



The Inversion

Artist's Proof 34

Drug Policy

Cannabis kills zero. Alcohol kills 2.6 million. Correct the inversion

****Status and Dependency****

This paper imports external data — the only AP to do so. Every other AP derives from {S, B, R, C}. This one applies the derived architecture to empirical records.

The 420 Code takes its name from cannabis culture. This is not hidden. It is declared. The question is whether the name biases the analysis.

The kill switches are the answer: every claim in this paper is falsifiable. If the records showed cannabis destabilizing at alcohol's level, this paper would not exist.

The name is a commitment to honesty about where the author stands. The architecture is a commitment to honesty about what the records show.

Epistemic status per section. §1 (statement): derived + empirical. §2 (classification): derived. §3–§6 (record sets): empirical — external data, referenced. §7 (comparison): synthesis. §8 (why the inversion exists): historical. §9 (adolescent protection): derived + empirical. §10 (measured cost): empirical. §11 (correction): application. §12–§15: synthesis.

****Kill Switches****

KS-34.1 (Alcohol data): LIVE — EMPIRICAL. If alcohol does not cause 2.6M deaths/year or contribute to 50%+ of violent crime.

KS-34.2 (Cannabis data): LIVE — EMPIRICAL. If cannabis has significant direct mortality or increases violent crime at population scale.

KS-34.3 (Psilocybin data): LIVE — EMPIRICAL. If psilocybin has significant mortality or produces population-level destabilization.

KS-34.4 (Endogenous system): LIVE — EMPIRICAL. If cannabis/psilocybin compounds do not interact therapeutically with their respective receptor systems.

KS-34.5 (Drug classification): LIVE — STRUCTURAL. If the herb/mushroom/drug distinction can be shown to be structurally invalid — if there is no meaningful difference between cannabis and methamphetamine at the coupling level.

KS-34.6 (Legalisation destabilization): LIVE — EMPIRICAL. If jurisdictions that have legalised cannabis or psilocybin demonstrate population-level destabilization attributable to the substance. Colorado (legal since 2014), Canada (2018), Uruguay (2013) do not show this.

The record set is growing.

KS-34.7 (Inversion justification): LIVE — EMPIRICAL. If there is a legitimate stabilization argument for the current legal arrangement that outweighs 2.6 million annual deaths.

Here is how to destroy this paper. Show that cannabis kills at scale. Or show that alcohol does not.

Or show that there is no structural difference between an herb that couples through an existing receptor system and a synthesised chemical that forces coupling through a channel the body does not have.

Seven kill switches. All live. The records will do the work.

****§1 – Statement****

You know someone who drinks. You know what it does to them.

You have watched it happen — the slow contraction of their possibility space, the coupling pathways that close one by one, the version of themselves that gets smaller with every glass.

You have watched this, and you have watched it be legal.

You may also know someone who uses cannabis. You have watched them face prosecution, job loss, or imprisonment for something that has never killed anyone.

You have watched this, and you have been told it is justice.

This paper makes one structural argument with two parts. First: the classification of substances into “legal” and “illegal” bears no relationship to their measured stabilizing or destabilizing effects.

The legal status is inverted with respect to the structural consequence. Second: the category “drug” is applied indiscriminately to substances with fundamentally different structural profiles — a classification error so severe it prevents coherent policy.

The strongest structural argument for alcohol’s current legal status: prohibition was attempted (US, 1920–1933) and produced catastrophic destabilization — organised crime, black markets, poisoning from unregulated production, loss of tax revenue, criminalisation of a majority-participating population.

The axioms agree: the correction for alcohol is Level 2 (restriction), not Level 3 (prohibition). The failure of alcohol prohibition does not justify cannabis prohibition.

It demonstrates that prohibition itself is a destabilizing correction when applied to a widely-used substance. The lesson applies to cannabis and psilocybin equally.

****§2 – The Classification Error****

You have been told that cannabis is a drug. You have been told that psilocybin is a drug. You have been told that these are in the same category as cocaine, methamphetamine, and fentanyl.

This is a lie. The lie is structural, and it costs millions of lives.

A herb is a plant or plant-derived preparation used by humans for food, medicine, or ceremony, with an evolutionary history of co-use spanning thousands of years.

A wild mushroom is a fungal organism that grows without human cultivation, consumed by humans for food, medicine, or ceremony across millennia.

A drug is a synthesised or concentrated chemical compound that hijacks biological reward or signalling pathways not evolved to process it, producing dependence, toxicity, and structural damage.

Cannabis is an herb. It has been cultivated and consumed by humans for at least 5,000 years.

The human body contains an endocannabinoid system (ECS) — CB1 and CB2 receptors distributed throughout the brain, immune system, and peripheral organs — that evolved over 500 million years specifically to interact with cannabinoid compounds.

The body has a coupling channel for cannabis. Cannabis couples through an existing structural pathway.

It is a herb the way tea is a herb, the way turmeric is a herb, the way chamomile is a herb. Calling it a “drug” is a classification error.

Psilocybe cubensis is a wild mushroom. It grows on every inhabited continent without human intervention.

Psilocybin mushrooms have been used in spiritual and medicinal contexts for at least 7,000 years (archaeological evidence including Tassili n'Ajjer rock art, Mesoamerican codices and mushroom stones).

Psilocybin interacts with the serotonin system via 5-HT_{2A} receptors — receptors the body evolved to use. The body has a coupling channel for psilocybin. It is a wild mushroom the way chanterelles are wild mushrooms.

Who are human beings to tell nature it did something wrong?

Cocaine is a drug. The coca leaf is a plant with mild stimulant properties. Cocaine is the extracted, concentrated active compound — processed to a potency the body's reward pathways were never designed to handle.

The concentration overwhelms the dopamine reuptake system, producing intense euphoria followed by crash, craving, and compulsive re-dosing. The body has no coupling channel for concentrated cocaine. It forces coupling through destructive override.

Methamphetamine is a drug. Synthesised in a laboratory from pseudoephedrine. No plant origin in its final form. No evolutionary co-history with the human body.

It floods dopamine and norepinephrine at concentrations the neural substrate cannot sustain. The result is neurotoxicity, psychosis, organ damage, and death. The body has no coupling channel for methamphetamine.

It is a chemical assault on the substrate.

Fentanyl is a drug. Synthetic opioid. 100 times the potency of morphine. No evolutionary relationship with the human body at the concentrations consumed.

The margin between effective dose and lethal dose is so narrow that microgram differences kill. Over 70,000 fentanyl-involved deaths per year in the US alone.

Herbs couple through existing channels. Drugs force coupling through channels that do not exist.

A note on concentration. The coca leaf is a herb; cocaine is its weaponised extract. The classification tracks the receptor-level coupling, not the preparation.

But concentration matters: ultra-concentrated THC extracts may overwhelm the same ECS channel that traditional preparations couple through gently. A herb pushed past its receptor system's absorption capacity begins to behave like a drug.

The classification is structural. Regulation should track both the receptor pathway and the concentration.

The classification error: lumping cannabis and psilocybin into the same category as cocaine, methamphetamine, and fentanyl. This is not a category. It is a lie.

A lie that protects the legal status of the most destructive substance of all — alcohol — by making everything else look equally dangerous.

****§3 — The Record Set: Alcohol****

Now look at the numbers. Look at what the legal substance does.

2.6 million deaths per year (WHO, 2024). 4.7% of all deaths globally. 200+ diseases. Highest proportion of deaths in the 20–39 age group — the peak coupling-capacity years.

For ages 25–49, alcohol is the leading risk factor for disease and death worldwide (IHME, GBD 2019).

Violence. 50%+ of all homicides and assaults globally. Two-thirds of domestic violence incidents (UK). 55% of domestic abusers drinking at the time. 80% of child abuse cases involve parental alcohol.

37% of sexual assaults by intoxicated offenders. 40% of convicted murderers under the influence.

Economics. 2.6% of global GDP destroyed. \$1,306 per adult per year in damage. Productivity loss: 61% of total cost. The harm exceeds the industry's revenue.

Biology. No endogenous alcohol system. No alcohol receptors. The body treats ethanol as a toxin. The liver metabolises it through the same pathways that process industrial poisons. Every dose is damage. The body tolerates it.

It does not welcome it.

This is the highest confidence empirical claim in the entire corpus. 10/10. No other measured quantity in any AP carries this rating. The data spans every jurisdiction on Earth across centuries.

****§4 – The Record Set: Cannabis****

Mortality: zero confirmed direct deaths from cannabis toxicity in the scientific literature. The US National Academies of Sciences: cannabis has not been determined to be the direct cause of overdose death in any study the committee identified.

The LD50 (lethal dose) has never been reached in any documented case.

Violence: no association. THC and CBD reduce agitation. The pharmacological effect is incompatible with violent behaviour. In jurisdictions that legalise medical cannabis, alcohol consumption, opioid overdose deaths, and driving fatalities decrease.

Biology: the endocannabinoid system (ECS). CB1 receptors in the brain (mood, appetite, pain, memory). CB2 receptors in the immune system (inflammation, immune response). The body produces its own cannabinoids (anandamide, 2-AG).

The system evolved over 500 million years. Cannabis couples through an existing pathway. With ageing, the ECS degrades — endocannabinoid production decreases, regulatory functions deteriorate. Exogenous cannabinoid supplementation maintains these functions.

On the evidence of ECS degradation and documented therapeutic effects, cannabis is structural maintenance for the ageing body.

Areas of genuine uncertainty

Adolescent brain development. Cannabis use during adolescence is associated with measurable cognitive effects in some studies.

The adolescent brain is still forming — the prefrontal cortex does not fully mature until approximately age 25. Introducing exogenous cannabinoids during this critical development window may alter neural pruning and connectivity.

The evidence is contested but the signal exists. This is the basis for age restrictions.

Cannabis use disorder. Approximately 9% of users develop dependence (vs 15% for alcohol, 23% for heroin, 32% for tobacco). Lower than alcohol. Not zero.

Cannabis withdrawal is real but not life-threatening (unlike alcohol withdrawal, which can kill).

Psychosis association. High-THC cannabis use is associated with increased psychosis risk in genetically predisposed individuals. The evidence is debated but the signal exists. This is the basis for THC content regulation and screening.

None of these approach the scale of alcohol's destabilization on any metric.

The structurally honest response: regulate for these risks (age restrictions, THC content standards, screening for predisposition) the same way alcohol is regulated for its risks.

Do not criminalise a substance whose worst documented effects are orders of magnitude below the legal alternative's baseline harm.

****§5 – The Record Set: Psilocybin Mushrooms****

Mortality: 0–1 deaths per 100,000 consumers per year. Effectively zero. No confirmed death from direct psilocybin toxicity in the scientific literature. The LD50 in humans has never been approached.

Psilocybin is one of the safest psychoactive substances ever studied.

Biology: the serotonin system. Psilocybin's active metabolite (psilocin) binds to 5-HT2A receptors — serotonin receptors the body evolved to use. The coupling is through an existing structural pathway, not a forced override.

Archaeological evidence suggests psilocybin mushrooms have been used by indigenous peoples worldwide for at least 7,000 years. There are over 300 psilocybin-containing species.

Phylogenetic analysis estimates the psilocybin-producing fungi at approximately 65 million years old (Boyce et al., 2022).

Therapeutic effects. Johns Hopkins (2022): psilocybin treatment for major depression produced 75% response rate and 58% remission at 12 months. From two doses. Two.

Compare: SSRIs take 4–8 weeks to begin working, require daily dosing indefinitely (365+ doses per year, every year), produce significant side effects including sexual dysfunction, weight gain, and emotional blunting, and have withdrawal symptoms that can persist for months.

Two psilocybin sessions versus a lifetime of daily medication. The dosing asymmetry alone warrants reclassification. The FDA designated psilocybin a “breakthrough therapy” for treatment-resistant depression.

Harvard, Yale, Stanford, and Washington University are actively running clinical trials.

Addiction potential: effectively zero. Classic psychedelics like psilocybin do not produce abuse potential in the same fashion as alcohol, nicotine, cocaine, and opioids. Tolerance develops rapidly, preventing compulsive re-dosing. No physical dependence. No withdrawal.

This is a wild mushroom that grows on every inhabited continent. It interacts with a receptor system the body already has. It treats depression more effectively than any pharmaceutical currently available.

It has zero addiction potential and zero toxicity deaths. It is classified as Schedule I – the same category as heroin. The classification is not merely wrong. It is structurally insane.

****§6 — The Record Set: Actual Drugs****

This is what drugs look like. Not herbs. Not wild mushrooms. Synthesised chemicals that force coupling through channels the body does not have.

Cocaine. 29,449 overdose deaths in the US alone in 2023 (CDC). The death rate nearly quintupled from 2011 to 2023. Cocaine floods the dopamine system at concentrations the reward circuitry cannot process.

The result: cardiovascular damage, stroke, psychosis, nasal septum destruction, and compulsive re-dosing that destroys careers, families, and communities. 78% of cocaine overdose deaths in 2021 also involved opioids — the substances compound each other's destruction.

Methamphetamine. 34,855 overdose deaths in the US in 2023 (CDC). The death rate increased 34-fold from 2002 to 2023. Methamphetamine produces neurotoxicity that physically destroys dopaminergic neurons.

Chronic users develop psychosis, violent behaviour, tooth loss, skin lesions, organ failure. The damage is often irreversible. No existing pathway. No evolutionary history. Pure chemical assault.

Fentanyl. 72,776 overdose deaths in the US in 2023 (CDC). Synthetic. 100x morphine potency. The difference between a therapeutic dose and a lethal dose is measured in micrograms.

It is the primary driver of the US overdose crisis that killed over 105,000 people in 2023. One hundred and five thousand. In one country. In one year.

Globally: over 585,000 drug overdose deaths per year (WHO). These are drugs. Synthesised or concentrated chemicals that the body has no structural capacity to process safely. They hijack reward systems. They produce dependence. They kill.

Cannabis kills zero. Psilocybin kills zero. Cocaine kills 29,449 in one country in one year. Methamphetamine kills 34,855. Fentanyl kills 72,776. These are not in the same category.

Putting them in the same category is not policy. It is structural negligence.

****§7 – The Comparison****

You have now seen the numbers side by side. The two substances with zero deaths, existing biological coupling channels, and proven therapeutic value are criminalised. The substance with 2.6 million deaths per year is legal.

The classification does not track structural consequence. It tracks economic power, cultural entrenchment, and racial politics.

That is the inversion. The legal status is upside down with respect to the measured harm. And you have always known this. Everyone who has ever compared a hangover to a joint has known this.

The data does not reveal a new fact. It confirms what the lived record already showed.

****§8 — Why the Inversion Exists****

Economic capture. The global alcohol industry: \$1.6 trillion annual revenue. The lobbying power this buys protects legal status regardless of destabilization produced.

In the architecture's terms: a node whose political coupling is so strong it overrides the organism's destabilization signal.

Cultural entrenchment. Alcohol embedded in religious ceremony, social bonding, business, hospitality for millennia. The coupling pathways are so extensive that removing alcohol is perceived as destabilizing even though the evidence shows the opposite.

Racial and political weaponisation of prohibition. Cannabis criminalisation in the 20th century was explicitly motivated by anti-Mexican and anti-Black racism (US Marihuana Tax Act 1937).

Nixon's War on Drugs explicitly targeted Black communities and anti-war activists — his domestic policy advisor John Ehrlichman confirmed this on record. Psilocybin was criminalised in 1970 as part of the same political programme.

The criminalisation was not a consequence measurement. It was a weapon. KS-32.7 (dehumanisation) fires retroactively.

****§9 — Adolescent Protection****

Children and adolescents should not use cannabis or psilocybin.

This is not a concession to prohibition. It is a structural requirement from AP33 (The Boundary). The adolescent brain is in Pre-Agency transition to Active Agency.

The prefrontal cortex — responsible for executive function, impulse control, and long-term planning — does not fully mature until approximately age 25. During this critical development window, exogenous cannabinoids may alter neural pruning, connectivity, and cognitive development.

The specific mechanism: prefrontal cortex myelination — the insulation of neural pathways that enables adult executive function — continues until approximately age 25. Exogenous modulation of the ECS or serotonin system during this window may alter the trajectory of myelination itself, not merely the signals passing through the pathways.

The signal is contested but sufficient to trigger the precautionary principle.

The derivation's position: cannabis and psilocybin should carry age restrictions at least as strict as alcohol (21+ in most jurisdictions), with the structural justification that a developing node's coupling architecture must be allowed to form before it is modulated.

This is the same logic as AP33's consent architecture: you cannot consent to modifying a system you do not yet have the modelling capacity to understand.

Adults make their own choices about their own bodies. Below ϵ , the individual is sovereign. Children are not yet sovereign — they are nodes in formation. The organism protects forming nodes.

****§10 – The Measured Cost of the Inversion****

The inversion's measured cost is 2.6 million alcohol deaths per year sustained over decades of legal protection.

Meanwhile, people are imprisoned, lives destroyed, families broken, and communities devastated for possession of an herb that kills no one and treats many, and a wild mushroom that may be the most effective antidepressant ever discovered.

The economic cost: 2.6% of global GDP consumed by alcohol harm. Net zero consumed by cannabis or psilocybin harm. (The 2.6% GDP figure is gross cost.

Net cost after subtracting alcohol industry revenue and employment contribution remains above 2% of GDP. The correction is to make the industry internalise its destabilization, not to destroy the industry.)

The policy cost: billions spent on prohibition enforcement and incarceration. The human cost: millions incarcerated globally for cannabis and psilocybin offences, disproportionately from racial minorities, in a system designed from inception to target those minorities.

****§11 – The Correction****

Cannabis: reclassify as herb. Full legalisation. Regulate as an agricultural and therapeutic product. Age restrictions (21+ with developmental justification). THC content standards. Expunge all cannabis-related criminal records.

Reparations to communities whose coupling capacity was measurably reduced by prohibition — computed from the accumulated record set: incarceration rates, economic disruption, family separation, health outcomes (AP33's coupling capacity projection).

The correction is Level 1: the destabilizing agent (prohibition) directly restores the coupling capacity it reduced.

Psilocybin mushrooms: reclassify as wild mushroom with therapeutic applications. Remove from Schedule I. Legalise supervised therapeutic use immediately. Legalise personal cultivation and use for adults. Continue clinical research programme.

Cocaine, methamphetamine, fentanyl: these are drugs. The correction is Level 2–3 (restriction to separation). Treat as public health crisis, not criminal justice problem. Harm reduction, treatment infrastructure, interdiction of supply.

But do not confuse the policy response with the classification: these substances force coupling through channels the body does not have. They are structurally different from herbs and mushrooms.

Alcohol: Level 2 (restriction). Not prohibition (Level 3 failed). Taxation commensurate with measured destabilization cost. Structural consequence labelling (not “drink responsibly” — specific data). Advertising restrictions proportional to harm.

The correction is graduated: the rate is computed from the organism's absorption capacity, how fast cultural and economic coupling pathways can adjust without producing secondary destabilization.

The correction must not be more destabilizing than the condition it corrects.

****§12 – Connections****

AP31. The stabilizing/destabilizing binary applied to substances.

AP32. The correction hierarchy. Alcohol = Level 2. Cannabis/psilocybin = Level 1.
Cocaine/meth/fentanyl = Level 2-3.

AP33. The ECS and 5-HT_{2A} system as biological coupling channels. The jurisdiction boundary (ϵ). Adolescent protection as Pre-Agency node protection.

The terminal ethic. Legalising a substance that kills 2.6 million per year while criminalising an herb and a mushroom that kill none is not kind. The terminal ethic demands the inversion be corrected.

****§13 – Debts Owed****

Debt 35: Psilocybin long-term efficacy. Monitor ongoing Phase II/III clinical trials beyond the Johns Hopkins cohort (n=24).

If larger trials fail to replicate the 75% response rate and 58% remission at 12 months, confidence in §5 decreases. Track: FDA approval timeline, MAPS trials, and population-level outcomes in jurisdictions that legalise therapeutic use.

Debt 36: Cannabis long-term legalisation outcomes. Twelve years of data from Colorado, Uruguay, and Canada is insufficient to detect slow-onset population-level effects.

Monitor: adolescent use rates, psychosis incidence, traffic fatalities, and overall public health outcomes across all legalised jurisdictions over a 25-year window. KS-34.6 tracks this.

****§14 – Confidence Summary****

Alcohol as catastrophic destabilizer: 10/10. The highest confidence empirical claim in the corpus.

Cannabis as net stabilizer: 8/10 (motor impairment, 9% dependence, psychosis signal acknowledged).

Psilocybin as therapeutic stabilizer: 8/10 (early data, clinical trials ongoing, no toxicity).

Cocaine/meth/fentanyl as catastrophic destabilizers: 9/10.

The herb/mushroom vs drug classification: 9/10 (endogenous receptor systems are structural facts).

The inversion as measurable policy failure: 9/10.

Racial weaponisation of prohibition: 9/10 (on the record from its architects).

Why the confidence gap exists. The confidence gap between alcohol (10/10) and cannabis (8/10) is temporal, not structural. Alcohol harm data has accumulated across every jurisdiction on Earth over centuries.

Cannabis safety data in legal jurisdictions has at most twelve years (Colorado 2014, Uruguay 2013, Canada 2018).

Psilocybin therapeutic data rests primarily on trials with small sample sizes (Johns Hopkins n=24), though larger trials are underway. The gap will narrow as records accumulate.

The kill switches track this: KS-34.2, KS-34.3, and KS-34.6 are live precisely because the record set is still growing.

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