

B2+ Past Modal Verbs of Deduction

Aim: To practise past modals of deduction, *must have*, *can't have*, *could have* for B2 or above students.

Length of lesson: 90 mins

Level/age: B2/C1

Materials: DB Cooper reading text, Vocab sheet

Preparation: Photocopy reading text and vocab matching exercise.

Procedure:

Warmer: Brainstorm mysteries, elicit Loch Ness Monster, aliens, UFOs, Bermuda Triangle etc. Ask students which they actually believe in. Tell students they're going to study a real mystery today.

1. Write DB Cooper on board. Ask sts if they have heard of this man? Summarise story in dramatic fashion to raise interest: *This is the person the FBI are still chasing after 50 years, the only unsolved hijacking in American history. He stole \$200,000, jumped out of a plane and WAS NEVER SEEN AGAIN.*
2. Give out vocab sheet, in prs students try to match words to correct definitions. T monitors, helps, prompts.
3. In pairs, ask students to discuss whether they think DB Cooper is alive or dead? Give out DB Cooper text, sts read to check whether they were right. When sts have finished reading, (sts may ask about further vocab, but tell them it is the overall meaning they need to understand for the next part of the lesson. They can read the text again at home and look up any unknown words then). T asks sts again whether they think he is alive or dead.
4. This is a chance for students to produce the target language so monitor carefully. They will probably produce: *I think he is dead, maybe he is dead*, or something similar. Board these examples.
5. Ask students if they can say the same thing with a modal verb. Ask a student who thinks he is definitely dead and elicit *he must be dead*. Concept check: do we know he is dead? No, we assume or we are very sure but we don't actually know 100%. Now ask a student who thinks he isn't dead, and elicit *he can't be dead*.

Concept check again. Finally, ask a student who isn't sure and elicit *he could be dead/he might be dead*.

6. The students should know this, so point out that our story happened in the 1970s so how do we use this grammar in the past? Board examples of must/can't/could/might + have + past participle.
7. Students discuss the rest of the questions at the end of the text in pairs with the aim of using the language from stage 6, monitor carefully and error correct target language. General feedback and highlight good use of TL and do whole class correction of errors.
8. Set HWK: students write a paragraph about what they think could have happened to DB Cooper after he jumped out of the plane, using the TL as much as possible.

Contributed by Steve Cameron, London
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B2/C1 DB COOPER – Modals of deduction

Vocab Sheet

Match the words on the left to the correct definition on the right.

- | | |
|------------------|--|
| - exhaustive | a) a person who commits an illegal or immoral act |
| - perpetrator | b) a sudden, short period of activity, excitement, or interest |
| - convey | c) if an engine stalls, it stops working |
| - ransom | d) a period of warmer weather that melts ice and snow |
| - terrain | e) including or considering all elements or aspects |
| - cruel | f) to remove unwanted things from the bottom of a river or lake using a boat or special device |
| - stalling | g) a period of warmer weather that melts ice and snow |
| - scramble | h) an area of land when considering its natural feature |
| - to be deployed | i) the use of existing information to help discover what is likely to have happened |
| - extrapolation | j) to put into use |
| - thaw | k) to take or carry news, or a message to s.o. |
| - factor in | l) an opinion or conclusion formed on the basis of incomplete information |
| - conjecture | to order fighter plane to take off immediately in an emergency |
| - dredging | extremely unkind and unpleasant |
| - flurry | a sum of money demanded in exchange for s.o. or sth |

?????What is the world's greatest mystery????

The Loch Ness Monster?

The Bermuda triangle?

Area 51?

Stonehenge?

The Yeti/ Bigfoot?

Crop Circles?

Or this man?



D.B Cooper

That's the name popularly used to refer to an unidentified man who hijacked a Boeing 727 aircraft in the airspace between Portland, Oregon and Seattle, Washington, USA on November 24, 1971. He extorted \$200,000 in ransom and parachuted to an uncertain fate. Despite an extensive manhunt and an exhaustive (and ongoing) FBI investigation, the perpetrator has never been located or positively identified. To date, the case remains the only unsolved airline hijacking in American aviation history.

Mid-afternoon Thanksgiving Eve, November 24, 1971

At Portland airport a man carrying a black brief case approached the flight counter of Northwest Orient Airlines. He identified himself as "Dan Cooper" and purchased a one-way ticket on Flight 305, a 30-minute trip to Seattle, Washington. Cooper boarded the aircraft, a Boeing 727. He lit a cigarette and ordered a bourbon and soda. Onboard eyewitnesses recalled a man in his mid-forties, between 5 feet 10 inches (1.78 m) and 6 feet 0 inches (1.83 m) tall. He

wore a black lightweight raincoat, loafers, a dark suit, a neatly pressed white collared shirt, a black necktie, and a tie pin.

Flight 305 took off at 2:50 pm. Cooper passed a note to Florence Schaffner, the flight attendant situated nearest to him in a jumpseat. The note was printed in neat, all-capital letters with a felt pen. It read, approximately, "I have a bomb in my briefcase. I will use it if necessary. I want you to sit next to me. You are being hijacked." Schaffner did as requested, then quietly asked to see the bomb. Cooper opened his briefcase long enough for her to glimpse the bomb. After closing the case he dictated his demands: "I want \$200,000 in unmarked 20-dollar bills. I want two back parachutes and two front parachutes. When we land, I want a fuel truck ready to refuel. No funny stuff or I'll do the job." Cooper then ordered Schaffner to convey his instructions to the cockpit.

Waiting to Land

The 36 other passengers were informed that their arrival in Seattle would be delayed due to a "minor mechanical difficulty." The aircraft circled Puget Sound for approximately two hours to allow Seattle police and the FBI time to collect Cooper's parachutes and ransom money. FBI agents assembled the ransom money from several Seattle-area banks—10,000 unmarked 20-dollar bills and made a microfilm photograph of each of them. Cooper rejected the military-issue parachutes initially offered by authorities, demanding instead civilian parachutes with manually-operated ripcords. Seattle police obtained them from a local skydiving school.

Schaffner recalled that Cooper appeared to be familiar with the local terrain; at one point he remarked, "Looks like Tacoma down there," as the aircraft flew above it. He also mentioned, correctly, that McChord Air Force Base was only a 20-minute drive from Seattle-Tacoma Airport. Schaffner described him as calm, polite, and well-spoken. Tina Mucklow, another flight attendant, agreed. "He was never cruel or nasty. He was thoughtful and calm all the time."

On the Ground

Once the delivery of the money and the parachutes was completed, Cooper permitted all passengers, Schaffner, and senior flight attendant Alice Hancock to leave the plane. As Cooper evidently planned, none of the passengers realised that they had been hijacked. During refueling Cooper outlined his flight plan to the cockpit crew: a course towards Mexico City, at the minimum air speed possible without stalling the aircraft (approximately 190 km/h; 120 mph) at a maximum 10,000 foot (3,000 m) altitude. To ensure a minimum speed, he specified that the landing gear remain down, in the takeoff/landing position, and the wing flaps be lowered 15 degrees. To ensure a low altitude, he ordered that the cabin remain unpressurized. It was agreed that the plane would refuel at Reno, Nevada. Finally, Cooper directed that the plane take off with the rear door

open and its staircase extended. Northwest's home office objected on grounds that it was unsafe to take off with the rear staircase down. Cooper countered that it was indeed safe, but he did not argue the point.

Into the Black

Two F-106 fighter aircraft scrambled from nearby McChord Air Force Base followed behind the airliner, one above it and one below, out of Cooper's view. After takeoff, Cooper told Tina Mucklow, the sole remaining flight attendant on board, to join the rest of the crew in the cockpit and remain there with the door closed. As she complied, Mucklow observed Cooper tying something around his waist. At approximately 8:00pm a warning light flashed in the cockpit, indicating that the rear stair apparatus had been activated. At approximately 8:13pm, the aircraft's tail section sustained a sudden upward movement, significant enough to require the pilot to make an adjustment to bring the plane back to level flight. At 10:15pm, the plane landed, with its the rear stair still deployed, at Reno Airport.

Immediate Aftermath

Aboard the airliner, FBI agents recovered 66 unidentified fingerprints, Cooper's black clip-on tie and tie clip, and two of the four parachutes. A precise search area was difficult to define, as even small differences in estimates of the aircraft's speed, or the environmental conditions changed Cooper's projected landing point considerably.

Initial extrapolations placed Cooper's landing area on the southernmost outreach of Mount St. Helens near Lake Merwin. No trace of Cooper, or any of the equipment presumed to have left the aircraft with him, was found in the days following the hijacking. In early 1972, after the spring thaw, teams of FBI agents, 200 soldiers, Air Force personnel, National Guard troops, and civilian volunteers, conducted another thorough search for eighteen days in March, and then an additional eighteen days in April. A submarine was used to search Lake Merwin. Ultimately, the search operation—arguably the most extensive, and intensive, in U.S. history—uncovered no material evidence related to the hijacking.

Subsequent analyses called the original landing zone estimate into question. Pilot Scott, who was flying the aircraft manually because of Cooper's speed and altitude demands, later determined that his flight path was significantly farther east than initially assumed. Additional data from a variety of sources indicated that the wind direction factored into drop zone calculations had been wrong, possibly by as much as 80 degrees. This suggested that the actual drop zone was probably south-southeast of the original estimate, in the drainage area of the Washougal River.

Physical Evidence

In the autumn of 1978, a placard containing instructions for lowering the rear stairs of a 727, later verified to be from the hijacked airliner, was found well north of Lake Merwin but within the basic path of Flight 305.

In February 1980, an eight-year-old boy vacationing with his family on the Columbia River uncovered three packets of the ransom cash, significantly disintegrated but still bundled in rubber bands in 3 groups. 2 of 100 \$20 notes and 1 of 90 \$20 notes.

The discovery launched multiple new rounds of conjecture, and ultimately raised many more questions than it answered. An army hydrologist noted that the bills had disintegrated in a "rounded" fashion, and were matted together, indicating that they had indeed been deposited by river action, as opposed to having been deliberately buried. If so, it confirmed that Cooper had not landed near Lake Merwin, and it lent credence to speculation placing the drop zone near the Washougal River, which merges with the Columbia upstream from the discovery site.

But the "free floating" hypothesis presented its own difficulties. It did not explain the ten bills missing from one packet. Ralph Himmelsbach, the FBI chief investigator, observed that bundles floating downstream would have had to wash up on the bank "within a couple of years" of the hijacking; otherwise the rubber bands would have long since deteriorated. Evidence, however, suggested that the bills arrived at the area of their discovery no earlier than 1974, the year of a dredging operation on that stretch of the river. It was later confirmed by scientists at University of Portland State that the packets arrived well after dredging had been completed.

To date this is the only evidence that has been found. Of the remaining 9 710 \$20 bills, none have been found either in hiding or in circulation.

Copycat crimes

Cooper was not the first to attempt air piracy for personal gain; only two weeks prior a man named Paul Cini attempted it aboard an Air Canada DC-8 over Montana. However, it was Cooper who inspired a flurry of imitators. Most of the "copycats" struck during the year that followed. The most famous of these was Richard McCoy, a former Green Beret, who hijacked a 727 and bailed out over Utah with over \$500, 000. He landed safely, thus proving that the feat was theoretically possible, but was arrested two days later. In all, a total of 15 hijackings similar to Cooper's were attempted over the course of 1972 with more in ensuing years. Only Cooper, however, has eluded capture or identification. A direct result of these numerous highjackings was the radical improvement of airport security.

Important FBI conjectures

1. Cooper may have known the Seattle area and have been an air force veteran. He commented accurately from the air on Tacoma and McChord airforce base
2. Agents theorize that he took his alias from the hero from a popular French comic book of the 1970s
3. Cooper was not an experienced skydiver; he jumped at night, in rain, in 200 mph wind in civilian clothes. He also failed to request a helmet and didn't notice that his reserve chute was only for training, it had been sewn shut.
4. Agents have argued from the beginning that Cooper did not survive his jump.
5. Cooper must have known the 727. It was the ideal choice due to
 - The high forward placement of the engines
 - The unusual ability for an airliner to stay in slow, low-altitude flight without stalling
 - The possibility of opening the rear door without interference from the cockpit, this allowed Cooper to avoid the risk of physical confrontation
 - In addition, Cooper's knowledge of the wing flap setting of 15 degrees was highly specific knowledge

Queries and Mysteries

- Did Cooper survive? Why/Why not?
- Is it reasonable to suppose that the FBI may have manipulated the evidence in any significant manner?
- Would it be possible for someone to spend the money, either in the US or abroad, without extreme risk of arrest?
- Why has no-one ever come forward claiming to know the man in the photofit?
- Where had the money been for nine years and why were there only 90 notes found in the third bundle?