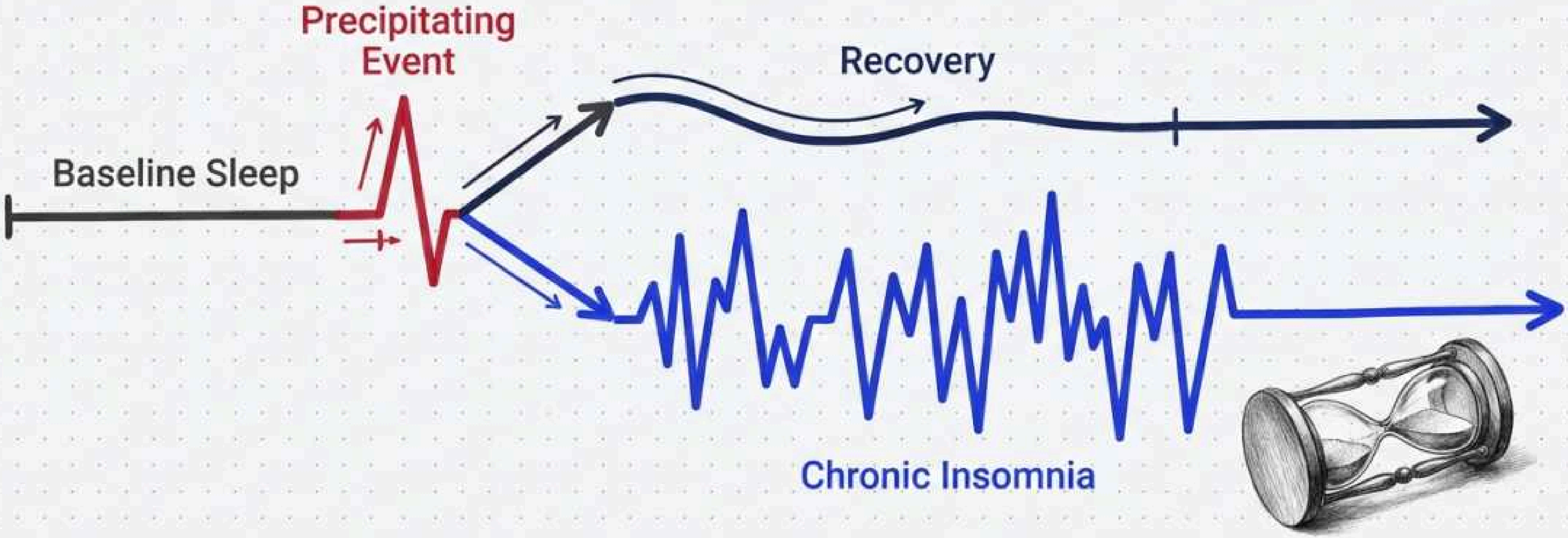
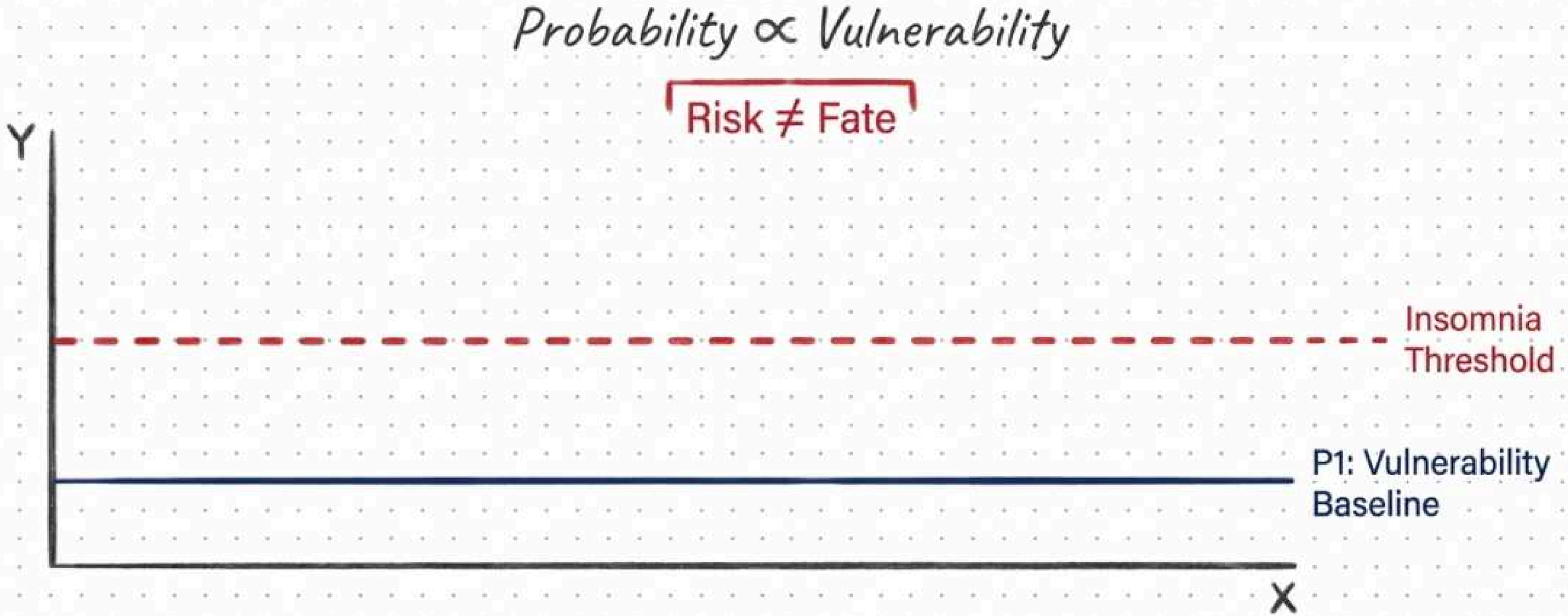
The clinical puzzle is why insomnia outlasts the initial stressor.

CBT for insomnia (CBT-I) is built on an account of maintaining factors, not on the claim that character or willpower is to blame. Most people sleep badly during an acute crisis and recover. A specific subset does not, eventually fearing the bed itself.



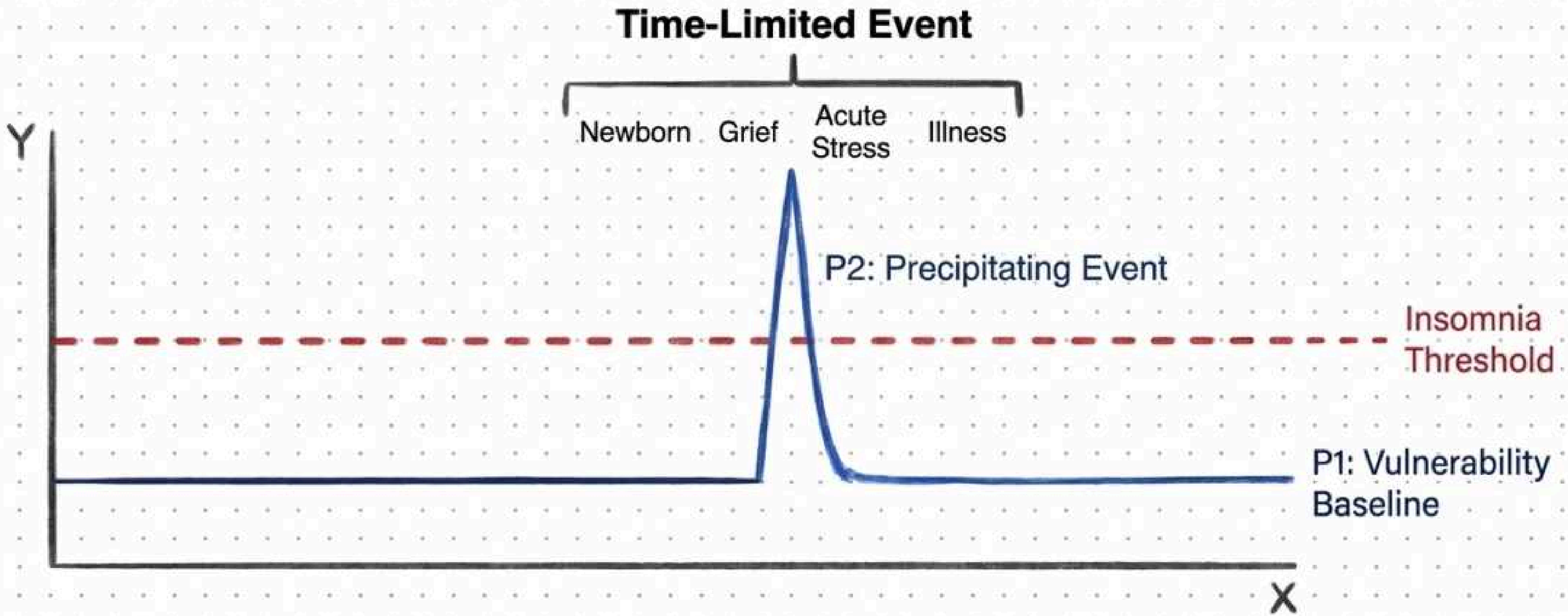
Predisposing factors raise the baseline probability of a sleep disturbance.

The first P in Spielman's three-factor model represents stable features (e.g., light sleeper, anxious temperament). They do not produce the disorder alone, but make the sleeper more vulnerable to later insults. It is a risk, not a fate.



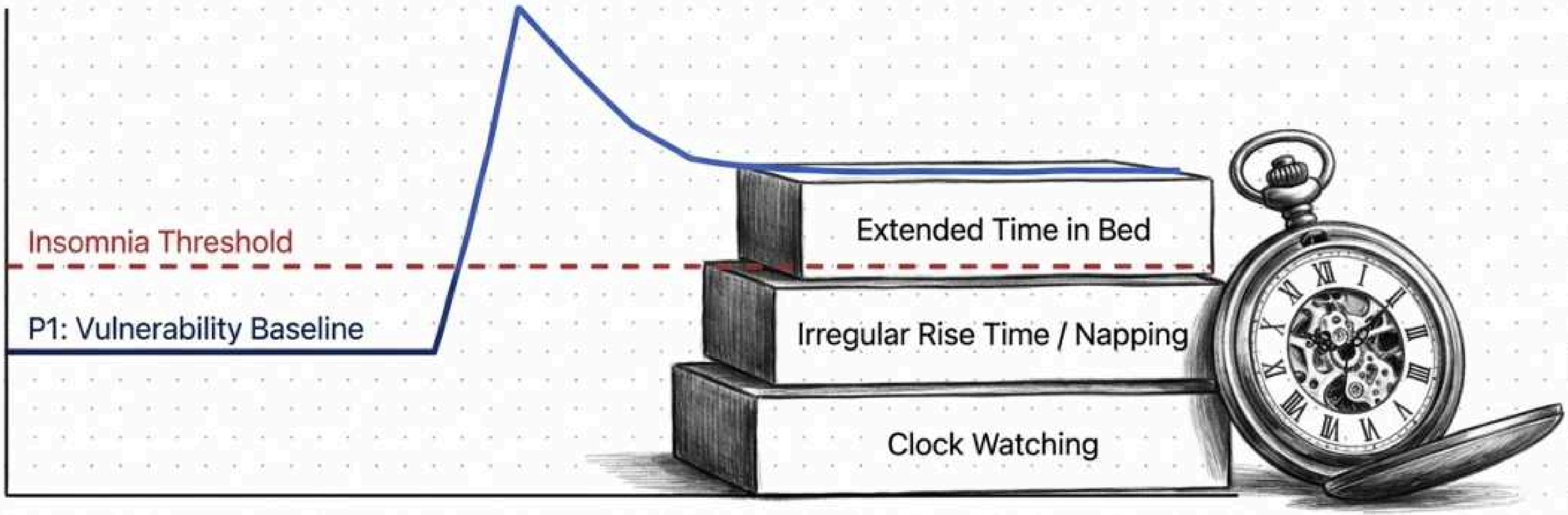
Precipitating factors act as time-limited triggers that push sleep off course.

The second P. Acute stress, illness, or grief push sleep off its usual course. If nothing else happened, sleep would return to normal as the event recedes. Because maintaining factors can be changed, the disorder is not permanently fixed by this original event.



Perpetuating factors artificially maintain the disorder once the trigger fades.

The third P. These are understandable responses to poor sleep that become part of the problem. They fragment sleep, weaken the association between bed and sleeping, and reduce nighttime sleep pressure.



The sleep environment can become classically conditioned for arousal.

Richard Bootzin's stimulus control theory (learned arousal). Spending night after night awake and frustrated pairs the setting with wakefulness. The context of sleep acquires the wrong meaning.



(Neutral Stimulus)

+



(Frustration/Arousal)

→ Wakefulness



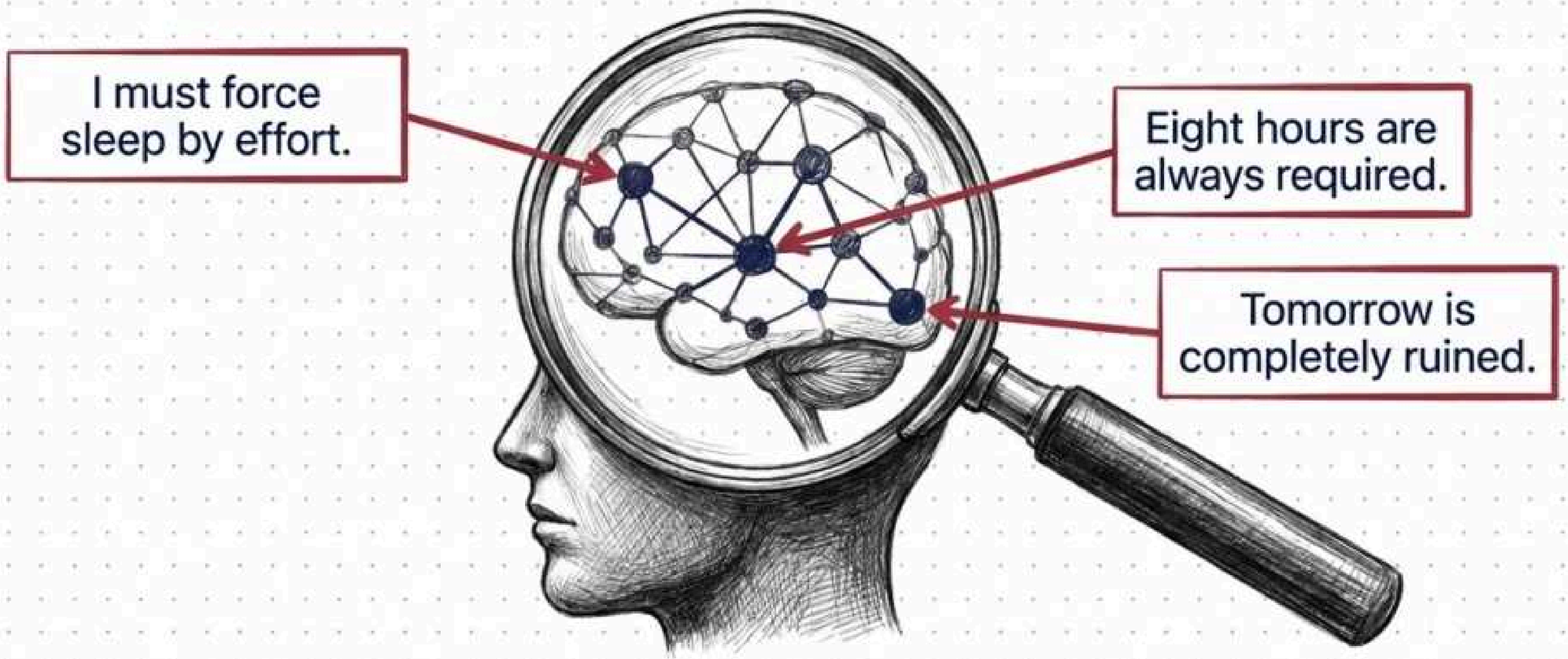
→ Wakefulness

(Conditioned Response)



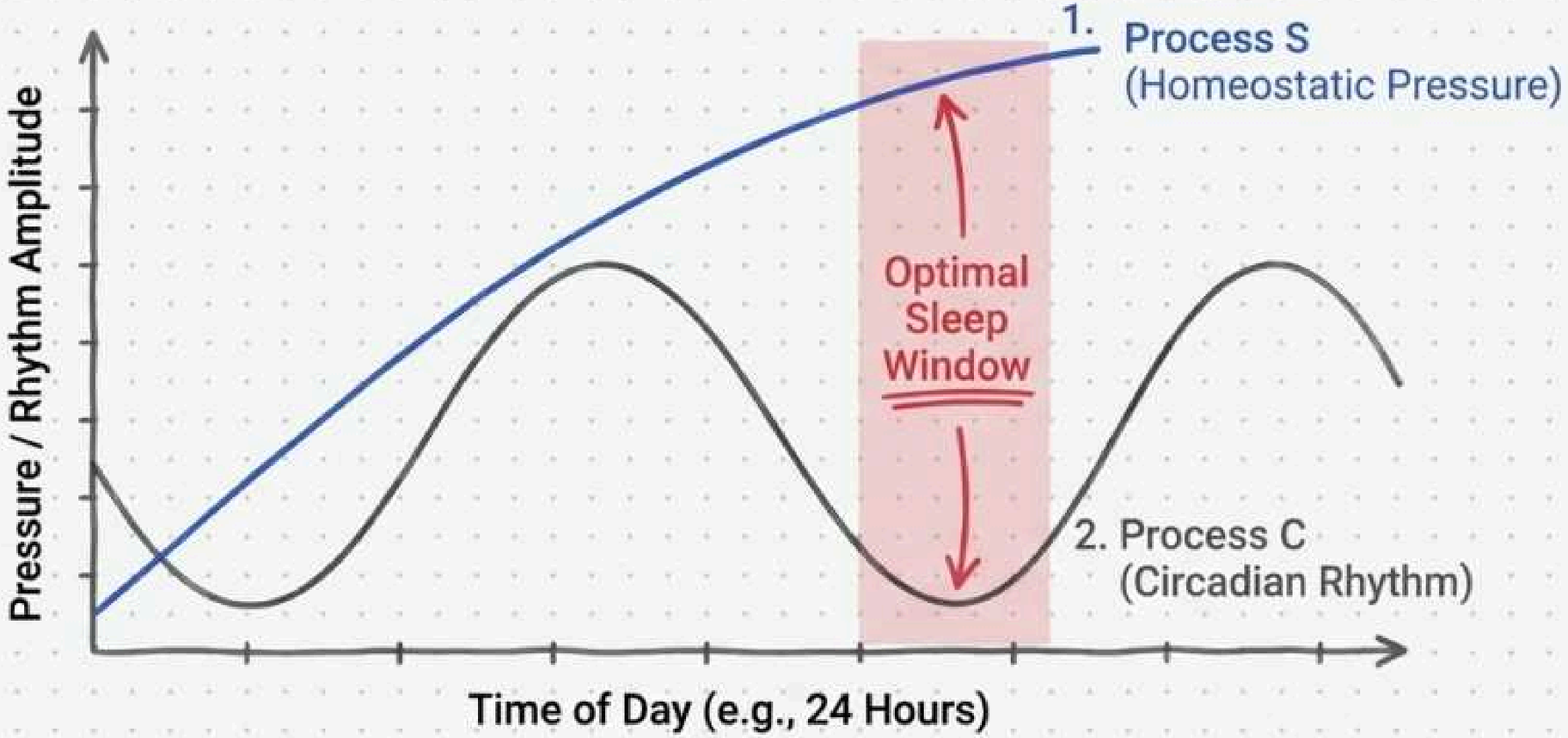
Rigid or fearful thinking turns sleep into an examination.

Charles Morin's cognitive model. Unhelpful beliefs and hyper-monitoring encourage safety behaviors and more clock watching. These beliefs are exaggerated rather than absurd, requiring a careful look at personal evidence to dismantle.



Behavioral habits can severely misalign with core sleep physiology.

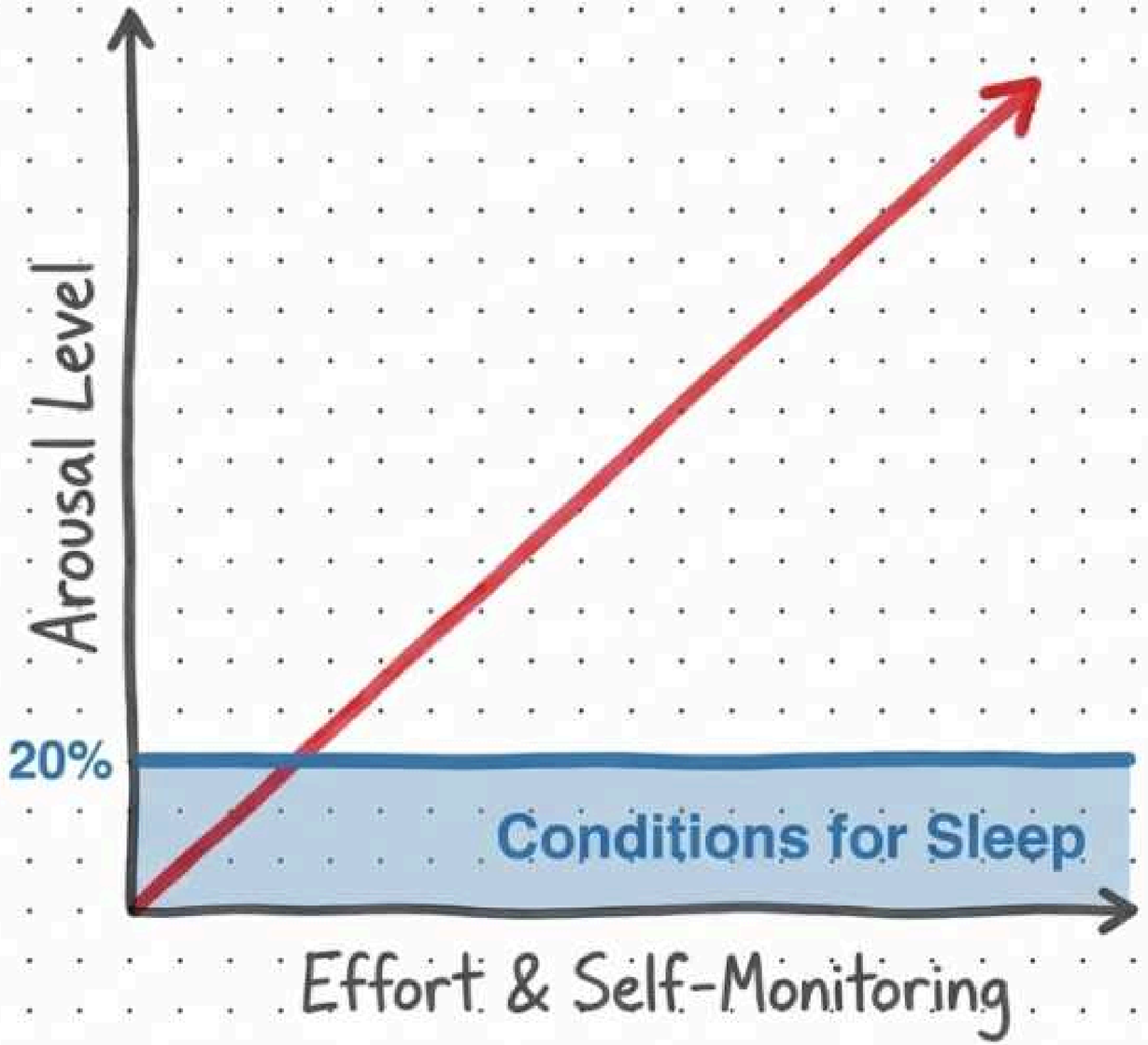
Sleep relies on two biological processes. Late napping or irregular schedules leave a person in bed when sleep pressure is weak or the clock is aimed at wakefulness. A purely mental effort to sleep against these forces usually fails.



Trying harder to sleep creates a paradoxical increase in arousal.

Sleep is not a voluntary motor act like lifting a hand. The person who announces that sleep must happen now has already left the conditions under which sleep arrives.
CBT-I aims to change schedule, context, and appraisal—a reasoned attempt to get out of the struggle.

↑ Effort → ↑ Arousal → ↓ Sleep

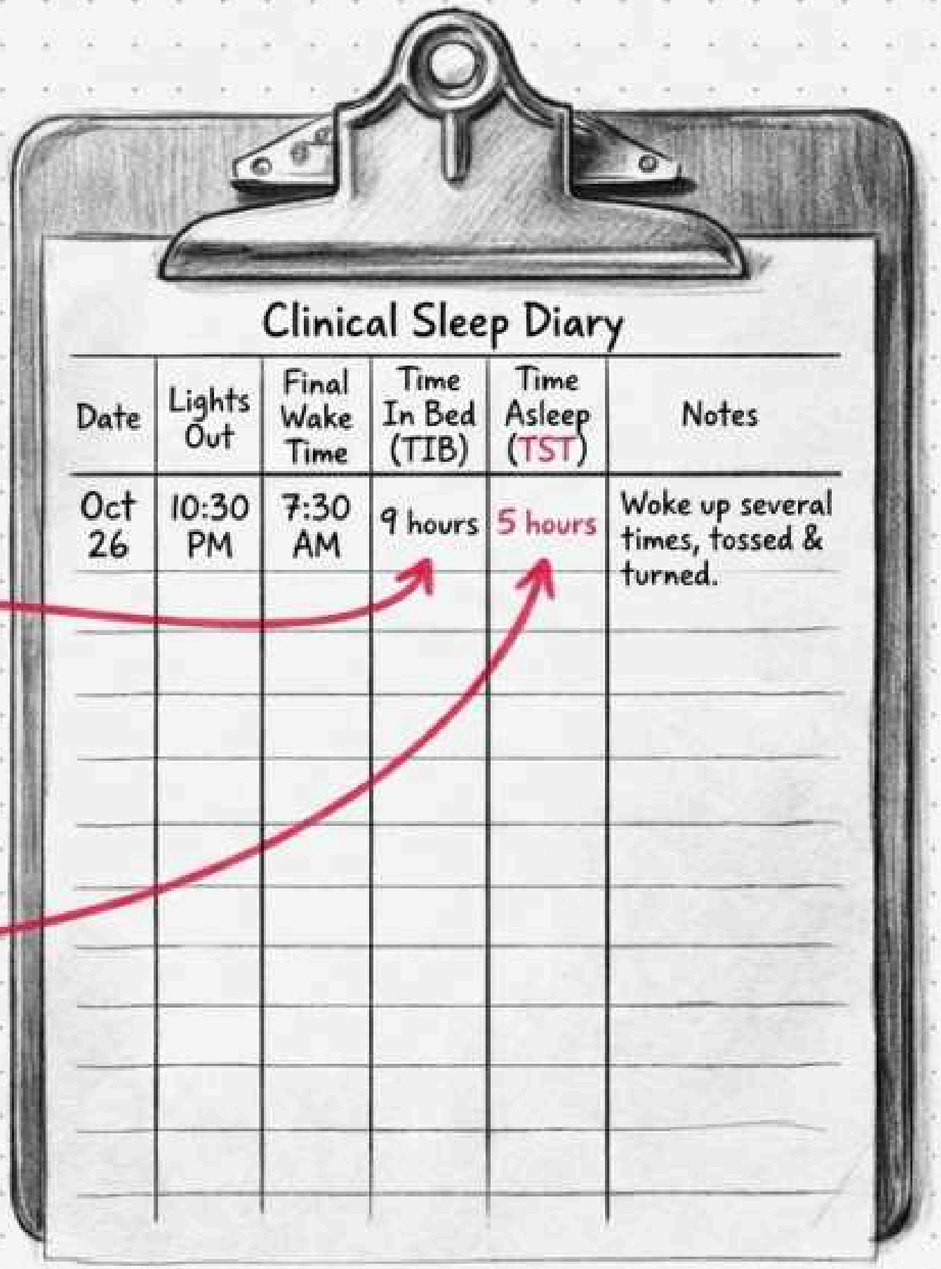


Sleep diaries make hidden maintaining factors visible on paper.

Michael Perlis emphasizes the diary not as a moral ledger, but as a data record. Patterns half-noticed in the dark—like a widening window in bed after each bad night—become mathematically clear.

$$SE = \left(\frac{\text{Total Sleep Time (TST)}}{\text{Time In Bed (TIB)}} \right) \times 100$$

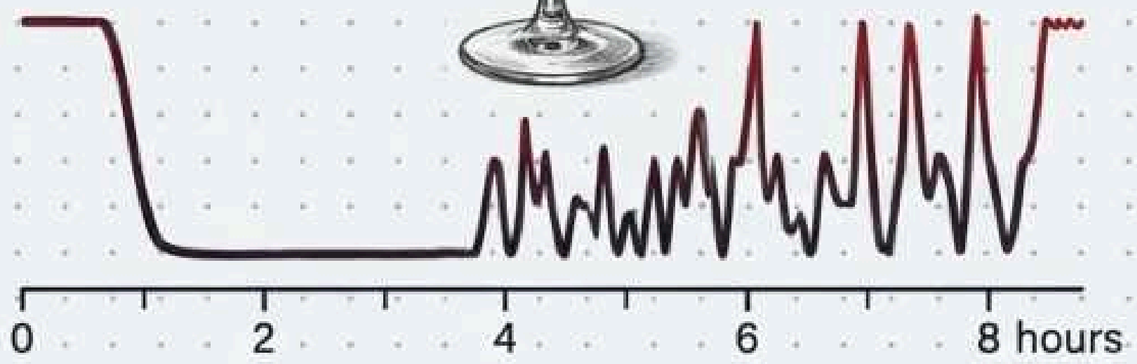
SE = Sleep Efficiency



Chemical coping mechanisms often backfire and perpetuate the cycle.

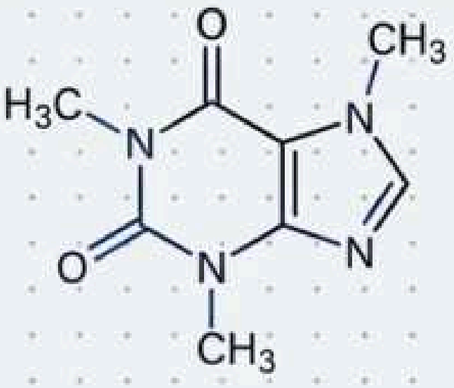
Substances used to force sleep are understandable attempts to cope, not moral failings. However, they disrupt sleep architecture. Clinicians review these as perpetuating factors.

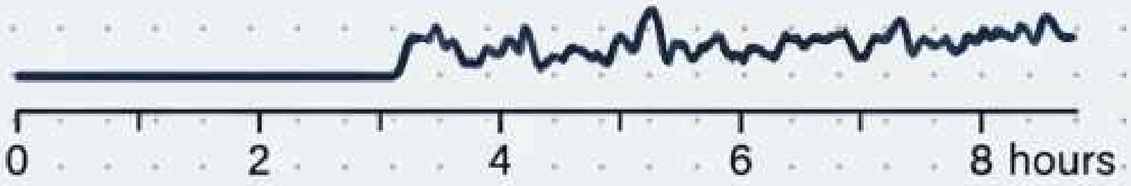




Rapid onset → Second-half fragmentation.



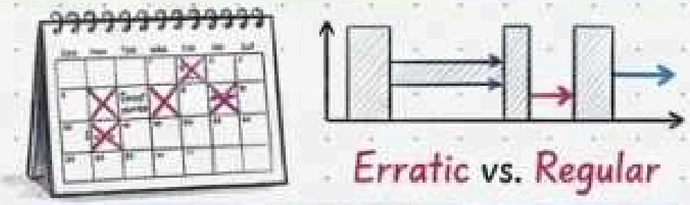




Delayed onset & lightened sleep.

The Two-Column Habit: Testing hypotheses against sleep diary evidence.

To apply the theories of Spielman, Bootzin, and Morin, clinicians use a matrix. It maps the proposed maintaining factor against the concrete evidence a sleep diary would need to show.

Proposed Maintaining Factor	Required Diary Evidence
Expanding time in bed (Spielman)	Low Sleep Efficiency (SE), widening TIB window.  $SE = \left(\frac{TST}{TIB}\right) \times 100$
Conditioned arousal (Bootzin)	High latency at night, but ability to nap easily elsewhere.  Home/Bed vs. Other location
Exaggerated safety beliefs (Morin)	Cancelled daytime events logged, erratic schedules.  Erratic vs. Regular

The three frameworks combine to form the vicious cycle of chronic insomnia.

Spielman, Bootzin, and Morin offer complementary mechanisms, not rival slogans. Chronic insomnia begins with a **trigger** on a vulnerable sleeper, and is locked in place by **schedule changes, learned arousal**, and **fearful thinking**.

