

THE COUNTERFACTUAL CASEBOOK

THE OTHER VERSION OF TUESDAY

ONE CHANGE / TWO STORIES / NO PROPHECY



A companion to the Counterfactual Bureau

Twelve fictional records, a one-change method and printable worksheets

HOW TO USE THIS PUBLICATION

A cabinet of unobserved endings

This casebook is an independent educational publication. It does not reproduce website screenshots and does not make claims about actual decisions in visitors' lives.

THREE LEARNING OUTCOMES

01 Distinguish a record from a possibility

Say whether a statement is asserted within our invented scenario, stipulated as an assumption, or unknown even inside the scenario.

02 Isolate one proposed difference

Modify a decision or constraint while saying out loud what remains fixed and why that assumption could fail.

03 Resist the comfort of hindsight

Spot when knowing the ending makes one explanatory story seem inevitable, although several explanations still fit.

Reading convention

DOCUMENTED EVIDENCE names published empirical or methodological research, with references.

INTERPRETATION identifies a defensible but contestable reading. ILLUSTRATIVE MODEL denotes a rule in the fictional case compiler. FICTION labels all twelve narratives. Do not promote a fictional branch into a real historical fact.

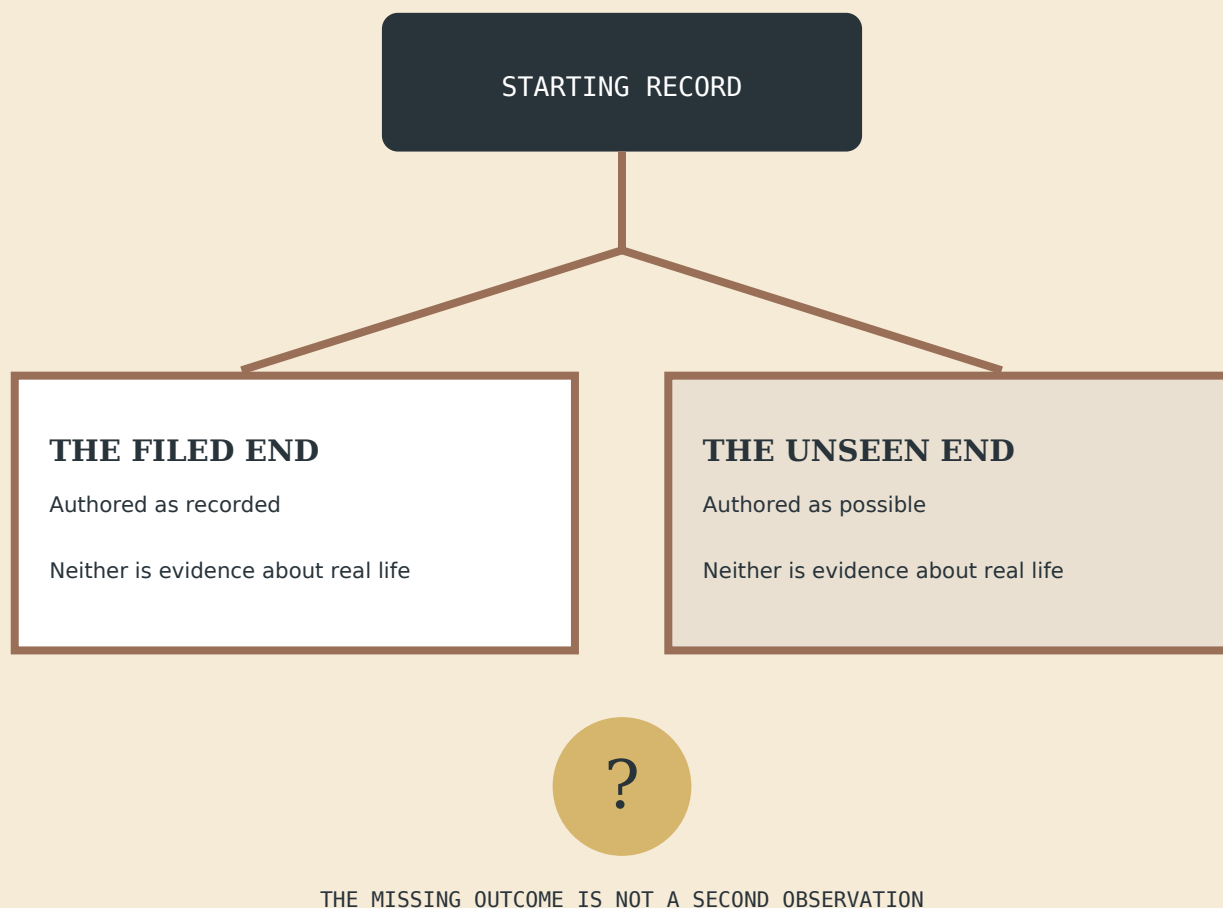
How to work with a file

Read the starting situation without checking the alternate ending. Write down what is known inside the story. Decide which one variable could be changed, and keep the other two as explicit commitments. Then read both authored branches and ask how a competing mechanism could produce the same result. A good analysis often ends with uncertainty, not victory.

The printed exercises work without any device. Nothing in this book asks you to describe a personally sensitive event.

What forks—and what does not

The diagram is not a map of parallel universes. It depicts two different kinds of statement with different evidential status.



The figure's central error to avoid

The left page is “recorded” only because the author put a statement into the fiction. The right page is an unobserved alternative that an author can make plausible. Neither page is a measurement of a real counterfactual outcome. A research question about actual causal effects would require evidence and an explicit identification strategy.

A second question matters: which backgrounds are held constant? If those conditions are themselves consequences of the choice, “all else equal” may be incoherent. In the office, such constraints are intentionally visible rather than concealed in the prose.

MENTAL MODELS

Why “if only” feels like insight

Counterfactual thought can support preparation, explanation and moral reflection. It can also overstate how predictable an outcome was.

FOUR TERMS THAT MUST NOT BE COLLAPSED

Counterfactual

A conditional about a state different from what is taken as actual: “If the train had not been boarded, then ...”. The semantics of such conditionals are philosophically contested.

Mental simulation

The construction of a possible course of events. Its accessibility or vividness should not be mistaken for independent evidence.

Hindsight bias

A family of retrospective judgment distortions associated with knowledge of what actually happened. Fischhoff’s work helps explain why hindsight is not equivalent to foresight.

Potential outcomes

A framework for defining causal comparisons by considering outcomes under alternative treatment or exposure states. Real estimation requires a suitable design and assumptions.

Two apparently opposing insights can both be true: an imagined alternative can help us ask a better question, and the imagined alternative can mislead when we treat it as the answer. The point of the casebook is to practise that boundary.

Hindsight is not foresight

A research illustration anchored in Baruch Fischhoff's 1975 article, not a reconstruction of any original experimental dataset.

DOCUMENTED EVIDENCE

Fischhoff examined judgments affected by outcome knowledge and described how people can misread the availability of a known ending as if it had been foreseeable beforehand. His original paper, "Hindsight ≠ Foresight," appeared in the *Journal of Experimental Psychology: Human Perception and Performance* in 1975. His 2025 reflection revisits the phenomenon. These bibliographic facts and general abstracts were checked; the casebook does not reproduce data or make numerical claims.

Fictional miniature / the clerk who knew the ending

A clerk reads that Mira reached the workshop early by train. The clerk says, "Of course the train was always the rational choice." The record also mentions lost notes. The clerk has not observed the bus branch, delays elsewhere or the value Mira attached to arriving with the notes.

Questions a careful reader asks

Before: What information was available at the platform? After: What became known only because the train journey was followed? Counterreading: Could a less vivid bus story be no less plausible? Revision condition: What credible route data or independent constraints would alter the causal account?

This example illustrates the problem of outcome knowledge. It does not claim that every individual experiences hindsight bias, or that this particular fictional clerk is clinically impaired. The concept does not permit personal diagnosis.

Reference anchor: Fischhoff (1975) and Fischhoff (2025); full citations on pages 18–19.

A story is not an intervention

The language of changing one variable resembles causal inquiry. The evidentiary burden remains very different.

DOCUMENTED METHODOLOGY

Rubin (1974) discusses estimating causal effects using randomized and nonrandomized studies. Holland (1986) examines statistical causal inference through a potential-outcomes framing. Woodward's interventionist approach offers a philosophical account of explanatory dependence. These frameworks ask what comparisons would warrant causal claims; they do not turn a fictional scene into experimental data.

A credible controlled question

Suppose a school wants to test whether one reminder changes sign-up attendance. A research design would specify the intervention, identify units and outcomes, examine confounding and spillovers, and decide how uncertainty will be represented. Our fictional library club does none of this. It deliberately shows that a reminder may be sent without affecting attendance.

Two defensible perspectives

Interventionist reading: compare what would change under a defensible intervention on one variable.

Critical reading: a single contrast may hide preemption, overdetermination, background dependencies and changes to the wider system. The Stanford Encyclopedia of Philosophy surveys why simple but-for accounts of causation need refinement.

Working conclusion: one-change rules are good for transparency. They are not a universal ontology of causes. A causal study needs stronger assumptions than our scripted comparison supplies.

COMPILER SPECIFICATION

The Branch Record Office / exact mechanics

A fully inspectable reading model: 12 authored case files, three binary controls, a visible constraint and a rejection rule.

INPUT SCHEMA · NO SCORES, NO RANDOM OUTPUTS

Case ID

A fixed enumerated value among the twelve records, default LAST TRAIN, TUESDAY. A case switch restores all variables to their defaults.

A — background constraint

fixed [default] or relaxed. “Relaxed” calls up a case-specific contextual possibility, explicitly marked hypothetical.

B — decision

record [default] or alternate. “Alternate” calls up the authored decision branch, while A and C remain fixed.

C — unknown factor

unresolved [default] or revealed. “Revealed” tests one different possible hidden condition; it does not acquire new evidence.

VALIDATION

Count the binary controls that differ from defaults. Zero changes displays the baseline and its unobserved comparison. Exactly one change displays one of three transparent alternatives. Two or more changes are rejected with: “Too many changes — isolate one difference.” Unknown codes are invalid. Undo restores the immediately previous control state; Reset restores the current case defaults.

The same input always returns the same authored text. There is no randomization, personal input, storage, analytic logging, cloud response or probability meter.

WORKED TRANSCRIPT

Last Train, Tuesday / one controlled change

Follow the actual rules. The example is fictional, including its “recorded” ending.

BASELINE / A=FIXED, B=RECORD, C=UNRESOLVED

Setup: Mira reaches a station as the last train is announced. A: The platform gate remains open for two minutes. B: Board the train. C: A service disruption could affect either route.

Left page · recorded in fiction

Mira boards; she arrives before the workshop begins, but loses her notes on the carriage.

Right page · unobserved comparison

Mira takes the bus; she arrives after introductions but keeps her notes and meets a helpful stranger.

PERTURBATION / A=FIXED, B=ALTERNATE, C=UNRESOLVED

Change exactly B: choose “Take the night bus.” The branch record changes from boarding to the bus narrative. The platform’s two-minute constraint and the unknown disruption remain as before. The compiler reports “ONE CHANGE · DECISION” and explains which variable changed.

Interpretation: There are two tradeoffs: arrival time and retention of the notes. The choice cannot be ranked without a stated objective. The bus branch is not empirically observed, even though its prose is clear.

Failure test: now set A=relaxed without restoring B. The compiler rejects the request with “Too many changes — isolate one difference.” This is a method rule, not a law of the real world.

ADVERSARIAL CASE

When changing the action changes nothing

This is the case designed to resist the seduction that every choice must cause a different outcome.

THE LIBRARY WORKSHOP / FICTION

Ravi organizes a public reading club with only three attendees signed up. The room holds twenty people and posters are already printed. The variable under inspection is whether Ravi sends an extra reminder.

Observed in fiction / original branch

Ravi sends a reminder; attendance remains three, because everyone who can attend has already registered.

Illustrative branch / changed B

Ravi sends no reminder; attendance still remains three, because everyone who can attend has already registered.

The intervention changes the action, not the chosen result. The independent bottleneck is the availability of attendees. Another unknown, such as a walk-in participant, could change both stories. We do not know it from the record.

Why the counterexample matters

A narrative generator that must make every intervention produce a dramatic new outcome will manufacture causality. The correct educational response is to allow a zero-difference ending when the stated conditions justify one. This file teaches the possibility of null effects, not the numerical probability of any response to a reminder.

Reader prompt: Describe the empirical information you would need to judge whether reminders matter beyond this single invented club. Specify the outcome, relevant comparison group and evidence that would change your explanation.

THE TWELVE FICTIONAL RECORDS

Casebook folio 01 / files 01–03

Each card gives the setup, one recorded-in-fiction ending, an imagined one-change branch and an adversarial counterreading. Complete scenario notes remain on the website.

FILE 01 / FICTIONAL

Last Train, Tuesday

SETUP: Mira reaches a station as the last train is announced. Constraint: The platform gate remains open for two minutes.

RECORDED: Mira boards; she arrives before the workshop begins, but loses her notes on the carriage.

ONE CHANGE: Mira takes the bus; she arrives after introductions but keeps her notes and meets a helpful stranger.

CONTEXT: The workshop may start late; punctuality might not matter.

UNKNOWN: A service disruption could affect either route.

CAVEAT: A late start makes both routes functionally equivalent; neither branch proves the smarter choice.

LESSON: Earlier preparation matters more than the transport choice alone.

FILE 02 / FICTIONAL

The Borrowed Umbrella

SETUP: Eshan sees storm clouds before leaving the neighbourhood library. Constraint: The library closes at six and rain is possible.

RECORDED: Eshan borrows it; he arrives dry but must return it the following day.

ONE CHANGE: Eshan leaves without it; the rain stops, and he takes a longer stroll home.

CONTEXT: A sheltered route may change the stakes.

UNKNOWN: The forecast could have been wrong.

CAVEAT: Weather remains dry in both stories, so the decision does not alter the immediate result.

LESSON: An observed dry arrival cannot establish that borrowing was unnecessary.

FILE 03 / FICTIONAL

The Quiet Meeting

SETUP: Leena reviews an ambiguous slide just before a team meeting. Constraint: The chair allotted five minutes for questions.

RECORDED: Leena asks; the misunderstanding is surfaced, but the meeting runs over.

ONE CHANGE: Leena stays silent; the meeting ends on time, then two colleagues interpret the slide differently.

CONTEXT: The chair might already know the ambiguity.

UNKNOWN: Another attendee may independently ask.

CAVEAT: A colleague asks the same question, producing the same clarification in both branches.

LESSON: Uncertainty is not always resolved merely by speaking.

THE TWELVE FICTIONAL RECORDS

Casebook folio 02 / files 04–06

Each card gives the setup, one recorded-in-fiction ending, an imagined one-change branch and an adversarial counterreading. Complete scenario notes remain on the website.

FILE 04 / FICTIONAL

The Community Garden

SETUP: Noor is offered one free afternoon to help plant seedlings. Constraint: The soil is dry and volunteers have limited water.

RECORDED: Noor plants; a volunteer carries extra water and most seedlings survive in the story.

ONE CHANGE: Noor waits; water arrives later, but shade moves and planting takes longer.

CONTEXT: Extra volunteers could change the bottleneck.

UNKNOWN: The water shipment may be delayed.

CAVEAT: A sprinkler starts regardless, removing the assumed water constraint.

LESSON: A helpful intervention can have knock-on effects outside the chosen action.

FILE 05 / FICTIONAL

The Unsent Draft

SETUP: Asha has written feedback on a neighbourhood newsletter. Constraint: The editor will publish the next edition tomorrow.

RECORDED: Asha sends it; the editor uses one suggestion but misses a nuance.

ONE CHANGE: Asha revises it in the morning; the message is clearer, but the edition is already laid out.

CONTEXT: The editor might accept late copy.

UNKNOWN: Delivery time can vary.

CAVEAT: The edition is postponed, so both choices lead to inclusion.

LESSON: The best-crafted message is not necessarily the most influential.

FILE 06 / FICTIONAL

The Repair Queue

SETUP: Irfan can repair a bicycle tyre now or inspect the whole wheel. Constraint: A repair shop closes in forty minutes.

RECORDED: Irfan replaces the tube; he rides away, then notices the rim still rubs.

ONE CHANGE: Irfan inspects the rim; he finds a burr but runs out of time to finish the repair.

CONTEXT: A nearby shop might be open later.

UNKNOWN: The rim problem may be cosmetic.

CAVEAT: The tyre remains flat for a separate valve reason in both branches.

LESSON: The fast fix and the thorough fix optimize different goals.

THE TWELVE FICTIONAL RECORDS

Casebook folio 03 / files 07–09

Each card gives the setup, one recorded-in-fiction ending, an imagined one-change branch and an adversarial counterreading. Complete scenario notes remain on the website.

FILE 07 / FICTIONAL

The Exhibition Label

SETUP: Tara curates a small photo exhibition with an ambiguous image. Constraint: The gallery permits one additional line on each caption.

RECORDED: Tara adds a line; viewers understand the setting but debate the intended meaning.

ONE CHANGE: Tara leaves it untitled; viewers generate diverse readings, some unsupported by context.

CONTEXT: Visitors may read the catalogue.

UNKNOWN: The photographer might revise the title.

CAVEAT: A curator talk supplies the missing context in either version.

LESSON: More context can reduce one confusion while narrowing an artwork.

FILE 08 / FICTIONAL

The Cooking Class

SETUP: Dev has enough ingredients for one group meal and a late guest arrives. Constraint: The kitchen has one small oven.

RECORDED: Dev changes the recipe; everyone receives a portion, but cooking finishes later.

ONE CHANGE: Dev keeps the recipe; it finishes promptly, and guests share smaller portions.

CONTEXT: A second tray may be available.

UNKNOWN: The guest may bring a dish.

CAVEAT: The late guest brings extra food, eliminating the shortage in both branches.

LESSON: What counts as success depends on a value judgment about timing and fairness.

FILE 09 / FICTIONAL

The Museum Ticket

SETUP: Sana arrives at a museum with time for only one gallery. Constraint: Both galleries will close at five.

RECORDED: Sana visits sculpture; she notices a technique she later sketches.

ONE CHANGE: Sana visits archives; she discovers a letter that reshapes her understanding of the exhibition.

CONTEXT: Gallery staff could provide a shortcut.

UNKNOWN: One wing may close unexpectedly.

CAVEAT: A shared tour moves through both rooms; the choice loses its exclusivity.

LESSON: There is no single objective best visit without specifying the goal.

THE TWELVE FICTIONAL RECORDS

Casebook folio 04 / files 10–12

Each card gives the setup, one recorded-in-fiction ending, an imagined one-change branch and an adversarial counterreading. Complete scenario notes remain on the website.

FILE 10 / FICTIONAL

The Library Workshop

SETUP: Ravi organizes a public reading club with only three attendees signed up. Constraint: The room holds twenty people and posters are already printed.

RECORDED: Ravi sends a reminder; attendance remains three because everyone who can come has already registered.

ONE CHANGE: Ravi sends no reminder; attendance remains three for the same reason.

CONTEXT: A local event may compete for attention.

UNKNOWN: A walk-in visitor could appear.

CAVEAT: This is the adversarial fixture: changed B, same attendance, distinct action trace.

LESSON: A single change may have no effect if the outcome depends on another bottleneck.

FILE 11 / FICTIONAL

The Shared Desk

SETUP: Pia and Arun both need the same desk for an afternoon. Constraint: There is one power outlet and a quiet corner.

RECORDED: They schedule shifts; each gets quiet time but loses the overlap for discussion.

ONE CHANGE: They share the desk; a useful exchange happens, but concentration becomes difficult.

CONTEXT: Another desk could become free.

UNKNOWN: Neither person may need mains power.

CAVEAT: The power supply fails; both plans need a different workspace.

LESSON: A seemingly fair allocation can impose hidden coordination costs.

FILE 12 / FICTIONAL

The Festival Map

SETUP: Omar volunteers to draw a map for a local festival. Constraint: Visitors have only one printed page to navigate.

RECORDED: Omar prioritizes landmarks; first-time visitors orient themselves visually but miss minor streets.

ONE CHANGE: Omar prioritizes street names; regulars navigate precisely, while first-time visitors hesitate.

CONTEXT: Signage onsite could supplement the map.

UNKNOWN: A temporary road closure could invalidate either layout.

CAVEAT: A volunteer at the gate gives directions, reducing the difference between versions.

LESSON: Different users need different evidence about what a map makes clear.

Claim versus evidence

An original matrix for keeping the status of a statement visible even when its words sound persuasive.

CLAIM	MATERIAL	STATUS
The file says Mira boards	A sentence in an authored story	OBSERVED IN FICTION
Mira would have arrived late by bus	An authored alternative branch	ILLUSTRATIVE MODEL
The gate stays open two minutes	A fixed condition inside the example	ASSUMPTION
The bus was actually worse	No independent comparison exists	NOT PROVEN
Outcome knowledge can bias judgment	Relevant published psychology	DOCUMENTED RESEARCH

Interpretative rule

Evidence is not the same as narrative coherence. “Observed in fiction” is intentionally qualified: the prose defines a stipulated world, not a real data collection. “Documented research” points to work whose bibliographic identity and broad claims were checked. “Assumption” names a premise you can criticize. “Not proven” records the conclusion a responsible reader must withhold.

Use this matrix when a story’s vividness makes you want to move it into the evidence column. The movement requires outside justification, not literary confidence.

PRINTABLE PRACTICE

Your one-change branch ledger

Choose a fictional case. Leave room for disagreement. No personal confessions are needed.

01 File title and written starting facts

02 One change (A, B or C) and what stays fixed

03 Alternative narrative — clearly marked possible

04 Another explanation that fits the facts

05 What you cannot establish from the record

06 Evidence that could change your mind

ANSWER KEY / MODELLED, NOT CERTIFIED

A worksheet with a disciplined ending

This is one defensible fictional analysis, not the uniquely correct answer to a causal problem.

01 / File

The Exhibition Label: Tara curates a photo exhibition with an image whose interpretation is ambiguous. The gallery allows a single additional caption line.

02 / One controlled change

B changes from “Add an explanatory line” to “Leave the image untitled.” A remains one line of permitted text. C, the possibility of a later catalogue or curator talk, stays unresolved.

03 / Two possible stories

The caption helps viewers locate the setting but risks narrowing interpretation; the untitled image elicits richer discussion and also unsupported guesses. Both descriptions are authored fiction.

04 / Competing account

A curator talk might give visitors the context in either condition. The effect attributed to the caption could partly be the effect of surrounding information.

05 / What stays unknown

We have no recorded visitor interviews, no measured understanding and no evidence that one label systematically caused a better outcome.

06 / Evidence to discriminate

A properly designed visitor study with a clear outcome measure, appropriate consent and comparable presentation conditions could inform a narrower claim. It would still require interpretation.

The exercise succeeds when the reader can articulate the limits of the example even after inventing an attractive alternative.

What the bureau will not claim

The point of a method is not to defeat uncertainty by hiding it. It is to make uncertainty workable.

LIMITS THAT MUST STAY VISIBLE

No alternate-life prediction

An invented decision fork never reveals a real person's unchosen past. The field guide avoids asking visitors for sensitive memories or regrets.

No individual diagnosis or verdict

A feeling of inevitability need not imply pathology; neither a single example nor a self-report proves hindsight bias in any person.

No causal effect size

There are no samples, probabilities, randomization, outcome measurements or confidence intervals in the case compiler.

No hidden surveillance

The static website stores nothing remotely. Its controls use only in-memory state; a downloaded text record is created locally by the browser.

No borrowed visual assets

Graphics are original vector drawings. Research titles, ideas, links and limited source facts remain the intellectual contributions of their original authors.

A cautious last sentence

Which part of the version I imagined was knowledge—and which part was preference, uncertainty or desire? The workshop is successful if that question remains open.

Sources and counterreadings, 01–06

Broad source details were checked using publisher or institutional pages on 28 October 2026. This is not a claim of full-text systematic review.

01 Roese, Neal J. (1997) — Counterfactual Thinking

Psychological Bulletin 121(1), 133–148

Supports: Counterfactual thought has multiple cognitive functions and is an established research subject.

Counterreading: A review of thought patterns does not validate scripted forecasts.

<https://pubmed.ncbi.nlm.nih.gov/9000895/>

02 Fischhoff, Baruch (1975) — Hindsight ≠ Foresight: The Effect of Outcome Knowledge on Judgment Under Uncertainty

Journal of Experimental Psychology: Human Perception and Performance 1(3), 288–299

Supports: Outcome knowledge can distort retrospective likelihood judgments.

Counterreading: The study does not establish how any particular fictional choice would turn out.

<https://www.cmu.edu/epp/people/faculty/faculty-images-and-files/jep-hpp-hindsight-foresight-1975.pdf>

03 Rubin, Donald B. (1974) — Estimating Causal Effects of Treatments in Randomized and Nonrandomized Studies

Journal of Educational Psychology 66(5), 688–701

Supports: Controlled design and randomization bear on causal inference.

Counterreading: Our narrative branches are not estimates from randomized data.

<https://doi.org/10.1037/h0037350>

04 Holland, Paul W. (1986) — Statistics and Causal Inference

Journal of the American Statistical Association 81(396), 945–960

Supports: The potential-outcomes framework distinguishes causal questions from simple associations.

Counterreading: A fictional same-person alternative cannot be observed as ground truth.

<https://doi.org/10.1080/01621459.1986.10478354>

05 Byrne, Ruth M. J. (2005) — The Rational Imagination: How People Create Alternatives to Reality

MIT Press

Supports: Mental alternatives are structured by reasoning processes.

Counterreading: Human imaginability is not proof that the alternative occurred.

<https://doi.org/10.7551/mitpress/5756.001.0001>

06 Byrne, Ruth M. J. (2016) — Counterfactual Thought

Annual Review of Psychology 67, 135–157

Supports: Counterfactual thought supports reasoning about the past and future.

Counterreading: Its affective functions make it vulnerable to preference and regret.

<https://doi.org/10.1146/annurev-psych-122414-033249>

Sources, licence and colophon

Further reading is cited, not reproduced or licensed as our creation. Source descriptions are intentionally bounded by the material actually checked.

07 Kahneman, Daniel & Tversky, Amos (1982) — The Simulation Heuristic

Supports: Mental simulation is a distinct judgment operation. Counterreading: Ease of simulation can mislead about probability.
<https://doi.org/10.1017/CBO9780511809477.015>

08 Woodward, James (2004) — Making Things Happen: A Theory of Causal Explanation

Supports: Interventions and explanatory dependencies matter to causal questions. Counterreading: Changing words in a story is not an empirical intervention.
<https://doi.org/10.1093/0195155270.001.0001>

09 Stanford Encyclopedia of Philosophy (2024 revision) — Counterfactual Theories of Causation

Supports: Simple one-factor accounts of causation face counterexamples and refinements. Counterreading: The philosophical disputes are not settled by this interface.
<https://plato.stanford.edu/entries/causation-counterfactual/>

10 Stanford Encyclopedia of Philosophy (2025 revision) — Counterfactuals

Supports: Counterfactual conditionals have philosophical and logical subtleties. Counterreading: Different semantics need not yield one preferred narrative.
<https://plato.stanford.edu/entries/counterfactuals/>

11 Fischhoff, Baruch (2025) — Fifty years of hindsight bias research—Reflection on Fischhoff (1975)

Supports: Hindsight bias remains a live research subject. Counterreading: The review does not guarantee immunity from bias through one exercise.
<https://pubmed.ncbi.nlm.nih.gov/39913490/>

12 Byrne, Ruth M. J. (2017) — Counterfactual Thinking: From Logic to Morality

Supports: Counterfactual thinking can influence moral judgments and reasoning. Counterreading: This ethical link is context-sensitive and should not be used to assign blame.
<https://doi.org/10.1177/0963721417695617>

IMPRINT / OPEN SHARING

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