#### **BILL HAMILTON AT SCHOOL 1949 – 1954**

compiled by Martin Jacoby <mjacoby@attglobal.net>

Bill and I were at school together but never knowingly met. However, I followed his academic course – science with a main interest in biology, so we shared the same teachers. Visiting the Fribourg University website devoted to Bill, it occurred to me that some account of his life at school would be interesting, so I sent this letter to selected school contemporaries:

## W. D. Hamilton at Tonbridge School

Dear [surname, to avoid offending doctors, knights, priests, colonels &c.], ......if you will forgive the form of address we used 50 years ago.

You probably know that Bill Hamilton (Smythe House 1949<sup>3</sup> – 1954<sup>3</sup>) was one of the most distinguished scientists of all time. I am compiling information about his life at school, and I see that you were with him in ....... [class, team, house & dates]. Would you find a moment to jot down and let me have anything you can remember about him? I hope that memories will be individual and spontaneous so I shall not give you any categories of information that I might appear to want. Of course I shall respect all requests for anonymity.

The school records give about 70 people who were clearly Bill's contemporaries, and I am writing to the survivors in the hope of producing a summary of his exploits and character as it appeared at school, and to publish it on the web-page devoted to him. For your interest the page is:

http://evolution.unibas.ch/hamilton/hamilton.html

Or your could see Richard Dawkins' obituary in The Independent of 10 March 2000. I will gladly send you a copy if you ask me to.

On a personal note, I never knew Bill at school, though we overlapped by a couple of years. Nor am I an ardent OT [Old Tonbridgian – the society of former pupils] – indeed this is the first contact with the school for forty years, and I am very grateful to the OT Society for forwarding this letter to you.

Yours sincerely,
Martin Jacoby
(F.H. 1952<sup>2</sup> – 1956<sup>2</sup>)

In what follows below I have italicised excerpts from notices in *The Tonbridgian* (the school magazine), quotations from Bill's own accounts in *Narrow Roads of Gene Land* (abbreviated to 'NRGL') reproduced here with kind permission of The Headmaster of Tonbridge School and Oxford University Press <a href="www.oup.co.uk">www.oup.co.uk</a>, and lightly edited replies to the letter of enquiry I sent to Bill's school contemporaries. I give editorial notes and sources in square brackets, with a list of contributors at the end. Inevitably after fifty years there is some conflict among these replies, and I have tried to resolve them in the notes. I have also retained repetitions because they point up Bill's impacts

on his school friends. If any other contemporary reading this, or known to a reader, who did not receive such a request, and has any correction or other contribution to make, please would he contact me at <a href="majacoby@attglobal.net">mjacoby@attglobal.net</a>, but please title emails 'Bill Hamilton' so that they are not erased with spam. Likewise, I should like to hear from any other contemporary throughout Bill's life who can offer a reflection on his school years.

# Background

In the 1950s, English education of children aged 11-19 was divided into the state sector, in which schools were generally controlled by local government and paid for from central taxes, and the private sector in which schools were autonomous and charged fees.

Secondary state schools, both single sex and mixed, were either grammar schools which selected their pupils by a test at 11+, or secondary modern schools for those who did not pass. Entry to private schools for boys was nearly always from a private preparatory school by a common entrance examination at age 13+. For those boys who failed to meet the requirements of his parent's first choice of school, his answer papers were sent to the second choice and so on until he found a place – all part of England's elaborate class system. The majority of state schools were 'day', that is, pupils lived at home and attended daily during the working week. On the other hand, most private boys' schools were boarding with two or three weekends during term in which boys could go home.

Headmasters of the more expensive and exclusive private schools met together at the Headmasters' Conference, and called their schools 'Public Schools'. Though this term continues to confuse, it arose from their schools' founders' philanthropic wish to provide an education for the public. Tonbridge School in Kent, England, was such a Public School. It was founded in 1553 and endowed with land in London. The founder became Master of the Skinners' Company, a liveried company in London that still governs the school. The school crest was a boar's head which was displayed on stationery, monuments, badges etc. Of course Tonbridge School has changed from what it was half a century ago – see <a href="https://www.tonbridge-school.org">www.tonbridge-school.org</a> for its character today.

# **Teaching staff**

Masters were generally regarded by boys with a mixture of respect and affectionate condescension, as reflected in their nicknames. The Reverend L. H. (The Arch) Waddy – headmaster, P. L. (Bathy) Bathurst, J. N. F. (Tinfin) Morris – physicist who had a metal hand in place of the one lost in World War I, T. (Tom) Staveley – Bill's housemaster for all but his last term, G. P. (Gerry) Hoole, C. H. (John) Knott – housemaster, A. L. (Crump) Thomas – Bill's biology master, A. E. (Toad) Foster – housemaster, J. M. (Paddy Mac) McNeill – my housemaster, C. B. (Holy Joe) Gordon – Head of Maths and absent for the year 1953-4, The Rev. F. H. (The Crab) Gripper – School Chaplain who sidled into Chapel, A. W. (The White Rabbit) Bunney – director of music (whimsically, one and a half white rabbits were portrayed in the east window of the school chapel), J. C. (Belch) Stredder – housemaster, Col H. M. (Eddie) Gray – Commanding Officer of the Combined Cadet Force, W. P. (Puddle) Lake – Bill's tutor, R. H. P. (Daddy) Reiss, V. (Deadly Bones) Hedley Jones, R. M. (Taffy) Williams –

Bill's housemaster in his last term, J. G. (Beaky) Wood, were seniors in the formal list of masters whose rank order was based on their years of service at the school.

"Biology was already his [Bill's] subject and the master in charge was a Mr Thomas whose nickname for whatever reason was Crump. He was certainly a man of few smiles. Towards the end of his time at Tonbridge and with his career in mind his mother arranged a meeting for her and Bill with Mr Thomas. Because Bill had only ever referred to him as Crump she addressed Mr Thomas as Mr Crump throughout the meeting, much to Bill's discomfort. Crump never corrected her and apparently never referred to it again. But he must have thought a lot of Bill to arrange for him to go to his own college at St. Johns, Cambridge." [37]

#### Academic life

Masters taught their special subject in classes of 10 to 25 boys who carried their books to the master's room and sat at scarred wooden desks. There were good science laboratories, workshops, an art school and a music school. In class, boys were graded according to ability within each year group. Class discipline and quality of teaching varied but was generally good enough – as the steady stream of scholars to Oxford and Cambridge showed. The school year was divided into three terms: winter, spring and summer, with the academic year beginning in September.

In contrast to Bill, I remained in the lowest-ability classes (except in biology) throughout my school career, so my memories are of limited use in this note, and replies to my original enquiry contain little information about academic life. Generally, more able boys were taught by better qualified masters. In the first year (age c14, III<sup>rd</sup> Forms) subjects included English, history, Latin, French, mathematics and geography.

In our second and third years (aged c15-16, IV<sup>th</sup> & V<sup>th</sup> Forms) Bill and I dropped history and geography and began physics, chemistry and biology. Other boys specialised in classics, languages, maths, history or geography. I remember non-science teaching as being almost entirely didactic. It was the practical investigations in science that caught my own, and probably Bill's, imaginations. At the end of these two-year courses we sat the General Certificate of Education Ordinary Level Examinations in each subject. Results were simply pass or fail, there was no grading of performance. Bill seems to have passed in all subjects except French.

[NRGL 1.12] "I ... had begun to believe even as a schoolboy that the quickest way to understand what puzzled me was to spend more time thinking about what I already knew, not necessarily collecting more data."

[NRGL 2.737] "Nevertheless it was certainly partly through such Russian authors [Checkov, Tolstoy and Gorky] that the idea of the theme of this paper [The seething genetics of health and the evolution of sex] took root in my mind even in my teens and early twenties, long before I had arrived at any interest in Galtonian 'regression to a mean' of family lines, or interpretation of such regression by Ronald Fisher ....."

[NRGL 2.742 "In the antique wisdom of my high-school cellular physiology, which is virtually all I have on this subject, mitochondria provide simply an energy supply ....."

"I don't think that Bill bothered about ... [the lack of grades at Ordinary Level] He was very meticulous about his schoolwork – I thought TOO meticulous – but I think

it was as much for his own sake as for the results. I remember Bill's neat writing and red underlining when writing up the results of his science practicals." [36]

"Bill was an abler boy than myself and he was always helpful if I asked him to explain any scientific topic to me." [30]

"His mathematical mind was apparent at school but was not fully manifest until [later]". [32]

"He was a regular prize-winner for being top of his form." [34]

"I can remember that he was very industrious, and seemed to reach solutions far more quickly than I could, but any idiosyncrasies – No!" [19]

"I remember vividly spending time at Badger's Mount not only wandering through the beech woods surrounding his home but with his brothers excavating a deep drift in the sandy ground with the family tractor. From this drift each [of us] dug a horizontal adit with the enthusiasm of small boys ignorant of the dangers of mining into soft ground. His brothers shared with him an enthusiasm for experimentation and I recall discussing with them their scheme to build a dish aerial pointing towards the Wrotham radio transmitter (still in use, about 6\_ miles away along the North Downs). Being so close they had calculated that there would be enough energy to be plucked from the air to do something useful (boil a kettle?) – for free! I do not know if anything became of this venture – National Service intervened. Another example of his infectious curiosity is when he approached the A-level examinations, we predicted that rabbit would quite likely be part of the Biology practical. We duly shot a rabbit in the woods. Though I was in the Upper Fifth and did not take the examination until the following year, I am sure the dissection practice stood me in good stead as I am sure it did too for Bill." [32]

"I remember being surprised to find the sensitivity beneath his rough exterior, his interest in poetry and nature." [25]

"Looking back as a teacher, it is a particular surprise to me that someone of Bill Hamilton's future distinction left such a little mark in terms of examination results at school. (Only after his contemporaries had left Tonbridge in 1954, did his name appear on the school roll as a State Scholar bound for Cambridge University)" [4]

"In The Times [of 22 April 2004] obituary of Professor John Maynard Smith Bill is described at one point as 'the only bloody genius we've got'. I must say that most of us in Smythe in the 1950s were blind to his genius!" [14]

"I don't think it is at all surprising that his genius did not manifest itself at school. I would have thought that must be the rule rather than the exception. By and large, people, including school children, who shine early on are those who swot [study intensely] or who are naturally good at assimilating and regurgitating information. People with original ideas need much longer to think about them and may even be particularly unsure of themselves. Bill knew he was intelligent, but it was not the intelligence to get all-round high marks and could be quite compatible with failing in French. He got a State Scholarship because he was good at science but that was all. It was also not surprising that he failed to get a First [Class Degree] at Cambridge which would also involved learning a lot of stuff he was not interested in. [36]

"Two memories emerge. He doodled incessantly. I must have sat near enough to him to witness the act of drawing. They were finely worked abstract patterns in black ink of striking design. So much so, that I attempted to model my own doodles on his. He

read a short story aloud in class. It was an imaginative story of déja vu and time slippage, involving an image of a sheep's skull on deserted moorland. Maybe it wasn't that special, but it is the only story I can remember anybody reading in my entire school career, so it certainly had an effect on me." [17]

"He had considerable literary skills. He wrote a story called the "Red Death" which dealt with a fictional situation where scientists had created life in a test tube and it was spreading and destroying the planet. A shortened version of this appeared in The Tonbridgian quite early in his school career." [30, it won the Floyd Short Story Prize; Bill was aged 14.]

#### THE RED DEATH.

The red death was creeping over the land. From bush to bush, from tree to tree, it moved. All was dying under its merciless jaws. The corn was bitten from head to root, and now it stood brown as the earth it grew from, dead. As it passed though wood and orchard, the branches, red with the bodies groaned and broke with the weight, and when it had passed on, it left the trees with a myriad tattered midribs where the leaves had been. On wood and crop and grass and garden the red death crawled, and they died.

The little wild beasts of the land starved, and they too died on a black earth and barren field. Horses, cattle and sheep pined in their pastures, and the carcases of the dead lay unburied among the dying. Birds starved till they collapsed on the wing; then, as they lay on their backs, they shook their feathers, trembled and lay still.

Most pitiful to see was man dying in horror. Man who had made the Death, who had plunged so deep into the secrets that controlled him, that he had doomed even himself.

He had made Life at last ... in a test-tube. From the day when the great, scientist, crouching over his microscope in the warm, drug-scented room, had seen against the white a red blotch break apart and move of its own will, life was doomed. He had made life and the punishment was inevitable. Perhaps he knew this, for be tried to kill it. When his assistants came in an hour later, the slide was melting above a Bunsen flame, and fallen to the floor in that forest of test-tubes lay the great scientist with a broken phial between his bleeding lips.

But they made Life again, cultivated, fed it, and let it escape and then brought the weapons of modern science against it to kill it. They failed. Then they called it Death.

Now they wandered among the stricken crops and stamped it underfoot hopelessly. They sprayed it with fire, dropped dust from the air, did everything conceivable to kill it, but they could not. A thing that has seven generations in a day, and that will eat anything green, is not easy to kill. Only two trees it refused as food; the Yew and the Cypress. Oh, horror of horrors, why those trees of all the thousands?

Already Man is dying by the million; he starves in the street, he dies of disease. Finally, to end his suffering he dies by the Knife, the Cord. and the Bottle whose label is black and red. As his eyes dim and blear, he sees beside him in the gutter, the little red worm crawling; the worm that has only a mouth, the power to reproduce and the power to kill.

Rather the Great Flood than this. And why, why the Yew and the Cypress?

[from *The Tonbridgian* January 1951, page 295]

[NRGL 2.601 – quote at head of Chapter 16]

"Between red death and radiant desire
With not one sound of triumph or of warning,
Stands the great sentry on the Bridge of Fire.

J. E. Flecker"

[NRGL 2.624] "The British yew tree, Taxus baccata, is an example both ways. Barely touched by insects and seemingly also very little attacked by fungi and other parasites, yews stand ageless, perhaps even stand for a thousand years, in Oxfordshire churchyards. Below them their roots reach past the human bones into Oxford Clay, a formation that has lain undisturbed since it settled off coast in tropical seas of 150 million years in the past. In the clay, yew roots touch bones astonishingly similar to bones of the living tree itself. They are fragments of 'taxad' wood that sank not far from coral coasts where they originated, there having been torn, perhaps, from living trees by dinosaurs – trees pulled down perhaps by that fearsome 'thumb' of Iguanodon. Some plant forms, like some animal ones, most mysteriously don't change. Often, like the yew, these Methuselah species are taxonomic loners. Were there once thousands of insects plaguing the yews of the Oxfordshire forests of the dinosaurs, like insects plague oaks today – plague them in hundreds, as was shown in T. R. E. Southwood's paper, when for yew he found only one? And did dinosaurs trim yews with impunity, the way cows and horses trim oaks in our parks today? When cows and horses try to eat yews they die. Their detoxicant systems have moved far off from, or perhaps never appreciably encountered, the forgotten poisons of rare and relict species. Is this why relict taxon Taxus can produce such special drugs as are now being used to fight cancer?"

If any reader of this page can show that the cypress is similar, then 14-year old Bill's story throws strange light on his growing mind.

"It ['The Red Death' above] was prophetic. I think the vision remained with Bill all his life and was probably relevant to his views about AIDS – by that time buttressed by his hypothesis about hosts and parasites as a principle cause of the evolution of sex, and by the soaring but blind successes of modern medicine. I am not sure that the essay itself was completely original; we had a lot of books at home including Dorothy Sayers' collection of stories of detection, mystery and horror and books of stories by Edgar Allan Poe [one of Poe's titles is 'The Masque of the Red Death'], Lord Dunsany and others, some of which I seem to remember had similar themes including one about armies of ants which I found very gruesome." [36]

Bill and I devoted our fourth and fifth years (age c16-18, Upper Vth & VIth Forms) to three subjects: physics, chemistry and biology. At the end we sat the General Certificate of Education Advanced Level Examinations. Again results were not graded, though we could find out our marks. On the strength of his 'A' Level results, Bill was awarded a State Scholarship which paid money towards his fees and support at Cambridge. State Scholarships were increased at this time so that those with no other means of support could receive all the fees and expenses paid for by the state; and even those from comfortable backgrounds would receive generous state funding. He stayed on at

Tonbridge for the winter term 1954 and he was awarded a place at St John's College, Cambridge. However he failed to win a college scholarship, which would have brought distinction rather than significant extra funds. He also published a poem:

#### THE BRACKET FUNGI.

The beechwoods on far hills are turning gold, Suns shall light them, and in evenings Red suns on red horizons rolled Shall stain them deeper, sweeter and less cold.

Soft rain shall drench them, mists shall drown, Leaves through stagnant stillness spinning Go drifting quietly down and down. Wet earth is black, the piled dead leaves are brown.

The stately trunks snake-coloured, and on these, Live, or dead but still upstanding White hands of bracket fungi seize Hands tough as leather, soft as cheese

Quietly encircle, quietly pull and kill.
And when that cobweb-shattered sun
Sinks huge to a yet more distant hill
The pallid hands grow fleshy, pink and fill
That beauty with their growth.

W. D. H.

[from The Tonbridgian May 1954, page 24]

Bracket Fungi and the following poem by Bill were published in Tonbridge Poets 1953-54, edited by J. M. McNeil. [41]:

#### SUNDAY PREP

The fountain pen Lay black upon the crimson cloth: White paper there, dull-coloured books Full-scattered. He lit a match, he lit a match He lit a match and watched the flame Go wandering up the pearly stick. And then the blowing out and smoke strands Drifting through the darkening room. Tight-slumped in awkward chair he felt The awkward creasing of his clothes. He stretched and twisted, elbow-kneed Bent low above the dying fire. The bloody thing's not hot enough, Not hot enough, not hot enough to singe a fly -Must get some coal, turn on the light And then go through the thing again.

The room darkened. He lit a match. Self-angered by his dreaming, Sweetly dreamed of Summer on the hills. He could. not see, he did not know, His room was on the shadowed side, But even there where leafless trees Rose grim beyond the muddy lawn, Had he but looked, he would have seen Some blood-stains on the trees: Had he but gone to get the coal He would have seen A fiery sun which struggled down Through turbid depths of crimson cloud To the black tree-spiking hills. Cloud masses vast, cloud hills, Cloud mountains, wall in all horizons, Pink coloured by the fighting sun; Watching and waiting, hemming in Till their tall crowding Burns to the blueness of a star-pricked night.

W. D. H.

# Chapel

The chapel was built 1900-1909 – a tall austere building without side-aisles. Wooden pews faced inwards so that misbehaviour could be detected more easily, and there were allegorical stained glass windows, a fine organ and chilling war-memorial inscribed with the names of old boys killed in the two world wars. The whole school assembled every morning for a short service in chapel, and the day closed for boarders with prayers in Houses. There were two chapel services on Sundays plus Communion for those confirmed in the Church of England. Three masters were ordained.

[NRGL 2.xxxvii following the description of Bill's clash with Lord Florey at meetings of the Royal Society Population Study Group] "Later I thought how my attendance had been like my presence in my school chapel: there, too, it was awesome and dim and had become boring by repetition, and there was a silent boy. In that case, having been always totally unable to sing any sort of correct note or harmony, I would, when pressed by a prefect, open and shut my mouth silently like a fish, mouthing hymns as required, but mostly thumbing through my book and trying to find for my own inward recitation the few hymns that were passable as poetry (mighty few). In Burlington House it was as if a prefect had been watching me once again: but well, wasn't I a step further? At least this one hadn't ordered me to mouth out the beliefs I didn't hold."

"I remember in chapel he would read hymn books during the services, quite avidly it seemed, was he bored or perhaps this was an indication of his interest in the interplay of words that sowed the seeds of his poetic gift?" [32]

"I remember trying to steer a large maybug from my side of the chapel to his [Bill's] during the morning service." [24]

"I remember the maybug which was taken into chapel in a match box and we discussed long and hard as to when the quietest period in the service would be so it could be released to maximum effect. The critical part being that the timing had to be anticipated well in advance." [32]

#### The House

The 500 - 550 boys at Tonbridge were divided into nine Houses: two were for the 100 or so boys who lived at home and came into school daily. Welldon House catered for boys from Tonbridge, and Smythe House (Bill's) for those from further afield. Other houses had dormitories in which boarders slept. The House was the social unit. It was presided over by a housemaster and his wife who ran the domestic side unpaid, or a house-keeper who was paid. The school prefered married housemasters, although Mrs Staveley, Bill's housemaster's wife, was ill and no longer able to live in Tonbridge. Each boy was allocated another master, outside the house, to act as his tutor. A tutor did not instruct but merely met his tutees in small groups once a week to discuss general topics and to offer an alternative ear in private, if necessary.

A senior boy was appointed head of house and called a *school praepostor* (abbreviated to 'prae' and pronounced 'pree') on the grounds that there can be only one prefect, which was the term applied to such office-holders in most other schools. Under the head of house were three to five house praes who administered discipline within the house and also in the school as a whole when they encountered unsocial behaviour which they reported to the head of school. Misdemeanors in the houses were corrected with small penalties such as gardening, peeling potatoes or a punishment run. More serious house offences required a meeting of the house praes in the changing room and two to six lashes with a cane, administered to the buttocks of the offender by the head of house. Bill was a house prae in spring 1954, and head of Smythe House and therefore a school prae, in winter 1954.

"During his time as a house prae, he kept the 'punishment book' in which all the misdemeanours and the appropriate punishments of the juniors were recorded in his characteristic spidery hand. I particularly remember this because the book became my bailiwick when he was made up to 'head of house' Circuits of the 'Head' [running round the cricket field] was the usual punishment currency and when one had built up a good stock they could be traded for so many miles of cross country running. We preferred the latter; if one was forced to run for one's misdemeanours, it was more interesting to have a change of scene and even better, for those wise to the hedges, ditches and geography of the hop fields, short cuts could often be taken. On one occasion, about mid way through our school days, one of the senior boys went out with a pair of binoculars to witness this activity which of course further increased our unhappiness, most unsporting we felt!" [32]

"I remember Bill's displaying the stripes on his backside. I believe that they were for leaving his shorts on the floor of the changing room." [36]

On admission to a house, boys had to pass a test of social knowledge. They had to learn the names, nick-names and addresses of all masters, the geography of the school, the names of all school praes and their own house praes, the colours of each house which were worn in a ribbon around the straw hat (called a 'barge') or as ties, and the captains and colours of the major sports. For their first year, boys were allowed a box for their possessions and shared a table to work at in the 'prep room'. Each new boy

was assigned to a house prae as a fag – in effect a servant who cleaned shoes, tidied studies, hung up clothes and generally fetched and carried. At the end of his term of servitude, a fag was paid up to £1 or given a meal by his prae. In the second year, boys were allocated a study to share with another. It was usually about six feet wide and eight feet long with a fixed desk. Praes had a study each. Dormitories for boarders slept 3 – 20 and were austere. There were no carpets or heating and windows were usually required to be open even in winter.

# **School Discipline**

One of the school praes was appointed head of school, and he ruled over school discipline – masters playing almost no part out of class. Indeed, on one occasion a master announced the award of colours in his minor team and was told in no uncertain fashion by the head of school that the procedure was otherwise. [pers.] School offences were dealt with at a meeting of the school praes in a special room called the Niven Room where sentence was passed and beatings or some other punishment handed out by the head of school.

"He [Bill] was head of house the term after poor old Tom Staveley's reign as housemaster ended and, looking back, it was not a particularly happy era. Smythe was not a very happy house, and morale was not what it was later when Tom had been replaced, and Bill should get some of the credit for the improvement. I feel that I must have been somewhat in awe of Bill – but then weren't we mostly in awe of people two years senior? By 1953-4 I was sufficiently shrewd and senior enough to reckon that by and large a low profile was prudent; I don't think I ran foul of Bill. I would reckon that things might have been worse but for him." [3]

"Bill and I entered the house when morale was high. There was then a good bunch of senior boys who seemed to have won every cup available. They seemed responsible, fun loving and fair crowd that one could look up to. This state of affairs rapidly declined, but by the time Bill left morale was waxing again to reach another peak shortly after. Bill undoubtedly played a part in that renaissance. I have a picture of him at lock on the tug rope when Smythe won that cup." [32]

"I don't think Tom Staveley, though rather a sad character, should be discounted. He was tolerant and had some eye for talent in literature." [25]

"Tom had been a great character at Tonbridge both as boy and master for many years but we only knew him in his twilight years when he had to live a bachelor life. He was perhaps less inhibited than some of the staff at that time and few can forget his memorable yearly Gilbert Sullivan performances with his fellow dayboy housemaster Mr Bathurst (Bathy). Nor was he forgotten as a parent at his son's public school, where he propped himself against the fireplace, with a glass of sherry in his hand and declaimed to the other parents with his flies undone." [4]

### Bill's appearance and character

[NRGL 2.235] "... rather as my school friends in more than one school picked me out to be named 'ape man' or 'cave man'."

"Bill was physically stocky and robustly built which qualified him as a member of a small but boisterous mob who would frequently racket around the House to the amusement of the younger ones. Despite his rather gorilla-like presence he seemed a decent chap utterly devoid of malice. His slightly menacing figure belied an affable and essentially friendly nature." [5]

"Bill was of course Apeman Hamilton to all his contemporaries. While the Good Lord had blessed him with the features which gave him his nickname he was compensated with a brain box of gargantuan proportions. He never seemed to mind his nickname. As far as I remember he never seemed to mind anything very much. ..... It is extraordinary that this unkempt apparently oafish boy should have slipped past all his contemporaries without too much of a hint of his future brilliance, never responding to any of the ribbing which he got, and he left Tonbridge to carve such an extraordinary career for himself, and also that he should have then died prematurely." [37]

"Some of the other boys used to tease Bill slightly by telling him (incorrectly) that he had a faintly ape-like appearance. He always took this in good humour and once appeared in a CCF [Combined Cadet Force – see below] concert in a comedy play in which he played the part of a gangster who was half man and half ape. ...... I only met him once after he left school and that was during his National Service which he was not greatly enjoying. ..... I knew Bill fairly well as we both had strong Scottish connections." [30]

"His hair was cut short and he was usually a pretty untidy sort of chap!" [13]

"A rather ungainly figure wandering around the House – not unlike the jungle picture of him." [in The Times obituary 9 March 2000. 14]

"Bill had an unusual appearance, almost something of the neanderthal man about him. Short, stocky with a large head, strong build and arms which seemed longer than normal and which always declined to keep in step with his feet when he marched! [on parade in the CCF] He was also unusual in that before reaching Tonbridge he had already managed to remove half a finger or two on one hand as the result of an unexpected explosion whilst experimenting with chemicals at home. He had, so it always seemed to me, a quiet and peaceful air about him which even in the front row of the scrum [see below under Rugby Football] rarely, if ever, got roused. A man of few words, but nevertheless one who I always liked and respected." [15]

"Friendships at school were often made more strongly with those who lived nearer one another, tended to travel together and to meet out of school more often. Though of course there were overlaps, these tended to be stronger among the Men of Kent [inhabitants of Kent who lived on the Weald south of the River Medway] and among the Kentish Men [those who did not]. The Medway divide seemed to affect transport as well; Maidstone and District Motor Services held sway to the south whilst London Transport took the northbound routes. Bill was part of a tight knit group in Smythe house. Despite our common interest he remained rather an enigma. We were good friends, as much as it was possible to be counted a friend, he was a reserved character, self sufficient and to some extent keeping himself to himself but he was still full of fun and I remember having many laughs with him on so many occasions. His wry smile will always remain with me." [32]

"He had a lovely smile in a not very beautiful face and was a special character. I think he had a finger missing — as a result of an explosion during a chemistry experiment. He certainly was "different" as a result of his excess Betz cells and could be in a world of his own — but this didn't prevent warm friendship. His hair stood straight up." [10]

"Bill Hamilton was two years older than me. By some quirk of school organisation, I joined his form for a year in 1953. In the nature of boarding schools of that time, the fact that he was senior and was a member of a different house from me meant that we were unlikely to develop a personal friendship. I do, however, recall his physical presence sitting at the back of the benches in the laboratory and my feeling that he was something special. [17]

"He had a vivid scar from his abdomen round under his arm and half way up his back. He was obviously an inquisitive sort of guy." [20]

## **Daily routine**

"All his later days at the school he lived at Badger's Mount and used to arrive in Smythe at about 0755 as that was the only possible bus for him – the other Smythe people who came from the Sevenoaks direction would arrive at about 0820; occasionally (usually if I had forgotten a book or it was a CCF field-day) I would get that early bus and he would be hunched in the front seat upstairs (there was an unwritten rule that everybody went upstairs), presumably over a book." [3]

"Bill and I arrived at Smythe House, Tonbridge School, in 1949 on the same day and by the same "London Transport" bus, and spent the next five years travelling together on the bus to and from school, trying to use the time to catch up on homework, when we weren't chatting ...... about the usual schoolboy topics – work, masters, our house, discipline; we both had a naughty streak." [24]

"Towards the end of our school careers, we came of an age that allowed us to motor cycle. Whilst not allowed at school, motor bikes known by us as 'heaps' could be used well away from school and day boys could often be found in the summer evenings 'heaping' around the neighbouring country lanes." [32]

"I was actually very happy there [at Tonbridge]. It was a help to be large and good at Latin. It was a very stratified society, and being good at both rugger and Latin was thought to be eccentric, but people then fitted me into a slot called eccentric. I think Bill was slotted into the same pattern, although he was an original genius. It was I think probably difficult if you were not physically and mentally tough in Smythe House 1949-55. There was physical and mental bullying. Bill and I were able to withstand this, and I hope we did not inflict it. There was homosexuality, never brought out into the open. Neither Bill nor I participated, though curiously enough I can remember a dispassionate discussion on this subject with Bill and another boy. This discussion was odd because we were all in different years. Conversation between members of different years was discouraged, perhaps to discourage unnatural vice, perhaps to prepare us for life in the army. In pre-Suez Britain [Britain and France invaded Egypt in 1956 to keep open the Suez Canal] blimpish imperialist views were acceptable and Tonbridge the norm, Bill and I revolted against them. I can remember with shame how odd I found it going to Oxford in 1956, a difficult time because of Suez and Hungary [the rebellion against Soviets], because it was not at all like Tonbridge. The place seemed full of aristocratic old Etonians [Eton is a public school] and ambitious grammar school boys, both sets despising Tonbridge. I wonder if Bill was similarly affected [at Cambridge]. Bill caused offence his first day by arriving with his books in a knapsack rather than a briefcase. He arrived with a briefcase the second day." [25]

"I suspect that Cambridge was different from Oxford at that time. The Cambridge that I encountered in 1954 was tolerant towards public school boys from schools like Tonbridge as we were often in the majority." [4]

"I was a contemporary of Bill through most of his school days, a few terms behind and shared with him a science education, particularly biology, and progressing with him in Smythe House, experiencing the bare boards and open box 'lockers' of the Junior Common Room, through the two middle common rooms, the senior common room to the prae's common room." [32]

"Bill Hamilton and I went to Tonbridge in autumn 1949. We both left in 1954, although he remained for the autumn term to take the Cambridge entry exam. We were day boys in Smythe House, at that time under Tom Staveley as Housemaster. We both opted for science with particular emphasis on biology, taught by 'Crump' Thomas. We shared an interest in 'nature study' and the countryside (including what one could hook or shoot, and preferably eat!). We played some enthusiastic games of fives [a court game] and enjoyed cross-country runs through the muddy winter fields – better still if partly flooded – though I never matched Bill's prowess at rugger. In terms of timing and interests another contemporary, also aiming for a future in biological sciences, and I probably had more to do with Bill than any others during his time at Tonbridge.

"After leaving Tonbridge I kept in touch with Bill intermittently for several years. However he did his National Service in England and I mostly in Canada. He went to Cambridge and I to London, and by the time Bill had moved to London as a post-graduate I had gone to Africa. We seldom met but exchanged news, opinions and ideas mainly by letter. I was astonished to discover when visiting Bill's sister at Badgers Mount after Bill's death that he had kept some of these letters, among reams of other correspondence. Alas for posterity, the only letter of his that I kept is an air letter to Tanganyika (as it still was then) written in 1961, just after he had found the post-grad niche he shared between LSE and University college. The 1961 letter must have been about the end of the series and we met only once more. Bill was by then — around the early 1970s — working at the Imperial College Field Station at Silwood Park.

"Going back to our correspondence, in a letter to Bill at the start of the 1960s I attempted to console him for his currently dismal lack of academic support and recognition, and the hostility of some academics to his ideas. Based on what I knew of him at that time I wrote that I saw him as someone who was destined to have important ideas (I can't claim, though, to have known about what!) but so advanced that they would take ten years to be recognised. I hope that this boast may therefore excuse a little hindsighting now, about how much of the future Bill Hamilton we could already discern even before he left Tonbridge in 1954.

"Bill may have been a close school contemporary and companion but he remained the sole proprietor of his own thoughts. You could learn from him, discover novel ideas, be amused, be inspired; but if he believed something it was hard to change his mind. To illustrate, we once argued long, and totally at cross-purposes, he about gravity and me about aerodynamics. I said that if you dropped a lead weight out of the window at the same time as a piece of balsa wood the lead would hit the ground first; he said gravity applied equally to all objects whatever they were made of. I don't recall that we ever got to the point of agreeing that both of us were right!

"Despite such discussions, for the most part Bill was quiet-spoken and quite diffident in manner. I have heard Tonbridgians described (this, of course, by a non-Tonbridgian!) as rather cold, unemotional folk. If that means abiding by such British middle-class maxims as "don't shout, don't show off, wait your turn", then Bill was

fairly typical. But if he was seriously riled by something it was another matter. Then his customary quiet-spoken diffidence would be replaced by a look of calculating, hostile determination which Tom Staveley said "made him nervous". If disagreement turned to 'mobbing' [fighting], I recall, Bill would pitch you to the floor or bounce you off the walls before you knew that hostilities had turned physical. His large head, somewhat simian features and robust build (which earned him some disparaging nicknames which, however, he tolerated good-naturedly) enhanced both the display and attack phases of these rare incidents. It was in this state of outrage, one imagines, that in Brazil he later tackled a mugger armed with a knife – and got considerably injured.

"On Expedition Days in the summer term Bill showed me the woods, fields and chalk pits around his home at Badgers Mount, the memories of which he was to return to again and again in his life's work and writings. I also was invited to his home and met other members of the large, and it seemed to me happy, Hamilton family. I was shown the workshop and the blast-damaged vice, scene of the explosion in the year before Bill came to Tonbridge that left him permanently marked. I remember being impressed by the fact that Bill's parents encouraged their children to build private dens of their own in their large garden or the surrounding woods — below, at or above ground according to preference.

"During these many interactions we spent a good deal of time, as young people do, discussing "life-and-all-that", science, art, philosophy, poetry etc. Conversations were often deep and serious. Parties, beer, girls (how could we get to meet some?!) and the like featured less often than when talking with other contemporaries. It wasn't that Bill was a prig; he would join social occasions when invited. But he wasn't really that interested in such matters.

"On "life-and-all-that" questions, even at Tonbridge Bill expressed core ideas that never deserted him. For any phenomena or beliefs to be valid they had, for him, to have some physically material, observable basis. Evolution was already one of his major interests. So far as humanity was concerned, Bill already saw us as inescapably the product of our own evolution and the ancient pressures that had driven it, so that we had to organise our present-day beliefs and behaviour in harmony with these realities. Organised religion, in his view, often ignored such realities. These core ideas were as yet, of course, unelaborated concepts. They cannot have gone down too well with some contemporary Smytheans, of which there were at least two who later entered the Church! But they accounted for Bill's rejection of Christian dogma and his boredom with rituals of daily Chapel. They also show up throughout his life's work: time and again as his speculations and mathematical modelling drew him into questions of politics, ethics or economics he would dodge back to "nature study" to illuminate or assess the biological ground truths of the Narrow Road he was following. At Tonbridge his uncompromising, evolutionary approach to human nature left him unimpressed with the UN's comprehensive Human Rights framework, which was then being put together: the only human right he was prepared to recognise, he said, was the right to struggle.

"Bill's broader cultural interests also were well developed while still at Tonbridge. Apart from being fascinated by nature and obsessed with evolution, he was already in love with words. New forms of expression, puns and apt phrases attracted him. Even at school (to say nothing of our later correspondence – among the historical treasures I destroyed there is mention of a letter of 17 pages!) the urge to innovate and dazzle with words and to get his ideas and experiences onto paper was well developed. When it came to exam technique, of course, this approach was disastrous; there was so much he felt the need to say that he had usually completed no more that three of the customary five questions of a typical paper before time was up. Three segments of

excellence followed by two blanks must have been a nightmare for his masters and examiners to mark.

"It was perhaps not surprising that among poetry he was drawn to the poetry of nature especially. He was later to describe himself as a "...child of the receding wave of the Romantic Movement .." (NRGL) – this, one has to add, despite his stark views on the nature of humanity. At Tonbridge he/we read poets who were to be among his lifelong favourites – Housman, Blake, Masefield, D. H. Lawrence. In chapel we searched the hymn books for interesting poetry, though Bill later recollects that he found little. Kafka, the great Russian novelists and playwrights and the art of Paul Klee also occupied him. Bill was, however, tone deaf. He could not sing in tune and recounts how he was told to mouth the words silently in chapel and the House Shout [see below] so as not to spoil things. While his life's work is full of references to, and quotes from, literature and art, music hardly gets a mention. If things had been otherwise then surely Vaughan Williams, Bax and Butterworth would have joined the list of those whose artistry he loved.

"Central to Bill's later career was the use of modelling — in his case mathematical — to explore and explain how or why observed phenomena were as they were. Something along these lines happened on the Smythe lunch table one day, when one of those conical glass salt containers with a plastic spout fell on its side. What, Bill asked, was determining the angle at which the salt inside had come to rest — its angle of repose? Debate followed: moisture content; crystal shape; particle size?? A foretaste perhaps of his search for determining variables in his future mathematical models.

"Physical courage (some would say recklessness) was part of Bill's makeup. His success as a rugger player has been documented by others. His dangerous cycling record goes back to his early youth and, according to Prof. Dawkins, lasted a lifetime. But one example from Smythe House also makes the point. The main stretch of the Smythe stairs was long and straight with a handrail on each side. A popular game was to stand part way up this stretch, fall forward to grab the rails, then swing down using your arms and land at the bottom without touching any steps with your feet. The higher you started from, the greater the kudos. Bill was the only person I can remember who dared to start from the edge of the landing above: and he made it.

"How much direct credit can Tonbridge take for Bill's extraordinary achievements? As a day boy, his daily time always divided between school and family, he was less subject (or vulnerable) to the pressures that often shape the public school 'product', of which bullying in the boarding environment can be one of the more important. Despite some good natured mocking of his appearance which he took in good part, Bill was not bullied. Anyway – see above – you messed with Bill at your peril; he could take care of himself. Perhaps for these reasons his general approach to life does not seem to have been much moulded by Tonbridge. As in other matters, he may have observed and noted; but in the end he stuck to his own views and judgements.

"Tonbridge did of course equip Bill with the academic qualifications for university entry even though no one seems to have succeeded in persuading him to alter his exam technique. 'Paddy Mac' McNeill and other masters surely widened his already well-developed interest in arts and literature. Tonbridge gave him sports opportunities that he enjoyed and in one of which, rugger, he reached the top level in the school. As a fellow pupil I have to say, however, that in his core subject of biology Tonbridge teaching at that time was not very inspirational. It covered the basics of form and function of animals and plants but was angled strongly towards preparing boys for entry to medical schools rather than making a career in biological sciences. Our main source of inspiration at that time came not from dissecting rabbits under the eye of

'Crump' Thomas, but from reading the excellent New Biology series, with articles on ecology, anthropology, evolution, genetics and the like. Bill also recollects this apparently now defunct series of articles in Penguin books on popular science (NRGL). I suspect that it may have been here that he first came across the writings of his early heroes, J. B. S. Haldane and R. A. Fisher. Whether the school provided these books and whether 'Crump' pointed us towards them (it would be nice to say 'yes' on both counts but I'm not confident!) I do not remember.

"To understand Bill Hamilton as a schoolboy more fully one has, I think, to look also at the influence of his family. With family encouragement he was already roaming woods and fields collecting insects before he came to Tonbridge. Among all their children his parents promoted such independence, self-reliance and a 'can do' attitude to the mechanics of life and its daily living (see dens above). Bill's sister Mary told me after his death that they were always "encouraged to believe that they could do anything" if they applied themselves sufficiently. Home, I suspect, was also where his love of poetry began: it is perhaps significant that many of the references in Bill's papers to poems (as well as to butterflies and birds) cite publications from the 1930s and earlier, which one suspects were on the family bookshelves.

"Ultimately, however, Bill as a schoolboy was already much more than the sum of these influences. Even at Tonbridge his instincts and intuition favoured nature more than nurture in explaining what we are. So leaving aside the relative contributions of Tonbridge or family to his nurture, I offer a final piece of hindsight: that in Bill's case nature was dominant. I'd guess that most of what we saw then, and what Bill achieved later, was (though he surely would have put this more colourfully) mainly the result of the particular shake of the genetic dice that made him." [35]

### Games

Games were taken seriously by most boys with frequent matches against other schools, even down to 4<sup>th</sup> teams. Some matches were ancient fixtures such as the rugby match against Harrow and the cricket match at Lords (the seat of English cricket) against Clifton. Tonbridge was well supplied with games facilities. There were tennis, squash, fives and raquets courts, a gym, a boat club and an out-door unheated swimming pool that was just liquid in April but warm and opaque-green by July, and extensive playing fields, some of them far from the school and near the river. Gymnastics were part of the weekly curriculum. The major games were rugby football in the winter, hockey in the spring and cricket, rowing or athletics in the summer. One major and two minor sports were compulsory and a summer choice of major game was available after a boy's first year. Cross country running was chief minor sport in the spring term. Unfortunately it was the sport of last resort when fields were flooded and courts full, and also used as punishment.

"One of Bill's favorite sports at Tonbridge was cross country running because it entitled him to go 'out of bounds'. Also of course he liked the natural scenery." [36]

"We used to play at lot of fives together, and go on the interminable runs. If one had fewer than three games of rugby in a week then a run had to fitted in somewhere. Being a good rugby player he probably ran less than I." [32]

## Rugby Football (also called 'rugger')

Rugby football played a central part in Bill's school days, so here is an outline of the game for readers of this web-site unfamiliar with it. In English Public Schools of

the 19<sup>th</sup> Century sometimes hundreds of boys played a two-team game in which a ball was kicked across country towards a defined goal that was sometimes miles away. Generally, older and bigger boys were in the front and called 'forwards', while juniors stayed back, packing into their own goal to defend it. There were few rules, injuries frequent and deaths not unknown. In 1823 a boy called William Webb Ellis at Rugby School, Warwickshire England, picked up the ball and ran with it. Rules were eventually agreed, especially those relating to violent injury, numbers of players and bounds of play, and matches arranged between schools. The first team at Tonbridge played on a field called The Fifty, which had been laid out for fifty players. There were also two other fields called the Upper Hundred and the Lower Hundred which corresponded accordingly.

In Bill's school days, as today, rugby football was played by 15 unarmoured men on each side. Their object was to touch the ground with the ball in a defined area, to kick the ball over a bar between two tall posts called the 'goal', and to prevent the opposing team from doing likewise. The teams were divided into three parts: the five fleetest as backs, the two nimblest as halves and the eight most massive as forwards. At times forwards locked their arms together over the shoulders in three rows one behind the other. They adopted the formation of 3,2,3, which was called the 'scrum', and engaged the front three heads of the opposing scrum. Bill usually played in the second row where he put his head between the pairs of buttocks of the front row, the back row doing likewise. To avoid excessive damage to ears, forwards are allowed to wear a padded helmet called a 'scrum-cap'. All forwards then pushed while the ball was put into the scrum between the opposing front rows. The middle of the front row was called the 'hooker' and it was his duty to intercept the ball with his foot and deflect it backwards so that it could eventually be retrieved by the halves and passed to the backs who then ran forwards with it. When a player was running with the ball, members of the other team could tackle (grab) him and bring him to the ground. It was prudent for him to pass the ball to a fellow teamster before being tackled, so retaining possession for his team. Though a ball could be kicked forwards, under no circumstances might it be thrown or even knocked towards the opposing goal. Penalty for infringement was a scrum, or a free kick if the offence was thought to be deliberate. It was the duty of forwards to be closely behind the ball at all times, while backs disposed themselves in a backward sloping line which the ball could be passed down while they were running forwards. Bill played in the 2nd XV in winter 1953, and 1st XV 1954.

[NRGL 2.567] "I sat in silence nursing my suspicion that it wasn't only for the pedestrians that cars were dangerous in the Italian rush hour. I thought of the 'loose scrum' of my school rugby days and of how here I saw motorized equivalents to our much-loved 'scissor' movement, as also equivalents to those one-foot feints that carry you off past the tackler in a new, unexpected direction. Fortunately the more physical moves of rugby, like hand-offs and the outright falling tackles, seemed rare, though, judging from car body work around me, they were not unknown."

"His rise to rugger performance in 1953 from some junior side was remarked on by my brother who never rose beyond the fourth XV. In 1954 Bill was in the second row of the first XV where I joined him for some matches. Then I did get to know him, sharing seats on the bus with him to away matches. I remember ..... his kindness to me when I was dropped from the first XV. About five years ago learning of my whereabouts from some mutual friends at New College [Oxford], he sent me a photograph which had appeared in The Times to record the Tonbridge versus Harrow match in October or

November 1954. There are Bill and I not performing so well in the lineout. I wish I had taken up his suggestion that we had met and talked over old times." [25]

"You will see from the 1st XV photo of 1954 that with an ear protector on he presented an ominous threat. But I do not remember him as a violent player." [37]

"He was called "Caveman" as a nickname which he seemed to exploit to good effect on the rugger pitch. Despite not being very tall for a lock [second row forward] he made his mark as a fierce competitor and good sport, and was in the 1954 1<sup>st</sup> XV." [10].

"I remember him as a formidable, fearless & ferocious rugby player". [11]

"On the rugby field he was nicknamed "Caveman"! He was immensely strong and a formidable player when in full flight with the ball – he played in the second row and was a difficult man to stop. I seem to remember him being a very noisy player – considerable grunting and snorting went on!" [13]

"Hamilton, W. D., was a great-hearted second row forward who tackled well and ran hard (though he seldom passed [the ball to others of his team])". [from The Tonbridgian, Jan 1955 p118]

"The Tonbridge pack [forwards] had a good day. ..... Hamilton, W. D., [and three others] combined to make the covering and spoiling better than in recent matches." [from The Tonbridgian, Jan 1955 p123]

"... while Hamilton and Berkeley worked hard in an outweighted pack." [from *The Tonbridgian*, Jan 1955 p124]

### Music, Drama, Societies

In the absence of television, active spare-time occupations were popular. A music school with practice rooms and a small orchestra chamber for rehearsals provided facilites for regular concerts by professional trios etc. and others less formal. There was an annual performance of songs from Gilbert and Sullivan, and an inter-house singing competition aptly named 'the house shout'. Each year saw the production of a school or house play. Other societies included debating, photography, history, geography and natural history.

[NRGL 2.630] "Mentioning some of the defects, I may begin with one that seems both trivial and serious at once – a bad musical ear, an un-faculty so hampering to me and so setting me apart socially that I sometimes wonder if I've had from birth and unrecognized a never-ceasing tinnitus that turns every harmony ever directed to me into a discord."

"Singing was not in his gift, but he was vociferous enough in the showers after sports. On one occasion we were punished for the questionable content of the singing and had to revert to hymns but they resonate just as well in the confines of the shower room." [32]

### The Natural History Society

This was my main leisure activity, and I was secretary from September 1955 to June 1956. The society met sixteen times that year. Excursions to find orchids, collect insects or watch birds occupied 'expeditions day' in the summer term or occasional Sundays. Transport was often in the private cars of masters who not only gave up their day but also their valuable petrol ration. In winter there were evening films or talks by

outside speakers, staff or members. 'Skinners' Day' marked the end of the summer term and academic year, and the natural history society mounted an exhibition for visiting parents and former pupils. I can find no reference to Bill's participation in the society. He seems to have prefered his natural history alone.

[NRGL 2.235] "... twice in my boyhood, in Longsprings Wood, Well Hill, in Kent, I'd climbed to crows' nests in the great beech trees and had stolen one egg each time ..."

[NRGL 2.572] "On the other hand, I do remember crushed thyme reminding me of other nights when, following butterflies and orchids in the hills of Kent in my boyhood, I had slept in similar lonely places, where also flowering scabious was over me and certainly there was a fantasy of them becoming 'other' or 'again' daisies before my eyes even as they nodded through drifting stars."

"When asked what was his hobby he replied 'Butterflies,' and added 'Anyone who thinks that is a sissy passtime should change their mind pretty quickly.' [34]

## The Athena Society

The Athena Society was started in 1953 by the Headmaster and J. M. McNeill. It was Bill's last year and he was a member. The society was for "a small number of boys over seventeen who have won notable intellectual distinctions or made outstanding contribution to the life of the School through music, art, drama or work for School societies". [*The Tonbridgian* Jan 1953 p198]

"The Athena Society was founded by Waddy [and J. M. McNeill] and as its name indicates had a bias towards the classics. I can remember an extremely boring lecture on a medieval Greek monastery. This was, I think, at the annual general meeting (dinner with wine at Waddy's house), and there were termly meetings, although I can't remember them. The society had yet another tie (purple with owls), [see below under 'Colours'] but I have not kept it. I imagine the Society was a brave effort by Waddy to combat rampant athleticism, and the inclusion of Bill is probably a tribute to Staveley and McNeill." [25]

"I thought that I remembered helmeted Athenian heads on the tie, rather than owls (little owls, of course). Anyway, they were regarded by us lower orders as merely toothpaste stains, even though the editor of The Tonbridgian (Apr '53) thought that they were 'the heads of various Sabine women'". [my reply to 25]

### **The Combined Cadel Force (CCF)**

Practising to kill people was compulsory. Boys were in the army section for their first year, thereafter they could opt for an air section.

"On fine days the latter section would wheel out the elastically catapulted glider onto Martin's field for a few seconds of seemingly uncontrolled adrenalin rush." [32]

One master paraded in naval uniform. Most time was spent polishing boots and brass, parading one afternoon a week in coarse khaki uniforms with 1905 rifles under raucous non-commissioned officers (NCOs), and learning about bren guns, mines and 'sections in attack'. Field-day each term relieved tedium with the joy of thunderflashes. Bill rose to be Lance Corporal (the lowest rank of NCO, and difficult to avoid), in charge of a section of ten boys.

### Hierarchy

Within each House, and also throughout the school, there was a strict social order, largely based on the number of terms a boy had been in the school – a 'termocracy'. Social rank was enhanced within this framework by athletic achievement which was recognised by the award of first team Colours. Boys that won Colours advertised the fact by ties and blazers. In the summer of 1956 there were 17 different barge-bands, 23 ties, 13 neck-squares, 10 scarves, 11 blazers and 16 caps [pers.], each signalling something more or less elitest about the wearer.

Slightly lower on the scale were House Colours which in turn could be displayed by wearing silk neck-squares, white silk or long wollen scarves banded with House colours.

An editorial in *The Tonbridgian* of April 1956, presented the scene and widespread reaction to it:

"And its not for the sake of a ribboned coat, Or the selfish hope of a season's fame, But his Captain's hand on his shoulder smote 'Play up! Play up! and play the game!'"

# [Henry Newbolt Vitae Lampada]

The spirit embodied in these lines is remarkable for its absence at Tonbridge. In the first place there have been this term very few games up in which to play. Hockey is a team game, and, no doubt, produces all those benefits of team spirit that the person playing for Whites on Seniors 6 [a distant playing field] well knows. Unfortunately the English climate has allowed only three games of hockey to all except the most fortunate; one has been on ice, one in snow and one in mud. Since standards [in athletic sports] have been abolished, and only a few can compete in the heats of the sports, running rather slowly along the London road seems to provide the best opportunities for playing the game; squash, fives and rackets are now the prerogative of the Court Games' Club and school praepostors.

Moreover captains here are very bad at shoulder smiting. Their main function is, of course, to write out lists, but we have seen them cursing, talking politely to visiting teams, leading in Plaza Toro fashion, missing school periods, making unsuccessful attempts to drop a goal when one pass would have saved the match, in fact doing everything except give Newboltian exhortation.

Perhaps this is the reason why ribboned coats and selfish hopes of a season's fame play such a large part in our lives. We have chosen the wrong term for criticizing tasselled caps, those expensive toys, which are worn about six times, and then hung on the altar of self-glorification. We may, however, mention in passing the remarkable fact that the mysterious goddess, bad form, equally pursues the person who tries to put his cap to some

sensible use, such as an alternative form of headgear in wet weather, and the person who refuses to buy a cap at all.

Scarves are in a slightly different category. The House scarf is useful in cold weather for warding off the cold. It is useful in warm weather for warding off an inferiority complex, and also for showing the wise that the wearer has got an inferiority complex. The buying of ties could be excused as prompted by a wish to be free of the universal red that is so suited to the Lovat jacket [school uniform]. May we suggest that a black tie would be more suitable for those with individualistic tendencies than a striped monstrosity, designed in the Art School, and looking like an allegorical painting, entitled "Pride."

If considered carefully, the cult of the ribboned coat becomes rather frightening. If every member of the first XV and first XI buys his full regalia – and regrettably few seem to think that an additional barge band is entirely superfluous except as a monument to pride – a sum of about £300 is spent annually. The Lent term, with its note of self-denial, provides less opportunity for self-advertisement, although doubtless the hockey XI will soon be demanding a scarf, but its sports and the other games of the summer term probably have another three hundred pounds of rubbish to be bought. Thus a sum twice that of the fees of Tonbridge is spent in giving conceited boys an opportunity for conceit.

"And it's not for the sake of his school's renown That the Tonbridge 'sportsman' strives at his game. But a boar's head badge, and a barge band crown Drive on, drive on the folly of fame."

Hierarchy was further accentuated by minor customs that were enforced with ferocity proportional to their triviality. First-term boys had to have all three jacket buttons done up and were not allowed to put hands in pockets, however cold the weather. In the second year they were allowed to use one button, and one hand in a trouser pocket. Praes could have the jacket open and put both hands in pockets, which they usually did whatever the ambient temperature. There were areas of the school reserved for different age-group or classes of boy – the Fourth-Termer's Walk figures below. Transgression of these rules attracted penalties that became increasingly severe with repetition. There was plenty of scope for rebellion.

"I think Bill and I were united by our contempt for the petty conventionalities which held sway at Tonbridge". [25]

### **Explosions**

[NRGL 2.203] "Something about the tube and the man's chest depicted brought back to me certain tubes and a pain in my own chest from 30 years in my past. It reminded me of how in Denmark Hill Hospital once two intern medics armed with a bikepump-sized syringe, looking somewhat like the proboscis of Olsen's mosquito, had

tried to draw off stale blood pooled in my right lower chest. It was blood flooded there from a wound after the explosion of a homemade bomb. The picture set me squinting in memory again down the pale dunes of my chest, still tented here and there at the time with plasters and bandages, towards a real surreal dreamscape that I shall never forget. Who let those two serious young whisperers loose on my anatomy it is now difficult to imagine; even to me then, a trusting 12 year old, they appeared to not quite know what they were doing and, in so far as I could make it out, it seemed the impossible. With unencouraging vagueness, measuring their distances with handspans and knucklengths out from certain landmarks such as the edge of my ribs, they found their spot. Then – well, imagine using a bike-pump-sized syringe to suck red-tinted junket through the wall of a rubber hotwater bottle in which, for some reason, the junket has first been allowed to set (that is, to clot in the case of my blood): you will then have an idea of their difficulties. As might be predicted, there would come into the barrel of the syringe a half inch of well-stirred red junket and a quarter inch more of a pink whey, and then nothing – even I could tell that the blood clot and perhaps also some of the lung substance of patient Hamilton had blocked their tube. Twice, I think, and again very like a mosquito looking around on a shirt sleeve for a gap between the threads, the two whisperers pulled up their rig and tried again in another spot, prefacing the new dig with another small but ineffective sting from a smaller syringe, which obviously applied a local anaesthetic to my skin and muscle. This local, however, hardly affected the major pain of the big needle piercing my pleuron. It seems to me now that I must have been both witnessing and feeling what it was like to be killed by rapier thrust several times repeated during that morning. And yet I watched and assessed it all in a rather detached, accepting way, merely longing to see them succeed – if rapier is the word, I had more the spirit that Hamlet had in Shakespeare's duel, I guess, than that of Laertes."

"I was with him that day. He was using empty .303 cartridges we had collected from the rifle range where our father went once a week to shoot his rifle with other Home Guard neighbours from Badgers Mount. Bill was filling one of these empty brass cartidges with powder he had mixed himself from sodium chlorate, sulphur and aluminium powder and squeezing over the open end in a vice when the explosion occured. (He had intended to throw the 'bomb' onto a bonfire to demonstrate it to a friend, and had successfully detonated a similar explosion the day before. Fortunately, I was not in the shed at that moment and the friend had retreated to the far end." [39]

There were three Hamiltons at Tonbridge in Bill's time

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      initials
      d.o.b
      entered
      last form
      rugby
      involved with

      explosions

      WDH
      01/08/36
      49-3
      Smythe
      Sc VI
      1st XV
      yes

      JGH
      08/04/36
      49-3
      Smythe
      Sc VI
      yes

      PJH
      15/10/36
      50-2
      School
      ML VI
      1st XV
      no
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and consequent confusion between them in the 50-year old memories of contibutors to this note. However, I have included some of the accounts which muddle Bill and JGH, and indicate the reality.

"Bill was quite a celebrity when he came to Tonbridge as he was making a home made bomb shortly before his arrival which unfortunately blew up as he was working on it. This resulted in a loss of part of one or two fingers and the propulsion of some sizable pieces of shrapnel, which penetrated his chest. Indeed he had to play rugger with metal plates sewn into his rugger shirt to give him some protection. I remember

when the mobile X-ray lorry arrived at school to scan us all, there was considerable alarm when Bill's turn came, as the machine registered all these pieces of metal, which Bill had completely failed to mention in advance." [24]

"We were standing in the middle of a rugger field, and I asked him why he had what was obviously a metal plate sewn into the front of his rugger shirt. He said he had but a bullet in a vice and tightened it up to see what would happen. He had bits of metal lodged near his heart which couldn't be removed. It struck me at the time the lengths to which people will go in pursuit of knowledge." [33]

"I suppose that my main memories of Bill always centred on explosives rather than biology, and in our later school years I was organising a Cadet Corps attack of Smythe House via the Upper Hundred and wanted to impart an air of realism about the proceedings to try and liven up the habitually bored cadets. I asked Bill whether he would reproduce some realistic explosions to try and impart a battleground atmosphere, which he entered into with enthusiasm, utilising the row of Smythe House dustbins as his arsenal. When the moment to attack came I gave the signal to Bill and the deafening noise of the resultant explosions left all the cadets completely stunned. I have a lasting memory of a barrage of dustbin lids flying thirty feet into the air, before clattering back into the ground. How we failed to shatter all the Smythe House windows I shall never know, but the exercise was voted a complete success by the cadets if not the masters." [24]

"In a spirit of scientific enquiry he had on a CCF exercise fired a blank bullet into his boot with dire results." [25]

"Bill belongs in my memory to a tiny but elite group of Tonbridgians whom I shall call 'The Exploders'. Fixed low down on the trunk of an Upper Hundred tree (behind Smythe House) was an insignificant brass plaque. This was to commemorate a detonation that had removed a chunk of the tree's bark some years before and, I believe, it recorded the name of the responsible party [a boy called Smith]. Then, in Smythe House and a contemporary of WDH, was another Hamilton - "Jock", a taciturn Scotsman. "Shock" Hamilton (as he was generally known) worked wonders with explosives. ..... You may consider this digression into 'the other' Hamilton an irrelevance, but it sets a scene into which his namesake fitted. As a non-scientist I was totally oblivious to what was going on in the School labs but I was aware that there were boffins aplenty, all actively experimenting and striving to break new ground. The illicit Exploders were the most obvious of these and Bill Hamilton had apparently, at some time, been one of them. As witness to this, two of his fingers had had their tops blown off above the first joint and it was said that he carried a lump of brass shrapnel in his torso. He had a long surgical scar down his back and this was, I believe, another legacy from that early 'scientific research'. Perhaps this is why he later came to exercise his genius in the less damaging field of genetics and biology." [5]

"The second extraordinary happening [this term] was the explosion of the H-bomb; not the Hydrogen bomb in the Pacific which altered the course of history, but the Hamilton bomb in the rose garden which altered the course of the Fourth-Termers' Walk." and "The play itself was an anti-climax, except, of course, for Shock Hamilton's devastating noises off." [from The Tonbridgian, May 1953 pp2 & 10; refers to J. G: Hamilton, but was frequently attributed to Bill in the memories of his contemporaries.]

"There was indeed another Hamilton contemporary with Bill who was a noted chemist and keen on making explosions and practical jokes. One which I remember Bill

telling me about with enjoyment was when he [J.G.H.] sprinkled explosive [probably nitrogen iodide that explodes at the slightest disturbance when dry, yielding a puff of purple vapour] on the Chapel floor so that when the chaplain (or headmaster?) walked up the aisle he was accompanied by a series of crackling reports! He [J.G.H.] was not a friend of Bill's, that I know. I doubt very much if Bill had anything to do with these exploits. He had already had a terrible lesson about the danger of explosives. People are wrong in thinking that Bill had a 'passion' for explosives. He certainly was interested in them, but so were most boys at that time so shortly after the War. Unexploded bombs were still to be found and the ingredients for making explosives (including in boys' chemistry sets) were fairly freely available." [36]

**Bill Hamilton's contemporaries at Tonbridge** (reference numbers of quotations)

	0.1	1 1 0
ref n°	name & house	class, team &c
03	Berridge CR, SH	IV <sup>th</sup> form 1952 <sup>2</sup> ,
04	Boys GRH, MH	ScVI 1953 <sup>3</sup> ,
05	Cardwell AB, SH	IV <sup>th</sup> form 1952 <sup>2</sup> ,
10	Farrow DJD, PS	1st XV 1954 <sup>3</sup> ,
13	Gracey RMK, PH	2 <sup>nd</sup> XV 1953 <sup>3</sup> , 1st
		XV 1954 <sup>3</sup> ,
14	Hadler DJP, SH	IV <sup>th</sup> form 1952 <sup>2</sup> ,
17	McIntyre DA, HS	ScVI 1953 <sup>3</sup> ,
19	Moss WPB, HS	Ve 1952 <sup>2</sup> ,
20	Oakley JS, PH	Ve 1952 <sup>2</sup> ,
24	Raven FC, SH	V <sup>th</sup> form 1952 <sup>2</sup> ,
25	Winnifrith TG, SH	1 <sup>st</sup> XV 1954 <sup>3</sup> ,
26	Alexander DB, FH	ScVI 1953 <sup>3</sup> ,
30	Hamilton JG, SH	ScVI 1953 <sup>3</sup> ,
32	Galley DJ, SH	IV <sup>th</sup> form 1952 <sup>2</sup> ,
33	Barker JA, FH	Ve 1952 <sup>2</sup> ,
34	Sayers M, SH	IV <sup>th</sup> form 1952 <sup>2</sup> ,
35	Hocombe SD, SH	ScVI 1953 <sup>3</sup> ,
36	Bliss, Mary	Bill's sister
37	Clemence JA, JH	2 <sup>nd</sup> XV 1953 <sup>3</sup> , 1 <sup>st</sup>
		XV 1954 <sup>3</sup> ,
39	Hamilton, Robert	Bill's brother
41	Lake, AG, JH	ScVI 1953 <sup>3</sup>