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## Chapter 27.

# The COGNITIVE SCIENCE behind HUMAN ERROR.

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(In the book the full chapter has 12 pages and 18 scientific references.)

### Wise quotes:

- “All men (and women) learn from their mistakes, but only wise men learn from their errors.” **Winston Churchill**, the British prime minister during WW2.
- “A man’s errors are his portals of discovery.” **James Joyce**, Irish novelist of “Ulysses.”
- *By ignorance, we mistake; by mistake, we learn.*” **Old Latin proverb.**

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## 1. INTRODUCTION.

THE CHALLENGE: Anesthesiologists must seek remedies to prevent themselves from making ampule swaps, syringe swaps, or wrong route injections while experiencing distractions while multitasking during critical anesthesia phases.

A good QUESTION is: When are the critical phases of anesthesia?  
The ANSWER is the entire anesthetic.

The *psychology of medical drug errors in anesthesia* is the same as the *psychology of decision-making*. Cognitive errors involve faulty thought processes and subconscious biases. They contribute to (i) wrong assessments of situations and (ii) patient injury. Technical errors account for a few medical errors, and mistakes in thinking account for the bulk.

We will attempt to understand error psychology and cognitive science, seeking ways to avoid making drug errors.

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