

How Do You Know The Window Is A Window?

Lesson 20 · Part 2 — a worked argument about perception · theology, computer vision and chaos arriving at the same answer

TLDR / 80-20

You cannot recover the room from the window. You can recover its structure, up to a transformation you cannot fix from inside.

Not certainty, not nothing. Three fields reach that same middle independently, and one of them states it as a theorem.

The argument, as it was actually made

- **The opening claim.** Perception is not reality. We live inside a perception; the real is larger. His life and the miracles are evidence that something exceeds the perceived order.
- **The first objection, and it is a good one.** If perception is a window, how do you know *that*? The judgement is made from inside. It recurses with no floor.
- **The second objection, sharper.** A 2D projection is measure-zero inside a 3D space. Infinitely many bodies cast the same shadow, so the image carries almost nothing about its source.
- **The conclusion, in its final form.** The danger is not that the shadow is unreal. It is that reverse-engineering reality *from* a shadow produces confident errors.
- 杯弓蛇影 — **the bow's reflection taken for a snake.** He drank, and the fear made him genuinely ill. The reflection was real, the snake was not, the sickness was.

Where the argument holds

- **The percept is not the object, and that part is not controversial.** Signals are not the thing that caused them. Every account of perception since Descartes concedes this.
- **The regress is genuine and nobody has solved it.** You cannot step outside perception to check perception. No tradition in the corpus escapes it; they only differ in where they stop.
- **The fibre really is infinite.** Given one image, the set of scenes producing it is unbounded. This is not a philosopher's worry, it is a geometric fact.
- **A single view is worth nothing.** Hartley and Zisserman state it directly: from one image, depth is unrecoverable. The 0.000001% intuition is correct for that case.

Where it overreaches

- **"Not verifiable" and "not real" are different predicates.** One is about knowing, the other about existing. The argument earns the first and spends it on the second.
- **The tampering case needs the shadow to be real.** You cannot forge what does not exist. If the shadow were nothing, there would be nothing to add a shape to.
- **"Just signals firing" — the word *just* carries the whole claim.** The signal exists. The open question is whether it resembles its cause, not whether it is there.

What actually answers it — from three fields

Field	The same finding
Computer vision	One view recovers nothing. Two recover structure up to a projective transformation; with calibration, up to a similarity . Ambiguity collapses from everything to a known group.
Chaos	Error grows exponentially, then saturates at the attractor's width. The detail is lost forever, the structure is not lost at all.
Scripture	<i>"Now we see through a glass, darkly; now I know in part."</i> Partly — not falsely. <i>"The things which are seen are temporal"</i> — not unreal.

- **You are not a single static view.** You get a stream of projections from a moving viewpoint over a lifetime. That is structure from motion, the condition that makes reconstruction possible.
- **杯弓蛇影 is a false correspondence, and vision has a name for it.** One view, one confident match, one wrong scene. It is the outlier that wrecks a fit.
- **Tampering has a technical answer: RANSAC.** No single correspondence can be trusted. A forgery must stay consistent across many views, over time, across observers and across senses, and that cost compounds.
- **The undetectable forgery survives, and should be granted.** A perfectly consistent deception cannot be ruled out. But it predicts the same observations forever, so it never changes what to do next.

AI's Take

- **The snake-in-the-cup framing is the strongest version of the argument,** and it is his. It relocates the problem from the shadow's reality to the inference drawn from it.
- **The honest landing is narrower than either side wanted.** Not "the world is real", not "it is a projection". You know the shape and cannot fix the scale from inside.
- **Three fields converging is the actual finding.** Optics, chaos and vision were not consulted for theology, and all three say: lose the detail, keep the structure.
- **Where each tradition stops is the revealing part.** The gospels stop at a person, the Gnostics at a restlessness, the Heart Sutra by negating the knower along with the known.
- **The transferable rule.** When an argument slides from *cannot be checked* to *is not there*, that slide is where to look. Same shape as Lesson 12.

Provenance. This lesson is a live argument, not a survey. The claims under "the argument" are David's, in the order he made them. The objections are mine. Neither side is tidied up to win.

1. Corpus: *king_james_bible* (1,695), *pistis_sophia* (400), *Hartley_Zisserman_Multiple_View_Geometry* (668), *Strogatz_Nonlinear_Dynamics_and_Chaos* (520). Scripture quotations verified by exact string match.

2. Reconstruction ambiguity is Hartley & Zisserman §10.2; the calibrated case fixes structure up to a similarity, the uncalibrated only up to a projectivity.

3. An earlier framing — that the resurrection proves the world is an illusion — was withdrawn during the argument. The gospels resist that reading on purpose (Luke 24:39, 42–43; John 20:27), and the early church named it *Docetism*. Part 1 carries the detail.

4. The unanswerable case stands: a perfectly consistent forgery is not refutable. It is granted here rather than argued away.

5. Title and framing are mine. The questions, and the argument being answered, are David's.