

Fully Observable vs. Partially Observable refers to how much of the environment's current state the agent can "see." If the agent can see everything relevant to decision-making at a given moment, the environment is fully observable. For example, chess is fully observable because the entire board and all pieces are visible. In contrast, if only part of the environment is visible, the environment is partially observable. A self-driving car in heavy fog or a player in poker (who cannot see opponents' cards) faces a partially observable environment.

Accessible vs. Inaccessible is a different concept. This refers to whether the agent can ever obtain all the information it needs for decision-making, in principle. An accessible environment makes all relevant information available. For example, an online airline booking system has access to all flights, times, and fares in its database. An inaccessible environment hides some information permanently. A medical diagnosis system is an example: no matter how many tests are run, the doctor or AI cannot have complete knowledge of the patient's body at all times.

The **solid reason why these two are not the same** is that observability is about a **snapshot of visibility at the present moment**, while accessibility is about the **total possibility of obtaining information at all**. For instance, chess is both fully observable and accessible. Poker is partially observable because cards are hidden during the game, and also inaccessible because the agent can never know opponents' hidden cards in principle. Similarly, fog on the road makes driving partially observable, but the fog can clear later. By contrast, the inner biology of a human body may always remain inaccessible no matter how much time passes.

In short:

- **Observable asks:** "Do I see everything right now?"
- **Accessible asks:** "Can I ever know everything I need?"
Because one is situational (current state) and the other is fundamental (knowledge limits), they are **not the same**.

