Evans Gentleman of Glyn Eithrym (born in 1950), married 1) Laura Joseph, 2) Larisa Voronchuk.

Appendix 4: Relation to Tudors and Queen Elizabeth II

Queen Elizabeth II is a distant cousin because we are descended from Tewdwr Mawr as follows. Tewdwr Mawr Prince of Deheubarth, Powys and Morgannwg, Rhys ap Tewdwr Prince of Deheubarth (about 1015–93) married Gwladus ferch Rhiwallon, Gruffudd ap Rhys Prince of Deheubarth (born about 1081) married Gwenllian ferch Gruffudd, Rhys ap Gruffudd Prince of Deheubarth (1132–1196) married Gwenllian ferch Madog, Princess Gwenllian ferch Rhys (died in 1236) married Ednyfed Fychan (died in 1246), Goronwy ab Ednyfed Fychan Llangoed Mo^n (died in 1268) married Morfudd ferch Meurig Grosmont Gwent (born in 1199), Tewdwr Hen ap Goronwy married Angharad ferch Ithel, Goronwy ap Tewdwr (died in 1331 Bangor, Mo^n) married Gwerful fech Madog Trefynwy (died in 1311), Tewdwr ap Goronwy Penmynydd (born about 1320) married Margred ferch Thomas Is Coed (born about 1340), Maredudd ap Tewdwr (born about 1365, Penmynydd), Owain ap Maredudd Tudor (born 1397, Snowdon) married Queen Catherine de Valois of France (born in 1401), Edmund Tudor Earl of Richmond, King Henry VII Tudor, Margaret Tudor married King James IV of Scotland, James V of Scotland, James VI of Scotland and I of Scotland and England, Charles I, Charles II, James II, Queen Mary married King William, Queen Anne, George I, George II, George IV, William IV, Victoria, Edward VII, George V, George VI, Elizabeth II.

Appendix 5: Relation to HRH Sophie Countess of Wessex.

Sophie Countess of Wessex is a distant cousin; we are both descended from Bleddyn ap Maenarch as follows. Bleddyn ap Maenarch (born in 1024), Blegwrd ap Bleddyn (born in 1050), Gwgon ap Blegwrd (born in 1090), Trahaearn ap Gwgon (born in 1130), Hywel ap Trahaearn (born in 1160), Rhys ap Hywel (born in 1185), Einion Saes ap Rhys (born in 1240), Hywel ab Einion, Hywel Fychan ap Hywel (born in 1304), Llewelyn ap Hywel (born in 1330), Dafydd Gam ap Llewelyn (born in 1351), Gwladus ferch Dafydd Gam (born 1385), Richard Herbert (born in 1424), William Herbert, Gwenllian ferch William Herbert, Rhydderch ap Rhys, William ap Rhydderch, Thomas ap William, William ap Thomas, Rhys Llwyd ap William (died in 1645), John Lloyd ap Rhys Llwyd (died in 1668), Francis Lloyd (died about1721), Rice Lloyd, Jane Lloyd Nantmoel (born in 1709), Rice Jones (died about1811),

Theophilus Rice-Jones (born in 1799), Theophilus Rhys-Jones (born 1839), Theophilus Rhys-Jones (born in 1871), Theophilus Rhys-Jones (born in 1902), Christopher Bournes Rhys-Jones (born in 1931), Sophie Helen Rhys-Jones (born in 1965), HRH Countess of Wessex married Prince Edward, youngest son of Queen Elizabeth II.

Appendix 6: Relation to Dafydd ap Gwilym

The greatest of bards in the Welsh language, the fourteenth century Dafydd ap Gwilym, is my distant ancestral cousin as follows. We are both descended from Tewdwr Mawr. Tewdwr Mawr, Rhys ap Tewdwr, Gruffudd ap Rhys, Rhys ap Gruffudd, Gwenllian ferch Rhys married Ednyfed Fychan, Gwenllian ferch Ednyfed Fychan married Gwrared ap Gwilym, Gwilym ap Gwrared, Einion Fawr ap Gwilym, Gwilym ab Einion Fawr, Gwilyn Gam ap Gwilym, Dafydd ap Gwilym Gam (about 1320 to 1380), born Brogyn, Llanbadarn Fawr, Aberystwyth, Dyfed.

Appendix 7: Relation to Owain IV Glyndw^r of Wales

Owain Glyndw[^]r is regarded as one of the greatest figures in the history of Wales. I am related to him in two known ways. The most direct is his maternal line from Tewdwr Mawr as follows. Tewdwr Mawr, Rhys ap Tewdwr, Gruffudd ap Rhys, Rhys ap Gruffudd, Gruffudd ap Rhys, Owain ap Gruffudd, Maredudd ab Owain, Owain ap Maredudd, Llewelyn ab Owain, Thomas ap Llewelyn, Elinor ferch Thomas (born in 1337), Owain IV of Wales (1354–1416). Owain Glyndw[^]r is also descended from Iago ap Idwal Gwynedd (born in 974 AD), from whom I descend through Crisli ferch Iago and Bleddyn ap Maenarch. The line from Iago ap Idwal to Owain Glyndw[^]r is as follows. Iago ap Idwal, Cynan ap Iago, Gruffudd ap Cynan, Owain Gwynedd, Angharad ferch Owain, Gruffudd ap Madog (born in 1218), Gruffudd Fychan ap Gruffudd, Madog Crupl ap Gruffudd, Madog Fychan ap Madog, Gruffudd ap Madog (born in 1298), Gruffudd Fychan ap Gruffudd (born in 1333), Owain IV of Wales (1354–1416).

Appendix 8: Relation to Oliver Cromwell Lord Protector

Oliver Cromwell was my distant ancestral cousin, his ancestor being Tewdwr Mawr as follows. Tewdwr Mawr, Rhys ap Tewdwr, Nest ferch Rhys, Heiress of Carew (born about 1073) married Owain ap Cadwgan Prince of Powys, Einion ab Owain, Gwrgeneu ab Einion, Gwrgeneu Fychan, Gwrgan ap Gwrgeneu Fychan, Llywarch ap Gwrgan (born about 1200) Arglwydd Cibwr, Senghenydd, Goronwy ap Llywarch (born about 1225), Goronwy Fychan (born about 1250) Trecastell, Llangoed, Moⁿ, Rhun ap Goronwy, Cibwr, Madog ap Rhun, Hywel ap Madog, Morgan ap Hywel, Ieuan ap Morgan (born about 1400), William ab Ieuan Llanishen (born in 1443) married an unknown daughter of Jasper Tudor, Earl of Pembroke, Duke of Bedford (born about 1431), brother of Edmund Tudor Earl of Richmond, uncle of Henry VII Tudor, descended from Tewdwr Mawr, Morgan Williams Llanishen (born about 1473) married Katherine, sister of Thomas Cromwell, Earl of Essex, Minister of Henry VIII Tudor, Sir Richard Williams Llanishen, Lord of Neath (1499-1544) married Frances Mervin, Robert Williams (took the name Cromwell, 1538–1603 /04) married Joan Warren, Oliver Cromwell Lord Protector (1599–1658) married Elizabeth Bourchier.

Myron W. Evans Craigcefnparc Wales, 2011

AUTOBIOGRAPHY O WRAIDD EI DDOE ROOTS OF YESTERDAY

CHAPTER ONE

Yr Oen Newydd

Ar y gwys hir ei goesau, - daear wych A dyr gyda'i neidiau, Hwyl i gael, hel golau, Dros y mawn yn drysi mae.

I was born on 26th May 1950 in this house- after a long and difficult labour, my mother almost died. She was Mary Jones (later Mary Evans (1926–2002)). Just before she died in 2002, she admonished me, only half in humour, that with a head as big as mine there must be something in it. Others (who don't know me at all) have said so too, but in truth I am quiet and reserved, and just like studying. I am sometimes forced to blow my own trumpet but I do not like it. I had the opposite nature to my father, who was Edward Ivor Evans (1922-2000). The Lay Reverend Gareth Hopkins of Craig Cefn Parc wrote in an obituary that after talking to Eddie Banwen you were made vividly and memorably aware of his opinion, and sometimes he might even have been right. He was brought up at Y Greithig (Grithig) across the river from Craig y Nos Castle and descended on his mother's side from the Morgan or Awbrey Family of Glyn Tawe. Morgan Morgan, "the Squire", lived in Craig y Nos Castle for two years before selling it to Adelina Patti. He was entirely Welsh speaking and communicated with Patti through an interpreter. He was an industrialist and this was a powerful family.

The Morgan Brothers Find King Arthur (written circa Mid- Eighties)

To the north a glacier roared and cut rock
As the black shotman sliced coal with powder,
The Black Mountain glistens with limestone,
Black, silurian, mountain, crag and water
Embrace Arthurian in the paths of night.
Llyn y Fan Fach, our lady of the lake,
Veiled above Patti's Castle, Craig y Nos,
Cut by the wind's hard teeth, the caves lie low,
Hid in time's grain that the ploughman had made.
Here, Dan yr Ogof, is the ossuary
Where ancient bones of certitude were carved,
Two Morgan brothers in a coracle
Paddled across time to Arthur's far shore,
And mighty were the idols of their cave.

My mother was descended on her father's side from the Havard Family, another entirely Welsh speaking family. Her great- grandfather was Twm (Thomas) Havard of Ty Trawst, Cwm Cerdinen, one of the most beautiful valleys I know of, and her grandmother was Mary Havard, who was illiterate. Her father Thomas Elim Jones was one of the most gifted and cultured men I have ever known, anywhere. Both Awbreys and Havards were of Norman descent and intermarried many times into the Royal Celtic line of Bleddyn ap Maenarch, Prince of Brycheiniog. I knew none of this until a few years ago, when some kindly genealogists worked it all out on the internet. I thought that Normans were red- haired savages in tin pot helmets and long nose guards. My earliest memories, very vague and dreamlike when I was less than two years old, are of an iron lung in the bed next to mine in the children's ward of Morriston hospital. It was an iron lung of a very young patient who was being treated for polio, to help him breathe. I was in there for an emergency operation for intestinal twisting. My mother said I was turning green with a big lump, the prototype for an amoeba. Now I know that the surgeon must have done brilliant work, because I had been misdiagnosed until I almost died. This was not the fault of the overworked GP, the kindly Dr Hargest as such a diagnosis is very difficult. My father said that I should just be allowed to

die, because I was in such pain presumably, but my grandfather Thomas Elim Jones and the Reverend T. R. Lewis prayed fervently for my recovery, being most devout Baptists. It was science and medicine that saved me, but someone must have heard them, and even then I was thinking of Cartan geometry and strict metre poetry. Welsh is the language of heaven (and I repeat this old cliché not to make fun of them at all, but out of respect). My mother told me all this as I remember nothing of it. The earliest photograph of me I have now is at age about 1, making an intensive botanical study of grass on Mynydd Gelliwastad. I look fat, big headed, and content. Later on, there are photographs of the whole family, my parents, my sister Gwenydd and I on visits to Father Christmas in the post war Swansea shops, an era when large parts of Swansea were bombed- out ruined houses, upon which death had fallen randomly because of some foreign dictator aiming at the docks and missing. They look very kind, very young and very innocent people, although in one or two of them my mother is exhausted – probably from worry about my operation and slow recovery, and post war rationing. I am in a school cap with wondrous eyes transfixing the commercialized Santa. I have a very vague memory of those bored and white- bearded, red coated individuals, and never did twig that Father Christmas was different every year. I have sharper and most happy memories of Christmas at Pant y Bedw, when I was still young enough to believe all of it earnestly, piously and avidly, maybe 4 or 5 years old. There was a real Christmas tree with Walt Disney Fantasia lights going on and off, hypnosis among the scent of real Norwegian spruce - no bull. no plastic. There were paper decorations across the wooden, beamed ceiling of the best room of the small stone house, which was transformed magically for the occasion with a warm and glowing coal fire throwing shadows on warmer walls and wooden ceiling. Both grandparents were there, both parents, and my younger sister Gwenydd. Those moments should have lasted forever, and indeed do. Christmas was a bad time for turkeys, which we grew on the farm. Not an artificial Tesco turkey but a formidable, free roaming, dangerous, thirty- five pounder that dominated the table, defeathered and roasted a glowing brown, stuffed with thyme and onions, surrounded by an array of vegetables. All around were mince pies, pudding, Christmas cake, and a bottle of pristine sherry for Christmas morning, when Edward Ivor took me to see Uncle Raymond in Glais near Clydach, where he still lives now. On Christmas morning there was the wild excitement of presents and stockings filled with more than a child could ever imagine. Amidst contentment I had premonitions of the future, of time dancing backwards and forwards. These also flashed into

my mind on some lazy weekend half asleep in the hayshed. What would it be like in 2010, with parents and grandparents inconceivably absent? Well they are here now, in imagination, maybe. Their legacy is certainly here, to be the scientist again. In the school canteen at Christmas I took part in a play, of three wise men and Bethlehem, all in the beautiful Welsh language of Elim chapel and the Elizabethan Bible of Henry Morgan and other scholars, that towering prose masterpiece that kept the old language alive. These are the earliest memories I have of that time, the vivid, happy time. At Christmas the chapel took on the same magic, the Cymundeb (Communion) wine and bread, the brilliant and gentle minister, T. R. Lewis, the formidable deacons, my grandfather the head deacon. The wine was real, but being Baptist, was not transmuted, or transubstantiated, the bread was real bread, but bread alone. In that sublime chapel, all was metaphor that lasts forever. The wine was so real that my grandmother had to be carried back from chapel one day, all through the village, to her eternal embarrassment. She was a small and pious lady not used to transmutation and such transportation. This was the gentle nonconformist humour of the family. I had an inkling that I was living in a savage world, but that was outside, and in a different tongue entirely.

My earlier dreamlike memories at less than 2 years old are of being carried back to this house alive from the hospital, stitched up inside and out. I remember the sharp pain of the stitches that sometimes doubled me up for hours like a boxer hit in the diaphragm. I remember the anxious eyes of my mother and grandmother, and occasionally remember the doctor being called to give what little reassurance he could. I was and am alive only because of this unknown surgeon's skill, and because of the National Health Service. Without that I would have been allowed to die as was the custom with a sick infant beyond recovery. So I am a fervent Bevanite Socialist after the famous work of Aneurin Bevan in the Labour Government of 1945 to 1951. So is my Uncle Raymond, who recently visited me (July 2010) after forty- five years and left after five minutes for an appointment. He reminds me very strongly of my late quicksilver father. He told me to come and see him with the family history. So I did. We are not, therefore, the closest of families in one sense, but then again, we understand each other so well that we do not have to say anything, even after forty- five years. It is as if time never happened and was never invented. Uncle Raymond is a close friend of Rhodri Morgan, the First Minister of the Welsh Assembly, both being fluent Welsh speakers. In about 1940, the two brothers Edward Ivor, then about 18, and Raymond, about 7, helped in the excavation of the newly discovered Ogof yr Esgyrn. This is now

a famous cave system, known to have many miles of passages. Our ancestral cousins, the Morgan brothers Tommy and Jeff, discovered Dan yr Ogof in 1912. In our family all spoke Welsh, as did all the village and most of the coal mine. The latter was an inevitable and evil presence whose danger was dust, dust in the lungs. At the time, I knew nothing about this, except that Twm Elim could not work, his breathing was laboured, he walked with a stick, and used a respirator (we called it a pwmp or pump) and sometimes his eyes turned a lighter shade of blue and looked right past me into the distance. Twm Elim had the frightening blue eyes of the Viking, his mother being Mary Havard of Cwm Cerdinen. Havard is an ancient Norman and Norwegian or Danish name. He looked right through people like an X ray machine, and was the carbon copy of my cousin Ffloyd Havard of Craig Cefn Parc, the four times British boxing champion, about to deliver a knockout blow on YouTube. However, Twm Elim was Prif Ddiacon or Head Deacon of Elim, Capel y Bedyddwyr, Craigcefnparc and delivered knockout blows only after a bad sermon or some misdeed, admonished in public in the manner of the Baptists. I wrote this englyn to him; the National Coal Board never gave him much compensation. Wherever he is now, perhaps this will.

Yr Hen Lowr

Duedd a ddeil y dwylaw, - oes byr dan Ysbryd y se^r distaw, Banner goleuni gerllaw, A dan eu byd, du'n y baw.

I was brought home with severe damage repaired by the surgeon— I do not know how long I was in the hospital. This was Morriston War Hospital with long sloping corridors between the wards. I remember the hospital only after a later operation when I was about 6 years old — especially the night lights and the furtive nurses moving around from one bed to another with thermometers, watches and charts. Of that earlier operation I remember nothing except the iron lung, in very vague outline like the negative of a faded photograph. I was brought home to this little house, built of stone from nearby Gelliwastad by my great- grandfather William Newlands, helped by Dai Havard and others in about 1926. This house was built for my grandmother Martha Jane Newlands, later Martha Jane Jones. The house next door was built in about 1895 and in

1950 was lived in by her widowed younger sister Maude Newlands, later Maude Hopkins. I was stitched up like a zip, both inside and out, and very thin (I was told later by my parents). So I was quite easy to carry back into the house, light as a raincoat. I must have been glad to see the fire again. It was an open fire of steam coal from Craigola seam right under the house, with an oven one side and a grill across and hotplate on the other. Later, as a teenager, I made a photo of it with a copper kettle, and after my grandmother died, desolate without my grandfather, the house too became cold and empty, the fire was out and it became desolate too. Earlier, the house enveloped me with a feeling of great comfort, as it does again now, and the only thing that has changed, I often feel, is that the open steam coal fire has been replaced with an anthracite stove. In fact I bought it back myself in 1993 after it had been sold out of the family when my grandmother died in 1969. I saw it for sale again when I was in Charlotte, North Carolina, of unhappy memory. The fire is alive again, in this very room. I always felt that there was no need to leave this house, and I was right. Twm Elim Jones was a composer and he wrote on his own table in this room, in do re mi notation and four- part harmony in red notebooks that I later donated to the National Library of Wales. There was another table for food, and for his work on repairing watches and clocks. When he struggled out for a walk I was with him many times, trying not to walk too fast for him. He could not walk up the path to our later home Pant y Bedw (hollow of the birch trees) that my father bought when I was about four years old. He struggled on like a wounded bird, stopped for air and struggled on again. This was the effect of working in the coal mine, and by the age of 4 I was vividly aware of it.

> On Peering into the Entrance of a Drift Mine, Nixon Colliery, Late Fifties (written about 1997)

I am the Lord of the Flies, this my cave,
You will be the carrion that they feed on
For three hourly pennies each killing day,
The dirty putrescence of a Friday
Shall eat your wages like a methane storm
In the black back garden of the empire.
Don't think boy that you can escape me,
My black eyes are like the seams before you,
Useless for seeing: the day wasn't here.

The flies gather round me in galleries,
Driven by the smell of death they firefly,
Briefly they will live and suddenly die.
Out of the way boy, there's a dram coming,
Didn't you hear just now the sirens sing?

The main drift mines in the fifties were always known as Nixon and Hendy, nationalized in 1945, and called Clydach Merthyr Colliery, Craigola seam by the National Coal Board (NCB). Judging from a photograph of Nixon colliery about 1900, conditions must have been terrible beyond contemporary conception; the photograph shows 15 year olds or younger with the effect of dust upon them like the mark of Cain, sallow, sunken cheeks, hollow eyes accusing and cursing. Things were not better in the fifties. It was almost certain death down the coal mine, with its dark entrance to a neolithic cave, an ugly dust filled darkness, the supplication of silence as Vernon Watkins put it, but a supplication to the devil. To this day, I do not know how Twm Elim scraped together the money to survive, but at least the NHS gave him his pump free of charge. This stone house felt like a refuge from a crazed world, and it still does. Twm Elim wrote hymns in four- part harmony and set them to words that burst into life in the Chapel. All that has changed is that I write hieroglyphics on a computer in the same room, the fire to my back. I know now that Clydach Merthyr Colliery produced steam coal for export from Swansea docks, for use in the industry of the Swansea valley, in far off Clydach full of smoke stacks, nickel factory, and coal drifts, and for each house with its coal fire. Craig Cefn Parc was built by coal miners with their own hands, the sites of the surrounding farms having been there for 2000 years and back into unrecorded time. The farm of Cefn Parc (behind the meadow) is high up on the shoulder of Glyn Eithrym, (Lower Clydach Valley), surrounded by trees to break the harsh wind. Craig Cefn Parc is the cliff behind Cefn Parc. The cliff was cut out of the mountain by a glacier, giving access to rich seams of coal and access to dust filled lungs.

Niwmo

Barf o lo yn ei berfedd, - a sug ei Ysgyfaint y pydredd, O haf ei foel, haf ei fedd, O lwch caled dan lechwedd. I always had all that in the back of my mind, although trucks of coal and drams of coal were fascinating things, the trucks behind a steam engine on large tracks, the drams on small tracks pulled by a rope. There was the powder house (ty pwdwr) of thick concrete that I happily climbed all over. I take care not to smoke to this day. That powder was used by my father, a colliery shotman, to bring down a face of coal. Not too much powder or the roof would come down, not enough powder and there was no coal. No smoking because of fire damp, or methane, which blew Senghenydd apart in 1913. In the nature reserve on the floor of the valley today, you can still stumble on a piece of iron or a bit of wood, still walk across the coal tip, and if you have lived here long enough, you know the entrances to drift mines. They have been blocked up and the water allowed to flood them. How many lives did they claim and lie drowned there now?

This oppressive darkness at noon was pushed to the bottom of the valley. I have always thought that the village of Craig Cefn Parc is supremely beautiful, sheltered out of sight in a shoulder of Glyn Eithrym below Mynydd y Gwair. It IS beautiful, no matter how hard the human species tries to make it ugly and cultureless without language. The little smallholding of Pant y Bedw was then a house of local stone, a rough stone- built shed to house coal, and a concrete shed with zinc roof to house a couple of cows and a calf. There was a hay shed of galvanized zinc and wood and one winter its roof flew off into the field. The hay after harvest had the fragrance of expensive perfume, and the cows thought so too. Next to the rough stone shed, covered with peeling whitewash, was a pigsty of less favoured odour, and next to that the domen dail, which is untranslatable, something like waste heap. If you fell into it you certainly knew about it. The pigs were quite happy and the pig's breakfast was made up of anything that could be found, bits of wood, plastic, peelings, anything at all, boiled up in a big electric cauldron manufactured by Macbeth and Company of Morriston. My earliest memories of Pant y Bedw were sitting on the dirt yard, surrounded by giant turkeys, admiring the sunset. I still have some photographs of Pant y Bedw, now much beautified with loss of all it was. When very small my father used to carry me on his shoulders around Gelliwastad, where I still walk every day now. I was so thin that I was easy to carry I suppose, and as the sun began to set the mountain became cold in any season and started to be enveloped in Baskerville shadows and the howling hounds of imagination. That was premonition and poetic licence, for I could not read at the time. With us was a real hound, the great sheepdog called Jo, who would live to the immense age of 20 years. The dog had real wisdom in

his eyes, knew all about sheep, and developed asymmetric ears from many a fight with others of his species.

Many times I spent a few days with my grandparents here in this house - in my bedroom at night there was feathered comfort and the occasional lights and gear changes of a passing car, rare in those days. I would be put on a brasswork stool probably made by my great- grandfather William Newlands and sang there by the fire to my grandparents by the warm and glowing steam coal fire. There was a copper kettle nearby almost as large as I was and the fire worked the oven, hotplate and water boiler, which rumbled blackly on a winter's evening. On the wall there was a wooden wireless on a shelf, and my grandparents would listen to "Galw Gari Tryfan" or a rendition of "Pwy bydd yma mewn Can Mlynedd?" – "Who Will be here a Hundred Years from Now?" The hotplate was used to make pice ar y ma^n (Welsh cakes) and every Friday kippers would be grilled over the coal by my grandmother and served with butter, followed by pancakes. No chef with blue ribbon could have done better than the little humped figure with golden brown hair now turned white with years of washing and cooking and cleaning and suffering for her dust stricken husband, but still a most dignified presence, capable of wit and humour. The garden grew almost as much food as was needed, the rest I got for my grandmother was from the three nearest village shops - a quarter pound of ham, a quarter pound of cheese. There were three of them on Rhyddwen Road: The Coop, Siop Bob and the Post Office. Further up towards the School there was a three- storied house with a butcher's shop, and a shop next door to the water mill near the School. The village was a shield against an outside world that made profit from coal mining and seemed to care nothing about the grief that it caused. The coal miners cared for each other's families in a close and cultured society. Such sublime and childlike contentment among the horrors of coal mining remains with me to this day. In the front room where my coat of arms is now, my grandfather had a harmonium and musical instruments from the brass band of which he was the conductor, and he composed four- part harmony in the same room that I type in now, in the red notebooks that I gave to the National Library of Wales. This room, this same room, then had two large tables, one for his use, and one for food, and was always warm. His simple chair was in the corner by the fire, and often he would debate theology with Deacons of the Chapel or with the Minister, Reverend T. R. Lewis. The most shocking feeling of my life came over me when I felt how cold it had become when both grandparents had gone. This house was sold in 1969, shortly after my grandmother's death, and it took me a quarter century of wandering around the world to get it back and warm it up again with Garnant anthracite from the Amman valley instead of the steam coal of Glyn Eithrym (Lower Clydach Valley). The village outside has become a cold and selfish suburb, but this room is still always full of family culture.

In these rooms and in this house at other times I always had the pain of pulling stitches to contend with. That was acute as I grew up from a very thin infant to a fat boy and then a teenager, and only gradually worked its way out of my system. I was often doubled up with my head pressed against the wall. They still pull today when I read a paper on string theory and it puts me back in stitches of laughter. When I reached the age of about 4 my grandfather Twm Elim decided to write some big letters on a piece of hardboard in front of the fire, and that was my first lecture. Otherwise I was free, and from photographs I can see I was a cheerful child, riding a tricycle on the stone pavement at the back of the house, lucky to have such parents and grandparents, sister, aunt and hundreds of cousins close and distant. So the operation left no scars in that way. I think I knew the letters A and B before school. This comfort of family and freedom was shattered one day when I was deposited at the age of just over 4 in a damp grey building with damper, smellier coats of howling infants for company. I thought I would never see the farm again so joined the chorus. This was Craig Cefn Parc Infants School under the care of the teacher, Miss Thomas, and of course it was raining. It seemed to us that she had a mania for numbers and letters in Welsh. The numbers are in my mind right now, the times tables chanted like a banshee chorus. Slowly the letters A and B were added to until the crystallization of words in Welsh. The easiest was ci, meaning dog, an easy two letters only. By mysterious process, the words became sentences, and I started to read not only in Welsh, but in a mysterious foreign tongue called English that no one spoke. There were just books lying around in this language. The numbers became fractions, and tortuous arithmetic exercises that my parents could not do. So it was the loneliness of the long distance runner from the starting gun. My parents were good parents, naturally gifted, but never formally educated very much. There was opportunity, but I suppose they were worn down by work and survival in post war days, or just saw no point in it for themselves. I was expected to do well by parents, teachers, the village and all, but no one quite knew why. The one and only thing for me was to stay alive, bear the pulling stitches, which I suppose could have burst, causing internal injury, and stay out of the coal mine with its beckoning, dusty dance. There was plenty of that in the coal shed at Pant y Bedw and as soon as I grew old enough it was my job to put in a ton of coal left outside. Each coal

miner was given free coal. It was my job to shovel and think in the darkness of the coal shed surrounded by dust and implements of the farm, and I was glad to see daylight like the pit ponies we saw from school. There was a wild mess of implements, the cryman (sickle), bladur (scythe), rhaw (shovel), raca (rake), caib (levering iron), morthwyl (hammer), sledge (big hammer), and assorted six inch nails, barbed wire, cans of tar, and a cave full of treasure of this faded utilitarian kind. There was a big axe and a small axe (bwell mawr, bwell bach) that I used to chop sawed and tarred sprags discarded from the coaldrifts.

I am running ahead of myself because the early time at Pant y Bedw must have been a time of recovery for me, and hard work for my father. He was the son of William John Evans, born in Llanfilo on the Brecon to Bronydd road, later of Fferm y Clo^s (Close farm) near Brecon, the grandson of Edward Evans of Cleirwy on the Powys Herefordshire border, and great-grandson of Edward Evans Llanigon (born in 1802). Little is known about my great- grandfather, except that he was illiterate and an agricultural worker throughout his life in the Brecon area. His wife, my great grandmother, was Mary, nee Thomas, who was also born in or near Cleirwy, and who might have been literate. Both were English speaking, as was the Cleirwy (or Clyro) of Kilvert's Diary. I know very little about my grandfather except that he was English speaking: I was told by my mother and one or two others that he was usually a cheerful man. My father did not appear to get on with him at all, so in consequence I was allowed to meet him only once, at Glyn Bedd Farm near Crynant, and then only for a few minutes. He seemed subdued to the point of being desolate, a figure in a cold farmhouse room, having lost his wife Gwenllian Potter, later Gwenllian Lodge, in a deeply tragic way, but he gave me a coin, either a golden threepenny piece or a silver shilling. I think that my father's character was shattered permanently when his mother Gwenllian was drowned in September 1944, when my father Edward Ivor was 22 years of age. My Uncle Raymond Vivian Evans gave me some precious memories of Gwenllian, about her warning the six Grithig children to be careful of the dwrgwn or otters at the mouth of Ogof Fynnon Ddu, with its perennial cold black outflow from the deepest cave in Britain, immeasurably ancient, foreboding and frightening, but a magnet to any child. Raymond thinks that she worked at Craig y Nos Castle as I have vague memories of my father Edward Ivor mentioning her as a teacher. Judging by the deep rooted and quiet kindness of her daughter Blodwen, whom I remember vividly, she also must have been kindness personified. Of his own father William John, Raymond too has little memory, except that he could not speak Welsh. Raymond speaks fluent Welsh. After Gwenllian

drowned in September 1944, Raymond, aged 11, was moved into the care of my father at Banwen Farm. Gwenllian struggled to save her daughter Hannah (my Aunt Nan) but was then swept away by the cruel flooding Dulais River just below Glyn y Bedd. She was on her way home with Nan to Melin Llech, a small farm where the family lived after moving from Grithig.

The farmer at Banwen near Craig Cefn Parc was someone called John Morgan, who was a harsh, indeed brutal, taskmaster, making Raymond do a milk round before school, and making him work at the horse and plough. All for no pay and still a child. Raymond told me about that in July 2010; he recalls it with great bitterness and resentment, and who can blame him? His wife Mrs Morgan was a lot kinder. Later, Raymond, after some schooling, worked in the Nixon drift coal mine and told me that if you were not careful you landed up with a headache if the roof caved in. That's the grim humour of the collier. That drift is deep underneath me now as I write, flooded, silent, and sombre, killing darkness. The barbarity of child labour is inconceivable now, or should be. His mother Gwenllian was a fluent Welsh speaker descended from the Morgan family and the powerful mediaeval Awbrey family which married into the Royal Celtic Line of Bleddyn ap Maenarch when my ancestor Thomas Awbrey (born about 1299) married The Gentlewoman Nest ferch Owain Gethin (born about 1304) of the line of the Prince Bleddyn ap Maenarch. So Pant y Bedw was built around memories of my father's youth, on farms near Grithig and later on Banwen Farm where I think he lived from the age of about 12 up to his marriage in 1948. He was called Eddie Banwen, or Eddie of Banwen Farm. So I was Mab Eddie Banwen, his son. He was quicksilver intelligent in his own way, but too impatient for formal learning. A lot of self- defensive bluster in Edward Ivor hid a deeply sensitive character badly damaged by the loss of his mother, his father being remote from him: the unjust world not to his liking and who can blame him? He could read and write fluently, but rarely if ever seemed to read books and spoke fluent Welsh in a slightly different dialect – that of Glyn Tawe – the upper Swansea valley – a mysterious region of Brycheiniog, itself a mysterious part of Wales. Having been forced to leave home at the age of 12, in 1934, his heart was never in half industrial Craig Cefn Parc, and Pant y Bedw was a small farm that reminded him of Grithig. The town of Swansea tended to give him the creeps, as it does me, being as it is a heterogeneous mixture of concrete and condemned damp stone. The whole family was crammed into a very tiny end of the damp converted barn known as Grithig ("Y Greithig" in correct classical Welsh -"the scarred hillside", scarred with stone). My grandfather William John was a

plate layer on the Swansea Brecon line at Penwyllt, once a thriving industrial community high up in the wild moorland of what is now the Brecon Beacons National Park. No one would want to leave such a beautiful place as Grithig if they could survive there, but times were very hard and William John a poor man with three children of his own and three stepchildren. His father Edward was illiterate, and also a farm servant from an early age if we can trust the Census records, but perhaps became a farmer in his own right, near Brecon, one Census recording him as "farmer (worker)" (sic). When Eddie Banwen died in 2000, of coal dust in the lungs, he was cremated, and his ashes eventually scattered over the wild hillside above Grithig, overlooking Craig y Nos Castle. If one believes in such things, he must be very happy there, not down some coal mine.

Marwnad Edward Ifor Evans

Hedd y llan, hudd y llencyn, Bo lwyd gwsg dan blodau gwyn, Y bugail bach ar fachyn, Twyll y ta^l, tywyll tyn, Glo a baw, clai dy gawell, Addewid gam oedd dy gell, Canaf glod i dy dlodi, Dwys yw hedd y glowr du. Yr hen frain ar hoen fryniau, Yn y llan mae'r golau'n llai, Malwoden dan ddeulen ddu, Oerni mynydd, haearn ynddi, Yn y cof hun y cyfan, Yn y maen ac yn y man, Y mab dwys rhwng grwys a gras Hudd heddiw mewn hedd addas, Ef oedd fawr, ac ef oedd fur, Gwyn ei gof yn y gweindir, Ef oedd hael o fedd heulwen, Ei ysbryd nawr, sibrwd nen, Dewr yr ysbryd, cryf, derwen Fawr y brwyn, yn fur o bren. Io^r mawr y nenfyd 'r oedd,

O gwmwl du ar gymoedd, Mawr ei fri, a gwawr ei gof, Graen ei oes a drig arnof.

This is the traditional elegy (marwnad) I wrote to him as a strict metrical cywydd. My mother was the daughter of Thomas Elim Jones (Twm Elim), the son of Tommy Thomas Jones Craig Cefn Parc and Mary Havard of Ty Traws, Cwm Cerdinen. Her mother (my maternal grandmother) was Martha Jane Newlands, the daughter of William Newlands of Orlandon in Pembroke and Elizabeth Hopkins of Craig Cefn Parc. She was also born in this house on 12th February 1926 and also attended Craig Cefn Parc Infants and Primary Schools. She was taught to sing in an alto voice by Twm Elim, who, in his prime, was organist, head deacon, choirmaster, composer, lay preacher and brass band leader. With Meirwen Harris as soprano, she won many eisteddfodol awards for duet, and could also play the piano well. Being a Havard she was naturally musical and pious, and genuinely so, being baptized in Elim. Edward Ivor was Church of Wales at Eglwys Ioan Bedyddwyr Callwen, St John the Baptist Callwen. They were married in Elim by Reverend T. R. Lewis, and were married for fifty two years. She was also of considerable intelligence, but again did not have a formal education. Having a musical, modest and cultured nature, she was not happy at Pant y Bedw, among the mud and hay, and eventually insisted on selling it while I was away at College doing a post graduate degree. So one day I found Pant y Bedw had become a shocking, gaunt ruin open to the rain, "Tydi y bwth tinrwth twn" of my distant ancestral cousin, Dafydd ap Gwilym. I did try to buy it back, and eventually managed to buy back this house, also sold out of the family. Pant y Bedw was put back into good shape and is now an impressive house, but of course, not the house of my youth, Ferndale of Dylan Thomas, gone forever except for these lines and a few images of photography.

Yr Adfail

Mud yw llechi'r to^ a'r mur, - y graig hen, Y gragen hon o'th lafur. Haf dy bi^n, yr hafod bur, Y blodyn dan y bladur. I was closer to my mother than to my father, who could be suddenly tempestuous, formidable and distant – but both were very good parents struggling their way through life. I took care not to be a burden on them longer than necessary.

From earliest memories, my favourite place at Pant y Bedw was either the hayshed or the cowshed (beudy), which had room for three head of cattle, two on one side of a whitewashed brick partition, one on the other. In front of the cattle was room for hay, and behind a wall a storage place for hay, or later, bales. Often a bored chicken could be found there sitting on eggs, and the light was subdued by a few dusty panes of glass, even in high summer. There were usually two cows and one calf, a cow and calf being taken by lorry to market in Caerfyrddin (Carmarthen), a huge distance of twenty- five miles away. It was safer in front of the cattle, because they had the habit of kicking you like a football with great accuracy. In my earliest years at Pant y Bedw, I don't remember being in there much but later it was my job to bring in bales of hay, break them up, feed them to the cattle, chain them, and give a bucket of milk to the calf. The most odorous and chem-like task was to clean out the shed with a wheelbarrow, which at first was bigger than me. The by- product of the cowshed was deposited on the domen dail in summer, and used as fertilizer in the two small and uneconomical fields. The pigs near the domen dail never seemed to make any objection to this process, producing themselves a more pungent type of fertilizer than any cow could ever manage. So as for any farmer, we were tied to the land;- every morning there was a chorus of tortured clucking from starving chickens, so it was my job to open the small hatch, bricked up safely to stop foxes making chicken burgers, and get the Indian corn out of the small side shed with tarred wooden walls that housed the brooder for chicks. I threw the Indian corn over the dirt yard, to be hunted down savagely by chicken eyed eagles, or eagle- eved chickens, depending on the metaphor you like best. The by- product of the chicken shed in high summer was the most spectacular of all, and there was a shortage of gas masks and no fume cupboards.

The eggs were brown (Rhode Island Red) or white (Wyandotte) and were scattered free range all over a wild jungle and tangle of growth and dense hedgerow that at one time must have been a garden or part of a field. This was partitioned off by wire netting from the rest of the field, used to grow grass for hay, or for what little grazing the cattle could glean from one and a half acres. Later, there was a garage made from galvanized zinc, coated with creosote, nailed on to wood on a dirt ground. After about twenty years of work on Banwen and in Nixon, my father managed to buy his first van, housed

here in its stately abode. It was my job to find the nests in the hedges and undergrowth, and collect the eggs for breakfast or for selling, a dozen or half dozen at a time, round the wet grey streets of Clydach in the van. I was often the passenger in this commercial enterprise. It often took hours to get around the houses; all would be discussed in the greatest detail while I sat freezing and my father was never silent on any topic or subject. Despite the frostbite, I was fond of these trips, and listened astutely to any wisdom that I could garner. The long dark winters at the Atlantic edges of Wales were spent in this way, unchanged for 6,000 years since farming began, keeping a calf dry.

Keeping a Calf Dry (written in Clydach about 1987)

The cowshed had a corrugated roof
That time had rusted and I was tarring:
And all the day's folds lay like lakes of light,
Eyes, that propagated wave like to specks
Of coal dust, deadly as hell, hammered in
The black lungs of my pals – those the night's slaves.
Tarring, see, to keep dry a Friesian calf,
Caulking out the killing rain, and keeping
Dry an intermingled shade, black and light,
So that safe at night I could paint its mouth
With milk, its hide with straw, its eyes with time,
And deep among night's water find the land.
Now in this contemporary city
Stark, merciless, distracted stare at me.

The freedom of the cowshed, and wisdom of the cattle, were infinitely preferable to tortured chanting of times tables in the one classroom of the infants school, from which I graduated after two years of numbers and letters to the formidable gothic primary school at Craig Cefn Parc, built out of dressed stone like a castle, high over the coal tip opposite Hendy drift. It is unchanged to this day, but I suppose that some faceless and bored bureaucrat has plans for rationalizing it into a ruin, as is the fashion today, to replace the essence of people with the anonymity of remote and heavy duty plastic comprehensives from age 4 to 18. All for the exigency of the machine as R. S. Thomas wrote so memorably. Money rules OK? The infants from age 4 to 6 tried to combat

the shattering boredom of the captive times tables by intoning them into a kind of playground song, and what I remember best is the freer chanting of infants in the tiny little yard below spectacular trees which served as the playground. Pine trees, oak trees, ash and mountain ash with red berries in summer, birch and near the river far below, the bowing and graceful willows. Above the playground trees rose one of the immensely ancient and strong shoulders of Glyn Eithrym, up to the tree- hidden farm of Cefn Parc, also there since farming began and often lost in mists immemorial. Far below us sang the river Clydach, the Irish named stony bedded stream.

Yr Afon

Sw^n y dwfr, sain a dofrwydd – ar y graig O'r grugiau; bodlonrwydd. Haul a naid fel y nodwydd, Rhed afon ar faen yn rwydd.

Graduation to primary school was preceded by a long summer of seven weeks free from school. These seven weeks followed the hay harvest (cywain gwair, or in our dialect, cwen gwair). At 6 years old I was eager to help in Pant y Bedw. I had no idea that it was uneconomical, (a huge big word), and I liked it immensely. The raca (or wooden rake) was much taller than I was, and to get a grip on the handle was almost impossible for my small hands. The raca was made in exactly the same way as in Les Tres Riches Heures of the Duke of Berry, around the time of Dante or Dafydd ap Gwilym. That book contains some of the first reportage of the mediaeval life of ordinary people, working on the land. We worked in exactly the same way in Pant y Bedw, with exactly the same type of rake. Wooden pegs were cut and shaped from trees, and about ten of them made the base. In earlier times than the fifties, the handle would also be made from tree boughs, in much the same way as the six foot bow. In earlier times the bladur or scythe, and cryman or sickle, would be made in the same way, with the help of a blacksmith (gof) for the sharp blade, made in much the same way as the sword, battle axe or spearhead. In the fifties, we had the help of the tractor and cutting machine, which took about an hour to cut the grass in neat rows in our tiny acre and a half of land. This was an exciting time, the smell of fresh cut grass still lingers in my mind, as well as the smell of exhaust from a Massey Ferguson

or Fordson Major tractor. The latter's gear stick towered above me, and was taller than me by a foot. In the fifties, the massive shire horse (ceffyl mawr) was still patiently and cleverly working the land, without need of human interference. It would pull a cutting machine for the much larger fields of a real farm, and would be used instead of the tractor on steep sided hillsides, the fabric of nearly the whole of Wales. When this mediaeval fabric of fields and hill farms was created, every square inch of land was needed to live through the winter, so the fields proliferate at all angles and in every corner of land that could be made to grow anything. The new cut grass had to be turned by the raca to dry it (troi'r gwair) and that is the task I never mastered but kept on trying until my hands bled, literally, not a metaphor. It was a craft mastered by my father, but he never found my work to be satisfactory and frequently vented anger at me, one day raising a raca above his head like a battle axe in total frustration at my perceived incompetence. However, I was never beaten by him or even treated roughly, but got a few well deserved slaps from my mother for childish mischief. This didn't bother me at all. I had a hard and flexible head and once butted a kitchen wall by accident, bearing the scar to this day, over my right eye, like a boxer.

After the hay was turned it dried out properly, and at that time on the farm was raked into stacks. They would have been left in the field to be painted by Monet or van Gogh before the arrival of the hay shed, tacked together on a wooden frame from sheets of metal, which we called zinc, then tarred. Raking the hay was satisfactory to my father, so that was a good time for me. I can easily imagine him to be a thumbs up / thumbs down Cambrian Norman Baron, but I was never executed, and he treated me very well in his own way, unique to him. He had a perfect sense of what was right and what was wrong, and was, at the same time, a child of nature. The twin metal-pinned, wooden- handled pitchfork would be used to pile the hay up in the field and then loaded on to the gambo (haywain), pulled by a horse, or later a tractor. The small grey Massey Ferguson usually did the job. The hay was loaded into the hayshed by hand with the forks. I accidentally transfixed my late friend Royston Rogers with this pitchfork once, fortunately only causing a flesh wound to his leg. Later on, a borrowed baler was used and bales stacked in the haystack. This was never quite as comfortable as loose hay on a summer afternoon. There were bottles of cider in the fields, and that was the end of the harvest, hay in your hair, clothes, nostrils and orifices, soaked with sweat, but as happy as you would ever be in your entire life. So my coat of arms now has the golden lion rampant of my ancestral cousin, the formidable

Prince Rhys ap Gruffudd, holding a silver sheaf of hay, in honour of my equally formidable father and the cwen gwair. His years of courageous and voluntary services to the dangerous Mines Rescue Service were honoured by its gold, silver and bronze medals, which I gave to my nephew James John of Clydach. Later, as a young graduate back from College, I had mastered the art of turning hay at last and did the whole hay turning for him, because he was showing signs of the brutal unforgiving dust in his lungs. In about 1972, he was forced to retire with 30% pneumoconiosis (the feared and detested niwmo), but had to go on working at BP Baglan Bay and in menial jobs for the Council to get a pension. I could see that he hated and detested that existence after years as the aristocrat of the working world, the coal miner. He retired with this State Pension and other hard earned pensions in 1987 and died in 2000. The NCB allowed niwmo- causing conditions to go on, doing nothing about them, trying to avoid paying compensation. These days coal mining should be utterly different, no more human sacrifice on dusty altars.

> Mehefin Cywain gwair yn eurlawn – ddydd o haf, Hedd a ddofa, gwres orlawn, Bendigedig a digawn Yn ir y medd ar y mawn.

The teachers in Craig Cefn Parc Primary School in 1956, when I started there, were Miss Jenkins, Mr Hopkins (my relative) and Mr Jenkins, the headmaster. Adjoining the beautifully built school is a house for the headmaster, and this arrangement has been the same for a century or more I think. That house was forbidden territory, and I have not been in it to this day. My grandmother Martha Jane Newlands, born in 1894, attended an earlier school called Penclun, now lived in by a chaired bard and his family. I think that the Clydach Historical Society has photographs of classes of both schools. Martha Jane was about five feet tall, long golden brown hair in an elegant Edwardian photograph with her sister Maude at the turn of the twentieth century, and of the Newlands and Hopkins families. She could speak English, but hardly ever did;— this was despite having a block of wood hung around her neck with the words "Welsh Not" at Penclun. This kind of barbarity is known in Wales as "the Treason of the Blue Books"

and conflicted harshly with the life of the chapels and village, which was all in fluent and beautiful Silurian Welsh, maybe 6,000 years old in origin. Newcomers simply and easily learned Welsh. One of my friends from Felindre at Pontardwe Grammar School was Neville Arrowsmith, whosef irst language was fluent Welsh of the Felindre dialect, a pure Silurian / Dyfed dialect different distinctly from Craig Cefn Parc Silurian, but situated only two miles or so away. By 1956 things had enlightened, all the teachers being fluent Welsh speakers with the possible exception of Mr Jenkins the ascerbic but intelligent headmaster; - I can't quite remember whether he knew Welsh. Miss Jenkins, who was the most capable teacher, lived on a farm with her sisters near the chapel of Salem between Craigcefnparc and Felindre; I remember working on the farm with my father in later years when I was at the grammar school. Mr Hopkins (a relative) lived in Speit, high above the school, and always walked to work and back in the evening up and down a steep mountain path and turnstiles and fields. He was the most suddenly volcanic of the teachers; I think he was bored and resigned to his fate. Whatever the reason for his character, I was always very wary of him. Mr Jenkins was not from the village, and not happy in it. Now things have plunged into darkness again because the system has been "rationalized" and destroyed – the school no longer teaches in Welsh. This is part of what the great poet R. S. Thomas referred to as "cultural suicide". Some of us are still very much alive.

The syllabus of the school consisted of arithmetic and Welsh, with English for arithmetic. This was the same as in the earlier infants school, where Miss Thomas, a cultured and kindly lady, worked so hard to instil wisdom. The times tables were in English, the big letters that became words were in Welsh. It was entirely natural to speak two languages. So the whole class was taught the old language from the very earliest age, and crucially, Welsh was the language of the playground. This system was designed for the "Eleven Plus" at the age of about 11, there being five standards of the primary school, covering five years of study from age 6 to age 11. The eleven plus was designed to separate children into those who attended the grammar school and those who attended the secondary modern school. When I started at 6 years old, in September 1956, I knew or cared nothing about any of that. My mind was still in the cowshed and hay shed, and on the increasingly fascinating presence of football and cricket as I began to recover from the pulling stitches. Rugby was not played in the village. By that age I was being sent to school on my own, which meant a walk down to the cross (the cross roads), first visiting my grandparents

here where I am writing now, then past the gobstopper shop and post office from my grandparents' house to await the double decker bus, upon which one could buy a grubby ticket up to the school or try to fake an old ticket without being thrown off by the conductor. The standard one class was taken by Miss Jenkins, in a school room with wooden desks and inkpots and badly damaged and twisted nibs, saturated blotting paper and a blackboard upon which the chalk occasionally screamed, sending spines and teeth a tingling. There were no cushions or as it often seemed, any heating, just rain dripping down the window panes.

Miss Jenkins was thin, small and wore stern glasses, was fluent in Welsh like Miss Thomas and Mr Hopkins, was thorough and kept good discipline, and embarked without flinching upon the difficult, imported task of teaching the syllabus, designed in fractions and imperial units of far distant committees and rainy cities. This meant farthings, halfpennies, pennies, threepenny pieces, sixpenny pieces, shillings, florins, half crowns (two shillings and sixpence), the rarely seen crown (five shillings), the ten shilling note, the precious pound note and almost never seen five pound note. I have never seen a golden guinea, or any kind of guinea, to this day. A fiver was two weeks' wages for a collier. So the endless chanting of the school room was twelve pence one shilling, twenty shillings one pound, and two hundred and forty pence one pound. Subtract five and three from a guinea (one pound one shilling). Underneath us the colliers laboured in their dusty, pitch black darkness full of imminent danger, so I realized very surely that I did not want to be down there, that the only way to enlightenment was to subtract five and three from a guinea, and get the answer right. Never mind why. There were drams, ounces, pounds, stones, hundredweights and tons, sixteen drams one ounce, sixteen ounces one pound, fourteen pounds one stone, one hundred and twelve pounds one hundredweight, twenty hundredweights one ton. So if two sevenths of a ton cost two shillings and sixpence halfpenny how much for eight ninths of a hundredweight? Write the answer down with a twisted nib and dry ink without wasting blotting paper. Nevertheless, I thought of that pitch darkness underneath us in Craigola seam and of turning the hay with bleeding hands. No calculators, no log books, only long division and multiplication. There were twelve inches in a foot, three feet one yard, one thousand seven hundred and sixty yards one mile, made up of eight furlongs, a furlong being two hundred and twenty yards (what else?). With such a mind numbing routine of many a rainy day, only the exceptions are memorable, or some incident that broke the monotony. Some of my class

friends have a better memory of this than me; Wyn Thomas told me recently that the only reason I got on was that I copied everything from him, and he may well be right. I do remember being asked to add four sevenths and eight thirteenths, and showing the result to my parents. They had no theoretical or practical experience of such a tortuous, pointless exercise, and so I was told that I was on my own at age 6, and expected to get on. I just wonder if the syllabus makers knew about the effect of their fractions. By luck I could add these nasty, hostile arrangements of numbers, but almost all the class, (and almost all their parents), could not, so these children were predestined without their knowledge to the tough, grim, grey, secondary school in Clydach. That meant a working class existence. That though was preferable to that awful 1900 photo of probably illiterate pit boys already destined for an early grave. We as children knew that much quite, quite clearly. We did not shoot or knife the teachers, and did learn to read and write, were not drug, drink and tobacco addicts, and did not burn the school to the ground just for a bit of a laugh. Those are modernist habits and trends.

On the morning walk to school down from Pant y Bedw to this, my grandparents' house, the oak tree was a curtain of green and vivid colour, the month must have been May in which I was born upstairs, so I remember it as does many a poet from Dafydd ap Gwilym onwards. It was not raining and I did not need a coat, a rare day of sunlit verdant spring.

Mai

Gwyrdd a mwyn yw grudd y Mai, - y goeden I gyd yn deg tyfai. Y marw drom mae ar drai, Llwyn o gwsg yn llon gwisgai.

In the mid eighties, May seemed like this to me, in the hostile environment of the so called University of Swansea.

May

Through leaden night the clear dawn of May Scythes the time of birth in the brilliant air, Light mile of earthen fragrance bears these fields To golden horizons, far, far away. May the first to bear, the first to flower,
The magic child of freezing cold despair,
Breathes with the sun, sows shining seeds of life,
A million pearls of wisdom, off-spring, shower.
Winter is cold earth's frozen cynic,
Lightly tread his ice, dusty black below,
His vanished snows have left the paths of life
For silent beckoning born of stormy lies.
But May is enthroned in her lucent pearls,
Borne upon ancient time the light day whirls.

CHAPTER TWO

As I began to grow older, my range of perception and experience also grew, and I became more and more aware of the world around me. At first it was in the company of my mother, with visits to my great= aunts just opposite the dressed stone of Elim Chapel. These were my great- aunts Elsie, Lil (Lilly Maud Jones, 1906–26th March 1986, who married Urias Hopkins (1904–69)) and Rachel, sisters of Twm Elim. They lived in one of the oldest houses of Craig Cefn Parc, with a tiny window which is still there. Elsie had already lost her husband (either by mining accident or dust, commonplace in those days) and was later to die a terrible death of cancer, becoming as gaunt as a ghost. In those earlier days, she bore her burden with courage and was full of kindness to a child like myself. Lil had a burden of her own, as she lost her son Morlais as an infant, and her only daughter Greta was disabled and always remained a child, but one of a most sublime character, a profound wisdom and contentment of her own, unworried by the world (Mary Margretta Hopkins (1932–78)). She wore dark glasses all her life and I wondered and wonder how much she knew. They now lie together in the graveyard of Elim Chapel, which is almost a family chapel. I keep an anxious eye on it in these fat deserted times, and I have tried to get CADW to protect it. I ventured on my own to the valley floor of Glyn Eithrym, where there was and is a magical stream of water named "Clydach" by some ancient Irish settlers. It is indeed a stony bedded stream, where the water dances to an age old tune. The easiest way down there was along a road that the coal miners used to get to Hendy drift and across the railway bridge. The water is shaded in summer by the trees, and there are banks of stone with deep pools. By looking very carefully you can see the flickering shadows of quick small fish. Later, I tried fishing there in heavy rain, but all I caught was a cold and I abandoned the activity in favour of geometry before a dry fire.

I suppose that in times of winter famine the old people would try to live off anything they could find, without getting their legs trapped and mutilated by well- fed landlords who called them poachers: they could find turnips, and if skilled hunters, rabbits and fish. The wise ones may have had potatoes, bread and butter and cheese stored up for winter on the farms, and hay for the starving shivering cattle. My great- great- grandfather Twm (Thomas) Havard of Ystrad Fellte must have survived many a winter in his house "Ty Trawst" in the incredible beauty of Cwm Cerdinen. Being trapped in a black cave for a lot of their time, the coal miners appreciated this beauty most of all, as did the pit ponies, let out for two weeks a year just under our school and dancing madly in the fields. Ty Trawst was a smallholding and a ty^ hir or long house of very ancient origin. The family lived in one part of the house and the cattle in another. In winter they must have been completely on their own for weeks, no electricity, communications and little food, carefully conserved, sheltering from the savage rain and wind, stored up firewood and maybe some coal and candles. Out of this grew the independence and strength of a People.

From "Sacred Progress" (circa 1984)

In Wales the gods had set in concrete
Patterns of somnolence and insolence,
Petty rules their caesars hoarded
Crushed the little people
In narrow lines of thought and modern action.
They scarred her with accent and attitude,
Blithe liars both,
Impediments as hard as coal and steel
Which bar her the way to constancy,
Her sun's blood splashing always
On jagged edges.

If wind turbines have their way we will be there again soon but with a population far too large to survive and with no independence of mind. Twm Havard's father was Morgan Havard, who lived in the appalling nightmare of Pen Deryn and and the living hell of Cyfarthfa, and died of typhus in his early thirties. That was the era of the judicially murdered Dic Pen Deryn and of the Merthyr Riots. Maybe this is revisionist history from the perspective

of a fat and comfortable and cultureless languageless time: the people who were actually there and living would not have considered anything out of place, injustice and early death being a kind of plague, and would have carried their burdens with courage, surrounded by poetry and folksong in their own tongue. Which is the greater desolation, then or now?

Across her face they stick to walls of stone and iron
Their ruin stares still in her hills,
The self- imprisonment of beings
That lithe as wolves had ravaged her
With mines now numb and statuesque,
Each an acropolis
Under fierce hammering of early winter rain,
A bludgeoning castle of intruder stone
About which man and brother
Squabble for succour
And lie to the weary traveller.

Just by the banks of this stony stream lay the industrial world, and the steam engine loaded with coal on large tracks, the drams on smaller gauge tracks. The coal miners could be spied on working on the surface, and sometimes they were hauled from the depths of the earth in a train of drams with seats. Twm Elim was once in charge of a train of drams, and his father Tommy Thomas Jones was in charge of the winding gear. The coal miners were moving statues painted with coal dust, and walked up and down from the village of Craig Cefn Parc to the drifts, which were drilled sideways and downwards into the rich Craigola seam. As a 6 or 7 year old I observed all this with distant fascination, being half afraid of approaching the miners too closely. I am still fascinated by this river world now, and photograph the flickering sunlight and ancient, secret, unchanged shadows of time that humankind has never captured or despoiled. It is very, very dark and quiet in frost tinted winter when "no birds sing" as John Keats wrote in his gothic "La Belle Dame Sans Merci", and indeed it hath me in thrall.

The waters have scattered In arid plains and towns, Sterile from long argument With the featureless land,
They have carved for the intellect
Vast highways,
Their feet in chains,
High above Thermopylae
The vicious eagles scream
And missiles darken
The golden Parthenon's brow.

Later, my mother and her friends would walk with us children the immense distance of two miles along the dram track to pownd (pond) Ty Lwydyn, a large pond of water under an ancient stone bridge further up the valley from Craig Cefn Parc. All along the dramroad there were piles of discarded coal, some of it slowly being washed away by the Clydach. In heavy rain and in later years the river ran black as we travelled to the grammar school early in the morning. The dramroad circumvented an immense tip of coal opposite the Hendy drift entrance, a small black rectangular cavern. If you looked carefully enough you could see pit sprags (props) and cross beams of wood, the gleam of dram tracks inside the mine, then the blackness took over. Walking past the coal tip and along the dramroad I said to myself: "How would you like to do geometry down there?" The coal miners said that sometimes the props and cross beams began to bend, from the pressure of the floor moving upwards.

Across the walls and broken stones
The winter slashes,
Godhead is corrupt.
The warlike machinery
Of many a century
And the ruins of symmetry
Crowd at the lowering cloud,
Arid in the atom's awakening.

Pownd Ty Lwydyn smelled of fresh brilliant mountain water and was a small dam made of stone below the arch of a stone bridge. I could not swim and never wandered from the banks. Others jumped off the bridge and swam like bigger fish.

Later, in the primary school and in the class run by Mr Hopkins, there was a window out of which you could just see the coal tip, with its dram track running up the side of a cone. On the other side of the valley there were two or three craters, said to be bomb craters, or perhaps due to subsidence. Nearby, the pit ponies went wild for two weeks of the year. It is fortunate that we looked down on the coal tip. After Aberfan it was levelled but its base still remains, a monument made of low grade coal mixed with what the colliers called "stone". In the Great Depression and general strike of 1926, people scraped what coal they could get from leviathan. In earlier times, the children of Tommy Thomas Jones and Mary Havard Jones shared one fish among them all, as my mother told me. She had an accurate memory of all the original people of the village of Craig Cefn Parc. In those days, everyone knew everyone else, there were no cars to mention or escape from quickly on the road, thrown into the side by a savage teenager, nothing to scythe you down with blaring noise called music, and you were greeted as a friend on the small roads of the mountainside village. Some of the steel of the dramroad is still there, and you can stumble across it, and sometimes feel the timbers under your feet. It is now called a nature reserve, but we all know what it really is, the remnant of a dead industry, deliberately abandoned. It can easily be made into a new industry with none of the inhuman dangers. Obviously there is a lot of coal around.

They bent the backs of tiny relatives, Fugitives in monstrous galleries Crawled like ants for betterment: Ideals like lead. Strange in mode and purpose They breathed filthily The dusty entrails of the earth, Found the old war dog Growling a hoarse familiar tune. In the black gutters of their hills Their day was their night perpetually, For many a blackened Troy The small ants scuttled, Built the Titans' furnace on their shores, Wrought weaponry for pointless wars, Incestuous grumblings of their makers, Obscure, terrible emperors Of the western world.

Beyond the Pillars
Their labours of Hercules
Exploded in battle,
Dreadnought from the land's hard depths
Gave to the sea
Incarnate savagery.

My father Edward Ivor was one of those at Aberfan who clawed in horror at the shroud of coal, as a Member of the Mines Rescue Service. I remember him clearly setting out for there, ashen white of face and the opposite of his daily hue. I foolishly asked if I could come to help but he refused, knowing it would be futile. The Prime Minister Harold Wilson visited Aberfan, and I never saw him as badly shaken during an interview with the deeply shocked Cliff Michelmore of the BBC. The Duke of Edinburgh also rushed down there but Alf Robens (Lord Robens), the Chairman of the Coal Board, said he was too busy to attend. Idris Davies wrote "Gwalia Deserta" in an earlier era after his friend was killed in an accident and Pete Seeger made a famous song out of it. I use a few stanzas as a refrain in the following elegy.

Aberfan (published in 1974)

We are crushed who now lie in this sultry grave
In the dark mountain's heart,
Now forever we are stilled,
An earth, an age, apart.

"And who robbed the miner Cry the grim bells of Blaina"

Man's black hand is evil on our brow,
The slurry and the sword cut deep,
For us, the prey, in this indifferent soil now
The mourning blind mists weep.

"Even God is uneasy Say the moist bells of Swansea." The spared have heard the valley roar
A shadowed, deathly psalm,
They claw in horror at the shroud of coal,
Still we, the dead, lay calm.

"They have fangs, they have teeth Shout the loud bells of Neath."

The blue scarred hold us as we bleed,

Take us as the carrion,

The burning eyes, the burning sun, are blind,

For now our day is done.

"O what can you give me Say the sad bells of Rhymney."

(Refrain by the miners' poet Idris Davies, "Gwalia Deserta", made into a song by Pete Seeger, "The Bells of Rhymney")

As a graduate student and post doc in my twenties back from Aberystwyth or Oxford on a visit to my parents then living in Lone Road, Clydach, I did about eight miles of road running past Gellionnen chapel in the morning of every day and in the afternoon walked up to pownd Ty Lwydyn over Bank yr Allt, getting over barbed wire, across fields and hedges, and then down the already deserted valley and the old Hendy and Nixon drifts. At that time in the seventies, the dramroad was still intact but completely deserted in winter except for an echoing, harsh raven, vulture and corbie of prey, and lord of the valley, but by now some parts have fallen into the river, and a new footpath created. Measure the loss against the gain: the loss of all the culture and language, the society and golden humanity and generosity of the coalminers against the elimination of danger and disease by removing opportunity to work locally. The question is not an easy one to answer.

Ionawr

Oer a gwyn, mud yw'r gweundir, - oer y dydd Y duedd heb flagur, Daw her sydyn yr eryr, Ar naws y dydd hirnos dyr. As children we accepted the danger and disease as a natural condition of a life that unknown to us was a very rich one, certainly rich in comparison to any city or town I have seen or lived in. I am quite able to function here now as a theoretical physicist, but still a coal miner's son. On those eerie walks down the deserted, seventies dramroad, the ghosts accompanied me, the flickering shadows of the painted statues of the fifties.

In the Damp Winter's Air (1974)

In the damp winter's air,
A bare latticed willow frames the lair,
The noon dark valley with the red shoulder,
Of the dead mine owner.
No dumping of rubbish to the green flowing stream
From Clydach Merthyr Colliery, Craigola Seam,
Bubbling on it ancient bedrocks
By order of the modern Coal Board.

Rusting ferns on a dusty winter's day
Adorn an old lung shaft, that a death ago
Drew spring's life to a catacomb,
The rain pools tremble with the ghostly wind,
Mirroring a purple wreath.
A rusty skeleton with corrugated bones
Is enthroned in exploitations' rotting body,
The pay office is brick, rent in grey lament,
Bitter toil, primordial strife, a ruin.
The tram rope is a gallows in the packed path,
Of death's grim domain, timbering rules,
Faded on the bone, whisper windy defiance,

The old cross sower is burned into wood.

A low god exhales dust,

Beware of the engine that carried him here,

The willows mourn his mortality,

His soul is at sea.

Next door at 48 Rhyddwen Road lived the younger daughter of William Newlands, my great aunt Maude (Sarah Maude Newlands, later Hopkins (1897-26th March 1962)). When I was born in 1950 she had been a widow for five years. Her late husband was Benjamin Ellis Hopkins, born in nearby Bettws in 1900, whose family came from the Pen y Bont (Bridgend) area and were no relation to the Hopkins Family of Rhyndwyclydach. Their daughter Marbeth was born in 1934 and was sixteen years older than me (Marbeth Hopkins later Williams, (1934-28th October 2003)). She was married to Cenfyn Young Williams of Boncath, Sir Benfro (Pembroke County), a devout Baptist whom she met in the chapel. Cen was born in 1930 and died on 22nd August 2010, universally respected. With them lived David John Hopkins who had been a steam engine driver from Swansea to Paddington, and never married. He was the younger brother of my great- grandmother Elizabeth D. Hopkins of Fagwr, Craig Cefn Parc (1875–30th November 1913). Maude as I remember her was taller and stouter than her sister Martha Jane (my maternal grandmother) and was sterner in character, although late in her life she taught me how to do scales properly on the piano. She had a far away, almost wild, look in her eyes sometimes, and that must have been because of the loss of her husband Ben Ellis at the age of only 45.

> Who are left undrowned Astride the skeletal rock Torn bare of trees and greenery Black with dust and gravity Of the hidden sun, The eye of mankind, Is devoid of pity. Their epitaphs are wholly calculated, Their destiny foreseen. They are Doric columns Strewn on the ground In old Parnassus, Sludge and lumps of slag Where once the pastures clawed, Progenitors of childhood vision Vanquished. Here broken on the walls A human face in unison

Let's fall tell- tale tears Among the desert grains, Embalms a golden age.

Her modest and effortless teaching revealed how good a pianist she must have been in her youth. She was an L.R.A.M. (Licentiate of the Royal Academy of Music), as was Marbeth. I was fond of wandering in next door (really part of the same house, the originally named "Bryn Awel House", built by my great-grandfather William Newlands (1873–1933)). This was because I could play draughts, dominoes and snakes and ladders with Marbeth, a "big sister" to me, and with whom I got on perfectly all my life. I sat on a narrow wooden bench seat worked in to the wall, and this is still there beneath the original timbered ceiling. Marbeth sat at the other side of the table by the fire. In those days, she could stand up, walk and live normally, but as she grew older she developed a rare spinal disease which curved her back acutely, causing her great pain which she bore with courage and cheerfulness. She was the organist at Elim as well as an excellent pianist until she could play no longer. Of all my cousins I was closest to Marbeth, there being a kind of perfect understanding between us. Cen and Marbeth had one son, my second cousin Ellis, who lives next door now with his family. Later, when my first wife Laura and I returned hungry and tired from the United States, in the early and mid- nineties, Cen and Marbeth were always there to greet us. One of the most poignant things I ever heard was from Ellis, who mentioned that after Marbeth died of a terrible cancer in late 2003, she could at last lie down serenely and in comfort. Her ashes now lie in Elim reunited with her husband and parents.

The graveyard hides from cities,
Here the colliers' children lie
Woven in labyrinths of time.
Their spring is knowledge
That will never dry.
The golden sun's corona
Fades into darkness,
The earth is open to the void.
Alone on the horizon
Life is a blood soaked grail
As night's fires move and leave

With the sun for a new age. The moon is pale And weary at the end of time, And drinking from the burning grail The twilight falls. Great cold descents On the plough broken earth And those alive. And leaves the stars in their void With pain and guilt. Black and light are harrowed, Firmament is sowed with stars, The morrow grasps the grail Full of light in black night. Great city far away Lies uneasily for dawn.

In the mid- fifties, Cen and Marbeth were married at Elim and although twenty years older than me, Cen became a close friend and "older brother" and I could drive with him to see his parents and brothers and sisters at Blaen Cwm, near Llandysul. This was a long drive in a fifties type of car, I think it may have been a Morris, with no heating. Sometimes it felt as if it had no springs and no wheels. The small farm had a stone farmhouse with an open hearth fire. You could walk right around it. They spoke a perfect Welsh in Boncath dialect and were a close, immensely kind and hardworking family, independent and strong in character, all devout Baptists. Ellis arrived on the scene and I acquired a younger "brother" as well. All was set fair in the village of Craig Cefn Parc and time should have frozen still as in a photograph, because it was naturally Welsh speaking and peaceful. There was one policeman called Watt Jones, but he never made an arrest as far as I know. The closest I got to being arrested was when I tried to use my foot as a brake with both Ellis and me on the same bike. We crashed right in front of P. C. Jones but got a ticking off in colourful Silurian Welsh instead of a ticket. I have many photographs of that era, including one with the whole family gathered around a Fergie tractor at Blaen Cwm. Ellis grew up by sliding from one accent to another, Boncath to Silurian and back again. Deeply ingrained in my character is the wish that time would stand still, and I think that this is part of us all, a wish that is

famously encapsulated in the poem "Ferndale" by Dylan Thomas. "Ferndale" must have been very much the same as "Blaen Cwm" or "Pant y Bedw". As a child, time is limitless, immensely imposing and unchanging, then it runs past us all.

The Night and Her Silver Ring (from my Welsh of the mid 1980s, a variation on Henry Vaughan)

"I saw eternity the other night Like a great Ring of pure and endless light All calm as it was bright"

This whirlpool freezes
A last eternal second
On the tongue.
A cywydd from a tear of water,
The silver ring beckons.
On a black tip of time,
The mountains are cold and distant,
They are terrible and eternal
In the fierce light.

Before the Blaen Cwm era, and at around the age of 8, the first great adventure of my life had begun with a journey to the other side of the earth, to stay on holiday with my parents and sister with my great- uncle John Havard Jones and his wife. He had decided to escape the mines and to run a bed and breakfast house in Sea View Place, Aberystwyth, a far off town and semi mythical. The journey took place in the battered van, the back of which was used for spades, rakes, forks, and chicken eggs, barbed wire, Indian corn for the chickens, cake for the cattle and bales of hay, and forked loose hay. In the front there were two ancient seats for my parents. This time the cosmological distance of seventy two miles was attempted for the first time with my sister and myself sitting on each wheel cover with suitcases between us. The spectacular drive through Mynydd y Gwair was followed by a sharp descent into Bettws and Rhydaman (Amanford), then ever winding roads through Llandeilo, Tal y Llychau (Talley) to the Llanbedr (or Lampeter) road, infinitely winding into the Aeron Valley where the only straight thing in sight

was the railway gushing steam, tethered by the nose with some bulls of an industrial dairy. We raced the train to sudden Aberaeron, where the vastness of the blue sea suddenly came to view in a wildly exciting way. Then up the coast road to Aberystwyth through small villages and over hills. I can only reconstruct this Grapes of Wrath journey by later knowledge:- the only things I actually remember are breakfast smells mixed with gas in Sea View Place. Later as a student, I would be in sardine tin digs just across the road, at "Brig y Don" (now a derelict house) and the only reason I went to Aberystwyth was the memory of bed and breakfast in maybe 1958 or 1959. I know the date from Bill Haley's "Rock around the Clock" (1956) which blared on the promenade or from some open door, I forget which. The first sight of the university for me was the mural on the Old College near the pier and crazy golf, but I was much more taken with the golf than the very grim stone, musty with imagined books. We also took a walk down the avenue of trees below what I later learned to be the Edward Davies Chemical Laboratories, but I did not even see it in 1958 or 1959. I was much more interested in the narrow gauge railway with its stage coach carriages up to Devil's Bridge and the almost vertical funicular railway on Constitution Hill on the way to Clarach. We walked across the cliff path to Clarach and I looked in the telescope on top of Constitution Hill. It was all a great adventure. We went to the cinema on the pier and I remember a film about banshees, Irish ghosts above the lapping waves. I did not feel entirely safe on that pier. There was a big bright red mine that had been converted into a spherical charity box, a whole castle to play in, and a ring of Eisteddfod stones, right next door to Sea View Place. Above all the crazy golf and the boom of the giant sea waves against the wall of the promenade, when the whole world shook. Later, my father took my sister and I to Aberystwyth for one or two day journeys, in the same spine- raking van with my sister in front in the seat, but his mercurial character soon became bored and for me the magic of that first trout fishing, small streamed, nets and fishing rod visit to Aberystwyth had also begun to fade as childhood receded. On subsequent trips it was always raining, dark and grey, so we took shelter in some arcade carved out as a tourist trap. I nearly shot my sister accidentally and never played again with hair triggered and dangerous fairground airguns. These are apt metaphors for my later life at Aberystwyth, it could be sunny, it could be dark, one could be sniped at.

The Second Coming (A Variation on W. B. Yeats)

Ugly is the sleet edge
That cuts a contemporary eye
On Aberystwyth prom.
The past is thrown at a frail shield
On the doorstep of Christmas.
Its beery head is iced with cold
And bellows drunkenly
At destiny:
"Come and waste with pleasure."

Wallow on the booming sea Like an infant in a cold wet lap: Swim in the roaring sea.

A second coming
Might hammer back the frosty dykes
So false with learning,
And the sea with net and legend
Might partake of the many dry fish
That met hereby their sullen end
Like Seithenyn.

In Mumbles and Porthcawl, Oxwich and Rhosilli, we had our own version of Aberystwyth, one seaside pier being exactly the same as another, so I began to get bored myself. In Mumbles, the lifeboat was poised over the sea at the end of the pier, otherwise all was the same. Oxwich and Rhosilli had infinite beaches to any child, but after getting out of my depth one day in Porthcawl, I abandoned the sea for the fairground. There must be more to life than boredom, and at around the age of 7 I began for the first time to learn. Before that it was routine, you had to be in school. After 7 or so it was sometimes good to be in school.

From 1956 to 1961, I was educated at Craig Cefn Parc Primary School with emphasis on the Welsh language, history and literature, and arithmetic. There were no log books or slide rules, and of course no calculators. So the

education could have taken place in 1756 to 1761 or in one of the travelling schools of Gruffudd Jones Llanddowror. I cannot recall being taught any formal geometry and certainly no algebra, which came as a shock to me at the grammar school. There was a great deal of emphasis on detail, as I have described light heartedly in the first chapter of this autobiography. This emphasis was sometimes tilted towards the business world of dividends and shares, adding up accounts, calculating percentages and so on. I am not sure what this had to do with a coal mining village, almost completely socialist in outlook. I was often asked to add up long columns of this and that for the teachers, both in the primary school and grammar school, so I must have had a minor talent for accuracy. At the end of those five years (standards one to five) everyone as far as I recall could read and write. This is not the case in today's farcical and dangerously violent education system. I have known one Oxford D. Phil. who could not spell. So the endless fractions, weights and measures, were meant to instil discipline. There was also punishment by mild caning on the palm of the hand for the boys, though none for the girls, some of whom being just as troublesome. The science was taught through botany of the local plants that could be found in spring, summer and autumn, it may have had some bearing on agriculture. You could not learn more at school than you did on the farm, so the farmers' sons and daughters saw no point in being at school. There was no chemistry or physics except perhaps the occasional mention of the Mond Nickel Works. Also there was no technical teaching of literature in Welsh, such as cynghanedd, and I cannot recall being taught the tenses in Welsh properly. They were taught more by reading the Henry Morgan Bible and listening to the Minister in Elim. There was one book called "Help Llaw" that I remember, and I must have studied that quite a lot. Sometimes the teachers used Welsh, sometimes English. I was ill prepared for the eleven plus and I do not know how I passed it, probably by being strong in arithmetic. Five years is a long time for learning what seems now to be so little, and the terms lasted well into July, starting again in early September. So I do not remember much of that education, except for long division and multiplication, adding up fractions and so on. There were some watercolour classes, but apart from that, little or no art. Also I do not remember any homework being given, or very little of it. I did not prepare at all for the eleven plus, so could easily have landed up in the grim grey secondary modern. I do not recall being asked to prepare. It was also no use showing my parents any of the classroom work; they could not add fractions such as a quarter and three eighths. So I wonder what education in arithmetic they had.

I do remember, however, that I began to read books in both languages on my own at home, and enjoyed reading them in between my father's irascible outbursts about work having to be done on the tiny farm of an acre and a half. He used to intone the phrase "work is hard, work is hard" - "Caled yw gweithio, called yw gweithio". Now I know there was no purpose to this uneconomical work, but I would never think of defying him and did not dislike farm work. However, my mind would be torn away from a book I was trying to read. The effect of this was to make me selfsufficient in learning from the very beginning, rarely did I ask a teacher or lecturer about anything. Arithmetic came naturally to me, but I was no prodigy and I had to learn everything in detail. I was certainly keen to advance, so must have had a sense that the village and farm life which I liked so much was at the same time a dead end. I was completely aware from the earliest age what the coal mine meant for me with my weakness from massive surgery. I know this from the fact that I was very happy at passing the eleven plus, meaning that I could go to the grammar school. At first, I did not hear properly from the headmaster whether I had passed or failed, so I almost shouted in Welsh "Have I passed?". He must have known enough Welsh to answer that I had. So there was a very strong desire in me to learn. Most wanted to leave school as soon as they could, and made no attempt to pass the eleven plus, or perhaps did not even know what it meant. Three of us passed the eleven plus, two of us went to Pontardawe Grammar School (Huw Griffiths and myself), one to Ystalyfera Grammar School (Jean Thomas). None of us had any idea of what the grammar school meant- very hard work and an immense amount of learning.

So what I remember of those years is peripheral, the monotony and unpleasantness of the actual classroom must have been such as to blank out memory. The conditions at the school were tolerable, except on a cold and wet day, when we had to shelter outside under a roof open to the elements, with wind blowing rain inside. That could get bad in winter, so all the damp and ragged children turned red, shivering from cold. There was no school uniform, the farm children might turn up in pungent wellingtons. Only in the very worst conditions (snow and ice) were we allowed to shelter in the cloakroom, with steam coming off our clothes. The food was also tolerable, but my parents had to pay for it I think. On Fridays we always had fish and chips because the Catholics could not eat meat. That happened to be the food I liked best. The four teachers ate the same food in the same small canteen which is still there, on a separate table, and the cooking staff were hidden behind shining cauldrons. There were some obnoxious, violent and loud mouthed contemporaries as in

any school anywhere in any era, but mild in comparison with what takes place now by all accounts. The activities that I remember are football and cricket on the yard and the occasional playing around on the steep mountainside, and pear- stealing excursions from which many a thief returned doubled up with an acidified stomach, circumstantial evidence of excellent quality. At other times, there were battles with conkers that became very grim and intense. On one memorable occasion Mr Hopkins took the whole class on a walk to the upper Lliw reservoir, in a long line strung out behind him like a pilgrimage on the rough wild mountain. There were no playing fields of any kind on the steep- sided slopes of Glyn Eithrym. If the cricket ball was subjected to a hook or square cut, it was never seen again because it disappeared into dense undergrowth way down the valley. I was the goalkeeper with badly cut knees and elbows. I could only dive to the left, but no one ever found out. Once or twice we used a small piece of rainy grass between coal tips further up the valley - the absolute limit of travel for the townie bus driver with a bored and angled fag. After that there was the wild moorland full of woad painted savages.

Before the eleven plus all was well with my contemporaries of the village;— I remember Dylan and Wyn Thomas, Arwel Rees, Howard Davies, Peter Harris, Huw Griffiths and a few others. We played football on rough waste ground with a bit of corrugated metal for a wicket, a punctured tennis ball and a piece of wood for a bat. One day we happily lost thirteen- one to Felindre in a deep bog with sticks as goal posts. Sometimes we had a football as a present or a real cricket ball. After the eleven plus there was an invisible divide because we rarely saw each other, having been partitioned into working class and middle class by the world outside. That divide is permanent and still there now – no one knows why. I was never subjected to any caning, being studious, infinitely cautious and obedient, but there were one or two very unpleasant incidents which served as a curious premonition of conspiracy and false denunciation in later life. As usual, the injustice sticks in my mind. The first of these was when the entire class had been told by Mr Hopkins to put their hands on their heads without talking. One of the pupils, a girl called Einir Watts, was put in control while Mr Hopkins read something, and suddenly denounced me for talking, although there was total silence as obvious as deep space. The teacher looked up at her curiously for a while as if wondering what to do, and slowly ignored her. This trivial incident would echo in later years at Aberystwyth and UNCC. It was shocking because it showed that children could and can denounce quite cynically. Probably it was some childish envy of what little talent I possessed.

The Ballad of Graham (Early eighties)

As I was walking near To Aberystwyth pier I spied the learned Graham, His papers he was counting – o.

Too mi li too mi li mi loo Wac fal mi FORTRAN o There's envy in the jar.

Well first I drew mi pencil And then I drew mi biro, Said "Stand and deliver For ye are the bold deceiver".

Too mi li too mi li mi loo Wac fal mi FORTRAN o There's gossip in the jar.

My intellectual gamble
Did now his codes unscramble – o.
His thoughts were as dog biscuits
To integrated circuits – o.

Too mi li too mi li mi loo Wac fal mi Algol o There's falseness in the jar.

He planned to do mi printer A mischief in the winter – o By freezing all its golf balls In decalin solution – o.

Too mi li to mi li mi loo Wack fal mi card packs o There's murder in the jar. He planned to do mi puncher A mischief in the summer – o And rambling through mi tape reels With a magnet in his knap sack – o.

Too mi li too mi too mi li mi loo Wack fall mi key strokes o There's poison in the jar.

I remember that the children were aware of this talent because my nickname, which I loathed, was "prof". How can the son of a farm labourer, the lowest of the rural low, and not even from the village, have talent greater than that of the daughter of a bourgeois shopkeeper with middle class pretensions? This incident smelled of Sir William Golding's "Lord of the Flies", where one of the children was ritually sacrificed by schoolboys in uniform turned murderous savages of the types that exist in schools today. The other occasion was when Mr Hopkins, in one of his foulest moods, hauled me out to the blackboard for some ritual humiliation, not quite a sacrifice, some task which he made me do over and over on the blackboard, never to his pretended satisfaction, and in full view of the sniggering class, coldly and deliberately and almost savagely referring to me as "Evans", not my first name at all. Was I perhaps too obedient and too perfect, or did my parents tell him something about his temper that he did not like? Only first names were ever used in the village. So this showed all too clearly what authority could degenerate into.

King Jeremy's Dilemma (early eighties)

King Jeremy, King Jeremy The scribbler has a LED on me, He wrote a book without my name He writes one every weekend – o.

He wears no shoes, he wears no shirt,
His desk is thick with dirt,
He wears no tie, he wears no hat,
And scribbles like a bat.

Gee wiz, in thing, buzz word, you're King, But I'm the patron saint of soap, Do the scribbler, stop him dead, And give me gob-filled hope.

> Did not I crawl and butter, And flatter with a stutter, To get what every bugger wants, The title of professor?

It's time to turn him over
To inkless white Siberia,
He wrote a book without my help
And left me off the cover.

King Jeremy can't sleep at night, Two bees buzz around his head, The wild haired inkpot chewer – o And Graham's shining LED.

The fact that these incidents stick in the mind more than fifty years later shows how shocking they were to me as a boy. The effect was to make me most wary and silent and to instil in me a desire for independence for the sake of peace. So my father used to describe me as "a cool one" to all his friends. This is what happened to Silas Marner the weaver in the great novel by George Eliot (Mary Anne Evans). Silas was denounced by his best friend and falsely accused of stealing chapel money. He was expelled and made his way to the village of Raveloe to become the silent weaver.

On another occasion, Mr Jenkins the headmaster erupted volcanically when I failed to turn over the page in an examination – the other side had some more questions on it. On that occasion, Mr Hopkins stood by very meekly as the headmaster ranted away. This may indeed have been a trial run for the eleven plus. I was not told that the other side had more questions, but who was I to offend authority? Miss Jenkins and Miss Thomas never behaved in this way. What pressures must there be on a man to become so irate at a school pupil over so trivial an issue? So it is the unusual and unpleasant which dominates

my memory for that era from 1956 to 1961. I was always very glad when the holidays came round from the school, but at the very end, was profoundly sad and uncertain when I had to leave it in July 1961, facing a future like a blank canvass. I think that school these days would be a horrendous experience for any intelligent young person, to the extent that private schooling by parents would be preferable. So I am in the end thankful for the four Primary School teachers of that era: Miss Thomas, Miss Jenkins, Mr Hopkins and Mr Jenkins. I still don't know their first names, so distant was authority. I could easily look them up, but I don't.

I had good reason to be grateful to Aneurin Bevan and the then new National Health Service, which provided inoculations against polio, diphtheria, whooping cough and smallpox in primary schools, and provided penicillin against tuberculosis, gangrene, and infection. Very probably I was given penicillin after the major intestinal surgery, to prevent gangrene, and the surgery was carried out in a modern NHS operating room, sterile and well equipped with instruments, in Morriston hospital. I have scars from the surgery itself and also from a feeding tube near my ankle. Right next to Pant y Bedw on Mountain Road, Ceri Griffiths, Huw's elder brother, had polio and had to wear an iron brace around his leg. My earliest memories as recounted in chapter one are of a polio victim in an iron lung, an apparatus designed to help with breathing. So in the yard of Craig Cefn Parc Primary School one day we were lined up for a smallpox injection, which as everyone knows leaves a permanent scar. No doubt I had been administered with polio and whooping cough injections earlier. For a day or two you felt ill, but were protected against a terrible disease. That was an unusual day so I remember it. I also remember visits to Dr Hargest's surgery and his visits to me when I was having trouble with the stitches. He was happy that I had recovered from the massive intestinal surgery and because of the NHS, general practitioners would visit free. The NHS was set up in postwar austerity, with rationing still in force. So to attempt to destroy it now is political fanaticism of the worst kind. It has been taken up by 140 countries. I was admitted to Morriston again for an operation when I was about 7 or 8 years old, one which was very painful to recover from. I was old enough then to remember the night lights, thermometers, charts and nurses taking my pulse and temperature with glass stuck under my tongue like a cold cigar. During that painful recovery I met the rugby player, broadcaster and author Cliff Morgan, who was visiting the children's ward, struggled up to him like a stricken sparrow, and got his autograph, struggling back again to my ward bed, holding my pyjama leg so it did not stick to the open wound that could not be covered with bandages. He was fly half and captain for Wales and the Lions, and became a commentator and later an executive for the BBC. The night lights were reminiscent of dimmed streetlamps in a children's ward full of small patients lined up like parked cars all painted white under the sheets.

Meeting Cliff Morgan

Among dimmed ward lights And aching wounds of children Cliff Morgan came to visit My kind of rugby. They told me he was famous. But he sat a humped figure among reality, Parked near a bed. Here was another side of life That he tried to give cheer to, A whiteness dangerously close to death In those so young. It was incomprehensible, And at night very silent. It was not a rugby crowd, In green daylight. Cliff Morgan was my hero And scribbled an autograph For a wingless bird. Nye Bevan was my hero, Before him I was sold And beyond repair – This my first official visit To the world outside.

In consequence of the care I got from the NHS and my parents and grandparents I managed to get through these post operation years with only minor ailments to contend with, mumps and chicken pox, with the usual flu. The mumps would swell my neck like a balloon, and my grandmother and mother treated it with sa^m gwydd (goose grease) of disgusting odour

wrapped around my neck. I doubt whether that had any effect until the doctor administered the right medicine. They could both be incredibly irrational clear even to a child - with all kinds of ancient superstitions. Nevertheless, I was very well looked after, many a child these days being neglected and coming from a broken family. I spent another few days in a Swansea hospital situated near the Brangwyn Hall and that was dispiriting because it was an unnecessary tonsillitis operation. It was fashionable among mothers of the fifties era to have tonsils extracted from their children, and that was taking advantage of the NHS. I have managed to stay out of hospitals ever since, with the exception of visits to others. Around the age of 9 or 10 I began to get too fat from eating too much cheese and butter and bacon and sausages, so I was put on a diet by the doctor. I stuck to this for the rest of my life, struggling against the efforts of my mother and grandmother to stuff me like a goose. Only when I began a regime of regular and very tough athletics training at Aberystwyth did this diet become unnecessary because I burned off all the calories. Other advantages of the NHS included glasses, (which I first needed much later, around the age of 18) and sometimes free dental treatment. This took place at a school in Clydach, with an incredibly painful drill and no anaesthetic. So I have been a toothpaste addict ever since at the thought of that drill. After the first smallpox inoculation at Craig Cefn Parc Primary School we were given a boost, but this probably took place with a sugar lump, so no more scars. I remember the sugar lump but no second booster injection. The NHS also came to my help with a large cut on my knee in early teenage years, which was stitched up, and a massively scarred but not broken knee much later in life in my forties from an athletics accident. I recovered fully from both accidents. So before criticising the NHS I ask people to think just a little bit of how much care they are getting. I found out much later in the States that without insurance you would get no treatment.

During the primary school era I tended to forget over the holidays what I had learned the previous term or even the whole previous year, but some basics of arithmetic gradually instilled themselves in my mind. There was no science education at all during that era and indeed I inclined more to literature in both languages than to arithmetic. I was always attracted by farming. I now know why because I come from generations of farmers or farm labourers. My father would be wandering around from one farm to another and often helped with the hay or other labour. Labouring came naturally to him (although he seemed not to like it, paradoxically and typically) and he expected me to become a labourer too. I had other ideas. Later on he would stride around the

village delightfully with childlike pride at my school reports from Pontardawe, placing me in pole position at the top of the class, but as far as I know he never read a word of what I wrote, either in science or literature. On a bad day he could be snarlingly contemptuous of my inability to lift some heavy log off the ground (ripping stitches and all) or use the cryman (scythe) properly or some other task which to me was entirely trivial. I always tried my best at whatever random job I was given, but my efforts were not noticed. If things went just a little wrong there was an immediate irascibility – and the only defence against this was obedient silence. So that instilled in me a respectful but determined independence, I was not going to waste my life being a labourer, and I was not healthy enough to be one. Labouring brought with it an unbearable boredom which rapidly worsened as I grew older, an endless deadly repetition to which the vast majority is subjected. What sticks in the mind from those days is a visit to Glyn y Bedd - the farm in which lived my half- aunt Blodwen (nee Lodge), stepdaughter of William John Evans, my grandfather, and daughter of his wife Gwenllian Potter, whose first husband Frederick Lodge died in 1918. Blodwen had an entirely different, much more patient, character from her younger half- brother Edward Ivor, and her son Dyson and I became the best of friends. She died recently in her mid- nineties – universally respected by all accounts that I have heard from those who knew her and remembered her.

On Glyn y Bedd one of my random but new and exciting tasks was to help collect the sheep from the shoulders of March Hywel, where they wandered around grazing the poor, peaty moorland. The only way to do this was by pony and with the help of sheepdogs, who paralysed the sheep into submission by the threat of annihilation with piercing, crouching eyes. My father was not a shepherd and so the collecting of the sheep became a stochastic process. He was immediately impatient and strode away from me on the mountain, which seemed to be his natural abode, not imprisonment in a coalmine. I was left isolated wondering (with hindsight) whether this was really the way to intellectual development. Coalmining was the source of much displaced anger in my father, who was a volcano that always threatened to erupt, throwing verbal lava randomly over those in range, be they king or peasant. A highly intelligent man should not be a coalminer. In fact no one should be a coalminer unless conditions are made safe. The pony had no saddle or bridle, so I hung on to the mwng (or mane). That did me no good, the pony with primordial cunning contemptuously dipping his head and I was thrown perfectly timed into the stinking bog, no less primitive in nature. Somehow the Brownian motion of the sheep gathering was brought under control and they were funnelled into the corlan (or sheepfold). This was a prelude to baptism – the sheep dipping to remove all kinds of accumulated nastiness from the wool. So water and disinfectant cascaded everywhere, over four footed and two footed alike. There was one blind sheep that I tried to catch but it danced away like Barry John doing double, four- footed, side steps and sudden leap. Instinct is something at which to marvel.

March Hywel (Hywel's Stallion)

Briefly in time's black torrents You are an eternal giant, In the light of a firefly you are blinding. In man's minute domain Whose history flickers briefly And whose waters rushed contrarily You are the giant unyielding horse. Pound on the dark and ancient miles And make peat flash on the anvil. Among the ruins of civilization A stallion thunders On the canvas of a modern city. It is vulcanized by time. Grey commercial beings are seared In the forge. The mighty horse brings freedom And bears away his underling.

Glyn y Bedd was meant to be a working, economical farm, with super heavy churns of milk put out near the gate for the churn lorry to collect on what passed as the main road. It refused to crawl slowly over the rough road to the farm so the churns were taken down to the main road by tractor. There was a pasteurizer driven by a generator that growled into life after much verbal persuasion which could turn Silurian blue. All was hellfire Welsh. The milk ran backwards and forwards along the warming horizontal tubes that took all the T. B.(tuberculosis) away by law. Otherwise they would have drunk the milk straight from the cow as they had since the last ice receded from Britain, leaving the South Wales valleys. They would have made the farm cheese and

butter as I saw done by the ladies of the farm with small wooden churns endlessly turned by hand. I did not know that I was living right at the end of a very rich and ancient age – before the onset of desolate and violent, spiritless and entirely anonymous societal discomfort crowned by wind turbines. This pasteurizer was housed in the ysgubor or barn, a stone age shed with a tin roof, with handheld lamps for lighting. In winter the milking took place in permanent and very cold damp darkness, six in the morning, six in the evening. Gathered around the table of the farmhouse we were warmed by coal and lit by oil lamps and by wicks – the potato eaters of van Gogh. This was the ancient 6,000 year- old world unchanged – immensely reassuring, my father calmed and moderated by the patience and presence of his serene, dark and wise- eyed half -sister and immediate Glyn Tawe family and not threatened with daily death from a falling stone far below Craig Cefn Parc. We were undisturbed by television - its flickering disturbing rubbish - there was simply no electricity. For a while he was out of the mine and his best side took over. Now I know he was descended from the Princes and Normans, not a coal miner at all. Glyn y Bedd had a Fordson Major tractor, whose wheels towered over me like a circular stonehenge turned sideways and processed into tough as iron tyres. They had deep tracks to grip the slippery soil and mud. There was a metal seat and a towering gear that was cogged into the open engine. I think it always had to be turned into life by a handle, no electric starter, and required supplication and chant to burst into life, pouring pungent exhaust. This formidable presence pulled the plough and harrow, the hay cutter, hay turner and maybe a baler in later days. It pulled the gambo (haywayn) back into the farmyard. "Gone are the chains which bound him to the soil" as R. S. Thomas wrote so memorably. Back home on Pant y Bedw we were still prisoners, still doing things by hand, which I did not mind at all except for that hand blistering hay turning which so irritated Edward Ivor for no known reason. Blodwen's husband Dai was also a coalminer, so the farm could not have been economical after all. I can figure that out now, but then it seemed natural. The farm could turn nasty - one day Dyson was kicked by an irate cow and burst into tears of anger and pain. He was then about 9 or 10 years old with an immensely optimistic grin. I can see him now, at the back of the stone house under the orchard with apples, pears and plums. He died a few years ago in his mid-fifties and Glyn y Bedd was sold for "development, suitable for holiday cameos", or similar atrocious nonsense on the wild bleak moorland of March Hywel above the Dulais river, once a part of our Nation. Development means the destruction of life itself. It became its name, the valley of the grave

- Glyn y Bedd. Before that kick, Dyson had seemed to be made of tough and very ancient sinew that could not be damaged in any way. My visits to Glyn y Bedd came to a very sudden end with a violent guarrel between Edward Ivor and Dai. I could hear them shouting savagely at each other as I sat small and paralysed, and my father drove away very suddenly. I still do not know the reason. I was told very little about my own family. Much later though, there is a photograph of the Grithig children in old age, among them Blodwen, so the quarrel must have been patched up somehow, Dai being long dead by then. In one room of Glyn y Bedd, I met my grandfather William John Evans for the one and only time in my entire life – I must have been about 8 or 9. I very vaguely remember that he spoke a few words to me after I was brought up to his room. I cannot remember whether they were in Welsh or English, but apparently he spoke only English. I remember that he gave me a coin, which seemed very nice and friendly to me, and then, after a few minutes, I was ushered out of his presence, never to see him again. Why this should be so is the biggest mystery. He died just as I was preparing for my finals in 1971, and William John and Gwenllian now lie in St John the Baptist Callwen until they too are sold for development.

Er Cof am William John a Gwenllian Evans

Dan y trum a dan y trwch, - yng nghwm mwyn Yng nghwm mud gorweddwch; Clawdd y llan yn claddu llwch Yn ei hudd, yn ei heddwch.

CHAPTER 3

Lest it be thought that I have fallen into then and now syndrome I was always very careful then of those around me, never entirely trusting. This may not have been a particularly pleasant trait of character but the cruelty I saw around me made me so. There was natural cruelty and man- made cruelty. Often I saw a man who must have been in his early twenties who would walk very slowly, then come to a stop like a pillar of salt, and as my grandfather did, stare at nothing. This was the effect of pneumoconiosis, or black lung, as I know now and wish I did not know at all. Another time, I was ushered into the presence of a man dying from this disease, and he fixed me with a stare, his eyes past seeing. It seemed to a child that there was something wrong, but then it slipped out of mind for a while, only to reappear half a century or more later. Then there was natural cruelty- just across the road there were two sisters, Phyllis and Mary Kayes, who were retarded (as the Latin has it). They had the simplest and kindest of natures, although they were always bewildered by the world. When their parents had both died they tried their best to look after themselves until Mary was found dead in squalor one day by Cen and an unknowing Phyllis taken to an institution for the rest of her days. Some people tried to keep an eye on them. Where is the justice in that? I shied away from this cruelty as from a repulsive adder lurking near the river. Why should there be such natural oppression is a question that the Minister, Reverend T. R. Lewis, struggled with in almost every sermon. I imagine that there would be an empty pew after an accident. I simply mistrusted the mechanisms that caused grief and thought that they were pure malevolent chance, like stones falling from the roof of a mine gallery. Reverend T. R. Lewis was the most sincere and eloquent of Ministers, brilliant in the Welsh language, knowing several classical languages, but later I found out from Cen (then a deacon) that the congregation could not, or even would not, pay him, one of the many unfathomable hypocrisies of village life. So he moved to Aberystwyth. There was never a capable Minister after that to replace him, and the congregation fell apart – the rot set in after the drift mines were closed, and the indiscriminate selling of houses began. Now, as the only Armiger, I am left in a quandary as to how to save the chapel from "development", which means contemptuous sale and destruction. I was right not to trust the government of the village, or lack thereof at any level, because that government has destroyed the community – that word has come to mean suburbia. Perhaps this is a contemporary plague of society everywhere, the plague of anonymity.

The Assault on Carreg Cennen Castle.

Driven like slaves by trivial convention
Which centuries old became a habit
For bodies that were barely fed or clothed
In old moulds that they feared and despised,
In which elders perceived truth and light,
A busload arrived of the unemployed,
To be shown around the state's old mortar.
In the pointless desolate wilderness
Efficient management of slaughter
Had created inside the castle walls,
Realpolitik of kill, steal and keep,
They forgot for the day their own drab lives.
For years after that, all labouring done,
The castle still filled them with dawn and sun.

Even to a child of about 5 these injustices were already apparent and could become oppressive from the talk almost every day of the family elders about how hard and dangerous it was to work. I had no doubt that mining was a terrible existence, so my thoughts were how to escape it without losing my mother tongue. From earliest times I was on my own, which strengthened my intellectual resolve immeasurably. I was lucky in that there was compulsory education up to the age of 15, later 16, and free education, because my father was reluctant to support it, or often seemed that way, on the edge of either pulling me out of school or throwing me out of his house. He could not have

supported any educational fees financially. He was overly proud of my top of the class reports, but that was all, because if I had not been top, he would have been sullen and angry. In the end, I got through the entire education process without having to rely on my parents except for shelter, clothes and food, and also helped them a lot on the farm. This was the only way forward I could think of, otherwise I could have been pulled out of school by my father to do some real work as he would have seen it. As I was often told, he had to work when only 12, which made me very wary of the implication. So around the age of about 7 or 8 this oppressive incoherence within the family began to dominate and disturb my everyday mind. The only way to get away from it was on walks with the sheepdog, called "Jo", or by doing some work on the smallholding such as tarring the roof, chopping wood or moving coal. My father would be pleased and contented by that for a while, especially if I did it without having to be told. He saw that as real work, so I appeared him, not that he was evil in any way. Parents and grandparents warned me constantly not to go down the coal mine - they need not have worried, for I knew at the age of 5 that it was certain death: a quick one or a slow one. Despite these warnings, my father fully expected me to follow him down the mine, or at least become a farm labourer. I am not sure that the great expectations that people had of me ever changed his deepest mindset, that of many generations before him.

So the memories of that time (aged about 5 to 11) centre around the unusual, and of days that gave relief to what was beginning to become a monotonous differing of purpose with my always volatile, wholly unpredictable, child of nature father, a daily struggle of young intellect to grow against purely utilitarian existence and early death. That is still my struggle now, and the struggle of all intellectuals. I do not blame the elders of my family in any way, it was simply monotonous to hear that working was hard when I already knew all too well that it was and I was very sympathetic and anxious for them. Each new day there could have been a fatal accident. As far as I know (I was told almost nothing), the nearest that Edward Ivor came to an accident was when his friend was killed instantly right next to him by a runaway dram. I had to drive him back when I was about 17 in deep shock, completely white of face and bandaged, from Lliw Colliery where he was then an overman (underground manager). He survived in the drifts and pits from 1936 to 1972, but did not escape the dust that eventually killed him at the age of 78 in January 2000 from a sudden and massive pulmonary oedema. His last words were for his drowned mother Gwenllian (he said as he fell: "oh mam" - "oh mother") and not for his wife Mary who was with him after fifty two years. He must have mistaken my mother Mary for Gwenllian – we will never know and it may be best for us to respect his dying words – surely they were meant for all us fellow humans. I was far away on my own in freezing Ithaca, New York when the news came through by telephone from my mother. His ashes were spread above Grithig in Glyn Tawe exactly as he wished. He had never really left Glyn Tawe as we all knew. Considering the rotten things that life threw at him he comes out of it all with profound dignity. I have the utmost of respect for his memory and achievements. He always told me that I could take care of myself, and I suppose he was right. Later in life he was by all accounts proud of me, and in my own way, the only way open to me, I always tried to please him. I cannot write honestly that I was close to him – it was more a deep mutual respect between individuals with different experiences of battle.

Among these earliest of memories was a visit to my mother's friend Bettie James who had lost her husband by a shotgun accident and was living with her young daughter Mair high up on Gellionen near the Bronze Age stone circle known as Carn Llechart. This was a very welcoming house, beautifully kept by the young widow who bravely kept going, carved out of the hostile winter. I do not know how she survived. So I remember walking to Carn Llechart, which is ancient and mysterious, an almost unique ring of Bronze Age stones leaning outwards. Nearby there are Stone Age remnants and standing stones to mark a place of importance for ancient peoples. We children knew or cared nothing for any of that, but walked around these stones in delightful exploration. It was a day with no rain in summer high on the shoulder of Glyn Eithrym. This is a glacial valley partly fenced in by farmers but still as it was left by the receding ice 10,000 years ago. It is owned, as is so often the case, by anonymous people from outside Wales and rented by tenant farmers. I take no notice of that and regard the land as my own in the sense of the native American. Land is not for owning in the real sense of the word, it is there in perpetuity for all of us, especially if we are born there. If we destroy it with hideous turbines for no purpose we will suffer and I hope that my distant cousin Beaufort realises how much he is disliked intensely by so many people. He really is my distant cousin, I am not making this up. In fact I never make anything up at all. The aristocratic system is so deeply engrained that David Somerset Duke of Beaufort still owns the mineral rights in my garden. The Somerset Trust exploits everyone for profit because the Labour Government failed to nationalize the land.

At another time, a visit to Betty James and her little daughter Mair took

place in winter, when the whole mountain as night drew on became cloaked in fog so thick that it was difficult to see one hedge from another. Inside the little house, with its few acres of rough land carved out from the bare mountain, the light of the fire was generated by steam coal, and reflected off brasswork and an oak dresser decorated with best plates. A little way down the road was a farm, with daily milk and possibly some butter, and all was still in a fluent Silurian Welsh of which Bettie James had a rare mastery in accent still unworn by time. Milk was brought up to the little house with a small churn, and I remember seeing that in dense grey rain. This way of life had remained unchanged for millennia before the days of nearby 4,000 -year old Carn Llechart, the outward leaning stones perpetual observers of human transience and almost worn to nothing, having been replaced by the dressed stone of the chapel. Nothing in human nature changed in those thousands of years: humankind is transient, but its nature is more unchanging than the stone, conserved in chromosomes. Science knows from DNA that the language must also have been the same in essence for those 6,000 years, but evolving as it was continuously spoken, kept safely alive by the fire while the winds and fierce rains of millennia howled down the stone circles until their purpose was forgotten. The sheep would have been worked in the same way 9,000 years ago, as soon as the ice receded, and wolves would have been transmuted into black and white dogs by the promise of meat from a hunter. The hunter became the farmer as soon as he learned to make hay for cattle and flour from wheat. Bettie made food from wheat as good as any New York City chef: cakes, mince pies, puddings for Christmas. We forgot the time amid the pies and emerged into weather de Baskerville, except that the sheepdog would not move from the fireside where it was a black and white horizontal statue. The last time I saw her was at my mother's funeral in 2002, and tears filled her intelligent blue eyes as she glanced at me. She was one of the very few who attended. All too predictably she is now in a home for the aged, the house has been sold for "development" and she is banished from the living. I prefer to remember it when her kind and hardworking second husband was alive, working the sheepdogs for visitors. The sheepdogs responded only to the finest Welsh, now also banished from the moorland. So I sustain its brilliance on paper as best I can.

Outside in the sudden cold and darkness, it was possible only to brush along the hedge with a small electric torch, whose light was uselessly scattered by the ancient precipitation, until we eventually collided with our no less ancient van. My sister and I climbed in through the back doors, dripping with condensation. All the cattle and sheep of the surrounding farms must have

been safely inside their static stone buildings, also unchanged in millennia and now completely hidden by the threatening winter. My parents went in the front and we began a perilous journey above the almost vertical sides of the unfenced road levelled out of the protesting mountainside maybe a thousand years ago. At a very sharp U turn the van pointed straight at oblivion until it was slowly reversed and turned around by the steering wheel. My stomach protested violently and quietened only when we reached the St. Illtyd Way, a paved road along which Illtyd strode in Celtic times. That dropped rapidly in low gear into Rhyd y Fro, where it reached a modern road with drenched streetlamps pathetically battling with the mists and rain. These were bulb lamps asthe era of halogen had not dawned. In the nearly bankrupt Britain of the early twenty first century, infinitely remote government's only trace of existence is to put the bulbs back again, pleading the need for reduced lighting. That surely means the onset of political darkness.

The Three Lloyd Brothers

There, with his leg a piece of weathered steel,
John Lloyd was still a stronger man than me,
Sculpting bales from wild hard gorse, before rain
Soaked the hay, and blood soaked the end of day.
Much stronger. He and his brothers were carved
As half gods, pre Celtic, Neolithic,
Laughing at the glacier, slowly doing
The valley long after they were complete:
Laughing at Hengist and Horsa as these
Saxon visitors thieved and killed the east.
Laughing at Grindell-Mathews' weird lab
Where in a cranky fog he death rayed clouds.
These three giants worked indifferent to time,
A common sight enough and then sublime.

Later, a fantastically ugly open cast coal mine was clawed open by massive machinery immediately next to Carn Llechart, which must have narrowly survived a mechanized obliteration at the hands of modern man, or more accurately at the hands of the machine or automaton that modern man has become. When the machine stops, what will be left of humankind? It will

have no ancient language unless it realizes that life is not for sale and homes are for living in, not for holidays. The open cast mine appeared on the horizon in the late fifties, a filthy presence that dominated all that was verdant or fernlike red below in Glyn Eithrym. Gradually the horizon filled with pylons and pipeline damage, until now it is on the edge of being obliterated by a new quixotic madness, giant wind turbines generated by a blizzard of greed, useless in comparison with coal and unable to keep a country alive. The open cast mine closed after it had clawed out all the coal near the surface, and was surrounded by always green pine trees wholly out of character with the ancient deciduous oak and mountain ash that bow to the seasons so gracefully. I think that this will be the fate of turbines, larger leafless trees with flailing, vividly plastic branches of an ugliness so profound that it could only have been invented in hell or the House of Commons. After much damage to nature, they will be dismantled, if only by time, their remnant concrete bases will be as modern art, incomprehensible, and slowly they will be covered by ferns, heather, gorse and bog. Humankind might itself have vanished from the land, unremembered, an unremarkable episode of time, a destructive little species. Damage nature and it will take its slow and subtle toll.

At another time lodged differently in memory, my father Edward Ivor and I were driving back home in the same battered van from one of the remote farmhouses of Gellionnen and Baran which he so often and very suddenly visited as boredom dictated, and I had the rare opportunity of sitting in the front seat. In Rhyd y Fro the tyre began to whistle a strange tune; I remember that it was the left front tyre, I remember the details and the exact location. The van began to skew and hauled itself to a halt against the steering wheel. What happened is vivid even now. Having thought about this catastrophe for a while, and having no mobile phone in a rain-drenched night, Edward Ivor remembered that there were some ancient bricks in the back of the van. There was no way of repairing the puncture with a mechanical device because none had been supplied when the van was purchased second hand. From a historical perspective, there is no doubt that this puncture was a disaster waiting to happen. So using his great strength as a collier he lifted the side of the van entirely off the ground. Only then did I fully realize that it was my task to place the bricks under the axle and a ton of steel held up only by human sinew barking incoherent instructions. I remember the shadow of steel over my head and that was the one and only taste of coal mining in my entire life. I remember the crunching of my frantically constructed brickwork façade as the steel came down on top of them. I then bolted for the cloud-hidden stars.

If my father had lost his grip on the van I would have been killed outright, so that is why the memory sticks in my mind forever. It would have been safer to take a bus home, but he had no money with him as likely as not. The wheel was removed by a rusty old wrench on rusty old bolts and replaced. Often had I sat on the dust- covered rubber of the spare wheel in the back of the van when the wheel cowling got too bumpy, but now I saw it in vertical resplendence, proud at the result of my architecture and construction with second hand bricks. With a cold feeling of impending roof fall I saw my father lifting the van again, and knocked the bricks away with utmost haste. Having survived that puncture it became clearer than ever before that I was not to be a ferret underground. I would prefer any crushing boredom of the classroom to that crushing axle coming down on the bricks. He was not evil in any way, but that was truly dangerous. I have met many a profoundly evil devil in later life.

False Philosophers Fall

When all that is bluff and bull is squandered,
Whom does the wind embrace but simple men,
And soothe their grief with delicate disdain
For those who squandered truth like excrement?
Black clothed pedlars of universal pain
Came by to my old man and me one night:
As he strained with all the fierce collier's
Mighty strength to lift I shoved a brick
Between the axle's biting steel and earth
And scurried like a ferret for the stars.
A weight would crush me in its gravity,
On me a drunken university
Would reel and bite with teeth of sordid liars
Who sugared our petrol and slashed our tyres.

Rain can be stunningly monotonous, and in the early years of childhood there is no escape from parental exigency and infinite routine, so I often had to work in the rain, or simply gaze out through the wood- framed, simple windows of Pant y Bedw at the distant clouds of mist climbing up the great wall of Mynydd y Gwair. Later, there was a black cat on the window sill at Pant y Bedw and I made a pitch black upon white silhouette photograph

out of it, developed much later still in the pitch black student dark room at Aberystwyth. That darkroom was a converted cellar under the music room, with a different kind of tortured violin sounding like a different kind of cat, and under sea level at high tide. The sea tried to tear down the wall with the vibrant blows of a steam hammer, waves a few seconds apart, but I was fascinated by the image developing magically under the filtered lamplight. I think that those bricks in the back of the van came from a nearby rubbish tip that the council had designated for Craig Cefn Parc. It was and is a village in which everything could be dumped by completely unknown officialdom, coal mines, closed drifts, garbage, pylons, pipelines, mercenary property seekers, and now gigantic turbines, grotesque monsters from Dante. So the accumulated rubbish of bourgeois existentialism was hauled in stinking lorries into the serene fields and hedges of the village, along winding narrow roads meant only for horse and cart and walking colliers in the pre- dawn blackness, perennially seeking another darker blackness. Colliers were also designated as the diseased rubbish of humanity, but deposited deeper underground. The rubbish tip smelled continuously, rotting clouds drifted over humanity, but for children the odorous detritus had hidden treasure half emerging from the ground and all for free. People then as now would throw anything away, even themselves. In winter there were stagnant pools of cold water lashed by rain, in early summer there were tadpoles to be imprisoned in a jam jar. Very few became frogs unless dumped back again into the morasse. I am certain therefore that these bricks had come from the rubbish dump- someone, somewhere had even thrown old bricks away, half held together by rotting cement. I remember my father taking me, raincoated, optimistically to this rubbish tip, in cold, ever heavier rain, with nimbus clouds deposited also as detritus by the vast and hidden Atlantic. The bricks had been used to build a wall at Pant y Bedw, and I remember chipping away the old cement, helping with the concrete, new cement, sand, chippings, and spade and water. Only later did these bricks find their way to the van, and find a new purpose under the executioner's axle. That rubbish tip was deposited in a bog near Rhyddwen Road. As usual "Rhyddwen" is a corruption, as it should be "Rhyd y Waun", the heath ford. Through the ever stinking rubbish- ridden bog ran a small stream, whose waters became Afon Llan amid water cress which we rescued for sandwiches. No matter how much pungent societal stink was dumped into that bog, it swallowed it whole, and we swallowed the pure water cress a mile downstream. We reached that cress on bikes over a small stone bridge just below the Mason's Arms, where the patient workings of nature have restored the stone of that bridge to a verdant green, and the works of man have been overgrown entirely by time as always happens to the greatest of arrogant empires far away. A large new bridge has been built, one in which modern anonymity speeds to destruction with utter irresponsibility, a great danger to any adult or child. So none walk on that road now amid the murderous and selfish petrol-guzzling speedsters of our time. The serenity of farm tracks has been replaced by the machine and its inevitable corruption. A sodden longgrassed football pitch was later built on that rubbish tip, a unique amenity with tottering goal posts but no nets. Here the Craig Cefn Parc All Stars played at home, farmers using wellingtons as scythes, opposing teams being overcome by fumes. The tip was closed at last, and I hear that there are remote plans to stuff the place with cardboard houses. It is always rumoured in Wales that the intensely hated councillors get kickbacks from developers, or at the least a lot of council tax to keep them in their unelected splendour. Councillors on the Graig are almost never seen, and I am not sure whether they exist except as images. These houses, flimsy anonymous shacks, will be built on the rubbish of a languageless culture. The population is not growing, but what used to be a village is crammed by new cars and houses. Giant cars litter the narrow roads, consuming petrol as if there was no crisis. What has it got to do with me is the only point of philosophy. Let others do the turbine fighting.

Rain

Falling rain looms heavy on the silent earth,
Brilliant verdant threads are grey with age,
The toiling bureaucrats are penning birth
To woven shadows in an iron cage.
The darkest hours of enlightenment
Run headlong from the July sun
And hide from him, conceal the stinking scent
Among the streams, our leaders on the run.
Quickly the sage and learned turn and flee
In shining sodden torrents drown their debts,
Custodians swept to deep obscurity,
An army beaten by obscure threats,
The cloth of wisdom is a winding sheet,
A seamless garment full of rotting meat.

When I was about 4 years old we moved to the smallholding of Pant y Bedw, a few hundred yards away from the house in which I was born, originally called "Bryn Awel House", now just an anonymous 50 Rhyddwen Road. Bryn Awel House has a long garden negotiated out of Beaufort rule in about 1895 as two adjacent strips of land meant for mere peasants. If I find coal or oil among the potatoes I have to give the coal to the Duke of Beaufort to eat, even though I am an Armiger myself now. Such is the merit- mincing mediaeval mindset, even to this day. Impossible to know why a country can be so backward for so many hundreds of years of political insincerity and royalist fantasy. Compared with Bryn Awel House, Pant y Bedw was a gigantic ranch to a 4 year old. My earliest memories are of sitting near the chicken shed at dusk. Later, I would be assaulted there by the claws and beaks of turkeys that towered over me. For this they were executed at Christmas. Bryn Awel House here has three sheds build by William Newlands, my great- grandfather, with stone quarried from Gelliwastad. William Newlands built Bryn Awel House himself, with the help of Dai Havard and a carpenter. The slate roof was put in place over wooden beams. The walls are a yard thick and very solid, and it has survived the subsidence of the drift mine below. The ceilings are of the original varnished wood, with a hook for salted bacon. The sheds are also built of stone from Gelliwastad, a coal shed and a forge with its own small fire, then added to those another, and next door a finely constructed pigsty with its own slate roof. In this tiny forge William Newlands wrought brasswork still displayed here in my efforts at "cultural continuity". The rough and original stone walls of Bryn Awel House are captured in photographs, the garden grew (and still grows) a lot of food, but was also a flower garden with fine trees, herbs and berries. An ancient oak towers over us now, and must have been there before the house was built. If there is any ancient culture left in Britain, it is conserved in its oldest living beings. These are not pitifully short- lived hominids but the yew trees: the oldest ones I know of are those planted by druids in the churchyard of Defynnog. This is the village where my great- great- great Havard grandfather probably originated, and in the churchyard there are Havards there now, at peace with the Welsh language inscribed in their memory. The yew trees in Defynnog were planted by druids in a ceremony, and are known by science to be about 5,500 years old. They are living remnants of ancient Britain and the later Celtic llan was built between two yew trees. Ancient Britons exist therefore not only in cold, mysterious stone, they exist in language that must not be lost - it is as old as the druids and yew trees - the Welsh language. Our druid ancestors are still with us, but

after 200 generations or more. Who is to say that Britain is intellectually better now? In the Paviland Cave in Gower there have been discovered the remains of a man who lived over 30,000 years ago, before the last ice arrived and then receded again about 10,000 years ago. He was just as clever as we think we are now, and was a man of some standing, much more relevant to his people than an unknown councillor or expenses- fiddling politician of our mechanised time.

When my father took my sister and myself for a drive in the van he would often make for Glyn Tawe up the Swansea valley on the A4067. In the fifties, this was the only road, and on the other side of the Tawe there was the still open Swansea to Brecon line with steam engines. Quite often my mother preferred to stay home, so there was a spare seat in the van. My sister was usually given this, being almost two years younger. He was happy to get away from what he must have found to be the increasingly oppressive village of Craig Cefn Parc. I am sure that he found it oppressive because of the everbeckoning lord of the flies, the coal drift, which I describe in the sonnet in chapter one about peering into the entrance. He was beginning to realize that the smallholding of Pant y Bedw meant too much work for no return, and that his wife was unhappy there. I always found Pant y Bedw to be home, despite the manual work on top of school work, and was greatly shocked when my parents turned up in my graduate digs at Aberystwyth one day in about 1972 and casually mentioned they had sold it. I was told nothing more, but later found that it was sold for just a few hundred pounds. Its roof was taken away and it was allowed to fall into ruin deliberately. It stayed like that for years, a gaunt remembrance against the sky. I tried to buy it back but it was hopeless. Both of my early homes, (50 Rhyddwen Road, part of Bryn Awel House) and Pant y Bedw, were sold suddenly, and I inherited nothing of either. I managed to buy this house back in 1993.

My father's state of mind brightened as soon as he had got clear of Pontardawe on the way to Ystradgynlais through Ystalyfera, and as the industrial part of the valley was gradually left behind. As we reached Pen y Cae we knew he was home again near Grithig. On one visit, he showed us Grithig for the one and only time, and for a few minutes only. I remember it very vaguely from that visit in the fifties. Someone showed us inside and there were shadows of a wooden staircase. My father quickly looked inside for a while and we were suddenly whisked away as was his manner. I think that the memories were too much for him but my sister and I were fascinated by the dark waters of Ogof Ffynnon Ddu emerging as if from a distant nowhere underground. He

drove up towards Penwyllt and showed us Ogof Agen Allwedd. I realized that he knew the caves very well. Only much later did I visit Grithig again, and found that it was a small converted barn or ysgubor. My grandfather William John Evans brought up six children in a third part of this tiny house: Billie, Blod and Fred (his stepchildren), and Edward Ivor, Hannah Mary (Nan) and Raymond Vivian (his children). On another visit to Glyn Tawe we visited my Aunt Nan, who lived in a council house near the church in Callwen. We drove past the dark, foreboding and looming walls of Craig y Nos Castle a few times but I was never allowed inside it. They were not dark to my father and he pointed out the stables with some pride. My parents went to occasions in the Adelina Patti Theatre so I was lord of Pant y Bedw for the evening. I was never allowed in the theatre. Once or twice he would drive over the top of Callwen up to Crai: flanked by red soil we raced the steam engine from Penwyllt and gazed at the wonders of wild moorland down to Crai reservoir. When we reached Defynnog in the nineteen fifties I had a strong feeling of having seen the village before. Only now do I know that this was ancestral country on both sides of the family. On one occasion we got as far as Brecon, with its intruder castle for whose control my own ancestors struggled. Of that fifties visit I have vague memories only of castle shadows. The road back from Pont Senni to Llandeilo was finely engineered as the mail road for Ireland, and its gradient designed for a stage coach and six horses. My father pointed out the place where the stage coach had gone off the road in a terrible accident but we reached Llandeilo without a puncture. He was fond of driving up through Brynamman to the Mynydd Du (Black Mountain), the van labouring up to the summit at Tro'r Gwcw, a horseshoe turn and hairpin bend. The fantastic beauty down to the Tywi Valley came into view and we descended past many bends and mountain streams. My father would inspect each farm minutely and if he had managed to would have bought a working farm. That would have been the end of my career in academia. So, imperfect as it was, Pant y Bedw was my only existence and I hung on to the hope of a schooling. My father once went as far as suddenly putting a "for sale" sign near its gate, and I was immensely relieved when he removed it just as suddenly.

Pant y Bedw in the fifties was a small stone house with a tiny kitchen and pantry. There was no bathroom, and I think that water had just been put on in the house. Before that, water was taken from a well, as at Bryn Awel House. From memories of digging a long drain in the field I think that there must have been no other amenities when we first arrived. The buildings of Pant y Bedw are known now only from photographs, but I remember them in detail. It has

now been covered by a "development", which just means more anonymity. In the fifties the whole village was essentially Welsh speaking, now the Welsh language has been destroyed by lack of character and strength, by appalling local government, and deliberately inflicted industrial decline. The local school has been turned into an English speaking school. All of this is wrong. In great contrast, I have retained the language and improved my knowledge of it. A "development" is mere materialist exigency that happens for no reason other than money. One might as well "develop" the Parthenon or blow it up as did the Turks. Inside the little stone house of Pant y Bedw I struggled in solitude with the tasks allotted to me by the teachers at Pontardawe Grammar School. There was no one at all to help me, least of all the impatient teachers. They wanted only results. This struggle took place in the parlour, but later in time, from age about 11 onwards to 18. In those early days, I remember an open coal fire in the room where we ate around a square wooden table, a glass front door that was always kept shut, and a wooden back door with a small window. My bedroom upstairs was the tiniest room of the house, and the smallest I have ever seen, with a small window opening out on to a field leading up to Gelliwastad with barely enough room for a small bed. There again a lot of study took place deep into the night as examinations loomed. After they were over I read what I wanted and liked and my mother always looked after the house impeccably. At around the age of 7 or 8 I was a fluent reader of both languages, but my understanding of what I read was still elementary. I could read the Henry Morgan Bible and had to memorize passages for the sunday school. My mother Mary Jones, later Mary Evans, was always the one to encourage me in my studies and when my memory developed I recited many pages of my written notes from memory to her as she checked them before the open coal fire. However, she was not able to understand much of what the primary and grammar schools threw at us and was capable of intense unknowing anger if I did not do well. This meant that I had to keep that top of the class, pole position, or face the wrath of both parents and teachers, and had to develop the technique to do so on my own. Now I know that the teachers were made to be automatons responding to an imposed syllabus, the headmaster responding to a need to get pupils into irrelevant universities such as Oxford and Cambridge. I do not recall asking the teachers anything, almost literally. So schooling was an intensely threatening thing until those reports arrived and I could escape for a walk on Gelliwastad. Then I would be told to start work on the farm because it was a holiday.

The oldest shed at Pant y Bedw was built again out of local stone, using a

technique similar to dry stone walling. The shed could have been built in the Stone Age, its walls visibly bulging out and in, and it had one tiny window covered with dust. In the Stone Age it would have had a wooden roof or one made out of straw or turf. In the nineteen fifties it had a corrugated, galvanized roof that always had to be tarred, otherwise all would have been the same. It was the oldest, darkest and most chaotic interior of any place on the smallholding. The walls were mortared, but constructed in a very rough way. The interior housed coal and farm implements thrown all over the place as I described in chapter one. The coal mine delivered blocks of wood made of sawn sprags, so I chopped them with a small axe and sometimes a bigger one. A ton of free coal would be delivered to each coal miner, and this was dumped outside the shed. It was shovelled inside by hand and then cut up with a hammer. Those were often my tasks as soon as I got old enough. So Pant y Bedw may have been originally the house and this shed, which could have been the original cowshed. Next to it was the pigsty, and next to that the domen dail, an ammoniacal, deeply odorous deposit that was supposed to be used for fertilizer. The paved part around the house (stone slabs and concrete) ended at this shed, and the rest was unpaved. It must have been very difficult for anyone to make a living from only an acre and a half, and so these smallholdings must have been the houses of coal miners. This was not exactly a prep school environment, but I was happy enough on it most of the time. There were plenty of books inside the house, and hard exercise gradually mended the damage caused by the operation when I was less than 2 years old. I was always wary, however, of my father's temperament, and never contradicted him. I think that a prep school environment is a bad one: there are no parents to form a family life.

The cowshed at Pant y Bedw was made out of later material, perhaps bricks or concrete moulded bricks which were whitewashed, but with time the whitewash began to peel. The roof was corrugated and had to be tarred, a task allotted to myself. So I sat on the sloping roof with barely enough friction to keep me from early destruction. The tar was an early kind of chemistry, with pot and brush, and I did not dislike the task. On one side there was a vertical drop to the ground of perhaps ten feet, enough to cause serious injury, but I never thought of that. I think that I had old clothes that were permanently tarred like a sailor, and kept especially for this odorous task. My sister helped me sometimes, but found the smell too revolting, and the angle too steep. On the other side there was the less dangerously sloping roof of the chicken shed. Inside the cowshed there was room for three cattle, or calves. Two on one side

of a concrete barrier, one on the other, with chains to imprison mankind's ancient four- footed slaves. This was the only semi modern element of the smallholding. In front of the cattle there was room for hay, and a barrier behind which would be found loose hay or later some bales. A chicken would often sit there on eggs, clucking strangely, a guard and incubator. At night the shed was lit by a single bare electric bulb, and it was sometimes my task to feed hay to the cattle or a bucket of milk to a calf. Much later, I encapsulated these images in the sonnet "Keeping a Calf Dry" in chapter one. The wrong end of the cowshed was a stinking trench of concrete which I had to wheel out to the field or domen dail. In early years, the wheelbarrow towered above me and it was a struggle to push it or even reach the handles. The idea was to use this effluent as fertilizer, but there was no overall purpose because the farm was hopelessly uneconomical, an inflated hobby of my father's. I half realized this at an early age, but at the same time I was at home there, more than any other place in my life. The chicken shed was very primitive, just concrete, windowless walls and a corrugated roof attached to the cowshed, with a corrugated wooden- framed door and a small hatch on one side into a very wildly overgrown field. Out of this hatch the chickens popped out one by one like feathered paratroopers, and disappeared into the freedom of the undergrowth. I knew all the nests and collected all the eggs, brown Rhode Island Red or White Wyandotte. I was the guard in charge of bricking up the hatch at night against foxes, and I don't remember a fox ever getting in to make chicken burgers. There was one proud cockerel- any more than one they would fight and mutilate each other like Prime Minister's Question Time. In the mornings I fed Indian corn to the chickens, and opened the door to let in some oxygen. In summer the shed could become a black, putrid cauldron that smelled as badly as pyridine, and if the chickens got hungry there would be a hoarse chorus, lined up on wooden perches. They slept balanced there. Bags of Indian corn and cow cake came from a seller situated just adjacent to Llangyfelach Church, so were carted from there in the van. This must have been an ancient outlet for a mill, the church being 1,600 years old and dedicated to Dewi Sant and Cyfelach Sant. They could have fed chickens in the same way, minus the Indian corn, but more likely fed the congregation. Cow cakes were small pellets which the cows and calves devoured.

The easiest way to get the cows back into the shed at night was to entice them or persuade them with a metal can full of pellets, and not try to drive them. I often drove them along Mountain Road from a small field we had rented or bought. In the rain this could become a greasy and miserable task, with the water cascading off the beef: Friesian, Hereford, mixed breed, shorthorn, Aberdeen Angus or Jersey. The two small fields of the smallholding were fenced very badly, so often the cattle escaped and I was sent chasing after them to drive them back again as best as I could. I could often be seen chasing back the cattle, a small, saturated, dirty spectacle to idle onlookers who never volunteered to help, and the dog was too wild to help. However strenuous those episodes, getting the cattle safely back to a dry interior was always a pleasing thing, and preferable to what the smallholding has become now, an anonymous micro suburb stuffed with fuel- guzzling cars (sod the crisis) driven by who knows who. Sometimes a cow would calve in the open field, and the vet would be called in. Otherwise we were wholly independent: the cow and calf would be pushed up a wooden ramp into a cattle lorry once every year or so and taken to Caerfyrddin or Carmarthen market. This was the only attempt at economics. A new cow would be bought amid number chanting auctioneers and competitive, red- faced farmers all carrying sticks, and the uneconomic plan would start again. There was no milking because the calf would drink it all - the basic function of a calf.

In an Album

Frozen still in the rough stones of the years
Hear this boy, myself, while he asks me
Why his eyes are blackened like coals by the
Many seams of knowing that mould the man.
For these eyes can see between the dry walled stones,
The winds have rounded his words to mine
And bind us like the light between two stars.
Light is time, boy is man, the old coal shed,
Peeling, whitewashed; broken gate, twig-like arms,
The asking boy turned man is gone, I am.
Like starlight I am here but also gone,
The winds find no echo of his asking,
But I am his arching sun, his golden day,
And his timeless hours lightly lead my way.

Another small outhouse of Pant y Bedw was made of wood covered by tarred oilcloth tacked on to it, with a primitive roof. For a long time this was empty and raised off the ground with bricks or stone. One of my memories of that era (I must have been about 8 or 9) was of buying a brooder from a farm on the road from Llandeilo to Tal y Llychau (Talley) in the domain of the great twelfth- century Prince Rhys ap Gruffudd whose arms I have been allowed to use as a main element. He founded Tal y Llychau Abbey. This was a new and exciting experience and I helped my father stuff it into the back of the van. This must have been magic, because the brooder was bigger than the van. It was driven in ceremony back to Pant y Bedw, through Llandeilo and Rhydamman, over Mynydd y Bettws and Mynydd y Gwair and past the silent laboratory of Harry Grindell Matthews' still threatening death rays. These could be used against the wind turbines that might now destroy the beauty completely for no reason other than Cousin Beaufort's greed and an incorrect scientific theory of global freezing, sorry warming. With energy from wind turbines, who needs a disaster waiting to happen? The brooder was a metal case with lights switched on to hatch the eggs. At night the brooder glowed like incandescence, and ultra violet light in much later experiments reminded me of it. The eggs would be cracked open mysteriously from the inside by a small beak, which turned into a golden-feathered chick, a very small defenceless being innocent of the fate of a roasted chicken stuffed with thyme and onions. Gradually the brooder became a chick suburb, chirping pedestrians under the incandescent light of halogen. I don't remember for how long this brooder lasted, its only economical purpose being to turn eggs back into eggs, sold a dozen at a time from the van, whose overall effect was to make eggs out of a brooder. The cowshed, chicken shed and brooder shed was an Oxford style quadrangle around a dirt yard upon which turkeys roamed in ancient times, the fifties and sixties. I was much more at home in it than in Wolfson College, whose quadrangle is a contrived sixties affair made of anonymous concrete already ageing drearily at the end of a suburban road in north Oxford. The grass of Pant y Bedw was greener than the grass of Merton. Miraculously, parts of the fields of Pant y Bedw have survived. Development is not progress, and Pant y Bedw has vanished in the tides of anonymity to become "little boxes, little boxes all made out of ticky- tacky, and they all look just the same".

My father's best side was his energy and force of character, so he could persuade the people around us to lend him a tractor and baler (but unfortunately for my bleeding hands never a side rake or turning machine) or help build something new all for free. His force of character meant that he became an overman, or underground manager, but only after thirty six years which took their toll, dustily and gradually. Thus the hayshed came into being. It was built

near the cowshed in a corner of the field out of wood and corrugated metal which was nailed onto a frame. The roof was disposable because one winter it blew off, and in the morning was asleep in the field. It must have glided to a landing. The corrugated metal was still tacked onto a frame and someone must have forgotten to nail the frame in place. It took a feat of engineering to put it back manually. I still have no idea how this was done, Stonehenge style, muscle alone. I have a couple of photographs which show the shed from a snowy window of Pant y Bedw, and of myself doing acrobatics from the beam, about 11 or 12 years old. The hayshed was a perfect place for contemplation and a justifiable foreboding of what was to come, the disappearance of the Welsh language being the worst, "the exigency of the machine" in the words of R. S. Thomas. I myself though have resisted the decline into empty materialism of a once rich people, and my knowledge of the language is better than ever, threats from developers and all. Before the baler it was loose hay, which was forked up in the same way as in the very rich hours of the Duke of Berry, minus the corrugated roof, in conical Monet style. The bales were stacked later like large building bricks made by machine, a secular Chartres.

Having studied the genealogy of my direct paternal line, I found more than half a century later that I come from four generations of farm labourers, the earliest being my great- great- grandfather Edward Evans Llanigon who was born about 1802 just across the Wye from Hay (Gelli Gandryll) and down the road from Clyro (Cleirwy). It is true that my grandfather William John Evans became a platelayer on the Swansea to Brecon line, but that is just another kind of labourer. So this may explain my father's almost manic desire to have me at work on a smallholding, even from an early age. I think that my great- great- grandfather, and his son Edward Evans Cleirwy, started full time manual work at the age of about 8 or 9, maybe on farms of relatives. The worst memory of my childhood is a violent clash between my maternal grandfather Thomas Elim Jones, and my father Edward Ivor. This took place right in front of me in a field owned by Idris Borsden, a small farmer who had a milk round. I must have been about 7 or 8 and was eating a boiled egg here given to me for breakfast by my maternal grandmother Martha Jane in the same room as I am writing now in my grandparents' house. My grandfather Twm Elim was very ill by that time with the effects of dust and other causes and was confined to bed for lengths of time. My father came in suddenly and abruptly told me to come to help him, so without time to finish my breakfast I found myself on the farm run by Idris Borsden, working for him in a field. My grandfather must have been infuriated and took a bus over. He managed

to walk to the field and began beating my father savagely on his back with a walking stick as the latter sat on a tractor. Strangely enough my father took the beating quietly, but an immense amount of damage was done to me for obvious reasons. Thereafter, family life was shattered permanently, and I began to feel a need to get away from it, the first opportunity coming in 1968, when I took up residence in a magnificent sardine tin in Brig y Don, Sea View Place, Aberystwyth. The look in my grandfather's face can be seen now on YouTube when you watch my cousin Ffloyd Havard, the same intense blue eyes as a Viking with a broadsword – or walking stick. So in the Head Deacon was an ancient pagan echo. This was the clash of giants to me, the immovable object and the irresistible force. Somehow the quarrel must have been patched over, but the damage was done and etched in my memory like a circuit. There were some glowering verbal clashes between the two branches of my family, paternal and distaff lines, like echoes of 1,000 years ago, when they fought each other at the Battle of Brecon in 1093, Princes against Normans. In the end, I must have done as much manual (and unpaid) labouring as any of my ancestors in early age, while doing one or two other things in addition. Edward Ivor never beat me in any way, but did lose his temper one day and raised a rake above his head like an executioner. Likewise Thomas Elim never beat me, but I did get a few slaps from my mother, which did me no harm, and for childish misdemeanour. I escaped all corporal punishment at school. The only unpleasant incidents were later at the grammar school, when an irate music teacher hit me hard across the head, and when Silwyn Lewis the headmaster literally threw me out of his office for wanting to go to Aberystwyth. At that time, I was naive enough to think that Aberystwyth was entirely Welsh speaking as it should be. I don't bear any resentment against those teachers, as the pressure was always on them to produce the results that the system wanted. They were the cogs in the machine's exigency.

Tacked on to the side of Pant y Bedw was a glasshouse which was a tropical furnace that grew tomatoes and cucumbers, and on the other side there was a small garden. The glasshouse was a good place to be for a while, amid green twine and fertilizer, condensation and damp soil from a hosepipe, but not too long. I was made to work in the garden and so took a dislike to it from an early age. My great- great- grandfather John Williams of Hereford City was the gardener at the Vicarage in Cleirwy (or Clyro) described vividly in the classic "Kilvert's Diary", but I have inherited none of that. The most I can do is a potato, while my father Edward Ivor was a very good gardener. He could have made Pant y Bedw economical by turning it into a market

garden, but that would have needed a lot of work. It would have been nice to inherit something, but probably it was thought that I could look after myself. My sister needed a lot of looking after, and so did her children. If I had inherited Pant y Bedw it would never have been "developed", it would have been carefully preserved somehow or another. I "recaptured" this house (50 Rhyddwen Road) in 1993 and it is now preserved in The Newlands Family Trust, protected against mindless materialism. I was not averse to farming, but being badly injured from surgery, could not work for hours on a farm. The boredom would soon have become intolerable. There were novelties such as the Royal Welsh Agricultural Show and other local shows, tractors with eight ploughshares and a harrow, combine harvesters, other giant machinery, champion cattle, shire horses, cobs, mountain ponies, sheep and pigs, horse jumping, tents and the smell of grass and petrol. That was OK for one day, but my father having taken me there would fall asleep under a fence, being on night shift.

None of this presages a career or even an interest in science, except perhaps an ability in arithmetic, an unusual ability to read literature in both languages and a good memory and high IQ tested at the primary school. The years up to the grammar school were not years of continuous learning. After a few weeks free from school in summer I had forgotten a lot, and the next year's work did not add much to the previous years. I did have a desire to learn, and to pass the vicious eleven plus examination, (a kind of executioner's axe if you did not pull your head away), score in IQ tests and so on. Manual labour became very monotonous if prolonged for any length of time, and surely this must be the case for everyone. Instinctively, I knew I had to get away from it. So this meant swimming against the tide from a very early age. The closest I got to culture was the Welsh speaking Baptist Chapel at Elim. At the time it was hard seats and half- understood sermons, but now I realize it was very brilliant. The Reverend T. R. Lewis would enter from the Vestry, climb the steps to the pulpit and read from the Henry Morgan Bible. He would deliver the prayer and the sermon on a theme taken from the New or Old Testaments, announce the hymn number, and entice the congregation into wonderful four- part harmony accompanied on the organ. At the funeral of Cenfyn Young Williams last year, the chapel was full again, and the four- part harmony burst out again in his praise. I checked that the Henry Morgan Bible is still there, and will work towards the preservation of the chapel against "development", the modern word for complete barbarism. T. R. Lewis knew Welsh, Greek, Latin and English, and one day at his home he went through an original Greek text to look up the precise meaning of a phrase. He may have known some Hebrew as he was a B. A., B. D. He was not treated at all well and had to leave for Aberystwyth. The worst thing I ever did was to tell him I wanted to be a footballer, he was very bewildered, and this was a bad joke on my part. I was obliged to take some piano lessons from Miss George of Craig Cefn Parc, but soon realized that I was not a virtuoso. As the pressure to do well at grammar school increased, I dropped the piano lessons, much to my mother's lasting disappointment. I like music immensely, but cannot play the piano. One day coming home from piano lessons there was some boyish scuffle outside the chapel between myself and Gareth Hopkin and his two brothers, Haydn and Meirion, and the music case flew all across the road. My grand Uncle Urias Hopkin, Greta's father, chased them away with a few acidic and very angry words. Urias wore thick glasses, was never in good health, and bore a deep burden in life. The only other memory of a clash in those days was of being suddenly hammered by a stick by Alun Dukes, who spat in my face as was the charming custom. Gareth Hopkin is now a lay preacher and Alun Dukes has sadly died. Haydn Hopkin died in his twenties, Gareth Hopkin attended Pontardawe Garmmar School and Aberystwyth, and attended at the funerals of both my parents. The boys of the village were no choir boys but then there was no church, only chapels. There were a lot more good people than bad. They were not the savage, totally ignorant and deeply violent specimens imported into the village in later years by Swansea County Council, an entity as remote as the moon.

These are some memories before I started at the Pontardawe Grammar School in September 1961.

CHAPTER FOUR

The first memories of the looming grammar school are of walking down the yard of Craig Cefn Parc Primary School, between the yellow painted railings, for the last time in July 1961. The sun was shining vividly like a Van Gogh Arles, but I was filled with sadness and again the ever present foreboding. The elation of having passed the eleven plus was long gone. This was a moment of deep inner conflict: I knew I had to leave the village for many, many years, but nobody could tell me why. By the time I returned here the village had been almost totally destroyed. It was materially a little more splendid perhaps, but otherwise morally bankrupt, filled with outsiders who never talked to anyone or each other, and without a trace of culture or real industry. So should I have stayed and become a lay preacher like Gareth Hopkin or a Minister as T. R. Lewis hoped? In fact I knew from a very early age that I had no feeling for religion, but for nature. The study of nature was unformed and unregulated in those early years, as for any child, but nature was obvious and all around me religion was abstract and too emotional for my "cool character" as Edward Ivor would have it. I respected Reverend T. R. Lewis, B. A., B. D., and the Deacons, but at a distance. The Head Deacon, my grandfather Twm Elim Jones, realized this and never attempted to pressurize me. I think that Pontardawe was chosen as being the grammar school nearer to home than Ystalyfera. None of my immediate family knew anything about a grammar school, I thought it must have something to do with spelling. During the whole of that summer I wished that time would stop and that I could remain with the cattle and sheepdog on Pant y Bedw, but my rational self knew that a great challenge was coming.

From what I had discerned of the outside world in the small fields of Pant y Bedw, it was a savage place that allowed terrible injustice to be accepted by careless people who masqueraded as leaders, and allowed miners to be slowly

killed in full view of their children. From the perspective of the present, I can see this clearly but when 11 years old the nature of the world intruded occasionally like a bad virus into the Welsh language of everyday life. It intruded on a small, black and white TV set that my parents had bought in the mid- fifties. I recall being badly scared by "Quatermass and the Pit" and Anthony Eden talking about Suez in 1956. The TV babbled away opposite the open steam coal fire, and in English, from a remote source, which could have been high up in the Beardmore Glacier of Antarctica for all I knew or cared. The language of the family was always Welsh, which was the language of common sense. The TV was completely mad, a crazed twentieth- century intruder into the stone house that had stood there with its language for 6,000 years. So what could a grammar school be? No one in the family had any idea or experience of education beyond the age of about 12, but all were selftaught in some way or another, could play the piano, could compose and sing in four- part harmony, were fluent in both languages, could recite, win Eisteddfod prizes, could read and recite the Henry Morgan Bible, and worked and looked after themselves. So what was the need for this grammar school?

This is a question I am still struggling to answer, from the perspective of this time of writing, the grammar school taking me away from my own language and village and trying unsuccessfully to instil into me a foreign language and foreign ways. Although the pupils and teachers were almost all from the Swansea Valley and surrounding areas, the syllabus was dictated from Eton or Harrow with the aim of going to Oxford or Cambridge. It was the Welsh Joint Education Committee (WJEC) syllabus, but apart from a little Welsh language and literature, and history of Wales, could have been a syllabus anywhere in Britain or Ireland, or anywhere in the Commonwealth. In the primary school nearly all was naturally in Welsh, and plenty of Welsh history was taught, if only in the form of familiar stories and legends and the great literature such as the "Mabinogion", but in a half- understood way. My knowledge of classical Welsh has greatly improved since then, but my working, 6,000-- year old dialectic Silurian was a treasure unrealized by me at the time. No one cared about half understanding, it was our own brilliant light, passed down to us from our own ancestors, and we had need of nothing else. If people only realized that they would be much less unhappy, would not look towards the TV and the lapsed "News of the World" as substitutes for heritage. My reluctance and caution at having to transmute into an alien was well justified. When I returned to this village here in 1993, the Welsh language was no longer spoken except among a few friends and families. Houses had been sold

indiscriminately without a shred of local government, without vision, without intelligence. Local councillors remained there for half a century masquerading as "a Welshman to any tourist", empty of any inner strength, accumulating kickbacks and pretending to be this and that as elections came around again and no one voted.

The Consumer Society's Exile (Swansea circa 1985)

By steadily ignoring myths like an Old carthorse in his winter's pouring rain And deserted by sun and certainty, By the black and white writing of a life In absolute truths and absolute lies, He sought the murky bog, hibernant fog, To weave from the gloom an affirmation, To spin into life the winter branches, To make of winter a warm companion, Something that was neither bought nor sold in The pitiless light, summer's noisy sell, Giver of life, progenitor of hell Seen and heard in dreams and ghostly misting The summer is sold and the ice lies thick.

So as the summer of 1961 drew on, a half century ago, I remember the smell of glue, a complete reluctance to leave the cowshed and fields. Over the horizon was a bourgeois army with fixed bayonets and foreign accents. It was something like my ancestral cousin Prince Owain IV Glyndw^r of Wales waiting for the Flemish and English at Hyddgen, outnumbered ten to one, but suddenly victorious with the longbow. I was determined to win, whatever they threw at me, but win what I did not know. I think that that sums up the era of the grammar school because it was always a battle that I fought against teachers, pupils and parents, with very few enlightened exceptions. Why all this should ever have happened is still the unanswered question. In the end I learned the Welsh language myself to a high enough level to become a bard, all my eloquent ancestors, starting with my ancestral cousin Dafydd ap Gwilym, having done this without a grammar school which absolutely

insisted remorselessly on teaching me French and Latin, or else. I never spoke Latin in the cowshed. The one thing that the grammar school managed to do was to introduce me to science and mathematics. It did so in a machinelike way, examination after threatening examination, but in the end managed to create a genuine curiosity. My mother began to collect items that the machine told her to collect, a school uniform from a shop in Swansea where she herself had started work again by that time as a draper's assistant in Lewis Lewis in the High Street. This shop had all its Edwardian efforts at architecture intact, with wires for messages which arrived in little containers among the smell of new cloth. Lewis Lewis later moved to some concrete abstraction and went bankrupt. The old shop was developed to death, and I do not remember where it used to be on those rare occasions I have the bad luck of having to visit Swansea with its gambling, drink, dirt and "multicultural" (beware of the jargon) anonymity. This was one shop, therefore, that had not been bombed flat. She told me that she worked in order to help support me, but never once visited the grammar school, and I think that she was bored at Pant y Bedw being obliged to pluck chicken feathers. My father never seemed to give a thought to the grammar school except to wave around school reports triumphantly around the village every term – top of the class, averaging 92%, pole position at a Monaco Grand Prix that arrived on TV. I wonder what would have happened if I had slipped to second place or blown a tyre, or gone completely berserk, a white haired raving maniac at a record early age. In the entire seven years from 1961 to 1968 (O and A level) he only once visited the place, and bellowed characteristically at the headmaster for giving me only a share of the O level prize for best results – with Hugh Thomas – in 1966. To both the headmaster and my father, only the result counted, not the education. The headmaster was Silwyn Lewis, of evil temper, who dumped me in a corridor for going to Aberystwyth. He was certainly a Welshman to any tourist and apparently died of a heart attack maybe during or after a towering outburst. I can feel an abstract sense of mild sympathy for him, because he was only a cog in a machine, and there was always that pressure to get results. Why, no one knew, and no one knows. Otherwise he was lucky I did not have a miniature longbow hidden in my desk. Nevertheless, he was the genuine article, a tempestuous product of Siluria, not some bureaucratic nonentity imported from Birmingham pretending to cold sympathy for Wales. Why are people imported into Wales when we have plenty of talent of our own?

So the items of the school uniform began to arrive, and I felt intensely miserable at being a burden because I was told all the time whatever I did that

"working is hard", "caled yw gweithio", and wandered away to Gelliwastad with the sheepdog Jo who was wiser and more ancient than any of us. On those walks, I saw the towering nimbus and cirrus clouds over a primordial landscape of amazing, fantastic, dreamlike beauty that I eyed for the first time as a photographer. I tried to capture it with a simple camera that I bought for myself on my saved up threepence a week pocket money, old pennies, 240 to a pound, which I shall never forget. The parental triumph of that passed eleven plus had evaporated very quickly. It was a transient glory in which they could share very briefly before having to return to that hard work- they may have been trying to convey the appalling boredom of that existence, because they were both very intelligent people. It also brought immediate schism – my 9year old sister threw away the triumph in anger, scorn, bile and envy, an envy that has plagued me very often in other ways far more evil than my sister. In fact she was not evil at all, merely bored. It was useless trying to explain to any manual labourer or coal miner that grammar school was also hard work so I never bothered. In these days of instant retrospective psychoanalysis at a distance I write over and again that they were very good parents indeed, cultured and intelligent but born to poverty in a "minority" as the bureaucrats write, and struggling with the bourgeois bayonets. These were real and could cause death at any moment from a roof fall, or a final gasping for air. No one outside a coal mining village can understand this at all, and it always stays at the forefront, not the back of your mind. Without falling into "then and now", there are no parents in contemporary society, there is only schism, single parenthood and chaos, and children rioting on the streets as in "Lord of the Flies". Any scientist is able to deduce this objectively using Baconian principles. They only have to look at that mad TV. I no longer have one.

Those items of uniform, gradually arriving like an ominous clock tick, epitomise the onset of symptoms – like sneezing before the plague. They are vivid metaphors, and stand for a journey to an unknown continent. This uniform had to be worn, as it stood for bourgeois values that were out of place in a cowshed. Try milking a cow in a school tie, not that I ever did, the calf did it for me. The school tie was black or deep blue striped with red. That labelled us differently from the deadly rivals at Ystalyfera on the same school bus, black and blue striped tie. Whoever invented these colours was no artist. Both were mixed schools and everyone had to wear ties all the time. No one knew why, no one knows why. The main element of this war gear was a jacket, which had to be a dark colour, almost black, and which had to have a badge on it with a motto. You could wear a grey pullover in winter, and a white or grey shirt.

After that there was a pair of grey trousers, or shorts for the younger boys of 11 or 12. This is called a pair because you have two legs, but it is a singular noun. With logic like that who needs the Goon Show? When these shorts turned into trousers you had grown up because your kneecaps were no longer visible and did not get cold in winter. Pontardawe was "Bid Ben Bid Bont", which was also the motto of Aberystwyth. It has elements of bad cynghanedd in it and is untranslatable. The nearest I can think of just now is "Your brains are a bridge", which is an atrocious, terrible, barbaric translation - "you are a barbarian, boy". It just means that learning gets you somewhere. This is true, but not at a grammar school. Learning takes place in a small stone house in a small room in a remote village that does not speak the same language. My mother was fond of good clothes and of Sidney Heath in Caer Street in Swansea before the drunken thugs, sodden violent pubs and gambling dens moved in to Wind Street, and deposited filthy fields of litter all over the pigeons in the square. The square is below a castle built by some Norman bonehead like Payne Y Cythrael de Turbeville, also my ancestral cousin (Paganus the Devil and you don't come any worse than that). Sidney Heath at that time must have been one of the shops that sold the school uniform - it was a shop with a black and white Tudor front. The Tudors were really my cousins too, I am not making it up. If you can trace your ancestry over thirty two generations and

1,000 years, everyone is your cousin. I remind everyone at every opportunity, the genealogy being such hard work for so many good scholars. If I really met Henry VIII I wouldn't like him at all.

So she dutifully collected these items on my behalf, and it had the effect of making me want to please my parents with good results. That was a deeprooted feeling, the most deeply rooted of all my educational twenty years a growing. I wanted to please the teachers and lecturers too, and they were good people, cogs in a small town, but good people with one or two truly devilish exceptions to be encountered much later than Pontardawe Grammar School. These made Payne de Turbeville look like an angel. I am allergic to the stiff clothes of authority to this day and would often wander around the corridors of the EDCL at Aberystwyth: a dangerous anarchist. I had a lab coat with a large, vivid, Toulouse-Lautrec, anti- nuclear power poster glued to its back. This was imported from Italy by my post- doctoral assistant, also a very dangerous, coldly calculating anarchist of my BBC Hall of Fame Group. It was baseball after all. The EDCL will come to figure in this autobiography, the Edward Davies Chemical Laboratories to give it its full title. It is described by Kerry Pendergast in his well- known biography. This anarchy was fuelled

by that uniform, which had to be worn every school day for seven years, completely unchanged, all looking like postage stamps. Any retrospective psychoanalyst would advise that that seriously inhibits development, stops your brains being a bridge, and you can't be recognized in a school photo because all look the same except for faces. These are regrettably individual. The uniform was crowned by a Victorian-style cap, which is the only cap I ever won:- happily I never played for Wales, or anything at all. The ridiculous, lazy, shady, imported rugby culture had saturated the school, unknown to my innocence as a seven- year old farm labourer with better things to do, or else. In rugby, kickbacks are to be found in boots, not in plain envelopes left under pub counters on Thursdays to be picked up in lieu of planning permission. It is a game whose only purpose is to control violence by kicking a converted pig's bladder around a bit of grass with sticks in the ground. The grass has been surrounded by monstrous stadia (Latin plural for stadium, shall I ever forget) all looking like metallic ticky-tacky with plastic seats for the drunken thugs dressed up in good clothes, the opulent barbarism of our times, well dressed looters, fat, bourgeois arsonists and soccer / rugby fans. These games are the money- laundered efficient machinery of a latter day substitute for war. I just liked losing thirteen one to Felindre at soccer, it was great fun in the mud and I was the promptly evicted goalkeeper.

> Swansea Town One, Arsenal Nil (Written in Charlotte North Carolina, 1992)

'Erbie Williams scored a goal with his 'and Alone of thirty thousand at the Vetch I saw him, and Swansea Town won the game. This was cheating as bad as cooking prac, Bad as stealing Bettie Corfield's crystals When mine would never leave the liquid state, Thick and bad as the mud at Passchendaele And the thirty thousand crosses of Vaux, Supplicating alone to the gods of Reason, the Idols of Chance passed me by On the transatlantic road to wisdom, And they swam with the stream the other way. 'Erbie that day the idol of the crowd Warned me not to think too much aloud.

In order to have something to walk on you needed shoes, and these had to be laced and black and polished, and stockings, which had to be grey with a red band. The new shoes tore my feet apart as I tried them on, and the elastic of the socks bit into me like a demented allegory on the banks of the Nile, a malapropism as we were later to learn at the grammar school in one of those useless plays of long ago on the Beardmore glacier, written for Penguin Books. Now you can cheat and look up the Sheridanian malapropism of 1775 on google smuggled into any examination. Much later I did athletic intervals with no socks and shoes on the grass below the EDCL. That was faster than any engineered marathon shoe I used on the cinder track at Penglais or road running out to the plant breeding station and back. Not only did my unknowing and innocent, often exhausted, mother have to buy this stuff at her own expense, she had to buy clothes for rugby, a game which we all detested. Being early torn apart by surgery, rugby meant being mowed down by those lucky enough to be brainless but otherwise in full health – early string theorists. There was no escaping it until much later on, to the athletics track. I did toughen up to it enough to bring the brainless crashing down, both at the grammar school and over the internet. I look at the unhappy spectacle of a surgeon like my older contemporary, Dr. J. P. R. Williams, throwing punches in South Africa, and ask like John Taylor what happened to the brotherhood of man. John Taylor was the only one not to go to South Africa. If you throw punches in public why be a surgeon? There had to be a regulation duffle bag for this useless rugby apparel, towel and boots, there had to be an apron for woodwork classes, and above all there had to be a school satchel, a leather bag that contained the books for homework. All this war gear had to be hauled to school in the early dawn of enlightenment, like soldiers laden with seventy pounds of kit, and wading through deep mud to certain death. It is the same idea, as uniform mechanizes and dulls the mind into submission. The commercialized worship of rugby is the saddest part of contemporary Wales, as it all takes place in an English accent. Wales has become sardines. It is not the pious, learned country of William Williams Pant y Celyn or Grufudd Jones Llanddowror, a country in which the poor were scholars and hymn singers.

I had no sense of wanting to go to the grammar school: it was a thing thrown at me, and I had to survive the assault. It was a thing that had to be done to escape the increasing, barely hidden, scepticism of my father – how can a weak and surgery- damaged labourer have any future? The grammar school was one of those dark passages of Ogof Fynnon Ddu susceptible to flooding. Get through quickly and survive. My mother, the late Mary Evans

(born Mary Jones, daughter of the Head Deacon and of the thousand- year old Norman Havard Family) put my initials M. W. E. in gold letters on the brand new satchel made of bright polished leather. A Norman Lady would have done the same, and she was excellent at all the Norman virtues, not a coal miner's daughter at all. She could have woven my coat of arms herself, as did the Ladies of 1,000 years ago, but did not live to see it. It is now displayed in her father's room here, himself a Havard. So we prepared ourselves as best we could for the grammar school, none of us knowing its purpose, sensing its looming presence. The gold lettering was soon torn off by my contemporary bourgeois vandals, but the satchel served a faithful existence, being a battered pile of old leather by the time I left the school in 1968. It had survived many a violent bus journey, many an examination, and gradually filled with my notebooks in many subjects. It once went flying over the grass as I was hurled to the ground by a rugby tackle from behind, and was never stolen. The few weeks of summer between primary and grammar schools can be summarized as an exponential function, an exponential increase of glue. It became so thick that I could hardly walk as the time for alien processing drew nearer. Much later in New York State in the Hudson Valley and New York City, I was processed again as an alien, with fingerpints and endless forms and interviews, J1 visa, green card, and immigrant examinations anew. I was naturalized as a US citizen in 2000 at Cornell after many oaths. The earlier alien processing took place in the building later levelled by aircraft, or in one of the skyscrapers very close by in dark Manhattan far from Pant y Bedw. The terrorism of adolescent thugs had come of age. I am most proud of never having been a child or fat, stupid, drink and drug- crazed, adolescent thug, I began work at the age of 7, and enjoyed a lot of it. I never wanted to be a thief or fiddling politician.

The week and the night before the grammar school began stank with glue made of the entrails of slaughter house animals, those whom I had fed on the farm and served no further purpose. In Morriston War Hospital in 1951 / 1952, I could smell the slaughter house as I fought for life with that unknown NHS surgeon, I was less than 2 years old and maybe could also feel the ghosts of injured soldiers all around. As the grammar school time drew nearer in late August 1961, it began to rain. It always began to rain. Even when I got my top first, less than a decade later in June 1971, it began to rain as soon as I stepped out of John Thomas' office having become an aristocrat – the graduate student – and out of the main EDCL doorway with its architected steps. By the time I got home to my digs I was drenched with pride and huge relief. I had escaped the coal mine and manual labour. Even my landlady was proud,

and I was congratulated by fellow students, the most earnest and appreciated congratulation of all. I had just earned one of the best undergraduate degrees in the history of Aberystwyth, (so I was told, and I believe it) and the top first and ticket to freedom, the Dr. Samuel Williams postgraduate studentship to study with the famous Mansel Davies of that era. He was famous among contemporary chemists. I had unglued myself from predestiny, and had proven that it was incorrect dogma after all. I was not predestined to be anything, I could make myself into something, and nothing is written. Whatever was thrown at me, and some of it was pungent, I have clung on to that precious freedom for forty years.

To combat the falling rain, one last item of uniform was provided by my struggling kind- hearted mother, an overcoat that had to be of a dark, sombre colour. Rain is not unknown in Pontardawe, so the grammar school children often looked like the ravens on a shield, huddled like undertakers in the window of the Eynon bakery shop waiting for the overcrowded bus, often saturated by rugby, with sodden Victorian caps. The first day at Pontardawe started at seven in the morning, with this raincoat and an empty brand new satchel. I think it contained a box of mathematical instruments which I still have here on my desk, fifty years later, or perhaps that may have been bought a little later. It was and is "The Oxford Set of Mathematical Instruments, complete and accurate". It was gold with a blue label with a drawing of an Oxford College. It is now rusty and battered, but still contains its original ruler, faded and darkened, and a broken compass which drew so many a geometrical construction. Recently I bought a new box and the only difference is that the wooden ruler has become plastic. They are ever present companions on a journey. The journey to Antarctica started with a walk down to this house along a grassy path by a hedge, where one could grasp at the last shards of broken village life and familiarity. In that time, the towering oak tree just above me as I write now had begun to take on the colours of autumn. I opened the small gate to my grandparents' house here and called in for a few minutes. They gave some words of encouragement, or it seems that they must have done so.

Then I was on my own, walking in the rain towards the bus stop, which over the next seven years became the daily gathering ground of the Craig Cefn Parc contingent bound for both Pontardawe and Ystalyfera Grammar Schools. The last time my wife Larisa and I used this bus stop was on the way to Buckingham Palace in July 2010. Yes, the Queen is really my cousin, but she did not go to Pontardawe, and we really did start out for the Palace in a bus, and yes, it was raining. On that first day, in early September 1961,

the only survivors from the primary school were Huw Griffiths, who went to Pontardawe, and Jean Thomas, who went to Ystalyfera. The first signs of trouble began when Jean was ushered into the downstairs of the double decker bus, being a girl, and Huw and I upstairs. This never happened in the primary school. Huw and I happened to live next door to each other, and had been allowed to walk back together from the primary school after the eleven plus announcement. At the end of the grammar school in about July 1968, Huw and I walked back to Craig Cefn Parc over the mountain and past Gellionnen Chapel, deciding not to use the roads in a symbolic procession that St. Illtyd or St. Eithrym may have made in Celtic times. We had defeated the bourgeois and had fended off predestiny and slavery. In the upstairs of the double decker bus there were plenty of seats to begin with, because it got as far as remote Craig Cefn Parc, and no further. We were the end of the line hillbillies of the wild west of the Swansea valley, dressed up in uniform. Only Felindre and Garnswllt could get any wilder and there lurked Welsh speaking savages, Indians west of the Mississippi, painted blue with woad and whitewash like Caradog and Buddug (Caratacus and Boudica to the Romans). As the bus made its way through the gigantic metropolis of Clydach, it was invaded by bigger beings with more strength, height and experience, and we were thrown out of our seats. The bus was crammed with pupils of age 11 to 18, the older ones sitting in the back. This was the first encounter with the bourgeois forward force of skirmishers. They did not seem to be intellectuals. We had to stand or sit on top of someone else, three or four to a seat as the overloaded bus swayed drunkenly up the old A4067. This was the road to the machine, hidden in a cave, a road that wound between stone houses of infinite grey. From this perspective of half a century flown, it was a short journey, but I look back with vitriolic anger at the conditions, at the well- fed cynics who refused to study and were determined to disrupt the lives of others around them. They called us wild and starving and poor, but we were the victors in the end.

Happily that anger funnelled itself into study, always the escape route, but on that first day it was very dark, with time only for survival. Happily I was not locked in with some of the most violent individuals, as in a public school in whose sordid atmosphere primitive injustice becomes codified and all kinds of horrors multiply. As the bus rolled and yawed, an inebriate crawling from a pub, I knew that in a few minutes I could get myself free at the railings at the foot of a road to the almost hidden grammar school. On my most recent and mistaken visit to the place, it was an empty shell with many smashed windows, only the ghosts of my contemporaries being there, howling and stuttering like

the wind, all long vanished and out of their time. I tumbled out of that bus and followed the line of coats and caps through a zig- zag railing and up a road that seemed to go nowhere. It ended at what was to me an ordinary suburban house of a type that I always loathed. It was a tiring walk uphill in creaky shoes and leather, amidst many a pupil from foreign villages and towns. Just before the house there was a sudden turning to the right, and a long low red building came into view, the lowest of three such buildings. I did not know where to go or what to do, so followed the line into the second entrance to the main building. Then I remember very little, a teacher must have told us to deposit our coats in a steaming lobby, and to proceed to assembly then to class. As with all bad experience, the mind blanks out that day. Returning to Pant y Bedw must certainly have been the best part of it.

Of that first term in the grammar school I have images lodged in my mind, but the routine has long vanished. The names of most of the teachers have vanished too, which shows how remote they were from me - they were made by the machine to be its mechanisms of cogs and wheels, to oblige me to take dictation or to solve problems. This does not mean that they were in any way bad people- compared with the university lecturers at Aberystwyth they were far better at what little teaching they did. The headmaster at that time in 1961 was Percy Roberts, in his sixties and approaching retirement, born in late Victorian times. He was portly and mild mannered, but instilled perfect discipline, and retired in 1962 or 1963. The only other teacher whose name I recall easily was Miss Maude Daniels, the very small and grey-haired Latin and English Literature teacher, but who could also instill instant discipline by mysterious means, reducing bellicose adolescents to silence. With a little effort I recall the P. T. (physical training), geometry and physics teacher John Morgan (John Mock) and the chemistry teacher David Davies (Dai Bump), Miss Olive Williams the history teacher, Miss Olive Harding the geography teacher, and Miss Thomas the French teacher. There was also Eic Davies the red- haired and very fat Welsh teacher. He wrote a play called "Y Dwymyn" that we had to perform and invented many Welsh words wasted on rugby. A new physics teacher, Mr Blackmore, arrived about 1963, hardly older than some of the adolescents in his charge. I also remember the art teacher called Charlie Lines, who was very irritable and always on the edge of exploding. The classrooms of the grammar school were arranged in a long corridor, along which one had to quickly slide past the forbidden territory of the headmaster's office, and then the door that led into the assembly hall. Every morning the 400 or so pupils of the grammar school had to gather here to be addressed by Percy Roberts or his Deputy Headmistress. She was Miss Agnes Thomas, shortened to Aggie. She lived in Clydach and I always found her to be fine, but to the girls she was a ferocious disciplinarian, who became a little dotty after years at the grammar school. She carried some string to tie up the hair of any girl who wore it fractionally too long. On the retirement of Percy Roberts though, I saw tears in her eyes, and Aggie was human after all. The first strange thing that happened is that we were given a timetable of classes, many subjects to learn. I know in retrospect that there were about seventeen subjects in that first year, but at the time I knew only that we were ushered into a class full of wooden desks and handed out this timetable, little blocks of print with subject names: English language, English literature, Welsh language, Welsh literature, Latin, French, history, geography, physics, chemistry, algebra, arithmetic, geometry, art, woodwork, religious studies and P. T. These seventeen subjects were thrown at a collier's son from Pant y Bedw and the rest of us. The girls had to do domestic science instead of woodwork, otherwise the syllabus was the same, in mixed classes.

We were handed out small notebooks and text books, which the WJEC provided free, but my parents had to pay for the school dinner, which was cemented potatoes and gravy with prunes for afters, some meat embedded in fat, all boiled up in dark green cabbage water and yellowing musty mustarded custard. We had to line up to eat this brew- I remember the dull smell of mass cooking very vividly, just because we had to eat it. Normally a hominid would not come near such a smell. The canteen was in the uppermost, grey building next to the gymnasium, and opposite there was an enclosed corridor bridge to the uppermost building of the school itself, a red colour with windows on two levels. Above the canteen was a rugby field and athletics ground and cricket nets in summer, and above that the land rose to a road up to the ancient church of Llan Giwg. The class of 11 year olds in that first year was not told anything of examinations, or if they were, I do not recall it. I did not know that they existed and thought that the eleven plus would be the only one I had to face in my entire academic career. Some teachers took two or more subjects, some kept control, one or two could not. Olive Williams was a young lady, a history teacher of great intelligence and sensitivity, who was destroyed by the most wooden- headed and loud- mouthed of my enforced companions, who had a killer instinct for any weakness in a teacher. She was driven into a nervous collapse and had to retire from the school to work in the Pontardawe Library, where she remained for the rest of her working life. She is still alive today. The people who did this to Olive Williams were never brought to justice, did not want to learn anything and probably never did. I was deeply angered by this assassination of a gentle teacher, things being made worse by the headmaster who would sometimes take over the class, a deep humiliation for Olive Williams. I often thought that this was inflicted deliberately and uselessly. On one occasion, she took us as an older class to St Fagan's Museum near Cardiff. She seemed a little happier then, delighted by the Museum, and it became clear to me even as a young adolescent that she was a deeply intelligent being wasted on a grammar school. Less than a year or so later, she was broken by the machine. Olive Williams epitomises all that is best in human nature.

The bewilderment and confusion of those first days and weeks at the grammar school began to resolve itself into a routine of classwork in the middle building of the school, built as it is on a steep slope of the Tawe valley above the small town of Pontardawe. A sharp ringing bell would presage the onset of study, and after a given time (probably half an hour or less) it would ring sharply again, whatever the stage of the lesson. The same electric bell served for all the lessons and classes of any age group, called "Forms". So the 11 years olds were Form One. We often broke off dictation in the middle of a sentence, and were hurriedly given the homework. I did not know what it was - I thought that home was for living in and school for learning, but all the real learning took place at home. This is the most important lesson of all and many never learn it. You are not given an education, you must take it with great effort, struggling deep into the night if you have to. Many of the coal miners would complain of not having been "given" an education, although this was available for them in several ways. In the first year the pupils had to take almost all the subjects, so the great majority did not do any work, or the least possible amount of work. If there was any homework to do I always did it, so among the memories that come to mind of that first term was an introduction to algebra. We had had no algebra at the primary school and at first it was frighteningly incomprehensible, letters being used instead of numbers. How does one add up letters? My fellow Craig Cefn Parc pupil Huw Griffiths broke down completely and very shockingly in class one day under the stress of this new episode, and I remember struggling with concepts on the wooden table at Pant y Bedw for hours after school had finished. There was a bad mismatch between the syllabus of the primary school and the grammar school, and evidently no algebra in the eleven plus. This struggle for understanding took place therefore at home, after school, and this became the lifelong pattern for me – I gradually dispelled with teachers and lecturers altogether. This must

happen if one is to learn and become an original thinker. In the class itself there was no time for learning, the class was too short, there were too many subjects. Gradually it dawned upon me that in order to add an x to a y, one had to write down x + y. I had thought that the next letter to x and y was z, so the answer could only have been z. I had not realized that x and y could stand for different numbers, or different things, the key concept of algebra. There were too many pupils, some always disruptive, and often the teacher did not teach, the teacher acting as a mechanism for delivering material from the syllabus. If they did no homework they never learned. I do not know any member of that class now, I never met them again after leaving in 1968, and never met a single teacher again.

Arithmetic was not so bad, because I had done a lot in the primary school, but geometry could be a little awkward. I think we were given some rudimentary physics in that first year, memorizing laws and elementary formulae, but I do not recall any practical work in the first year. What actually attracted me to chemistry was a demonstration one day of a reaction in which colours vividly changed. In that first term and first year one could not like anything, it was a mass of new things thrown at you like random hailstones. The teachers had a syllabus to keep to every lesson, and if everything was not done exactly as dictated, the pupil was in trouble. I recall being given a carrot to draw in one of the first biology lessons, and drew it diagonally instead of vertically. A carrot is a carrot, but the teacher would not have it so, diagonally. Since then, I have avoided biology as a subject. Aggie had a whole laboratory to herself as the senior biology teacher; this was a new and separate building full of pickled remnants. Very soon I noticed that teaching of some subjects such as history took place completely by dictation. A teacher would enter and start reading from something, and the class would write to the teacher's dictation. Occasionally, the teacher would say something original, but not very often. That was easy, but I did not realize that this process would lead to an examination just at the wrong time of year, as Christmas approached. The subjects began to arrange themselves in my mind – science was stern and a matter of solving problems, or else. The other subjects (the majority) were a matter of taking down dictation. The least likeable subjects were art and woodwork, and P. T. was a waste of time because there was no soccer and I was completely ungymnastic, getting netted like a kipper in a trampoline being my speciality, and wooden horses were for Greeks bearing gifts. Woodwork took place in a dark stone building under the physics laboratory for more senior Forms, with only hand implements such as planes and chisels. The Form One

physics lessons took place in a classroom. The only memorable thing I did in woodwork was plane a piece of wood down to nothing in an effort to get it square, and stain my overall a bright brown. I handed in a sliver of wood to a glowering woodwork master and fortunately the lesson ended. Art consisted of water colour, lino cuts, clay modelling, pen and ink, but no oil or acrylic. My sense of drawing was zero, but later I began to like art history and one pen and ink drawing of mine called "The Flood" was displayed, created of course in Pant y Bedw in between cleaning out the cowshed. There was a head- on crash between bourgeois values and village life. No teacher ever visited me at home, and my parents never visited the school except on that one occasion when my father vented primordial anger at the headmaster. Obviously, the headmaster took a dislike to me after that, so in the end, in 1968, I was glad to escape both.

The one thing that sparked my 11- year old interest (apart from having to grind through) was the literature class under Maude Daniels, the choice of Sir Thomas Mallory's "Morte d'Arthur". Miss Daniels read this as if she really was interested in it, and we did not have to take dictation. The rugby fanatics seemed strangely interested too. Maybe because it was the brilliance that shone through, and its transmutation from Celtic times into Norman chivalry. As in Celtic and Norman times, it took us away from the mere existence of bourgeois materialism. Mallory was a Norman, and elements of Norman French are worked into the original Brythonic Celtic. The sword Excalibur was thrown into a lake to be caught by a mysterious hand. This was the hand of a Celtic half goddess, a goddess in human form. It was exciting to hear that this lake was our very own Llyn y Fan Fach. Many years later, I visited Llyn y Fan Fach for the first time, and the Lady of the Lake was no doubt still there. Perhaps that it was this immediacy that made us interested, or the earnest and highly intelligent Maude Daniels. I believed for along time that she was the sister of Sir Goronwy Daniels, the Principal who awarded me my D. Sc. Degree at Aberystwyth, but the recent discovery of source documents (on www.aias. us) shows that his sister was Mrs. S. Lewis, the German mistress. They came from an Ystrad Gynlais family. In the town library of Ithaca, New York one day I found that Arthur was thought by the authors to be Owain Ddantgwyn Arth ab Einion Ddraig, a fifth and sixth century Prince of Powys. The British in Roman times had the habit of giving themselves both Celtic and Roman names. The name for "bear" is Arth, and the Latin name is Ursus. So the bear became Arthursus, shortened to Arthur. Owain Ddantgwyn Arth is Owain the white toothed bear. His father was Einion Ddraig, Einion the Dragon.

His wife was Gwenhwyfar, or Guinevere as the Normans pronounced it. The Knights have Norman or Celtic origins, Sir Lancelot, Sir Gawain, Sir Mordred, Sir Kay. That experience was so vivid that I have no trouble remembering it as something which stood out in a dreary cloud- covered day on the edge of a glacial valley. There appeared the sorceress Moragan le Fay to bewitch the 11- year old mind. Then the bell rang and it was back to enforced rugby and existentialism of a lower quality than that of Jean-Paul Sartres.

Upon Seeing a Photograph of a Slate Tip at Ffestiniog (Written at Ithaca, New York 1998)

If it were merely winter's black and white,
Shuttered, caught, netted, sketched, smelt in the dark,
If bromide were really beehive cells,
Dwelling among these lashing grains of slate,
Reassuring, beguiling, it would be,
A trade in of graining, silver for life,
Millennium of talk for a slate quarry,
Poor people for arrangements of stone.
Where are they, where are they, the bright triskeles?
Gold bright as the first light on Ffestiniog.
Desiccated and made dry with all time
They are abstraction and camera charnel.
It was not black and white nor shades of grey,
Their blood was red at the end of the day.

The rugby field was badly situated a very long way from the grammar school on the floor of the valley by the River Tawe. Today on visits to Glyn Tawe I drive past it as quickly as possible without looking. So the enforced rugby took place as the last bit in the day of the timetable, because there was nowhere to change except a corrugated shed, and nothing with which to get clean and dry, nothing to mend any injury. We just had to get back up to the bus stop by about four, so started to walk at around half past three when a game would be stopped very suddenly. The teacher glided off in a car. So we would often arrive soaking with saturated rugby kit at the bus stop, with satchel and duffle bag held tight against thieves. As time drew on the satchel became a prized possession full of notebooks, my own hard work, the duffle bag I could easily

have thrown away. I managed to do this as soon as I entered the Lower Sixth in September 1966, because rugby was no longer compulsory. For a long time before that it had been failing, some of us being allowed to do athletics, which meant a leisurely walk up to Llan Giwg and a run back down again, faking breathless as we arrived. At age 11 there was no escaping it. I was small for my age but was made into a second row. I don't remember ever getting the ball so ran around randomly trying to look interested. My natural game was soccer, at which I became quite a good goalkeeper, but athletics became the solitary discipline which I practiced daily for over thirty years.

Just before Christmas of 1961, I found myself embroiled in my first term examinations, consisting of examination papers stencilled out in blue or red with their smell of special ink. The examinations came upon me before I knew it, so I answered as many questions as I could without any advance preparation at all as far as I remember. This was like entering a marathon smoking a fag and swigging a flagon. The classroom was transformed into a silent trial overseen by a silent teacher who always pretended to read as he surveyed for cheating. We were given sheets of foolscap and we could go to get some more if we wanted. I remember being surveyed like this by Eic Davies in the Welsh examination. The questions were answered and the papers handed in to the teacher, who took them away ominously, Fort Knox style. This ritual was repeated for each subject, so there were about fifteen examinations each term of that first year, a total of forty- five written examinations for 11 year olds, getting on for 12. At the end of all this, the teachers returned with a pile of marked exam papers, which was placed on the teacher's desk. The papers were in order and the names were called out in turn, the best result first. On each paper was a percentage out of a hundred. This ordeal was repeated fifteen times and the top of the class emerged triumphant, or if he was a psychologist, modestly. Each pupil was given a school report to be taken home, consisting of position in class, all percentages, an average, and remarks by the teacher, ranging from "excellent" to "abysmal barbarian".

I returned home all innocence with a thirteenth position in a class of about thirty five or forty. I was glad to get rid of the grammar school for two weeks of holiday and get into the pigsty again. I ran straight in to the wrath of both parents, a kind of cold, seething, foreign, Norman rage which felt like an electric chair. I write retrospectively with poetic licence, because now I know now that both were of Norman descent. Evidently they had been instilled with the unhealthy doctrine that I was a genius, by whom I do not know. The system about which they knew nothing should have put me in

pole position, number one, nothing less would do. That is what it felt like. I cannot remember anything after that, so it must have been a very bad day for me and I could not have enjoyed Christmas. By chance my ancestors had instilled in me enough force of character to analyse. I was the only one who could analyse, and I figured out slowly that I had not been warned by anyone that the examinations were scheduled for the end of each term. Under threat of annihilation by parents and teachers alike, I began to develop an approach to examinations which remained the same up to my Ph D in 1974. This consisted of no secret, it was thorough notetaking and memorizing, and constant practice in mathematics, the most knife edged examinations of all. In preparing for them one could only hope that the problems would be something familiar, something one had solved before. My mother never changed, even when I was a successful post-doctoral (the best in Britain in chemistry) she could fly into the same seething rage if she thought something was wrong. I remember her seeing a computer output with an algol or Fortran error printed on it, and that was enough for her to lose it—she thought I had made a mistake as if I were still a child of 6, knowing nothing about computers or universities or the devious politicians against whom both parents were helpless. When I showed her the Meldola Medal back from Oxford she was an entirely different human being, full of great warmth and pride, the golden- hearted Silurian Celt again, no cold Norman stone. Such are the ways of every parent. No doubt there are nice Normans and nasty Celts. The aforewritten is a metaphor after all. The golden- hearted Celt won at the end, and the last I saw of her was in August 2002 after a series of strokes. She waved one last goodbye in that same Morriston Hospital, her only thought being who was going to look after me, and we both knew that it was the last goodbye, at least on this earth if one believes such things.

I remember very little of the second and third terms of that first year of the grammar school, except for the development of that exam passing technique. I decided to try to do what everyone expected of me, even if they had no idea why it was expected of me. Those terms, therefore, must have been pure hard grind, like a hill climb in the Tour de France, or a fast 5,000 metres. I remember only the class placements for each term, these being thirteenth, fifth and second. Recently I tried to find the school reports of that era but was told by some bland bureaucrat that all the records of Pontardawe Grammar School had been lost. The school was replaced by something called Cwm Tawe Comprehensive, with luxurious facilities but completely anonymous. It could be a school anywhere in the western world. I saw a figure lurking

around in a tracksuit and it turned out to be the headmaster. I was told that boys did cookery and girls did woodwork. The children are fat and throw food on the floor. My parents must have lost my school reports from the grammar school, but I remember that they were single sheets of paper with one-line comments from each teacher, handwritten, followed by a percentage or "marks" and finally an average and class position. The most critical struggle for me was in the mastery of algebra, so I remember learning how to factorize a quadratic equation, for example, and that was the breakthrough because algebra thereafter became a favourite subject. As the second term approached in January 1962, it was a matter of automatically rising at dawn, and gathering together all the gear of the weird anglicised society represented by the grammar school. By this time, the three golden letters on the satchel had been ripped off by some vindictive fool in the school bus, so it was a plain leather case but by now full of notebooks and textbooks. In between these were jammed the Oxford set of mathematical instruments, with its wooden ruler, compass, protractor and angle plates, a small pencil and sharpener. Once a week there was that pointless duffle bag for compulsory rugby, or compulsory athletics, and overalls for woodwork. The cost of these things (items of middle class life) must have been a drain on my parents' meagre resources gathered in by hard monotonous labour. I do not remember getting any instructions on how to play rugby, we were just told to play this ridiculous game.

The school was therefore a mechanism which processed 11 or 12 year olds according to instructions received from authority afar. It was designed to transform a Welsh speaker into an English speaker, which is impossible. This is what is usually referred to as "discipline", but in reality it was the workings of a cuckoo clock. My memory of that first year is so blanked out that I must have been in a state of hyperconcentration, slowly working out that in order to survive the onslaught from both parents and teachers I had to prepare for term examinations. The school day passed infinitely slowly, with a dinner break. All the corners of the grammar school became very familiar over the next seven years. I do not recall any time for individual study during school hours, and no attempt at individual tutoring. The teachers did exactly as much as the syllabus demanded of them, and no more. There were no after school activities, and if there were any I could not have attended them because they took place a long way from home. The real work was done in Pant y Bedw, where in about late February 1962 I realized that there would be examinations that must occur towards the end of the term. So I realized that the end of the school day at about ten minutes to four in the afternoon was just the start of my real work day. I had to really learn what had been hastily thrown on to my notebooks, and had to learn how to solve problems in arithmetic, algebra and geometry. No one knew why I had to do this, I just had to do it, the machine ruled all. One historical conclusion emerges sharply from this mind fog caused by hyperconcentration – I was on my own completely and totally, and had to learn myself. I do not think that my father ever had an idea that any of this was taking place. My mother, on the other hand, did discern the tremendous pressure that was being applied.

So at that age I was already grown up and fully independent- I had been since the age of about 7 in intellectual matters. On top of this pile of pressure applied by the grammar school system I was expected to do well in music lessons which continued into first year at grammar school. These were given by Miss George, a scented and hyper disciplinary individual when it came to music, but otherwise of an amiable disposition. So there is some clear memory of practising at the cold piano keys in a small, stone cold parlour, fire gone out or not yet lit. I was hauled down to some damp suburb of the snobby uplands of Swansea and emerged triumphant having passed one music exam with merit or distinction, I forget which. I had no talent at all at playing the piano, and refused to go further to my mother's eternal dismay. I was also expected to do well at the sunday school in the chapel, and for fifty years my mother kept telling me to go to chapel, although she herself rarely did. Finally, I think that both parents were expelled from the chapel. As usual I was never told why. So in this atmosphere of perennial and great expectation I realized that I must find a way of defeating the system by doing well in examinations. It was this technique that was perfected in 1971 when I graduated top first at Aberystwyth. Later as a graduate, I reapplied it with imagination, no longer a slave to the system. The latter is unhealthy and full of corruption. I knew that at the age of 7, with bleeding hands in a hay field, but I know it better than ever now.

At the end of the school day at about ten to four in the afternoon we were free to walk down the steep hill to the bus stop near Eynon's bakery and wait for the bus from Ystalyfera. Some genius had allocated one double decker bus for far too many pupils, probably an accountant. So the bus was dangerously overcrowded, and there were no seats for us 11 year olds. There were no teachers and the conductor never attempted to keep order, so the larger specimens took the seats on the upper deck, while the puny 11 year olds had to stand. There was just a noisy and repulsive chaos of blue and black and red and black until it gradually emptied and I could sit down a little at last. The

bus reached Craig Cefn Parc just as the sun was setting in winter, so I never saw the daylight in the village, leaving just as the sun rose, and getting back just as it set. In February 1962, the satchel felt heavier and heavier, it was a leather case full of facts to learn and problems to solve. Otherwise there would be acidic condemnation from all around, not least from myself. By that time, my mother was working in Lewis Lewis so my food after school was prepared by my grandmother in this house. I have one photograph of her making a pancake on a very small electric cooker, but after she had been widowed and worn by age and mourning. In the winter of 1961 to 1962, I was assured of a warm welcome here, in the room where I am writing now. This was much better society than the grammar school, which was an artificial brew, teetering on the edge of rugby violence. If I showed any grammar school notebooks to my family they would shy away instinctively, and I was told within a few seconds that they did not understand anything. Perhaps that was the best reaction, although it irritated me at the time. If they did not understand anything, why expect me to surpass my fellow barbarians? It gradually dawned on me that I expected myself to surpass my fellow barbarians.

My maternal grandmother was Martha Jane Jones, nee Newlands, descended from the Newlands Family of Orlandon in Pembroke, which originated in Aberdeen and Angus in Scotland and married into the Mac Thomaidh, Mac an Taoiseach and MacDonald Clan na Chattan. She was born in Craig Cefn Parc and descended on her mother's side from the Hopkin Family of RhyndwyClydach. So I ate my food here, maybe bacon and fried eggs and potatoes, bread and butter, a sliver of cheese, and tea, some pice ar y ma'n (Welsh cakes) or pancakes. Earlier I had recovered here from massive internal injury and was given bread dipped in tea, which did the same to Marcel Proust - brought back all the memories. Sometimes there were dumplings, puddings made from stale bread, more slivers of cheese. My grandparents were very poor, and very hardworking, more learned than anything I found in my grammar school contemporaries, and uncorrupted by the English language, drink and drugs. They never spoke a word of English to each other, unlike my parents. When I was 16 or 17 I remember my grandmother taking some gold buttons from one of her most precious dresses, and struggling to far away Swansea on the bus to sell them with a look of terrible sadness. Once she had been young and elegantly dressed in Edwardian times. By that time in 1961 and 1962, my grandfather Thomas Elim Jones was very ill, with many ailments, and I do not remember him often eating with me. He had developed a large swelling at the side of his neck from glandular trouble, and the house here was

a small pharmacy of tablets and respirator, a hand held pump that sprayed something into his lungs to help him breathe. Less and less was he able to write notes into his red- ruled notebooks, four- part harmony in do re mi. Less and less did he rise from his seat in the corner by the fire, and at the end was barely able to walk at all. He could still annihilate me at draughts, and one day I left this house in a childish rage after being canned. He just smiled and said nothing. The garden which had grown so much food for the coal miner gradually became overgrown with weeds.

In Memoriam: Martha Jane Jones (Swansea circa 1987)

Darkest hours, blackened echoes, cough up dust,
Beat back the suffocating pain of years,
The anthracitic seams where the light must
Die, where the day is a torrent of pain.
There, husband, you harvested me cold coal,
Gathered form an ancient sun, the blood of
Life and the blackened milk of time, the soul
Of warmth you carved, and gave to me your love.
Mine are the notes of music that you made,
Harmonious truths you wrought of forlorn light
Hope for the tortured lungs of those enslaved,
The light of liberty in dusty night.
On the ocean of time I grieve for you,
Great symphony of dawn, your sun, burst through.

After eating I would walk up the steep path to Pant y Bedw, and if my parents had locked the door got in through a small window, letting my sister in through the door. The heavy weight of distantly imposed realization made me start at the homework, at about six, when I tore myself away from the fatal embrace of the TV. It was possible to do routine homework with others of the family present and watching the TV, but in February 1962 I took myself into the only other room of the house, called the parlour, which had once housed a bright Christmas tree. It was there and then that the journey towards learning began, as the second set of term examinations approached. The only thing that I could think of doing was to memorize the notes and declensions, so the

process began of reading the notebooks for that term and starting to absorb them. This year (2011), I learned that the great pianist Sviatoslaw Richter used the same technique with music, learning a page at a time. I have no talent at playing the piano, but can easily hear who is a great pianist and who is not. This process of mine started after I had finished the daily homework, so it went on from about seven p.m. deep into the night, often in a room unlit by fire or any warmth of human interest in what I was doing. I was profoundly alone, undisturbed by mobile telephones, or even by the loudest of the wind's howling as it drove the rain against the single sheet of glass between us. I would go over sentences and facts until they stuck in my mind, the sentences becoming pages. I would go over French declensions, read the Morte d'Arthur, Wilde and Sheridan, and go over problems solved in mathematics. Laws of physics would be learned by heart, until my brain was filled with facts. This time I knew that the exams were coming, and knew when they were coming, so the long night before each set of exams was dedicated to a final memorizing of notes for those particular exams.

In that second term, the method was new and not perfected, and I became tired at around ten or eleven p.m., having risen at seven a.m., so had to stop. When very tired my eyes began to close and my brain had to pull them open again, or I had to walk around a little bit. My system must have been strained to its far limits, but it held together. This is what must have happened under that massive surgery in my infancy. The outside world cared nothing and knew nothing, and vice versa. When convinced of my learning I finally retired to my tiny bedroom, where I often went over something again if there was any niggling doubt. A few hours later the miserably cold and dark winter morning shook me awake and I started the violent journey to the school, but wearing an armour made of facts, ignoring the loud insulting ignorance around me. My head was full of facts and when I met that exam paper they were poured out onto foolscap. I am not sure, but I think we were allowed to answer the questions in any order, so the easiest one was attacked first. In a mathematical examination a familiar, most easily solved problem was devoured first. I wrote at a furious pace with an automatic stopwatch in my head. If there was a clock in the classroom I glanced at it often. The timing was instinctive even as an 11 year old, do not write too much or too little. At that time in about March 1962, the examinations lasted an hour at the most, and if you ran out of foolscap you had to walk to get another one from a pile, kept under surveillance by the teacher who would measure your pace as Doppler radar does a moving object. Towards the end of the

exam there was a frenzy of writing as the facts poured out of my brain onto paper, and my writing became chaotic, but readable. In the primary school I had been castigated by Mr Hopkins for having bad handwriting, and my mother had imprisoned me one day making me write over and again in a useless attempt to get it better. In these examinations it became stochastic in its attempt to fit all those facts onto paper. Finally, the bell rang and the ordeal was over for a while.

The next exam started and my hand began to cramp from writing. My brain forced it to do its will. I cannot remember any examinations in woodwork or practical art as they called it. I could neither plane a block of wood nor do much art at that time. I do not remember practical examinations in physics and chemistry, the most unpredictable examinations of all. There were about fifteen one hour examinations on paper, all of which happened one after the other within the space of at most a week. I found that the arithmetic, algebra, geometry, history and French were the easiest, the literature ones more difficult, because they needed some modicum of imagination and knowledge not given by memorizing only. Physics and chemistry needed both memorizing and problem solving, as one could not get by by memory alone. The formulae can be memorized, but also have to be applied. In a subject such as history or geography the facts can be poured out endlessly, being just a regurgitation of other people's writings. Suddenly it was all over and we could spend classroom time as we wished – reading a book. I could get home, change into farm clothes, head direct for Gelliwastad with the black and white sheepdog, or go and play football with my alienated friends, or do some farm work to please my father. The textbooks would be discarded in favour of Sherlock Holmes stories. All the big words of the English language were becoming comprehensible, even words as long as those used by Conan Doyle. Sometimes I would read R. H. Dana, "Two Years Before the Mast", Charles Dickens, translations of Tolstoy, and become paralysed by Edgar Allan Poe's "The Pit and the Pendulum". None of these books or stories had to be memorized, but they are the most vividly remembered of all.

The term ended with the ritual of the return of the papers. Each teacher entered with a pile of exam papers, the best on top, the best name read out first. Each pupil took the paper from the teacher and walked back in triumph or disgrace before the whole class. I had no expectations as far as I remember but must have found that my name came up first sometimes, sometimes not. So I landed up fifth in the class and was handed the term report. It must have averaged around 75% to 80%. That would be enough to get a first class degree

but I knew nothing of that at the time. So I carried the report dutifully back home to my parents and awaited execution. It never happened so they must have been better pleased, again knowing nothing except the class position. My sister treated everything with scornful contempt. She got into the grammar school but dropped out very soon, and I have had very little to do with her. There were two weeks of peace around Easter, with the Gymanfa Ganu of wonderful harmony back in the Welsh language. I realized that as soon as the examinations were finished, I had forgotten nearly all the facts, but slowly a deeper skill emerged, a skill at problem solving, and developing a deeper understanding of literature and history. The scientific skills developed much more quickly than those at literature. I suppose that number five felt better to my parents than number thirteen, with unlucky overtones, but they were far from satisfied. I do not recall being pleased or unhappy with this result, but it was better than number thirteen.

Around that time or earlier, I had learned to balance on a bike, and this provided a means of getting away from a head filled with facts for a while. Also my younger cousin Ellis was getting to be old enough to come up to see us on the farm sometimes. The bike was hard going up the steep slopes of Mynydd y Gwair past the laboratory of Grindell Matthews, but at the top there were views of the entire valley of Glyn Eithrym, a sight so wonderful that it stays indelibly in mind. Ellis and I also drank out of the pure cold water that comes out of the hillside just above the chapel of Pant y Crwys. It still does so today. The little things of life, the small things but great memories, are the best that life can offer. I also have a photo of Ellis standing on the triangulation stone on Mynydd y Gwair looking at the horizon in a balaclava helmet in winter, and this is just above the Grindell Matthews laboratory, an intrusion of the outside world. On this plateau there are remains of machine gun training by the US Second Infantry Division. In its pitiful manner, humankind degrades nature, war is of no use to anyone. I cycled over to the Lliw Reservoirs and the remote valley which was drowned to give water to Swansea. That place, which looks like smallpox, is a creation of an industrial revolution which meant the destruction of ancient Wales. So drowning valleys for remote cities, saturating our hillsides with turbines, and destroying our language are not things that make me happy. The freewheel back to Craig Cefn Parc was the best part of the bike ride, pushing out of mind the almost vertical drop to one side. Later, in my twenties, I used the same route for road running, a discipline which I started when about 19 or 20 years old to counteract instinctively the sedentary life of study. There

was some theoretical running at the grammar school, but that was a joke. I was 40 before recording my best time of 6.92 seconds over sixty metres on a tartan track at Zurich. The world record is 6.4 seconds, but 6.92 is not bad without any specialist training and for a complete amateur who resisted all the kickbacks and corruption of the childish rugby world. I think that all sport should be made amateur again, and all great stadia demolished.

The third term of that first year at grammar school is very vaguely characterized in my mind by the onset of summer, and a switch over to cricket and athletics. This was much better than rugby, although I was still unathletic and ungymnastic. John Mock was not such a bad P. T. teacher, and did not force me to do anything. The facts were piled up very much as before, but I grew more expert at passing examinations, I began to prepare earlier, and study later into the night, increasing my stamina and absorbing ability. So I could in the end start at seven in the morning and go on working until about one the next morning. I also became better at anticipating what the examination questions would be, and at this age my memory began to get much better. On 26th May 1962, I became 12 years old, a triumph of time. This meant I was about the youngest member of the class and that examinations would be on me soon thereafter, but after that the glory of seven weeks of holiday in Craig Cefn Parc in summer. I was more confident of meeting the examinations one by one; the only problem would have been in a mathematical type paper. Due to this long preparation, I never froze in an examination, as some unfortunate pupils and students do. Others of my class gave up early and would sit through an exam doing nothing. The more obnoxious specimens would use threats of violence to copy my Latin work. It got them nowhere and they disappeared into obscurity. One of them got minus 5 % out of a hundred, nothing for the exam, and five taken off for copying. Mine was a very different and much more intense world to theirs. The really unfortunate ones wanted to do well but froze up. I was quite happy to help those and all who wanted to learn and asked me to help. I think that this is why the exam system was moderated over the years, but if moderated too far, the pupils and students learn nothing. It was not a world of 11 and 12 year olds - it was fully grown up and in deadly seriousness. So at the end of the third term I emerged second in the Form, and would have had to average about 85 – 90 % to do that. I think that the top spot went to Huw Thomas of Speit, whose father was a headmaster. This time my parents were pleased, especially as I explained to them that Huw was a bright pupil with all the advantages of tutoring by his father. In fact I did not know that

his father took any more interest than my father. No one wants to tutor after a full day at school. I cannot quite believe that all the records of the grammar school have been lost, so those reports might turn up one day. I had to study through the hay harvest, and that made my father irritable, but I did as little as I could in the fields and concentrated wholly on the bigger goal.

The summer was as glorious as anticipated, especially to a freed prisoner.

CHAPTER FIVE

The first actual memory I have of autumn 1962 is the Cuban missile crisis, which came upon us 12 year olds in the covered walkway one cold and damp morning between the upper and lower buildings of Pontardawe Grammar School. Frightened children were saying goodbye to each other in the playground as the missiles made their way on ships towards Cuba. I was not disturbed because I was never a child, and even then I knew that politics is a farcical and corrupt game played at the expense of the population. I have never voted for any politician. I thought that this time they may go too far, but usually the game stopped short of mutual assured destruction. I recall a shoe being banged and violent threats made in Russian at a summit conference on a black and white flickering TV set at home in the stone house of Pant y Bedw and Macmillan asking for a translation. The summit conference burst out laughing and I thought to mysef that this is a stupid farce compared with the hard work of grammar school and coal mining, a farce played by actors with nothing else to do, but actors who happened to be in control of nuclear warheads. I had seen some massive destruction on TV caused by nuclear tests in the atmosphere, tests which polluted milk with strontium- 90.

At the beginning of the second year at the grammar school, we were divided into two streams, Form 2L and Form 2A. We were given ridiculous subject choices such as Latin or woodwork and French or Welsh so the number of subjects began to fall. By the time I reached O level, there were nine subjects left. I chose Latin, the only reason for this being that I was useless at woodwork. I did not particularly like Eic Davies because he gave us inflated marks, not realistic ones, so I decided to take French, my command of Welsh being already fine. Despite all the intense pressures to speak English, my command of Welsh has improved to the point where I have taken an Oxford University course in

cynghanedd and learnt this art initiated by my ancestral cousin Dafydd ap Gwilym, one of the greatest of the European poets of any era. If there had been a more reasonable teacher of the Welsh language I would have taken it, or it should have been compulsory as it is now. I did not know that Cymdeithas yr Iaith Gymraeg (The Welsh Language Society) was being formed at around that time in Pontarddulais, and I fully support its aims. A lot of its members have been imprisoned for heroic efforts on behalf of the language.

A few of my notebooks have survived from that time, and one issue of the school magazine, "Y Bont" for 1961 / 62. These items have been posted on www.aias.us under the source documents section. The magazine was edited by T. A. James and Eic Davies. His son Huw Llewelyn Davies was then in Form IVL. Another Huw Davies was a student editor. Huw Llewelvn Davies became a well-known broadcaster and member of the Gorsedd of the National Eisteddfod. There is a congratulation to former Pontardawe Grammar School pupil Dr. Goronwy Daniels for a C.B.E. in the new year's honours of 1962. He was then Permanent Under Secretary for Fuel and Power, and later earned a knighthood and was appointed Principal at University College of Wales Aberystwyth in 1968. In 1978, I earned my Doctor in Scientia degree and was awarded it in a degree ceremony at the Great Hall by Sir Goronwy Daniels, who broke into a broad smile as he handed me the certificate. I am the youngest recipient of this university distinction in Britain and the Commonwealth and Ireland (at the age of 28) and it is a distinction higher in standing than a full professorship or personal chair. It is generally acknowledged that I should have been appointed a full professor in the University of Wales in 1978, via a personal chair, but due to its endemically corrupt, vindictive and mindless nature I have been locked out. Society in Wales is in general corrupt, and in need of reform. Nepotism is rife and local government is notorious among the people. It is best to stand entirely outside and free of such a harmful society, be untainted by corruption and laziness, and work and live as independently as possible. As a descendant of the Princes and Normans I find this corruption to be loathsome, and begin to wonder whether bureaucratic pseudo-democracy is in any way an improvement. Being independent and standing outside society is the Leveller philosophy which I inherited from ancestors such as William Hopkin Cwm Nant y Moel, (born in 1823), a Dissenter and Annibynwr (Independent). The fact that the University bestowed upon me its highest distinction and then proceeded to deny any salary or position for thirty years and more is an obvious and indefensible example of gross corruption, much of it caused by pure selfishness and ruthless job grabbing and blunt denial of talent. Positions are given all the time to non- Welsh speakers, less qualified immigrants into Welsh, and inferior talent unsympathetic to and sometimes hostile to all that is Wales. The politicians just let this happen and look after their own jobs. Genuine and hardworking talent is more or less forced to work in isolation. Thus I conclude that a true native scholar of Wales is not welcome in the University of Wales, so the University is a deception. That is the University's problem not mine, but reform is still an urgent necessity.

A Scholar Deserted By His University

Trapped like wit in a foreign body,
I am in this massive etching invisible,
In the window-glass of your architect
Rioting and reflecting like the winter's boar.
On ingrown thoughts you drool and bubble,
Ferment in dust, deserted libraries,
Torn from politicians, bent contractors,
In the years of Vietnam. I think, I am.
Cogito ego sum, as black as ink
Grieving for the sun and enlightenment
In massive grey corruption comes the night,
The easy laughing fools were yesterday's.
Their embers in harmony glow in the dark,
Flame light burns yet leaves no earthly mark.

The well- known singer Mary Hopkin, who started her career with the Beatles in 1967 from the Lower Sixth at Pontardawe, is my cousin, both of us being descended from William Hopkin Cwm Nant y Moel above the village of Craig Cefn Parc. She is a few days older than I , and in Autumn 1962 was 12 years old. I do not have any memory of her at the grammar school because she went into the A stream in the Autumn of 1962, while I went into the L stream and did not know at the time that she was my cousin. The two streams converged again in the lower sixth when I remember her as appearing sometimes in the Sixth Form common room (just a small boxroom with a rough table and a few books). Sometimes she had a guitar and sang a little, and suddenly disappeared to London. Neither of us are mentioned in the School Magazine of 1961 / 62, but two others of our age appear as pupils of Form 1:

Sandra Morgan and Neville Arrowsmith (a fluent Welsh speaker from Felindre, a village of Mawr along with Craig Cefn Parc and Garnswllt). Despite his Norman / English sounding name, Neville spoke in the characteristic Welsh of Felindre, slightly different from the Silurian of Craig Cefn Parc because the latter became a mining village and Felindre remained a farming village. Neville is one of the very few pupils I remember well, he was earnest and wanted to learn, and had a tough and nervous time sometimes when the examinations loomed as they always seemed to do. Sandra Morgan had a poem in English and Neville a poem in Welsh. For that age these are good poems.

The School Magazine reminds me that the headmaster when I started was R. Percy Roberts, M. A., a history teacher who retired in about 1963. His assistant teacher in history was the unfortunate Olive Williams already mentioned in this autobiography. The School Magazine mentions them as being in charge of the history society, and mentions a Sixth Form visit to St Fagan's Folk Museum. Olive Williams was in charge of such a trip when we were in the third or fourth form, but as usual, the mindless elements that I so disliked ruined her day for her. The school described in that Magazine consisted of about 400 pupils in all, and was a society made up almost entirely of pupils from the surrounding areas. The bizarre structure of local government meant that some pupils had to travel very long distances to reach the school, and others lived in Pontardawe itself. I like the Welsh language part of the magazine much more than the affected English style of writing so foreign to Wales, aping the upper middle classes of a bygone Eton. The cover of the Magazine is a pen and ink drawing showing a bridge (pont) to the outside world. Unfortunately, to the immature pupils of the Sixth form in my time, that meant a bridge to Chelsea because they had just seen the Beatles on TV. This was a group of four people that always irritated me with their straining for effect and shallowness. I recall seeing a YouTube or similar of Mary Hopkin singing with McCartney, who did not seem to be able to teach her anything, and I wonder why she left Pontardawe or Wales at all. Having received their free education in Wales, most of these pupils were actually encouraged to go to places like Cambridge or Oxford, which I find to be ridiculous. In consequence of this immaturity, none of them made a mark on the academic world as far as I know. One became First Minister of the Welsh Government, which I suppose is some kind of distinction, albeit political. In an earlier era a former Pontardawe Grammar School pupil Sia^n Phillips of Ty Mawr, Mynydd y Betws, became an actress of some distinction, but again in London, anglicised beyond recognition. I am perfectly content with my own

background here in Craig Cefn Parc, because there is no substitute for your own language and people elsewhere in the world. To me it is unimaginable why anyone should turn their backs on their own language and this was also the view of the great poet R. S. Thomas. The pupils who wanted so badly to go to Chelsea had capitulated to a foreign culture and allowed it to overwhelm their own because they were not strong enough to sustain their own brilliant heritage, so infinitely superior to anything on TV. Now of course things are much worse, pupils knife the teachers and set schools on fire. So we Levellers isolate ourselves from the degradation and well- fed middle class barbarism of our times – we are the last flickering of civilization. I was certainly forced to travel – but I never wanted to. What is needed for scholarship is a civilization, a society that is stable and that is able to maintain its own identity without feeling the need to import mediocrity and street violence, and people from anywhere except Wales, any language except Welsh, now confined to the sign posts only.

So even in those days I could feel the idiocy of local government. Being from the village of Craig Cefn Parc I had to arrive early at the Pontardawe Grammar School because the severely overcrowded bus had to arrive at Ystalyfera from Craig Cefn Parc in time. This made us susceptible to another idiocy, being forced by teachers to move well over 100 chairs from classrooms into the Assembly Hall, day in day out for years. The chairs had to be piled up, slid along wooden- floored corridors, down steps, and across the yard, up steps across more corridors and finally into the Assembly Hall and arranged there. The headmaster and system were incapable of buying enough chairs, but were capable of using unpaid child labour. This is surely a form of supine corruption, and my view is that local government is hostile to nearly all aspirations of Welsh speakers in the Swansea area. Welsh speakers are singled out for the poorest treatment. This can be seen clearly from the history of Craig Cefn Parc, from which the Welsh language has almost disappeared in only fifty years through deliberate council hostility and mismanagement. Swansea is only superficially friendly to the language via sign posts only. As a result, the Welsh language is now on the edge of extinction in the opinion of the United Nations, yet we find that immigrants still flood into Wales without any ability to speak Welsh, many not knowing that the language exists. This is contrary to laws on the protection of indigenous cultures in Europe, and again it is due to government.

Around this time in 1962, I began to take quite good landscape photographs with a small camera that I bought for myself out of very meagre savings and these are posted in the photography section of www.aias.us. A few are of summer, showing the great beauty of Mynydd y Gwair before it was spoiled by pylons and gas pipelines which have caused massive ecological damage. Gas is still not available in Craig Cefn Parc. The pipelines are driven straight up the shoulder of Mynydd y Gwair in full view for miles around, causing massive ugly scars all along the most beautiful parts of Wales. This is despite the environmental bylaws of Swansea Council. So again government is very harmful, and people must take measures to protect themselves from government. One such measure is to put houses in trust and never to sell them out of the Welsh speaking family. Another photograph I took of that era is of the ancient farm of Fardre across the valley of Glyn Eithrym (Lower Clydach valley). At that time, the last vestiges of the coal mining industry in the valley were closed, another disaster caused by government. The floor of the valley at that time was still a sea of waste coal, and the buildings of the Nixon and Hendy drifts were still visible, the drifts still clearly accessible, and the winding gear still there. It was there for years after the mines had been closed in order to help pump out water. Gradually though, government demolished the whole of the coal industry in Wales, and all the mines were flooded. Government did great harm to the people, a kind of genocide.

Luckily a few of my notebooks of that era have survived, one being the arithmetic homework notebook. It reminds me of the progress made in the first year to the second year at the grammar school. The first entry is in a neat small handwriting on 21st September 1961, just a few days after I had started at the grammar school. It records simple multiplication of pounds, shillings and pence, almost all marks are very good, nine or ten out of ten being frequent, almost always. The notebook is posted in the historical source documents section of www.aias.us. The handwriting is in blue ink and fountain pen and fifty years ago I wrote several letters differently with traces of the copperplate style. It is very neat, legible handwriting. There is a problem with multiplying fractions on 8th February 1962, in the second term of the first year, but this was soon fixed. There is long multiplication by hand and long division by hand, with one difficult problem of dividing 217 tons 13 hundredweight and 42 pounds by 141. No one at school could do that today by long hand and the familiar ten out of ten is marked in the margin on 24th May 1962, two days before my 12th birthday. Exercises of this type go on to 7th June 1962, when it was examination time again. Almost always it was ten out of ten, and so I arrived at second of the class in that term. So my performance must have been similar in all subjects. On top of this homework I was developing intense

preparation for examinations in that little stone room known as the parlour, developing a very deep and fierce determination to learn, being snarlingly contemptuous of those that got in my way.

The next entry is 4th October 1962, just before the Cuban missile crisis. On 14th October 1962, a U2 recovered evidence of Soviet missiles in Cuba. The school exercises show little change between first and second years, and take no notice of the Cuban missile crisis. On 18th October, for example, I was adding 24/55 to 3/11. The tense and dangerous missile crisis ended on 28th October 1962, while I was still being asked to add fractions. They could easily have been the last fractions I ever added. There is a revision exercise on 22nd November 1962 as the term examinations loomed. I came third in the class that term. I got home with the school report just in time because on 22nd-26th December 1962 heavy snow began to fall all over Britain. On 29th-30th Dec 1962, there was a great blizzard all over the South West of England and Wales. I took several photographs of that time which are posted in the photography section of www.aias.us of a magically transformed landscape. I remember that walk out on the top of Gelliwastad in the heavy snow, taking photographs of heather and gorse covered in deep snow, of dry stone walls looking like Christmas cards, and of a wonderfully beautiful Mynydd y Gwair and Banc yr Allt, blue white with bare trees near dusk. I was beginning to freeze and my 12- year old ears were aching from the wind, even under a balaclava knitted by my mother. In that blizzard there was twenty feet of snow in some areas and it became so cold that the snow lasted for two months. My father put chains on the wheels of the van and we raced up the hill to Craig Cefn Parc and back to Pant y Bedw, chains gripping into the snow before it turned to ice. Later in New York State, I became familiar with such conditions in the winter in Kingston and Ithaca. In January 1963, the temperature dropped to minus 16° C (3.2 °F) and that was colder than anything I encountered in New York State in the eighties and nineties.

The Realizer of Truths

The noisy statements were suddenly dead
And all were left with no priority,
Strangers to the rule of sanctity
Delved among their rubbish to look for peace.
They granted truth some honour, a forced smile,
A crooked tooth for every work of war

Appeared, spat blood, and spoke absolution.

A pinnacle of civilization,
They marked it with a sharpened bayonet,
Displayed it, a cabinet butterfly.
Tribal patterns and spirals were straightened,
Strangers pretended to greet each other,
Converged familiarly, gigantic ruts
Indelicately carved, missiles are there.

The double decker school bus crashed one morning in that January of 1963 - it could not get a grip on the steep hill down to the river from Craig Cefn Parc, turned sideways when the driver braked and tipped over, coming to a rest against some trees. We slid out very fast down the steps and onto the road, hoping that this accident would give us some respite from school. It did not and we walked the rest of the way to Clydach to catch another bus. In this freezing winter on 17th January and 9th February 1963, the neat handwriting continues, many marks in red and nine and ten out of ten a regular occurrence. The exercises had evolved into decimal addition and I had forgotten to note the change of year from 1962 to 1963. On 28th February, I had to convert 6 and 27/80ths to 6.3375 and then the second term examinations of the second year (Form IIL) were on me again. I came second in the form that term, probably to Huw Thomas Speit. In February 1963, more snow hit Britain in a thirty six hour blizzard with winds of over 100 miles an hour. The little house of Pant y Bedw was warmed by steam coal. One memory I have of that time was reading out pages of notes to my mother in front of the fire, and she checked for any errors. Then on March 6th 1963, there was a great thaw, and the snow disappeared. On 2ndMay 1963, the notebook records decimalization of money, with further entries on the 9th and 30th May and on t12th and 20th June. Then the summer term examinations had to be met head on with a perfected technique of intense preparation well into the night at Pant y Bedw.

The best moment of my entire life occurred when I became top of Form IIL in that summer term of the second year at grammar school, being a few days older than 13. The class burst out in spontaneous and very friendly applause and I was intensely proud and happy. When I think of that, all the dreary cynicism of a cheating and alienating later society is thrown away like a weight from my shoulders. That was genuine applause at an age of innocence.

Merit was instantly recognized and awarded and no one spat in its face. The teacher looked up in evident surprise, and slowly started to smile. I also have a photograph of that era in which I appear very thin, with a sleeveless pullover probably made again by my mother, standing before the whitewashed coal shed into which I had shovelled so many tons of steam coal. I wrote the sonnet "In an Album" about that photograph. I had become very thin because of a diet that I took very seriously. At about the age of 8 or 9 I was too fat, from eating too much cheese and butter and bacon and pastry. So the doctor advised a diet which I stuck to tenaciously. I started skipping school dinners, (not a difficult thing to do). The dark marks around my eyes at that time reveal those long hours of study and intense determination. Then my parents were told by someone that I was skipping the dinners, so I had to eat them again. The effect of these dinners is described with one piece of wit in the School Magazine of 1961 / 62 - "Wild Wind". If you survived that, then nothing else in life could be a challenge.

In this second year at the grammar school, I began the study of Latin as taught by Maude Daniels. This was a strange language in which everything happened at the ends of words. French teaching was begun in the first year. There was the famous amo amas amat, followed by moneo and all the rest of it. So I switched on my memory to deal with Latin and learned it in the manner of a metronome, but I also learned the origin of all those big words in English, and found that English was Latin with a few other words. French was a much more natural language to me, with recognizably Gaulish elements in it. The geometry and algebra notebooks are missing for those years but from later notebooks that have survived there was a lot of factorization and compass and ruler work. I liked both subjects more than the monotonous arithmetic. The latter was easy at the grammar school because of the thorough preparation given to us by Miss Jenkins at the primary school in Craig Cefn Parc in arithmetic. I remember vaguely that physics was a grind, formulae of Newton applied to problems. The first time I ever sparked an interest in chemistry was when I saw a reaction on a demonstration bench when there was a vivid change of colour. This was a chemical reaction, something very mysterious. Before that, chemistry must have been acid plus alkali is salt plus water, not the most wildly exciting thing to a young imagination. The reaction brought everything alive, and the chemistry apparatus when seen for the first time had a fascination to it. At that time, we were not allowed into the chemistry laboratory run by a teacher called Dai Bump- I think his real name was David Davies and how he obtained his bump is unknown.

To be absolutely truthful, I could never discern any bump, but there might have been the odd acid splash or two on his forehead, like "The Red Headed league" of Conan-Doyle.

The chemistry class of that second year was run by a teacher whose name I forget, but I remember that he was from Pontardawe and a lay preacher in Welsh. I remember that vividly because of my fellow pupil of the same class, the late Eifion Wyn Jeffries of Garnswllt, who died when he was only 12 or 13 of a cerebral problem while still a pupil at the grammar school. This teacher had said one or two harsh things to Eifion Wyn, and when he died suddenly was very shaken with remorse. There was no need of that remorse, but he attended the funeral at Capel Noddfa Garnswllt with two of my friends from Cwm Gors and I: Leighton Carter and Lyn Renowden Evans. My father took us to the funeral and he was at his best on that day, kindly and pious. We were ushered into the presence of the bewildered and wild- eyed mother Irene Jeffries, (nee Pugh) whose only son had just died. She embraced me like a lost son, with tears streaming down her face, holding me very tight. I still remember that now, my first experience of the dark side of life. Irene Jeffries died on 2nd August 2008, and is now reunited with her only son in Capel Noddfa Garnswllt. Eifion Wyn was her only son, and as far as I know she had no other children. I remember that Eifion Wyn (named after the great bardd of that name) was quiet and cheerful, a fluent Welsh speaker, and deserved a better fate than that. He was the best of the Garnswllt contingent of three, the other two being Gerald Cox and Alan Walters. The one thing that raises the gloom of that memory is the fact that Noddfa is still going as a chapel, and has not been "developed". The tremendous devastation of that early loss of one of the best of us shook the whole class and also one or two of the more dedicated teachers. Only that lay preacher and chemistry master turned up at the funeral of Eifion Wyn, and three of his friends from school. I remember that it was a Saturday, and wondered why the other teachers had stayed away. Perhaps this was not the result they wanted.

Hydref

Rhedyn y cnawd, rhwd yn cnoi – ar lo main Reilwe mud, yn crynhoi; Y cof llosg yn ei osgoi, Heddiw ddaw o wraidd ei ddoe.

So the teachers at the grammar school during my time at the place (1961 to 1968) confined themselves to the syllabus, some confined themselves even more narrowly by dictating from a course book, or just reading from a play in the subject of English Literature as it was called. As soon as school ended, their responsibility ended completely, whatever happened to the pupils. In the first two years or so there were plays such as "The Importance of Being Earnest" by Wilde, and Sheridan's "The Rivals" (written in 1775). Sometimes the class had to read out in turn from a play with hilarious results, sentences being chopped in midflow, and ha ha's chanted out mechanically and very loudly and suddenly by an eccentric called Maddox (he could easily have become the editor of "Nature"). That had the effect of tremendous laughter, so the ha ha ha's became real. Maddox would just plough through anything as if tied to a tractor. Whoever chose this ludicrous syllabus did not live in a coal mining community in South Wales. I doubt whether anyone understood the structure of the play or anything else except the wit: "I dislike argument, argument is vulgar and often convincing." The tortuous eighteenth- century contrivances of Sheridan's Georgian society in London had to be explained carefully, "an allegory on the banks of the Nile", for example. This was spoken by Mrs Malaprop, (Mrs Badly Tuned), and then it had to be explained that the allegory (a kind of story with ethics inbuilt) should have been an alligator. Finally, it had to be explained that this was a witicism. By that time, the pupils were yawning and sliding off their desks, sound asleep. In those first two years, I do not recall whether there were novels on the syllabus, but there must have been. Later, there was "Macbeth" and "The Merchant of Venice", and the novels "Silas Marner" and "Lord of the Flies". There were no twentiethcentury poets at all, during the entire five years of the O level syllabus- I recall only Browning, Keats and Tennyson, who always made Dylan Thomas sarcastic, but on one or two occasions he did write some stuff that sticks in the mind, such as "The Lady of Shalott". I thought that this was a Breton onion seller, but it turned out have quite a rhythm to it. Its words were meaningless at the time, although they are obvious now, if a little monotonous. Any Dylan Thomas on the syllabus would have been incomprehensible completely.

history began to interest me a little— one could only begin to be interested in anything, because every word of dictation had to be captured for later regurgitation at the ever looming term examinations. There must have been the usual history of kings, as if the people never existed, but certainly no A. J. P. Taylor and the working classes. The Welsh history was immediate, so some interest in that was inevitable and the working classes finally appeared

imprisoned in the hellish death traps of Cyfarthfa and Dowlais iron works, and as slaves working underground. The Craig Cefn Parc contingent did not have to be taught what that meant. There were rebellions such as the Merthyr Riots. Sometimes I even read my history notebook out of curiosity. Usually my notebooks were like the loom of Silas Marner, monotonous hard work for a studious stone- trapped recluse. It was almost fifty years before I discovered that the Swansea Valley, in which Pontardawe is to be found after all, had a history of its own, written into the prolegomenon of this autobiography, an industry started by my own ancestors. I would have thought that history would have been strong in the school, because the headmaster Percy Roberts was also a history teacher and a Master of Arts, unusual in those days. I think that Olive Williams must have taken some of these second year history classes, and that was always a bad experience for me because of my hatred of injustice. She was capable and dedicated, but would be hounded unmercifully and brutally by some of the Latin class in a kind of controlled and coordinated common assault. This always infuriated me because of the disruption and the damage being done to this intelligent teacher. Sometimes she would visibly disintegrate under the stress, shaking and weeping. The noise from these thugs lured in the headmaster Percy Roberts, who would silence them but at the same time inflict further humiliation on Olive Williams. These were the same thugs who were so fond of rugby, an activity as empty minded as themselves. It is a measure of the decadence of society in our times that rugby thugs get honours from the government such as O.B.E., while the teachers that some of them broke in such a cowardly way lie in obscurity. The rugby thugs are now monstrosities, surrounded by dark Colossea, monstrosities like gladiators. Let them take up athletics, where there is no opportunity for violence, and let them be amateurs untainted by money. Give them no publicity to test their dedication.

Conditions at schools are now degraded to such an extent that I advise parents to teach their children at home, especially if they are Welsh speakers, because like Olive Williams, the Welsh language is being assaulted by governmental thugs. I would advise never voting for a politician, never listening to what a politician says. Take note only of what they do, deeds not words. The one thing I like about my ancestral cousin Oliver Cromwell is his dissolution of a very corrupt Parliament in 1653, "you have been sat here too long for all the good you have done". That Parliament was almost as corrupt as the one we have now, in which everyone fiddles expenses, school pupils with power. Cromwell imprisoned some Levellers of my background for

"The Agreement of the People" in 1647. This was a constitutional document designed to bring in the vote for all men excluding paupers and labourers. That was too much for Cromwell and Ireton, who considered themselves to be gentlemen. The Levellers, Anabaptists and other enlightened factions of the New Model Army were led by Rainborough and others. "The Agreement of the People" led directly to the Constitution of 1776 in the colonies, which became the United States of America. Unfortunately both the 1647 agreement and the 1776 constitution were born in violence, so begat violent societies, now more violent than ever at the time of writing (August 2011). Comfortably off middle classes loot and shoot and knife and burn, which is what happened in the decadent days of the Roman Empire or any Empire or decadent society or bunch of rioting soccer fans.

I think that the French and geography teacher in that second year, Form IIL, was Miss VivienWilliams, who taught French mechanically but quite effectively, keeping discipline. The manner in which school teachers keep discipline cannot be taught, it is instinctive. The problem with a mixed school is that some of the weaker teachers are open to verbal assault. These days teachers are physically assaulted, and cannot use corporal punishment, and the result is that school degrades children like "Lord of the Flies". Sir William Golding warned of this in his famous novel in which pupils from a public school turn into savages. I suspect that they are savages anyway as portrayed in the film "If" directed by Lindsay Anderson in that same era, the sixties or in some of Ken Russell's films. Government is again responsible for putting teachers in such a dangerous situation daily. French was at least a recognizably sensible language, so when the tenses and vocabulary were learnt one could write confidently that the pen of my aunt is or was or had been blue. Geography was a subject in which I had some mild interest because I was fond of maps and exotic place names. In general though, one did not learn much at Pontardawe Grammar School, one taught oneself material supplied by people who converted the syllabus into notes and problems. I do not recall ever being helped to learn by a teacher. The things I do recall are paraphernalia and irrelevance, anger and annoyance, with occasional triumphs. So I think it would have been better to have been taught at home, provided that one's parents took a minimum amount of interest. Education in the sixteenth century was much better in quality judging by the notebooks of my ancestral cousin Elizabeth Tudor in Latin, French and Italian. These are more or less word perfect at the age of 12, the exercises consisting of translation from one language into another and then back again into exactly the same starting words.

The most difficult class for me was art, which took place in the corner of the uppermost of the three red buildings of the school. It consisted of water colours, lino cuts, pen and ink and clay modelling. My parents again had to pay for lino cutting apparatus, Indian ink and brushes and pens. I did not learn much in that class, but much later as an undergraduate found that I could draw well. The same pattern again in literature, I did not learn much from O level, but found that I was a poet. I think that some effort could have been made to find whether a pupil liked art or not, but it seemed to be compulsory all the way to O level. By that time, art history had become part of the subject, and that pulled me through so I obtained an O level certificate in art at a very good grade 3. My other grades were seven 1's (best grade) and 2. The art teacher Charlie Lines was irritable and sarcastic, completely out of place in Pontardawe. I bumped into him once in Clydach but he said nothing at all, his responsibility having ended at ten to four in the afternoon and he didn't want to be seen talking to a coal miner.

All these teachers did their work within a framework of behaviour that they had inherited from their own teachers. Compared with university lecturers they were apolitical. The average lecturer I encountered later just delivered something from notes, wrote on the board, said a few words and left it at that. The teachers were more constrained by syllabus and had a harder time with discipline. I do not know whether they were appointed in open competition by advertisement. Lecturers at Aberystwyth were not, which may go some way towards explaining why they were so bad. I would have hoped that teachers were appointed in open competition. At the time in 1962, I just accepted that the teachers were there, as part of the stonework or woodwork. The syllabus was fixed and unchanging, so they must have been doing the same course work for decades and were practiced in it. At the school there was no overt corruption in that marks were fairly awarded. The closest thing to corruption that I detected was the high marks uniformly awarded by Eic Davies in an attempt to get pupils to take Welsh. This is why I did not take Welsh. I knew that Eic was respected but I think it would have been better to have a system in which Welsh was compulsory. Being the language of my home (in which English was not spoken), I felt that that was enough. The problem now (August 2011) is that there is hardly anyone here left to speak it with, but I use it as frequently as I can. In the rugby world I was told by hearsay that money was left in boots and so on, but I was instinctively repelled by all that, and as in mediaeval times thought that rugby should not be part of a grammar school. Around about the third or fourth year a group of us managed to wriggle out

of rugby to do what was nominally referred to as athletics, but I was still compelled to play the odd game or two.

Marks at examinations were controlled by the Welsh Joint Education Committee, which set the examinations from outside the school. Presumably there were external examiners and school inspectors. The lack of any interest in pupils after ten to four may have been due to my desire to get away from the place and to minimize participation in anything that interfered with study at Pant y Bedw. I became an exam- passing machine most at home on the smallholding of Pant y Bedw. My complete ignorance of the ways of the middle classes showed up one day when I was told to bring jars to school for charity or similar. So I did exactly that, and I brought a duffle bag full of empty clean jars, not realizing that they were supposed to be full of something. So I was dismissed contemptuously along with all the hard work of my family in collecting these jars. In itself a small incident, but revealing, because our family was too poor to have the things that the middle classes took for granted. On another occasion though, I could be fully in tune with the teacher, who happened to be the same Olive Williams. I was told to prepare a small scrap book for an Eisteddfod competition built around a subject in what was probably history, and did so - dedicating the whole weekend to it. Miss Williams was very pleased and this project won an Eisteddfod Prize. I was in Ty Ddewi, which had a bright yellow badge. So the prize was for Ty Ddewi.

Around this time in 1962, Mercury 6 was sent into orbit with John Glenn and Ranger 4 was sent to crash into the moon's surface. Boeing 727 began its flights. The angelic- looking Robert Kennedy vowed to stay in Vietnam until the Viet Cong were beaten. Just a year or so later, John Kennedy was dead and had uttered the words "Ich bin ein Berliner". This means "I am a jelly doughnut". He should have said "Ich bin Berliner" but that was meant to commemorate the Berlin airlift. I had different problems because the unenlightened were using mafia tactics to get my Latin homework to copy. This should surely have been obvious to the teachers and could have got me into trouble for "allowing it to happen". So I developed evasive tactics to prevent this childish form of corruption, or giving them deliberate errors to copy. These were all pupils who came from a richer background than I, and all were pupils who did not know what they were doing at a grammar school. Unsurprisingly, I have seen none of those copying machines since then and cannot even find them on the internet. The formative years of learning occur at about that age, and if the hard work of learning is not done, then it is never done. So the corrupt nature of humankind, its original sin as the theologians would have it, became evident early on.

As time went on the corruption worsened- the harder I worked the more the effort to stop me. That is the law that I became accustomed to. The worst thugs of all are corrupt full professors, or "When a doctor goes wrong, Watson, he is the worst of criminals". I have always tried to stay out of all that, and have gone the route of winning open competitions fairly. So I hold the world record for the number of post- doctorals won in open competition. This strange kind of world record was necessitated by deep corruption at the Edward Davies Chemical Laboratories at UCW Aberystwyth. I now know that few of the staff there ever faced open competition, but were appointed to tenure "internally" as they say. That meant essentially a soft job for life as long as you turned up for a few vague lectures and sat through many committees. I have greatly outperformed all those people, but I was denied a soft job for life. The more one delves into human failing, the worse it becomes. A soft job for life makes you into a jelly doughnut, so it is better to be true to oneself. The other very unpleasant societal trait that became evident around 1962 was the danger of being used for other people's ambition. Copying was the first ugly sign of this. Later on in the Sixth Form, it exploded into anger as the new headmaster Sulwyn Lewis became violently abusive when I refused to go to Cambridge, putting Aberystwyth as my first choice. That incident revealed that the pupils were being used for the school's reputation, meaning Sulwyn Lewis personally. It was thought that Cambridge was a centre of learning superior to anything in Wales. Some of the worst people I have ever met came from Cambridge University. I was outraged at the conduct of Mr Lewis, and after leaving the school in 1968, saw him on only one more occasion, at a "reunion" about Christmas 1968 back from my first term at Aberystwyth and its Christmas examinations. It was a mistake to go back to the school because it had become small and small minded, and there was the "what are you doing here?" attitude that I encountered a few times in later life. The school has been vandalized and was partly burnt down in 2007, and I think that the Assembly Hall has no roof left. I don't look upon this with regret, but as a phenomenon of human nature that is bound to happen when people trust in government.

For the Unheard

Trust was a brilliant child, a model for Posterity; of these who cares that trust

Is told so frequently to go to hell
By these fat and fiddling politicians?
These fools can bear no offspring, never will,
Untouchable and safe behind the scenes
Their silent poison coils around trust's world,
A child-like learning and integrity.
Hear the master of our worldly disguise,
Hypocrisy in lurid modern guise,
The bloated corpse that babbles on the screen
Will always be lying and contriving
To perpetuate the all-embracing see,
Rotting in its bland anonymity.

The year 1962, however, ended in a triumph because I was top of the class, and held that number one for the next eight terms, culminating in a School Prize for the best O levels jointly with Huw Thomas of Speit. Whether Huw Thomas really deserved a share of this prize is debatable, as it was probably given to him because his father was a headmaster and friend of Sulwyn Lewis in the nearest masonic lodge or its school teacher equivalent. It was reluctantly forced upon the school to award a prize to a woad- covered and strange owleyed savage from Craig Cefn Parc, whose father had drawn Mr Lewis over the steam coals like Oliver Cromwell. My father was innocent enough to believe that a number one for nine terms running should lead to a School Prize outright, and so it should have. The actual prize itself consisted of nothing at all as far as I can remember, or maybe a quid divided between Huw and myself, but it did come with a Prefect's Badge that I didn't want. I am very pleased that that number one made my parents happy in 1962 and there was no longer a danger of being acidified as an abysmal failure for being second or third. It seemed as if I was a genius after all, as they had been told by someone unknown. I don't know what the word means, it just comes from the Latin word for being alive, or having been born. My father carried the school report around his friends in the village, to their bemused surprise. None knew what a grammar school was, what physics was, what geometry was, and so on. They still don't today. Even the teachers today don't know. My father's contentment lasted all of five minutes, until something went wrong on the farm, a cow got loose, or the van wouldn't start. Then it was wiser to keep out of his way or get back to being a labourer again. I tried to find those reports recently, but was told that all the records of Pontardawe Grammar School had been "lost". Whether this is true or not I don't know, but in my case this autobiography has at least some of the facts. How can a system lose an entire school that is always described as being "distinguished"? The answer is that the system does not care what it says because it is a system devised by politicians. The prowess of someone like my ancestral cousin Owain Glyndw^r lasts longer than a grammar school. How can politicians let this school be burnt to the ground? Probably because they have no O levels themselves. The worthlessness of corrupt society manifests itself in these ways. Something that is worthless does not last, and so the politicians do not last. What does last is goodness, sincerity and learning, qualities in pupil and teacher alike.

My father Edward Ivor was becoming more difficult to deal with in 1962, probably because the Nixon drift with its even Craigola seam of steam coal had been shut down around that time in the Coal Board's infinite wisdom. So the village of Craig Cefn Parc was destroyed- all that the coal miners had built up was demolished by a bored bureaucrat in some office somewhere, thugs dressed up in jargon. The colliers at Nixon and Hendy had to transfer to Lliw Colliery, a pit which went vertically under the Llwchwr estuary in a coalfield full of fire damp. Abernant colliery near Cwm Gors was a similar pit of dangerous methane, with regular fatalities. In a coal mining community a regular fatality is normal, so it is more dangerous than the army. The only more dangerous industry in those days was deep sea fishing. I think that he had been promoted to overman, or underground manager, and was finding the increased responsibility a burden. It was certainly more anonymous in Lliw Colliery, to which the colliers had to travel by bus and back again through the dreary streets of Gorseinon. They walked down to the surface of the drifts of Nixon and Hendy, then were lowered into the drift in a chain of about twenty- five drams. At the end of the day they walked back up again in helmets, covered completely with coal dust, so they were black from head to foot. Nearly every collier who worked in the drifts would be killed by that work, either through dust or accident. Everyone knew of an accident when it occurred- once a collier was killed who was living directly across the road from here. I heard from the talk that that was a falling stone. This worsening of my father's character manifested itself in ways that I prefer to forget; for example, I was castigated severely as a 12 year old for failing to raise a heavy log of wood off the ground- it could have been a complete sprag (pit prop) or a railway timber. If so it would have been too heavy for a full grown man of usual strength, as he well knew. I was told that I was a useless weakling, and in a way

that sticks in the mind. Clearly he had been angered by someone or something and like a corporal worked it off on a soldier. To resist that biting sarcasm I must have had an inner strength that was not visible on the surface. On many occasions thereafter, I got this type of stuff from academics, or degenerate and completely corrupt academics who have become cyberstalkers, but it just bounces off. So I developed a technique of avoiding his presence as much as I could. Sometimes the older character would return. As the dust accumulated in his lungs it seemed to have had this effect on him. He distrusted the grammar school— what would it turn me into? Would he have any help on the farm?

My notebooks became more and more of a magnet to me, because there was no future now on the smallholding. My father's condition would only get worse and the sallowness caused by dust is evident in a photograph I took of him when I graduated in 1971 and did the hay- turning for him entirely. Perhaps this is why Pant y Bedw was so suddenly sold. I was not told of it until my parents were already established in a very poor house in Clydach, 91 Lone Road. They could not have chosen a worse locality and the move was entirely irrational. Of that time in 1962, a triumph at school would always be counterbalanced by some log- moving incident at home. The pressures on me must have been tremendous, especially as my father's character got unstable to the point where he would suddenly put up a "for sale" notice painted on a piece of wood. It never seemed to occur to him that that would ruin all my efforts at Pontardawe. At that point, it became clear that I would have to leave home in a careful and controlled way and also do very well at Pontardawe to earn a university place and a tiny grant. That is the only reason why I went to Aberystwyth. I had been there before and it was nicer than Cardiff, a repelling mess of buildings and rain- soaked stone and brick that stretched infinitely from nowhere to nowhere. I think that I had only been there once, on the way to Bristol in a train, and that was enough for me. Aberystwyth on the other hand was a holiday town. Bristol consisted of the zoo and Clifton suspension bridge, then we were travelling home again through greyness and fog, through the Severn tunnel.

My only other experience of the outside world prior to 1962 was a trip to Letterston in Pembroke to see relatives, and a side trip to St. David's Cathedral with its effigy of Prince Rhys ap Gruffudd whose coat of arms I now bear as main element. There had also been a trip to Newtown and one or two to the Royal Welsh Agricultural Show, all in that battered van. So to my 12- year old mind reeling from that sarcasm Aberystwyth was the only place to go. Swansea was out of the question because I disliked it so intensely. The battered

and blackened campus at Swansea depresses me completely whenever I see it. I always think to myself, "is this what has become of the land of Gruffudd, Arglwydd Gw^yr?" It was inconceivable not to live in Pant y Bedw, but at the same time an awakening reality meant that I had to get myself to Aberystwyth some day in five or six years' time. During the summer holidays between the second and third years at Pontardawe there was a respite of seven weeks. This was used up in cycling and walking, gradually extending the range of adventure until from a photograph I know that Ellis and I reached a summit of Mynydd y Gwair above the laboratory of Grindell Matthews. I had seen the strange looking and out of place building many times from the back of the van as we drove back over Mynydd y Gwair- it looked and looks like a random prefab, a piece of litter, but it was built in about 1934 when Grindell Matthews was bankrupt. He must have been given a lot of money to build it. It suddenly appeared behind a shoulder of Mynydd y Gwair as I walked away and slightly downhill from the triangulation stone amid a scene of amazing beauty, Mynydd y Gwair in summer. The grey ugly prefab lurked behind a small field, and it looked as if it was deserted like a solitary ghost. I stayed outside the fence and had a cautious look at it, expecting to be death rayed, then retreated to the safety of Craig Cefn Parc down the high ridge of Mynydd y Gwair above Glyn Eithrym.

Much later in 1985 or 1986, I wrote to Professor R. V. Jones to ask about this mysterious man. I was then the University of Wales Pilcher Senior Fellow at Swansea, in some cardboard box office of the physics department and R. V. Jones was emeritus professor of physics at Aberdeen. He had been at the same College as Grindell Matthews in Bristol and was sometime director of intelligence, joint chiefs of staff, and wrote back to say that he thought that Grindell Matthews was a crank or eccentric. Most source documents, however, attribute important inventions to Grindell Matthews, but all these were completed before he arrived at his prefab called "Tor Glawdd". This name denotes two visible boundary lines of the mediaeval Arglwydd Gwy^r, (Lord of Gower), my ancestral cousin as is now known from the very accurate genealogy that opens this autobiography. The "laboratory" was surrounded by an electrified fence and had power lines which are still there. For some reason, Grindell Matthews was given enough money in 1934 to build an airstrip near the "laboratory" and to keep a plane. There are two books about him: "The Death Ray Man" and "The Secret Life of Harry Grindell Matthews". He died of a heart attack in 1941 without ever having built a "death ray". I know now that he could not have done so without the

laser or adequate power supply, cavity magnetrons and similar. Gari Owen and I were shown the lab's interior in about 2004 and there was nothing remarkable. I suspect that Grindell Matthews did nothing of significance in it. He was not a crank, and could invent good apparatus, but in his Tor Glawdd years was a kind of con man of the type that proliferates on the net these days. Nearby there happen to be some anti- glider ditches to stop any attempted capture of the port of Swansea by paratroops. The "laboratory" was used in about 1943 and 1944 by the U S 2nd Infantry Division for training prior to the Normandy landings, and there are remains of that era still there on the plateau of Mynydd y Gwair behind the laboratory. Senior officers were housed in the prefab, others in tents.

My mother walked up to the lab in the thirties, with her friend Meirwen Harris, to try to sell some items for charity, but ran into an irritable and hostile man who knew no Welsh and should not have been there because he was deceiving people for no purpose. The stories about death rays are fabrications. The one true thing about him is that he used a searchlight or some similar device to reflect a message off low cloud asking for groceries or other items from hired help. This is a crankish, deceptive trait, especially as Swansea was being bombed heavily and the Mond Nickel Works was surrounded by antiaircraft guns and searchlights, coal miners working double shifts as Bevin boys. My father was one of those, and also a member of the civil defence known as the Home Guard. I imagine he had his own helmet and bicycle, and a broomstick as a weapon. Due to political corruption and apathy in the thirties, Britain was totally unprepared for the ruthless little corporal and was saved by ordinary soldiers and miners, factory workers, good luck, and the United States, of which I am now a citizen. The heroes of that era are from the working classes, and they voted in the Labour Government of 1945 and the N.H.S. That is why I am writing this autobiography now. Some bombs fell near the village of Craig Cefn Parc, missing the nickel works by a long way, and the docks areas of Swansea were very heavily damaged. I clearly remember the rubble and ruined houses in the mid- and late- fifties, and the numerous prefabs, or prefabricated houses, for the bombed out. So when I first saw the lab when I was 5 or 6 I thought it was a prefab. My grandfather hosted four soldiers of the U S 2nd Infantry Division here in this house, and according to family stories, all were killed. I have no way of verifying this but that division landed at Omaha Beach on 7th June 1944 in the second wave. The first wave was massacred due to non-existent planning and preparation, but still took the beachhead as is very well known. The 2nd Infantry Division fought its way across Normandy and took heavy casualties there and in the Ardennes Offensive under Patton.

In the summer of 1962 though, the lab was just an adventure for a 12-year old getting his first sight of the magically beautiful plateau of Mynydd y Gwair, now threatened by Nazi thugs of a different kind, wind turbine developers, against whom I have fought fiercely for fifteen years. I know now of a Stone Age or Bronze Age circle nearby, and of many mysterious and precious archaeological sites which have been there for many a thousand years. I am still fighting now against bikers, arsonists and vandals who would have been very frightened to go to Normandy. This shows that a long era of peace brings with it the inevitable violence and internal degradation caused by human nature, the fact that the human being is a hunter gatherer that attacks its own species. The species is probably a transient mistake of evolution, and empires fall for this reason.

CHAPTER 6

From photographs of that era it is possible to reconstruct the smallholding of Pant y Bedw with its two small fields of rough grass bordered by hedges with barbed wire tacked on to the trees and almost hidden by the leaves. Rough sheets of rusting corrugated metal would be used to stop other gaps. The cows and calves always got through whatever was done, and I was sent out to get them whatever the weather. One field sloped down towards the houses of Mountain Road, which in one photograph appear in the mist with no cars on a dirt road. "Pant y Bedw" means "Birch Hollow", and the earliest photographs I have of it are taken with a simple camera. One shows the field sloping down towards the hedge that separated it from the house in which my friend Huw Griffiths lived, and across this field on the horizon stood the giant ridge of Mynydd y Gwair, free of pylons and gas pipelines. In that photo there is no sign of a TV antenna, and there are strands of hay after the harvest. Another photo is of the upper field in winter, with trees bare of leaves, looking over into land owned by Pant y Baban and down onto Mountain Road. This field slopes up toward Gelliwastad. There were birch, oak and ash trees on the hedges. The house was built side by side with a garden which was surrounded on two sides by hedges, on one side by the coal shed and pig sty, and on the fourth side by a breeze block wall which aged into dark ugliness. It may have originated on the rubbish tip. Across this wall and a path was the whitewashed stone wall of the lower field with a dark background made up of a shoulder of Gellionnen with March Hywel in the distance. A little wooden gate was used to enter the garden. The coal shed was so roughly built that it was a Stone Age dwelling that must have been the original cowshed of the house. Around 1963, I can be seen hanging onto the wooden structure of the hayshed in a rough shirt and very dusty work trousers. These were the clothes in which I felt fine

after a series of mind emptying examinations or on holiday from school. In the background of that photograph is the loose hay of the shed, filled almost to the roof. Beams of dusty light cascade inwards through holes in the rough corrugated zinc sheeting. I am grinning at the camera and the photographer must have been Ellis or one of my friends. I am small for my age with darkbrown straight hair. The hayshed was just a frame with corrugated metal sides nailed on to it and the hay was a place for reflection on many a day, peering into the future. Now I am peering back again after fifty years. These small square photographs of that time are in black and white, some barely in focus, one of me leaping off the top of the coal shed into the earth of the garden.

Yr Adfail

Mud yw llechi'r to^ a'r mur; - y graig hon, Y gragen hen o'th lafur. Haf dy bi^n, yr hafod bur, Y blodyn dan y bladur.

The garden grew vegetables for extra food, and my father was a good gardener: potatoes, onions, carrots, and other vegetables, and bamboo sticks tied with green twine for peas and runner beans. One photograph shows the sticks patterned against the sunset, a try at composition. In the background of these photographs appear Mynydd y Gwair , Baran and Gellionnen in their pristine beauty, as they were 10,000 years ago after the ice retreated and carved out Glyn Eithrym. There are no pylons of tremendous ugliness built on the horizon, no terrible incisions of monster gas pipelines driven through Wales by unknown government, there is no open cast mining site. The photographs of the winter of 1962 to 1963 can be dated to that time very accurately. A few of them appear in the photography section of www.aias.us . They show the lower field deep in snow drifting up towards the hedges, the field transformed into an Antarctic adventure that I was fond of reading at the time. The hedges on a farm near Nant y Milwr are much smaller, well- kept with the cryman (the scythe) and the plateau of Gelliwastad has no trees on it – it was carefully used for grass by farmers who were all Welsh speaking and who helped each other, the last flickering of 6,000 years of life and language. The farmers of 2011 do not help each other, are kept going only by subsidies, and do not speak Welsh with the exception of those of my age and are greedy for wind turbine money,

pieces of silver. They are permanently on the dole, meaning that they are doled out money to survive. At Pant y Bedw we received no dole and never asked for it. There is one photograph of the smallholding of Pant y Bedw under deep snow, with a white roof and hayshed painted with thick frost. I can almost see my footprints in the vanished snow.

There has, therefore, been a great degradation of the community of Mawr brought about by a local government that at times seems intent on destroying it while theoretically standing up for the language on sign posts and incomprehensible bureaucratese, a kind of machine code substitute for Welsh. That is not the living language of my youth and is not any living language. There are a few strong- minded families that keep the language, and there is a will to see it survive, but government will not do this, it must be the will of every individual. The way in which this degradation is brought about is by indiscriminate selling of houses in Welsh speaking areas and by forced development that further damages the Welsh language. When I was 12 or 13, in 1962 to 1964, with exams safely over, I used to play rough football with my village friends on a small patch of Coal Board land called Cae Bach. When the Coal Board started scraping around for money in 1995 I bought Cae Bach from its agents. I received a letter from the agents stating clearly that the land was mine. My intention was to let it remain, with its precious ecology and peacefulness. Within days I received another letter to the effect that the land had been "sold" again, this time to a building firm. This kind of duplicity is known as "gazumping" and may now be illegal. On the first day of 1996 the developers (thugs on machinery) tore up the ecology among frenzied anger and bellowing from people all around. The county councillor did nothing. The community councillors did nothing. Cae Bach is now covered by tiny ticky- tacky houses all bought by people who speak not a word of Welsh. So it has been suburbanized into anonymity. House prices are wildy inflated and the community is destroyed as surely as if it had been napalmed. Craig Cefn Parc is plastered by petrol-guzzling cars bought on hock that litter and narrow the already difficult mountain roads. The local government is not able to light the streets, collect rubbish or keep roads from freezing to glass in winter. Sic transit gloria mundis, this is surely a transient opulence that is already in decay. It has been rumoured for centuries in Wales that planning permission is bought by kickbacks found under pub counters on Thursday nights in brown envelopes. To protect the language all this corruption must stop, or there will remain only corruption, the dust of glory. After being gazumped I was just told the builder had an "agent" in the local county council offices. Who could this have been I

wonder? Such spiritless greed is unimaginable to any decent mind. Y Gaeaf Hir

Duedd cul y dydd called – heb ei haul Heb ei hwyl, gwres deled! Gwres ar lwyn a gras ar led, Yfa fedd, haf a fydded!

In many of these photographs appears a sheep dog called Jo who was my constant companion throughout my youth. He came from Glyn y Bedd and was given to my father because he was too wild and stubborn to work for any shepherd. He had a genealogy that is as old as Glyn Eithrym- modern research has shown that the sheepdog in Britain has been with mankind for at least 9,000 years. He was originally a wolf with sharp ears, and the human gatherer was a rival hunter. It may have been that the wolf was thrown some meat, or came across the remains of a meal. It started to follow the hunter gatherer, who in turn gave the wolf some more meat out of affection or to keep him away. The hunter gather became a farmer, and the wolf became settled too, as it saw the gatherer as the greater hunter. The farmer noticed how the dog could paralyse sheep by the look of a yellow eye, and the sheep dog started to work for the farmer. It still does so at sheep trials or on the farm, one or two at a time, a delicate contract with the shepherd and with the sheep. The dog must control the sheep but never bite them, because then he tastes the blood of his ancient ancestors, and is finished and useless. The farmer must control the dog without making him feel resentful. The dog is more able than the man in many ways, stamina, speed, smell and hearing. The man has better eyesight and the greater intelligence and organization, or so we think. If we really were intelligent, we would not be at the edge of extinction.

In the early square- shaped photographs the dog is young with very bright eyes, sitting or lying in a field, with a white front, two white front feet, a white collar and tip of his tail. The rest was coal black with two piercing shining eyes, and one ear that fell over, always intently listening with knife- sharp eyes. As time went by he appears throughout the years in many photographs, as a black and white object among red ferns in autumn, among heather on Mynydd y Gwair, leaping over a fence, statuesque against the background outside this house, barking in the snow, asleep on the thin mat near a steam coal fire, in the back of a car that had replaced the van in the mid- sixties and

barking in the middle of the stream that comes down from Mynydd y Gwair to the artificial lake known as the Upper Lliw Reservoir, and in old age with my widowed grandmother. The best photographs of him are on the www.aias. us site. In one of them he appears against the golden backdrop of Mynydd y Gwair and high clouds against a light blue sky that is now timeless, with very intelligent eyes staring at something in the distance out of human hearing. I think that this photograph captures him at his best and in his prime. Time allows such moments to last only very briefly and transiently, and the second photograph shows that time was asking for its money, the price of life is death. The muzzle is greyer and the eyes dimmer, but the great wolf turned dog lies content on the ancient grass of Gelliwastad. In his young age he would race wildly over and around Gelliwastad to the call of "dal e" which means "catch him". He would cross the field, jump the hedge, run up the steep path and out onto the mountain itself, almost disappearing from sight while we hunter gatherers turned farmers remained static. Exactly the same call appears 1,500 years ago in the earliest extant literature of the Cymric language, "Pais Dinogad" - "dal e', dal e', dwg dwg" - "catch him, catch him, go, go". That poem was written near Dun Edin, now called Edinburgh. For 4,500 years before that, this hunter's call echoed around all Britain and the wolf turned dog would race after the prey. I left for Aberystwyth in 1968 and the dog was hopelessly unhappy, he did not know why this had to be, and I only half knew. When I returned after another bout of examinations in December 1968 he went wild, and unreservedly showed his great happiness. As he got older he struggled more and more to keep up with me as I ran around Gelliwastad; only a few years before he would have left me standing to that hunter's command. When I returned from Aberystwyth one term he was gone, there was only an euphemism, he had been "destroyed" due to an old age of more than 20 years. Youth died with him.

In the summer of 1963, my grandfather Thomas Elim Havard-Jones began to shake himself free of what the world had done to him. He was in hospital at Clydach Cottage Hospital when he was shown my term report for the summer term of the second year in about July 1963, showing that I was top of the class, and I was told that tears were running down his face, a tremendously shocking utterance that I still have in my mind now, because he was the stern and all powerful head deacon in his own seat above the congregation, the composer, leader and brass band conductor and master of his own house here where I am writing in September 2011. This was the man who had told me suddenly one day, and strangely enough in English: "never give up". Here was

the formidable Norman knight of 1,000 years ago. He was suffering from multiple ailments and this was due to the killing field of coal, cold and wet climate, no penicillin, and lifelong poverty. To the world outside this was just another coal miner and they all go that way don't they? I remember that quite often he would not recognize those around him, his mind was suffering from some defect, maybe due to chronic lack of oxygen, and he would just stare past us with very intense eyes that saw nothing. Then my grandmother would turn wild- eyed herself with horror. All through that summer my mother was here at her parents' house more and more often. One morning I had forgotten to light the fire at Pant y Bedw, or could not get it going, and she became uncontrollably angry and very bitter as she came back from her parents, so something was very, very wrong, she was under great stress and the reason was ineluctably clear. Twm Elim always had a "presence" that made him stand out, and one of the last photographs of him is amid sixty or seventy coal miners on an outing, looking more like a minister than a miner in broad hat, tie, starched collar and raincoat standing in the middle of the row just under the top row of miners. All were more learned than professors, more pious than bishops by far. His last sermon as lay preacher at Elim was delivered with agonizing effort, because he could hardly breathe, and he was tightly grasping the lectern with its Henry Morgan Bible in the towering Welsh language. The pious Cen Williams did all he could to help, so did the Reverend T. R. Lewis and the G. P., but we all knew that soon he would be free of the misery of the coal mines, the toll inflicted by capitalism and the need for survival of the very distant. The need to support a greedy existence with the lives of others, the exigency of the machine in the words of R. S. Thomas, the hunter gatherer that attacks its own species.

Y FILLTIR SCWA^R (Er co^f am Thomas Elim Jones)

Mae'r haul ar Fynydd y Gwair, Miloedd o leiniau disglair, Mi a gymeraf wres i'w wydd, Gwau ef bridd yn frethyn aur.

Edafedd dyfroedd afon, Fflach o fywyd bythol hon, Ennyd y dydd, dwr ei oriawr Deil y wawr yn nhardd ei don.

My a glywaf Blant yr Haf Yn chwerthin yn ei gaeaf, Dilladach llwyd eu tlodi mawr A dry y nawr yn harddaf.

Llachar, hir, ar hyd y bryn A welaf ddydd yn ennyn, Yr hen fro hon yn fam ei byd A'i chwm ei chrud cyntefin.

Dros fy wyneb mae fy llen, Arch y garreg oer uwchben, Fy ngharchar unig oedd i mi Yn nhywyllwch ei thalcen.

Caeth i'r glo nid ydwyf nawr, Ond glasder nenfrwd enfawr A ry i'm eto olau ddydd, Aer y mynydd, per ei sawr.

Mi a grwydraf yn fy haf, Yng ngwresni'r brethyn harddaf, Yr ysbryd cyntaf eto'n rydd, A'r pridd euraidd amdanaf.

I had to get ready for the return to Pontardawe Grammar School in early September 1963, back to the middle class world and its pretentions. From my arithmetic notebook I can see that the last problems in Form IIL were set on 20^{th} June 1963, just before the term examinations. The first was to calculate 4% of £1200 . I got the answer wrong at £720 , but the teacher marked it right. The answer is £72 . I just noticed that error after nearly fifty years, it was June and the teacher was probably bored and overheated. Problems like this were not any advance on what I was doing at an early standard of the primary school in Craig Cefn Parc, about six years previously. So in arithmetic progress seems to be slow from this distance of half a century. In algebra and geometry

a quantum leap had to be made because these were not on the primary school syllabus. Turning over the page of my notebook I can see that the next problem is on 2nd October 1963, in Form IIIL, working out proportions. The usual ten out of ten is marked in the margin, and nearly all marks from then on are ten out of ten as I kept the top position in the class up to O level examinations in June or July 1966. I received commensurate marks in all other subjects except for art practical. In art history I did as well as the other subjects. Between 20th June and 2nd October, my grandfather died in Clydach Cottage Hospital on 26th September. That was a brutal blow but as usual these blows in life did not affect the academic side of my mind.

After the news reached us my immediate thought was for my grandmother, who had been married to him for over forty years. Their wedding photograph is on www.aias.us, a sincere looking young couple who were married in the registry office because Elim at that time did not have a licence. I remember that when I came home from school both my grandmother and mother began to take out photographs of him and put them on the table in the room in which I am writing now. He had become these several images, from a young man to head deacon. He is still immediately remembered by the older generation in the village now and I have donated his red music notebooks to the National Library of Wales. These are ruled by his own hand and the four- part harmony is composed in do re mi, not A, B, C notation. The greatest test of my barely 13- year old character was when they brought him back from the post mortem in a coffin made of light coloured wood. That tore my grandmother apart and she held on to my hand very tightly for a long, long time, shaking and weeping. She never recovered and the later photographs show a deep sadness and loneliness that lasted only a few more years until she too was gone. She had had to look after him for so many years that the price paid for life was far too much to bear. As was the tradition in those years the coffin was placed in the best room for two or three days before burial at Elim. Cen and I paid our final respects to him in that room, along with others of the village. The funeral was presided over by Reverend T. R. Lewis who gave his usual eloquent, very sincere, deeply pious sermon and service. I have a bitter memory of that funeral because someone was laughing and joking in the graveyard. Perhaps this is the best thing to do with death, laugh at it. I did not feel like that at the time. No one at the grammar school knew of the bereavement because they were so distant and foreign to me that I uttered not a word. Only Huw Griffiths of Craig Cefn Parc knew what had happened.

As soon as my grandfather was buried I buried myself in my work, and the

marks of the notebooks show that I had become an exam- passing machine, developing real learning in mathematics that I still use today. The discipline of that era, when I could work seventeen or eighteen hours a day as a 13 year old, remains with me now. I don't work half as hard now as I did then, and don't learn half as much as I should be doing. On 7th November 1963, the notebook shows a new title: "Percentage", the tens out of ten marching like soldiers down the margin of the page except for one eight out of nine. The last entry for "percentage" is on 21st November.

At 12.30 p.m. eastern standard time on Friday 22nd November, the US President John F. Kennedy was shot in Dallas, Texas. That would be 5.30 p.m. in Pant y Bedw, when the news came through on the flickering TV screen. It was a dull day and I remember that my mother and I were present in the room. Being a Friday it was the end of the school week and my mother was still deeply affected by the death of her father less than a month previously. I remember that she was home from work and preparing food, a pie contained in a tin can that had to be heated in an oven. She forgot to open the cover with a can opener and the tin exploded, a fateful miserable day indeed. She was working at Lewis Lewis as a draper's assistant and sometimes would bring back for me from Swansea a book or some plastic construction set of a plane or ship. I liked all kinds of books which unlike the school syllabus books, were of real interest. There was a book of Second World War aircraft types that I remember now: Supermarine Spitfire, Hawker Hurricane, Avro Lancaster, Hanley Page Halifax, de Haviland Mosquito, Fairey Swordfish and less famous types such as the Bolton Paul Defiant night fighter. All can be googled up now instantly. Many of these models would take shape on the table, along with warships such as the Hood, and they were sold in shops in Swansea. I did not think of what war really meant, although its marks were all around me in bombed out houses and bomb craters. In the war Fairwood Common in Swansea was a base for Lancaster bombers. I grew fond of Conan Doyle's Sherlock Holmes stories, read Dickens, Tolstoy in translation, and the usual Daniel Defoe and similar. My taste for poetry and classical music had not yet developed except for poetry and folk poetry and hymns in Welsh. My mother at that time had begun to understand what the grammar school meant, and became supportive and helpful, so we understood each other or so I thought until Pant y Bedw was so suddenly sold after this house was so suddenly sold. I then realized my insignificance and made my own way in the world. My father treated the school and all the middle class world with deep suspicion, and he may have been right. He was descended from Princes after all, and of royal blood.

My first reaction to Kennedy's murder was dulled by years of looking at violence on the TV It seemed natural to US society where people are allowed to carry guns, and Kennedy did not mean much to me compared with my grandfather or the drive to pass examinations. It was difficult to distinguish between films full of violence and real life violence. I had a negative instinct for politicians, and although murder is a capital crime, politicians often murder by dint of power. They call it war, and now they can get away with it without Congress. So much for the constitution if the US does nothing about this trend to kingship. On 25th July and 5th August 1963, two nuclear test ban treaties were signed. These are two of Kennedy's achievements in which he was helped by my distant cousin Lord Harlech, a descendant of Prince Llewelyn ap Gruffudd, my ancestral cousin. In that year on 17th May, there was a massive nuclear test in the Nevada desert. It reminded a 12 year old that he may never make it to 13 on 26th May 1963. Cymdeithas yr Iaith carried out its first demonstration in Aberystwyth early in 1963, and on 8th August occurred the Great Train Robbery. On 7th June, the Rolling Stones made their first TV appearance, pure blues. I was vaguely interested in the Stones, and in few other groups and songs of that sixties era, the best era in popular music of the second half of the twentieth century. One day after the Kennedy murder "Dr Who" began on TV on Saturday afternoons after the sport. I used to watch that a bit with my father when he was in his good humour.

At the start of Form IIIL, the subject range narrowed further with the intent of concentrating on strengths. Mine seemed at that time to be mathematics and science. The arithmetic notebook of late 1963 and early 1964 is one of those that has been archived for conservation on www.aias.us and at the National Library of Wales and British Library on the British web archive www. webarchive.org.uk and shows that ten out of ten had become a routine, with neat handwriting in blue fountain pen ink. On 6th February 1964, I began to mark the months with the Latin II, which may have shown the influence of Latin declension. On this date the concept of pi enters the homework as the area of a circle, followed on 13th February with a simple pulley problem. Arithmetic was an easy comforting routine compared with physics, in which formulae had to be translated into the workings of nature. The way in which that was done could not be taught, it had to be imagined. The environment in which physics practical was taught did not help, as it was a dark stone-clad room full of pulleys and weird contrivances set out on benches with tap water and hard stools on which to sit. It was situated above the woodwork room. It could have been an environment of the eighteenth century, and indeed

the early years of physics at Pontardawe Grammar School were years of the seventeenth and eighteenth centuries, dominated by Newton, Hooke, Boyle and Charles. Physics theory was taught in a classroom, and one of the teachers was John Morgan, also the P. T. and rugby teacher. He also took geometry. I remember this because I was marked 100% by John Morgan in two of the term examinations, physics and geometry. Other marks for all subjects were regularly in the nineties, for mathematics often approaching the 100% mark. These marks were delivered after the term examinations by each teacher, who brought in a pile of papers placed in order on the teacher's desk. Mine was almost always on top almost in all subjects. This became my pride and joy, an inner pride and joy because of the danger of adolescent envy. As soon as the relative innocence of childhood was lost in that applause of 12 and 13 year olds at the end of Form IIL the ugliness of envy and adolescence set in. So I just said it was a bit of luck or a bit of a laugh, not half as good as rugby. That kind of bitterly envious human failing became evident at post-doctoral level, when I set a world record for the number of post- doctorals won in open competition, but my career was blocked endlessly by lesser talent. In retrospect this is clear, it is the verdict of history, which cares nothing about career, only about thought and its permanent impact. Career is the negation of scholarship.

> Y Golau wedi'r Glaw Y glaw mawr ar arogl mawn – yn tasgu Ar hoen tesog brynhawn. Daw aur o liwiau orlawn O ddw^r oer gwlyb ei ddawn.

To get these marks needed a source of self- discipline and withdrawal from the world. This was instinctive and not taught, the marks were their own reward. Later, a top first, an open competition post- doctoral, the Doctor in Scientia, a Meldola Medal or a Civil List Pension were their own rewards. They had to be won fairly and in open competition untainted by corruption. It is so easy for human society to fall into corruption. So these early examination marks amounted to an escape from evil, or an escape from the indisciplined violence of the rugby culture and from the brutal violence of a nuclear test. As time went on in the grammar school this rugby thing became very tedious, thugs who assaulted someone like Olive Williams were glorified by this game.

These same thugs sat through examinations with arms defiantly folded, and would thieve Latin declension. They would arrive at the school later in the morning than the Craig Cefn Parc contingent, and after we had already been at work moving those endless chairs. I suppose that Craig Cefn Parc was considered to be a minor outpost with children of disposable coal miners. These could be used naturally as labourers and could never be expected to be scholars of the middle classes. I remember the thugs and thieves arriving in the lobby of the top school building and demanding my Latin homework book with threats. In frenzied failure they copied all they could amid benches and puddles of rainwater, steaming overcoats and hooks. The overcoats all looked the same because they were part of the uniform. Thugs are often dressed up in uniform. As far as I know these have all disappeared completely from history. They had no self- discipline at all, and soon took to drink, boasting about how many pints of toxic ethanol they could consume without vomiting. They could not face the world without drugging themselves into insane stupidity.

The other poisonous sub- culture of the grammar school was tobacco, the worst thing that ever came out of America. Teachers would be smoking regularly in their common room, which had a small coal fire and was just a small room in the top building of three on the slope of Cwm Tawe. I did not enter this room on a single occasion in all my seven years at the school. The classrooms were heated with radiators but only for the Christmas and Easter terms. They were switched off for the Summer term, which could often be freezing cold, but the teachers had their coal fire and smoked pipes and cigarettes. The pupils were not allowed to smoke, but as the addictive effect of tobacco took hold on their 11 or 12-- year old lungs they would cower in some dark corner of the school or under some tree or bush, fuming away. They had supplies of mints to cover up the acrid, dank and repulsive smell of burnt tobacco as they tried to breathe it out of their system. It must have accumulated and its after effects are printed now on every fag packet. The rugby players would often be drug addicts at an early age: tobacco and ethanol addicts. I should think that conditions in contemporary "schools" are indescribably worse, drugs being present and teachers not allowed to impose corporal punishment or to be nasty to the angelic knifers. Government or no government is responsible for this decline and this is why Pontardawe Grammar School has been destroyed and partially burnt. Society has fallen into drugged and stupefied decay, and is by now bankrupt. Only the scholar has survived the test of history.

I have never smoked in my life and instinctively kept away from the drug culture of the school. I was withdrawn completely from the indiscipline of my contemporaries and from the habit of kicking a ball around on grass or between and over some sticks stuck in the ground. The ball would not even bounce right because it was originally a pig's bladder meant to be thrown or ripped apart, or whatever was the mediaeval habit. This game called rugby originated in violent clashes between villages over the border in England. As they flooded into our peaceful and beautiful valleys here looking for work, they brought this game with them, and obliterated the valleys with lethal coal tips. Our classic language was destroyed and replaced by some indescribably ugly patois. By now rugby is a money- making machine, and so boring. Recently we threw away our TV set. We ourselves mistake the pig's bladder for Wales, as do all tourists. Wales does not exist, it is the original Britain, a 6,000-- year old literature. In Form 3L or IIIL, my self- discipline had to be stronger than at any time later in my life. The purpose of a school is learning, not the contemplation of a pig's bladder. We had pigs at home already. At this distance, and writing this autobiography, I have come to realize how much I despise the lack of discipline of the world, its inability to study Latin, its inability to be peaceful and content. Society is ingenious at getting down to its lowest common denominator, which is a grunting pig. Here I am being unfair to the pig, which is probably wiser than a man. It is a pity that such a wise companion lands up in Tesco as a chopped up recluse encased with vacuumed plastic. This ridiculous world of imposed rugby continued right up to the time when I left school in July 1968. I excelled at the game of touch rugby in the yard between the middle and upper schools, the yard in which I appear as a tiny face in a school photograph which is extant on the internet. In that photograph I recognize only one or two of my friends for whom I had real respect. The rest have been blanked out of my mind for theft and common assault. Touch rugby was played with a folded school cap on a concrete yard, and I was as brilliant at that game as any Barry John, because of the cat-like reflexes of a goal keeper and apprentice shepherd on the wild mountainside of March Hywel. Later, I used these reflexes in dealing with cyberstalkers. Touch rugby is a far better game than rugby because it is faster, more exciting, harmless, and athletic. Players are not allowed to use violence as a substitute for sport, violence that would put them in prison anywhere else in a civilized or decent society. I could bring a thug crashing very hard to the ground in a real rugby tackle, and the thug would not try it again. In dealing with declension thieves I thought that guile was better than wrestling or reporting them to teachers as I should have done. I was outnumbered three or four to one, and no one would help me in a fight. I found out that no one would help me in a

fight at post- doctoral level and later in life. They went through their careers in a smug world, and were lost to history.

Natur Ddyn

Dirwyn graeth ar darian gron, - ei aradr Ar draws blaned ddirion, Ei raen hyll ar y nen hon, Yn y gwys nid yw'n gyson.

On 22nd February 1964, my notebook in arithmetic begins to deal more and more with the mysteries of pi, with circles and cylinders, but not with spheres, because integration is not yet present. There are red ticks in the margin as every problem is correctly worked out, and I can find only one mistake in the entire year of 1964, when I accidentally wrote "surface area" for "height". Despite this error the discerning teacher awarded the usual ten out of ten. The word "height" is written in red by a teacher on 22nd April 1964, my father's birthday. Naturally I hid that mistake from him. That was the start of the Summer term of my third year at the school, and on the same page there is a long division of 4337.1400 by 1728, carried out in four stages. That shows that decimals had entered the scene by then. Problems dealing more with practical situations in life begin to enter the notebook, which had by then served me well for almost three years. There is a problem of water flowing down a circular pipe, and of the costs of constructing a traffic island. The infinitely mysterious pi was to be taken as three and one sevenths and on the next page appears the encircled number ten: ten out of ten in red ink. None of these marks were ever used in continuous assessment— the work load was greatly increased by examinations, upwards of nearly fifty examinations every year. One had to do just as well in the examinations, so my entire world was geared up to attacking them. By the time I reached undergraduate level at Aberystwyth, the continuous assessment system had arrived on the scene, but only for practical work. Even then there remained one final examination in practical organic chemistry at the end of the Spring term of 1971. Corrupt careerists such as Howard Purnell tried to destroy the entire education system in that they gave jobs in order to bolster their own careers, reducing the University of Wales to rubble. So I was forced to become a scholar.

On 14^{th} May 1964, compound interest enters into my notebook, an intrusion

from the capitalist world that had just killed my disposable grandfather. That kind of thing, or that kind of insolent remark, was not on the syllabus of the school however, so I had to learn compound interest. What is the compound interest on £390 at 3% for three years? How many full professors could do this problem now? The answer is £26 17 shillings and 10 pence. I suspect that I could have done this problem at Craig Cefn Parc Primary School in the Standard One or Two classes of Miss Jenkins. Since none of us had any money, the irrelevance of compound interest to a coal mining village was obvious, so it was never mentioned in Craig Cefn Parc. We earned our living the honest way. The familiar red tick appears in the margin, I had worked out the problem in neatly ruled columns with the same wooden ruler that sits in its box on my desktop now, surrounded by Cartan tetrads. The ruler is darkened by fifty years, and it sits in its rusted box having triumphantly produced many an item on my CV. The notebook for the Summer term of 1964, the last term of Form IIIL, records the appearance of logarithms. We had been handed out log books by the Welsh Joint Education Committee. It was a book crammed with numbers, a four decimal place log book which I carried back and forth between the school and Pant y Bedw in the satchel bursting with notebooks and textbooks, log book and the Oxford Set of Mathematical Instruments, a fountain pen clipped to its inside division between notebooks and textbooks, and tightly closed with leather straps. Being so solidly packed, it could be a very useful weapon against thugs who tried to haul me out of my bus seat. By that time I was getting too big to be a target.

The first problem is to use logarithms to evaluate the square of 21.65 multiplied by the cubed root of 34.7 divided by 52.2. The answer appears in a neat column now in the National Library of Wales and British Library. The logarithm of 21.65 is 1.3355; it is multiplied by 2 to give 2.6710. The logarithm of 34.7 is 1,5403; it is divided by 3 to give 0.5134, which is added to 2.6710 to give 3.1844. The logarithm of 52.2 is 1.7177; it is taken away from 3.1844 to give 1.4667, which is the logarithm of 29.3 looked up with antilog tables. Triumphantly, the red mark appears in the margin, followed by ten out of ten. This could be done now in a flash with a calculator, and nothing at all would be learnt. On 18th June 1964 appears the final problem in arithmetic of Form IIIL, logarithms applied to a practical problem, again hitting ten out of ten. Anything less than ten out of ten would have been a sharp shock by the end of the third term. The final two problems of the notebook are on 8th September 1964 and marked "Christmas Term, 1964", Form IVL and beginning my fourth year at the grammar school. I get away to a flying start with two more tens out of ten.

Between 18th June and 8th September the third set of term examinations had occurred. I was top of the class in all three terms of Form IIIL. By great luck this notebook in arithmetic has survived, it is the only one from the earliest era of the school, and the entire set of extant notebooks has been archived for conservation at the National Library of Wales and the British Library on www. webarchive.org.uk. They are also archived on www.aias.us under the aegis of the Newlands Family Trust. I continue to try to find other notebooks of that school era in order to archive them. The "government" in its ineluctable and timeless and very hostile wisdom, has deliberately destroyed the records of Pontardawe Grammar School, so these appear to be the only extant records of what counts in a school, its academic life.

Y Dref Fawr

Llif o fwrlwm, lliwiau llon – ye ennyd Ar naid y dydd eurlon. O mor gul y mae'r galon, Du'n y dwr a dan y don.

I recall that my subjects of Form IIIL were: physics, chemistry, arithmetic, algebra, geometry, history, French, Latin, English language, English literature, art, and geography. These were academic subjects and examined subjects. There were also physical training, rugby and athletics, non- academic subjects much to my relief. Form IIIL was one of my very best years at the grammar school, one in which I excelled in all subjects and regularly recorded an average of well over 90% - an average taken over examinations in all subjects. There were more arts subjects than science subjects, with geography coming in between. This was achieved in tough conditions at home and in a year which started with my grandfather's death on 26th September 1963. By that time, I had dropped woodwork, religious studies and Welsh, mainly because of those meaningless marks awarded by Eic Davies. I am now more fluent in Welsh than ever. If I had my way I would not speak English, but the latter language is crammed down all of our throats, not the other way around because the UN has warned against the extinction of the Welsh language, not the extinction of the English language. Chemistry was still at the primitive level of acid plus alkali etc., with a lot of salts and water. Luckily my sixth form chemistry practical notebook has survived, showing a high standard by that time, September 1966 to July 1968.

Physics of Form IIIL seems to have been a lot of mechanics, pulley systems, Boyle's law, Archimedes and similar. Algebra had advanced to the point of solving quadratics, and for me was a comfortable subject, and geometry was mastered because I hit that 100% in it around this time. I also hit a 100% in physics, so must have mastered that subject too to that level. History and geography were pure memory work. I had a natural grasp of English language and literature, and the set books were accompanied by set methods on how to answer exam questions. I was no poet at that time, but an expert in passing English lit examinations. French and Latin were a matter of learning off by heart the vocabulary, declension and grammar, and keeping a look out for those irregular verbs. Art practical was a problem, but strangely enough I cannot recall examinations in that subject. Art history was no problem, it was chewed up by the exam passing machine and memorizing technique in that small stone encased environment of Pant y Bedw deep into the heavy night. I do not remember anything about rugby except that I was a second row one time, a full back another time, a complete waste of time. I remember scoring one try but it was disallowed by some unfathomable rule.

The exam- passing technique was built up on my own, literally without the help or advice of any other. I was among the least advantaged of all the pupils of the grammar school, so hitting that number one spot was a very great thing to me. To my parents it was something that lifted their lives from the mundane, or so I thought, but I was sure that it was a vital necessity for me. It gradually developed from an early age, about 11, when I came to realize that the term examinations were the all- important happenings - they were recorded for the government. No one in my family knew that they even existed. The technique was the same throughout the years from September 1961 to June 1971 when I graduated the top first at what turned out to be the right choice of college, Aberystwyth. As those extant notebooks show, it consisted of careful note- taking in neat handwriting, of problem- solving at home in Pant y Bedw (in between farm work) but above all of memorizing. The notes were gone over endlessly until they were memorized. On the night before each examination the notes for that examination were gone over until I was ready. This was an exhausting method that had to be accompanied by the development of great discipline and stamina and the ability to concentrate no matter what the noise was around me or no matter what occurred in the world outside. In school it was noise caused by the merciless destruction of Olive Williams, something which infuriated me at the time and still does. I had to keep my silence and concentrate on those notes, the teacher often dictating shaking with trauma with tears streaming down her eyes. At home it was the quarrelling between my sister and father, and sometimes the quarrelling of parents. They would often choose to quarrel in front of me, and in the English language. They chose to become foreigners and I started to have doubts about whether they really were all that interested in school. At those times, there was no thought about my future or the grammar school. I also had to fight against adolescent envy, against thieves and thugs, and this had to be done for five years until I received any kind of return, the nine O level certificates of 1966. I had no way of knowing the nature of the world outside the Swansea Valley, I knew only that those certificates had to be won. I had to avoid being physically injured in rugby, because I had to attend every class without failure. When the examinations arrived they were attacked fiercely and everything I had learned poured on to paper until my small- sized hands almost seized up with cramp. The writing became wild as I struggled to complete the examination in time, pouring everything out of my mind, every fact and every sentence. There would frequently be a morning examination followed by an afternoon examination. Any loose time would be spent going over my notes again. On top of this was the development of problem- solving skills and the ability to foresee which questions would occur in the examinations.

The actual memories of that era from September 1963 to July 1964 have been blotted out of my mind by that intense concentration. The most desolate days were those following 26th September 1963, but the notebooks show no sign of this desolation. I received only a few words of condolence from one person only, Hugh Griffiths Craig Cefn Parc. His older brother Ceri had an eloquent poem in Welsh in that school magazine of 1961 to 1962. Ceri was permanently in a leg iron due to polio. These few awkward but earnest words were uttered in Welsh as we passed the post office and shop on the way to the bus stop. I maintained my silence in the grammar school because bereavement would have been seized upon as an excuse for adolescent mockery. I had plenty of sense to realize that at the time. We had to start out very early for the school, only four miles away, because of the system, the bus had to reach Ystalyfera in time on winding roads and Ystalyfera Grammar School was much further away. I still do not know the genius who thought up that system. In winter the Craig Cefn Parc contingent never saw their own village in daylight, they set out in early morning light and came home as the sun was setting. The death of my grandfather in September 1963 was followed by the death of my younger brother early in 1964. He was still- born because my mother had been so deeply affected by the loss of her father. I was never told that she was expecting

a child, so again did not know what was happening. The first sign of trouble was when I saw her walking down very slowly towards an ambulance strangely present in the dirt yard of Pant y Bedw, helped by an ambulance man. She looked to be in great pain and that must have been Spring 1964. She looked at me briefly with strange eyes, and was taken away in the ambulance. I caught some gossip to the effect that my father was very greatly disappointed, but by that time I was alienated from him. I would still do all the farmwork I was given to do, and still gave him those end of term certificates, but otherwise it was a different world. My mother seemed to recover completely from this ordeal, but the scars must have been lifelong. My parents did not have to pay for any of my education, with the exception of school dinners and all that useless rugby and woodwork gear. All books were given free. I am glad of this because they were good parents and the family was well balanced in between my father's bouts of irritation and blasting, indiscriminate, child-like temper. That was met by an equally ferocious temper by my mother, but fortunately these happenings were rare. I had to obey both without any question, and I did so with the exception of music lessons. My sister started at the grammar school in September 1963, being two years younger. Apparently she had an I Q greater than mine but left the grammar school as early as she could. My parents spent a lot of time and effort looking after her and her children, I was told to look after myself, not in so many words but by circumstance. I was always made welcome for a few days when I returned from the College, but not for too long. I managed this well enough, the most difficult time being the first terms at Aberystwyth from October 1968 onwards. I lost a lot of weight (perhaps thirty pounds or fifteen kilograms or so) and arrived back home to the alarm of my mother. My father said I was looking fit because my ribs were visible, he did not mean this unkindly, but as an optimistic remark. It was the same kind of humour as my Uncle Raymond, who informed me that if the roof of a coal mine collapsed you landed up with a headache. I myself had not noticed that I had lost weight, at the age of 18 most of my predecessors would already have dust in their lungs and would be condemned.

Niwmo

Barf o lo yn ei berfedd, - a sug ei Ysgyfaint, y pydredd O haf ei foel, haf ei fedd O lwch caled dan lechwedd.

I have vague memories of Beatles badges being sold at the school and post office in Craig Cefn Parc but I was irritated by their music. I never heard anything in it. The Beatles phenomenon started on 16th February 1963 and increased in screaming intensity in 1964. Much more important for the Welsh language was the establishment of Cymdethias yr Iaith, the protest on Pont Fechan Bridge in Aberystwyth and the later establishment of the Welsh language channel S4C and a bilingual Welsh Government. Richard Bryn Williams was awarded the Chair at the National Eisteddfod in Swansea in August 1964 for the awdl "Patagonia". My time in Form IIIL was a dangerous time for the world, with a US nuclear test in Nevada on 13th September 1963, and a test ban treaty for atmospheric tests on 24th September 1963. These events occurred on the TV at Pant y Bedw, from which I retreated into my study cell. On 24th November 1963, Lee Harvey Oswald was shot by Jack Ruby, and I do remember that off the TV at the time. On 8th January 1964, Lyndon Johnson declared war on poverty. On 29th January 1964, Apollo 1 made its first ascent into earth orbit on the Saturn Five, and on the same day the Innsbruck Olympic Games started. I remember liking the four man bobsleigh and downhill. On 15th March 1964, the USSR carried out a nuclear test in Semipalatinsk followed on 29th April by a nuclear test by the USA in Nevada. These were two gigantic adolescents viciously brawling in Pant y Bedw in front of our fire. Not to be left out Britain carried out a nuclear test in Nevada on 17th July to mark the end of third term examinations and the relief for me of summer again. On 20th August, the US carried out another nuclear test right at home on our TV, again in the Nevada desert. I remember these underground tests as they were shown on TV. On 26th July 1964, Jimmy Hoffa, the very corrupt Teamsters boss was sentenced after a grilling by Robert Kennedy, who resigned as the Attorney General on 3rd September, just as I started Form IVL. On 19th June 1964, the Civil Rights Act was passed by the House of Representatives and after a long delay, in the Senate. In that year of 1964, Sean Connery had started filming of "Goldfinger", which I saw in Swansea. My first experience of going to see a film on my own was in the Globe Theatre in Clydach. Later, this was burnt to the ground by arsonists, probably in league with developers. Huw Griffiths and I were paralysed by Dracula's dental problems and strange nightly habits in far off Transylvania. I thought that that must be further away from Brecon with its blood sucking Normans.

During the whole of Form IIIL, the little notebook evolves unperturbed into Form IVL, my fourth year at the grammar school which started in September 1964. It is a peaceful well- ordered microcosm of civilization amidst ultimate barbarism.

CHAPTER SEVEN

My natural care in scholarship was accompanied by this time with an increasing confidence, and I no longer regretted having to go back to the grammar school. I was too big to be thrown out of a bus seat so could at least arrive at the school after a journey free from violence. Four notebooks in mathematics have survived from Form IVL, and at the time my photographic technique began to emerge from snapshots and a box camera, so there are many photographs of the era extant, some posted on www.aias.us. The early photographs were taken with a simple Kodak box camera with no controls and processed at the chemist (pharmacist) in Clydach. That meant a walk down the abandoned railway track at the bottom of Glyn Eithrym (Lower Clydach Valley). When I was about 14 or 15 I saved up to buy a Yashica camera and tripod in the Arcade in Swansea. That camera had focus and exposure controls and an open shutter control, so I could experiment with night photography, a kind of art of my own. I was self- critical with photographs and selected only two or three out of twenty or so for an album and had a natural eye for photography. These photographs are now a valuable record of how the village of Craig Cefn Parc has been destroyed by over development. The local government is to be severely criticised for this deliberate destruction. There is no purpose to this development, because it creates no industry, and even with the Welsh language almost extinct in the village, development by land vultures is being further encouraged. The Welsh language primary school system in Mawr has also been deliberately destroyed by local government, which is therefore no government, or as my ancestor William Hopkin Cwm Nant y Moel would have said: "false authority" in which no trust can be put at all. Any person with a modicum of common sense knows this in Wales. So the People must take government into its own hands and decide on every issue of importance by electronic referendum. If not, the People will lose all that is worth keeping. Ultimately the strong minded will keep the language alive within their own homes, and ignore false authority as much as possible.

At about this time also, I began to cycle around Mawr on a bike with three gears and drop handlebars. I remember once that some friends from Cwm Gors and I decided to cycle from Craig Cefn Parc to Felindre and through Cwm Cerdinen to Garnswllt - the villages of Mawr. They returned to Cwm Gors from Garnswllt and I returned to Craig Cefn Parc over Mynydd y Betws and Mynydd y Gwair. That was a journey of steep hills amid tremendous beauty. Predictably, human nature now seeks to destroy this beauty with an invasion of wind turbines. This is because greed and corruption elsewhere in the world seeks to destroy our beauty and high civilization in order to foster further greed and corruption elsewhere in the world. In 1964 and 1965, however, the beauty was so overwhelming that it is vividly in my mind now. I freewheeled at great speed down to the bridge in Cwm Cerdinen and as far up the other side as I could without having to push the bike, towards the historic Welsh speaking Baptist Chapel of Gerazim (1801) and neolithic, bronze and Iron Age workings of remote antiquity. After Gerazim there is only the infinite peacefulness of the golden mountain or moorland, a short level run at the top before a very steep drop into Garnswllt past its primary school and chapels. Amid local fury, the Welsh speaking primary school was closed about four years ago. This is how the Welsh language is destroyed by local government and this is why the language must be nurtured in every civilized home. I repaired punctures on the bike with a box of valves and glued patches made I think by Dunlop and oiled it with a small tin can. Cycling brought fresh air and exercise into the scholar's sedentary lungs. I did not start regular athletics until the final undergraduate year at Aberystwyth.

I needed that exercise because a photo of that era (1964 / 1965) shows Ellis and I before the original stone wall of Bryn Awel, the part now known as "48 Rhyddwen Road". I was a little overweight and had deep black circles around my eyes from long hours of study and sedentary existence. Around this time, my friend Royston Rogers arrived in the village and once or twice I cycled around with him, until he lost control one day on the road down to the valley floor from Craig Cefn Parc. There is a right angled bend there over an iron bridge. He could not make the bend and crashed directly into the wall of a house. He suffered a lot of damage and was in hospital for a few days. On any cycle trip in Mawr about half of it has to be done by pushing the bike up steep hills, which is good exercise. The rest of the trip is freewheeling downhill,

needing good brakes and balance. It is easier to run up the hills and I did this type of road running for a few years in my twenties. Royston had an unhappy upbringing and his father died when he was still a teenager I think. Royston himself died when very young, but I had the pleasure of seeing his daughter some time ago; she is an Oxford graduate and works for "The Guardian". I showed her the tiny house where Royston used to live with his parents.

On another occasion in one summer of 1964 or 1965, the Cwm Gors contingent of the grammar school walked over Mynydd y Baran to a pool of natural water in the Lower Clydach River and the Craig Cefn Parc contingent walked up to the same pool. We were all fluent in Welsh, so we had no need of switching to English for the sake of someone who did not understand Welsh. The word "Clydach" is Irish for "stony stream" and this is an accurate description. In high summer sharp splinters of light come off the water like sparks from a steel mill, and the water takes on the verdant colours of surrounding leaves, colours that flash in the sunlight. The scene could have come out of one of those Irish poems of 1,500 years ago translated I think by Anthony Conran. I know now that the pool is just below Nant y Moel Uchaf, owned by my ancestor William Hopkin, a Dissenter of Baran Chapel. This is situated on land leased from Nant y Moel, and in the nineteenth century was a thriving centre of learning in the Welsh language. It had a large congregation from miles around, who would walk or travel on horseback. Over 100 of these emigrated to Pennsylvania together in search of freedom of thought. From about 1964 to 1965 onwards, there is a good record of the village of Craig Cefn Parc through my photography and landscape photography. The best photographs of this era were enlarged later in the photographic darkroom of University College of Wales, Aberystwyth, they won an undergraduate photographic competition, and are now displayed in the National Library of Wales and the British Library via www.webarchive.org.uk eeand\fs24softlinewww.aias. us. The photographs of the mid- sixties show that the roads then were still clear and unblocked by oversized cars designed for California. The pine trees of Nant y Milwr, for example, stand against a nimbus cloud with the rainsoaked road making a pattern of light that landscape photography seeks to capture by "light writing". Under that clump of trees there is said to be a Neolithic mound. At that time, the farm was worked by Glyn Nant y Milwr, it was a working farm, and Glyn was of course a fluent Welsh speaker. It was sold to a monoglot English speaker and ceased to be a working farm. Any government that cares in the least about the Welsh language should prohibit

such sales by law. Incomers must be fluent Welsh speakers by law. Otherwise the language will be destroyed by deliberate neglect. The towering nimbus clouds that come in from the Atlantic are patterned dramatically over the landscapes of Mawr with a high contrast technique that I developed with darkroom and red or yellow filter. These are art photographs not designed to be literal views, but there are many of the latter too. Eventually, I should archive all of them for conservation.

Gorffenhaf

Mal y don, mil adeinydd, - mal duedd Yn olau dwys hafddydd, Hwyl a sw^n yn hela sydd, A hwyl fwyn yr hel feunydd.

In one of the photographs appears a working farm made up of a modest house, a hayshed and a TV mast. It houses a working Welsh speaking family and the sun breaks through a nimbus cloud to show the farm in black and white contrast against the light. By now the farm has been sold again to a monoglot English speaker, not necessarily from across the border but from Wales. Any government that is concerned with the Welsh language would enact laws against such a sale. In order for the language to survive, large areas are needed in which it is the only language. The photographs of fifty years ago show such an area, the village of Craig Cefn Parc and the community of Mawr. The local pseudogovernment is hostile to the Welsh language, and unable to govern, because it suddenly puts signs up to say that it is unable to govern, notably that it cannot light the streets or grit the roads in winter, cannot collect rubbish regularly, and cannot mend the large holes in the road. Council taxes double in a decade, and most of the village is crammed into a housing estate where only the English language is heard. The working economy of the village of Craig Cefn Parc fifty years ago is shown in one of my night photographs of newly installed halogen lamps accompanied by the full moon. It is one of the photographs archived for conservation and is found on www.aias.us. There are just as many houses as needed, there is a working petrol station run by my lifelong friends Dylan and Wyn Thomas, and the houses have been built by employed Welsh speakers in a real coal mining economy. The road is free of monster blocking cars bought on hock. At present (September 2011), houses

are luxurious and without purpose, they are the product of a false economy in which they are built and resold at wildly inflated prices to outsiders, the only people who can afford the prices. This has almost made the Welsh language extinct in the village. The few Welsh speaking families left have a simple remedy to this assault on civilization, they can put their houses in Trust for the Welsh speaking descendants, educate their children in their own homes, or be very careful about choice of school because of violence and pressures to speak English. The EEC laws for protection of minority indigenous languages encourage them to do so. Electoral dictatorship and contempt of democracy can be seen in the wind turbine fiasco that has bankrupted Europe. Politicians of any party are not elected so as to represent, and are dictators. There is no county councillor in Swansea City and County who has been elected by a majority of those on the electoral register. They remain there for up to half a century. They cannot enter your home however, and force you to speak a foreign language.

In a colour photograph of about 1964 / 1965 now to be found on www. aias.us I managed to capture the timeless beauty of the village as it was then. There are many vivid colours from the dark gold of Mynydd Gelliwastad in the foreground to the bright gold of the unspoilt Mynydd y Gwair crowned by a light blue sky touched by darker nimbus clouds. The giant shoulder of Glyn Eithrym rises to a plateau unspoilt by electricity pylons and deep scars of gas pipelines. Fifty years later it has been destroyed entirely, and there is still no piped gas in the village of Craig Cefn Parc. It was all done by outsiders for the sake of outsiders. The coal mines lie still and drowned. In the photograph it is autumn because the ferns are red in the middle distance. The sheepdog is a black and white pattern in the foreground. There are far fewer houses visible half a century ago, and there are more local jobs. Now there are many more houses and no local jobs, the population is about the same. This means that the local government for the past half century has been a disaster. The crammed tight housing estate is wholly missing, and the floor of the watershed is a golden colour that sweeps up towards Fagwr, another home of my ancestors here in Craig Cefn Parc. The indescribable filth of the council tip had just been buried deep, and for a few brief years the village was all gold again. Now there are plans to cram yet more development into the area directly over the old tip. Rubbish begets rubbish. This is said to be for the sake of tourism. The far distance sweeps up to Penlle'r Castell, and there are plans to plaster that with wind turbines. The human species is overdue for extinction.

Medi

Mud yw mwyar y Medi – yn ei gwsg Yn ei gysgod ydi. Mwyn y byd min y beudu, A brwyn dan y Baran du.

The most telling night photograph I took in 1964 or 1965 is of the road just outside Bryn Awel House where I write now, it is well lighted with halogen lamps, and there are no cars at all. People lived within their means and walked or took a bus. Fifty years later the same narrow road is saturated with cars, which are dumped on pavements meant for pedestrians. The road to Swansea in the rush hour is blocked for miles by cars which rapidly consume what fuel we have left to share in the world. They travel on the M4 at 100 miles an hour. Look out if you try to keep to the speed limit on any road. Wind turbines will not produce petrol in case anyone has not noticed. Very soon any real government will bring in petrol rationing and laws prohibiting the use of cars in this way. In the miles- long traffic jam to Swansea there are cars containing only one person. A few train loads would do the same job very well, but of course the railway has been ripped up. The local pseudogovernment plans to attempt to cram yet more houses and cars into the narrow roads and precious land of Craig Cefn Parc with what is said to be development for tourism. The local county councillor has designated his own property for tourist development; he has drawn up a plan with boundaries tightly drawn around his own land. Such a plan is openly displayed on lampposts. Perhaps he wishes to open a bingo parlour. This man has never been elected by a majority. In my night photograph of fifty years ago all the houses visible in it were occupied by Welsh speakers who knew each other well, and were the descendants of the men who actually built the houses with their own hands, the original coalminers. One of these was my great- grandfather William Newlands, and this house is protected now by the Newlands Family Trust. It cannot be sold and is to be left for Welsh speaking descendants of my extended family (hundreds of cousins). Now the surrounding houses of that photograph are occupied almost all by English speakers who never appear to converse with each other. Bryn Awel House is still held by my cousin Ellis and I, and flies my personal standard as an Armiger. Most people cannot tell an Armiger from a bingo parlour so care nothing about Wales or Great Britain, paying lip service to the contrary.

From this peaceful and golden village of September 1964 I set out once more to the grammar school to continue my education there. Fortunately my father had not sold Pant y Bedw despite a few strange attempts. Unknown to me his grip on the smallholding must have been tenuous, and as soon as he could he sold it. That happened to be in about 1972 when I was already a graduate, so he could no longer accidentally destroy my education. He did not know or care that continuity at Pontardawe Grammar School was to me vitally important. The suicidal mania for selling land and heritage to anyone at all was all too present fifty year ago, and of course I was disinherited after a lot of labour given freely. This pattern was repeated for many houses of the village, with the dismal results described above. If you sell heritage the money soon runs out and you are left with nothing. In the fourth and fifth Forms preparation was being made for the O level examinations, using a set syllabus and past examination papers. In English literature, for example, we studied "Macbeth" and I was given the task of reading out the part of Banquo. That took place in the upper school building under a new teacher whose name I forget. By now I am well acquainted with many Macbeths and understand his quandary, but then it just seemed very odd, something to plough through. It seemed childish to me, and many of Shakespeare's plots are like that. His strength is precision and power of metaphor and I understand that now. There must have been some poetry, plays and novels of that fourth form, but I cannot recall them. I can recall vividly the poetry, plays and novels of the actual O level syllabus tackled a year later in Form V. The other arts subjects slowly evolved as usual, with history starting to contain interesting sections pertaining to our actual life in Wales, notably the Merthyr Riots, Cyfarthfa, Dowlais, the industry of the Swansea Valley, the Rebecca Riots and the tremendous fight for freedom and the Welsh language that still goes on now among any individuals with courage. Now I know that many of these figures of history were my own ancestral kin or cousins. The main part of the history course was still presented in terms of Great Britain as a whole, such things as the repeal of the Corn Laws, but I think it ended around the turn of the twentieth century. There was no twentieth- century poetry or history, but there was one twentieth- century novel late on: "Lord of the Flies" by Sir William Golding with its prescient description of adolescent savagery.

Art history began to be taught around that time but was restricted to art in Great Britain, leaving out all the continental developments in the subject. That

means that nearly all of Kenneth Clark's "Civilization" was missing. Nevertheless, the subject sticks in the mind so must have been taught well by Charlie Lines. It started with Nicholas Hilliard, a miniature portrait painter of Elizabethan times. I remember thinking that the costumes of that era were ridiculous. That was soon counterbalanced, however, by Lely's portrait of my ancestral cousin Oliver Cromwell, paint me warts and all and so on in full armour. In the fourth form, I had dropped geography in favour of chemistry, and I begin to remember the titrations and acid bottles of that fourth year. There were bottles of sulphuric, nitric and hydrochloric acid on the window sills of the chemistry laboratory situated in the top building of the grammar school opposite in orientation to the arts room along a long corridor. I recall the pipettes and burettes, the Liebig condensers and flasks, the smell of gas and Bunsen burners and row upon row of chemicals in the store room. These still used cork or rubber stoppers rather than ground glass as at Aberystwyth later on. Control of the pipette was learned in the practical classes. Physics evolved into something that began to look more useful but still nothing later than the nineteenth century, no quantum mechanics at all. English language was natural and easy for me.

Quite a lot of detail of the mathematics of Form IV have survived in notebooks now archived for preservation. I began to excel at this subject as these notebooks show. I was top of the class in all three terms of Form IVL in all subjects. The first entry of the arithmetic homework notebook starts on 20th October 1964 and is a continuation of the Form IIIL work on pi, but in more complicated guise and the usual tens out of ten appear throughout the first term and up to 21st March 1965 in the second term, where there is one eight out of ten. All the rest of the marks are ten out of ten with one seven out of ten in the Summer term. The syllabus from this range of fifty years seems static, but there does appear on 17th November a problem that used the Pythagoras Theorem in arithmetic, borrowed from geometry. So the first term examination must have been easy for me, and I guess that I scored about 95% or similar in arithmetic. I remember clearly many marks of over 90% because the teacher asked each pupil to read out his mark to him in class. This is because I was getting to know how the examiner's mind worked and could guess the problems that would be set. On 18th January 1965 in the Easter term, there is a problem that is quite a challenge, being a combination of the volume of a sphere and cylinder. The volume of the sphere was given and pi given as 3.142. These cylinder sphere problems are followed by ones on stocks and shares, which meant nothing to me as a socialist but which I calculated with my usual care and precision. I was a socialist and nationalist from earliest

days, but fell into the trap of thinking that politicians were real. I was never illusioned enough to be disillusioned and have never voted for any of them.

On 12th March 1965, a series of miscellaneous problems is set, problems that seem to advance very little on those in previous years, so may have been revision of some kind. All marks for both Christmas and Easter terms are ten out of ten with one exception at the end, an eight out of ten. The question was as follows: "In a given year a man spends £1,669 and 8 shillings more then he saves. He saves 16% of his income; how much did he earn in a year?" With problems like this one gradually developed an instinct for the keyboard in the same way that scales practice would do for a pianist. The Summer term of 1965 began on 26th March 1965. I accidentally wrote "Summer 1964" in the notebook. Arithmetic of the first problems was still about ratios and stocks and shares and the syllabus seems so static that the examiner had to use a lot of imagination to construct variations on a theme amidst the problems. On 4th May 1965, there was quite a difficult problem about wine glasses, revealing the remote middle class origins of the alcoholic problem setter. Back home in Craig Cefn Parc the coal miners had been transferred to the dangerous Lliw colliery from the relative safety of the Nixon and Hendy drifts down to the Craigola seam. Surrounded by the grammar school I still thought of those dark and dangerous caverns and still do so today at the time of writing (mid- September 2011) when the news blares out of four more fatalities in the Swansea Valley three or four miles away. That is a stark and deeply shocking reminder of what could happen at any time in my childhood years. So I burrowed ever deeper into my notebooks.

Y Glowr

Poer y llwch o'r pair llachar. – Yn ei boen, Yn ei boen aflafar, Poen ei gymal, sw^n galar, Rhed y cec ar hyd y cwar.

The Coal Miner

Dust pours from the fiery cauldron. – In his pain,
In his pain, in his harsh pain,
A catacomb meets up with grief,
As the pick echoes in the seam.

(In memory of the four coalminers killed in the Swansea Valley, September 2011)

The handwriting is still neat with the remains of copperplate t's opening sentences as capitals, with strongly crossed lower case t's in the middle of the sentence. It is still in a fountain pen with a bottle of blue ink, and is larger than when I was 11. It is still very neat in the set homework with plenty of time to complete the problems, with occasional crossings out. In the examinations it became wild as I struggled to complete the questions with as many facts as I could get down on paper, but the teachers never complained about my handwriting and allowed for the pressure imposed by time limits. The strongly crossed t's are indicative of a strong character determined to excel. A past O level examination question makes its first appearance, a question from Summer of 1963 in the arithmetic O level paper. There were small books of past questions which we studied carefully, trying to get a hint of what we would be faced with in the summer of 1966, the O level examinations. The notebook ends abruptly with another ten out of ten and in the third term examination of Form IVL I emerged top of the Form again, scoring some of the highest marks of all my years at the grammar school. The class became aware that it was breaking up for the summer holidays for the last time before the O level syllabus itself was upon them.

I have tried repeatedly to find the records of Pontardawe Grammar School, but they have been deliberately destroyed by "government". So these writings are the only detailed record left of that era of strong discipline. "Government" is barbaric because it loses civilization and no clearer indication of false authority can ever be gleaned. I think that the school has been deliberately expunged from history because of its strength in the Welsh language. There is always a hostility to the language among those who have lost it - it is a feeling of complete failure, and the anger at failure is displaced onto those still strong enough to speak it. They try to force us to speak a foreign tongue and we resist very fiercely as we have always done. The most well- known teacher of Pontardawe Grammar School is probably Eic Davies, who came from Gwrhyd, and was born in an era at the beginning of the twentieth century when Gwrhyd would have been much the same as it was in Celtic times, or Bronze Age times, remote, entirely Welsh speaking farms served by chapels or by rings of standing stone, depending on the thousands of years for which it existed. I have built a large wall here with stone from Gwrhyd Uchaf; it is Pennant blue stone with vivid reds of iron ore and gleaming quartz. The way

in which the Welsh language is destroyed is illustrated in the way that Gwrhyd Uchaf quarry was sold for money to an outsider across the border. The cost of the stone rocketed and the farmhouse became offices marketing the corpse of culture. The chapel is empty and silent, and wind turbines are on the horizon again. "Government" was totally inert and failed completely to protect the language where it really matters. Arguably, all this breaks EEC laws on the protection of indigenous languages in Europe. I have never seen or heard an immigrant learn the Welsh language, they all speak their own languages. So if there is any government at all, which is doubtful, it should set up gealtacht areas into which migration is strictly controlled by a Welsh language test. This is the only way in which the language will survive as a spoken language. Dwellings, farms and factories within the Welsh speaking area must be protected by law. There must be a prohibition on sale, and on inflation of prices. Inside Wales the new Welsh Language Act must be implemented, not merely exist on paper. That would mean that everyone inside Wales must learn the language. This is the same as for any other country worth the name.

What little there is about Pontardawe Grammar School only mentions those who have become known in a different culture, that of London or the United States. For example, Sia^n Phillips who was born in a mountainous area similar to that of Eic Davies. She was originally Jane Phillips, and was given the name Sia^n by Eic. There is a cywydd of great brilliance by Tudur Aled called "Marwnad Sia^n Stradling", a deeply moving cywydd "Elegy for Jane Stradling", my remote ancestral cousin. So Eic knew of this work and among his protégés are two chaired bards, Dafydd Rowlands and Meirion Evans. The memory of these great bards cannot be obliterated by "government" because as in mediaeval times the memory is kept alive by the People. "Government" imports outsiders as if they were the secret police of Edward 1.

When one asks what has happened to the most brilliant civilization, the question is evaded. "Government" evades all questions like this. It is very easy to change the system with an electronic referendum. So the People must fight again for its very existence. Its existence is denied by "government" that knows no brilliance. Eic Davies' son Huw Llewelyn became a well-known broadcaster and was born in 1945. He was five years older than me at the school, and I remember him as part of the sixth form when I was in my first or second year in 1961 to 1963. He has served the Welsh language with great distinction and became a member of the Gorsedd of the National Eisteddfod, staying inside Wales all his life and finding plenty of richness there. My ancestral cousin Henry Vaughan, the great seventeenth- century metaphysical poet, also

stayed within Wales and was fluent in both languages. He moved across the border only for his education. My cousin Mary Hopkin, the singer, is a few days older than me and got O level certificates because I remember her in the lower sixth in 1967. This is only a very brief memory because my cousin and I were never in the same classes or streams. At the time, I did not know that she is my cousin from William Hopkin Cwm Nant y Moel, Craig Cefn Parc, of the seventeenth century Hopkin Family of Rhyndwyclydach. She had and has a knowledge of the Welsh language and recorded her beautiful songs in the language now on Google. Sir Goronwy Daniels was a former pupil of an earlier era, and was instrumental in establishing Welsh language TV channels. His protests at attempts to expunge myself from history are on http://www.aias. us/ttttwww.aias.us. These are diplomatic, but hard hitting. He was Principal at Aberystwyth and handed me my Doctor in Scientia certificate in July 1978. This Doctor in Scientia cannot be expunged from history, it is the highest distinction of the University of Wales, higher than a personal chair, awarded in January 1978, thesis completed in 1977 at a record age. I am a Welsh speaker, productive and hardworking, and I despise academic corruption, as so many attempts were made to destroy my career. They cannot succeed because the degree cannot be taken away and the results of my work are known all over the world. I am still the youngest recipient of the Doctor in Scientia in history thirty three years later, not only of the University of Wales but of the entire Island of Britain, of Ireland and of the former Commonwealth and Empire. Having awarded me that degree, the University of Wales allowed itself to be ruled by the dictator Howard Purnell, a very small dictator who has disappeared from memory, and is excommunicated by history. The University of Wales must be made to be entirely Welsh speaking, and all members of staff must be fluent in Welsh, as they were in the first two universities of Wales created by my ancestral cousin Owain IV of Wales (Owain Glyndw^r, Owain ap Gruffudd Fychan ap Gruffudd ap Madog, Glyndyfrdwy a Sycharth).

I Owain Glyndw^r

Golau'r coel are foelydd – Eryri, Ar eira oer henddydd. Ar wyneb oer, ar wynbridd; Golau haf, a gilia hudd.

My algebra homework notebook has survived, it is now delicate and fragile, and I turn over its pages with wondrous care. Its first entry is dated 17th May 1965 with an answer to a problem that is not written out. It is quite a difficult problem, with the equations being numbered with neat rulings from the ruler now in honourable retirement on my desk here. The ink is again blue from the same fountain pen. These problems are about costs of train passengers and hotels. It would not be until 1972 in Teddington that I stayed at my first hotel, doing some graduate work at the National Physical Laboratory. No one in Craig Cefn Parc could afford to stay at a hotel and would never have the time off to do so. The grammar school blandly assumed that we were children of the suburban middle classes. The extant notebooks are all archived now at the National Libraries on www.webarchive.org.uk, science and technology section, Alpha Institute for Advanced Studies, the acknowledged world leader in theoretical physics at present. The entire www.aias.us site and blog are archived. Let us hope that "government" does not shut down Great Britain and lose the National Library in London and the National Library of Wales in Aberystwyth. Even if it does so the www.aias.us site and blog are also archived by the Newlands Family Trust which I set up this year. On 24th May 1965, two days before my 15th birthday, I slipped badly to nine and a half out of ten but recovered after my birthday on 31st May to ten out of ten again. I still use those techniques of algebra now, and it is surprising, or maybe unsurprising, how many academics now cannot do algebra. That is how string theory arose, now gone into the winds along with all the rest of it: Higgs bosons, strings, superstrings, anything but physics. I turn over the fify- year old page and it is already October, into the final year of O level. In that Summer term of 1965, I was again top of the class in arithmetic, algebra and geometry, and I think all other subjects. I was the second youngest member of the L Form, Gerald Cox of Garnswllt being one day younger, born on 27th May.

A loose page of Form IVL geometry has survived entitled "Geometry Test" of 12th March 1965. This is a subject in which I excelled, scoring 100% in one term examination. The test of 12th March 1965 is to prove that the diagonal of a parallelogram bisects it. The proof is written out neatly, and the teacher writes in red: "Note which lines are parallel". The second question of the test is to prove that the line joining the mid points of two sides of a triangle is parallel to the third side and equal to one half of it. The proof takes fourteen lines and is carried out by the construction of a parallelogram. No professor of string theory could do this today. The mark is twenty minus out of twenty. Minus what is not written.

My Form IVL algebra graphs notebook has survived. I know it is Form IVL from the cover, and a date that appears almost half way through it, 9th March 1965. That is one of only two dates in the notebook, the other a week later on 16th March 1965. On the inside in capitals are written three abrupt sentences to dictation: "Neatness is essential. All graphs to be drawn in pencil. All writing to be done in ink." The entire notebook is now archived for preservation at the National Libraries. It starts with the Cartesian coordinates (x, y) and the straight line, and various lines are drawn like modern art with the ruler of the Oxford Set of Mathematical Instruments, a light wooden ruler marked in inches. There was also a much used compass, set squares and protractor for angles. The cover of one extant notebook is pockmarked with compass markings and the marks of drawn lines, an echo of fifty years. The exercises show very neatly, as required, that the straight line has a constant gradient and is described by y = mx + c. There are various applications to experiments of the straight line, the syllabus showing ingenuity about how to draw out a straight line over half a term until the parabola arrives suddenly on turning over a page. This is the mysterious y = x squared and had to be drawn by hand. On one page various parabolae make a pattern of art, art drawn by hand. The nearest thing to a computer was a log book. The whole notebook looks like a work of art, because it is a notebook made out of already drawn graphical pages that was supplied by the Welsh Joint Education Committee. On 9th March, the cubic makes its appearance, and I am awarded nineteen plus out of ten. Plus what is not indicated. Obviously to all readers I was and am very proud of these marks, for their own sake. As a coal miner's son I could have no hidden agenda except the coal mine, a death trap as is all too evident now at the time of writing. I have done all that I could do, with a feeling of helplessness, sent out deepest and heartfelt condolences to the families. This is all I was ever able to do.

On 16^{th} March, there is eighteen out of twenty for a test in algebra graphs, the results of which are marked "good" by the teacher. From a signature scrawled in blue biro on the inside of the back page I know that this was Mr Phillips, a young teacher who took over from Mr John Morgan and who taught me later in the Sixth Form. The test was to draw the graph of y = x squared + 4x between – 5 and 1 and to use this to solve the equation x squared + 3x - 3 = 0 graphically. This was achieved in a neat way by intersecting the parabola y = x squared + 4x by the line y = x + 3. The reason for this is that x + 3 = x squared + 4x at the intersections, the roots of the quadratic. Overleaf there is a problem showing that the formula for the two roots of a quadratic

had been introduced by that time, and I get nine and a half out of ten and this was used as a check on the graphical results. So from that age I learnt that checking results is important. I still use that method now. The grammar school discipline was therefore formative and very important. There follows after a few pages another nine and a half out of ten, despite a "wrong graph drawn". At undergraduate and graduate level the same hand technique was used, and many graphs are hand- drawn graphs that appear in my scientific papers and books. For Form IVL there are a few pages of a second algebra graphs notebook with a ten minus out of ten soon making its appearance. Even the most minor of errors was pounced on with an exclamation mark like a corporal, for example: "0.6 not 0.75!" (underlined). For fifty years I have been allergic to exclamation marks, as so many can be generated these days by holding down the button on the keyboard. In the last two graphs as the Summer term examinations approach there is some sign of application, converting wavelength to frequency and a graph on mileage. Then the notebook ends abruptly.

The teacher for physics at that time was Mr Blackmore, who arrived straight from teacher's training I think, and took over from Mr John Morgan in physics. The latter teacher awarded me my other 100% for a term examination, - in physics. My marks for the various subjects would vary from mid- to higheighties to high- nineties out of a hundred all the way from the final term of Form 1L in 1962 to the second term of Form VL in 1966. The final term examinations of Form VI, were the O level examinations and the Easter term examinations were "mock examinations", a dress rehearsal for the O levels. There were no electronics in that era and the physics practical laboratory could have existed in the mid-nineteenth century: pulleys, Wheatstone bridge, sound apparatus, and similar, ammeters, voltmeters, all analogue. So the syllabus was classical mechanics, dynamics and statics, electricity and magnetism, some problems in sound and optics. There were concave and convex mirrors and lenses, prisms and an apparatus for measuring the deflection of light. The laboratory had a large demonstration bench, and the apparatus was also stored in a back room. We all had to sit on stools as in the later laboratories at UCW Aberystwyth. There were no microscopes or telescopes, and there was no astronomy or quantum mechanics. Relativity was considered to be completely out of reach and Newton ruled, not Einstein. The routine was monotonous and practical examinations the most difficult, so all I actually remember of that era was keeping my hand up to get the answer right after all the rest had got it wrong in some question set by Mr Blackmore. The latter was just a few

years older than his pupils and one time showed us a film "The Dambusters" from a reel, so he must have been a film fan and that must have been allowed after the term examinations were finished and there were a few days before the break up for holidays. The latter were two or three days at half term, two weeks each at Christmas and Easter, and seven weeks for Summer. I thought that the haughty teachers had such an easy life compared with coal miners, who had two weeks a year, and if lucky, time off for injuries. The teachers though had a great deal of responsibility and had to deal with thugs.

By that time, geography (taught by Olive Harding) had been dropped in favour of chemistry. This was a choice forced between two subjects that I liked. If I could I would have dropped art in favour of a subject such as geography, because I liked maps from an early age, and liked the way in which geography was constructed and taught in Form IIIL. Art practical was my least-liked subject, but even so I got one pen and ink drawing of "The Flood" displayed on exhibition in the corridor. This was a biblical interpretation, with all kinds of animals. Charlie Lines the art teacher was very volatile and could never teach me anything except art history to dictation. In this I did well and came across "Civilization" by Kenneth Clark after finishing my finals in 1971 in a totally exhausted condition. I had and have an instinct for landscape photography, but that was not taught at school. My clay models tended to look like trolls, and my watercolours ran away, my lino cuts just cut the lino. There were no oils or acrylics. History was almost all memory work in Form IVL, and it gave no inkling of what I have gathered of my family history in the prolegomenon. I think that the lower Swansea Valley was mentioned because of its copper and tinplate and its concentration camp conditions, but little or nothing about the valley industry itself. Nothing about Ynys Cedwyn or Penwyllt, no history from the perspective of the working classes as in A. J. P. Taylor, but there was that great triumph of the Tudors at the Battle of Bosworth. A dozen or more of my ancestral cousins were present at that battle, including Henry VII Tudor, descended from my ancestor Tewdwr Mawr. Nevertheless, the syllabus did spark a glow of interest which developed later. The teaching of the languages in Form IVL must have been mechanical – I got the usual best marks of the Form, but remember very little of that year. I had no poetic talent at that time, unlike a Dylan Thomas. What talent I have at poetry developed much later in the early eighties when I was being put under great pressure by an incredibly corrupt administration at Aberystwyth.

Form IVL ended in about July 1965, I was routinely top of the class by this time and I think that the novelty had worn off for my father. From the perspective of fifty years, history can be written objectively, so I understand that it was a stress for him to have to keep a son in a grammar school, with no prospect of money coming in and having no educational qualifications himself. At this time, my sister began to cause him a lot of trouble, and he had been transferred to Lliw. She caused trouble for my parents all their lives, but they patiently bore it and looked after both her and her children. I think that my father was promoted to overman from shot fireman around this time and that brought with it the animosities of the smaller- minded men he had to control. I think he was subjected to threats once or twice, so I understand now his desire to leave Craig Cefn Parc for which he never developed much of a liking. When I became 15 on 26th May 1965, he could have pulled me out of school legally, or could have stopped looking after me. This he never did, to his credit, although his temper became more and more like that of his ancestral cousin, Henry VIII Tudor. In 1965, he had been working continuously underground for nearly thirty years, so the dust had accumulated in his lungs with its evil effects. So I thought to myself that it was best if I got a summer job to earn some money, to show that I could earn money. With the help of my mother I got a job in a furniture store called Thomas Thomas near the old bus station in Swansea. I was a van boy, and had to help the driver move large, heavy items of furniture into the large blue van, and out again into houses, up steep staircases, and through narrow doors. One scratch would have meant instant job loss for all I knew. At the end of the first week I got my first pay packet, and the employer paid my first national insurance. It was a big effort to drag myself to Swansea every morning, to a town that I disliked intensely, but I managed it. My memories of that time are walking out of the bus station early in the morning past a café with some pinball machine with bored fag- ended people drinking coffee bleary- eyed. I particularly remember one sad young woman begging her red- haired husband to stop wasting his money. This was a part of Swansea that was not bombed, and it has been described for all time by Dylan Thomas.

The journeys in the van were in the company of a driver who was a kindly individual and pious, so he mentioned religious matters once or twice, but never pressed the point. I had already developed an agnostic frame of mind; I admire genuine piety (which is very rare), genuine piety of any kind. I have a profound admiration for the nonconformists and dissenters, going back to the Levellers of the Commonwealth. It is they who introduced all the enlightened reforms, beginning with the vote, it is they who wrote the US Constitution and it is they who introduced human rights laws. The logical end result of that

reform is direct government by the people, using the electronic referendum, and eliminating political corruption and despotism of the kind that we have today. I think that chapels should be rigorously protected by law and no one should be allowed to desecrate them hideously by living in them, living on top of graveyards. Even the most "barbaric" of mediaeval peoples would have been repelled by that. In many ways, the pointless and desolate wilderness that is pure materialism without any shred of language or history is the ultimate in nihilism. No one would object today if you sold grandmother as long as you could buy a new car and speed it at a ton up, sod all laws and sod the crisis. The van journeys took me to places that I had not seen before, and on roads that were new to me, and I could rest for a while from all that heavy furniture. I don't think that there was even a trolley to help us, maybe some wheels for particularly heavy items. We had to deliver under the eagle eye of some fanatically house proud housewife and ugly curlers into houses already loaded with riches to my eyes. The underlay of heavy carpets were the real back breakers, and a log book was used to get a geometrical object of larger proportions through a narrower door. That taught me the pointless way of life of most people, so I became fiercely determined to keep my freedom and use my mind. That meant the last year before the O level examinations, and it meant a return to Form VL in September 1965. I was very hardworking at Thomas Thomas, and once brushed a storeroom all afternoon, the boss having forgotten that he had told me to do the job. "Is that boy still there?"

In Form IVL, we were living through a very dangerous escalation of the cold war, the US, the USSR. and China began to fight each other on a massive scale in Vietnam. The nuclear bomb spread to five countries: the US, the USSR., Britain, France and China. The USSR carried out nuclear tests at Semipalatinsk and Novaya Zemlya on 18th September 1964, 25th October, 16th November, 16th January 1965, 11th May, and 29th July 1965. The US carried out tests on 24th September 1964 (of the Minuteman ballistic missile), 22nd Oct., 4th February 1965, 5th April, 14th April, and 14th May. On 7th October 1964, China exploded its first bomb. France carried out a test in Algeria on 28th November 1964, on 22nd February 1965 and 30th May. There was a test in the Pacific Ocean in February 1965. The buildup of thousands of missiles began. All these appeared on the TV at Pant y Bedw, but there were no mushroom clouds because they were underground. Our murderous elders and betters at that time had at least had the sense not to explode in the atmosphere and spew out radiation all over the planet. The tests at Semipalatinsk were carried out without warning the inhabitants, and many died. The same

thing happened later at Chernobyl. Both areas are wastelands. The Labour Government of Harold Wilson had been elected in 1964 and Tony Benn was the wild- eyed minister in the white heat of technology. He had given up his hereditary peerage for a new kind of power. That included nuclear power stations which were deposited as far away from London as possible, in places like the north of Scotland, Trawsfynydd and Wylfa. Unknown to us school pupils we were breathing in strontium 90 and the early power stations also leaked, causing many deaths from cancer. I think that "government" has at last admitted this. Wales became a nuclear free zone, all councils voteing against it. Similarly, Tryweryn was drowned, all Welsh M. P.s voting against it, all ignored. Similarly, the people are being ignored now in the insanity of turbine proliferation. Democracy is still a faraway ideal.

On 15th November, the Vietcong assaulted Saigon. On 7th February 1965, the U began the bombing of Vietnam and on 8th March sent the first combat troops there. On 22nd March, the US admitted using chemical warfare in Vietnam, in violation of the Geneva Convention. On 29th April, troops arrived in Vietnam from the US, followed on 5th May by a large scale buildup., followed on 30th May by a Vietcong offensive backed by the USSR. and China. On 8th June, there was a US counteroffensive and on 20th June the US sent large scale ground combat troops to Vietnam. The United Nations seemed powerless to stop the war. B52's dropping huge bomb loads became a common sight, together with the blast of napalm. The Labour Government kept out of the war, but Australia sent troops. I remember all these events from TV and left to my stone cell to study. On 8th November 1964, the International Monetary Fund had given Britain one billion US dollars, and the pound was devalued. This stopped all the plans of the Labour Government in its tracks, and was the result of thirteen years of appalling gruel by the Tories. On 22nd July 1965, Edward Heath replaced Alex Douglas Hume as the leader of the opposition. Douglas Hume was another aristocrat dug out of some cupboard to replace Harold Macmillan. This was an era of war more savage than the Second World War, the white heat of technology having learned how to make weapons that became more and more destructive until we have arrived at mutual assured destruction. Amid this mindless primeval savagery there were events such as the Tokyo Olympic Games, with the barefooted Abebe Bikila setting a world record on 21st October 1964. On 22nd October, , the existentialist and novelist Jean-Paul Sartre refused a Nobel Prize, and was later a leader in the 1968 student uprisings in Paris. The Mariner missions to Mars continued throughout the year, Ranger missions to the Moon and Gemini manned missions in orbit. On 1st October 1964, Khrushchev was replaced by Kosygin and Brezhnev as the geriatric oppressors of the politburo briefly emerged from their darkness, and in November of that year Shostakovich composed his 9th and 10th string quartets, a nervous, owl- like survivor of Stalinism with thick glasses, peering at the camera as if from a gulag, eternally smoking and by then a prominent member of the Communist Party, purely for survival. Now I can appreciate this music and its condemnation and defiance of Stalin. On 15th July 1965, Ron Clarke of Australia set a new 10,000 metre world record of 27 minutes 39.4 seconds amid about fifty other world records and on 12th June 1965 a new darkness was proclaimed, Big Bang theory, now so thoroughly refuted by the AIAS group and myself, by many others, and by experimental data.

In Wales, on the Atlantic edge of Europe, Tryweryn was drowned in 1965, along with it a village and a Quaker meeting place. That sparked rare outrage in Wales, an immensely long suffering nation, and in 2011 a Tryweryn Festival is held in commemoration. I think that Trawfynydd and Wylfa are greater crimes, the radiation having killed many people by inducing cancer. The City of Liverpool apologised for Tryweryn in 2005, a normally enlightened city with a large proportion of Welsh expatriates. In August 1965, the Chair at the National Eisteddfod went to William David Williams for his awdl (ode) "Yr Ymchwil" ("The Search"). At the Eisteddfod the plea for peace was more earnest than ever. "A oes heddwch?" - "Is there peace?", and the answer "Heddwch!" from all present. The old Quaker saying is used there "Y gwir yn erbyn y byd, a oes heddwch?" - which comes from "Speak truth to power" and means literally: "The truth against the world, is there peace?". Somehow the pupils of Form IVL have survived to this day, and at least one writer has not forgotten them. As far as I know, only one of us is not with us, Eifion Wyn Jeffries of Garnswllt, and at least one has not forgotten him.

CHAPTER EIGHT

In September 1965, Hugh Griffiths and I were among the aristocrats of the bus stop on the crossroads of Craig Cefn Parc, the cross. We were all of 15 years old and sat like kings in the back of the bus. Only the sixth formers were older. We were joined by a few younger pupils of the Craig Cefn Parc contingent. As the bus rolled downhill to the river Clydach we had it all to ourselves, on the top deck. In September, the trees were starting to turn the colours of autumn, reflected in the River Clydach on its eternal journal to the Tawe and to the oceans. I think we still had to push all those chairs around, the school could never buy enough of them apparently. After heavy rain the river still turned black with coal washed off the base of the giant tip opposite Hendy drift mine, closed in the early sixties but still pumped out in 1965 and for years after that. This tip was on the bottom of the valley, and coal washed off it every time the river flooded. The Nixon drift further down the valley was also closed but also had to be pumped out, because one could walk from one end of South Wales to another underground, and the whole system could flood. The tip never slid into the river; that would have caused a dam of water to build up right up the valley of Glyn Eithrym (the Lower Clydach Valley as it is called "officially"). It made its brooding presence visible to the school pupils as we crossed a black river at the bottom of the valley. Only slightly underneath the cosmetic topsoil today is a mass of coal waste, which is stony coal of poor quality. Mixed with water it turns into dangerous moving material, like cold deadly lava. I suppose that when wind turbines fail to deliver on a freezing cold January day people will be out scavenging again, middle class pretensions forgotten and no cars for lack of petrol. This is where "government" is taking us today in September 2011. They scavenged for coal like this in the Great Depression. Coal dust could be mixed with cement and made to burn to produce a little heat. My grandparents had to do that many a time.

The worst tribulations of the grammar school were over by then, some of us having managed to wriggle out of rugby and were allowed to spend the time in "athletics". A few of us had managed to extricate ourselves from the terrible mess called "school dinner", and cooked baked beans out in the woods above and behind the school. A small fire must have been kindled for the occasion. I remember that my good friends at the time were Leighton Carter and Lynn Evans, both of Cwm Gors. Lynn was a miner's son and his father worked in Tai'r Gwaith. I recorded these in a photo smuggled out of the sixth form common room (a small attic with a few books and a very rough table chiselled by many a former pupil). My final game of rugby was as a wing forward and I played against a fly half called Gethin Edwards, the younger brother of Gareth Edwards of Gwaun Cae Gurwen. After that the "athletics" took over. So going back to school in September 1965 no longer meant having to go through the tedious routine of rugby. The school never developed the teaching of soccer and I would have enjoyed that game as a goalkeeper. Knowing the system it would have made me into a centre forward, or striker. The secretive athletics routine consisted of running a few yards to get out of sight of any teacher, then walking up the steep path to the Llangiwg road. I was not in any condition then to run uphill. The walk became ever more leisurely until I disappeared in mediaeval times. Out of the fog would loom the turret of Llangiwg, thought to be 1,500 years old, with an original Celtic wall. It is much older than that because of the yew trees and was originally druidical. The Church was going to sell it, but it was saved from the cynical destruction known as "development". It was good to get away from the twentieth century for a while and imagine myself to be free of nuclear annihilation. The road up to Llangiwg is well trodden by the centuries, and when people became fat and too lazy to walk the church was largely abandoned. A pointless golf course has been built nearby now so that the middle classes can use farmland for knocking around a little white ball. This means that society is no longer selfsufficient, and as the fuel crisis worsens will no longer be able to waste petrol to knock around a little white ball. It may occur to society that the farmland is there to grow food. This golf course was there in 1965 and I ran downhill over it to the school, being careful to arrive out of breath. By this time, William Samuel of Craig Cefn Parc was working at Pontardawe Mining and Technical Institute next to the grammar school and I would give an Oscar winning performance for him if I happened ever to meet him. William Samuel wrote his own autobiography and trained Gareth Edwards for a while. I was not

interested at all in rugby because of what had been done to Olive Williams, and because I was disdainful of corruption.

The cellan of St. Ciwg (Llan Giwg) was built in the mid-sixth century and was adjoined by a mediaeval road to the nearby cellan of St. Cyfelach (Llan Gyfelach), also sixth century in origin. This road was human sized, not the monstrous machine- made highways that have destroyed so much of history in the twentieth century. The British Celtic word "cellan" came from the Latin "cella", meaning "cell" or hermitage. The British Celtic word "betws" comes from the Latin "beatus", meaning "sanctified" and the British Celtic world "banwen" means a holy place. One thousand five hundred years later the mediaeval road can be traced past Morriston Hospital and runs under the farm now called Banwen where my father and his younger brother Raymond lived and worked as described in the prolegomenon. It is a narrow road meant for people and farm horses, as are all the very ancient roads of Mawr. Llangyfelach was also a cellan of Dewi Sant, St. David. Near Banwen or on the site of the present farm there must have been a holy place or hermitage. These were probably centres of learning. The road went down to the floor of Glyn Eithrym, forded the River Clydach, and back up to Gellionnen to the site of Llan Eithrym. In my twenties I used this very steep road up to Gellionnen for athletics training every morning but turned off to run past the 1692 Unitarian chapel of Gellionnen, now listed by CADW. Recently this chapel was smashed to pieces by contemporary piety - vandals who worship a nothingness of mind. It was restored by a truer piety in the form of volunteers. The site of Llan Eithrym needs to be excavated, and is known with some precision.

The road from Gellionnen passes Speit, where my deadly rival Huw Thomas lived, and then descends very steeply into the Upper Clydach Valley past ancient farmhouses, around horseshoe bends and under ancient hedges and forded the Upper Clydach River. Today it intersects the main road from Cwm Gors to Pontardawe and begins its ascent up to Mynydd Gwrhyd. The road to Llangiwg branches off it, Llangiwg itself being isolated in a locality above modern Pontardawe. The floor of the Tawe valley in mediaeval times was covered with dense trees, with some clearings for farmland that was actually used for farms, which are mechanisms for growing food. Food does not originate in Tesco. Llangiwg was a small cellan, and is a very rare example of an original Celtic building, which forms the western side of the present Norman and later edifices. Part of the tower had to be dismantled because it was in danger of collapse. I think that these sites and roads are far older than Celtic times, and probably go back to Neolithic times. If yew trees can be

found in or near these sites they can be dated. The yew trees in Defynnog, for example, are over 5,000 years old, and are living remnants of Neolithic times. The cellan of Celtic times was sometimes made of stone, as Llangiwg shows. The beehive cells of Skellig Michael off the coast of Ireland are also far older than Celtic times, and on a pilgrimage route through all Europe to the Middle East. So 5,000 years ago people lived within their means and were as organized as we are today. They saw no need for nuclear test sites.

Llan Giwg

Llech y maen a llwch y mur, - y gragen hon O graig hen dy lafur, Uwch dy loes mae d'achlysur, O aeaf poen yr haf pur.

The thought of a walk up to Llangiwg offset the formidable challenge ahead in the fifth form of the grammar school, the O level examinations of summer 1966. There were nine subjects to study: chemistry, physics, mathematics, history, English language, English literature, Latin, French and art. This was the normal load of work for schools under the WJEC. The syllabus concentrated on the final year, the fifth year at the grammar school, and this was the material to be examined. Some of the subjects would be subdivided, for example, mathematics was subdivided into arithmetic, algebra and geometry, with O level examinations in each. So in order to earn an ordinary (O) level certificate in mathematics there were three types of examinations in these subjects. I cannot recall any practical examinations in chemistry and physics at O level, as the examinations were written ones. By the time a class reached the fifth year it had divided itself into those seriously intending to study, and those just there to cause trouble and play rugby. The serious scholars took less and less notice of the others, because they would soon have to face the outside world after wasting their time and their parents' trust and finances, failing badly at O level. I led a knife- edge existence because I came from a background where no one had ever been to a grammar school from the immediate family. Any failure in that fifth year would have meant a life of boredom and drudgery, and increasing hostility within the family.

So in order to meet this very private challenge I had honed to perfection the exam passing technique with long, long hours in my own cellan in Pant y Bedw.

The neatness and high marks of my surviving notebooks give vivid evidence for that preparation for any real scholar interested in learning. Coming across them after half a century I can look at them as if they were written by someone else, and can judge them historically. They are obviously the notebooks of a dedicated pupil. The O level certificate was awarded with grades, the top grade being 1, the second 2, and so on down to a fail. In order to let a pupil go on to advanced (A) level, the WJEC system required good enough results at O level. The A level system was designed to narrow down the range of subjects and to specialize in preparation for university. My strengths at the time were science and mathematics, notably mathematics, but I was also strong in languages and history, including art history. My weakness was art practical as it was called. Art in the subject range was an odd one out because there was no opportunity to drop it in favour of another subject. The easiest subject for me was English language, in which I had been immersed since the age of about 7. English literature was a challenge because there were set books. I could easily read them, but I was not allowed to interpret them, the interpretation had to be as taught by the WJEC. So I treated the subject as for any other, using memory and notes. There were few books interpreting the course books. At that age I could not interpret literature as I can today, it was half understood, so what really happened is that I learned the WJEC interpretation and regurgitated it. Nevertheless, that sparked a lifelong interest and it was formative because I remember most of the set books. This is unusual because most of the syllabus was taught mechanically, with the result that I cannot remember much of the material. By great luck, some mathematics notebooks have survived, giving a timeline of key importance.

The set books for English literature included "The Merchant of Venice" by William Shakespeare, "Silas Marner" by George Eliot (Mary Anne Evans), "Lord of the Flies" by Sir William Golding, and the poetry of Alfred Lord Tennyson (a predecessor on the Civil List and Poet Laureate), John Keats and Robert Browning. There was one more play, Sheridan's "The Rivals", a turgid and artificial eighteenth- century contrivance. I think that the English literature course at that stage was taken by a new deputy headmaster who was modernist in outlook as they say. Silas Marner the weaver of Raveloe was myself in another guise, he worked long hours at a loom in a stone cell, and wove cloth rather than set problems and examination papers. He had been accused falsely by his best friend, and expelled unjustly from his chapel. I was expelled unjustly from Aberystwyth, my own former teachers doing nothing to stop it. Silas became a recluse and a miser, hoarding gold under his loom.

He was an outsider with the marks of the devil upon him, and the villagers of Raveloe tolerated him only for his fine cloth. He had come from afar and spoke a strange, northern dialect in the midlands. Mary Anne Evans came from the midlands and was expelled from church and society for modernist views, and considered to be the most intelligent woman in England. The miser must have gold from all that weaving, and the Squire's drunken son Dunstan Cass stole it. In the manner of a morality play of the nineteenth century the thief was drowned with his illgotten gains and the gold was replaced by a living, golden-haired infant whose mother had died in the snow, the wife of Godfrey Cass, Dunstan's older brother. Pure scholarship is my living gold, not the lifeless gold of a pointless materialistic society. The writing of Mary Anne Evans contains passages of philosophy and accurate analysis of the human psyche, amid accurate dialogue, and the whole novel is available now on the net.

I found Browning to be very turgid, Tennyson was fairly interesting when he wrote in the rhythmical neo- Gothic style, but Keats was far superior to both. My favourite was the neo- Gothic "La Belle Dame Sans Merci", a mysterious kind of weaving which reminded me of the mists around Llangiwg. It is a prescient piece of work because Keats lived to be only 26 years of age and the beautiful thankless lady, la belle dame sans merci, is death itself: "La belle dame sans merci / Hath thee in thrall." Keats was apprenticed to a surgeon who was also a butcher, literally. The "Ode to Autumn" of Keats was carried round in my pocket all through undergraduate days until the paper must have disintegrated with infinite time. It reminded me very strongly of a small reproduction painting that my grandparents had in this house. When it was sold in about 1969 it was looted, even the fine oak doors disappeareing. I have almost finished getting it back into its old condition, and have protected it under the aegis of The Newlands Family Trust. I understand Browning much better now and can see the merit in his writing, but my preference is for twentieth- century poetry of the best quality. This was missing from the O level syllabus of Form VL. The play by Shakespeare was something to get through at the time- it was difficult for me to believe how an audience in illiterate Elizabethan times could have understood much of it. I understand all of Shakespeare now, and his power and accuracy of metaphor, but the simplistic structure of the plays tends to work against the poetry. This is rank heresy, I would never have got an O level like this. As it was I got a grade 1 in all the subjects except for English language (grade 2) and art (grade 3). I attempted an imaginative essay in the English language examination, I

still remember writing it in the Assembly Hall. I think I just got bored with regurgitating and paid the price for it. I was no good at drawing or painting at that time, so attempted an abstract and paid the price for that imagination. The art history pulled me through to a grade 3.

La Belle Dame Sans Merci

Oh what can ail thee Knight at Arms, Alone and palely loitering? The sedge hath withered from the lake, And no birds sing.

John Keats

The novel "Lord of the Flies" by Sir William Golding is an incisive warning about the savagery of human nature. A group of schoolboys become isolated in the midst of a war, probably meant by Golding to be a nuclear war. The novel is a warning in the manner of "Over Sir John's Hill" by Dylan Thomas, written in Laugharne in about 1948 just after the first atomic bombs had been exploded in anger in 1945. The schoolboys come from a preparatory school and are stranded on the island, or left there for safety. They revert to barbarity very quickly, as we see on the rioting streets today, and by this Golding might mean that civilization is a very thin veneer. They scavenge for food and light a fire in hope of rescue, one or two among them being made guardians of the fire, two members of the choir. One night after a dogfight a pilot slowly parachutes to the ground unknown to the sleeping boys, he has been killed and his parachute has become entangled in the trees and rocks, and this is meant by Golding to be a metaphor for a destroyed civilization far away. The boys are unaware of its presence near the fire that is kept burning by the guardians. The prefects become tribal leaders, in charge of ritual and rough justice. They forge spears from sharpened sticks and hunt the pigs of the island- they are hunter gatherers once more. The pigs are killed savagely with the spears and the meat is roasted and shared out under the control of the tribal leaders. The pig's head is put on a stick, and is the Lord of the Flies. This could be a metaphor for the death of civilization. One of the boys, called Simon, is ritually murdered for his piety, and his body slowly floats out to sea. The dead pilot is seen as a distant unrecognized object by the guardians of the fire, who slowly creep up

towards the body. A gust of wind lifts it up to reveal a shining skull and the guardians flee in terror, the fire goes out and they are condemned. One of the boys called Piggy has his glasses smashed so he is blinded, and the guardians are about to be executed when a rescue party arrives to find a group of little savages covered with dirt and war paint. "Excuse me Sir, I am the prefect, and this is the school choir."

On Peering into the Entrance of a Drift Mine, Nixon Colliery Late Fifties (Written at Ithaca, New York, in 1998)

I am the Lord of the Flies, this my cave, You will be the carrion that they feed on, For three hourly pennies each killing day,
 The dirty putrescence of a Friday
Shall eat your wages like a methane storm
 In the black back garden of the Empire.
 Don't think, boy, that you can escape me,
 My black eyes are like the seams before you,
 Useless for seeing. The day wasn't here.
 The flies gather round me in galleries,
 Driven by the smell of death the firefly,
 Briefly they will live and suddenly die.
 Out of the way, boy, there's a dram coming,
 Didn't you hear just now the Sirens sing?

The WJEC has kindly forwarded the examination papers and syllabi for the O levels of 1966, and this reminds me that the set books for English literature were "The Merchant of Venice", "The Rivals", "The Lord of the Flies" and poems by Keats, Tennyson and Browning. These books were handed out at the beginning of the fifth year, and I remember that the classes took place in the middle school building opposite the Assembly Hall and headmaster's study. There was more seriousness of purpose among the class in that final year. All the syllabi and examination papers have been archived on www.aias.us on a file of historical source documents to accompany this autobiography. I was top of the class in the Christmas 1965 term examination as usual. The Easter term examinations of 1966 were called mock O levels, for which I was also top of

the class, and at the end of the summer term of 1966 the O level examinations themselves took place in the Assembly Hall. "La Belle Dame Sans Merci" by Keats was the poem that really interested me because of its gothic rhythm and mysterious wording, ending in memorable short lines of four syllables. "Ode to Autumn" introduced me to the structure of the sonnet, iambic pentameter and imagery of beauty and power. I also remember Tennyson's "Splendour Falls on Castle Walls" but remember nothing of Browning unless I look up the examination paper. Much later, I read the biography of Dylan Thomas by Constantine Fitzgibbon and found that Thomas used to mock Tennyson's work by misreading it. Tennyson seemed to be overly melodramatic overdramatic and obvious to me, even at that age, but that was the style of his era. Tennyson would have recoiled from early Thomas to be sure. Dylan Thomas was on the syllabus but not taught at Pontardawe. Later, I read all of his work and gradually developed a full understanding of it. There were two other twentiethcentury poets from Wales who wrote in English. http://www.aias.us.Sheridan's "The Rivals" was on the syllabus, and was my least-liked item. It was written in the late eighteenth century and I followed the little course book rather than the play. These days I would understand it but be bored by it. This course in English literature was accompanied by one in English language leading to an hour- long essay examination and another examination of two hours on analysis, correct meaning, syntax, synthesis and so on. Correct meaning was greatly helped by knowledge of Latin.

The degeneration into savagery depicted by Golding is the most vivid memory of that era in English literature, the prefect becoming a monstrous killer. A year later, I was a prefect myself but before that was the year of the ordeal by fire. I reached a pitch of effort and concentration in the fifth form which I have not attained since then, and the little notebooks of algebra and geometry are now accompanied by syllabi and the examinations at O level that took place in July 1966. If I had let the fire go out as did the guardians in "Lord of the Flies", I would have condemned myself to a life of boredom and drudgery. Interleaved with the notebooks are a few pages of French prose. The French syllabus required a translation into English of unprepared prose and vice versa, a verbal examination in reading and conversation, and in enunciation and intonation. I found French easy to pronounce, perhaps due to my now known Norman ancestry of Havard, Aubrey, de Turbeville and Hopkins. French dictation was a short passage called "The Lost Child". The Latin syllabus led to unprepared translation and included scansion of hexameters and elegiac couplets, Caesar's "De Bello Gallico", Virgil's "Aeneid", lines 390 to 804, questions on Latin declension and grammar, and translation of passages into English. The Latin teacher was Maude Daniels, who maintained strict discipline and was very thorough, if a little mechanical and pedantic. My own technique of learning was memory- based, and for this reason I had forgotten the very high standard until I saw the syllabus again this week (September 2011). By that time, the pathetic copiers had stopped making their mafia threats and had seen that it would do them no good in the O level examination, so they had given up and the rest of us hoped that they would not disrupt the class too much. They never did so with Maude Daniels. The Latin O level examination was two and a half hours and the French examination was two hours.

I was focused on the point of a needle in order to excel for the sake of scholarly excellence. My world was and is very different from that of the career vultures I came across later in life, who grab power in a frenzied ego storm. The grammar school was a high point in civilization, an ordered world and tranquil in the shades of knowledge. It was a mixed grammar school and worked very well without any of the strident sickness about gender equality that saturates today's absurd and deeply unhappy society, fallen entirely from family, grace and wisdom. The examinations instilled a self- discipline that is now entirely lacking- contemporary courses in education are next to meaningless, I once met on Oxford D. Phil. who could not spell. Contemporary barbarism is aware of their defects and attempt to expel merit from history. The deliberate destruction of the records of Pontardawe Grammar School is an act of malfeasance by Neath Port Talbot Borough Council. No worse assault on civilization could ever be imagined, it is like setting fire to a Rembrandt or blowing up the Parthenon. Vastly inferior talent is able to dictate atrocities to the people through a system of unelected councillors. They are never elected by a majority of the electoral register and administer savages known as bureaucrats on Golding's remote island. The Borough Council is a Ministry of Truth situated in some concrete box in the wrong English- speaking valley, weak enough to have lost its language. The concrete box sold the grammar school to the ever present king of vultures, a "developer", who did nothing. The buildings were smashed to pieces by the savages of the Lord of the Flies, and burnt like a fire beacon in 2007. The Assembly Hall now lies gaunt and roofless amid damp rain. Pseudoeducation has moved to Cwmtawe Comprehensive, where luxuriously fat pseudopupils throw food on the floor. The concrete- clad bureaucrats evade and lie, and are well paid for it. They oversee the destruction of civilization, of all that is worth preserving and is destroyed, creating a wilderness ruled by vandals and anonymity.

Yr Adfail - Er Cof Am Ysgol Rhamadeg Pontardawe

Mud yw llechi'r to^ a'r mur; - y graig hen, Y gragen; hon o'th lafur. Haf dy boen, yr hafod bur, Y blodyn dan y bladur.

The mania for gender equality has led to the appointment of a so called vice chancellor at Aberystwyth (in this year, 2011) who knows nothing at all about Wales or its language. So the college becomes a bed and breakfast establishment with a landlady in charge, all about money and very bad food. The selection process is shrouded in the smoke of an anonymous room. The people are told nothing about why or how it happened. It is said that there is no one in Wales who can speak or read Welsh, and no one who knows anything about Wales at all. This is the only logic that would support such an idiotic appointment by the career vultures. There are many people in Wales far superior in ability to this so called vice chancellor. Every contemporary college and technical institute calls itself a university, and they are all excellent. Pupils from Welsh medium schools have nowhere to go, there is not a single vice chancellor able to speak Welsh. At the height of civilization in the sixties, the principal at Aberystwyth was Sir Thomas Parry, the great scholar of my ancestral cousin Dafydd ap Gwilym, and bard, fluent in all aspects of Wales. Who is responsible for blatantly defying the Welsh Government's policy on the Welsh language? Who is responsible for this wholesale destruction of all aspects of the human condition? Aberystwyth is flooded with strangers to the tongue. My method of disciplined self- teaching is the only avenue left to young Welsh speakers who want the language to survive and do not want to be conned by a bed and breakfast establishment and fifth column ethnic cleansing. They must learn at home within a stable, traditional family.

There were three examinations, each of two hours, for a mathematics certificate at O level in 1966 at Pontardawe: arithmetic, algebra and geometry. It was also possible to take alternative two and a half hour examinations in trigonometry and coordinate geometry and calculus. The arithmetic syllabus consisted of prime factors, units, fractions, decimals, ratios, percentages, averages, square roots, logarithms and measurements, all applicable to everyday life. The algebra syllabus included: formulae, indices, factors, remainder theorem, fractions, quadratics, simultaneous quadratics, graphs of

statistics, arithmetic and geometrical series and use of logarithms. Geometry was divided into practical and theory, the former being ruler and compass work with protractors allowed. It included triangles, parallelograms, proofs of theorems, bisection of angles, construction of perpendiculars, angle equal to a given angle, parallels, quadrilaterals, division of a straight line, triangle equal in area to a given polygon, tangents to a circle, circumscribed, inscribed and escribed circles of a triangle, circles from angle segments, regular polygons and so on. The theory included the proof that the exterior angle of a triangle is equal to the sum of the two interior opposite angles; if two sides of a triangle are equal the opposite angles are equal and so on.

A few loose sheets only have survived from the fifth form consisting of tests in geometry. The first test on 2nd December 1965 consisted of two questions on the internal angles of figures within a circle, and two more tests on 3rd December 1965 in which I scored thirteen and a half out of fifteen and five out of five. In algebra one notebook has survived starting from 8th October 1965 with an exercise in the remainder theorem. These were followed by some simple equations on 14th and 15th October 1965. The result was nine and a half out of ten. On 18th October 1965, there was an exercise in the use of equations marked ten out of ten, and pendulum- type exercises on 2nd November 1965, my grandmother's birthday, marked ten out of ten. Finally, there was an exercise on 4th November marked ten out of ten, and several problems on bonfire night, 5th November 1965, marked ten out of ten.

At that time, I was developing night photography with a long exposure or open shutter and bonfire night is recorded as figures and branches in stark black against a background of flame. So after getting my routine ten out of ten I changed into rough clothes, took my camera and tripod, and photographed the bonfire. The flames were fed with cardboard boxes and on top was incinerated an effigy of Guy Fawkes, fireworks being set alight spectacularly from a box. A lot of these bonfires were made in one of the two small fields of Pant y Bedw but the night photography took place in an area near the council tip, a morasse of rubbish covered up by the council with a thin veneer of soil and a football pitch, a typical council cover up. I can recognize one figure standing before the flames, my cousin Ellis in his glasses. The night photography reveals the landscape in front of Pant y Bedw in one photograph, in particular the shoulder of Mynydd y Gwair at night, unspoilt by pylons and pipelines about 1965 and 1966. There are only two houses where many are crammed in random anonymity now, and Cae Bach had not been destroyed by development. The road up to Lluest Treharne is marked by a series of lamplights, and in the far distance a car is traced by a long

trail of light as it climbs up towards Mynydd y Gwair. The hayshed and hedges of Pant y Bedw appear as dark, silent objects on the field at night. In another night photograph I kept the shutter open and moved the camera around on its tripod to produce an abstract pattern of light writing, or photography. The lights of streetlamps near and afar merge in with one another, and a car headlamp makes a jagged pattern. This was a photograph taken just outside the house at "Pant y Bedw", after I had emerged briefly into the darkness from my study cell of stone and books. Two of these night photographs were later developed in the photographic dark room at Aberystwyth, one showing a nightscape of Craig Cefn Parc centred on Elim, with its windows showing a blaze of light, with the vertical shoulder of Mynydd y Gwair patterned with streetlamps of three roads. This photograph was taken in the summer or autumn because of the dark leaves just visible in the foreground. There is also a reverse silhouette in which the light of a halogen streetlamp is reflected off the chimney and TV aerial of this house at night, with some stars in the background night sky. Around this time also I got my first telescope as a gift and looked at the moon and stars through it.

These were brief intervals, however, from the ever looming O level examinations of July 1966. The physics syllabus could have been written in the time of my Civil List predecessor Michael Faraday, and led to a two and a half hour examination in physics, no practical examination. It consisted of three sections: mechanics; heat, light and sound; and magnetism and electricity. The mechanics section included measurement, beam and spring balance, velocity, acceleration, Newton's laws, momentum, force, energy, work, power, forces, moments of forces, weight, centre of gravity, machines, stable and unstable equilibrium, equilibrium of three forces, fluid pressure, Archimedes' principle, flotation, pressure, the barometer and Boyle's law. Heat included temperature, mercury thermometers, maximum and minimum thermometers, expansion, Charles' law, quantity of heat, specific heat, thermal capacity, change of state, latent heat, melting point, boiling point, vapour pressure, transfer of heat, heat as energy, and transformation of energy. Light included propagation, reflection at a plane, concave and convex surfaces, images, refractive index, spectrum, colour, concave and convex lenses, the camera, the eye, combination of lenses as in a microscope and telescope, and candle power. Sound included production and transmission, noise, musical notes and vibration. Magnetism included magnetic lines of force, electricity included current, galvanometer, wet and dry Leclanche cells, electromotive force, Ohm's law, resistance, power, voltmeter and ammeter, currents, electrolysis, electromagnetism, induced currents, alternating currents, transformer, dynamo and motor.

These topics were gone through thoroughly by the young Mr Blackmore, with many demonstrations of apparatus stored in a room behind the main physics laboratory. In this fifth year I think that all classes were taken in the laboratory. The syllabus did not go beyond the early nineteenth century, and the laboratory looked like a museum with benches and stools, old fashioned galvanometers, ammeters and voltmeters. Iron filings were spread on paper over a bar magnet, giving a pattern of lines of force, and Faraday's law of induction was demonstrated with a bar magnet and loop of wire. There were boxes of convex and concave lenses, and graph paper for reflection experiments, problems on focal point, microscope and telescope. There was rudimentary thermodynamics of an earlier era than my predecessor on the Civil List, James Joule. There were no vectors, no laws of electromagnetism, and no quantum mechanics. There were systems of pulleys and problems of torque being force times arm. Some scientists would call this physics before the era of obscurity, and some never evolve from that. Physics was a combination of problem solving and memory work, a matter of finding out how to apply the laws and formulae to problems, and this is what I still do today, almost half a century later. Apart from electronics, physics laboratories look very similar today. I always found it a dry subject, something to plough through, and my real interest was sparked by problem solving involving mathematics. Mr Blackmore was only a few years older than the class, so was more in tune with our generation.

The WJEC chemistry syllabus is the most impressive and detailed, and together with all syllabi is in the public domain. It was taught by David Davies ("Dai Bump") in a then modern chemistry laboratory and store room in one corner of the upper floor of the top building of the grammar school. This is now derelict and abandoned. The syllabus included the following:

- Physical and chemical changes, elements, compounds, mixtures, air mixtures, separation of mixtures, solution, filtration, distillation, fractional distillation, sublimation, and fractional crystallization.
- Constituents of air, detection of water vapour and carbon dioxide in air, proportion by volume of oxygen in air.
- Water is composed of hydrogen and oxygen, composition of water by weight and volume, water as a solvent for solids and gases, saturated solutions, solubility of solids in water and the effect of temperature.
- Solubility curves, water of crystallization, efflorescence, deliquescence, colloids, solutions, hard and soft water, temporary and permanent hardness, disadvantages of hard water and softening.
- · Acids, bases and salts, formation of acid by action of water on oxides

of non- metals, action of one acid on the salt of another more volatile acid.

- Formation of salts by the action of acids on metals, oxide of a metal, carbonate, neutralization of alkali with acid.
- Double decomposition with filtration and precipitation. Acid salts, basicity, bases, oxides, hydroxides.
- Equivalent weights, determination of H displacement, gas laws, direct combustion with oxygen, conversion of metal to oxide with nitric acid.
- Reduction of oxide to metal, replacement of a metal by another. Equivalent weights of acids and alkalis with methyl orange as indicator.
- Equivalence of normal solutions. Law of conservation of mass, law of constant composition, law of multiple proportions. Dalton's atomic theory, atomic weight and equivalent weight, valency, chemical formulae, the law of Dulong and Petit for atomic weight, the law of Gay-Lussac for combining volumes, verification, application to the composition of water, carbon dioxide, sulphur dioxide and hydrogen chloride.
- Avogadro's hypothesis, proof that molecules hydrogen, chlorine and oxygen contain at least two atoms.
- Molecular weight, gram molecular volume and vapour density.
- Faraday law of electrolysis, ionic theory, electrolysis in aqueous solutions of dilute sulphuric acid, copper sulphate solutions, sodium sulphate, sodium chloride.
- Oxidation and reduction. Oxidizing and reducing agents and methods of detection.
- Reversible reductions.
- Use of catalysts, surface area of catalysts, contact process.
- Non- metals and compounds, preparation of oxygen in the laboratory and from liquid air.
- Laboratory preparation of hydrogen from acids, steam and water using calcium, commercial preparation from steam.
- Properties and uses of hydrogen, atmospheric nitrogen, ammonia, its synthesis from nitrogen and hydrogen.
- Ammonium salts, oxidation of ammonia in the soil and catalytically.
- Nitric acid from sodium and potassium nitrate, catalytic oxidation of ammonia.
- Reactions of nitric acid, effect of heating nitrates, nitric oxide and nitrogen peroxide.
- The nitrogen cycle.
- Carbon.

- Charcoal, graphite, allotropy of carbon, oxides, carbon dioxide in the atmosphere.
- Combustion of carbon and carbon containing substances in air and limited air, carbon monoxide from elements and carbon dioxide.
- Destructive distillation of coal to produce coal gas, coke and coal tar.
- Bunsen burner and flames, candle.
- Water gas, producer gas.
- Sulphur.
- Extraction and uses, allotropy and properties, sulphur dioxide, sulphurous acid as bleaching agent, preparation of sulphuric acid by contact process.
- Properties of sulphuric acid, oxidizer, dehydrating agent, hydrogen sulphide, atmospheric pollution.
- Chlorine by electrolysis of brine and oxidation of hydrogen chloride, preparation and reactions, bleaching powder, sodium hypochlorite, hydrogen chloride, preparation and direct combination, common salt.
- Metals and non- metals, metals from ores, iron, zinc, copper.
- Properties of sodium, potassium, calcium, aluminium, zinc, magnesium, iron, copper and lead.
- Preparation and uses of metal compounds: sodium hydroxide, carbonate, bicarbonate, chloride, sulphate and also of potassium; calcium oxide, hydroxide, carbonate, sulphate, chloride, magnesium oxide, sulphate, zinc oxide, sulphate, ferric oxide, hydroxide, ferrous sulphate, cupric oxide, hydroxide, sulphate and nitrate.

This syllabus was examined in one two and a half hour paper, without a practical examination. It is a more modern and vibrant syllabus than physics, and prepared for industry. The practical classes were well prepared with good quality apparatus, and the pupils learned the art and practice of chemistry as well as its theory. The syllabus covers what is known as physical and inorganic chemistry, but does not include organic chemistry. As with all the WJEC syllabi it was taught throughout Wales, and regulated by a central examination board, the WJEC. It was relevant to Wales and taught by Welsh men and women who originated from the same towns and villages as the pupils. My one surviving notebook of chemistry is my sixth form practical notebook, and as usual it is that of a diligent pupil. At O level I earned the best grades 1 in chemistry (taught by David Davies), physics (taught by Mr Blackmore) and mathematics (taught by Mr Phillips). I really earned these grades as is apparent from the detailed syllabi, regulated by frequent examinations and homework recorded in my extant notebooks. I always recorded the best results in these

subjects in the term examinations. At the time, I did not fully realize what an achievement this was, because my father had no interest in my work at best, and was sometimes hostile to the idea of the grammar school. So it is obvious that these results came from an innate desire to learn and to excel and I do not see why anyone should denigrate this achievement or try to cover it up, or much worse, expunge it from history. That is surely the sign of an entirely failed society.

The history syllabus is much shorter than the chemistry syllabus. The point of importance is that candidates could answer in either English or Welsh in some sections of the examination, one paper of two and a half hours. Pontardawe chose the history of Britain from 1760 to 1914, with emphasis on the history of Wales. That seems natural to any other country in the world, but in Wales was quite a breakthrough. The overall aim was the description of the main stages in the social, religious and economic development with special reference to Wales. There are some words in the syllabus about the relations between the peoples of the British Isles and the Continent of Europe, the growth of the British Empire and the influence of geographical factors on movements. All that is very vague compared with the scientific syllabi. In the examination paper there were questions on the stages in the growth of the Welsh iron industry (1760- -1860), answer in Welsh or English; Iolo Morgannwg (17471826); Henry Richard (181288); Sir Owen M. Edwards (18581920); causes of the emigration from Wales in the nineteenth century; the Merthyr Riots (1831); the tithe war; and importantly the establishment of the University of Wales. In the general section there were questions about the Saratoga campaign (1777), and Parnell in Ireland.

The history course was very much a memory job, and with my good memory the facts could be stored and regurgitated in the way demanded by the syllabus. This was not a learning process, but when the syllabus finally got around to mentioning Wales, I warmed up to the subject matter. I liked the teaching about Parnell in Ireland and the struggle for Irish independence. Iolo Morgannwg founded the Eisteddfod and was a great bard in his own right, although he tried to pass himself off as my ancestral cousin Dafydd ap Gwilym. Iolo is actually hardly a lesser bard and did not need to do that. The Merthyr Riots were particularly close at hand, and were the results of inhuman conditions, disease and starvation. It was an uprising, not a riot. Sir Owen M. Edwards founded the Urdd Gobaith Cymru and did an immense amount for the real Wales, not Wales marketed for tourists. History was too much of a learning subject for me, but nevertheless I earned a grade 1 in

it. So in the mid- sixties, every pupil in Wales knew that the University of Wales was established to be a federal university within Wales, not a cut up bed and breakfast establishment importing students with poor qualifications and excluding scholars from Wales. The People of Wales is supreme authority in the university, and have every right to re-establish that authority. The University was founded at the National Eisteddfod for the education of men and women in Wales. I emphasize men and women. Women have had equal rights in education in Wales for over 100 years. They must earn those rights, and not be handed jobs just because of gender.

Finally, the art syllabus at O level was examined, surprisingly, by three two and a half hour papers. The only other subject examined by three papers was mathematics. I was not interested in art, but for some reason the WJEC made it as compulsory as mathematics. There were three sections of the art syllabus at Pontardawe: drawing and painting; imaginative composition; and history and appreciation of art. I remember the latter vividly but the two former sections are blanked out of my mind. The syllabus reminds me that I took the examinations in plant drawing and abstract art, with a drawing on the subject of "Jubilation". The art history at Pontardawe was the British art history section on British painting: Hilliard, Lely, Hogarth, Gainsborough, Reynolds, Wilson, Blake, Turner, Constable, Ford Madox Brown, Whistler, Sickert, Augustus John, Stanley Spencer, and Sutherland. There were syllabi on the much more important French and Italian schools of painting which I came to appreciate much later.

I do not remember any preparation for these two art practical examinations in the shape of term examinations, and the art master Charlie Lines did not give us much help, being sarcastic and irritable given the slightest provocation. However, I greatly appreciate art now of any era, with the exception of postabstract expressionism. I do not appreciate the exhibition of blank canvases. Similarly, I appreciate music of any era and any type with the exception of modernist music. I do not appreciate a random string of noisy notes. So I must have gone in to the two art practical examinations unprepared, but clearly remember the preparations for the art history paper. We had to buy postcards of paintings, for example, from the National Gallery in London, or from Cardiff or the Glyn Vivian in Swansea. The art history examination was not easy at all, showing once more that I reached a high point of learning at the age of just over 16, when I went through the O levels in the Assembly Hall, now burned into a ghastly ruin by vandals. That is surely a terminal decay of civilization. Every generation tends to say the same, but in this case there is

stark evidence for it in silhouette against the sky. I remember feeling almost exhausted because the art examinations were among the last on the schedule of examinations. I attacked the abstract drawing almost randomly, having been taught nothing by Lines about abstract drawing. In the event, I got a grade 3, which translates into a good upper second degree. All my other subjects at O level were equivalent to first class degrees. Great credit to the teachers as well as myself as I look upon him now - with the perfect objectivity of half a century's perspective.

There were fourteen examinations in all, in the space of maybe less than two weeks: two in English language, one each in English literature, Latin, French, history, chemistry and physics, three each in mathematics and art. The grading system was offered to headmasters as a guide. There were nine grades, six of which were pass grades. So a grade one was the best passing grade, a grade six the worst passing grade, grades seven to nine were fail. The grades were given to parents and pupils, but on the actual certificates they did not appear. The deliberate destruction of the school records of Pontardawe means that all of these grades have been lost. However, I remember with the utmost clarity, so do many others with high probability. Neath Port Talbot Borough Council is proud of having destroyed these grades, and proud of reducing the school to a ruin. So the people must eliminate the council with an electronic referendum. I do not remember the school giving me my certificates, but amazingly, they are on record - for a fee of £45. So after half a century I must pay one bureaucrat for the destruction of the school records by another.

I recall that I was given the school prize for the best O level results of the entire school, forms L and A. However, there was no ceremony as far as I can recall. I remember that school prize vividly because my father became uncontrollably angry, as he often did. This was the by then familiar opposite reaction to what one might expect, but in this case his anger was justified, it was anger at blatant injustice, the first of many I have experienced inside and outside Wales. I was not given the prize outright, but it was shared with Huw Thomas, who lived in "Speit" high on Gellionnen overlooking Pontardawe. The name is probably a corruption of "ysbaid", which means "resting place". I can imagine that it was a resting place on the unimaginably ancient road between Llangyfelach and Llangiwg. "Speit" is situated just opposite the site of Llan Eithrym, so may have been a lodging place associated with the cellan and later church of St. Eithrym. This was the first time that my father had taken any interest in the school directly but he knew of the existence of those school reports indicating that I was top of the form from the summer term of 1962

up to July 1966. With all records lost both by a pseudocouncil and probably also by my parents, this autobiography is the only account of what happened. My guess is that the school prize was awarded jointly to Huw Thomas because he was a very good pupil, but also through the influence of his father, who was a headmaster. I was not particularly concerned myself and by that time had already found a summer job in a food warehouse on Swansea docks -- the old docks now glorified into a middle class suburbia. So on this occasion my father takes credit for fighting for justice, and in his own way was adept at the law as was his Awbrey ancestors. Also of course he looked after me until I left school at the age of 18, much to his credit, and so did my mother. However, there was an astronomical gap between what I was taught at school and their way of life. What would an abstract piece of art called "Jubilation" mean to a Welsh speaking coal mining family? Their own culture was already the higher civilization. I was also made a school prefect, and there would be a record of this in the 1966 / 1967 edition of "Y Bont", the school magazine and perhaps in libraries. Being a prefect meant that the sixth form pupil or student was expected to show leadership both in the sixth form and lower school, and entitled to wear a badge on his uniform. I thought that the best kind of leadership in a school would be study.

My actual memories of September 1965 to July 1966 are centred again on study in my own cellan at Pant y Bedw, and on the occasional photographs of the outside world. No one outside Pant y Bedw knew or cared of those long hours of intense concentration, either in Craig Cefn Parc or Pontardawe. They could guess at them through the very dark rings around my eyes, but never bothered to observe anything. Many coal miners would have been old men at the age of 15. It was my "... craft or sullen art/ Practised in the still night". It was critical to get good results at O level, so as not to waste all those exceptionally brilliant performances in the term examinations, and not to betray my parents' trust as so many pupils did. Those results were objectively brilliant, after fifty years I can allow myself the truthful luxury of saying that. So my preparations for the Christmas term examination of 1965 began perhaps in late October. That meant revision in addition to homework, and meant study into the night and sometimes the early morning. My sister had already given up and would be watching a blaring TV in another room, in a state of hostile and poisonous boredom. Often there were towering quarrels between sister and father, but I shut my ears to all of it. Luckily for me this TV was separated from me by two closed doors, minimizing the distracting noise of pop groups and atomic explosions underground every two weeks or so as the mad world squared up.

Fortunately there was no transistor radio or mobile phone. I allowed myself a short break to watch the BBC news at 9.00 pm, then retired again to the cellan. I developed techniques to stop myself falling asleep, or to stop a lapse of concentration. At some point the material would be ready in my head, and it would be revised one final time on the night before the examination; often there were two examinations in one day. I suppose that this is how an actor learns his lines, or an attorney learns a brief. The WJEC seriously expected pupils to cope with this load of work. Many just gave up. There being no records they can claim anything now, but the truth is that they gave up in the face of an understandably mountainous task.

There are memories of Saturday afternoons, the only free time I allowed myself, memories of football results from the TV, always looking out for Swansea Town, of cricket matches that went on for days, John Arlott trying to make an interminable boredom sound interesting. There were recitations of football results for the pools, and rugby results, sometimes athletics or swimming. Sometimes there would be rugby internationals in black and white, with both teams looking exactly the same, covered with mud. Clive Rowlands developed a style of kicking everything into touch, so results could be three nil or nil nil, all four wingers frozen solid, Dai Watkins never getting a pass. I began to feel the need for fresh air and a photographic walk with the sheepdog. My mother would be at work in Lewis Lewis on Saturdays and would not return home until about six p.m., often very tired, so my father made steaks like spare wheels dripping in fat from a pound of melted lard, and dished them out like solid tyres. Trying not to damage my teeth, I consumed these chemicals between inch thick slabs of bread while watching "Dr. Who", which came on after the sport. I thought it was rubbish but vaguely amusing. Sometimes my parents would dress up and go to the Adelina Patti Theatre of Craig y Nos Castle, transformed for the evening. If my sister had also disappeared somewhere unknown, as she began to do, I would be the guardian of the smallholding. I was happy with some peace for a while, I liked chopping up the sawn sprags, putting coal in the shed, and feeding the animals for the night. For a few short hours the looming examinations vanished.

I have a memory of cycling up to Tan yr Ogof caves from Craig Cefn Parc, about fifteen miles there and fifteen miles back on the old A4067. This was on a cold, cloudy day in what could have been the autumn. The bike had three gears and a box of spare patches for a puncture and I was mowed down by cars every few seconds or minutes, even in those days. The old A4067 wound through Pontardawe then under Godre'r Graig with its coal tips and

buckets of coal hauled across the U- shaped glacial valley. Godre'r Graig began to landslide around this time, many houses being moved visibly from their foundations, perhaps from the pressure of the coal tip, or subsidence or natural causes. The road went up to Ystalyfera, a small town with another grammar school, then to Ystradgynlais with its clock or watch factory. I had no idea at all that I was passing my ancestral home - Ynys Cedwyn Hall. By that time, it had been demolished by bureaucrats, experts in cultural karate. The road turned sharply near the old clock or watch factory, then continued on its course towards Glyn Tawe, where mountains came into view. These are sometimes dark and foreboding, sometimes golden in their beauty. They are represented now on my coat of arms - the Bannau Brycheiniog (Brecon Beacons). There was a long stretch of road after Ystradgynlais until a small road branched off towards Coelbren, known to the Romans. Unknown to me at that time, William John Evans my grandfather, once had a small house just off that road to Cae Hopkin in an old mill called Melin Llech, just below my great- grandmother's farmhouse. She was Hannah Thomas of Henrhyd Isaf. These were respectively below and above a waterfall of spectacular beauty -Scw^d Henrhyd. The railway had already been closed by Robbins the Hood. The gradient of the valley made itself known to the cyclist as I made my way laboriously towards Pen y Cae, where my father went to school briefly in the Great Depression, and a ragged scarred landscape of rocks opened to the right, in which the village of Penwyllt could still be found. Later in the eighties, most of its remaining houses were demolished. It cannot be seen from the A4067, and by that time I was nearing Craig y Nos Castle. At that time, it was a looming dark walled presence on the right of the road just as it passed over the gigantic ridge that gives its name to the Castle. It must still have been the T. B. Sanatorium of less than pleasant memory. I was never allowed in there, and did not know that it was once owned by my ancestor Morgan Morgan the Squire, High Constable of Brecon County.

My destination was the Tan yr Ogof cave system, just past the Castle on the road to Callwen. I had enough money to pay to get inside, and chained up the bike. That was the only time I got inside the system, to the sound of dripping water, steep passageways, and lighted stalactites and stalagmites. I had heard my father mention the Morgan brothers who discovered it by paddling across an underground lake in a coracle from a different entrance. They were my ancestral cousins of the prolegomenon, Tommy and Jeff Morgan. The cave reminded me too much of a coal mine for comfort, but its natural walls were safe but prone to flooding. Then it was an easier bike ride down the gradient of

the valley but against the prevailing wind as I began to ache all over from the unfamiliar thirty miles. I had to push the bike up from Clydach to Craig Cefn Parc and arrived stiff as concrete. Tan yr Ogof was also owned at some point by my Morgan ancestors. I did not get inside the walls of Craig y Nos until the mid- nineties, and overcoming my reserve, finally ventured inside the Castle. Now it is for sale and I have made efforts to buy it on behalf of the nation.

I also have a few memories of being given regular copies of a magazine called "Look and Learn", which had quite a lot of interesting things in it, but I gave them all to my cousin Ellis Williams and they have vanished. They must still be in the copyright libraries however. Cuttings from this magazine and others were used over one entire weekend to produce a scrap album for a project set by Olive Williams. She was pleased with it and awarded me an Eisteddfodol Prize. She also supervised an outing around this time to Cardiff Castle and St. Fagans Folk Museum in Cardiff- I remember the little houses, spinning wheels, implements and memories of a simple life that attracted me greatly, as it does many others. Cardiff itself was an anonymous mass of greyness, smallpox of industrial revolution and modernism obliterating ancient and verdant Wales. Miss Williams looked haunted and lonely, and the thugs who destroyed her by common assault were allowed to get away with a terrible crime. At about this time, a gramophone player arrived in the house, and my first record which I bought was Tchaikovsky's 1812 Overture, followed a little later by Holst - The Planets, and Sibelius' New World Symphony and Korelia Suite. That was the first awakening of classical musical appreciation outside the very rich music of Wales itself. At this time, I would be reminded of the chapel and its high civilization, and I often regretted my choice of grammar school imposed by an outside world. The Reverend T. R. Lewis was forced to move to Aberystwyth and there was no one of quality to replace him. I had been bought a system of model racing cars, but this was given away by my father, who thought I was too old for it, and one day suddenly took it away and gave it elsewhere. I hope to find other notebooks of that era but I fear that they were also "thrown away" as they say. Many of the books left with my parents for safe keeping also vanished, but may still be in some dark attic. Later, I subscribed to a history magazine that had some very good articles, but all that has also vanished. I was always too old for such things as comics, and was bored by them from the earliest age.

Having been placed top of the form (5L) in the Christmas term of 1965, the system began to gear up for the O levels themselves as we returned in the Easter term of 1966. I had a very remote foreboding caused by the war in Vietnam

and all the underground nuclear tests, but my mind was overwhelmingly on the examinations. Looking at the immense amount of factual information that I had to learn from the syllabi this was not surprising. On top of that there was still farm work, and worries about the stability of the family, whether my father would suddenly sell the farm, and force me into another school, and worries about the increasing violence of the quarrels between sister and father. There was no feeling from either about learning and grammar school, but I think that my mother's influence won the day - just about. She could easily have walked out of such an atmosphere back to her parents' home in this house, but stuck it out. I often worked here in some peace and quiet in the last years of my grandmother's life. It was becoming increasingly urgent to earn the O level certificates. I still thought that I enjoyed farm work, until one day my father took me to the farm of my former primary school teacher, Miss Jenkins, who lived there in retirement with her two sisters and I recall driving a Fordson Major tractor there pulling a large gambo (hay wayn). I did not have complete control of the clutch and shook off a few bales, causing instant anger. So I thought that this is not really the world for me. Miss Jenkins was very different from the stern school mistress of former years, mellower and much kinder. The greatest problem in these years was my father's spectacular temper, which could go off at any time, a walking powder house and shot fireman. There were causes for this, but it was a burden. It was a matter of instant obedience or silence and tactical withdrawal.

I was placed top of the 5L form in the mock O levels of Easter 1966, and do not recall whether they took place in a classroom, as was usual for term examinations, or in the Assembly Hall as a rehearsal. Even the obsessed rugby players were sobered up by this time because they knew that they had just a few weeks left until the real thing, as they realized that they could not get a job with rugby, and without O levels. The final Summer term was almost all revision for me, and I hope that they stopped loading us with new material a decent two or three weeks away from the examinations themselves in late June or July 1966, but my mind is completely blanked out by the needle point concentration. This is a well- known phenomenon - concentration ends up with regurgitation and the mind is emptied of all but material that is really learned. I recall the appearance of little books of past papers, such as the papers kindly sent to me in September 2011 by the WJEC. There may have been a little anxiety among the teachers, but they had also given up on those who had given up themselves. The O level examinations themselves took place in long rows of silent desks in the Assembly Hall, into which the hypertense and

white- faced pupils were admitted under the eagle eyes of supervisors. The papers were already lying on the desk, and there were examination booklets in lieu of foolscap paper. The nervousness before the examination was very intense, and in my case fourteen examinations were crammed into a space of about two weeks. I was so well prepared that the only slight feeling of trouble occurred in the abstract art examination. It seems from this distance that the art teacher had not prepared his pupils for it. Finally, the ordeal was at an end, and the pupils very suddenly disbanded, some of them literally running from the school, out of the little yellow painted gate, and downhill towards the bakery, and then vanishing forever. I never saw most again, as only a few of them returned to A level. I have sight now of all my examination papers, and they are all archived along with the syllabi as historical source documents on www.aias.us to accompany this autobiography.

Y Chwibon

Yr enfys, arch oer enfawr - uwchben y Chwibon; sain ei oriawr Ger swyn lliwiog a gyr sawr Ar hoen a sw^n yr henawr.

The papers were examined by WJEC and the results given in writing to the headmaster with grades which were used to assess which pupils could be admitted at A level. My grades were all 1 (the best grade) with the exception of English language (grade 2) and art (grade 3). The six passing grades were 1 to 6, 6 being the lowest, and grades 7 to 9 were fails. I remember these grades with the utmost clarity because I worked so hard for them. The WJEC gave only one certificate for all nine subjects, but that records pass or fail only. So the destruction of basic information by Neath Port Talbot Borough Council means that there is no record of who did well or not so well. This autobiography is therefore the most detailed extant record of that entire era of Pontardawe Grammar School. I do not recall any ceremony to give out the certificate, but it must surely have been sent or given to my parents and must surely have been used to award me the school prize and rank of prefect.

I always felt overwhelming relief at the end of any set of examinations, but there was never much time for relaxation before my father began to hint again that I should help him by finding work. The grammar school to him was never real work, which meant labouring work. From the genealogical research in the prolegomenon it has become known only in the past few years that all my known antecedents in the direct paternal line were manual labourers, going back to my great- great- grandfather Edward Evans of Llanigon in Powys born in about 1802. My father was very fond of manual labour on the farm, and would often go around farms cutting hedges with a cryman (sickle), exactly as his forebears did before him, offering to help with the harvest in the ancient tradition. On the distaff side he was descended from the Princes and Normans. as the very accurate genealogy reveals. Every one of my antecedents back to Edward Evans Llanigon had started work as a farm labourer very early in life. I did the same at Pant y Bedw, I was working in the fields at the age of about 7, and that was considered to be nothing unusual. In addition to that there was intense study. So this may explain my father's work ethic, which could border on obsession. He was an intelligent man, but lacking in self- confidence and patience, so never took advantage of the educational opportunities open to him. He took control of those around him by instinct and force of character alone, in the manner of his princely and Norman antecedents.

In late July and August 1966, there was no job at Thomas Thomas as van boy, to my disappointment, so someone found me a job in a food warehouse opposite one of the Swansea docks. I gave all my course books back to the School, and kept all my notebooks, carefully putting them away in the cellan of Pant y Bedw. This was exchanged temporarily for a warehouse packed with boxes full of food and other material sold wholesale for shops and similar. I travelled to it on the bus, getting off at Wind Street which was then still a respectable place near Swansea Castle of my Norman forebears. The present Wind Street is saturated with alcohol and shunned by decent people. Swansea pseudocouncil does not do a thing to stop the drinking and violence despite many protests, including protests from the Church in Wales, so again this collection of irresponsible and unelected individuals must be eliminated by the electronic referendum. That would get the alcohol licences removed very quickly, and also shut down the gambling dens in Swansea. The warehouse was filled with bored and grey- faced workers whose expletives were undeleted and continuous. They talked in one long stream of expletives, a remarkable literary achievement, so the atmosphere glowed with blue incandescence and smelled of Persil soap. My job was to carry around boxes full of this stuff and assorted food tins and other items. This was a change from Cicero and declension, and was a world of immediate and crushing boredom. In the dinner hour I went down to sit on an anchor chain near one of the big ships

in the docks to eat a few sandwiches. These docks are now saturated with ticky- tacky of indescribable ugliness and described as a desirable residence for the middle classes stuck out to sea. The working class natives are crammed into smallpoxed, crime- ridden housing estates, a scarring desolation on the horizon, so present day Swansea is strictly segregated with cars dumped everywhere, but no spoken Welsh anywhere. It commercializes Dylan Thomas to extinction, its councillors sit in a big fat building opposite the prison, and its university is known as a "knowledge economy".

The one memory of that warehouse was an accident one day when a mighty pile of jam came crashing to the floor, so all the cats in Swansea came rushing. The concrete was a few inches thick in jam, reminding me of Wilde's "The Importance of Being Earnest": "Mother, mother what is that/ That looks like strawberry jam?/ Hush, hush my dear 'tis only Pa/ Run over by a tram." The owner was called in and was a little man in glasses in a rage, the bored and pathetic workers, crushed and trapped by this life of boredom, were almost violently harangued indiscriminately, the culprit never found, and the jam cleared up. I struggled to move a trolley loaded with groceries one day, and thought: what the expletive deleted am I doing here? That job lasted the three or four weeks of late July and August. My father came in one day and was appalled at the continuous hopeless swearing of fagged and befagged women with mopped up hair. He had a pious side to his character, and told me that he was glad I was out of the place. So that made me feel reassured that he would tolerate two more years at the grammar school - in the Sixth Form.

In my fifth year at the grammar school, Form VL, the world was a dangerous place. There was a French underground nuclear test on 1st October 1965, a USSR test on 8th October and 21st November, a US test on 13th January 1966, a USSR test on 13th February, a French test on 16th February, a US test on 24th February and 5th March. A US test was on 4th April. On 7th April, the US recovered a lost hydrogen bomb from the sea, revealing a dangerous lack of care. On 22th April, there was a USSR underground test, and on 9th May a Chinese test. On 2th July France started to detonate hydrogen bombs in the Pacific, at Mururoa Atoll and on 19th July at Fangataufa. On 21st July, there was a USSR test, followed by one on 5th August. On 27th March 1966, there were anti-Vietnam demonstrations, the first of what was to become a familiar sight. The first US bombing of North Vietnam occurred on 12th April, and on 30th May 300 bombers took part in raids just as we were preparing for our O levels. On 29th June, the US bombed Hanoi and Haiphong for the first time. For me this extreme violence was a transient distraction on the TV at about 9.00 pm

- then I returned to study with intensity. The TV had made extreme brutality an everyday occurrence. It was difficult to reconcile the Lyndon Johnson of the Civil Rights Movement with this bombing, and shortly afterwards he resigned and did not run for a second term, to be replaced by the cracking, entirely innocent smile of tricky Dicky Nixon. On 26th Sept 1965, the MBE was awarded to The Beatles, and I remember feeling that that was ridiculous, Harold Wilson using popularity. Later, they returned the medals. A series of geriatrics were rolled out by the USSR, culminating in Leonid Brezhnev on 8th April, 1966. There was a series of Gemini launches during the year, culminating on 5th July 1966 by the Saturn rocket, still unsurpassed to this day. On 31st March 1966, the Labour Party narrowly retained power by four seats, with Harold the Mackintosh Wilson smoking his pipe with sidelong glances, looking as if he was about to be found out as some commentator mentioned. Harold Wilson was one of the better Prime Ministers, and at that time I still took an interest in politics. There was still a glimmer of hope for real socialism. He had to resign because of cerebral illness, revealed much later, and was replaced by Jim Callaghan, a dreary party product. On 1st January 1966, a piece of quality music reached number one in the States, "The Sound of Silence" by Simon and Garfunkel. At the time, I did not notice it, but later in 1969 heard it in the film "The Graduate" with my undergraduate friend Roger Goodger with whom I still correspond now.

In Wales we kept our heads down and hoped that the warring powers would not go entirely insane. In August in the Eisteddfod Genedlaethol, an awdl of exceptional merit won the chair at Aberafan, "Y Cynhaeaf" by Dic Jones, which I read as a small booklet. Gwynfor Evans won Caerfyrddin for Plaid Cymru, and I remember feeling jubilant at that. Perhaps that was the source of my jubilation in that abstract art drawing of July 1966, encased in the very loud silence of the Assembly Hall.

CHAPTER NINE

As I walked out of the fallen jam depository for the last time I had had a taste of what fate had handed to less fortunate people in Wales, a life of drudgery under materialistic middle classes with attitudes reminiscent of the gulag archipelago - that little man in glasses could well have been Himmler. Even worse were the coal mines, with their ever lurking dangers. Nearby were the remnants of the industrial revolution in Swansea, blackened piles of stone that looked like prisons or camps without barbed wire, and strung out behind them were stone houses for workers. No amount of decorating can remove the memory of that terrible desolation when the life expectancy was in the twenties. The docks ended in houses which had been bombed and which remained ruined until the late fifties or early sixties, when they were built over randomly with concrete. The road back to Pontardawe Grammar School started with a walk through the opulence of Wind Street, Sidney Heath with its fine clothes, a tobacco shop full of pipes and cigars. The ruins of the Norman Castle at Swansea still loomed - a symbol of unwanted oppression that had gradually reduced a people to the edge of slavery, and had taken away from them almost all their dignity. Their language had changed from ancient British Celtic to a nothingness, the strange accents of Swansea. Then the bus wound its way past gaunt, boxlike houses, under steel railway bridges, past dark buildings permanently grey in the rain, up to Morriston on the old A4067.

From "Sunset"

For the sun, no longer young behind the plough, Has watched the one he had always known so well Build his jagged cities, plan his wars, Ever thirsty, ever hating, ever frail Drinking poison from a dusty grail

I always felt a great sense of relief in Pant y Bedw after getting back from Swansea, a sense of being human again. That was about August 1966, the nine O level grades safely captured, but with no time for any celebration or pride in them. The O levels would get me as far as a factory office perhaps, but that would mean wasting all the learning and all the effort. The grammar school could not have been intended for a factory office, in which Cicero was never declaimed. Walking down the road from the grammar school towards the end of O levels I remember talking to Miss Daniels and Miss Williams, the Latin and French teachers who were hoping that I would take languages at A level. They looked disappointed when I told them that I would be taking the sciences: physics, chemistry and mathematics, and I did not want to disappoint them. So I remember that conversation now. The system narrowed down the range of subjects to three at advanced level. I must have notified the system in some way that I would be returning for A levels, but I cannot remember how this was done exactly, it must have been a letter or form of some kind. I did not know how anything was done in those days, but in September 2011 the W J E C wrote to say that the O level grades were for the use of the headmaster, the O level certificates themselves recording only pass or fail. This is a dangerously careless system, as it turns out the grades for Pontardawe Grammar School were destroyed deliberately by bureaucracy that cares nothing for history. The latter is written by the victors, or by those individuals who write the truth as it occurred. A bureaucratic system changes the truth.

There must have existed a selection system - otherwise anyone could advance to A level at random - and that system must have been controlled by the headmaster, perhaps with the help of a few teachers on a committee. The words "advanced level" must have meant something. These are statements of childlike innocence, but nevertheless the logic is unassailable. In those days, which no longer exist according to bureaucrats, merit must have prevailed. In the final year of O level the grammar school pupils were augmented by pupils who had been transferred from the secondary modern or technical schools. These must have been the best graded. Among these was Gareth Hopkins of Craig Cefn Parc, who had gone through the secondary modern system and had worked in industry before joining the grammar school in the sixth form.

Later he studied in the theological college at Aberystwyth where I met him once in the street. At the grammar school he was forced to wear a cap when about 19 or 20 years old, and that was not to his liking. The sixth form pupils had to wear the same uniform and in my case it was augmented with a prefect's badge, a shield shaped badge. The seats at the back of the school bus were reserved for the sixth formers by mutual and unofficial agreement and there was no longer any question of being thrown out of a seat. The continuous class system of the O level years was replaced by classes with breaks between them, and the sixth formers were allocated what was known optimistically as a common room. This was a small room that had a rough table, a few shelves, and rough chairs. There was also access to a small library, situated next to what had been the biology or zoology laboratory, full of strange pickled creatures in ancient jars. These were in the middle building of the grammar school.

The A level pupils had little idea what to do with their spare time, a new experience in the grammar school. Access to the common room was up a flight of steps next to the Assembly Hall, and the idea of a common room must have been imitated from some far off system. The pupils used it to chat and play cards, a forbidden activity. I took my camera to school and secretly photographed a card game around a rough table. My friends Leighton Carter and Lynn Evans are nearest the camera with three more friends in the background, one of them wearing a prefect's badge. So this was a dangerous rebellion against authority, a card game. On the wall there is a sign taken from a military tank range by some pupils, written on it is "Danger, Tank Crossing". There are some very rough and badly made thin, curving shelves with books on them, and the table itself looks as if it had been left out in the rain for years at the back of the woodwork room, or found in some junkyard or council tip and used for the idea of a "common room". In the photograph all are in the same uniform as used for the lower school at O level, and Lynn is wearing a black and red scarf. The room must have been a junk room that was suddenly relabelled a common room. There were signs of ominous rebellion all over the school, sometimes the regulation haircut was exceeded by a few inches due to the influence of the TV. Sometimes caps were not worn. The teachers regularly described the class, even at sixth form, as barbarians and the worst class ever seen at a grammar school. The five pupils in the photograph do not look at all like barbarians, and haircuts are strictly regulation. One day Sulwyn Lewis burst into the room like a short fat cowboy with no hat and no six guns and caught us playing cards. He turned apoplectic tomato red and sounded like a corporal. If there were a carpet there he would have chewed it, but there was only linoleum or blocks of wood too tough to eat. He must have been tipped off to rebellion. Sulwyn Lewis was a short fat volcanic man and that burst of random anger in the attic, or common room, or whatever, was a warm up of what I would be subjected to later in 1967. One day some 2nd World War bayonets or captured or antique swords appeared in the common room, and there was a sword fight. There were no machine guns as in the film "If" of that era, directed by Lindsay Anderson. Some of the sixth form pupils had a habit of taking a copper plumber's pipe and filling it with sodium chlorate mixed with sugar, a mixture which decomposes explosively. This pipe was put in the bank beneath the rugby pitch and detonated. Others used to inhale a solvent and exhale just as explosively, and collapsed behind the botany laboratory. Such were the innocent pastimes of that era between the A level classes. Rugby was still a menace and I remember being hammered to the concrete one day in the yard outside the middle school. All boasted of drinking twenty pints on a Saturday night, or eighteen pints on a Friday, the precise details being confined to obscurity. I felt that this was utterly childish, as the sixth form was a time for intense study.

From "Sunset"

Vessel of earth no longer smells of warmth,
And Chivalry and Arthur king of all
Lie with the dog waste of many a city night:
Man, who left his field of old,
Is dying from the smell of gold.

I must have decided to take the A level examination in pure and applied mathematics in one year instead of the two years allowed by the system, but cannot remember how this happened. I must have obtained permission from Mr Phillips, the mathematics teacher, and must have done a great deal of extra studying on my own to complete the course in one year instead of two. I must have had a burning desire to learn. I did not have access to the syllabus at A level in pure and applied mathematics, and saw it for the first time in September 2011. I did not know at the time that the syllabi could be found in a library, and no teacher offered to show them to us. The syllabus for 1967 required a ruler in inches and centimetres, a set square, compass and protractor, four figure log books and graphical solutions. In pure and applied mathematics there were

two papers each of three hours requiring a grasp of fundamental principles in pure mathematics and Newtonian dynamics in applied mathematics. Pure mathematics was divided into algebra and calculus; geometry and trigonometry; and vector analysis. Algebra and calculus consisted of notation, logarithms to any base, surds, ratio and proportion, factorization, partial fractions, binomial formulae of positive integral indices, summation of simple series, numerical and graphical treatment of algebraic functions, trigonometric functions and inverses, exponential and logarithmic functions, complex numbers, quadratic functions and equations, simultaneous equations, trigonometric and transcendental equations, differentiation and rules for composite functions, derivatives of algebraic, exponential, logarithmic and trigonometric functions, inverses and combinations. There were maxima and minima, slopes of tangents and normals, definite and indefinite integrals, reduction to standard forms, substitution, integration by parts, rationalization, partial fractions, plane area, volume and surface areas. Geometry and trigonometry consisted of functions of angles, addition formulae, multiple angle formulae, graphs and coordinate geometry, Cartesian coordinates, distance and angle formulae, loci, equations of chords, tangents and normals, geometrical rules transformed into algebraic form and vice versa. Vectors consisted of scalar and vector quantities, application to geometry, kinematics, statics and dynamics. The applied mathematics was divided into centre of mass, statics, kinematics and dynamics. There were centres of mass for lamina and cylinders, and integration in simple cases. In statics there were force, resolved parts of force, forces at a point, parallel forces, moment of force, couple, system of coplanar forces, equivalence to simple force, planar systems, centre of gravity, laws of friction, Hooke's law, equilibrium of a particle, rigid body and systems. Kinematics consisted of displacement, velocity, acceleration, equations of motion, harmonic motion, motion in a plane, angular velocity and acceleration, two particles, and relative motion. Dynamics were based on Newton's laws, linear momentum, kinetic energy, work, potential energy, gravitational and elastic energy, work done and hamiltonian, conservation of energy, impulse and impulsive forces, motion in inclined planes, simple harmonic motion, particle in a plane, free motion in gravity, circular motion, collisions, conservation of momentum, inextensible strings, collision of spheres, sphere and plane collisions, power, work and energy.

I use these ideas and methods today but have a much deeper insight to them. The two examination papers of 1967 in pure and applied mathematics were testing and difficult. The methods I use today for the development of a unified field theory are little different from those at A level, and today there is the additional advantage of the computer. In the school there were no computers, they were beginning to be developed as mainframes in the sixties, and as early forms of electronic calculators. These days I often run into people who admit to no knowledge of mathematics, or very little knowledge, yet hold positions in what are supposed to be universities. It is impossible to know what these universities really mean, and how these appointments are made, or even how they got into university at all. The mathematics in use now are the same as in 1967. That was a high WJEC standard and I had no time to waste on drinking or any damaging distraction.

Two entire notebooks of 1966 and 1967 have survived. One of them is right from the beginning of the course and is in the same blue ink and fountain pen. It starts with the coordinates of a point and I still write the letters in a slightly different way; there are remains of copperplate in the letter b, for example. Then there are hand- drawn and hand- squared graphs, and ticks march regularly down the page in red ink. All examples were right except for the last one, number eleven. This notebook has been archived for conservation on www. aias.us as a historical source document accompanying this autobiography, and will be archived in the National Libraries on www.webarchive.org.uk. The first date that appears in the notebook is 16th September 1966, about two weeks after I had started A level at Pontardawe Grammar School. These are problems on intersecting lines, the notebook is more untidy than those at O level, but everything is worked out correctly and meticulously. The mark recorded is the maximum twenty out of twenty, with the comment "Very good, but don't cram your answers into half the page". Then follows quite a testing problem on the volume of a cone, with the mark ten out of ten and the comment "Good". I can see that the syllabus is being followed because there arrive in the notebook problems on differentiation and integration. Just before the page marked "Easter Term 1967" there is an entry on the chain rule for differentiation. I still use this rule today in exactly the same way, but in the context of general relativity. Those were formative years, therefore, in essentially self- taught mathematics. The teacher was there, but he followed a set syllabus that I could follow myself.

The Easter term of 1967 starts with powers of the natural numbers and mathematical induction. Again the little red ticks march down the page, the teacher adding little or no comment except "see me about integration". By that time, it must have been decided to let me try the examination one year early, so perhaps a little extra tutoring was going on. The next few pages of the notebook deal with applied mathematics, but it seems that not all of the

syllabus was being taught. That means that some questions in the examination papers might appear for which I had not been prepared. All my answers in the notebook are regularly marked correct, but the notebook itself becomes a little untidy. Perhaps it was being used for tests in the classroom. I do not recall term examinations at A level. At the back of the notebook there are trigonometrical formulae and problems, written out very neatly. The second notebook is applied mathematics of the lower sixth, form VIL. I can see that the syllabus is being followed to some extent, with problems on forces and pulleys, resolving forces and so on. The first problem is marked ten out of ten. The other problems are all marked correct with a nine out of ten in the margin a few pages later and just before the Easter term of 1967 another ten out of ten. These problems are closely related variations on a theme and do not seem to cover much of the syllabus. Perhaps this as due to the inexperience of the teacher, Mr Phillips. The notebook proceeds to pure mathematics in the Easter term of 1967 with problems in trigonometry, gradients of lines, sums of numbers, integration and areas.

I cannot remember anything about the two three hour examinations for pure and applied mathematics in the summer of 1967, but the W.J.E.C. sent me the papers in September 2011. The problems are difficult, and I could not have passed those examinations without my technique of constant practice and revision. Also I must have done a lot of the course myself. In the event I got a grade B, the second best to grade A. The worst pass grade was an E, and a fail grade was an F. So a good grade B is equivalent to a first class degree in mathematics done in half the prescribed time. I clearly remember Sulwyn Lewis very briefly and transiently congratulating me on that grade B in the Assembly Hall at what must have been the start of the upper sixth in September 1967. He was haranguing a sixth former who was much bigger than him and suddenly turned on him. That was the atmosphere - a mixture of learning and adolescent violence glowering under the surface. Unknown to me at the time a grade B was already almost good enough to get me into Aberystwyth, which asked only for two grade E's. My intention was to get into Aberystwyth not because of any sun, sea and scenery but because I thought it was a pure Welsh speaking college. Today it is a completely secretive establishment in which less Welsh is spoken than Martian, the best place in the world for student-voted scenery. I remember Dr Cecil Monk, a reader in the EDCL, begging me not to try to come back to the place, for my own sake. I suppose he did not want me to land up like him, trapped in obscurity and surrounded by people who would find mediocrity daunting.

In 1966 and 1967, however, I was 16 and 17, lived in a village in which English was rarely spoken at all, and thought that Aberystwyth existed in Wales. Having been made to pass difficult examinations myself, I thought that university lecturers had done so also and had been appointed on merit. Having been taught a syllabus that mentioned the establishment of the University of Wales, I thought that it existed, and was in and for Wales. As it turns out none of these things is true, and I had to establish my own institute in a coal miner's house. The notebooks of 1966 and 1967 show a sharp concentration on subject matter as usual, accompanied by complete self- discipline. I sharpened my concentration and discipline yet further, in that first year of the sixth form. I knew that the next step for me was the university, and also began to realize that home conditions would not allow me to stay there much longer, I needed to become independent. The only place that I knew was Aberystwyth, so when the time came to fill up the UCAS form (the form that controlled and still controls admissions to universities in Britain) there was only one place to go. I was beginning to feel angry at the double standards to which I was always subjected by the system, on the one hand you must always do well, on the other hand we do not know or care what you are doing and we will not give you any help. I did well because I myself wanted to do so. At the back of my mind in the sixth form there was always the regret of having to leave both home and school. Looking back, this regret is justified because of the attitudes of a failed college, Aberystwyth. I was there, but achieved everything myself. There was no longer any future for me at Pant y Bedw and family ties might be stronger in the long term if I left and did well.

> Mehefin Cywain gwair yn eurlawn ddydd o haf Tn ddwfn yng ngwres orlawn. Bendigedig a digawn. Yn ir y medd ar y mawn.

I was also beginning to be pressurised by Sulwyn Lewis to apply for Cambridge, a place which had banned nonconformist protestants and catholics alike in the nineteenth century. I was greatly angered by this, as the headmaster must surely have known that I came from the same background that Cambridge had banned. He must surely have known that his own syllabus taught his own pupils about the existence of the University of Wales. I still

hope that the real University of Wales will emerge some day, it cannot be recognized now as having anything to do with the real Wales. However, the individual scholar must always be paramount, that is a clear and easy lesson to learn. I was also becoming more aware of the deep corruption in society, and corruption is something that I have always loathed. I could discern that the headmaster had no principles, he wanted me to go to Cambridge simply in order to give his school a good name. I do not recall ever exchanging a single word with him on any learned topic. I became determined to distance myself from the Chelsea that the sixties blared out via TV into the adolescent minds of some of my fellow pupils, and kept away from them with a few friends from the more traditional background of Wales. Among these I recall Neville Arrowsmith of Felindre, a fluent Welsh speaker who had trouble with examination nerves and who would often try to study among the turmoil of the attic known as the common room, or in the small school library. It was much easier to study in an empty classroom if one could be found, or even out in the yard or grass bank leading up to the rugby field. One day, sitting there behind the canteen and gym, one of my Cwm Gors friends suddenly said that I would become Professor Sir this that and the other, and I laughed out loud, thinking it was a joke. He was not amused and he seriously meant it. So there was sincerity to be found. My teachers at A level, Mr. Phillips, Mr. Davies and Mr. Blackmore, seemed not to mind what university I got to or more accurately forgot pupils after they had left school. The A level system meant that these three teachers were responsible for the whole of the sixth form syllabi, and I lost contact with all the others, never seeing any of them again after leaving school. I have heard though that Olive Williams is still alive and living in Pontardawe.

My cousin Mary Hopkin was present in the junk room sometimes, and played the guitar. She was good at the music but I do not think we ever exchanged two words. I did not know that she is apparently my cousin, both of us being descended from William Hopkin Cwm Nant y Moel. A glance at that A level syllabus in pure and applied mathematics shows that we were very different people, although from supposedly the same background. She must have left the school in about 1967 and I never met her again. I think she has returned to Alltwen to live now.

I was much more at home in Craig Cefn Parc than pseudoChelsea of the air waves, and I could always slip down to this house where my grandmother lived as a widow. It still had the peaceful atmosphere instilled by my grandfather and there are both black and white and colour photographs extant of that era.

My grandmother had intense blue eyes but always had the look of desolation in those photographs, a small, stooped, white- haired figure. Often she sat in my grandfather's chair in the corner of this same room where I am writing now in October 2011. In one photograph she wears a little black cap that she must have made herself. She sits in front of a small oak cabinet with a clock and some ornaments, with a small transistor radio that I had bought and left with her for as much comfort that I could give, which was very little. I struggled with many of those homework problems in this room, proving this or that indescribable formula that no one in the family understood. When I was stuck my grandmother became very anxious, and was delighted and much relieved when the right answer finally arrived. We always spoke to each other in Welsh of course, and of our own dialect, and she was of a generation that had had the "Welsh not" block of wood around her neck in school. On another occasion she is making pancakes on a very small electric cooker, and when I came back from school would always prepare something for me even though she had almost no money of her own. One day she went very quietly somewhere to sell gold buttons off one of her most precious dresses, making me feel profoundly miserable. No matter how simple her food, it always tasted much better than anything that I would imagine to be by a five star chef. I could not study in this room, for that I needed the complete quiet of a room in Pant y Bedw sealed off from noise and presence. These photographs recapture that lost time and in one she uses her great skill to make pancakes just by pouring a mixture right on to the hotplate, behind her being stored half empty bottles of milk delivered by Danny Llaeth, Daniel Davies the milkman. Another photograph in colour is of a copper kettle in front of an open steam coal fire. The white hot coal throws off light that is reflected off the kettle. This was a fireplace that had replaced the one of earliest memories, with an oven and hotplates all driven by coal, which also worked a rumbling copper boiler. In another photograph I set up a still life consisting of copper kettle and candlestick with a drinking glass and jug and cut glass set against a drawn curtain placed on the table. It is again a peaceful photograph but set among her sadness. There are four eggs and a brass boot which I still have today and which survived the looting after my grandmother died in July 1969. This was made by my great- grandfather William Newlands.

There has survived one photograph dated 7th November 1966 of the sheepdog Jo lying down before a roughly painted sign, the entrance to Mynydd y Gwair. On the sign is painted "Caution, beware of animals on this road, unfenced common land." Behind it the vast beauty of Mynydd y Gwair is

unspoilt by a massive pipeline that has just been driven through it, and there are no electricity wires and pylons. The U S 2nd. Infantry Division trained and camped on this part of Mynydd y Gwair, which would be desecrated by wind turbines if Beaufort has his ugly way and mediaevalism and fascism triumphs in the twenty first century. The dog looks in good condition, even though by human scale he was getting on for late middle age. The only sign of time is a greying muzzle. On the back of the photograph is a label and on the back of the label "Myron Wyn Evans, Region No. 4, Class A, Age 16, and the signature of a schoolteacher, G. Davies, of Pontardawe Grammar School, Pontardawe, Swansea, Glamorgan" The front of the label is red-coloured with "Members of School Camera Clubs 1966" and a picture of a "challenge school trophy" with two pupils. On the back of the photograph is scrawled "P6". So this photograph of a sheepdog becomes in itself a collage of history.

Medi

Mud yw mwyar y Medi - yn ei gwsg Yn ei gysgod ydi. Mwyn y byd min y beudu, A brwyn dan y Baran du.

There is one telling photograph in black and white of my good friend Peter Harris walking down the mountainside in snow towards the lower bus stop that I had begun to use in those days instead of the cross at Craig Cefn Parc. This stop was just beside the old pay office of the Nixon and Hendy drifts and both Pete and I got down to it on mountain paths. He was taking a course at the Mining and Technical Institute in Pontardawe, which was next door to the grammar school and lived with his parents in a very tiny house on the bare mountainside at the end of Mountain Road, Craig Cefn Parc. His father was called Eddie Harris, and he always used to call him Eddie. Pete was a brilliant instinctive mechanic and was fond of scrambling bikes, dismantling them and putting them together again. At that time, competition scrambling took place in land below Mountain Road across the valley, so I had a view from on top of the powder house, which was emptied of dynamite and gun powder by then, but not of ants as I soon found out. The bikes made a tremendous noise and stink, and tore the soil to pieces. It took almost half a century for nature to recover. The bikes were safely out of the way of Gelliwastad, which was carefully looked after by farmers. In the photograph Pete walks on a path with no tree in sight; the same area now is covered densely by tall trees which have grown up in the years since then. This means that the land is not used for animals, as there is no longer any economical farming on Gelliwastad. The grammar school and Tech. pupils travelled together on the bus and at that time I walked up to the grammar school through the Tech., because Pete and I had been friends from early childhood and were both instinctively wary of any system. After going to college I lost touch with him but he is still living in Craig Cefn Parc, having been badly damaged at one point in a motor bike accident. Relations between the two schools were usually good except for the occasional mass fight with snow balls, hundreds of pupils taking part at the same time and that could have got out of hand into tribal warfare of the Golding variety.

My chemistry practical notebook of the sixth form has survived and from the W.JE.C. syllabus the chemistry practical notebook had to be presented at the practical examination. There were two three hour theory papers in chemistry, one in general and organic chemistry and the other in inorganic and organic chemistry. The general and physical chemistry syllabus included classical atomic theory, the laws of combustion, equivalents of elements and compounds, the gas laws and the ideal gas law, kinetic theory, diffusion, Graham's law, law of partial pressures, vapour densities, methods of Meyer, Dumas and Gay-Lussac, law of volumes, Avogadro's hypothesis, gram molecular volume, molecular weights of volatile compounds, atomic weight, Cannizzaro and Dulong Petit laws, volume composition, molecular formulae, water vapour, hydrochloric acid, ammonia, ozone, sulphur dioxide, carbon monoxide, carbon dioxide, eudiometric determination of molecular formulae of hydrocarbons, the periodic classification of the elements, physical and chemical properties of the short periods and groups 1, 2, 4, 5, and 7, oxides, chlorides and hydrides, transition elements, chromium, manganese, iron, cobalt and nickel, modern atomic theory, subatomic particles, nucleus, nuclear charge, atomic nucleus, structure of the atom, isotopes, isobars, radioactivity, alpha, beta and gamma rays, displacement laws of the alpha and beta radiation, atomic number, the electronic constitution of the elements, periodicity, the theory of valency, electrovalence, normal and coordinate covalence, relation between position and valence, atomic numbers 1 to 18, solubility, volatility, conductance and chemical properties associated with valence and covalence, solubilities of solids and gases in liquids, Henry's law, Raoult's law, lowering of vapour pressure, freezing point depression, boiling point elevation, osmotic

pressure, determination of molecular weights of non- volatile solutes in dilute solutions, molecular association of solutes, chemical reactions of gaseous and liquid systems, kinetic treatment of reaction velocity, pressure, temperature effects on reaction rate, law of mass action, reversible reactions, equilibrium constant, the effect of temperature and pressure on equilibrium, le Chatelier's principle, exothermic and endothermic reactions, thermal dissociation, vapour density, homogeneous and inhomogeneous catalysis, Faraday law of electrolysis, electrochemical equivalents, ionic dissociation, strong and weak electrolytes, ionic dissociation from colligative properties, conductance, ionic equilibria, Ostwald's dilution law, law of mass action, dissociation constants, ionic product of water, pH, titration curves of strong and weak acids and bases, ionic theory, common indicators, hydrolysis of salts, solubility products, solubility in strong acids and insoluble salts of weak acids, oxidation, reduction, electron transfers and ionic equations.

The inorganic chemistry syllabus included the electrochemical series, preparation and properties of metals and compounds, oxides, chlorides of metals and non- metals, hydrides of non- metals, the chemistry of sodium, copper, manganese, calcium, zinc, aluminium, lead and iron, hydrogen, water, hydrogen peroxide, carbon, carbon monoxide, producer gas, water gas, carbon dioxide, carbonic acid and salts, nitrogen, ammonia and salts, nitrogen compounds from the atmosphere, nitrous and nitric oxides, nitrogen dioxide, nitric acid, nitrous aid, salts, phosphorus, phosphine, phosphorus pentoxide, orthophosphoric acid, phosphorous chlorides, arsenic, arsine, arsenious oxide, tests for arsenic, oxygen, ozone, classification of oxides, the inert gases, sulphur, hydrogen sulphide, sulphides, sulphur dioxide, sulphur trioxide, sulphurous and sulphuric acids and salts, sodium thiosulphate, halogens, fluorine, halogen hydride, hypochlorous acid, hypochlorates, bleaching powder, chlorates, iodates, coal gas, producer gas, water gas, carbon monoxide, hydrogen, ammonia, nitric acid, hydrogen chloride, sulphuric acid, sodium carbonate, sodium hydroxide, chlorine, and reactions in volumetric and qualitative analysis.

The organic chemistry syllabus included the purification of organic compounds, melting points, nitrogen, sulphur, chlorine, iodine in organic compounds, empirical and molecular formulae, ethanol, ethylene, acetaldehyde, acetone, acetic acid, isomerism, tetrahedral carbon valence bonds, structural formulae, homologous series, hydroxyl, halide, cyanide, amine, carbonyl, carboxyl, acid amide, chloride, ester, substitution, addition, unsaturation, hydrolysis, dehydration, condensation. Comparison of ethylene and benzene,

nuclear substitution of benzene, bromination, nitration, sulphonation, derivatives of benzene, methyl, hydroxyl, amine, carboxyl, nitro, halogen in nuclear substitution, directive influence, phenol from benzenesulphonic acid, aniline form nitrobenzene, aliphatic acid, nuclear aromatic attachment, hydrozyl, halogen, amine, ethylene, ethylene dibromide, iodoform, ethyl iodide, acetone bisulphate, acetamide, ethyl acetate, benzoic acid by hydrolysis of ethyl benzoate, nitrobenzene, aniline, aniline hydrochloride, and acetanilide

The practical examination tested ability to construct apparatus, basic laboratory operations, use of balances to a precision of five milligrams and similar. Each pupil was required to bring the original laboratory notebook to the examination, and my notebook is now archived on www.aias.us and www.webarchive.org.uk. Reference books could be used in the examination, which according to the syllabus tested volumetric and quantitative analysis in physical and inorganic chemistry. The volumetric analysis included tests with acids and bases including carbonates, ferrous ion, oxalic acid, oxalates, hydrogen peroxide, potassium permanganate, ferrous ion using potassium dichromate; iodine and oxidizing agents using sodium thiosulphate; halides in neutral solution using silver nitrate, chromate indicator, limits of accuracy assessed by the accuracy of apparatus. The qualitative analysis was inorganic analysis including the separation and identification of the cations of lead, silver, mercury, bismuth, copper, cadmium, arsenic, antimony, tin, iron, chromium, aluminium, zinc, manganese, cobalt, nickel, barium, calcium, strontium, manganese, potassium and ammonia; the identification of anions in salts including carbonate, nitrate, sulphide, sulphite, sulphate, chloride, bromide, iodide, nitrate, orthophosphate, chromate, dichromate, thiosulphate and permanganate.

My red- covered chemistry practical notebook starts in September 1966 with the preparation and properties of hydrogen peroxide. It is very neatly written in the same blue ink, with small red tick marks by the teacher Mr Davies, indicating that each entry was correct almost without exception. There follows a section on the preparation of salts, double salts, and on the oxygen method for the equivalent weight of tin, measuring accurately to milligrams. This is followed by an experiment to find the atomic weight of potassium by precipitating silver chloride from potassium chloride solution. The end of this entry is marked in red "DD, 20th October 1966" by David Davies the teacher. This was done before I started a section on molecular weights of volatile liquids and vapour pressure using Victor Meyer's method. I know this because I wrote around the teacher's writing. Every single item in the whole notebook

is marked as being correct by the teacher, and the blue writing is interspersed with drawings of apparatus carefully done in pencil with the help of a stencil.

On the day after, 21st October 1966, I was walking home from the school bus and was nearing the post office in Craig Cefn Parc when someone told me of a major disaster in Aberfan, near Merthyr Tydfil. He said that many had been killed. I felt sad but resigned because of the many coal mining accidents I had already been through in Craig Cefn Parc and surrounding areas. The news that evening showed people clawing desperately at coal from a giant tip that had buried a school, a row of terraced houses, and a farm. There were miners and volunteers with shovels, some heavy machinery, and the school was half buried under a thick black shroud. About 7.00 p.m. my father was summoned to Aberfan as part of the Mines Rescue Service, and set out for the scene. I was told not to go there because there was nothing I could do. He did not return until the next day, and was ashen grey. I recall hardened men such as Harold Wilson and Cliff Michelmore of the BBC severely shaken on the TV screen at Pant y Bedw, and also the Duke of Edinburgh. Alf Robens, the Coal Board Chairman, said he was too busy to attend. There were demented and bitter parents on the screen. In all 144 people were killed, 116 of them children a few years younger than myself. The last body was recovered after nearly a week. My father mentioned that of some, literally nothing was left. A tribunal found the National Coal Board wholly to blame, but the NCB and the Government refused to accept full financial liability so the Aberfan Disaster Fund brought in £150,000. My distant cousin Ron Davies, the Architect of Devolution, finally had this paid back in 1997 when Secretary of State for Wales. Ron Davies came from a coal mining family but is a descendant of Tewdwr Mawr. None of the Coal Board were prosecuted for manslaughter as they should have been, and this confirmed my own deep scepticism of the powers that be, that they can get away with murder.

From "Aberfan"

The blue scarred hod us as we bleed,

Take us as the carrion,

The burning eyes, the burning sun, are blind,

For now our day is done.

"O what can you give me

Say the sad bells of Rhymney."

The red notebook continues as if nothing had happened and begins to record quite elaborate apparatus with cork instead of the later ground glass at Aberystwyth. The Bunsen burner is used instead of the electric heating mantle. There is only one slight correction by the teacher to show that this is not perfection. The syllabus in chemistry was comprehensive and quite up to date for the late sixties. At Aberystwyth this syllabus was gone over in more detail, but the basics are all there at A level. The experiments are simpler than those at Aberystwyth because the apparatus at school was simpler. The volumetric analysis begins towards the end of the Christmas term and used the titration method from a burette. The Christmas term ends with a 13th December entry in the notebook. The Easter term of 1967 is dedicated to organic preparations of various kinds with apparatus diagrams in pencil, again the little red tick marks march down the page, and the notebook is prepared carefully because it had to be presented at the practical examination at the end of two years, in the summer of 1968. The organic preparations were experiments using different kinds of apparatus which was made available to each pupil by the W.J.E.C. from a store room with technicians. The experiments had to be designed so that they could be carried out on the bench without use of a fume cupboard. One experiment uses a Beckmann thermometer to find the molecular weight of naphthalene and another uses Landsberger's boiling point apparatus. At the end of the Easter term, the subject matter turns to inorganic preparation and Mr Davies marks the end of the Easter term of 1967 on 14th March 1967.

The Summer term of 1967 starts with reactions of chromates, dichromates and permanganates, followed by oxidation and reduction methods in volumetric analysis, followed by semi microanalysis which I remember clearly because it was mainly test tube work unlike anything we had done before, and needed good observational skills and a steady accuracy. The flame test was introduced and the pupil had to judge the colour of the flame. Strangely enough, there are no teacher's markings from the Summer term of 1967 onwards, but the notebook is as neat as ever up to the end of the Summer term of 1967 and of the first year of the lower sixth. The Christmas term of 1967 starts with oxidation and reduction. The absence of teacher's markings is difficult to explain, and not allof the syllabus was followed. However, Mr Davies followed the prescribed work accurately for the practical examination, which was physical and inorganic chemistry, but not organic chemistry, and it is clear that I did all the experiments and did excellently well in the prescribed work. There was a deeply shocking episode in the summer of 1968 when an organic practical examination was given which was not part of the syllabus.

Mr Davies was taken completely by surprise, as we could all see, and protested, but the examiner forced through the examination. This destroyed the chances of every single pupil of getting a grade A. As can be expected this incident was covered up, and I remain angry at that to this day. My two theory papers must have been excellent and pulled me through to a grade B in chemistry. That was easily good enough for Aberystwyth. There was no such incident in physics, and I easily got a grade A in that. That was my first taste of academic injustice and cover up, in this case a cover up by the W.J.E.C. in Cardiff.

I am always at home with pure academic work, or pure thought, but have grown to loath the academic system in Wales, which is one rotten cover up. In 1967, I could also see signs of encroachment of a wider world on the beauty of Craig Cefn Parc and Mynydd y Gwair in the shape of power lines of hideous ugliness driven right over one of the most beautiful sights in Wales, the shoulder of Mynydd y Gwair as the glacial Glyn Eithrym turns sharply. I photographed these pylons as they were going up, without their high voltage electric wires, and tried to make art out of them. I had an idea as a 17 year old of taking a Plaid Cymru flag and planting it on top of one of them in protest. Earlier and later photographic images of Mynydd y Gwair show how the whole horizon is destroyed by one angular, ugly pylon. The planned wind turbines will be 1,000 times worse and less effective than electricity conventionally generated. The whole appalling mess is caused by one man, the Duke of Beaufort, whose mediaeval madness and greed is responsible for this organized devastation. At the time of writing (October 2011) there are signs that the British Government will end subsidies to wind turbine companies, so they will go bankrupt. Mynydd y Gwair might well be saturated with flailing skeletons, rusty scarecrows signifying nothing, a monument to crass stupidity. They have already bankrupted whole nations and the idea of democracy. So as a 17 year old I was prescient and perfectly right, looking straight ahead in anger. Even Plaid Cymru betrayed the People and took up wind turbines, so we are left as usual with only one thing, our own fighting spirit. I remember Cen Williams telling me not to be so foolish as to climb that pylon, but decent people are trampled in the mud if the powers that be are allowed to get away with it. So I just stuck the flag in the soil under the steel monstrosity, and took a photograph of it for posterity. This is one of the photographs now on www. aias.us and it has been archived at the National Libraries on www.webarchive. org.uk.

The physics syllabus was also sent on by W.J.E.C. and is also meant to cover the two years of the sixth form. At the end of the two years of study at

A level were two three hour examination papers in theory and one practical examination. I got the best A grade in physics but it was not my favourite subject because even then it had a tendency towards dogma, for example, the emphasis on seventeenth- century Newtonian dynamics with just a brief mention of quantum mechanics. In the late sixties quantum mechanics was a highly developed subject. In my first year at Aberystwyth I found that quantum mechanics was taught in chemistry but in a way that revealed that the lecturer, Mansel Davies, did not know much about it. So the A level physics course by the W.J.E.C was taught throughout Wales as it would have been at the end of the nineteenth century, for example, with rare exceptions such as a brief mention of "modern physics" as it was called. There was no relativity at all, and no electronics or computers. My first introduction to computers came with courses by Cecil Monk in the third year as an undergraduate in chemistry at Aberystwyth. At Pontardawe there was no astronomy or cosmology. The first three hour examination paper tested mechanics and properties of matter, optics and vibrations and sound. The second paper tested electricity and magnetism and heat. Both papers looked for understanding of physical principles and applications. The practical examination tested manual skill, intelligent use of apparatus, care in experiment and presentation of results. Mechanics and properties of matter included kinematics, vector analysis, relative motion, Newton's laws, mass, weight, conservation of momentum, motion under gravity, force, energy, work, power, friction, kinetic and potential energy, conservation of energy, static equilibrium, coplanar forces, centre of gravity, moments, beam balance, uniform circular motion, rotational kinetic energy, moment of inertia, fluid statics, thrust on immersed planar surfaces, Archimedes' Principle, elasticity, Hooke's Law, elastic limit, yield point, permanent set, work done in stretching, Young's modulus, practical applications, surface tension and its measurement, excess pressure in drops and bubbles, units and dimensions.

Optics included reflection and refraction at a plane and spherical surfaces, the paraboloidal mirror, reflection caustic, small angle prism, deviation, refractive index, thin converging and diverging lenses, images produced by lenses and mirrors, focal length, focal power, dioptre, focal length, refractive index, radii of curvature, thin lenses in contact, the eye, defects of vision, optical instruments, camera, magnifying lens, compound microscope, refracting telescopes, Galilean, reflecting and prismatic telescopes, photometry, inverse square law, cosine law, candle power, foot candle, lumen, intensity, photometer, velocity of light and its measurement with one astronomical and one terrestrial

method, dispersion in a prism, spectrum, spectrometer, emission, absorption, solar spectrum, ultra violet and infrared, properties and methods of detection, theories of the nature of light, interference and polarization. Vibrations and sound included the simple pendulum, loaded spring, suspended magnet, damping of vibrations, forced vibrations, resonances, wave motion, sound, velocity of sound in air, pitch, quality, loudness, the superposition principle, stationary waves, beats, vibrations of air columns, stretched strings, Kundt's tube, musical instruments, diatomic and equally tempered scales, recording and production of sound.

Electricity and magnetism included axial and equatorial magnetic fields of a bar magnet, magnetic moment, terrestrial magnetism, Earth's magnetic field and measurement of its horizontal component, ferromagnetism, hysteresis, I H curves electrostatics, induction, the Van der Graff generator, the capacity of a conductor, the isolated sphere, parallel plate and spherical condensers, units of capacity, the effect of a dielectric on capacitance, energy of a condenser, the magnetic field at the centre of a circular current, the ampere, tangent galvanometer, moving magnet galvanometer, the magnetic field due to a current in a long straight wire, the field inside a long solenoid, the unit of potential difference, the volt, Ohm's law, circuits, Kirchhoff's laws, electric energy and power, the watt, force on a current in a magnetic field, moving coil galvanometer, ammeter, voltmeter, range multipliers, the Wheatstone bridge, potentiometer, electrolysis, Faraday law of electrolysis, electrochemical equivalent, ionic theory, cells, accumulators, thermoelectricity, Seebeck and Peltier effects, thermocouples, electromagnetic induction, Faraday law of induction, Lenz law, electromotive force in a coil rotating in a magnetic field, AC and DC generators, back emf of a DC motor, induction coil, transformer, attenuating currents, electrostatic voltmeter, moving iron, rectifier, frequency of AC mains, the concept of root mean square, cathode rays, X rays, hot cathode X ray tube, cathode ray tube, diode and triode, thermionic valves, diode valve as rectifier, triod valve as amplifier, Rutherford Bohr atom, wave mechanical atom, photoelectric effect, Planck's constant, energy quantization, proton, electron and neutron, nucleus, atomic number, atomic weight, electron shell, radioactive decay, half- life, radioactive series, alpha, beta and gamma rays, isotopes, fission, fusion, cloud chambers, measurement of electron charge, Millikan's oil drop experiment, alpha particle scattering, and Marsden experiment.

Heat included temperature, thermometry, coefficients of expansion of solids and liquids, expansion of gases at constant temperature, boiling point

at constant volume, the gas laws, the gas constant R, kinetic theory of gases, calorimetry, specific heats, Newton's law of cooling, the calorie, change of state, latent heat, the effect of pressure on freezing point, evaporation, saturated and unsaturated vapour, vapour pressure, partial pressures, cooling due to evaporation and its kinetic theory, the effect of pressure on boiling point, relative humidity, hygrometry, dew point, wet and dry bulb hygrometer, the two principal specific heats of gases, adiabatic and isothermal phenomena, transmission of sound, heat and work, thermal conductivity, convection, heat radiation, methods of detection, emission, reflection and absorption of heat.

The practical examination was set up and based on practical work throughout the two years. My unified field theory now explains most if not all of this syllabus in terms of a few simple equations of general relativity, so I have a much deeper understanding of it than when I was 17 and 18. In order to obtain an A grade an immense amount of memory work and problem solving was required, together with a lot of experimental skill. The final examinations covered both years, so all the work was examined. The combined work for mathematics, physics and chemistry occupied my time as usual from about seven in the morning on to the next morning, with a lot of laboratory work. As I read through the syllabus, flashes of memory of how it was taught come to mind, for example, the demonstration of lenses, Wheatstone bridge with resistors arranged in a well- made wooden box, a small Van der Graff generator being the most modern item of equipment, demonstrations of lenses and prisms, pulley systems set out on the laboratory benches and a pendulum with stop watches. Only after going through that work for years, and doing one's own research for years, can one begin to start on the construction of a unified field theory, the mathematics of which are made possible with thousands of hours of learning and continuous study. Experimentation was always taught in order to check the theories with data. In my mind, physics instilled an impression of gloom because it was taught in a small dark room in an old stone building above the woodwork room. On the other hand, chemistry instilled an impression of light because it was taught in an upper storey corner of the high building of the school, with plenty of light reflecting off glass apparatus and acid bottles, with bottles of colourful chemicals. Now both subjects can be understood in terms of my unified field theory, with its huge following around the world.

The effort and concentration in that year from September 1966 to July 1967 was so intense that I remember very little of anything outside the academic work. Physics and chemistry were subjects in which a lot more work

was required than a subject in the arts, because of the practical classes, and mathematics was an edgy subject because its results relied on examinations in which problems could or could not be solved in the prescribed time. I was not interested in achieving anything but the best results, and this attitude of mind intensified considerably in the five years from September 1966 to June 1971, when I graduated the top first at Aberystwyth with one of the best degrees in the history of the college. In 1971 I was interested only in one thing, a Ph. D. degree, then a D. Sc. degree, and so on until I had learned enough to change the face of both physics and chemistry, simplifying and strengthening both subjects. Career was always something that had to be got through, an unfortunate byproduct of the pseudoacademic world in which I often found myself surrounded by failed cynics who gave me a lot of trouble and who had been appointed arbitrarily. I often wondered what they did for their O and A levels. In the end, I found it more productive to remove myself from career entirely and work in a career- free world using contemporary computer communications.

In June or July 1967, I took the two three hour A level examinations in pure and applied mathematics in half the prescribed time, in one year instead of two, and largely on my own. I got a B grade in the examination, roughly equivalent to a first class or good upper second degree. My primary motive was to make room for concentration on chemistry and physics, and I decided also to take an A level course in pure mathematics on my own in the second year, also as a support subject for chemistry and physics. On 26th May 1967, I became old enough to get a learner's driving licence, although I had been driving tractors on farms for years. My father started to tutor me for a driving test, but this was a volcanic experience because every time I hit a drain cover I was admonished. I remember vividly driving into a hedge near Nant y Milwr to avoid an oncoming bus, and climbing vertically into a tree, or so it seemed. I do not remember how I survived that tutoring, failed my first driving test in Rhyd Amman (Ammanford) but passed the second time. So in the middle of that summer of 1967 I already had nine O levels and one B at A level. That was already enough to get into a place like Aberystwyth which asked for two E's to attract students of poor quality from anywhere, and did not give them a Welsh language test. That was unknown to me at the time. In order to escape the stressful atmosphere at home I found work on the assembly line of a factory called "Aladdin", in Alltwen, near Pontardawe. This consisted of assembling parts for oil heaters, a terminally boring existence amid the putrid language of swearing, uglified women transformed by factory work from what

they had been - polite and well spoken - cardboard boxes and mountains of unassembled parts. I have vague memories of a large warehouse- type building with no windows with what might have been a Henry Ford conveyor belt that kept beings operating like machines themselves. The shift supervisors were like guards minus rifles and barbed wire, and I envied the bored clerical staff in their offices - they could do work sitting down. I cycled up to Alltwen every morning, often from my grandmother's house here after listening to Handel on the early morning radio. The only relief from the assembly line was the dinner break in a canteen. The Aladdin factory was opposite the grammar school in the glacial valley of the Tawe, and was opposite in all other respects too, with people but without hope, inmates of a gulag camp being made to assemble endlessly, being coarsened and vulgarized by the prison life. The grammar school was very hard going, but with the promise of escape at the end of it, and escape into an intellectual world free of heater parts. There was always the danger that the family would disintegrate from the formidable stresses imposed on it by circumstance and personality, in which case I would suddenly find myself coming back from school one day to a sold Pant y Bedw. This happened finally in 1972, the last time I saw it close up it having been literally torn into a ruin after it had been sold for a pittance. Obviously I was not part of the family in any complete sense of the word because I was never consulted at all. The first time I knew of the sale was after my parents had already completed the process of moving out to a shabby existence in Clydach in a small terraced house chosen at random.

However, I had survived long enough to enter my final year at the grammar school, September 1967 to July 1968.

After the terrible events of Aberfan in October 1966 there was a highlight in the history of Wales on 27th July 1967, when the Welsh Language Act received its assent. This made the use of the Welsh language in legal proceedings legal after it had been betrayed by Henry VIII in the 1530s and 40s. To the Welsh people of the sixteenth century, who spoke only Welsh or just a little English, this must have felt very bad. They had just put Henry's father Henry VII on the throne in 1485, and Henry VII was a man with a liking for the language. Now they could not understand what was happening in the courts or in church and not for the first time were forced back on their own strength of will, the will to see the language through yet another crass betrayal. This era ended with the brilliant enlightenment of the Henry Morgan Bible, funded by Blanche Parry and encouraged by Elizabeth Tudor. Now the Welsh people could understand what was going on in church and later in chapel, and made a supremely high

civilization out of it. The language survived also with the itinerant bards and harpers, who were made welcome at the big houses of Wales, and survived amid the itinerant labourers with their rich store of rhyme and song. In 1967, the Chair at the Eisteddfod Genedlaethol in Bala went to Emrys Roberts for his awdl "Y Gwyddonydd", "The Scientist".

Yn y Labordy ("Poetry Wales" 1983)

Yma'n ddiogel dan ei glo,
Mae'r gw^r gwyn yn agor ei gan
A thinc gofalus, llywodraethol.
Yn hecian yn ddall yng nghalon y nos.
Beth oedd ond wargaledrwydd
Mae nawr yn chwarae rwydd
A'r fformiwlai.

A phan mae'r gynnau mawr yn tanio A'r arfau newydd cryf yn glanio Fel dyrnau brwnt ar blant ein byd, Mae ef a natur yn gyhyd A^'u galar mud.

In the Laboratory (from the author's Welsh)

Here, safely locked away,
A man in white is declaiming
On a very careful, controlled beat.
Hesitantly, almost blindly in the heart of night,
What used to be just stubbornness
Became easy playing
With formulae.
And when those big guns fire
And powerful new weaponry, dirty fists,
Hit the children of our world,
He and nature lie content
In mute desolation.

The scientist (or certain type of scientist) had made the world outside Wales

a very dangerous place. From September 1966 to July 1967, there is the usual dismal calendar of nuclear tests. On 7th September 1966, there was a USSR test, and on 11th September a French test, followed on the 15th by the launch in Britain of its first nuclear submarine. That was a great start to peaceful school. On 24th September another French test and on the 30th a USSR test. On 4th October, a French test and on 6th October a partial melt down of a nuclear reactor in Detroit. On 13th October, 173 warplanes bomb North Vietnam. On19th October, a USSR test, on 27th October Chinese and USSR tests. All these tests were announced calmly on the TV as if it was another weather forecast. I remember the Severn Bridge being opened on 7th September and the Arno floods in Florence and Pisa on 4th November which destroyed lives and art alike. On 5th Nov, there was a US nuclear test, followed by two more on 18th November and 3rd December. Amid all these tests there seemed to be positive news like Gemini 12 launched into orbit on 11^{th} November , but these same launchers could also carry nuclear warheads. On 8th December, there seemed to be a glint of sun amid the darkness and madness, a treaty to ban nuclear war in space. Even this was insane because it is safer to have a war in space than anywhere else. On 13th December, the US bombed Hanoi, infinite sticks of bombs and napalm from B 52 bombers. On the same day there was a US test and on 18th December a USSR test - testing the existence of mankind without consulting the rest of us. Could this be the result of physics above the woodwork room? On 20th December, there was a US test and on 28th December a Chinese test under the reign of terror of Chairman Mao, estimated to have caused the deaths of 70 million people in a revolution of culture.

They had a short break for the New Year and then on 14th January 1967 it was announced that the US had been researching secretly into germ warfare. On 18th January there was a US test, and on 26th January the usual USSR reply. I vividly remember 27th January 1967 because of the fire on board Apollo 1, showing that the whole set up was dangerously on the edge. On 8th February, there was another US test and on 22nd February a Vietnam offensive with 25,000 troops as the war escalated out of control. On 26th February there was a USSR test followed on 2nd and 3rd March by two more US tests. It would not have taken much for them to start throwing them in Vietnam, because this was a really a war between the US and the USSR and China. On 6th March, Stalin's daughter Svetlana defected to "the west" and I remember that item of news too. On 25th March, the USSR made another test as if in admonition of Svetlana. On 7th April, Israel and Syria started border fights, one armed by the

US, the other by the USSR. Even the oldest of civilizations had become victim to war by proxy. On 9th April, the first Boeing 737 was launched introducing a fuel guzzling age that seems about to end now. On 14th April, US warplanes bombed Haiphong, followed on 20th April by a USSR test, on 27th April by a US test, on 10th May by a US test, and on 19th May by the bombing of Hanoi. The US celebrated my birthday on 26th May with another test, especially for me, followed by a USSR test on 28th May. These delightful presents were followed on 6th June by the start of the six days' war between Israel (armed by the US) and the bordering nations armed by the USSR. On 17th June, there was a Chinese H bomb under mad Mao, but fortunately he had no means to throw it before my examinations started. On 15th July, the USSR celebrated my B grade with another nuclear bomb test, just to make a noise loud enough so I could hear, and in July the US celebrated it with race riots. In the middle of all this the Welsh Language Act was passed, and de Gaulle the Celt seemed to have heard about it because he said "Vive le Quebec Libre" on 24th July . The US responded with another nuclear test on 27th July and on 31st July, to mark the end of the school year, Mick Jagger was released from prison. Later, they gave him a knighthood for much the same thing. On 3rd August., , just as I was entering prison myself (the Aladdin factory) the US sent 45,000 troops to Vietnam, and the academic year was rounded off in the same old boring way by a US test on 4th Aug, and a USSR test on the same day.

I think that all this noise made me seek the peacefulness of logic, and I signed on for A level pure mathematics on my own while at the Upper Sixth at Pontardawe, with syllabus guidance and some advice and help from Mr Phillips. Somehow, we were all still in one peace (sorry, piece).

CHAPTER 10

As September 1967 came around, another September of colourful trees, the final year at the grammar school was going to start. After that the map was a blank, a vast Louisiana Territory where there roamed dinosaurs and Welsh speaking, blue- eyed Indians. I was glad to get back to the school after the brief stay in the Aladdin prison, a stay of just over an interminable month. At some time during the summer a letter had arrived notifying me of a B grade in pure and applied mathematics at A level. It seemed for the first time that I was going to make it into university. At that time, a few years after the Robbins Report, education at university becomes something that the "working classes" could claim as a right. Before that it was a privilege of the rich and not particularly talented. No one from my immediate family had been to university, and had never set foot in a campus. The prolegomenon of this autobiography is made up of meticulous research by leading genealogists, research that shows that none of my immediate ancestors attended university, the direct paternal line, the most important line to me, being made up entirely of manual labourers back to 1802. In the Awbrey line there are distant ancestral cousins such as Dr William Aubrey, and John Aubrey F. R. S., but they lived in Tudor times and the seventeenth century. There are some well- educated Morgan ancestral cousins, including another F. R. S. The latter does not mean much to real intellectuals, I am just pointing out that he was one. Most of the best artists and intellectuals do not have to carry labels around to prove that they are good. A large percentage of my eight great- grandparents were illiterate, and an even larger percentage of my sixteen great- great- grandparents. This does not mean that they were stupid, far from it, many being highly intelligent and cultured within a society that was much richer than anything in our vandalized, synthetic and bankrupt times. This was the culture of the people

who disappear from history because they are not recorded. Of my great-great-grandparents, only David Potter's writings are extant, in Brecon Museum in the form of letters of a high literary standard. The very stupid rules of modern bureaucracy mean that the entire culture of Pontardawe grammar school has been thrown away and they have to hire translators to write in their own language in order to quote laws at the people they try to expunge. These imposters of democracy fool no one and anger very many.

A Tramp in the Huw Owen Library (Written in Aberystwyth about 1982 and Dedicated to the Downfall of Bureaucracy)

Removed from soil in concrete cubicles,
Mountain water and air, the peat of hearths,
Revolutionary habits, struggles,
Were catalogued, conditioned, sterilized,
No sounds were heard and no conversation,
The people grazed on leaves devoid of earth,
Crept for sensation among miles of spines,
And hid from chaos, nature's solution
To the puzzle of moving in circuits
On silicon floors under silicon roofs,
To the ticking of sophistication
In perennial librarian seas and skies.
These conscience beings mushroomed for folk-lore,
Why should computers have given them more?

The Robbins Report meant that there was to be an expansion of university education in "the white heat of technology" as Anthony Wedgewood Benn put it under the first Wilson Government. One of the results of this expansion was that a new wing was added to the Edward Davies Chemical Laboratories, a new wing completed in 1963 in those genuinely optimistic times. It was hard to find optimism amid the deadly detritus of mushroom clouds, but hope springs eternal. These laboratories were the Department of Chemistry of University College of Wales, Aberystwyth, known to me in 1967 for its crazy golf and pier, but also as a symbol of the hopes of the Eisteddfod. The Eisteddfod founded the University, whose Victorian Charter was awarded in

1893. After the Welsh Language Act of July 1967 I expected a College that was entirely in and for Wales, as demanded by my ancestral cousin Queen Victoria in the opening lines of her Charter. I still demand that at the time of writing (October 2011). All this was unknown to me in the September of 1967 as I prepared for the final year, that of the Upper Sixth, during which I studied A level chemistry and physics taught respectively by David Davies and Mr Blackmore. I also took a pure mathematics course on my own with the help of Mr Phillips. If I was not obliged to do this course, and did it voluntarily, my intention may have been to learn pure mathematics thoroughly and sharpen up problem- solving skills. I can articulate that intention now, but at the time I was not clear why I was taking this extra subject, having already obtained a very good quality B grade certificate in pure and applied mathematics. I do not recall being given a syllabus to study, but Mr Phillips, the mathematics teacher, may have helped but I do not recall him doing so to any significant extent. He probably thought that it was not part of his job. The school did not teach pure mathematics as a two year A level subject on its own. I saw the syllabi for pure mathematics and pure and applied mathematics for the first time in September 2011, and it turns out that the pure mathematics sections are the same! It is that given in chapter nine. So I must have repeated the pure mathematics section of the pure and applied mathematics course but in more detail, and it becomes a mystery why the school did not teach pure mathematics, the syllabi being the same. It is of course unforgivable of the school not to have advised me that I was needlessly repeating work. I need only have taken the two subjects chemistry and physics in the Upper Sixth. No one told me that these syllabi were the same and no one told me that Aberystwyth required only two E's. This must have been because I was being groomed for Cambridge. So I needlessly repeated pure mathematics in the Upper Sixth, not giving it my full attention due to inexperience. My exam passing technique required full attention for months ahead of an exam. In all probability I would have earned two A's in physics and chemistry, but another unforgivable lapse of the system occurred in the practical chemistry examination in the summer of 1968.

It is clear in retrospect that the years 16 to 18 were the formative years of my whole output of work. I call it work, not career. They were the years in which my mathematical skills developed to a point higher than those at Aberystwyth, where I took pure and applied mathematics for two years of the tripos. My entire output of work has always been based on mathematics and computation used to develop ideas in chemistry and physics. Without a sufficient grasp

of mathematics I could not have produced the Algol and Fortran code on www.aias.us, and as everyone knows, the grasp of mathematics must be perfect before one can code a computer. The A level courses in chemistry and physics were demanding and full of facts and practical work, but did not require much beyond O level mathematics. A level mathematics for me was a daily challenge of problem solving, and so it has remained to this day. In the years 1966 to 1968 I learned to check everything I did and try to find two answers to the same problem, both answers giving the right result. I suspect that much of the false authority of standard physics comes from a lack of imagination, a lack of ideas, so the same old stuff is rolled out using computer programs which are slightly changed from student to student. How else can one explain the fiasco of Einstein's general relativity? After 100 years it turns out to be trivially incorrect (for example, UFT 193 and 194 on www.aias.us, written in 2011). Of course it takes imagination and long practice to apply mathematics in an original way, but how can a trivial error remain unnoticed for over 100 years? How can a trivially meaningless theory such as that based on a non-existent Higgs boson have survived for almost fifty years? How can any scientist ever have countenanced string theory? Such questions lead to even more awkward ones: how can physicists have allowed themselves to be used to make atomic bombs? How can physicists allow themselves to degenerate into dogmatists who cover up fact and destroy careers rather than reveal the workings of nature? Why are billions in public funding wasted and honest scientists ignored? Why are Nobel Prizes awarded for dogma?

I felt very uncomfortable at times in the atmosphere of the converted attic known as the "common room". The worst and most shallow of my fellow pupils (people I had been obliged to be with at random for six years) were mutating into foreigners, were not working at what they were supposed to be doing in a grammar school, and were talking only of getting away from Wales to some university in London or anywhere or wherever. I could perceive quietly that they themselves were already outdated because swinging London was grinding to a halt amid economic recession and drug- taking thugs, cliche and outright boredom of often repeated triviality, amid societal artificiality, LSD trips into a very grey smog. I could see and hear the symptoms of a familiar disease, people turning their backs on their own language and origin in the vague hope of finding something better in places they did not know and half hidden in fog. This kind of adolescent chat was very unpleasant, and deeply offensive to my entire being, but the disease broke out in deadly fullness when it had infected authority in the shape of Sulwyn Lewis, the over ambitious headmaster. This

anti-hippy was paralysed by centuries of iron in the mind, a variation on the bubonic plague that left the victim helpless, thinking that there was nothing in his native Wales left to bother about. One symptom was a flat little town called Cambridge.

A Scholar Deserted by his University

Trapped like wit in a foreign body,
I am in this massive etching invisible,
In the window-glass of your architect
Rooting and reflecting like the winter's boar.
On ingrown thoughts you drool and bubble,
Ferment in dust, deserted libraries,
Torn from politicians, bent contractors,
In the years of Vietnam, I think, I am.
Cogito ego sum as black as ink
Grieving for the sun and enlightenment gone
In massive grey corruption comes the night,
The easy laughing fools were yesterday's.
Their embers in harmony glow in the dark,
Their flame light burns and leaves no earthly mark.

I felt embarrassed when I saw Mary Hopkin on programs such as "Opportunity Knocks", which had always bored the sawdust out of me when my family were glued to it, and she was the first to leave the grammar school's sixth form for the imperial glory of London. I felt that this 17 year old was being used as a curiosity, and she did not seem to like it very much herself. That must have happened in 1967 at some time but I do not recall the exact date. On YouTube I notice that her accent had changed around that time to a kind of pseudo cut glass, and that has also happened to Sia^n Philips. I suspect that if I tried to speak to them in Welsh now, with the usual easy thou form of the old Swansea Valley, they would be reminded of what they were and would not answer, having been mutated into something else. That is what happens to a once proud language. I am a completely undiluted piece of the walking and talking, vigorous and mediaeval Bosworth hunting Wales of the Tudors. Who knows which has been the right road? After all the Tudors themselves turned their backs on their own soldiers, but it is they who lost their language

and themselves. There was also a great deal of talk in the junk room turned common room about money stuffed into rugby boots and about infinite pints of beer or cider or pure ethanol or petrol for all that I cared. That had the effect of engendering in me a cold, detonating, contempt of corruption and a loathing of ethanol. I could never quite bring myself to look on rugby any more, and regard ethanol as a toxic chemical. I felt like a complete stranger and that was how I was supposed to feel, because my fellow pupils did not like study, sensing that they themselves would disappear from history as bath water down a plug, so must have felt that their years at the grammar school were wasted. I am afraid that I cared nothing about their adolescent talk, or more accurately I am not afraid at all. There were four or five of us that resisted all that indoctrination, but even they disappeared entirely in July 1968. Of that class only Mary Hopkin and I remain on the internet, a virtuality and engoogled accident of time. I did not talk to her once at the grammar school, so I do not know how any conversation would go now. I simply remember her once or twice in the common room playing a guitar and singing. After the passage of years of time, conversations tend to get difficult. We are superficially very different products of Wales, you pay your money and you take your choice. One thing I am sure about, the language must be nurtured, and we have both done that as best we can.

That last year at the grammar school was a time when the school started to have a feeling of homeliness for the first time in seven years. All the silly talk about Chelsea was due to teenagers not knowing the future outside the Swansea Valley. My own world was split between ambition and the need to get away from home, or what was left of it, and a foreboding of change. I wanted to go to university but at the same time wished to stay in the Swansea Valley among friends at school. At the end of that year, in July 1968, they scattered and I never saw a single one again, with the exception of a few brief words with Huw Griffiths in the mid- nineties here in Craig Cefn Parc. I never saw a teacher of the school after leaving it. Very soon in the autumn of 1967 it was time to fill in the UCAS forms. These were university entrance forms that were distributed by the school, and the UCAS system is essentially the same now. The universities had to be listed in order of preference, and one of the few clear memories I have of that autumn is of filling in the form at Pant y Bedw. All the Oxford and Cambridge colleges were listed individually, together with the other universities and colleges. My intention was to put Aberystwyth as first choice, although I knew literally nothing about it except for the facade of the old college with its mural above the crazy golf course. I knew nothing about

the grant system and had never set foot on any campus. It was at about this time that the problem with Sulwyn Lewis began to emerge, because he was intent on me going to Cambridge. I insisted on putting Aberystwyth as first choice, with Cambridge as second choice.

He called me in to his room one day and made his intentions for me suddenly and shockingly clear, and I was drawn over some verbal fire about my first choice. I think that this was the only time I ever talked to him and he had never given a hint before of what was to be my fate. This was my first experience of many of the stupidities of academic administration. Ideas and scholars cannot be administered if they are at all genuine. He got uncontrollably angry, as he often did to groups of pupils or in the Assembly Hall about some triviality such as wearing caps, and the interview ended when I was violently thrown out of the room like an uncooperative rugby ball. At the opposite end of the corridor was Maude Daniels, who looked very disturbed at the headmaster and a little frightened, a small lady in glasses who had been my formidable Latin teacher. That was the first and last time I ever talked to Sulwyn Lewis, despite the fact that I was in the Upper Sixth and a prefect. At this distance in time I think that this episode of violence was due to an ultra- competitive atmosphere in which pupils within schools and schools against schools competed to go to what they thought were good universities. Cambridge was totally unsuited to me for obvious reasons, I was from a Welsh speaking nonconformist protestant background and from a different country. No Welsh was spoken in Cambridge. I was more or less forced to interview at Christ's College Cambridge in that autumn, and got an offer from Cambridge after what must have been a good interview, but it was a non- starter and this is what Sulwyn Lewis should have realized. I felt that he was betraying his own country and educational system. There was a family friend who was a lecturer at Cambridge and my parents and I set out on a journey into England without using the new Severn Bridge and through the Cotswolds, with its sandy coloured stone. It was a very flat country full of large fields and small villages, the complete antithesis of the glacial valleys of South Wales. At one point, my father asked the way but the reply came in such a strange and foreign accent that we did not understand it. Gradually the country became almost level flat as we passed through Bedford with a tall avenue of trees and some heavy traffic. The Cambridge colleges were as I had seen in photographs, but we continued towards the house of the family friend and his wife, the younger sister of Meirwen Harris of Craig Cefn Parc. I recall some flat land and hedgerows. There are three photographs extant of Christ's

College Cambridge, one of them being of my father and myself standing in a quadrangle. I am very uncomfortable in a grey suit and tie, looking a little like a young Aneurin Bevan with straight, dark brown hair. Perhaps I had some premonition of some of the less than pleasant characters from Cambridge that made their unwelcome acquaintance later in life, notably Howard Purnell, Jeremy Jones and David Buckingham. There were three or four other pupils up for interview from what must have been public schools. The College itself looked damp and in need of a coal fire. Easier to work from home if I had had one at the time. The interview itself seemed to go well, with a nervous and bored, but fairly friendly tutor who may have been from the Chemistry Department. It was a great relief to get back to Pant y Bedw once again and resume my usual routine of study in chemistry and physics, and one subject that I took myself, pure mathematics. I have just realized this year that that was a needless repetition of the same syllabus, and I should have concentrated on chemistry and physics. Nevertheless, I was back among the beauty of Craig Cefn Parc from the flat fenland around Cambridge and two photographs of that late autumn and winter are extant, of light from a halogen streetlamp dispersed by fog through four pine trees and the stone wall of Plas y Bedw, the small farm next to ours. The pine trees and stone wall have been obliterated by progress backwards into cultural nothingness, but the atmosphere of that photograph still remains. The other is of some houses of the village of Craig Cefn Parc from the floor of the valley of Glyn Eithrym, the houses appearing almost in silhouette under a small nimbus cloud. Life should consist entirely of this photographic imagery and beauty that captures time, with no need of damp fenland journeys.

From "False Philosophers Fall"

A blizzard, dark rendition, darkest fear,
The howl of learned men now flails the ear,
Universities which stocked with icemen
That do no warming kind of work at all
Must dissipate ideas into dust,
Be creatures of deterrence and the bomb,
Vindictive storms that bat for several years,
And spread a cancer that corrupts the earth.
It hangs around, a stench of ruined truth,
The whispered monody that dust choked lungs

Left ashen in the light's embrace, had dawned With sinews, an anatomy, of hurt.

See? My old man and me were burning tyres, And tactile minds were sugaring the pyres.

The red chemistry practical notebook starts the Christmas term of 1967 with the oxidation - reduction section of the syllabus. The first session was on the standardization of sodium thiosulphate solution with iodine solution of known strength. The same foundation pen is used with blue ink with strongly crossed t's, indicating a certain strength of determination to reach a goal that was at the same time unwanted. The same titration type experiments were then carried out with potassium iodate and potassium permanganate, followed by an experiment to find the equivalent of an oxidizing agent, then by one to find the number of molecules of crystallization in a hydrated cupric salt. These were all experiments to develop skill at titration with a burette. Then there was an experiment to find the percentage of available chlorine in a hypochlorite and to find the equivalent of sodium sulphite solution. There followed experiments on equivalents by precipitation methods, to find the strength of hydrochloric acid, to find the number of molecules of water of crystallization in hydrated barium chloride, and to find the percentage composition in a mixture of sodium chloride and potassium chloride. These were experiments in inorganic chemistry carried out with simple apparatus. The school had very little of the apparatus needed for a good course in physical chemistry.

The Easter term of 1968 starts with the organic preparations section of the syllabus, the preparation of nitrobenzene. It is not clear from the notebook whether this was dictation from David Davies or whether we actually carried out the experiments. There are no results recorded in the notebook. The next experiment is the dinitration of benzene, then one on the introduction of an amino group. The use of steam distillation and Dalton's law of partial pressures was introduced between two experiments in organic chemistry. There follow experiments on the preparation and properties of acetanilide and the reactions of aniline. In this section the writing begins to get more hurried, so the pace of dictation was being stepped up by Mr Davies. The organic section ends with the preparation and properties of diazobenzenechloride. This year (2011) I found that the W.J.E.C. syllabus for the 1968 A level practical examination did not include organic chemistry, so naturally Mr Davies did not teach it in actual experimentation, only dictation. In the event, the class was treated with great

injustice in July 1968 and given an organic chemistry practical examination, an unforgivable thing for the W.J.E.C. to do. The cover up continues to this day. The organic chemistry section of the notebook ends rather suddenly after only three or four dictations. The section on volumetric analysis starts with the standardization of sodium hydroxide using an acid oxalate, and the notebook reverts to actual results recorded neatly with the blue ink and fountain pen. This suggests that actual experiments had resumed in the inorganic part of the practical syllabus. So no blame can be attached to Mr Davies, who was a hardworking teacher who followed the prescribed syllabus. There follows an experiment to determine the equivalent of an insoluble carbonate, and to find the normality of hydrochloric acid using a sodium hydroxide solution The final section of the notebook switches to black ink in finding the percentage composition of a mixture of sodium carbonate and sodium hydroxide by the double indicator method, again using the titration method. The accurate control of the burette was taught in this way. There follows an experiment to find the percentage of ammonium cation in an ammonium salt, ammonium chloride. The next section of the syllabus is oxidation and reduction, the first experiment being to standardise potassium permanganate solution using an oxalate, potassium tetroxalate dihydrate. In this experiment the notebook records weights to an accuracy of milligrams, the balance being one of the few pieces of apparatus that the laboratory possessed. Then comes an experiment to determine the percentage of iron in iron wire using sulphuric acid and titration, then to find the strength of potassium tetroxalate dihydrate in a given solution, the percentage of ferrous iron, and the equivalent of ferrous oxalate solution. The strange thing about the second year of the notebook is that it contains no markings by the teacher, and there is no entry for the Summer term of 1968, my last term at the grammar school. I have vague memories of the fact that this last term was reserved for revision. This was rather a mechanical way of teaching practical chemistry; I am not sure whether it taught long lasting skills. Organic chemistry in particular is a touchy subject; it is possible to follow the prescribed practical method exactly and yet the experiment does not work, as, for example, no crystals appear.

My first clear memory of any practical organic chemistry is as a first year undergraduate at the Edward Davies Chemical Laboratories (EDCL) at UCW Aberystwyth, in an old and musty laboratory, but with better equipment than at the school.

On 26th May 1967, I had become old enough to drive a car, and in the autumn of 1967 passed my driving test. So on Saturdays I went down to Lewis

Lewis in Swansea to fetch my mother in the car after a long tiring week. It was my father's car so I drove carefully through the ugly, dreary and crowded roads down to Swansea and back again. That was about the limit of my driving, but in the late autumn or winter of 1967 or 1968 there was an appalling accident at Lliw Colliery and I was told to go there in the car to fetch my father home. He was in a state of deep shock, and could not drive himself. His friend had just been killed instantly in front of him by a runaway dram, and he himself was injured. I had to be very careful because the slightest bump or jar would cause him great alarm, so he would blast violently at me to be careful, obviously the effect of shock. At last I got him home to Pant y Bedw and I remember that journey vividly. He already had about 30% of his respiratory capacity impaired by coal dust, but unlike most coal miners, did not develop the characteristic and infinitely painful and endless cough as the system tried to get rid of the dust. During the entire era of this volume, 1950 to 1968, he worked underground either as a shot fireman or overman. In total he spent the years 1936 to 1972 underground and died in January 2000 when I was in Ithaca, of a massive pulmonary edema caused by dust. I was already in to my first year of post graduate study when he retired and took a job at B. P. Baglan Bay as a labourer, exactly like all his known forebears of the direct line. In its infinite generosity, however, the National Coal Board did give him a pension but covered up the fact that it was dust that finally caused him that fatal blow. Many relatives of dead miners all over the coalfields have the appalling experience of trying to extract compensation from the National Coal Board (NCB), or British Coal, or whatever it called its murderous self. After a lot of wrangling with morally filthy lawyers and rigged doctors, I got about £1,000s each for my sister and myself, British Coal claiming that it had nothing to do with dust. New sources of clean energy are indeed needed.

Yr Hen Lowr

Duedd a ddeil y dwylaw, - oes byr dan Ysbryd y se^r distaw, Banner goleuni gerllaw, A dan eu byd, du'n y baw.

In the late spring and summer of 1968, I was allowed the use of the car to drive to school, and parked it on a level side road near the school, at last

getting rid of the awful school bus, with pupils of all ages crammed together in dangerously overcrowded journeys, often made nervous by a waiting examination. In the two years of the sixth form I do not recall any term examinations, and due to the terrible stupidity of destroying the records of the school, only this account remains of the system, a large part of precious history having been destroyed by criminal government worthy of outright condemnation by any civilized society. I think that the pressures of those two A level years were worse even than O level, with the needless repetition of pure mathematics. It is not clear how this came about. It seems unlikely that I would force myself to do pure and applied mathematics in one year and then take on pure mathematics alone and voluntarily. I was never shown a syllabus, and only this year (2011) did I found out that I was needlessly repeating a syllabus of pure mathematics, the one reproduced in this volume. It could have been something to do with being groomed for Cambridge, but at this distance in history there seems little point in it, and less point in Cambridge of the Big Bang. Eventually I became a Junior Research Fellow of Wolfson College Oxford in 1975, but by another route.

The whole of that final year at the grammar school was focused sharply again on academic concentration, with as much precision of learning as I could muster in long hours that often spilled over into the early morning of the next day. Even this type of concentration and memorizing could not help in the practical examinations of physics and chemistry, and I cannot recall whether we were even given rehearsals in these practical examinations. There was no break in that final year, the two week holidays were also taken up with revision and study, and this was the technique that was used throughout the three undergraduate years at Aberystwyth. In the logic at a distance of 2011, my aim must have been to get the examinations over with in July 1968 and to try to prepare myself for the unknown UCW Aberystwyth, which began in the last week of September 1968. There are no photographs extant of the year 1968, indicating the concentration of my entire being on the examinations. I remember wrestling with some problems in this room, the same one in which I am writing now in October 2011. The A level examinations of summer 1968 took place again in the school's Assembly Hall, gutted by fire in 2007 after being smashed apart by vandals. In 1968 however, it was organized into long rows of desks, on each of which was placed an examination paper and answer book. I had six three hour theory papers and two practical examinations, which took place in the physics and chemistry laboratories / classrooms. The theory papers of chemistry and physics were tackled with my well- sharpened exam- passing

technique, which consisted of word perfect memorizing of notes by many repetitions for months before the examination itself. In the grammar school these notes were provided very well by the teachers, but at Aberystwyth the lecturing was poor, so I had the additional burden of writing my own notes. I entered the Assembly Hall along with other nervous sixth formers and made my way to a desk. There must have been a mechanism by which the students could look at the examination paper at the precise instant of time allocated for the start of the examination, and to stop writing precisely three hours later. The first anxious glance at the paper was followed by a search for the easiest question, and once started the mind poured out the facts. Often problems were solved by recognizing them from similar problems in past papers and by endless problem solving practice at home. At the end of the examination I got home as quickly as I could and prepared for the next one. I do not think that even the W.J.E.C. would force two three hour papers into one day.

The major disaster of that summer occurred in part of the chemistry practical examination, which consumed the whole of one day. This was one of the first practical examinations I had encountered in the seven years of the grammar school, the other being in physics. Usually I remember almost nothing about examinations because of the intense concentration of mind, and I remember nothing about the physics practical examination. This was successful because I got the best grade A in physics. However, I vividly remember the mess made by the W.J.E.C. of the summer 1968 chemistry practical examination at Pontardawe Grammar School. The sixth formers turned up to the examination with notebooks for two years, my red notebook having been archived on www.aias.us with the other historical source documents accompanying this autobiography. This notebook had to be handed in at the examination as the syllabus shows. I do not know whether it was counted as being part of the practical examination, probably not. I remember standing outside the chemistry laboratory with the others and being let in for the examination. My place was on the left hand side towards the back of the laboratory. The first sign of trouble occurred when the examiner and the teacher started to argue at the start of the examination. The teacher looked very disturbed while the examiner proceeded to oversee examination experiments for which none of the class were prepared. I now know that this procedure was illegal, because the examination experiments were in organic chemistry, and the syllabus very clearly restricts the examination to physical and inorganic chemistry. I have reproduced the entire syllabus in this autobiography. The entire examination class came to

a ghastly standstill, I tried to do what I could but with little success. In the event I got a second best B grade in chemistry and felt deeply the first major injustice of my academic career, one of many grotesque injustices that have had to be fought off or shrugged off. This original injustice done to 18 year olds has all been covered up for nearly fifty years.

I felt the usual great relief of getting this set of examinations over with and walked out of the school for the last time shortly afterwards, having returned all my textbooks. My notebooks were kept carefully and may turn up one day. The extant notebooks have all been archived on www.aias.us and at the British Library on www.webarchive.org.uk. Any fellowship that may have been built up at the school had already evaporated before the A level examinations had even begun, so I suspect that there never was any, the system being too authoritative and competitive, aiming to send its pupils to the wrong universities. The Craig Cefn Parc contingent of Huw Griffiths and I had been at the school for seven years together, and so we decided to take leave of it by walking home over Gellionnen, and down the valley that houses Llan Eithrym of the ninth century. We felt much more ancient than the grammar school with all its foreign ways. There was no formal leave taking as far as I remember, the sixth formers just scattered in all directions after the examinations were over with. There being no records, no one know what happened to them or how well they did. The school just collapsed like a bubble and we were the Craig Cefn Parc contingent again. Huw and I walked down to the Pontardawe cross, then up the steep, winding, treeshaded road to the top of Gellionnen. I remember that it was a fine day in summer, and at the top we looked down on the red buildings of the school as if for the last time. All its teachers and pupils had vanished as if transformed back in time into the mediaeval, hazy hedgerows and fields in the distance. We did not feel much of a sense of loss or regret, Craig Cefn Parc was our home again, and it came into view around the corner of Banc yr Allt of time immemorial, surrounded by neolithic monuments. Under the shoulder of Banc yr Allt the ninth- century Celtic stone of Llan Eithrym had been found, and was used at the 1692 Gellionnen Chapel before being donated to Swansea Museum where I saw it for the first time this year (2011). The route followed a small stream down to the site of the old Moody colliery, across the bridge and coal mine railway track, and back up to Craig Cefn Parc. Seven years earlier in 1961 we had walked home from the primary school having been told of the eleven plus results.

Y Golau Wedi'r Glaw

Y glaw mawr ar arogl mawn - yn tasgu Ar hoen tesog brynhawn. Daw aur o liwiau orlawn, O ddw^r oer gwlyb ei ddawn

Back home in Pant y Bedw I was too late to help in the cywain gwair (hay harvest), which by that time was done with a borrowed baler. This was a time of waiting, first for the exam results, then for the start of undergraduate life. I was helped to find a job back in prison at Aladdin again, but this time in much worse conditions in the press shop. This was the worst place I had ever been in, as the noise assaulted my ears as the presses were all turned on together at eight a.m., the start of the morning shift. They were large hydraulic machines for pressing a piece of metal into a component of an oil heater, or lamp. This was the unimaginable cauldron that 1,000 years had done to the peacefulness of Llan Eithrym or Llan Giwg. The metal sheets were covered by an oil or grease layer before they were pressed, each press had a quota per hour, up to 1,000 parts per hour, one every three seconds, so the operator was reduced to a mindless automaton for eight hours. I was started on one of these machines, which numbed my mind with instant boredom and my arms with ceaseless motion. In a glass- fronted room above the shop there were people who looked like prison guards, and off the press shop was a room where grease or oil was dissolved with open tanks of trichloroethylene, now known to be carcinogenic or cancer- inducing. I was hardworking and one day my sallow faced coworkers told me to slow down, as I made them work too hard, or showed them up. This became a familiar tune in academia. In this press shop worked one or two people who casually mentioned one day that Aberystwyth was a very corrupt place, better not to go there. How they had drawn this rather accurate conclusion was unknown to me, and I did not dare enquire further, because this was the place for which I was destined. While at the press shop my only thought was getting out of the place at the end of the day. I was surrounded by hopeless ghosts, who could hear nothing but the crashing of machines. One day I was told that workers had started to collapse in the degreasing room from fumes of trichloroethylene and a 120 F heat. Human life had been reduced to numbers - so many parts per hour, the higher intellect destroyed by machines, the ears destroyed by noise, and health destroyed by poisonous

fumes. To survive this cauldron became a challenge, and one day I forced myself to do a double shift of sixteen hours, with a bike ride back home at the end. I arrived here in my grandmother's house in a heap of exhaustion. In the early mornings there was Handel on the radio again, as in the previous year on the assembly line of the factory. This was a practical dose of Cyfarthfa, which was 100 times worse. On 20th July 1968, I have a vivid memory of walking in to the press shop to hear on a small transistor radio that the Prague Spring had been turned into the cold dust of winter.

1968 Prague Spring, Aladdin Factory, Alltwen, (Written 1987)

Beaten minutes, dancing light upon a
Dark, machine clad time, the giant hammer
Pounds the sun apart; a metallic burst
Of photons from the blinding welding torch,
And violent child has risen to be man.
The stink of tric is all at hand to wipe
The greasy lies from pristine parts of life,
Moulded in the press shop in the heat of
Premature Spring. These tanks are small, from them
Are built commodities that crush the crowd.
In its place, light and time are fugitives,
Skeletal, ashen people that avert
Their eyes and ears. Now as the shallow tide
Of hope recedes, the morning shift begins.

One day an anonymous- looking letter arrived which when opened revealed the letters A, B and D. These were my grades respectively in physics, chemistry and pure mathematics (self- taught). I also had a B grade in pure and applied mathematics, and nine excellent O level grades. So that was plenty enough for Aberystwyth and for all of my choices for UCAS. I remember my mother getting intensely angry over the D grade, revealing again that she knew nothing about what I was doing or of the system. By this time I was old enough to take no notice. So with these grades I was offered a place as an undergraduate at UCW Aberystwyth reading chemistry, physics and pure and applied mathematics. I would have to find lodgings there, and these were still

known as "diggings" or digs, as if they were trenches or holes in the ground. As a matter of fact that is what some were. I was completely unenthusiastic about holes in the ground, but the thought and experience of the press shop helped me get over my reluctance. It was clear that the seven years at grammar school meant nothing to my parents, I do not think that they ever read a word I wrote in my notebooks, so I was entirely on my own. At that time, however, the system provided a student with a very tiny grant, mine being about £282 a year, and this paid the fees. This tiny £282 a year was the maximum grant, because my parents' income was too low for them to be asked for a contribution. So I saw this system as a means of bare survival. My parents could never have paid the fees or supported my living expenses. Also I was becoming aware that I had some freedom in life, in Prague the tanks had just rolled over democracy, and in Vietnam there was daily horror. Above all, or below all, was the Aladdin press shop and its humans reduced to rotting ghosts.

My parents gave me a lift to Aberystwyth in late summer to look for digs, because there was no room in any hall of residence despite my grades. The only street I knew there was Sea View Place, where we had stayed on holiday in the mid- fifties. I think that my father and I took a share of the driving, and we made our way over the bridge at Tre Fechan and turned towards Sea View Place. The first place we came across was a dark, damp house above the stinking harbour, and fortunately there were no vacancies there. The next was "Brig y Don", with Mrs Haynes the landlady. I saw this house again in about 2008, forty years after 1968, and it was just a very tiny, boarded up and very dark ruin. It had vacancies in 1968 ,however, and I got a half room at £3 10 shillings a week, bed and breakfast for six days, full board on Sundays. There was one converted dustbin or sardine box which served as a room for six students. The members of the Haynes family reserved the front room and kitchen for themselves. My half room was an attic just under the sloping roof of slate, lightly plastered over. Having procured this stately residence my first thought was of getting home again to the civilization of Craig Cefn Parc, and I do not think that my parents were impressed either. This sardine tin and half attic was my home for the first year as anundergraduate, when I won the Mathews Prize for best first year results in chemistry There was still time for the late light of dusk to slowly fade over Craig Cefn Parc, and in one photograph of about that time the Baran Mountain in the distance is alight with the colours of a sun that has just gone below the horizon. This was also late dusk at Pant y Bedw, which had been my home for fourteen years, and for this house, because my grandmother Martha Jane Jones (born Martha Jane Newlands)

had only one more year to live. There seemed to be nothing in Aberystwyth to promise another dawn, and looking back from this perspective, that turned out to be true. It took me until 1993 to purchase back this house and until this year (2011) to put it in trust. One of the last things I did for my grandmother here was to dig the garden for potatoes - leaving her about half a ton of them for the winter. I have inherited none of my ancestors' gardening skills, so this was the limit of horticulture for me. As the time ticked by in the late summer of 1968 it seemed to get out of control—it went too fast towards the end of my time in Craig Cefn Parc, my twenty years or so of growing.

Hydref

Rhedyn y cnawd, rhwd yn cnoi - ar lo main Reilwe mud, yn crynhoi; Heddiw ddaw o wraidd ei ddoe, Y cof llosg yn ei osgoi.

The time from September 1967 to September 1968 was again very dangerous for the world with many nuclear tests and the escalation of the war in Vietnam. On 9th September, the USSR performed a test, on21st the US, on the 22nd a USSR test, on 27th a US test, on 6th October and on the 17th October a USSR test. On the 8th November, there was a US test, on 22nd November a USSR test, on 6th December a USSR test, and on 24th December a Chinese test. On 18th January 1968, there was a USSR test, and on 21st January a B52 bomber crashed with a nuclear bomb aboard. On 12 th February, there was a US test. The first sign of sanity appeared on 29th February 1968 when the US stopped carrying nuclear bombs on flights. On 25th March, there was another US test, followed by another on 10th April and on 12th April by a nerve gas accident, and on 18th by another test. On 24th, the USSR replied with another test, and on 26th the US replied with two tests, one a megaton underground test. On 17th May there was another US test, on 21st a USSR test, and on the same day the nuclear submarine "Scorpion" was lost with nuclear devices aboard. On 1st July 1968, the Nuclear Non-Proliferation Treaty was signed between Britain, the US, the USSR and fifty- eight other nations. This treaty was the first step towards control as nuclear war loomed. On 12th July there was a USSR test, on 15th July and 3rd August two more French tests. On 24th August, France exploded a thermonuclear device, followed on 5th Sept by a

USSR test and on 8th September by a French test. On 24th September, just as I was starting at Aberystwyth, there was another US test.

The Vietnam War and anti- Vietnam demonstrations escalated sharply. On 3rd November 1967, the Battle of Dak began, and on 5th November, Loc Ninh was captured. On the 30th and 31st January 1968, the Tet Offensive started, and on the 5th February the Battle of Khe Sanh. On 12th February, 10,000 more US soldiers were sent to Vietnam. On 18th February there was a large anti- Vietnam demonstration in Berlin, and on 10th May the Vietnam Peace talks started in Paris but had little real effect. On 28th August, there was a large anti- Vietnam demonstration, the first of many.

In between this stark madness there was some positive news, Saturn V was first tested on 9 th September 1967, and on 11th Surveyor took the first Moon sample. On 18th October, Hans Bethe of Cornell was awarded the Nobel Prize for physics. On 17th November 1967, Surveyor 6 lifted off the Moon as a preparation for the Apollo missions. On 22nd December Apollo 5 made an unmanned Moon mission. On 18th November 1967, the pound was devalued against the dollar however, and significantly Britain did not carry out nuclear tests during this interval of time. On 14th December 1967, DNA was synthesized for the first time in the laboratory, and on 3rd December the first heart transplant was carried out. On 7th March 1968, the BBC broadcast the news in colour for the first time.

Eastern Europe struggled to free itself from dictatorship. On 30th March 1968, Svoboda was declared President of Czechoslovakia, and on 6th May 1968 there was a battle between students and the police in Paris, 1,000 being injured. On 13th May a million people demonstrated against de Gaulle. On 14th May 1968, the Dubcek reforms were initiated in Prague. On 5th July 1968, the Manifest of 1,000 words was written in Prague, and on 6th July Sakharov wrote his Manifest of 10,000 words. On 20th July 1968, the Prague Spring was turned into cold war winter by an invasion of 650,000 Warsaw Pact troops – I remember the radio announcement as I walked into Aladdin Factory for the morning shift. On 5th June 1968, Robert Kennedy had been shot and died the following day and on 21st June Chief Justice Warren resigned. This was the atmosphere on the flickering TV at home in Pant y Bedw as I went on to my A level examinations.

In Wales we struggled for peace once more at the National Eisteddfod, where Richard Bryn Williams won the Chair at Barry. My cousin Mary Hopkin was catalysed into fame on $30^{\rm th}$ May 1968 with "Those were the Days" on the Apple Label, Apple 2.



Myron 1 Year Old Mynydd Gelliwastad



Craig Cefn Parc school about 8 years old



Aged about 8 with Marbeth Williams



Pant y Bedw About 12 or 13 years old





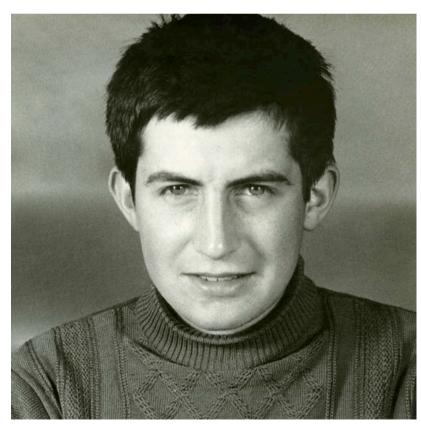
Pant y Bedw About 14 years old with my sister Gwenydd and sheepdog Jo



Pant y Bedw about 14 with my cousin Ellis Williams



Aged about 15 with Ellis Williams



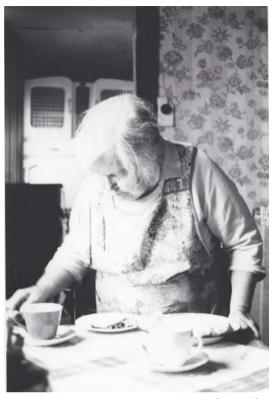
Myron aged 18



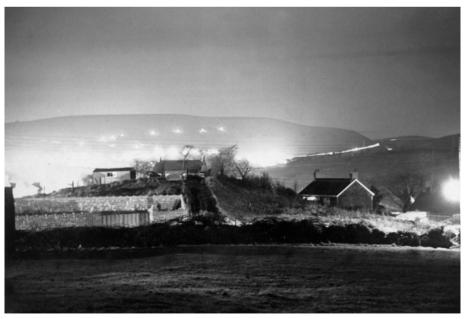
Pontardawe Grammar school Common Room 1967 Leighton Carter and Lyn Evans Foreground



Rhyddwen road craigcefnparc sixties



Grandmother Martha Jane Jones preparing my food after school 60's



View From Pant Y Bedw 60's



Across Clydach Valley Early 60's



Gelliwastad and mynydd y Gwair, 1962



Graduation 1971 with my parents



Sheepdog Jo, early 60's



Sheepdog Jo, autumn



night treescape 1967