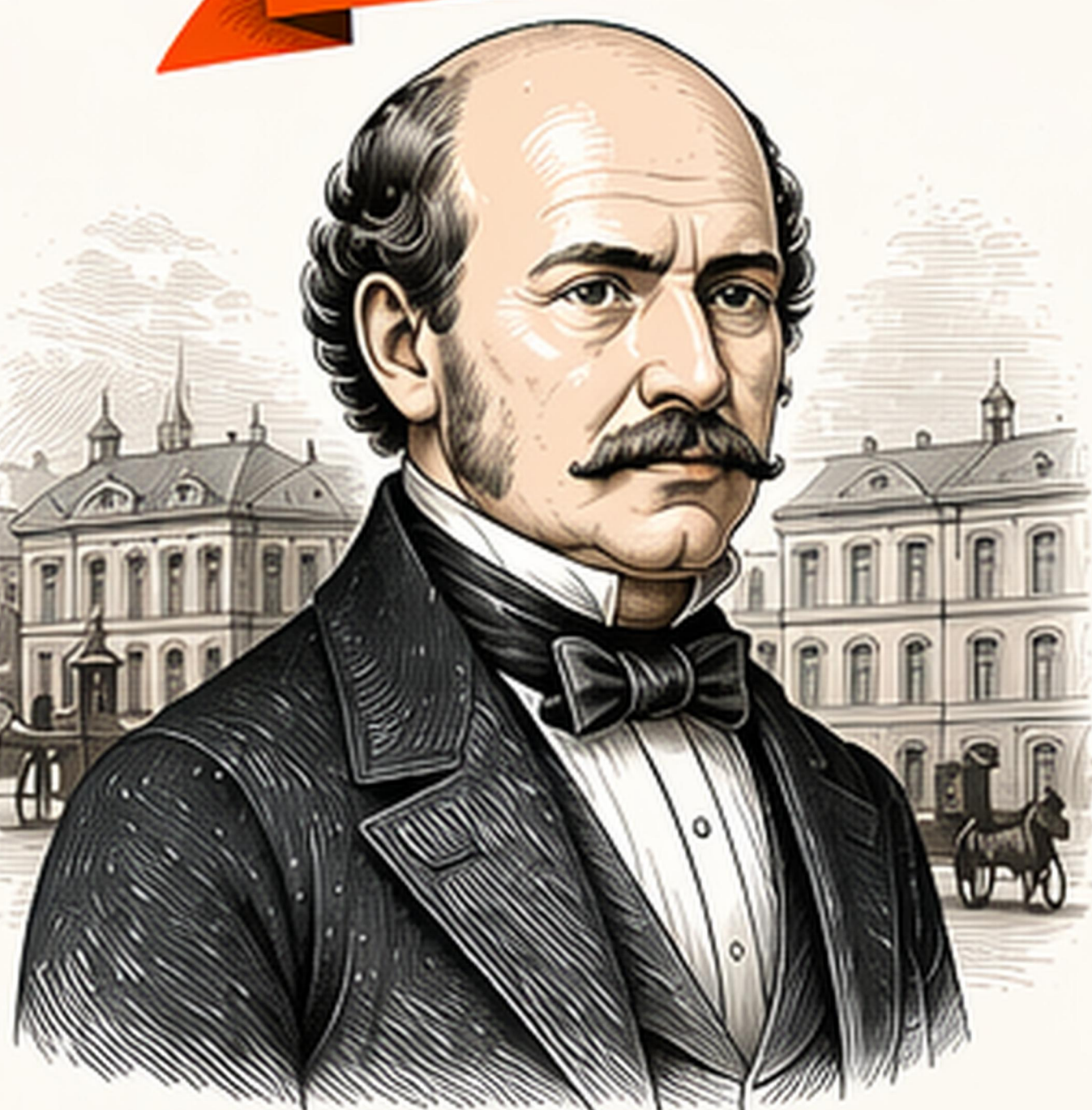


DR. SEMMELWEIS

Think through anything.

THE HANDWASHING MYSTERY



- ✓ It's 1847. In Vienna, doctors believe disease comes from "bad air."
- ✓ At one hospital, 5x more mothers die in the doctors' ward than in the midwives' ward.
- ✓ Semmelweis notices the difference: doctors do autopsies, then deliver babies without washing hands.
- ✓ He makes them wash. Deaths drop overnight.
- ✓ He's fired. It takes 20 years for the world to accept he was right.



EUREKA MOMENT

Spotting patterns is great — we're good at that. But what's hardest is **LETTING GO** of patterns you believe in when the data no longer supports them.

LOOK CLOSER — WHAT'S DIFFERENT?

Semmelweis compared everything. Most patterns held true—until he found the one that didn't.

1 AIR QUALITY?



Same air in both wards. Both were well ventilated.



✗ DOESN'T EXPLAIN THE DIFFERENCE

2 CLEANLINESS?



Both wards were clean, organized, and well kept.



✗ DOESN'T EXPLAIN THE DIFFERENCE

3 TYPE OF PATIENTS?



Same kinds of mothers. Same types of births.

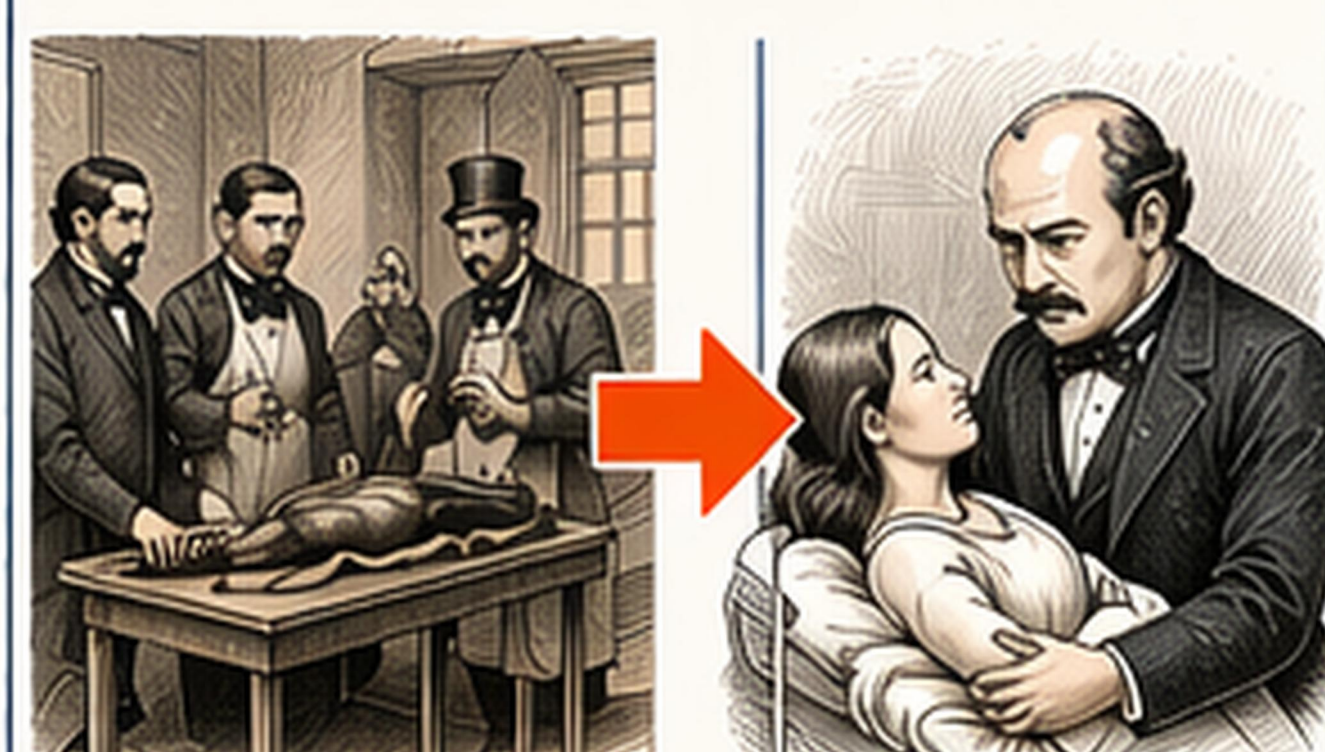


✗ DOESN'T EXPLAIN THE DIFFERENCE

4 DOCTOR BEHAVIOR?



Doctors performed autopsies on cadavers. Then they came straight to deliveries—without washing their hands.



✓ THIS BREAKS THE PATTERN!

⇒ WHEN THE PATTERN FAILS... LOOK FOR A HIDDEN DIFFERENCE. ⇐

THE TEST

Semmelweis changed one thing:

Doctors had to **WASH THEIR HANDS** in a chlorine solution before delivering babies.



THE RESULT

The death rate in the doctors' ward

BEFORE

1 in 10 mothers died



AFTER

1 in 50 mothers died



✓ Matched the midwives' ward: 1 in 50

WHAT HAPPENED NEXT?

HE WAS FIRED.



Why?

- ✗ People trusted the old pattern: "bad air."
- ✗ They ignored the new evidence.
- ✗ It's hard to admit you were wrong.



THE REAL LESSON

Critical thinkers are willing to **challenge widely accepted patterns** when the evidence dictates it.



OBSERVE
Look carefully. Notice the data.



FIND PATTERNS
Spot what seems to be true.



QUESTION
Ask: What if this pattern is wrong?



TEST & LEARN
Let the evidence—not your beliefs—guide you.



CRITICAL THINKERS DON'T JUST FOLLOW PATTERNS — THEY CHALLENGE THEM WHEN THE EVIDENCE SAYS IT'S TIME.