Uncovering the Origins of Mr. Bond

Spies and Science

I never joke about my work!
—Q TO 007, *GOLDFINGER*

Before delving into the main topic of our book, we need to take a short but very necessary detour. Let's look at James Bond's place in the world of real spies and peek at some of his fictional counterparts. Our objective, or mission, if you prefer, is to discover why James Bond is so popular. One theory is that his persona excites men and fascinates women. Another theory is that we're visually and mentally stunned by his toys—the cars, the gadgets, and the spy paraphernalia. We suspect both viewpoints are equally true. Of course, what appealed to fans forty years ago is much different from what appeals to them today.

If we study the history of spies in real life and in fiction, we see that spying has evolved from deception and espionage to the use of high-tech gadgets and computer hacking. The James Bond movies reflect the times during which they were produced, and they've evolved along similar lines in the real-life spy world. It's important to realize that Bond remains popular because he *has* changed with the times. The James Bond movies of today, with the superweapons and invisible cars, are vastly different from the Bond movies of the 1960s, when Bond used a chartered fishing boat to investigate Dr.

No and British intelligence was anxious to obtain a Russian Enigma decoder device. James Bond is a reflection of our desires and tastes, and therefore he always remains up-to-date.

A Short History of Spying

Spying began when humankind began. The earliest spies had no gadgets, computers, or technology. Rather, they merged into foreign societies and then reported back to their homelands about life there, secrets uncovered, and vulnerabilities. According to the Bible, Joshua sent spies into the land of Canaan to infiltrate the walled city of Jericho and learn its weaknesses. Twenty-five hundred years ago, Sun Tzu of China sent spies into other countries to learn their secrets; his objective was to avoid war.

In ancient Greece, the Spartans transmitted encoded information between secret agents and generals. The first spy gadget, the enigma device of the time, may have been a baton wrapped with encoded papyrus or parchment. After the encoded message was written, the papyrus or parchment was unwrapped from the baton, and then a secret agent delivered the message. Upon delivery, the message could only be read by wrapping the papyrus or parchment around an identical baton.

The ancient Romans also encoded their messages. Later, Genghis Khan used spies to gather information and spread negativism among the enemy. The Khan's spies were the equivalent of the Nazis' infamous Fifth Column and of today's double agents.

During the fifteenth century, espionage was common in Europe. A secret police force called the Council of Ten employed double agents throughout the Continent.

Queen Elizabeth I had spies, who discovered a murder plot against her. Supporters of Mary Queen of Scots, led by Anthony Babington, were planning an assassination. The spies also learned that King Philip II of Spain was in on the plot. The plan collapsed because Babington's spy, Gilbert Gifford, was actually a double agent working for Sir Francis Walsingham, the head of Queen Elizabeth's secret agents. One of Walsingham's spies happened to be

the playwright Christopher Marlowe, a contemporary of William Shakespeare. Had James Bond lived back then, he might have been a wannabe playwright, or perhaps a moderately successful poet; not quite the dashing figure of today. (As professional writers, we feel qualified to tell you that poets and playwrights are not as dashing as James Bond. Bob does not drive an Aston Martin, nor does he drink martinis, shaken, stirred, whipped, dipped, or otherwise concocted. Lois does not wear heavy makeup and evening gowns, nor does she have a pseudonym along the lines of, say, Pussy Galore.)

At any rate, due to espionage, Mary Queen of Scots was beheaded, and everyone who supported her was hanged (and drawn and quartered; plotting against an absolute monarch was risky business!).

During the same general time period, France also ran an espionage unit under Cardinal Richelieu. The cardinal's skill was formidable basically due to his ties to the Catholic Church, which operated a highly successful team of secret agents. The Cabinet Noir, established in 1620 by the cardinal and headed by the Catholic priest François le Clerc du Tremblay, was analogous to Bond's Directorate of Military Intelligence, Section 5 (MI5) or the United States' Central Intelligence Agency (CIA). They routinely intercepted and decoded spy messages and carefully analyzed world situations, hoping to thwart potential plots against France.

Now we'll swing through time into the eighteenth century. We've established that James Bond would have been a poet or a playwright—or possibly a Catholic priest—had he been a secret agent earlier than the eighteenth century.

In 1780, spies in George Washington's Culper Ring used invisible ink called Jay's sympathetic stain. A reagent was later used to reveal the writing. The messages were placed in boxes that were buried in a cow pasture. The arrival of fellow agents was signaled by hanging a woman's black slip on a clothesline. Benjamin Tallmadge, the head of Washington's secret service, also used three-digit codes (think 007) for his agents. In fact, during this time, one of the most famous double agents in history, General Benedict Arnold, was reporting American secrets to Britain. Had James Bond been part of the Culper Ring, he would have been found rowing along the

shores of Long Island, seeking a fluttering black slip and a cow pasture. Rather than fighting Dr. No, he would have been fighting Benedict Arnold—possibly using spears hidden within his oars.

Fast-forward to World War I in 1915. The British professor R. V. Jones figured that the Germans were conducting weapons research in Peenemünde, Germany, on the Baltic coast. There was no real evidence that this was happening, but Jones noted that a lot of German gas and oil was allocated to Peenemünde; hence something important was going on there. Jones concluded that the rumors about weapons research were true. Again, the spy work involved analysis rather than fast cars, fast women, and high-tech gadgets.

Deception and espionage were also involved during World War I, when the British developed the Q-ship in response to the German deployment of the U-boat. (Possibly the reason why Q Division was a Q rather than an M, a Z, or an F.) Here we see a turning point in spy history: the use of technology.

The U-boats were sinking Allied ships that carried supplies and food across the Atlantic Ocean to Britain. The ships were traveling without protection, so it was easy for U-boats to surface and use their deck guns to sink the unarmed vessels.

To counter the U-boats, the British designed the Q-ship, which was manned by sailors posing as plain seamen and wearing ordinary clothing. The Q-ship was heavily armed with guns, and when the ship's crew saw a U-boat surface, they would hoist a warship flag and blast the U-boat with gunfire. It was only when the spy Jules Crawford Silber told the Germans that the Q-ships were real that the Germans learned how their U-boats were being destroyed. The Germans changed their U-boat tactics. Instead of rising to the surface, submarines remained underwater and sank British ships using torpedoes. Advanced technology triumphed over deception. In the end, the British and the Americans were forced to group their supply ships in convoys with naval escorts to elude the U-boats.

In World War II, espionage and technology soared. In 1939, the British captain Hector Boyes received a letter that offered him a way to obtain information about German science and technology. All Boyes had to do was get the British Broadcasting Corporation (BBC)

to broadcast "Hallo, Hallo, hier ist London" rather than the usual "Hallo." Boyes arranged for the longer Hallo broadcast and awaited developments. He soon received seven pages of typed espionage material, along with part of a proximity fuse for German antiaircraft shells. The espionage material included information about Peenemünde research into radio-controlled glider bombs, bomber guidance systems, and early-warning radar systems. It also contained details about a Junkers 88 dive-bomber that the Germans were developing, and it described German research into advanced torpedoes.

Professor Jones, who now headed Britain's Air Ministry Intelligence unit, received all the material from Boyes. Jones requested help from British scientists, who told him that all the material was false, but of course Professor Jones disagreed with them. His remarkable insight led him to believe that the material was indeed real because the proximity fuse was real. Over time, Jones and his agents used the information to uncover German bombing guidance and radar systems and V1 and V2 missiles.

We have to remember how important this espionage information was to the safety of the world. In World War II, Adolf Hitler deployed the first V1 cruise missile and the first V2 ballistic missile. The V2 missiles nearly destroyed London and Antwerp.

Many years later, in the 1950s, the author of the espionage material surfaced. Hans Ferdinand Meyer had been working in Germany for Siemens Electronics. He feared a Nazi victory should the Germans develop and deploy secret weapons. He wanted to live in a peaceful Germany. Poor Meyer ended up in a concentration camp. His crime? Listening to the BBC.

In 1941, the Russians sent a superspy into Tokyo. Posing as a Nazi journalist, Richard Sorge was so highly regarded by the Nazis that the German minister for propaganda, Joseph Goebbels, attended a dinner in Sorge's honor. As a Russian secret agent, Sorge learned that Germany planned to attack Russia on June 20, 1941. He warned his country, but Joseph Stalin did not believe him.[1]

The Germans attacked Russia, of course. Then Sorge learned that Japan planned to attack the United States and England in early December, while simultaneously attacking Russia. He warned

Stalin, who believed him this time. Literally within days of delivering this vital information to Russia, Sorge was hanged by the Japanese for espionage.

Also operating out of Russia during World War II was the Red Orchestra espionage group. The Red Orchestra had spies in Belgium, Holland, Switzerland, and Germany. They uncovered many German secrets until 1941, when Germany traced secret messages to some houses in Brussels, Belgium. The Germans arrested the Russian spies and confiscated their spy equipment: invisible ink and coding books. Then in 1942, the Nazis discovered Johann Wenzel of the Red Orchestra. Wenzel was transmitting secret, encoded messages about German operations and research to the Russians. The Germans used Wenzel to give false information to the Russians until, nearly a year later, the Russians got wise to what was going on and shut down the Red Orchestra.

There are many other cases of espionage, deception, and technology during World War II and that general time period. The Spy Museum in Washington, D.C., has many examples of spy technology from that era, including:

- The Minox Riga camera, issued by Latvia to secret agents from 1937 to 1944. It measures only 1 inch by 2 inches.
- The Steineck ABC wristwatch camera, issued by Germany to its agents in 1949. It has a 1-inch-wide film disk and the ability to produce eight exposures.
- The heel knife, issued by the British Special Operations Executive to its agents from 1940 to 1945.
- The tear-gas pen, issued by the U.S. Central Intelligence Agency to its agents in 1948.
- The tobacco pistol pipe, issued by the British Special Forces to its agents from 1935 to 1945.
- The rectal concealment cyanide capsule, used in 1945 by Hermann Göring, the head of the World War II German Luftwaffe, to commit suicide. He stuck a rifle cartridge holding a cyanide capsule up his rectum and then pulled out the device while in a Nuremberg prison.

It's not a stretch to think of James Bond using any of the spy equipment from the World War II era, except perhaps the rectal concealment cyanide capsule, which might have offended his British sense of dignity a bit. But even in the 1960s and 1970s, Bond had camera wristwatches, tear-gas pens, and heel knives. If anything, some of his most popular gadgets were old-hat spy tools.

Bond in Print

James Bond's creator, Ian Fleming, was a British citizen who was born on May 28, 1908. His father died in World War I, and Fleming later served as a commander of Naval Intelligence during World War II. It was then that the seeds of James Bond, Agent 007, were planted. Fleming was the right-hand man to Admiral John Godfrey, one of Britain's top spies. Although Fleming did not operate in the field, traveling like Bond around the world on adventures, he did serve as an espionage analyst and was a close friend of Bill Donovan, a top man in the Office of Strategic Services (OSS) and later in the CIA.

When the war ended, Fleming needed to earn a living. Having grown up in a socially elite British family, having lured a married woman of high circles, Lady Ann Rothermere, away from her husband—she became pregnant, got a divorce, and then married Fleming—and having a strong need to prove to his new wife that he was capable of enabling her to flourish in high social circles, Fleming needed cash.

In 1952, he started working on the novel *Casino Royale*. He finished the book in four weeks, and James Bond was born.

Remember that in 1952 Britain was recuperating from World War II. The rationing was ending, as was the general postwar austerity. In the United States, people bought homes and cars, tried to climb social ladders, and focused on rebuilding life overall. People went to the movies to see glamour, flamboyance, and fantasy lifestyles. The same was true in Britain.

The creation of a character who was larger than life, whose lifestyle was every man's dream, was what the world wanted: a man

who wore dinner jackets to casinos, who smoked only the finest cigarettes, who drank only the finest liquors, who slept with only the most beautiful women, who drove only the most exotic and expensive cars, who traveled throughout the world on amazing adventures, who had the audacity and ability to demand and get a "medium-dry martini, lemon peel, shaken, not stirred,"[2] who was charming, brilliant, famous, and feared. This man was irresistible to the post–World War II audience, and he was probably the man that Ian Fleming wanted to be.

As for Agent 007, we note that Fleming, as a Naval Intelligence officer, analyzed and processed documents all day. These documents actually had a prefix attached to them. That prefix was 00. It so happens that Fleming's father was a friend of Winston Churchill's. Winston's ancestor John Churchill, the duke of Marlborough, gave his spies a 00 code during the War of the Spanish Succession from 1701 to 1714. But where does the 7 in 007 come from? For that, we turn to a spy for Queen Elizabeth I, Dr. John Dee. Dee traveled extensively; he was brilliant and dashing. The queen sent Dee on top-secret missions to thwart King Phillip II's plans. Dee sent secret messages to the queen using a special code for himself. That code was 007. Supposedly, the 00 stood for two eyes, indicating to the queen that the message was "for your eyes only." The 7 was *the* lucky number.

So when Fleming wrote *Casino Royale* in 1953, his Agent 007 was a figure of great fancy to cold war–era people worldwide. At that time, people could believe that the Russians were capable of the evil presented by SMERSH (a Soviet KGB organization devoted to assassination and violence) and SPECTRE (Special Executive for Counterintelligence, Terrorism, Revenge, and Extortion).

But was 007 the first spy in fiction? Absolutely not. In 1821, a novel called *The Spy* was published. Its author was James Fenimore Cooper, who also wrote *The Last of the Mohicans*. Cooper's book featured a British spy named Major Andre. A number of other spy novels were published throughout the nineteenth century, but most of them were not big sellers. Historical novels were all the rage; spies were not in fashion. Then in 1894, William Le Queux's *The Great*

War in England in 1897 thrilled thousands of British readers with its focus on the terrifying specter of German spies. Le Queux wrote numerous spy novels in the days before World War I and was perhaps the best-selling British author of the period.

The Riddle of the Sands (1903) by Robert Erskine Childers predicted a British war with Germany and called for increased British readiness. It was an extremely influential book; many experts consider it the first realistic spy novel. Winston Churchill credited it as a major reason for the British to establish naval bases at Invergordon, the Firth of Forth, and Scapa Flow. In an odd twist of fate, after fighting for the British in World War I, Childers became involved in the battle for Irish independence. A member of the Sinn Féin, Childers was considered to be the man behind the Republican terrorists' tactics. He was captured by Irish Free State soldiers in November 1922 and was executed in Dublin by firing squad. He was one of the few spy novelists ever to become a real spy.

In 1907, Joseph Conrad's *The Secret Agent* presented spies who were shady underworld characters. Then in 1915, Sir John Buchan's *The Thirty-nine Steps* was published to great acclaim in both England and the United States. In 1935, Alfred Hitchcock made it into an effective spy thriller starring Robert Donat and Madeleine Carroll. Buchan later served as the governor general of Canada. Somerset Maugham produced a number of spy novels, followed by Graham Greene much later. Greene's secret agents were a miserable lot and tended to drink too much whiskey.

In mainstream fiction, most spies were portrayed as ordinary men thrust into extraordinary circumstances. While they had a certain heroic attitude, most of them were not terribly brave, and several of them got their courage from a bottle. It was Ian Fleming's Bond, however, who changed the genre of spy fiction from the antihero alcoholic character to the daring, dashing hero who drinks to impress but never gets drunk.

After Bond came spies created by Len Deighton and John le Carré. Deighton's novels were very popular in the 1960s; his spy hero wore thick glasses and didn't seem to attract many women. Le Carré's Leamas in *The Spy Who Came In from the Cold* was also a

loner, and his escapades seemed more real and cold than, say, Bond's shenanigans.

The most popular spy novelists of the last quarter of the twentieth century were Tom Clancy, Robert Ludlum, and Eric van Lustbader. Clancy's novels about superspy Jack Ryan were filled with extensive details about weapons and weapons systems, and they found an appreciative audience among armchair soldiers. Ludlum wrote numerous spy novels about world-shaking events usually involving gigantic conspiracies that could only be stopped by one man or one woman or sometimes neither. His plots twisted; the novels were page-turners to the end. Van Lustbader's novel *The Ninja*, more than any other modern novel, focused attention on the secret spy order of Japan and their seemingly more-than-human athletic and spy skills. It was Lustbader's early spy novels that focused the attention of spy readers from Russia to Japan.

Bond Hits the Movies

Fleming's Bond books were well received but not best sellers. Several of the hardcovers even had their names changed when reprinted in paperback in the United States. *Casino Royale* became *You Asked for It*, while *Moonraker* was retitled *Too Hot to Handle*. Fleming was one of numerous writers who were publishing espionage novels, and Bond was one of many postwar spies. By the late 1950s, when Fleming was working on *From Russia with Love*, he considered disposing of Bond forever. But he decided to continue with the series, which proved to be a very wise decision a few years later.

In the early 1960s, John F. Kennedy was both the president of the United States and a big fan of James Bond. In fact, in an interview it was reported that Kennedy's ninth favorite book was *From Russia with Love*. The president's interest in the Bond books helped push them onto the best-seller lists and made Fleming and James Bond famous. It was during that period that producers Albert R. "Cubby" Broccoli and Harry Saltzman bought the film rights to James Bond, and Bond was then transformed into a spy icon.

Before Kennedy was president, he had dinner with Fleming,

arranged by a friend of Fleming's who had given Kennedy a copy of *Casino Royale* in 1955. The two men discussed Fidel Castro over dinner. Years later at the White House, Kennedy arranged for a private showing of *Dr. No*.

During the 1950s and 1960s, real spies used many of the gadgets that Q Division gave to Bond. Here are some examples, again from the Spy Museum in Washington, D.C.:

- A hairbrush compartment for the Minox camera
- The Echo 8 cigarette lighter camera, created by Japan and used by U.S. intelligence
- The Tessina camera and cigarette case—a cigarette pack with a hole in its side to conceal a tiny camera lens—issued by the East German Stasi
- The Toychka camera in a necktie, issued in 1958 by the KGB to its agents
- A shoe with a heel transmitter, issued in the 1960s by the KGB to its agents
- A rectal toolkit, filled with escape tools, issued by the CIA to its agents in the 1960s
- A lipstick gun that supplied one 4.5 mm shot, issued by the KGB in 1965 to its agents
- A gun in a cigarette case that delivered one shot from a .22 caliber gun, issued in the 1950s by the KGB to its agents
- A wristwatch microphone, issued by the United States in 1958 to its agents

It's clear that Bond continued to use devices that real spies were already using. His cool wristwatches, guns, and shoes were being issued by spy organizations around the globe. You could almost argue that James Bond was the spy fiction equivalent to John F. Kennedy himself: dashing, handsome, full of adventure and charisma, a lady's man, and stoked with plenty of power. Though it's a bit of a push to link the two this closely, it would not be surprising to discover that Fleming gave James Bond various Kennedy attributes along the way.

Modern Spies

Let's return to *From Russia with Love*. Fleming postulated that Bulgarian secret agents would handle assassinations and other dirty espionage work for the Russians. In 1978, the Bulgarian dissident Georgi Markov was killed by a ricin pellet fired from an umbrella. The Soviets admitted that the Bulgarian secret service was responsible for the assassination.

In the 1961 novel *Thunderball*, Fleming suggested that evil villains were stealing nuclear weapons and planning to destroy the world's largest cities unless the modern superpowers gave them $100 million. Such fears were actually quite true in the early 1960s, and they remain true to this day.

The threat of mutual assured destruction (MAD) grew after the cold war, and new horrors and technical wizardry arose: Ronald Reagan's 1980s Star Wars antimissile defense systems, which prompted the Soviets to gear up their own arms race; chemical and biological weapons; and suicide bombers. Saddam Hussein, for example, North Korea's Kim Jong-il, and Osama Bin Laden are world terrorists today who may press the nuclear, chemical, and/or biological buttons that destroy the world.

Today's espionage focuses on far more than exploding neckties, rectal concealment cyanide capsules, and lipstick guns. The world is a very unsafe place. It was a true nightmare during World War II, and that nightmare has only been exacerbated by global terrorism. Today's real spies focus on airborne and satellite intelligence and electronic and computer communications, and the world of James Bond has also evolved—at least his gadgets have evolved a bit, as shown in this chronological list of the Bond films detailing some of the more interesting devices used in the films:

- *Dr. No* (1962): a Walther PPK 7.65 mm firearm. In our opinion, not very high-tech.
- *From Russia with Love* (1963): a camera recorder. Again, not very high-tech.
- *Goldfinger* (1964): another stunning Aston Martin DB5. Our opinion: a cool movie, but not many Q gadgets.

- *Thunderball* (1965): an infrared film camera, compressed-air missiles, a Geiger-counter wristwatch, and a stunning Aston Martin DB5. Bond's technology is definitely increasing now, along with the times.
- *You Only Live Twice* (1967): a cigarette with a deadly dart, homing missiles, and an autogyro. On the general level of *Thunderball's* science.
- *On Her Majesty's Secret Service* (1969): a computerized copy machine and a safecracking device. Computers are in this one, but otherwise Bond is still somewhat low-tech.
- *Diamonds Are Forever* (1971): a voice box that imitates other people, a casino cheating device, and artificial fingerprints. More computerization in James Bond's bag of spy tools.
- *Live and Let Die* (1973): a circular-saw wristwatch. Fairly low-tech for the times.
- *The Man with the Golden Gun* (1974): a camera with rockets and a button homing device. Again, fairly low-tech for the time; this one's more like *Fantasy Island* with spies.
- *The Spy Who Loved Me* (1977): a cigarette-case microfilm viewer, a wristwatch with ticker tape, and a Lotus car–submarine. Very cool underwater technology.
- *Moonraker* (1979): a cigarette-lighter camera, a cigarette-case safecracking device, a wristwatch with a bomb detonator, speedboats, and a hovercraft. Lots of strange technology in this space-age Bond film. This one reminds us of *Star Wars*.
- *For Your Eyes Only* (1981): a binocular camera. This one is more glam-Bond; not much in the way of high-tech hijinks.
- *Octopussy* (1983): a television wristwatch, a video camera, a wristwatch homing device, a pen with metal-cutting acid, and a car rickshaw. A spy macho movie; the technology isn't as savvy as we'd like, given that the film came out in 1983, when computers were already widespread.
- *A View to a Kill* (1985): a robot surveillance device, a pen of burning words, a man's shaver that detects bugs, and a video camera that supplies identities of people using a centralized computer system (possibly a mainframe or a series of computers

linked together). A very high-tech Bond: seven stars out of ten on the Bond Gadget Scale.

- *The Living Daylights* (1987): a radio receiver pen, a key-ring stun-gas pistol, a key-ring bomb, and an amazing Aston Martin V8 Volante car. A techno-retro Bond: four stars out of ten on the Bond Gadget Scale.
- *Licence to Kill* (1989): an exploding alarm clock, a gun camera, an X-ray camera, and a toothpaste bomb. Sadly, not much science here.
- *GoldenEye* (1995): a silver tray X-ray document scanner, a grenade pen, a wristwatch that arms bombs and operates as a laser, and a leg-cast missile launcher. What can we say?
- *Tomorrow Never Dies* (1997): a wristwatch bomb detonator, a Sea-Vac underwater drill boat, a cell phone with a fingerprint scanner, and a very high-tech BMW 750 iL car. Cool tech in the car.
- *The World Is Not Enough* (1999): X-ray vision glasses, a hydroboat, a laser wristwatch, and a very high-tech BMW Z8 car. The car wins the Bond gadget award.
- *Die Another Day* (2002): a glass-shattering ring and perhaps the most unusual of all Bond cars, equipped with spikes for driving on ice and able to turn invisible with the touch of a button.

Today's Bond has superscience cars and superscience weapons. Yesterday's Bond had rowboats and guns. The technology is evolving, though perhaps not as quickly as we hope. Bond has evolved as a person, too: he's no longer quite the ladies' man that he was in the 1960s, and his M is now a woman, who won't put up with being slapped on the rump. The times are changing, and if Bond wants to remain working in this new century, he will, too.