Laying open the secrets of Britain's code-breaker

David Leigh reports on the brilliant mathematician and homosexual caught up in Cambridge's climate of treason

ALAN TURING, the brilliant mathematician behind Britain's war-time breaking of the German Enigma cyphers, was a homosexual from Anthony Blunt's Cambridge generation.

He killed himself in mysterious circumstances after his homosexuality was put on record and his friends think that he may have unfairly been considered a security risk.

These are some of the facts to be disclosed in a biography of Alan Turing being written by a fellow-mathematician, Dr Andrew Hodges. The biography, commissioned by Deutsch, is likely to cause a considerable stir.

Noel Annan, former Provost of Kings College, made a veiled reference to Turing's career last month in the Times Literary Supplement in a review of the book Climate of Treason, which helped expose Anthony Blunt.

He said: "The very influences at Cambridge, said to have corrupted the nation's youth, created one intelligence agency at Bletchley Park which was the most successful of any nation during the war. It was staffed by loyal and dedicated men and women who . . . maintained secrecy for over 30 years after the war.

"They were never penetrated by spies . . . many of them were public schoolboys, some even from the upper classes." He went on: "One at least of its most brilliant innovators was a homosexual. It remains a memorial . . . to the intellectual power and integrity of a generation."

As a fellow of Kings in the 1930s, Turing was an associate of academics whose names have already been mentioned, without evidence, and to the indignation of their friends, as hypothetical Soviet agents, Arthur Pigou and Donald Beves. In the climate of the time many, though by no means all his young colleagues, were Communist sympathisers.

Turing, who was an idiosyncratic libertarian, made his name with a 1936 paper outlining the theoretical prospects for "universal computing machines." This laid the ground for modern computers.

He and another Kings man, Fred Clayton, "adopted" two 15-year-old Austrian boy refugees just before the war. The suppressed homosexual atmosphere of that time is described in a 1942 novel, The Cloven Pine published by Clayton under the name Frank Clare, which draws on this disguised episode.

Clayton, who went from publishing articles by Anthony Blunt in the Cambridge Review to wartime work in the Intelligence Corps, and ultimately became Professor of Classics at Exeter, married an East German woman after the war. He is one of those who believe Turing was the subject of attention from MI5 at the end of his life. Clayton himself was not a Communist sympathiser.

Already, in 1938, Turing's abilities were so unusual that he had been recruited secretly for the cypher-breaking group at Bletchley, eventually to employ a galaxy of Cambridge intellectuals. The following summer, on the brink of invasion, the Polish secret service handed over the Enigma machine replicas they had built in Warsaw, and the quest began.

Turing spent the whole of the war code-breaking. The Enigma machine encoded German messages through a system of complicated revolving electric contacts, with further refinements such as interchangeable rotors with different wiring circuits, and connecting plugs to change round particular letters. The coded letters finally lit up on top of the machine.

Turing's achievement was to design the crucial contribution to a code-cracking machine, the "bombe." His design, incorporating wiring from the Enigma replicas themselves, made it possible to reduce the astronomical number of permutations.

Turing was also involved in discussions that led to the building of the Colossus series of primitive computers; he was sent to America in 1942, and returned to install himself at Hanslope Park, to work on a machine which could encipher speech, an early scrambler.

Turing's personality made a great impression on his Bletchley contemporaries.

Called Prof, he was known for his eccentricities, his child-like enthusiasms and his zest for marathon running. He was sometimes seen cycling about in a gasmask, to ward off hay-fever.

At the end of the war, his achievements were kept strictly secret; all he ever received for them was an unexplained OBE and, one day, at the height of wartime austerity in 1942, along with two colleagues, a tax-free gift of £200. He went to the National Physical Laboratories at Teddington to work on what the press christened "electric brains."

Dr Hodges says: "In 1936 he published the theoretical ideas which underlay the digital computer. In 1945 he produced the world's first complete plans for an electronic computer. The connection inevitably involves his war-time work, itself of immense importance."

Dr Hodges adds: "He left Teddington in disgust at the half-hearted support of the NPL for computer development."

In 1952, by now at the University of Manchester, this unworldly figure naïvely reported a burglary at his house. Cheshire police investigating the circumstances, decided to charge him and a 19-year-old acquaintance with homosexual crimes.

Detective Constable Robert Wills told the quarter sessions that Turing had been awarded the OBE for war work, and Professor Maxwell Newman testified on his behalf: "He is one of the most profound and original mathematical minds of his generation."

Turing, pleading guilty, was put on probation on condition he undertook organo-therapic treatment, hormone dosages. He also embarked on psycho-analysis.

It was a bad time to be named a homosexual, the year after Guy Burgess and Donald Maclean had fled to Russia. A panic wave of purges and interrogations was taking place in Whitehall, and "positive vetting" was just being introduced.

Was he cut off from secret work as a consultant because of security fears? Dr Hodges, who has investigated extensively, says: "I think he may have continued to do some work for the Government until 1952, but not afterwards."

Hormone doses did not alter his sexuality, and letters to friends showed psycho-analysis was not working out well. He decided to try to confine his encounters to foreign countries. But after a visit to Norway in 1953, a young Norwegian tried to visit him in Britain. According to letters Turing wrote, there was a flurry of police activity and he left without them meeting.

Prof Clayton thinks Turing may have been discouraged by security men from trying to go abroad after this episode.



Alan Turing—death by suicide or accident?

On June 8, 1954, his housekeeper found him dead in bed. The inquest found that he had deliberately killed himself with potassium cyanide. He had been conducting home-made experiments, and some of his friends insisted the death was an accident.

Others remember that he kept cyanide compounds by him, and that before the war he occasionally talked about suicide as a way of "bowing out" should life ever be come too difficult.

Dr Hodges says: "Turing was fundamentally interested in the human mind and his life was a quest for unity in a very divisive world. He had the first serious ideas about machine intelligence, and only now can it be explained how closely his early ideas were connected with the difficulty he faced in making sense of his homosexuality."

Burgess affair: 'Blunt lied'

By David Leigh

THE FACTS about Britain's circle of upper-class Soviet agents continued to be filled out yesterday with the publication of the death-bed reminiscences of the academic Goronwy Rees, the friend of Guy Burgess and Anthony Blunt.

The recollections of Mr Rees, who suffered obloquy for his relations with Burgess while Mr Blunt went on to public honour, appeared in yesterday's Observer newspaper as told in hospital to the author Andrew Boyle. He asserted that Mr Blunt was lying when he denied having a homosexual relationship with Burgess.

Mr Rees, who had a police guard in hospital as he lay dying, described Mr Blunt as "diabolically hard and callous." Mr Rees kept quiet about Burgess' 1936 hint that he and Mr Blunt worked for the Russians until the 1951 defection.

Mr Rees then confided in MI5, but while he found his academic career blighted, Mr Blunt merely underwent "comfortable" interrogations from his old MI5 colleagues.

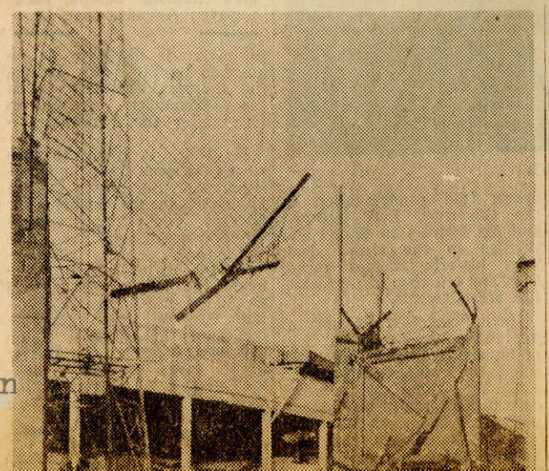
Even when he finally confessed under renewed interrogation 13 years later, Mr Blunt was allowed to keep his knighthood and royal position, and the affair was hushed up.

Death section of ground closed

By Alan Dunn

Middlesbrough football club have closed the section of their ground where two supporters were killed on Saturday for tonight's FA Cup replay against Portsmouth.

The supporters were killed when gates and brickwork collapsed at Ayresome Park after the game against Manchester



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Sound of Music stilled for adverts

By Dennis Barker

RICHARD RODGERS, as uncompromising an artist as he was a shrewd businessman, has effectively blocked any chance of his tunes being used as television commercials with different words.

The prolific writer of popular music, who worked with

Police omitted four vital witnesses in external inquiry into Kelly's death

By Philip Jordan

Fresh doubts have been raised about the handling by the authorities of the inquiries into the death of Merseyside labourer Mr Jimmy Kelly in police hands after the revelation that the officer called in to re-investigate the death failed to interview at least four vital witnesses.

It appears that the Home Secretary, Mr Whitelaw, took his decision to refuse a public inquiry into the case without having read the report by the officer, Mr David Gerty, assistant chief constable of the West Midlands force, to the Director

Mr Gerty was called in by the Merseyside chief constable, Mr Kenneth Oxford after protests about the death of 53-year-old Mr Kelly, from Huyton, following his arrest on a piece of waste ground near his home in June last year.

Mr Gerty's inquiries into the Kelly case and other allegations of violence against officers in K division of Merseyside police, took almost four months. Police said this was due to necessity for fresh re-investigation of all those involved.

It is now clear that Mr Gerty and his team missed out three out of six eye-witnesses

the Kelly family and by the action committee set up to seek an inquiry into the case.

Today Mr Tommy Banks, leader of the action committee, and 52 other supporters are travelling to London to lobby MPs at the Commons. Robert Kelly's story is important. Other witnesses have described Mr Kelly arriving at the waste ground singing and shouting loudly and walking. After meeting two police officers from a patrol car, they said, he was handcuffed and put in a police van.

But at 1.45 am on June 21, according to a statement he made to the solicitors Robert

last night that he too had given no statement to the West Midlands team.

He said that he had been told by a CID officer from Huyton that two teenage boys had stopped a patrol car and told the officers they had seen a man drunk and singing and shouting on a grass verge. The man had been arrested for being drunk and disorderly.

But when the man arrived at the police station he had "turned blue" and the officers could not bring him round. An ambulance was called.

Mr Martin Lavelle, a butcher, of Barkbeth Road, another eye witness, told the

The higher life is much in evidence in these stories, but is never allowed to get above itself or to ignore the physical. One character uses a bust of Schubert as a missile, effectively enough to put her husband on crutches; the sex war — a persistent theme — could hardly get closer to earth than that.

But there are few such direct resolutions. "Don't bury yourself in him", an under-liberated wife is advised. "He's becoming your tomb. Get out." She does, if only on a kind of day trip. Troubles, as in the

It is a long and busy novel but it shrinks, I'm afraid, as it proceeds. A badly disturbed student has a phobia about walking down steps, and this leads to an even more disturbing reconstruction of his mother's death fourteen years earlier. One thing the analyst manages to expose is his own clinical shortcomings. Clearly there is a gulf — and the novel brings it home to those who ever doubted it — between the professional world of norms and controls and orderly adjustments and that other world the rest of us

Shadow, by Fathy Ghanem, labours under a serious disadvantage perhaps unavoidable. Certainly Desmond Stewart's translation from the Arabic can hardly be blamed for the tonelessness of the dialogue which manages to be both flat and stagy; but how could English vernacular equivalents be written into an Egyptian script? Given the setting and the cinematic background it is hard to rid the mind of Valentino echoes ("He paled, his eyes trembled;" or "Did you imagine I was a gentleman? I am the son of a dog"). Yet the novel

We have been beaten in the end by our own violence and our own guilt and the new order offers few consolations. People copulate in public, and it seems pedantic under that baleful moon to object on aesthetic grounds. There are few surviving pleasures. You need a permit for destinations as remote as Ruislip. Clever people learn how to programme themselves out of official existence, though this doesn't prevent the launching of an all-out attack on the memory banks. This seems misguided, when memory is all we have.

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—*Guardian*

GOLLANCZ

Public faces, private masks

Paul Barker on two well-exposed writers

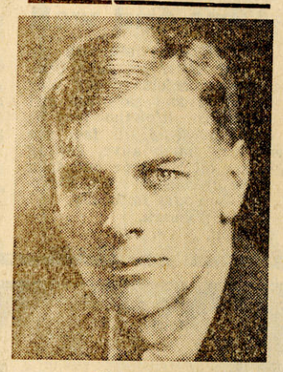
EVERY picture tells a story. There comes an age (Orwell said it was 50) when we all have the face we deserve. A sequence of photographs, from childhood on, will give the game away: how we put the mask together; and whether it *is* a mask or a pane of clear glass.

James Lees-Milne's biography of Harold Nicolson (so far, only up to 1929) and Ian Hunter's life of Malcolm Muggeridge are curious documents. Both are about authors who have had plenty to say about themselves, at one time or another: so they are pitching in against pretty strong competition. And neither avoids the danger of hagiography. There isn't enough *chile* among the *carne*.

But the pictures, dotted through the text, tell a less adulterated, less adulatory tale. Muggeridge first appears at three months old, winner of the Melins Baby Food prize In the twenties he is dressed up in white, with pipe in hand, as a teacher in India. By the forties, he is a liberator of Europe, uniformed and with a Humphrey Bogart cigarette.

Gradually the mask is being built up: an actor, with the necessary detachment from all his roles. Even as a baby, the sharp eyes glint out the message: I don't take *you* that seriously—how do you take *me*. Only in his sixties does the joke seemingly fade. The eyes are masked, too — perhaps to avoid the question that Ian Hunter doesn't avoid putting: has Muggeridge become, in his late Christian phase, a "major prophet or minor bore"?

Hunter chronicles again the years that Muggeridge himself has recently been chronicling himself. It is hard to know where to categorise a biographer who, on page 98, drastically misquotes a pretty well-known *obiter* of Dr Johnson's. He also thinks there is something called the International Labour Party, and a novelist called H. P. Hartley. So what is one to think of more private facts or "facts"?



Muggeridge in 1932

MALCOLM MUGGERIDGE: A LIFE, by Ian Hunter (Collins, £6.95).

HAROLD NICOLSON: A BIOGRAPHY, vol 1 1886-1929, by James Lees-Milne (Chatto, £15).

HAROLD NICOLSON: DIARIES AND LETTERS, 1930-64, edited and condensed by Stanley Olson (Collins, £9.50).

I assume this book is mostly aimed at the overseas market who, we are assured by Hunter make up the main market for Latter-Day Muggeridge. It draws on Muggeridge's private papers. But we don't, for example, hear a word from Muggeridge's wife, Kitty, on whose Webb of relations Muggeridge has written very, very often, and who — till in his sixties her husband set aside women, along with meat, strong drink and tobacco — appears to have had a lot to put up with.

In his book on The Thirties, and again as an inspired editor of Punch, Muggeridge was a brilliant and very funny journalist. But now that he has become Don Quixote, he has found his Sancho Panza.

Harold Nicolson, however, was *always* soft-boiled. And that leaps to the camera's eye in the snapshots between the pages of Lees-Milne's half-life. (It halts at the moment Nicolson's own diaries begin.) On his pony as a child, with a camera of his own in Tangier at 17, in various official poses, or perched like a rag doll in his bathroom — always Nicolson seems ill at ease behind his facade. The eyes are anxious, the moustache and the too well-chosen clothes look to be hiding something.

As indeed they were. Lees-Milne is always announcing that Nicolson is now, at some stage or other, definitely, quite definitely, mature. But in essence he remained adolescent all his life. In the diaries, this emerges as a pleasant naivety; in Nigel Nicolson's Portrait of a Marriage, the steeliness within it shows through. But the Lees-Milne version of Nicolson is very hard to take.

You see him fussing about what particular grade of honour he gets; being deeply snobbish about everyone within sight (apart from the Sackville-Wests); tapping away interminably at Tikki, the nursery-style pet name he gave his typewriter. In the diaries, this is transmuted; but not here. If Ian Hunter's tone is that of the Sunday School life of a Baptist preacher, James Lees-Milne's is that of a college magazine. Harold himself appeared not wholly to mind coming across as a bit of a ninny. But Lees-Milne minds for him.

With the diaries, of course, Lees-Milne is in competition with one of the literary monuments of our time. The new condensed edition is greatly to be welcomed. And it adds certain grace-notes, here and there, from the originals.

Here is Nicolson as he should be remembered.

The Dreadnoughts, by David Howarth, is a rather decent brief account in one of Time-Life's nastier-looking sub-imitation leather-bound series, with a good clear text and superb use of war artists' drawings (eg Lloyd K. Townsend) and of illustrative material from German archives (Time-Life, £7.95).

thing, the interviews span over fifteen years, and one never gets the feel of the band at any particular time. For another, what the cats like talking about is not Basie, nor his band, but themselves.

This is really where the book's strength lies, lazy deltas of reminiscence winding back to before the war, before the Depression, into the Twenties and the farm childhoods ("I had a paper route, on a horse"). Most of them were born in the mid-West, and learned jazz from, and even played with, the famous territory bands such as Alphonso Trent and George E. Lee, Nat Towles and Troy Floyd; they recall half-legendary figures like drummer A. G. Godley ("the Gene Krupa of the day before yesterday") and Raymond 'Syd' Valentine, who matched Armstrong at the Savoy in 1930.

Since Basie's was a Kansas City band, some remember the youthful Parker with Jay McShann ("His tone was different, and he knew what he was doing. When he got to New York he got on this bop kick"). But they are just as likely to remember Ben Webster sassing Joe Louis in Sugar Ray's bar uptown, and what happened.

It seems to have been rather an *old* band, as jazz orchestras go: in 1947, Preston Love was the youngest member at 25, and time and again fear of being out-dated clouds the narrative, whether by bop, or rock ("The group knew three chords, but not very well"), or simply by slowing down ("Id like to be sitting in with one of those good studio bands in Hollywood"). This even affects Count himself. ("Basie used to please people with his piano, but he got away from it when bop came along. He got shy"), who emerges as a kersey uncomplicated character ("He'd have patches on his pants and everything. All his band was like that").

When Basie lost his great pre-1950 soloists, he turned increasingly to ensemble numbers, but this kind of policy switch arouses no great emotion. Gene Ramey is acute on the coming of amplification: "All of a sudden, around '47 or '48, they started making the bass dominant and noisy with all those amplifications. It was wrong," and specially wrong for a band with such an integrated rhythm section as Basie's.

But all in all, their time with the band was just another job, memorable maybe but easily submerged in other, richer recollections. It is trumpeter Joe Newman who produces the most devastating summing-up: "The only reason I see why Basie's band is as well received as it is is because there aren't many other big bands." Tell that to the crowds at the Woodside, in 1938.

It reeks simultaneously of Candide, Catch-22, Player Piano, The Wizard of Oz, all the simpleton stories where a naive observer lands in a universe of total bewilderment.

Roderick, world's first real robot, is ejected from the University of Minnetonka into a stream of craziness that never loses touch with one's worst forebodings. Catechised, psychoanalysed, saturated in soap-opera, stolen by the gypsies and finally lynched, he struggles cybernetically to please. But in a world where 35 jackpot shows run simultaneously on TV, people make a living selling special food for geriatric dogs, and Introductory Astrology is a university course, the robot intelligence is hopelessly outmatched, even if it *can* rewrite the story of Abraham and Isaac as a flow-chart.

This is Candide without a Pangloss, I Robot with Asimov's Three Laws all gone inoperative. In the end poor Roderick cannot even cultivate his garden; he stimulates healthy respect, though, for his creator's manic powers of verbal invention.

English Writers continue to regard the future with a we-are-not-amused revulsion. In Michael Vyse's **Overworld** a great urban Hive endlessly recycles its own sewage while the brave Ecos try to break in and liberate the consumers from their savage self-indulgence. It's done with feeling, but with too close an eye on merely contemporary inconveniences.

Ned Crawford's **Naming the Animals** exposes a similar sty of **sexfest**, pilpaks and menacing professional Care-Takers to a fruitless challenge from Tom Bolt, the man whose transplant from the Third World is a warlord's eye. It ends ambiguously, with the hero crossing a threshold, whether to Inferno or Purgatorio we do not know.

Both the above sum up as Stop the Machine. Larry Niven's **Ringworld Engineers** would, of course, rather start a much bigger machine, spinning millions of Earths round a single sun and fixing the darned thing if it spins wrong. Oddly, though, the fantasy beneath this story is Dr Doolittle: if we could talk to the animals.

The sequel to Ringworld finds the gallant explorers stranded on a kind of African savannah where all ecological niches are filled by humans, leopard-men, bison-men, wild-dog-men, hyaena-men, even incubus-men for variety. Naturally the species aren't inter-fertile; that doesn't mean they can't mate. Talk to the animals is only the start of it . . .

Another good sprawl for a fantasy is Stephen Donaldson's **The Wounded Land**, fourth of the Thomas Covenant series which, with its leper-hero, is the most individual of the Tolkien successors.

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