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978-0-521-88747-2 - Seduced by Secrets: Inside the Stasi's Spy-Tech World

Kristie Macrakis

Excerpt

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Introduction



Seduced by Secrets takes a radically different approach to the history of the East German Ministry for State Security (MfS/Stasi) by bringing the story into the realm of intelligence history and distancing itself from politically charged commentary. By examining the interplay between secrecy and technology at one of the most effective and feared spy agencies and secret police in the world, we can also do what all spy agencies fear: reveal the Stasi's secret spy-tech methods and sources.

Despite the little-known fact that almost half of all its agents planted in the West were stealing scientific and technical secrets and that more than eight thousand staff members at headquarters worked on providing James Bond-like technology to support espionage and security, the Stasi is primarily associated with the omnipresent informer. The general public already knows that husbands spied on wives and children on parents and that East Germany was probably the most spied-upon country in world history.

What the general public does not know is that technology was at the heart of the KGB's (Soviet Committee for State Security) and the Stasi's spying operations against the United States and the West. Whereas the Soviet's foreign intelligence operations have been extensively documented, books on the Stasi continue to emphasize solely the internal repressive arm, yet they too operated like the KGB abroad.

Not only did the MfS steal technology from abroad, they also created some of the spy world's most inventive technological gadgets at home. These activities were two sides of the same coin. Nothing is more secret than identities of agents, and the methods spy agencies use to obtain and communicate secrets. It is precisely these secret techniques that have fascinated the millions of readers of spy stories. Whether they are reading Ian Fleming or John le Carré, readers are mesmerized by the techniques

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unveiled: the subminiature spy cameras, secret writing, servicing of dead letter drops, running agents, turning agents into double agents, honey traps, surveillance, and a host of other elements of the secret spy world.

What readers often miss by the time the entertainment comes to an end is the purpose the agent hero had in risking his life for the government.¹ In John le Carré's great work of spy literature, *The Spy Who Came in from the Cold*, the drama becomes a great game of spy-versus-spy. Even though James Bond was often trying to keep Western nuclear weapons or code machines from the evil East, the effect the spy films and novels have is to portray the dazzling techniques as ends in themselves.

With the end of East Germany came the dissolution of the Stasi and access to, and preservation of, most of its top-secret files. This was an opportunity to examine the extent to which the real spy world resembled the fictionalized account. Even though we owe a great deal of thanks to the dissidents and the citizens' movement for preserving those files, they did not read them as historians once they were available. Seventeen years after the fall of the Berlin Wall is the right time for historians to investigate the Ministry for State Security's secret operations at home and abroad in the neglected but enormously important area of science and technology.

Ever since the industrial revolution, backward nations seeking to catch up to and surpass their rivals have used industrial and military espionage as a silent weapon. In the twentieth century the Soviet Union stunned the West when they stole America's atomic bomb secrets. During the Cold War, the KGB and the East German equivalent, the Stasi, assaulted the West with an army of secret agents targeting our companies and defense contractors. Recent cases flooding newspapers about Chinese industrial and defense spying against America document the persistence of this quest and the need for historical perspective.

Recent books have begun to document the United States' use of sophisticated technical means like spy planes, satellites, and submarines to gather intelligence during the Cold War. Technical intelligence is usually associated with the American style of espionage; the East Bloc's style tended to favor human spies. The East also incorporated technology into their tools for spies but used it as a complementary, not solo, technique. Because the West underestimated the East's successful use of technology in intercepting and listening to radio messages, for example, this gave the East a surprise weapon.

The Stasi had an effective collection outfit, but the ultimate success of scientific-technical intelligence lies in its integration into the host country. This is where the espionage faltered. It was not just the weak economy

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that led to failures; *Seduced by Secrets* shows that the Stasi became so caught up in the great game of espionage that it lost sight of its initial goals. Even when the goals were achieved, the daily activities of the spy world – the running of agents, catching spies, tracking enemies of the state, and making spy gadgets, to name just a few – led to the emergence of an insular spy culture more intent on securing its power than protecting national security.

Born during the Cold War division of Germany, the Stasi developed in the image of the KGB with a German personality. In the chaos of the occupation period, 1945–49, the KGB staked an outpost in Berlin-Karlshorst and conducted internal and external operations from the Soviet-occupied territory of East German soil. Meanwhile, communist Germans set up fledgling political police and information structures.

It was not until 8 February 1950, when the German Democratic Republic (GDR) became a sovereign state, that the German police structures from the occupation, such as the K-5 criminal police and the administration for the protection of the economy, developed into the Ministry for State Security. A year later, the foreign ministry set up the Foreign Political Intelligence Service, and thirty-year-old Markus Wolf took over the helm in September 1953. At the beginning, then, foreign intelligence was separate from internal security and the secret police, but both worked closely with Soviet advisors.

Two major events in 1953 – a defection to the West from foreign intelligence in April and the worker's uprising in June – reshaped the German structures, goals, and manpower. In 1956 foreign intelligence moved to the Ministry for State Security's compound in Lichtenberg and became a part of Minister Erich Mielke's empire. Unlike U.S. intelligence, the Stasi combined the roles of the CIA and the FBI/police under one roof.

The close association between foreign intelligence and domestic security is reflected in the organization of *Seduced by Secrets*. Foreign operations make up Part I (High-Tech) and spy gadgetry and counterintelligence are represented in Part II (Spy-Tech) – in other words, first we look at the people and then their techniques.

Whereas other books on intelligence history are sometimes organized around the directorates of a single spy agency, they are usually seen as discrete entities. Further, a similar book on the United States would not include the functions of the FBI because it is separate in geography, organization, and function from the CIA. Because this is a general book about technology at the Ministry for State Security, it includes both their

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espionage aspirations to acquire the best Western technology as well as the spy technology they attempted to create themselves. Frequently these activities were related; sometimes they were not. While seeking magical solutions to the country's problems by stealing technology, spies used the spy-tech gadgetry featured in Part II. But because foreign intelligence, counterintelligence, and internal security were under one roof, some of the spy technology was primarily used internally for tracking or surveillance.

The book opens in the 1950s with the case of Agent Gorbachev, as he provides a window onto the early years of scientific-technical espionage before it was professionalized into the Sector for Science and Technology. Although the sector's history consisted of more bureaucracy than Bond, it was still punctuated by deaths, kidnappings, and defections as its members stole scientific secrets from the West. Despite massive attempts at maintaining secrecy, a dazzling defector in 1979 and the CIA in 1992 managed to obtain material that helped expose their agent networks. The colorful James Bond-like life of the defector Werner Stiller illustrates how such a crisis squanders energy on the spy-versus-spy game.

A surprising number of Americans worked for the Stasi in computing and electronic eavesdropping. Their two most important sources were Americans who volunteered while they were stationed in West Berlin. Contrasting biographies of "Paul" and "Kid" – who both ended up in Fort Leavenworth Maximum Security Prison – sketch out the spy lives of two of the most damaging and important Stasi Cold War spies.

Computer espionage was the main technological target during the last decade of East Germany's existence, and the final chapter in the high-tech portion of the book tests the success of the espionage outfit and its sources as outlined in the earlier chapters.

Operations and spies need tools to carry out their trade. The second half of the book unveils the secrets of those tantalizing techniques the science spies used – the eyes, ears, and even noses. The invisible is made visible; the concealed is no longer hidden. The opening chapter on the history of the James Bond-like "Q" lab illustrates the Stasi's under-one-roof principle – the Technical Operations Sector (OTS) serviced both foreign intelligence and internal security and counterintelligence.

Spy buffs frustrated by secrecy surrounding invisible ink formulas and methods will finally be able to read about authentic secret writing formulas and how spies used them. They can even follow us into the laboratory as we reproduce them. Standard-issue spy equipment was imbedded in imaginatively conceived concealments, such as cameras in deer statues; the Stasi's big electronic ear was larger than anyone imagined.

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Eavesdropping operations were so extensive that they covered counterintelligence, internal repression, and intelligence operations abroad (including Cuba) within one huge bureaucratic roof that was still part of the Ministry for State Security.

Fans of fictional portrayals like *CSI (Crime Scene Investigation)*, or mystery novels, will be particularly interested in how the Stasi modified and applied criminalistic techniques like radioactive spy dust or smell science to their own work.

This book tells the story of how a spy and security agency was seduced by the power of technological secrets to solve intelligence and national problems, and, conversely, how it overestimated the power of stolen technology from the West to boost its own technological capacities. By doing so it challenges the myth of an effective spy agency. By the time of the fall of the Berlin Wall, the system had become so bankrupt that the spy-tech props of the cloak-and-dagger world had increasingly been brought or bought from the West. Other writers have covered the Stasi's repressive arm – its structures and function as the handmaiden of the state – and other topics such as the churches, the media, and politics.² *Seduced by Secrets* concentrates on the spy game, on its methods and sources and on its technology.

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PART ONE

HIGH-TECH

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I

Agent Gorbachev



It is September 1961, a few weeks after the building of the Berlin Wall on 13 August. A man of medium build, with slicked-back dark blond hair and a bit of a paunch, gets off the West Berlin subway at *Friedrichstrasse*, the location of the main border crossing to East Berlin. The cheap fluorescent lights give his face a greenish pallor as he navigates the maze-like underground passages and walks up to the cubicles of the East German border guards. Attracting the attention of one of the officers, he asks to be arrested.

Agent Gorbachev has crossed the border many times over the three years that he has been passing secret documents to East Germany. But he has never done it quite like this. The newly constructed Wall has made it more difficult to get into East Berlin. Gorbachev is worried because he has not heard a word from his East German case officer since the Wall went up, and he needs money.

Around midnight, Major Erich Pape, the case officer, finally arrives at the train station. He reassures Gorbachev that the reason for the silence was to protect him. Gorbachev suggests another meeting to pass on more material he has collected. Pape reluctantly agrees, but warns that further meetings will have to wait until the situation stabilizes. Later, in his notes on their midnight rendezvous beneath the streets of Berlin, Pape writes that Gorbachev was slightly drunk: He had needed a few drinks to gain the courage to make the journey. As he filed his notes in Agent Gorbachev's dossier, Major Pape surely never dreamed that they would one day become public record.¹ The Ministry for State Security (MfS) was good at keeping secrets.

But in the aftermath of the fall of the Berlin Wall in November 1989, much of the Stasi's vast archive of secrets – containing more than a

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hundred miles of files and 35 million index cards – has become available for scholars and ordinary citizens to peruse.

Agent Gorbachev – actually a West German physicist named Hans Rehder, who worked at Telefunken and AEG, roughly the West German counterpart of Westinghouse – was one of the Stasi's most prized sources. He sold industrial and technical secrets to the Stasi for twenty-eight years without getting caught. He would remain unknown today if not for a bureaucratic quirk. The Stasi's foreign arm, the super-secret HV A (*Hauptverwaltung Aufklärung*), managed to destroy most of its records before the opening of the archives. But Gorbachev happened to fall under the Stasi's domestic intelligence, or “counterintelligence,” unit, by far the largest branch of the Stasi, and most domestic intelligence material was not destroyed. Thus Gorbachev's file, unlike those of many similar agents, was spared the paper shredder and is now a unique window into the workings of scientific and technical espionage during the Cold War.

Agent Gorbachev was far from unique in other ways. Thousands of respectable Western scientists, engineers, and businessmen, including Americans, worked for the Soviet Committee for State Security (KGB) and Eastern Bloc intelligence agencies during the Cold War, tools of organizations that knew exactly how to turn ordinary human weakness to their own ends.

Gorbachev's case can also provide us insight into industrial espionage even as it is practiced today. Since the end of the Cold War there has been an increase in state-sponsored and orchestrated economic and scientific espionage. The CIA was urged to conduct espionage for North American companies during the 1990s, and the National Security Agency (NSA) drew fire from the European Parliament, which alleged that Operation Echelon, a worldwide system used by the NSA to intercept foreign communications, was used for economic and scientific espionage.²

Countries such as Japan have proved to be far more capable of turning secrets into products than East Germany ever was. During the early twenty-first century massive Chinese industrial and defense spying against America, reminiscent of the Soviet's Cold War assault, produced considerable anxiety among counterintelligence officials and at companies.

THE MAKING OF A SPY

One thing seems certain: Hans Rehder never planned to be a spy for the communists. He did not have a particular ideological inclination toward

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communism. Born in 1912, he had joined Hitler's National Socialist Party in 1931 – more likely out of conviction than of necessity, because it was at that time a minority party – and presumably received plenty of anti-communist indoctrination.

Shortly after World War II ended, in 1946–47, the Soviets tried to deport scientists to the Soviet Union, and Americans tried to recruit them to spy for America. In 1946, the U.S. Army's Counterintelligence Corps (CIC) tried to recruit Rehder with the threat that his de-Nazification process would be negative if he did not cooperate. After several hard interrogations, Rehder claims to have had no more contact with them after 1947.³

He had never set foot in East Germany before 1957, when he made his initial contact with Stasi agents. From their point of view, however, there was nothing accidental about Rehder's recruitment. As early as 1955, Ernst Wollweber, the first MfS chief, directed staff to work in the West by penetrating West German companies and collecting scientific, technical, and military material to integrate into the economy. In 1956 the governmental Central Committee of the Communist Party amplified this request directly "to support our economy and our research and development installations with all available resources." Later that year, in another top-secret document, MfS chief Erich Mielke detailed the following objective: "The Ministry for State Security has the goal of acquiring, in steadily increasing volume, scientific-technical information and documents from West Germany and other capitalist countries."⁴

Toward this end, staff members created an overview of all major West German companies, in the form of object files, and its officers began systematic recruitment of leading personnel. The MfS had already established a network of domestic informants (called "unofficial staff members," or IMs) and often used these to recruit Westerners through business contacts.⁵

Rehder had been consulting for the (East German) Ministry for Machine Building for several years. An informant code-named "Simon," who worked at an East Berlin company that made radio receivers, struck up an acquaintanceship with Rehder and found out that he was deeply in debt. With a wife and four children to support, Rehder, even in his position as department head for small transmitters at Telefunken, was having a hard time making ends meet. Simon passed the information on to his case officers, who set up a meeting with Rehder at the Hotel Adria. At that meeting, Rehder said he was "ready, inasmuch as he could reconcile it with his conscience, to keep them abreast of the newest developments . . .

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Agent Gorbachev

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against an appropriate payment.” His first payment was five hundred West German marks.⁶

For his first two years as a spy, Rehder did not know he was selling secrets to the MfS, believing he was selling them to representatives of the Ministry for Machine Building. Stasi agents had been using a cover story. Cover stories or “false-flag” operations – when intelligence officers tell a potential agent that they come from another country – were often employed when there was a sense that the potential recruit was hostile toward communist countries. It was not until January 1959 that Rehder’s case officers, including Major Pape, apparently revealed to Rehder who they were. The files contain no description of Rehder’s reaction to this news; he simply continued, apparently with great eagerness, to pass on company secrets for money. Perhaps the best clue that the Stasi had him in their pocket had come a few weeks earlier, when Gorbachev bragged that he had made an imprint of the key to the company archive. “With this key,” he told the officers, “I am in the position to access all company secrets.”⁷

The spy agency quickly became Rehder’s personal line of credit without repayment or interest. By 1959 Rehder was considered so important that he received a salary of four hundred marks a month, in addition to lump-sum payments for document delivery. During the 1960s, he would receive between four hundred and six hundred marks at each meeting in which technical documents were delivered. In the course of his cooperation, Rehder and his family moved several times and received seven thousand marks for moving expenses. For the Stasi, it was a bargain: Within their first year of meetings in East Berlin, Gorbachev had passed on an estimated 1 million West German marks worth of technical documents; by 1961 that figure rose to 4–5 million West marks.⁸

On the long list of human weaknesses that intelligence agencies have used to enlist new agents, greed has always been one of the most effective. Aldrich Ames, the U.S.’s most notorious traitor, carried out secret files from his CIA office and delivered them to the KGB in garbage bags in exchange for millions of dollars. Klaus Kuron, West Germany’s head of counterintelligence, offered to spy for East Germany out of professional frustration and to help pay for his children’s education. Many West Germans spied for money; others spied for ideological reasons, for love, or for adventure. It was more common for West German citizens to spy for money than it was for domestic East German informants, who did it more often for ideological reasons or to advance their careers.

Code names were usually assigned to, or chosen by, an agent to protect his or her identity and often referred to characteristics of the agent. For