Unit 8: Beating a Lie Detector

Examiner: Hello, Jonny.

Jonny Phillips: Hi there.

Examiner: Would you like to take a seat?

Jonny Phillips: Sure.

The lie detector, or polygraph. How useful is it in detecting whether someone is lying? Is it possible to beat a lie detector? That's what Jonny Phillips wants to find out.

Lying is a stressful business. The natural physiological reactions to telling a big fat whopper is that your pulse quickens, you breathe faster, and you start to sweat. Polygraphs work by detecting these changes, so any spike on the chart can indicate stress and, therefore, the possibility of a lie. So, the key to deceiving a lie detector is to try and hide your real stress levels.

24 hours earlier, Jonny was in the lab with his friend Richard. When Richard wasn't looking, Jonny stole his games console. Can Jonny now hide his act of dishonesty from a polygraph?

I was hooked up to it so that my breathing, skin conductivity, and blood pressure could be measured.

Polygraph tests start with the examiner asking a series of basic questions to which the answers are known to be true. This establishes a baseline, which indicates the average stress levels of that individual.

Now, one rumored technique used by old spies was to put a drawing pin in their shoe. Now I'm gonna press my toes down onto this pin during the baseline questions. Hopefully the pain will increase my stress levels so that, during the potentially incriminating questions, my nervous stress won't register any higher on the charts.

Examiner: OK. I'm gonna ask you a series of questions. I just need you to answer 'yes' or 'no' to each question. Are you known as Jonny?

Jonny Phillips: Yes.

Examiner: Is today Tuesday?

Jonny Phillips: Yes.

Examiner: Keep perfectly still for me.

Jonny Phillips: Which is quite difficult when your big toe's jammed down on a drawing pin.

Examiner: Are you wearing a gray jacket?

Jonny Phillips: Yes.

With the baseline questions over, it was time for the main interrogation to begin. I was also hoping another trick might fool the machine. Stress makes you sweat more, which increases your skin conductivity, putting telltale spikes on the graph.

So, earlier, I'd sprayed my fingers with anti-perspirant to reduce the flow.

Examiner: The test has started. Regarding the missing games console, do you intend to answer truthfully each question about that?

Jonny Phillips: Yes.

Examiner: Prior to age 25, did you ever steal anything from a shop?

Jonny Phillips: Yes.

Famously, in the late 80s, CIA agent Aldrich Ames beat two polygraph tests while he was spying for the Russians by, apparently, just being super relaxed. Have my techniques worked with similar results?

Examiner: Prior to 2005, have you ever taken anything from a friend knowing you would not return it?

Jonny Phillips: No.

Examiner: Do you know where the missing games console is right now?

Jonny Phillips: No.

Examiner: Did you take the missing games console that Richard was using?

Jonny Phillips: No.

Examiner: Well, Jonny, we've come to the end of your test, and I'm afraid to tell you that you actually failed the test. There was one particular question, which was 'Did you take the missing games console from the bench in the lab?' And it shows a significant change in your breathing, in your galvanic sweat resistance, and your blood pressure. You failed one question, so you failed the entire test.

Jonny Phillips: I'd made a fatal error. Apparently, the pain-induced stress caused by the drawing pin produced a totally different spike to that caused by nervous stress. And tests have shown that most anti-perspirants actually increase skin conductivity.

I may not have beaten the lie detector, but a failed test isn't enough for a conviction in a U.K. court of law—although it might help persuade a jury.