AIAI-EVD-007 | CHAPTER 07 | Research notes

A good fit does not settle what a change will cause.

Different mechanisms can explain the same observations while predicting different consequences of an intervention.

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Take away three things

1. Separate prediction from intervention.

2. Expose the assumptions behind a causal explanation.

3. Keep competing mechanisms visible when the evidence cannot choose.

Two questions that need different evidence

What tends to happen alongside a condition is a different question from what would happen if we actively changed it. A system can predict a pattern without identifying its cause.

Direction, hidden common causes and other structural assumptions can affect the proposed intervention.

What the exploratory work examined

The reviewed draft constructs multiple causal models that reproduce the same synthetic observational tables while giving different intervention predictions. The examples are exact counterexamples built to make the distinction visible.

They illustrate an established identification limit. They do not discover the mechanism behind a real dataset or evaluate an autonomous policy system.

How to use the distinction

Write down the proposed mechanism, the assumptions needed and alternatives compatible with the observations. Ask what new information or intervention could distinguish them.

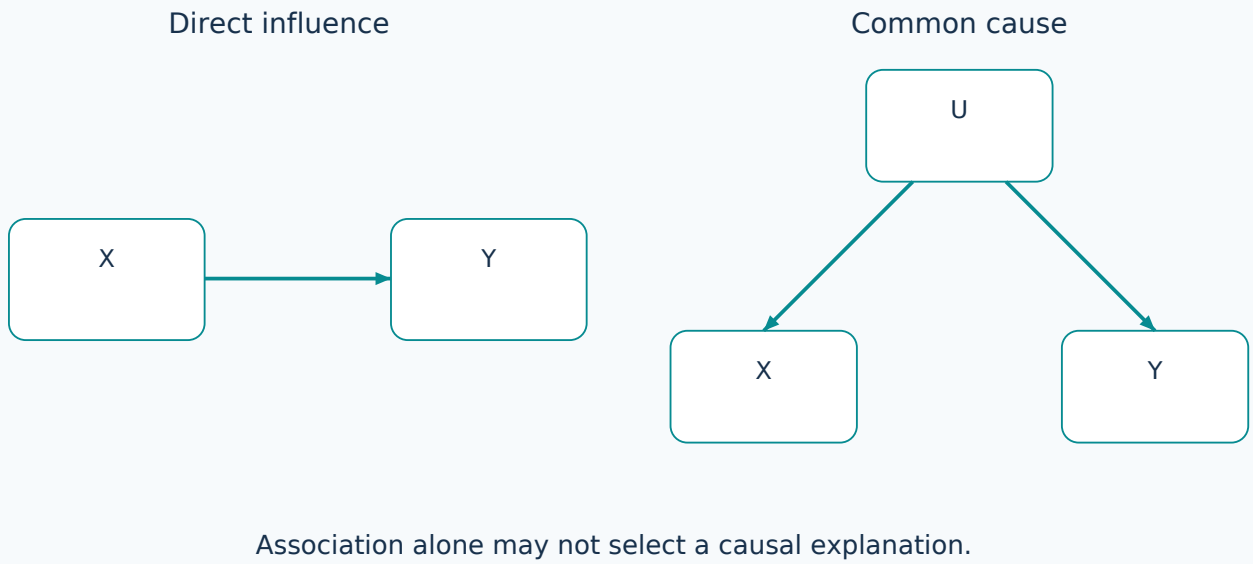
Where a single effect cannot be justified, preserve a range of compatible possibilities and the assumptions that would narrow it.

The transformation connection

A workflow change should be connected to an explanation of why it might help and an observation plan for its wider effects. This gives a proposal a route to testing and correction.

Figure 07. The idea in one view

FIGURE 07 / A good fit does not settle what a change will cause



Concept illustration. Read the chapter for its scope and assumptions.

Conceptual explanation with illustrative inputs where shown. This figure is not an empirical result or a validation of a deployed system.

Basis and scope

Public explanatory note informed by exploratory UMT-Ω research drafts reviewed 27 October 2026. The underlying studies use synthetic constructions, are not peer reviewed or externally replicated, and do not evaluate the complete OMNI CORTEX architecture. No private draft or dataset is included here.

Read online and explore related work

Open this chapter online

The online edition includes interactive representations where useful. The chapter remains complete as a static explanation.