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The Decline of the Spy

Intelligence, Counterintelligence and Signals Intelligence during the Second World War

Before the outbreak of the Second World War, most European governments focused on unmasking enemy spies and creating agent networks abroad. However, the war demonstrated the superiority of counterintelligence in general and the difficulty of infiltrating spies (HUMINT) in particular. Key decisions such as the German invasion of the USSR came as a surprise as contradictory rumors obfuscated the picture and leaders overestimated their personal ability to separate the wheat from the chaff. Instead, the hitherto underdeveloped signals intelligence (SIGINT) emerged as the clear winner, its reputation since enhanced by declassified accounts. Cryptanalysis all but replaced the notion of the solitary spy. Specific case studies such as the British scientist Alan Turing and the Soviet agent Willy Kruyt serve to illustrate this trend.

To a remarkable degree, President Roosevelt, Prime Minister Winston Churchill and Soviet leader Joseph Stalin devoted special attention to the field of intelligence. Churchill sincerely believed that fifth columns had brought about France's defeat in 1940. As a former 'naval person', Roosevelt delighted in special missions.¹ Stalin insisted on receiving regular updates on Soviet foreign intelligence operations and personnel. Their main counterparts, Nazi Germany and Japan, shared the belief in cultivating spy networks to gather intelligence. In part, popular literature had shaped the elites' fascination with conspiracies and agents. Yet, World War II also

1 See Joseph E. Persico, *Roosevelt's Secret War: FDR and World War II Espionage* (New York 2001).

underscored the challenges for conventional spy operations and signalized the rise of modern technology to supplement or even substitute humans.

On the British side, the German danger had always played a major part in helping the intelligence community access funds and personnel. Never before, however, had an invasion been so likely as during the Battle of Britain. In 1940, Prime Minister Winston Churchill created his own organization to organize sabotage in enemy territory: the Special Operations Executive (SOE). This dismayed the traditional Secret Intelligence Service (SIS). The leadership felt that SOE was 'Churchill's toy' and feared that successful sabotage might endanger its own networks of agents abroad. But in late 1939, the Germans had embarrassed SIS (at that time called MI-6) by kidnapping two officers in the Venlo incident.²

The Venlo Incident

The scheme was the brainchild of SS-*Sturmabführer* (Major) Walter Schellenberg, responsible for counter-intelligence at the *Reichssicherheitshauptamt* (RSHA) in Berlin. In his SS personnel report, Schellenberg was described as having an 'open, irreproachable, reliable character'. A lawyer by training, he had joined the Nazi Party and the SS to further his career. He was 'tough, firm and possessed energy'. There was no doubt about his 'thoroughly fortified' Nazi ideology. Schellenberg used his above average wits and sophisticated manners to become – at the age of 31 – the youngest department head at the RSHA.

Schellenberg was aware that London had contacts to a variety of anti-Nazi groups inside Germany. Many Germans were Anglophiles, some had studied in England or had family relations across the Channel. He contacted MI-6 in the guise of a 'Major Schemmel', telling them of a plot to get rid of Hitler supported by several German generals. Not surprisingly, the British wanted to find out more. At the end of October 1939, Captain Sigismund Payne Best and Major Richard Henry Stevens met with 'Schemmel' and found his tale of a plot against Hitler convincing. They reported back to London that he was a credible source. In his memoirs, Schellenberg wrote that he and Best chatted about music and got along very well. 'Schemmel' wanted to find out what kind of concession a new German government

2 Leo Kessler, *Betrayal at Venlo: The Secret Story of Appeasement and Treachery, 1939-45* (London 1991).

could expect from Britain. The MI 6 officers signaled interest but replied they had to get information from London to give more details.³

Schellenberg set up a meeting in the Café Backus in the Dutch town of Venlo. The Dutch-German border ran along the backyard of the Café. The meeting was set up for 9 November 1939. Just a day before, a bomb placed in the Munich *Bürgerbräukeller* narrowly missed Hitler. The assassination attempt suggested organized resistance and growing discontent within Germany and made Schemmel's arguments even more plausible. Nobody knew at this time that the bomb had been manufactured and smuggled into the beer hall by Johann Georg Elser, acting alone.

According to Schellenberg, SS chief Himmler called him the morning after the explosion and said the assassination attempt had been organized by the British Secret Service. Hitler had given orders to arrest Schellenberg's British contacts and bring them to Germany. Quickly, Schellenberg conferred with his guards and made plans to use the element of surprise to get hold of Best and Stevens.

Best and Stevens traveled with Dutch officer Lieutenant Dirk Klop. As the party arrived, a car full of German SS officers raced across the border, and a firefight began in which Lieutenant Klop was mortally wounded. Best and Henry quickly found themselves in handcuffs on German territory, the dying Klop dragged over the border by the Germans. Best and Stevens remained in German custody until the end of the war, revealing their knowledge of British networks to the Gestapo. As a result, London distrusted information coming from self-proclaimed anti-Nazi resistance groups in Germany. For his role in the scheme, Schellenberg received the Iron Cross first class from Adolf Hitler himself.⁴ In captivity, the two Englishmen testified to the Gestapo about the internal structure of SIS, practically paralyzing British operations on the Continent. Many stations had been closed as the war began, and the officers based in neutral countries produced 'little of value'.⁵

3 Walter Schellenberg, *Aufzeichnungen. Die Memoiren des letzten Geheimdienstchefs unter Hitler* (München 1979) 79. See also www.georg-elsler-arbeitskreis.de/texts/schellenberg2.htm#20okt.

4 David Kahn, *Hitler's Spies. German Military Intelligence in World War II* (New York 1978) 258-259. S. Payne Best, *The Venlo Incident* (New York 1950).

5 Jeffrey T. Richelson, *A Century of Spies. Intelligence in the Twentieth Century* (Oxford 1997) 129.

The Short Life of an Agent

German counter-intelligence hunted down many British agents on the Continent. Indeed, were it not for contributions from Polish intelligence and French sources, Britain would have been nearly 'blind' on affairs in Nazi-occupied Europe. Without comparable resistance movements, British intelligence inside Germany relied on 'solitary sources' such as Paul Rosbaud. Rosbaud provided London with information on the German rocket program, including names of scientists involved and reporting on the dimensions and shape of the V-2 rocket. Of particular value were reports that allowed Britain to conclude that German scientists were not progressing beyond the research stage in the area of nuclear bombs.⁶

Penetrating Nazi-controlled Europe proved extremely difficult. In France, agents had to be wary of the military police, the *Milice*, checking papers on trains. Composed of Frenchmen 'dedicated to ferreting out the members of the Resistance and slaughtering them', the *Milice* felt no compassion with their victims.⁷ After the liberation, many of the members of the *Milice* were executed for their collaboration with the Germans. In other countries such as Norway, Denmark or the Netherlands, police forces carried out similar raids to appease the German occupation authorities.

The cautious attitude of many civilians towards foreign agents turned out to be of major significance to the German counter-intelligence effort. As in Germany, the Nazi system encouraged vigilance and denunciations, playing into the hands of vengeful characters in any society. When the Gestapo chief in the city of Nice issued a public call for informers, he expected about forty answers. Instead, he received three hundred applications.⁸

Nazi occupation authorities not only promised monetary rewards for identifying enemy agents, they also threatened to execute anyone helping a foreign agent or not disclosing the whereabouts of foreign agents. In October 1942, the Wehrmacht communiqué ordered units to 'ruthlessly eliminate' anyone acting 'like bandits'.⁹ All quarter was to be denied in principle to commandos attempting to conduct sabotage operations.

Furthermore, German authorities ordered collective punishment as reprisal for resistance activity, for example in Vassieux-en-Vercors, where

6 Richelson, *A Century of Spies*, 131.

7 Marcus Binney, *The Women Who Lived for Danger. Behind Enemy Lines During WWII* (New York 2004) 40.

8 Binney, *The Women Who Lived for Danger*, 41.

9 Ibidem, 9.

two hundred people were executed, or in Oradour-sur-Glane, where an entire village was wiped out. These threats proved effective in limiting the support available for agents in the field. Even friends of the Allies would close their door to agents because they feared the annihilation of their entire family. In addition, resistance groups quarreled over tactical and political questions. In France, national pride sometimes conflicted with obeying orders from the Allied officers, and several operations failed because of internal disputes.¹⁰ Other operations failed because of inadequate 'checks' on agents to detect German attempts to turn them. For example, the former SOE officer Leo Marks reported that two Dutch agents made their way home after escaping from German prison and told the British that SOE networks in the Netherlands had been compromised. But instead of believing them, the British considered them Gestapo 'plants' and imprisoned them.¹¹ For two years, SOE continued to send agents to the Netherlands. The Germans called the operation 'Englandspiel'. Eventually, on 1 April 1944 Berlin sent the famous message in plain text, ending the radio game:

'Messrs Blunt, Bingham and Succs Ltd., London. In the last time you are trying to make business in the Netherlands without our Assistance Stop We think this rather unfair in view of our long and successful cooperation as your sole agents Stop But never mind whenever you will come to pay a visit to the Continent you may be assured that you will be received with same care and result as all those you sent us before Stop So long.'¹²

Leo Marks never forgave his superiors for not sooner detecting the deception scheme that cost about 50 Dutch agents their life. Many of the female SOE agents sacrificed their lives as well. Of fifty young women dispatched to France during the war, fifteen ended up in concentration camps, and only three survived.¹³

Technological Breakthrough: The Ultra decrypts

Painful experiences such as the 'Englandspiel' convinced Churchill to devote more effort to intercepting and deciphering German signals. Codenamed first as 'Boniface', later as 'Ultra', the decrypts have been credited with

10 Binney, 46.

11 Leo Marks, *Between Silk and Cyanide: A Codemaker's Story 1941-1945* (New York 1998), 479.

12 Marks, *Between Silk and Cyanide*, 499.

13 Binney, *The Women Who Lived for Danger*, 1.

shortening the war and saving the British Empire. In July 1945, Dwight D. Eisenhower wrote: '[Ultra] has saved thousands of British and American lives and, in no small way, contributed to the speed with which the enemy was routed and eventually forced to surrender.'¹⁴ The attempts to break into German codes predated the war, but once hostilities broke out, British authorities assembled bright minds from the major universities at Bletchley Park, an estate outside of London. Aided by information from Polish code-breakers, the experts tried their hand at figuring out the settings of the Enigma machine, considered unbreakable by the German military. Soon, the first breakthroughs were recorded. As the Battle of Britain progressed, Churchill demanded to be given regular daily briefings on decrypts from Enigma.

Luftwaffe signals on Operation 'Sea Lion', the invasion of Britain, could be deciphered quickly in Bletchley Park and helped the Royal Air Force combat the German attacks. Soon, the issue arose how to use the decrypts effectively without giving away the source. For example, in November 1940 the code-breakers determined that the Luftwaffe planned on bombing the city of Coventry (Operation 'Moonshine Sonata'). In 1974, Fred Winterbotham, a leading MI-6 officer, broke the Ultra story. Winterbotham claimed that Churchill had been informed hours before the attack, but had decided against any additional defensive measures to protect the Ultra secret. However, other members of the Bletchley Park team have since denied that Ultra decrypts explicitly mentioned an operation against Coventry.

Throughout the war, the Ultra secret had to be protected – this meant that the number of officials informed about the code breaking was kept very low. No recipient of Ultra could transmit or repeat a signal based on Ultra information. If action would be taken to protect a convoy against German submarines, a cover had to be used by for example setting up a spotter plane so that the German Navy would not suspect that its communications channels had been compromised.¹⁵

The most significant contribution SIGINT made in the course of the war was Operation Overlord, the Allied landings in Normandy. By allowing the Allies a very precise picture of German forces in France, the planners could decide on where to land, how to proceed and where to expect resistance. Valuable time and troops might have been lost if the Allies had not had

14 F.W. Winterbotham, *The Ultra Secret* (New York 1974) 2.

15 Winterbotham, *The Ultra Secret*, 89.

detailed information prior to the landings. On the other hand, the Germans, relying on the security of their communications, had no explanation on why their operations failed again and again; it was 'like fighting with one hand tied behind [your] back'.¹⁶

There has been an intensive debate over the question whether Ultra did in fact win the war for the Allies, or the degree to which Ultra sped up the final phase of the war. No amount of information on the location of enemy troops would have turned the tide alone, the need for troops, weapons, planes, and ships remained supreme. Winterbotham wrote in 1974: 'Let no one be fooled by the spate of television films and propaganda which has made the war seem like some great triumphant epic. It was, in fact, a very narrow shave'.¹⁷

Nevertheless, for the postwar period, the SIGINT-aided advance of the Allied armies had political repercussions. Winterbotham wrote: 'Ultra shortened the war by giving all the Allied commanders details of the weak points and dwindling resources of the enemy so that they could go forward into Germany as quickly as natural hazards would let them. This was highly important in view of the advancing Russian armies. Without Ultra we might well have had to meet the Russians on the Rhine instead of the Elbe, and they would have stayed put'.¹⁸

By comparison, the United States entered the game much later, with President Roosevelt encouraging William Donovan and his OSS to operate on a global scale from 1942 onwards. In 1943-44, Donovan's interest in recruiting agents in South-Eastern Europe and sending officers on reconnaissance missions angered the Soviets who saw this region as their exclusive domain. Signals intelligence, however, played a major part in the Pacific theatre, especially the breaking of the Japanese 'Purple' codes.

But in Europe, hopes for an uprising against the Nazi masters had to be abandoned quickly. Acts of resistance in Nazi-occupied Europe could lead to horrendous reprisals by the authorities. Weapons drops boosted morale but could not significantly pin down major German troops. Joint U.S.-British missions to France ('Jedburgh') helped the invasion forces but had little strategic value for the overall war effort.¹⁹ William Casey, later

16 Ibidem, 190.

17 Ibidem, 25.

18 Ibidem, 191.

19 For an example of recent literature, see Elizabeth P. McIntosh: *Sisterhood of Spies. The Women of the OSS* (Annapolis 1998).

CIA Director, took part in one of the 'Jedburgh' missions. In the run-up to D-Day, the resistance gathered strength. The Germans 'were harried from behind the lines in virtually every part of France'.²⁰ But when OSS officers arrived in Bulgaria and Romania in 1944, the Soviets understood this as a challenge to their goal of claiming these countries as their sphere of influence. Instead of helping to defeat the Axis powers, these missions played a significant role in boosting postwar tensions between the Allies.

A Dutch Grandfather in Stalin's Service

Several cases exemplify the operational challenges for intelligence agencies. In 1941, Britain and the USSR signed secret agreements to transport agents and coordinate sabotage operations. Churchill hoped to use Communist cells among factory and dockworkers to throw a wrench into the Nazi war machine. Perhaps he remembered how his 'crusade' against Bolshevism had been impacted by British dock workers refusing to load ships with ammunition for the British intervention force in 1920. Stalin, on his part, had ignored all the facts on the German attack plans collected by his military intelligence. After the German attack, the USSR was cut off from its spy networks in Western Europe.

The following four-year cooperation was marked by mutual suspicion and accusations. Both sides interpreted the agreement loosely, compiling dossiers on agents and attempting to recruit officers from the other side. Nonetheless, the strange alliance achieved some success, especially in safeguarding the 'Persian Corridor' one of the lifelines to the Eastern Front.²¹

Among the agents selected in Moscow was the former Dutch Calvinist minister John William 'Willy' Kruyt. In the early 1920s, Kruyt had moved more and more to the Left, serving as one of the deputies of Willy Münzenberg, the Communist press baron in Berlin.²² In 1941, he and his son Niko lived in exile in Moscow. But the Stalinist reality disillusioned the Dutchman. After his German wife had committed suicide, Kruyt applied for an exit visa.

20 Binney, 331.

21 Dónal O'Sullivan, *Dealing with the Devil. Anglo-Soviet Intelligence Cooperation During the Second World War* (New York 2010).

22 See: Sean McMeekin, *The Red Millionaire: A Political Biography of Willy Münzenberg, Moscow's Secret Propaganda Tsar in the West, 1917-1940* (Yale 2004).



John William 'Willy' Kruyt

Just at this time, the Soviet People's Commissariat for Internal Affairs (NKVD) compiled lists of suitable candidates for foreign missions, having got the green light to send agents to Europe via Britain. The NKVD made it clear: only if the Kruyts 'volunteered' to undertake a mission for the Soviet government would they get permission to leave. The selection of the 64-year-old Dutchman for a parachute mission indicates Moscow's desperation to get in touch with agents abroad quickly. The NKVD officers must have been aware that as a public figure and former member of the Dutch parliament, Kruyt would be easily recognized in his native country. In fact, Willy's brother H.R. Kruyt, a famous chemist, served as rector of Utrecht University.

Their only response was to send Kruyt senior to Belgium while son Niko was dropped over the Netherlands. Ironically, the Kruyts crossed the ocean on HMS Bulldog, the same vessel that had captured important 'Enigma' codes a year earlier.

During his stay in Britain, his handlers remarked that Kruyt senior was 'too honest to be a spy' as he would often give his real name during training exercises. They admired his courage, but felt he was more of a scholar than a secret agent.

Kruyt was not the only agent on a 'suicide mission'. Many agents arriving in Nazi-controlled territory faced quick arrest. The police apparatus remained very powerful: Registration procedures, Gestapo circulars warning of people carrying all their documents with them, including their birth certificate. Tiny mistakes in printing ration cards or soldier's passes could be fatal. Soviet spies repeatedly had to go to a few Vienna hideouts with A/C current because the Soviet transmitters could only be operated there – once the Gestapo found out they simply kept watch on these apartments and arrested spy after spy. In general, spies blackmailed into serving the Soviets were unreliable once in the hands of the Gestapo. The survivors often agreed to cooperate in a *Funkspiel* (radio game), luring more of their comrades into the hands of the authorities. Soviet officers in Moscow overlooked the 'security checks' by which an agent tried to communicate he or she was under the control of the enemy. SOE had been at fault precisely for ignoring these changes in the transmission protocol during the 'Englandspiel' in the Netherlands.

Even if a spy managed to deliver messages or money, an agent network constituted a costly infrastructure: for example, the cover legend had the spy pose as a successful businessman with expensive habits.²³ Messengers had to be paid, and hideouts had to be changed frequently. In the case of Moscow, the center regularly suspected its agents of working for the enemy or being in league with Trotskyites. Often, the information gathered remained second-rate and of dubious reliability.

In June 1942, Kruyt jumped by parachute near Liege and made his way to Brussels. When he arrived at the address the NKVD had given him, Willy Kruyt naively revealed the large amount of money he carried with him. Besides, the Gestapo offered a large reward for any reports on foreign parachutists. The temptation was too great for his host, the waiter Charles Bocar. Soon after, the Gestapo arrived to take the parachutist into custody. They even pumped his stomach after Kruyt attempted suicide by swallowing the lethal pill. But even in captivity, Kruyt senior did not reveal the whereabouts of his son or collaborated with the Germans. Kruyt was shot in July 1943 in Berlin. His son survived the war in hiding. In the intelligence game, the police state of the twentieth century had many weapons at its disposal: rewards, threats, torture and extra-judicial punishment.

The Scholar Behind the Lines

By contrast, Alan Turing seemed to be the epitome of the brilliant yet eccentric scholar.²⁴ A mathematician by training, he had devised the theoretical concept of a computing machine while at Cambridge University. If a question could be broken down into binary alternatives, might it not be possible to construct an electromechanical machine that could go through computations faster than a human being? During the war, he worked at the Government Code & Cipher School in Bletchley Park. Here, he developed significant breakthroughs during the successful attempts at cracking German codes. He was especially interested in constructing and improving machines (called 'bombes') that could calculate extremely rapidly. Turing's contribution remained secret for many years. Partly this was because the 'Ultra' operation was considered to be of lasting value to

23 The cover legend was a fake biography, usually supported by forged items such as personal papers. Agents had to memorize the details of the legend to be able to give credible answers during a police check.

24 Andrew Hodges, *Alan Turing. The Enigma* (London 1998).

the United Kingdom.²⁵ Harry Hinsley later wrote:

'We read all the Enigma signals of the German *Abwehr* which meant that we captured every spy that arrived in the United Kingdom by having advance knowledge of his arrival. Which meant that we could turn such as we needed and use them to send messages we wanted the *Abwehr* to receive, and monitor the reception and the reaction of the *Abwehr*.'²⁶

Not only was Turing never really recognized for his work. He suffered a very tragic fate. In 1952, he was convicted of homosexual acts after a burglary in his home led to an investigation. Turing never hid his homosexuality, which was still illegal at the time. The conviction was traumatic: he had to agree to be treated with female hormones considered to be a kind of chemical castration, and he lost his security clearance, blocking his access to high-level research. Eventually, this treatment led him to commit suicide by cyanide poisoning in 1954.

Turing never saw combat. Yet, as a cryptanalyst he contributed to the war effort in extraordinary ways. By reading German mail quickly and continuously, the British could carefully move their Atlantic convoys away from the dreaded 'wolf packs' of German U-Boats. With decrypts of German naval traffic reaching headquarters on a daily basis, the British military was aware of the number and location of enemy forces. Churchill considered these decrypts so important he carefully restricted access to the information – in some ways making it difficult to use them on the battlefield. Some forces had to be sacrificed in order to prevent the German Navy from guessing that its codes had been cracked. Many open questions remain, for example, how the Soviets ran their code-breaking operations.

To this day, memoirs of underground activity à la James Bond present a more attractive 'story' to the public. But during the Second World War, SIGINT often yielded more reliable and valuable information than the network of spies. While reports from the field might contain hearsay and conjecture, the decrypts revealed accurate information coming directly from the enemy. The signals intelligence units produced information captured at the source whereas relying on human agents had often led to deception

25 F.H. Hinsley and Alan Stripp, *Codebreakers: The inside story of Bletchley Park* (Oxford 1993).

26 F.H. Hinsley, 'The Influence of ULTRA in the Second World War', 26th November 1996. www.cl.cam.ac.uk/research/security/Historical/hinsley.html. Retrieved 24 August 2011.

schemes by 'planted' double agents.

Dropping agents over enemy territory proved to be very difficult and costly. Experts who instructed agents estimated that the average life expectancy of an agent dropped in France was about six weeks.²⁷ The high rate of losses has prompted some to doubt the efficiency of subversive operations, especially those supervised by SOE. For example, military historian John Keegan has criticized the sabotage service for unnecessarily endangering many agents. He wrote: 'It takes years to build up a control organisation and the networks it oversees in enemy territory.'²⁸ As a new service, SOE had to train 'on the job', and the agents in the field paid the price for it. The Germans themselves ran into similar problems when trying to establish networks in Britain and the United States.

Counter-intelligence was much easier for totalitarian countries, and the dividend from a parachute agent could be minimal whereas the investment in technology to intercept and decrypt messages seemed more beneficial. In the early period of the Cold War, attempts to penetrate the Iron Curtain with agents were made – unsuccessfully – in the Baltic Countries and Albania. These operations were thwarted by the Soviets 'turning' agents just like the Germans had done beforehand. Soviet 'mole' Kim Philby also had a hand in betraying the operations to Moscow. Here was another lesson governments took from the war. Subsequently, during the Cold War, security agencies invested heavily into technology such as aerial reconnaissance, satellites, communications and cryptanalysis, a lasting legacy of the wartime experience.

²⁷ Marks, 602.

²⁸ Quoted in Binney, 328.