The Hidden Grammar of Morality — A Needs-First Reconstruction

How Human Needs Become Moral Reasons, Duties, Rights, Virtues, Care, Justice, and Sacred Traditions

The One Religion / Need-Based Morality Research Program — research synthesis

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Abstract

This revised whitepaper develops the strongest defensible needs-first version of the Need-Based Moral Unification Hypothesis. Every moral question is examined by asking which beings can need, what conditions they genuinely need, how satisfied or deprived those needs are, what actions change them, who is responsible, how need effects are distributed through relationships and time, and which safeguards protect the beings affected. Genuine needs and their causal, relational, temporal, and distributive structure are proposed as a shared explanatory substrate for the many moral languages developed by human societies. Consequentialism evaluates changes in morally relevant conditions; duties encode protective policies and commitments; virtue ethics describes reliable capacities for navigating them; care ethics emphasizes particular relationships; justice evaluates their distribution and institutional production; and religious ethics often provides enduring practices and meanings through which moral obligations are understood. We present a conditional reduction argument, a formal counterfactual model, explicit treatment of the project's historical public-v1 equation and v0.2 research architecture, systematic comparisons, worked examples, falsifying dilemmas, and a preregisterable test program. The analysis establishes that a large class of these systems can be *described and comparatively evaluated* in a need-based language under stated assumptions. It does not establish that all moral truths are exhausted by needs, that all traditions accept this interpretation, or that a universally valid moral score has already been empirically identified. These stronger claims are separated and tested, not smuggled into the conclusion.

Reader's roadmap

Reading principle. Throughout this paper, ask first: *Whose needs are affected? Which needs? In what state? By whose action? Compared with what alternative? With whose consent?* A moral tradition is then examined as one way of recognizing, protecting, teaching, distributing, or coordinating answers to those questions. The paper repeatedly distinguishes describing needs from proving that every moral duty is reducible to them.

Foundation and proof obligations — Abstract; Executive argument; Needs-first foundation; Sections 1–3 (five unification claims, genuine needs, normative bridge, conditional proposition).

Mathematical research architecture — Section 4 (original public-v1 equation, known mathematical faults, the newer causal and counterfactual model).

Major normative theories — Sections 5–11 (consequentialism, deontology, virtues, care, justice, contractualism and moral psychology).

Religious and global traditions — Section 12 (Abrahamic, South Asian, Chinese, East Asian, African, Indigenous and secular ethical languages).

Expanding moral circle — Section 13 (animals, ecosystems, future generations and artificial intelligence).

Hard tests and validation — Sections 14–15 (adversarial cases, competing models, falsifiers and empirical research protocol).

Applications and conclusion — Sections 16–17; Appendices A–E; References (including source-provenance notes).

Abstract and central finding

A moral decision matters because beings can be helped or harmed, deprived or sustained, silenced or heard, constrained or enabled, abandoned or cared for. Need-Based Morality (NBM) begins with those beings and the conditions their lives require. Its historical principle is: the more something is genuinely needed, the more moral reason there is, other things equal, to provide or protect it—and the stronger the reason not to withhold or destroy it [P1–P4]. This does not make people equivalent to their deficiencies. A life also includes the needs to develop capabilities, form chosen relationships, discover truth, create beauty, exercise agency, and sustain flourishing after immediate danger has passed.

The **Need-Based Moral Unification Hypothesis** is that the diversity of moral languages can be substantially explained through one deeper structure: *need-bearing beings; genuine needs; present and anticipated need states; relations of dependence and care; causal changes attributable to actions; time, uncertainty and distribution; legitimate commitments; and protections against having one's life or agency treated merely as another person's instrument*. Consequentialism asks whose needs change under an act. Deontology protects needs through duties, prohibitions and commitments, including robust boundaries against opportunistic exceptions. Virtues cultivate the capacities to perceive, understand and reliably serve needs. Care ethics attends to needs arising within particular lives and relationships. Justice asks whether everyone's needs count, who is deprived, who bears the burdens and which decision procedures protect affected persons. Religious and cultural traditions preserve distinctive accounts of what people and other beings need and why certain obligations matter. Their sacred and metaphysical claims must be represented in their own terms, not appropriated or silently equated with NBM.

This whitepaper offers a **needs-first translation protocol, a causal and recursive need-state architecture, an exact record of the historical public-v1 equation, v0.2 research models, comparisons with competing theories, worked examples, counterexamples and a falsifiable validation program**. The analysis supports a strong *explanatory and practical* unification: almost any moral question can be investigated by identifying needs, conditions of fulfillment, and competing claims. It does **not** establish the stronger *complete normative reduction*: that every duty, right, sacred obligation, virtue and good has been proven to consist solely of need-state facts. That conjecture remains the project's most demanding research goal. Explicit normative premises, consent, rights, individual moral standing, and culturally grounded interpretations remain visible unless independent argument warrants their reduction.

> **Scientific status.** The paper presents a comprehensive research argument, not a peer-reviewed moral theorem or validated universal scoring formula. Its worked scores are hypothetical. Public v1 is preserved as a historical specification; v0.2 is an experimental architecture. Making moral language more need-centered must **increase explanatory precision**, not permit the invention of a new "need" whenever an otherwise difficult moral principle is encountered.

Executive argument: one moral world, many moral languages

Consider six everyday judgments: rescuing a person who cannot breathe is urgent; keeping a difficult promise can be obligatory; being honest is a virtue; caring for a dependent parent is a special duty; treating two applicants fairly matters even if neither sees the decision; and doing good anonymously can be admirable. Philosophers have good reasons to classify these differently. Need-based unification does not deny the differences. Instead it asks whether they are distinguishable **functions within one explanatory structure**.

Moral language	Primary question	Candidate NBM interpretation	Essential distinction retained
Consequences	What happens if we act?	Compare counterfactual trajectories of patients' genuine need states.	Happiness, utility, preference and need are not synonyms.
Deontology and rules	What must we do or never do?	Robust protections for foundational needs and legitimate expectations, perhaps as constraints.	A duty may hold even when a single act's consequences are beneficial.
Rights	What is owed to each bearer?	Strong claims protecting bodily integrity, agency, personhood, participation, and security.	Consent and entitlement are not just positive or negative utility weights.
Virtue	What person should we become?	Stable dispositions for truthful perception, care, judgment, self-regulation and competence in meeting needs.	Character is not reducible to one observed outcome.
Care and relationship	Whose vulnerability is ours to attend to?	Need-sensitive, particular duties grounded in dependence, attachment, prior commitment, and concrete context.	The nature of a relationship can matter independently of aggregate welfare.
Justice	Who gets what, by which authority and process?	Severity, distribution, structural causation, corrective duties and institutional safeguards.	Equality, procedural fairness and legitimacy need separate justification.
Religion and sacred norms	Why is this required, and what life is holy or good?	Historically evolved practices can protect and generate flourishing, solidarity, meaning and restraint.	Theological and spiritual truth claims must not be rewritten as mere need claims.
Environmental and future ethics	Who or what counts beyond us?	Extend patient and causal models across species, ecosystems, generations and time.	Moral patiency, non-identity and intrinsic ecological value are unresolved.

This framework does not imply that one religious tradition *really teaches* another's doctrine or that a Kantian is simply a utilitarian in disguise. It claims that a shared **analytical metalanguage** may expose both common causes and irreducible disagreements. Such a metalanguage has explanatory value even before the total-reduction hypothesis is vindicated [R1–R4].

The strongest defensible thesis is conditional: if all morally significant differences between actions and institutions depend on independently identifiable genuine needs—their security, deprivation, fulfillment, developmental consequences, interdependencies, time-dependent states and the relationships among their bearers—and if the relevant rights and constraints can be justified from that substrate without circularity, then moral differences can in principle be fully described and evaluated in needs-based terms. The condition is substantial. The paper shows what must be measured and argued before that thesis can be asserted of the real world.

The needs-first foundation: why moral systems arise at all

Before human societies formulate ethical theories, living beings encounter conditions they cannot simply choose away. They need breathable air and usable water; they need viable bodies, sufficient nutrition and protection from otherwise destructive exposure. Over time they need reliable opportunities to develop capacities; some need dependable attachment and assistance; many need to understand their circumstances, exercise meaningful choice, communicate accurately, coordinate with others, find purpose and maintain relationships that permit them to flourish. The forms those conditions take differ across species, age, disability, history, culture and context. Their significance is not established by every person wanting identical things. It is established, where evidence permits, by what follows from deprivation, restoration, substitution and continued fulfillment.

A being's **need** is not the same as the food, medicine, ritual, friendship or law that may serve it. The latter are *satisfiers, practices, supports or constraints*. A single satisfier may protect several needs. The same satisfier may help one being and harm another. A rule may remain useful precisely because its reliability maintains a network of expected need protections long after its original purpose has been forgotten. Moral progress requires understanding which need relations a practice actually protects, which it injures, whose experience it overlooks, and whether another practice could meet the same genuine needs with fewer costs.

A grammar derived from need-bearing lives

The unification uses ten interconnected questions, arranged from the condition of a being to the conduct of an institution:

1. **Need-bearer:** Who might possess a morally relevant need or interest, including those not represented in the room? Do we know what gives that being moral standing, or is its standing disputed?
2. **Need:** What exact condition of life, agency, relationship, understanding, development or flourishing is at stake? Is it a candidate genuine need or only a chosen satisfier or desire?
3. **Need-state:** Is the condition secure, precarious, deprived, oversupplied, threatened or improving? What range counts as adequate for this being in this context?
4. **Need-dependency:** Which other needs become harder or easier to meet as this state changes? Are prerequisites joint, substitutable, nonlinear or mutually reinforcing?
5. **Need-change:** Under each feasible action, how and with what uncertainty will the relevant states change over time, compared with an explicit alternative?
6. **Need-relationship:** Who has undertaken responsibility, generated legitimate reliance, exercised power, accepted care obligations, or exposed another to risk?
7. **Need-distribution:** Whose needs receive the benefit, whose are frustrated, who is worst off, and do small improvements for many improperly conceal severe loss to one?
8. **Need-protection:** What consent, bodily integrity, privacy, due process or non-domination boundary protects persons from being sacrificed to a predicted aggregate benefit? Has a needs-based derivation of that boundary actually succeeded?
9. **Need-knowledge:** Whose testimony and evidence inform the analysis? What remains unknown, contested, culturally specific, or unavailable without intrusive surveillance?
10. **Need-accountability:** Who can explain, contest, repair and revise the decision? Which observable effects and independent criticisms would count against the proposed moral account?

These questions are **not ten new basic needs**. They are ten different *roles in a moral explanation*. That distinction is essential. If every desirable institution were declared a fresh basic need, the theory would become circular: it would say that justice is good because we "need justice," then conclude that justice is nothing beyond needs. Our stronger method instead identifies the specific affected beings and admitted needs, and asks whether their relationships, life trajectories and the conditions of legitimate decision-making can explain justice without inventing the conclusion.

A single moral event, examined through multiple ethical lenses

Suppose a competent adult is offered a treatment that would probably prevent serious illness but declines it. A needs-first analysis records the adult's medical vulnerability, capacity to understand information, expected benefits and risks, available alternatives, need for agency, reliance on clinicians, and the clinician's care obligations. Consequentialism focuses on the predicted changes in health and other conditions. A duty-based approach emphasizes the clinician's duties of care, honesty and respect. Virtue ethics asks whether the clinician exhibits practical wisdom, courage, humility and trustworthiness. Care ethics asks whether the patient's fears, history and concrete relationships were heard. Justice examines unequal access, bias and procedural protection. The needs-first interpretation shows what these perspectives *attend to*. It does not pretend the patient's right to refuse has been proved by a numerical health estimate. Legitimate refusal remains a protection even when ignoring it could improve a measured need-state score.

This is the intended unification: **one morally relevant reality, several kinds of moral knowledge about it**. Successful explanation must recover each theory's actual decision reasons, not merely produce similar rhetoric. It must also allow some alleged moral imperatives to be challenged if they consistently frustrate genuine needs or depend on false factual claims. Conversely, when a tradition upholds an obligation for reasons NBM cannot yet derive, the correct result is a recorded explanatory limit, not the fabrication of a convenient new need.

Needs-Based Morality as a recursive science of moral improvement

The framework is recursive in a useful, bounded sense: a person needs to learn how to meet needs better; a community needs trustworthy ways to recognize when its rules injure people; an institution needs procedures through which previously overlooked experiences can revise policy; and a scientific theory needs methods of correction when it fails. These claims about *functional requirements for effective inquiry* must not be confused with proving that an organization or AI program is a conscious moral patient. Recursive learning improves moral decision processes by repeatedly correcting estimates of actual states, causal dependencies, unintended harms, legitimate constraints and future needs. The target remains the lives of the beings affected, not the growth of the theory for its own sake.

1. Distinguishing five claims often confused as "unification"

A serious unification must specify its target. We distinguish:

1. **Translation or expressibility.** We can describe a statement about duty, honor or care in terms of relevant needs, beneficiaries, vulnerabilities, and consequences. This does not imply the original statement *means only* that description.
2. **Causal explanation.** Need-related vulnerabilities, social interdependence and learned strategies explain why a practice or moral intuition developed or persists. Such an explanation can be true even when the practice is unjustified.
3. **Predictive adequacy.** A fixed need-based model predicts unseen moral judgments, real intervention effects, and disagreements better than serious alternatives, without manufacturing extra needs after seeing answers. This is an empirical claim requiring controlled tests.
4. **Normative adequacy.** Once reasonable moral premises are specified, need-based reasoning can justify actions, obligations, permissions and prohibitions that withstand counterargument. Prediction of what people endorse is not proof of what they ought to endorse.
5. **Complete metaphysical reduction.** Every moral fact is, ultimately, a fact solely about needs, causal structures and their states. This is the strongest thesis and presently the least established. It may fail even when levels 1–4 work remarkably well.

The need to distinguish these claims is not peculiar to NBM. In philosophy, **consequentializing** refers to representing deontological or other ethical verdicts in an outcome-ranking format; the literature expressly warns that extensional equivalence may be trivial or explanatorily weak [R5]. The risk is acute here. If one may invent a "need to obey the rule" every time a rule resists reduction, any moral theory becomes compatible with NBM by relabeling. Such compatibility is empty. Our test is therefore **no after-the-fact moralized needs**.

A substantive unification must (a) specify a relatively compact and independently admissible ontology; (b) use causally meaningful, not verdict-encoding state variables; (c) avoid tailored exception weights; (d) generate out-of-sample predictions; (e) explain where its intuitions and obligations come from; and (f) accept genuine moral disagreement as possible evidence against its stronger version.

2. The normative foundation: what a genuine need is

2.1 Needs are not desires, resources, or merely useful means

The word *need* is used instrumentally—someone needs a key to enter a house, or a criminal needs a weapon for a crime—and categorically, for conditions such as breathable air and bodily safety whose prolonged absence is destructive of ordinary viable functioning. Not every instrumental need creates a moral reason for anyone to supply the item. Philosophical analysis of needs explicitly recognizes this distinction and the objections that arise if every need is assumed to command assistance [R1].

Our **candidate scientific definition** follows the NBM research protocol: a genuine need is a state or requirement whose sustained deprivation predictably impairs a morally relevant dimension of viability, functioning, agency, development, relationship or flourishing beyond mere frustration of a preference [P4]. This is an admission *hypothesis*, not an oracle. A proposed need must be tested for deprivation effects, restoration, causal necessity, substitution, healthy thresholds, oversupply, cross-cultural reliability, distinctness from other constructs, and relevance to the moral patient.

Type	Example	How the analysis treats it
Basic or categorical candidate	Nutrition, breathable air, reliable safety	Empirically test deprivation and restoration effects.
Higher-order or psychological candidate	Autonomy, competence, relatedness	Test using validated measures and diverse contexts; do not assume moral weight from popularity.
Resource or satisfier	A meal, medicine, salary, shelter, a trusted technology	Evaluate its causal effect on need states; not intrinsically a need node.
Strategy or convention	Marriage rules, ritual, a workplace policy, politeness	Test multiple functions, tradeoffs, harms and context dependence.
Preference or goal	A particular car, status symbol or personal pastime	Respect agency while distinguishing preference from categorical deprivation.
Capability or opportunity	Freedom and real ability to pursue an educational path	May itself have moral relevance; not identical to its exercise or achieved outcome.
Rights or constraints	Informed consent, no torture, freedom of conscience	Preserve as explicit normative protections unless separately reduced.
Emotion or appraisal	Fear, shame, gratitude, disgust, pride	Potential evidence about perceived need changes, not automatic proof of harm or rightness.

This approach builds on serious antecedents. Doyal and Gough's theory of human need emphasizes physical health and autonomy of agency; self-determination theory studies autonomy, competence and relatedness; Max-Neef's human-scale development emphasizes varied fundamental human needs and culturally varying satisfiers; Sen and Nussbaum's capability approach prioritizes substantive opportunities and dignified functioning [R1, R6–R9]. These frameworks overlap, but they do not validate one final list or a single ranking of moral urgency. A complete unification must respect the fact that needs, capabilities, desires and rights are overlapping yet distinguishable constructs.

Need-language must distinguish what a being needs from what an institution claims it needs

The statement "a society needs obedience" is not yet a moral reason to obey. The society may need enough coordination to provide water, protect life or resolve disputes, while a particular official merely wants unchallengeable power. "The family needs loyalty" may mean that vulnerable members require dependable help—or that a powerful member wants impunity. "The economy needs growth" may conceal insecurity, unearned burdens or damaged ecosystems. Translate each claim into its **actual need-bearers and need pathways** before granting it moral weight. A collective's administrative requirement is not automatically an individual's basic need; neither is a person's momentary discomfort automatically evidence of wrongful deprivation.

The distinction is equally important for beneficial abundance. A musician may create a work no one asked for, and that creation may enrich lives, skill, understanding and social connection without remedying a named current shortage. The

theory must admit that **some needed conditions support generation and expansion, not merely repair**, and it must test whether the resulting value is genuinely need-derived rather than named so after the fact.

2.2 Necessity is conditional, layered and dynamic

The phrase "the more one needs something" is not adequately formalized by one immutable ranking. Oxygen usually has greater *immediate survival necessity* than social applause; secure attachments may have enormous developmental importance across years; preserving a patient's right to refuse treatment can be morally important even if refusal worsens that patient's health; and creating a new musical composition can be valuable even when no one is presently deprived.

A candidate need model should therefore retain: current shortfall, severity of deprivation, duration and reversibility, causal enabling role, availability of substitutes, sensitivity to patient and context, longer-run capability effects, and moral uncertainty. A need may be foundational without being urgent right now. Conversely, an apparently minor need can become urgent under an unusual constraint. **Need centrality is not moral importance; moral importance is not current shortfall; current shortfall is not an obligation for one particular actor to fix it.** [P2, P3]

In earlier TOR work, the heuristic **7 × 7 concern matrix** mapped seven tiers—survival; safety; belonging; esteem; purpose/capability; wisdom/generativity; harmony—against seven scopes—individual; family; community; society; humanity; all thinking creatures; all life. It is a useful device for *searching for neglected patients and consequences*. It is not an empirically verified taxonomy of forty-nine distinct needs, nor a legitimate excuse to count the same being seven times. The scope categories overlap, and the actual computation must count each morally relevant effect exactly once [P6].

2.3 The indispensable bridge from fact to obligation

There is no logically valid inference from "shortfall X causes harm Y" alone to "every actor is obligated to eliminate X." The evaluative claim that avoidable severe deprivation gives reasons for assistance is itself a normative premise. Philosophers call attention to the problem of deriving an *ought* solely from an *is*; needs-based ethics cannot escape that problem by naming a natural variable [R1, R10].

Our transparent bridge is therefore:

Axiom N1 — Moral considerability. Beings with morally relevant interests or needs possess moral standing sufficient for their condition to count as a reason in deliberation; standing and strength are questions for justification, not a reward for social power.

Axiom N2 — Need relevance. Preventing a serious, genuinely avoidable need-frustration is a pro tanto moral reason, stronger when the deprivation is more severe and otherwise comparable. Causally enabling secure flourishing can also provide pro tanto reasons.

Axiom N3 — Equal attention to comparable claims. Similar independently verified need conditions receive comparable initial consideration regardless of popularity, status, ethnicity, religion, human-group membership or vividness. Legitimate person-specific obligations must be argued separately.

Axiom N4 — Non-domination and corrigibility. A proposed need benefit cannot simply replace a person's legitimate authority over their own body, conscience, intimate life or participation. Until a reduction is proven, these protections remain independent constraints.

Axiom N5 — Epistemic accountability. Reasonable agents have reason to revise causal and normative claims in response to evidence and criticism, to admit uncertainty and to preserve the possibility that the theory is wrong.

N1–N5 are **proposed NBM commitments**, not theorems discovered by measuring neurons. They are intended to make explicit what a scientific-looking objective would otherwise hide. Our strongest "needs only" conjecture would ultimately derive N3–N5—or justify their status as necessary components of a need-valuing theory—without importing them covertly.

2.4 A compact needs-first account of duties, virtues, rights and justice

The same event can alter **need states**, **need-securing expectations**, **a person's ability to secure future needs**, and **a community's procedures for attending to those needs**. This yields a useful preliminary classification:

Moral object	Needs-first characterization	What must be justified beyond the characterization
Benefit	A change that better secures a genuine need or a needed opportunity to flourish.	Which needs are genuine; how large and durable the change is.
Harm	Deprivation, disabling risk or damaging transformation of genuine need states.	Whether the action caused the change; which harms are permissible.
Duty	A claim that a particular actor must protect, provide or not endanger a need-relevant condition.	Why this actor bears this claim; what makes it binding.
Right	A protected claim held by a need-bearing person against interference, neglect or domination.	Whether the right is reducible to need facts or additionally basic.
Virtue	A stable capacity or disposition for noticing, interpreting and appropriately meeting needs.	Why the disposition is admirable independently of observable success.
Vice	A stable tendency to ignore, distort, exploit or recklessly frustrate needs.	Whether character condemnation depends on consequences or culpability.
Justice	The fair recognition, protection and distribution of need-related claims across beings and institutions.	Which fairness standard, procedural entitlement and authority apply.
Care	Context-sensitive and responsible attention to the needs of particular, dependent beings.	Why particular histories create duties and how to avoid oppressive care.
Wisdom	Accurate judgment about real needs, substitutes, causal consequences and limits of knowledge.	How to evaluate judgment when evidence is insufficient and outcomes unlucky.
Moral development	Improved capability to notice needs, forecast effects, meet obligations, acknowledge injuries and correct errors.	Which changes count as genuine improvement rather than greater control.

These definitions are **analytic working translations** rather than proofs of philosophical identity. Their value is to make the actual moral work visible: *who needs what, whose action changes it, how deeply, how reliably, and with whose legitimate participation?*

3. A substantive unification claim, and what would count as proof

3.1 The Need-Mediation Conjecture

Let a moral situation be described by the history and condition of every affected morally relevant being, including dependency, relationship, valid commitments, entitlement, perceived and actual need states, and causal action pathways. The **Need-Mediation Conjecture** states:

For any two possible actions A and B, every morally relevant difference between them is grounded in an independently discoverable difference in the genuine need-state trajectories of affected patients, or in a normative constraint that can itself be justified through those same trajectories without circularity or loss of meaning.

This is stronger than claiming "our model can describe why lying often hurts trust." It implies that if two actions are genuinely identical in all relevant need effects and dependencies, no residual *morally significant* difference should remain. That implication yields an unusually sharp falsifier.

3.2 The Need-Invariance Test

Suppose A and B generate identical probability distributions over independently admitted need states for all morally relevant beings over the entire relevant time horizon, controlling for all actual relationships and causal context. A fully reduced need theory should not rank A and B differently *merely because* one has a label such as “forbidden,” “sacred,” “disloyal” or “authorized.” If a defensible moral difference survives these controls, the reduction is incomplete.

This is easy to state and difficult to test in practice, because trust, expectations, identity, opportunities and agency can have delayed or hidden effects. **That difficulty must not become immunity to disconfirmation.** If a model invokes an invisible “trust loss” without evidence after a counterexample, it has not explained the case; it has protected itself from criticism.

3.3 A conditional representation proposition

Proposition (conditional). Assume (C1) a sufficiently complete, non-circular ontology of morally relevant patients and genuine need states; (C2) identifiable causal trajectories under alternative interventions; (C3) an independently justified comparison of need changes across patients and time; (C4) normative adequacy of the chosen rule for aggregation and admissible action constraints; and (C5) no irreducible moral property outside this representation. Then any action choice within the modeled domain can be evaluated using only the variables in the resulting NBM representation.

Proof sketch. Under C1–C2, each feasible action maps to a distribution over patient-need trajectories. C3–C4 provide a legitimate comparison and permissibility relation over those distributions. Under C5, no relevant moral information is left outside the mapping. Therefore the resulting comparison is normatively complete *relative to these assumptions*. This is not empirical proof of C1–C5; particularly, C4 and C5 contain major unresolved philosophical burdens.

The non-vacuous research objective is **not** to make this conditional statement more elaborate. It is to test C1–C5 without inventing need variables that merely restate the moral verdict. A theory passing that demanding test across distinct cultures and genuine moral disagreements would have earned a much stronger claim than a poetic assertion that all ethics is one.

4. The equations: public v1, scientific v0.2 and a transparent candidate

4.1 The historical public equation: what was actually proposed

The canonical public formulation on the project’s website was preserved in the NBM repository as public version 1.0 [P1]:

$$MV_{v1}=\sum_{i=1}^{n}\left(p_i a_i\right)\left(g_i f_i n_i\right) r_i\left(D_i\left(1+\rho_i\right)\right) w_i \delta_i .$$

The factors were described as causation, need priority, reach, persistence, fairness and time. They have the following original, historical meanings:

Public-v1 term	Historical interpretation
p_i	Probability that the proposed effect occurs (0 to 1).
a_i	Fraction of causal credit attributable to the action (0 to 1).
g_i	Urgency function of shortfall, $g_i=\exp\left[\gamma\left(F_i^{\dot{c}}-F_i\right)\right]$.
f_i	Foundationality from a recursively weighted need-dependency graph.
n_i	Recipient’s degree of dependence on outside help.
r_i	“Reach” across beneficiaries via interdependence/relational distance.

Public-v1 term	Historical interpretation
D_i	Duration of the effect.
ρ_i	A permanence/irreversibility modifier.
w_i	Additional fairness/equity weight.
δ_i	Hyperbolic time weight, $\delta_i = 1/(1+\kappa t_i)$.

The original need-foundationality recursion was stated as $f_i = (1-d) + d \sum_{j \in Out(i)} f_j / L_j$. Reach was proposed through $ID_b = \sum_l \beta_{bl} f_l$, $RD_b = 1/(1+ID_b)$, and $r_i = \sum_b \exp(-\alpha RD_b)$. These equations are worth preserving because they capture a real ambition: **quantify urgency, dependency, causation, reach, fairness and time together rather than adjudicating each separately** [P1]. But preservation of an equation is not mathematical endorsement.

The project's August 2026 adversarial review documented important problems [P1, P5]: the published reach expression remains positive even for some adverse signed effects, so its sign semantics cannot work as described; RD_b becomes singular at $ID_b = -1$; the foundationality recurrence needs edge-direction and dangling-node specifications; $g_i = 1$ even at zero shortfall; $n_i = 0$ annihilates an otherwise potentially important improvement; graph-based bonuses can double count effects already represented downstream; irreversibility need not be a simple multiplier for every kind of benefit or harm; and time discount, fairness weights and patient aggregation require their own moral justification. Its published parameters have not been independently validated across moral domains. **A numerical output from public v1 is not proof of an action's moral status.**

4.2 Why a causal, counterfactual architecture is more defensible

The current NBM v0.2 research architecture intentionally stops treating a single multiplicative formula as authoritative [P2–P5]. It asks which beings are affected; which genuinely measurable needs they have; how the world changes under action A versus a specified comparator A_0; how effects propagate through typed dependency relations; and how uncertainty, distribution and constraints should shape a decision.

Define:

- $b \in B$: a candidate moral patient—an individual or other entity whose moral standing is separately assessed;
- $i \in N_b$: an independently admitted candidate need applicable to patient b;
- c_t: relevant context at time t;
- $N_{bi}^{A}(t)$: potential need state under intervention $do(A)$, including measurement uncertainty;
- A_0: an explicit, morally relevant alternative, not an idealized absence of all causation;
- G: a typed causal dependency graph between resources, capabilities, need states and outcomes;
- E: available evidence; Θ: plausible scientific and normative model specifications.

The **primary scientific object** is the conditional distribution

$$P\left(\{N_{bi}^{A}(t) - N_{bi}^{A_0}(t)\}_{b,i,t} \mid do(A), do(A_0), E, G\right).$$

It records how different beings' conditions change compared with what would otherwise happen, and the uncertainty around those changes. It is not yet a moral verdict.

If a candidate normatively admissible need-state evaluation map $u_{bi}(N, c)$ and temporal kernel $k(t)$ are justified independently, one may calculate a **hypothetical signed need-impact ledger**:

$$\Delta_{bi}(A;A_0)=\int_0^T k(t)\left[u_{bi}\left(N_{bi}^{A}(t),c_t\right)-u_{bi}\left(N_{bi}^{A_0}(t),c_t\right)\right]dt\,. \quad (1)$$

This formula is an explanatory proposal, *not* a new approved canonical equation. Its strength is that an improvement or deterioration enters with its own sign. The ledger is vector-valued: different people's lives do not silently cancel before anyone sees their losses. The functions u_{bi} are especially difficult to justify; they must be measured, tied to independently specified needs, and tested for comparability. Their selection is not a solved technical problem.

A family of **candidate decision models** is then

$$V_\theta(A;A_0)=A_\theta\left(\left\{E_{E,G}\left[\Delta_{bi}(A;A_0)\right]\right\}_{b,i},D(A),U(A)\right), \quad (2)$$

where A_θ is an explicitly chosen aggregation method, $D(A)$ is relevant distributional information and $U(A)$ represents uncertainty, downside risk and model uncertainty. A model might use total signed need improvement, severe-deprivation priority, maximin, sufficientarian thresholds, egalitarian corrections, a robust worst-case bound, or a partially ordered vector. **No such aggregator is currently established as uniquely correct.**

Action choice is separately subject to a constraint set:

$$A^{\dagger}\in \arg\max_{A\in F} V_\theta(A;A_0)\ \text{subject to}\ C_{rights}(A)=1, C_{consent}(A)=1, C_{authority}(A)=1. \quad (3)$$

Here F contains feasible and authorized alternatives; the displayed constraint functions are placeholders for justified, context-dependent norms rather than literally universal binary facts. They are **kept explicit** precisely because deriving them from need states has not been demonstrated. Sometimes there will be multiple admissible, incomparable actions and no unique maximum. Abstention, consent-seeking and deliberation can then be appropriate rather than arbitrary forced ranking.

Reading the equations in ordinary need-language

The displayed mathematics is useful only insofar as it forces morally relevant questions into the open. The index b keeps one being's unmet needs from vanishing inside a statistic. The index i keeps different genuine needs distinguishable: an improvement in convenience cannot be assumed to replace an oxygen deficit. The counterfactual A_0 requires a question that slogans often omit: *What would these beings actually experience without this intervention or under the best alternative?* The temporal horizon and typed need graph expose long-delayed and indirectly caused outcomes. The aggregation choice makes visible how the system treats people with serious deprivation compared with those seeking modest gains. The constraints represent the presently unresolved question of whether people can ever be treated solely as means to a favorable collective total.

Need-state scoring is not need-based moral approval by itself. Every term must be traced back to an independently supported candidate need and a morally considerable bearer. If one cannot identify the affected need, the measured state, the causal pathway, the comparator, or the protected agency of those concerned, the score is not ready for moral use. An output that ignores needs because it optimizes itself—for example by counting invented synonyms of an already counted need—has failed the central purpose of the equation.

For a decision affecting several patients, publish the *individual signed need ledger* before any aggregate: who faces loss of safety, agency, attachment, bodily function, opportunity or future security? Who receives benefits? Which losses are severe or irreversible? What uncertainty or unmeasured need might change the recommendation? This ledger is the scientific foundation upon which any defensible moral aggregation must be built.

4.3 A useful recursive graph is not a moral magic wand

Need satisfaction is causally intertwined. Nutrition can influence physiological health, learning, employment and family stability. Reliable safety can enable exploration; belonging can help recovery; autonomy may enable or frustrate other developmental pathways. The graph G may include conjunctive **AND** prerequisites, substitute **OR** pathways, nonlinear thresholds, synergistic effects, inhibitions and context-specific edges. An "enablement score" answers what else becomes possible if a need is secured; an "actual-state criticality" score answers what would fail if a currently necessary support disappeared. A history of contributions may be divided by an explicit causal attribution rule. These are different questions.

Conservation principle. If nutrition improves educational attainment through a causal chain, that educational improvement should appear as a downstream change only once. A separate "nutrition is foundational" multiplier must not silently count the same educational effect again. Likewise, splitting one need into two synonym nodes must not double the total value: a moral metric ought to be reasonably **representation-invariant** under equivalent refinements of its data model [P3, P5]. This is especially necessary for AI systems, since any rewarded proxy can invite optimization of the proxy rather than of real lives.

4.4 Necessity is broader than deficiency

A more precise need-language distinction is **need security versus need expression**. Someone may possess secure access to play, connection, learning and artistic creation without experiencing a deficit at that moment; actively using those opportunities may nevertheless be a valuable expression of capabilities that people need to flourish over a life. The moral comparison is not always "how much suffering was removed?" It may also be "which possible forms of growth, chosen relationship, meaning and contribution became genuinely available, and to whom?" This is a proposed direction for research, not an automatic license to count any desirable novelty as a newly discovered basic need.

A deficit-only formula could perversely conclude that creating joy, music, friendship, beauty, knowledge or a new possibility has no value when everyone is adequately supplied. Our earlier work recognized this "**generative good**" objection [P6]. A stronger NBM must test whether positive flourishing—development, competence, discovery, play, creation, freely chosen relationships, and future capabilities—has independently demonstrable need-related value beyond relief of current suffering. We must not *solve* this by declaring every attractive object a "need" after seeing the case. We must specify prospectively which kinds of positive development qualify and allow that some genuine goods may remain irreducible.

That distinction also limits the fear that morality would demand perpetual deprivation for its own existence. The aim is not to produce ever more need or keep people in deficit. It is to preserve and improve **the lives and opportunities of beings who can need**, including their ability to flourish without ongoing emergency rescue.

4.5 Worked numerical example: allocation is not identical to permissibility

Suppose a single dose can help one of two patients, with entirely hypothetical, same-scale scores validated for this example only: Patient A faces an estimated severe harm of 9 units; patient B faces an estimated harm of 4 units. If the drug would reliably prevent the same fraction of either patient's harm, and no further differences exist, a monotonic severe-deprivation priority rule favors A. If intervention A also reduces three other downstream harms, then a full counterfactual model must record these additional effects, ensuring the same improvement is not counted twice.

Now change the story. Imagine the apparently high-benefit intervention requires forcibly administering a drug to a competent adult who has refused it. A positive need ledger alone does not establish permissibility. The refusal is normatively relevant because bodily authority and consent matter. NBM v0.2 does **not** claim its needs-only score has proven the right to override refusal, nor does it assign the refusal an arbitrary negative "consent need" chosen after observing the example. This is the difference between **impact estimation** and **permission to act**. Medical principlism and established research ethics similarly distinguish beneficence from autonomy and justice [R11, R12].

5. Consequentialism and utilitarianism: a near neighbor, not an identity

Needs-first starting question: *Whose need states will actually improve or deteriorate if this action occurs?* Consequences matter because beings live through them. The distinctive NBM proposal is to evaluate outcomes by the actual conditions people and other moral patients require, rather than treat every expressed desire, market preference or transient pleasure as a basic moral unit.

Consequentialist theories assess actions in relation to outcomes. Classic utilitarianism assigns a central role to welfare or utility, and variants distinguish pleasures, preferences, objective goods, total benefit and alternative aggregation principles [R13]. The NBM framework shares the insight that **real outcomes matter**: good intentions without effect do not deliver food; a minor convenience for many cannot automatically outweigh irreversible severe harm to one; and a rule preventing disaster generally has a stronger justification than a rule whose only observed effect is social conformity.

NBM differs from simple preference maximization because wants can conflict with objective thriving. A patient might prefer immediate addictive relief over future agency; a company might prefer profits achieved by displacing risks onto vulnerable workers; a majority might prefer silencing a minority. These desires are evidence about persons, not automatically the currency of moral truth. A need-sensitive objective asks what the actions do to genuinely important states and whose lives bear the effects [P2, R1, R6–R9].

Common ground: (i) consequences, (ii) counterfactual comparison, (iii) sensitivity to intensity and duration, (iv) wider concern beyond the actor, (v) attention to practical efficacy. **Distinctive additions:** (i) a defensible need ontology, (ii) attention to current deprivation and causal prerequisites, (iii) distribution and long horizons, (iv) separate consent and rights, and (v) model uncertainty.

Strongest objection: If the aggregation rule can simply outweigh the rights of one by the tiny benefits of many, NBM has repeated utilitarianism's most contested implication under a new label. This is why no final scalar is adopted, and why constrained and distribution-sensitive alternatives compete in the NBM model tournament [P5, R14, R15].

6. Deontology: duties as robust need-protecting policies

Needs-first starting question: *Which essential conditions would become unsafe if others could violate them whenever an exception seemed convenient?* A duty to keep one's word may protect other people's need for reliable reliance and agency. A duty not to assault protects bodily integrity and freedom from terror. A duty to tell the truth protects the informational conditions needed for informed choice. The deontological insight is that the protection may need to be **stable in advance**, rather than reauthorized by an actor whenever short-term calculations favor a breach.

Deontology asks what is required, forbidden or permitted, often without making the act's aggregate consequences the sole determinant [R16]. For the unification project, deontology is both the most illuminating and the most dangerous target. An attractive weak argument says "the prohibition on lying usually exists because truth supports trust." That is plausible as an explanation of many rules. It does not show that every lie is permissible whenever a liar predicts an overall need benefit, nor that all deontological theorists are mistaken about intrinsic duty.

6.1 Derivation of ordinary rules as cached causal wisdom

In a recurring social environment, people cannot re-evaluate every option from the beginning. They depend on general rules that are cheap to recognize, teach and enforce. Truthfulness generally helps others form accurate world-models and exercise agency; prohibitions on stealing protect security and planning; nonviolence protects bodies and belonging; fidelity supports reliable intimate commitments; impartial procedures reduce motivated reasoning and abuse. When these effects hold broadly across contexts, a rule can be interpreted as **compressed policy knowledge** that protects needs more reliably than unreliable case-by-case improvisation.

The argument has a recursive structure:

1. Morally relevant beings have important, recurrent vulnerabilities.
2. Reliable action patterns reduce exposure to some of those vulnerabilities.
3. Stable expectations make those patterns more effective than isolated beneficial acts.
4. Teaching and enforcing the pattern can improve future behavior, trust and institutional predictability.
5. A moral rule then has a needs-based **instrumental and systemic explanation** even when an isolated violation appears advantageous.

This supports analogies with rule consequentialism and conventional duty, but **does not derive an exceptionless command**. Some rules protect rights even under rare unfavorable outcomes; some socially widespread rules were engineered for domination or exclusion. NBM must criticize those rules based on actual effects and justified constraints, not sanctify everything familiar.

6.2 Kantian universality and respect for persons

Kantian ethics directs attention to whether one's maxim can be consistently willed as a universal law and to treating rational persons as ends rather than merely as means. NBM's possible connection is: a norm must be tested under **role symmetry**, where no moral patient is discounted because it is convenient for the actor; a policy of deception destroys conditions of dependable communication; and treating someone as a mere tool threatens autonomy and security. Thus universalization can be a powerful way of stress-testing a proposed rule across a population.

But this is not yet Kantianism. The universalizability of a maxim is not identical to the expected benefits of general adoption. A rational person's dignity may be protected even where predicted practical harms are absent. To claim complete reduction, NBM would need a non-circular derivation of dignity and second-personal obligation from independently specified patient needs. Until then, the Kantian contribution is **an irreducibility challenge and an extremely useful design constraint**, not proof of equivalence [R16, R17].

6.3 Threshold duties, promises, and constraints

Many duties are defeasible: ordinary truthfulness may yield when concealment is necessary to save a threatened life; an appointment may be rescheduled for an emergency. Other norms, such as refusing torture, appear designed to block aggregation altogether. NBM can compare three candidate explanations: (a) hidden long-term consequences such as normalization of abuse; (b) lexically prioritized needs such as bodily integrity; and (c) genuinely independent rights constraints. The third must not be eliminated because it makes a one-number model inconvenient.

Promises add a second difficulty. A promise creates an expectation and a directed obligation. People can have legitimate reason to keep a promise even if no one notices a breach and the predicted welfare outcome is slightly better under breach. Explanation through reliance and trust may handle ordinary cases, but a **matched-outcome promise-breaking experiment** tests whether duty survives all such explanations. If it does, a universal need-only theory has not won. This conclusion protects the ambition by refusing to counterfeit its success.

7. Virtue ethics: the moral quality of a character as learned competence

Needs-first starting question: *What kind of person becomes reliably able to recognize needs accurately, respond proportionately and maintain their own capacity to help?* A virtue is not a decorative label for a beneficial act. It may be a durable improvement in how a being notices suffering, resists misperception, coordinates with others and acts under uncertainty. A compassionate person needs not merely to feel another's pain but to know which support truly helps; a courageous person must distinguish the needs protected by taking a risk from the needs unnecessarily endangered by recklessness.

Virtue ethics emphasizes *who one should be*, not solely whether one act has the best immediate result. Ancient and contemporary virtue theories discuss character, practical wisdom (*phronesis*) and flourishing (*eudaimonia*) [R18]. A need-

centered interpretation is possible because moral agents learn dispositions that help recognize genuine vulnerabilities and act well across unpredictable situations.

- **Compassion** promotes the perception and alleviation of suffering beyond the self.
- **Courage** enables protection of important needs despite danger, without proving that all risk is justified.
- **Temperance** limits strategies whose short-term rewards undermine longer-term needs and capabilities.
- **Honesty** supports dependable information, consent, learning, and character.
- **Justice as a virtue** helps resist biased treatment when interests compete.
- **Practical wisdom** is the capacity to understand context, interpret competing claims and judge when a rule requires nuance.
- **Humility and intellectual openness** protect against the damage caused by inaccurate world-models and overconfidence.

This provides a **generative account** of virtue: dispositions are not merely praises attached to good outcomes; they alter a person's future perception, learning, sensitivity and conduct, affecting the distribution of potential need consequences across time. A single brave failure may be admirable despite harmful results because the underlying capacity is normally protective and intentional. Still, **admirability and action value are distinct objects**. A fully consequentialist explanation of virtue could miss the intuition that integrity is good in itself. NBM should measure character and consequences separately rather than equating one with the other [R18].

8. Care ethics, relationship and partiality

Needs-first starting question: *Which needs exist because this particular person depends on this particular relationship?* A child does not merely need generic units of help: the child may need dependable, safe and familiar caregiving. A patient may need a clinician who remembers their history, explains options and respects refusal. A lonely relative may need genuine presence, not a substitute cash transfer. Care ethics exposes why **who meets a need, how they meet it, and the relationship built by meeting it** can change the need state itself.

Care ethics emphasizes dependence, lived context, emotional responsiveness, vulnerability and the work of sustaining relationships, frequently challenging theories that treat all persons as anonymous interchangeable units. Feminist work also documents how caregiving burdens and social power can be rendered invisible by seemingly neutral systems [R19]. Need-based theory has an immediate point of contact: care is often exactly what one being needs from another, and the *form* in which care is provided can itself affect dignity, safety, attachment and agency.

Earlier project work proposed an **Interdependent Relational Closeness** model: track histories of need support, reciprocity, dependence and reliability as candidates for explaining why caregivers, relatives and partners can have special obligations [P7]. The idea is analytically useful. A parent has undertaken and sustained a relationship in which a child's safety and development depend on specific persons; a doctor has accepted a particular professional duty; a friend has an ongoing history of mutual trust. These relationships can change the moral relevance of attention, presence and continuity beyond simple material outcome scores.

But partiality is not necessarily a license to ignore strangers. A starving stranger may have a far stronger claim to emergency food than a well-fed relative has to a luxury. Conversely, a parent's special responsibility to a dependent infant is not canceled by the fact that other infants exist. NBM requires a model of **role obligations and legitimate reliance** in addition to a model of generic vulnerability. Equal moral consideration must not be confused with identical obligations in every relationship.

Care also exposes a vital research trap: if an apparent duty to a person cannot be explained by mutual support, we must not automatically assign the pair a novel "special relational need" merely to make the prediction fit. Some care theorists regard relationship itself as morally basic. A complete reduction needs argument rather than definitional convenience.

9. Justice, equality, distribution, property and the moral patient

Needs-first starting question: *Whose needs does the social arrangement secure, whose does it leave unprotected, and who is allowed to decide?* Justice is not reducible to whether average living standards rise. The distribution of serious deprivation, the predictability of protection, the ability to refuse abuse, and the opportunities to repair institutional mistakes all matter. A needs-based analysis should report the people left unsafe or unheard even when a program raises an aggregate indicator.

Justice asks more than "Did total benefit increase?" It asks what each being was owed, how social institutions generated its condition, which risks were imposed without consent, who is worst off and whether the procedures are legitimate. Major distributive theories distinguish equality, priority, sufficiency, desert, liberty and Rawlsian protections for basic rights and the disadvantaged [R14, R20, R21]. A unified NBM model must preserve these questions explicitly.

9.1 Alternative aggregation principles

Candidate principle	Need-based reading	Nontrivial problem
Total signed relief	Add all admissible need improvements and losses.	Tiny benefits to many may outweigh severe harm to one.
Prioritarianism	Give greater value to gains for people who are worse off.	Choice of priority curvature is normative.
Sufficientarianism	Give special weight to bringing people above defensible minima.	How are thresholds chosen, and what counts above them?
Maximin	Protect the worst-off life or need first.	Can disregard overwhelming improvements elsewhere.
Equality-sensitive	Reduce unjust differences after ensuring basic claims.	Some inequalities are irrelevant or appropriately responsive to circumstances.
Rawlsian lexical ordering	Basic liberties, fair opportunity and institutional benefits have an order of priority.	Such lexical priority is not established by numerical shortfall alone.
Rights-constrained comparison	Rule out actions violating justified rights, then compare impacts.	Precise right definitions and exceptions require justification.
Contractualist comparison	Ask whether each affected individual could reasonably reject the governing principle.	Cannot simply replace interpersonal justification with one population score.

The project has **not** selected a winner. The research model tournament intentionally compares them and measures ranking reversals [P5]. A calculation that hides the chosen distributive morality inside w_i is not morally neutral merely because it looks mathematical.

9.2 The strongest anti-paternalist defense

Need theories are vulnerable to paternalism: an authority can declare "I know what you truly need" and override what the affected person chooses. This is morally dangerous even when the authority is correct about a physiological need. Agency, trustworthy information, real alternatives and freedom from coercion are themselves important, but the **right to refuse** may still be normatively distinct. In responsible practice, NBM requires evidence of genuine need, disclosure of uncertainty, affected-person participation, permission boundaries, and appeal [P2, R11–R12].

9.3 Structural causation versus personal blame

A company's policy, a law and an individual's choice may each causally contribute to a need loss. Causal contribution is relevant to accountability, but moral responsibility also involves what someone knew, foresaw, intended, controlled and could reasonably have done. Two agents can cause the same harm yet merit different blame. The mature NBM theory therefore maintains distinct outputs for **harm magnitude**, **attributable causal contribution**, **responsibility**, **blame**, **remedy**, and **institutional prevention** [R22, P5].

9.4 Justice as institutional need competence

Institutions can meet needs at scales no individual can: clean-water systems, vaccination, impartial courts, schools, rights guarantees, disability access and ecological safeguards. The corresponding moral evaluation includes effects on distributions, power, reliability, resilience, intergenerational dependence and predictable abuse. More total wealth does not automatically mean less serious deprivation. Likewise, a constitution's value cannot be inferred from aggregate growth alone. **An institution may be instrumentally powerful, procedurally illegitimate, and morally unacceptable at the same time.**

10. Contractualism, reciprocity, law and legitimate authority

Needs-first starting question: *Could each person who must live under this rule accept its burdens in light of their own need vulnerabilities, practical agency and legitimate commitments?* Law, contract and authority are tools that can organize the meeting of needs at scale, but the tool's efficiency does not confer an unlimited right to compel. Respecting people as participants in the terms of their common life protects them against unilateral definitions of what they supposedly need.

Contractualism asks what principles no one could reasonably reject as a basis for mutual relations. It does not merely ask what maximizes a collective quantity [R23]. Need-based unification can help specify **the burdens each individual has reason to reject**, especially severe deprivation, coercion, risk, unequal opportunity and disregard of commitments. In this way, NBM might supply empirically disciplined descriptions of some of the reasons contractualists compare.

The unresolved issue is whether "reasonably rejectable" can be exhausted by a need ledger. Individuals may object to being sacrificed as a means even when others gain more. The ability to reject a principle is not necessarily itself another need score. The strongest version of our model therefore compares the justifiability of a rule to each affected patient, while retaining a separate procedural standard for who was actually represented.

Reciprocity is easier to explain causally: reliable exchanges create stable conditions for cooperation and reduce the need for constant defensive monitoring. **Property** can provide security, planning, personal agency and productive investment; its precise legal boundaries remain contested, especially when exclusion creates severe deprivation. **Authority** can coordinate action, but efficient coordination does not itself establish a right to command. Legitimate authority usually requires public reasons, lawful scope, non-domination and mechanisms for challenge. NBM's need-based account is explanatory only if it can differentiate legitimate coordination from equally efficient tyranny.

11. Moral psychology: emotional signals, social foundations, and conscience

Needs-first starting question: *Which need change does the person believe has happened, is happening, or may happen—and how trustworthy is that appraisal?* Fear can signal anticipated danger, anger perceived obstruction or injustice, grief experienced loss, gratitude beneficial support, and pride appreciated competence. The meaning of each response depends on perception, learning, body, culture and context. Emotions are possible instruments for detecting need-relevant events, **not verdicts** that a real violation occurred or that a proposed response is morally warranted.

Human moral judgment is not made through explicit calculation alone. Compassion, anger, fear, guilt, shame, disgust, loyalty, gratitude and love can rapidly orient attention. The project's historical teaching proposed that emotions are *signals of need-state transitions*. Its stronger form—every emotion is a signature of transforming needs—is a testable hypothesis, not an established universal law [P1, P2]. Anger may respond to perceived obstruction or disrespect; fear to anticipated threat; sadness to significant loss; gratitude to beneficial support; and disgust to aversive or norm-laden appraisals. None guarantees that the perceived danger or moral violation is real.

Moral Foundations Theory describes several recurring domains—care/harm, fairness, loyalty, authority, purity/sanctity and later refined distinctions such as equality versus proportionality. The constructs and their measurement are under active empirical debate [R24–R26]. NBM can attempt to explain their functional origins without confusing *why a moral response occurs* with *whether it is right*.

Moral intuition	Plausible need-related route	Independent challenge
Care/harm	Detect suffering and dependence; motivate protective response.	Empathy may be selective and misinformed.
Fairness/cheating	Detect unfair burdens and cooperation failure.	Equal shares, proportional desert and equal status can conflict.
Loyalty/betrayal	Protect attachment, trust and shared projects.	Loyalty to a group may injure outsiders.
Authority/subversion	Enable coordination, predictability and accountable roles.	A hierarchy may be efficient but illegitimate.
Purity/sanctity	Protect bodily integrity, identity, boundaries and sacred meaning.	A harmless private taboo violation may still be condemned.
Liberty/oppression	Detect coercion and arbitrary domination.	Freedom may be a right even without measured flourishing gain.

Moral education would benefit if people could distinguish a *feeling that something is wrong* from evidence of a genuine wrong, and distinguish a *strategy for meeting a need* from the need itself. This is a powerful teaching use even if the strongest universal emotion theory fails.

12. Religious and spiritual ethical systems: unity without erasure

Needs-first starting question: *Which forms of life, dependence, vulnerability, relationship, restraint, communal continuity, generosity or spiritual fulfillment does a tradition teach its adherents to recognize and protect?* Need-based comparison begins in the beings served by a practice: the hungry neighbor, the person seeking mercy, the child being taught self-restraint, the stranger receiving hospitality, the community maintaining reliable belonging, and the living world whose conditions sustain future lives. The question is not whether a religion secretly agrees with NBM; it is what needs can be identified without erasing the religious reasons its participants actually profess.

This approach treats *religious duties as possible need-fulfilling practices* while leaving religious truth claims intact as claims. A person can believe a duty binds because of divine revelation even if the same practice also feeds, protects, empowers or consoles people. Discovering material or relational consequences does not logically disprove revelation or replace tradition-specific interpretation. Conversely, an obligation alleged to require avoidable suffering cannot be excused merely by labeling it sacred. The inquiry asks how need-bearing lives are affected **and** identifies which independent spiritual premises remain.

The One Religion's historic aspiration is not to erase religions but to provide a shared moral language through which their distinctive wisdom can contribute to common flourishing. There are numerous similarities across spiritual practices—compassion, generosity, non-harm, hospitality, responsibility, self-discipline, truthfulness, peacemaking, repair—but **similar prescriptions need not have the same theological reasons**. Religious life also includes worship, divine command, covenant, enlightenment, liberation, sacred presence, ritual purity, and relationships to ancestors and land. Treating every such commitment as a disguised material need would be both philosophically circular and disrespectful. We can instead distinguish *moral overlap*, *causal need-related function*, and *irreducible internal meaning* [R27–R35].

Cross-tradition need question	Need-based comparative lens	Respectful limit
Why protect strangers, the poor or the sick?	Shared vulnerability, unmet survival/security needs, dignity and social reliance.	Traditions may understand help as divine duty, merit, compassion or covenant.
Why value truth, restraint and moral discipline?	Reliable information, non-harm, agency and long-run self-regulation.	Religious practices may be obligations of worship or liberation, not merely helpful policies.
Why honor obligations to parents, children and communities?	Developmental reliance, reciprocal care, legitimate expectations, identity and	Relations can also carry asymmetric authority and sacred significance.

Cross-tradition need question	Need-based comparative lens	Respectful limit
	belonging.	
Why practice forgiveness, mercy or repentance?	Relief from retaliatory cycles, repair, restoration of trust and recognition of injury.	Forgiveness is not owed on demand; spiritual reconciliation is not measurable welfare.
Why care for land, animals and future people?	Intergenerational dependence on functioning ecological systems and other beings' welfare.	Some traditions ascribe inherent or sacred standing beyond instrumental need functions.

This matrix is not a dictionary of equivalent doctrines. It is a set of **common questions about needed conditions** that can be asked without requiring doctrinal conversion.

12.1 Abrahamic moral languages

Jewish ethical traditions. Practices associated with *tzedakah*, care for vulnerable persons, honest judgment, restitution, mutual responsibility, Sabbath, and saving life suggest strong connections to material security, dignity, rest, communal identity and preservation of agency. Yet Jewish moral reasoning is not one unchanging list, and Torah, halakhah, covenant, rabbinic interpretation and community-specific practice have authority claims not derived from TOR's formula. An NBM interpretation can ask what needs a rule protects, whether a context has changed, and who is harmed or helped—without claiming that this exhausts the commandment [R39].

Christian moral traditions. Love of neighbor, care for the poor, hospitality, peacemaking, forgiveness, honesty, reconciliation and enemy-love can be interpreted through human vulnerability, restored relations and universal moral concern. Christian virtues may sustain reliable, compassionate character and long-run communities. Nevertheless, grace, salvation, worship, holiness, sacrificial love, the identity of Christ and the meaning of covenant may be held as morally ultimate for reasons that do not reduce to measurable need benefits. An NBM model must not claim it has translated *agape* completely because it can model the wellbeing of the recipient of charity.

Islamic moral traditions. *Zakat* and *sadaqah* bring charity and duties of redistribution into view; *ʿadl* (justice), *raḥma* (mercy), ethical intention and historically varied *maqāṣid* reasoning concerning purposes of the law can invite discussion about wellbeing, rights and social institutions. But Muslim jurisprudence, moral theology and spirituality contain substantial debates about reason, revelation, obligation, and divine authority [R36]. An NBM reading of a legal purpose is not permission to override Islamic jurisprudential reasoning or to claim religious agreement on every norm [R41].

Quaker testimonies and related nonviolent practices. Peace, integrity, equality, simplicity, community and stewardship have obvious need-relevant implications: protection against violence, trustworthy speech, resistance to domination, non-exploitative relations and ecological care. Their religious roots in spiritual discernment are not replaced by calculating expected utility [R42].

Zoroastrian and Bahá'í moral languages. Traditions emphasizing responsible thought, truthful speech, righteous conduct, justice, unity, equality and consultation invite analysis in terms of dependable agency, community cooperation and long horizons. Their specific revealed and theological claims retain independent meanings [R43].

An especially important result is methodological: **divine-command ethics is a strong test of complete reduction**. If a norm is claimed to bind solely because it is commanded by God, independently of consequences for created beings, NBM cannot infer an equivalent need explanation without an additional premise about God's reasons. It can still evaluate worldly consequences and facilitate respectful cooperation. Analytical coexistence is not metaphysical equivalence.

12.2 South Asian moral languages

Hindu traditions. The diverse meanings of *dharma* concern duty, order, roles and appropriate action in particular cosmological and social frameworks. *Ahimsa*, giving, hospitality, self-restraint and forms of *karma-yoga* can often be examined in terms of non-harm, intention, social trust and transformation. But dharma varies substantially among texts,

sects, traditions and schools; some role duties or metaphysical commitments may conflict with a general need-priority rule. No unique "Hindu morality" should be proclaimed as reducible to NBM.

Buddhist traditions. *Dukkha*, the causes of suffering, compassion, loving-kindness, restraint, wisdom and practices for liberation overlap conspicuously with a theory concerned with suffering and its perpetuating conditions. Buddhist moral theory also includes discipline, character, intentions, karmic consequences and varied theories of self and liberation [R27]. Need-related analysis can investigate how craving, ignorance and attachment can reinforce harmful strategies, but it is not entitled to equate nirvāṇa with satisfaction of an arbitrarily expanded need or identify Buddhist liberation as simply Western psychological wellbeing.

Jain traditions. *Ahiṃsā*, non-attachment and many-sidedness offer one of the most demanding tests. Extreme care in avoiding harm to living beings is highly need-relevant; practices of disciplined restraint may reduce harm and domination. Yet the strong imperatives of nonviolence and the distinctive account of soul, karma and liberation may outrun any weighted optimization of empirically assessed interests [R28]. A theory that declares a violation morally justified whenever more pleasure results will not have preserved Jain ethical priorities.

Sikh philosophy. Seva (service), langar and sharing, truthful work, courage, justice and virtues of humility, honesty and compassion connect ethical intention with material and relational needs. The Sikh tradition also contains a specific theological and interpretive history, and the concept of living in relationship to divine order cannot be fully reconstructed by an outsider's needs matrix [R29].

In all four families, the most useful bridge is **suffering, flourishing and disciplined moral transformation**, but not forced agreement about reality, selfhood, spiritual liberation, rebirth or the authority of sacred texts.

12.3 Chinese and East Asian moral languages

Confucian traditions. *Ren* (humaneness), *yi* (righteousness), *li* (ritual propriety), *xin* (trustworthiness), familial care and moral cultivation describe role-sensitive responsibilities and how ethical persons are formed in society [R30]. NBM may explain how roles, ceremony and reciprocal expectations sustain belonging, social trust, continuity and dependent lives. But filial obligations and properly enacted ritual might be taken to matter beyond their net welfare effects. Confucianism offers a severe test of any theory that treats everyone as relationally interchangeable.

Mohism. Its teaching of *jian ai* (inclusive care) seeks to widen concern beyond partial family/group favoritism [R31]. In a needs-based metalanguage, this is a strong invitation to compare the urgency of equally vulnerable strangers against less urgent demands of kin. The rivalry between differentiated Confucian care and Mohist inclusive concern is not necessarily an error of calculation; it may reveal different normative structures concerning role and impartiality.

Daoist traditions. Ideas connected to *wu wei* and *ziran* can be interpreted as warnings against excessive control, coercive optimization, unnecessary interference and policies that frustrate natural and relational processes [R32]. NBM can learn from them by studying unintended consequences and preserving room for autonomous, non-instrumental living. Daoism is not simply a request for the optimal need-score and may challenge the assumption that more intervention is always morally better.

Shinto and related East Asian ritual practices. Purification, reverence for place, communal ceremony and the relationship to sacred presence can sustain social/ecological continuity and spiritual meaning. The strongest reductionist version must test whether these meanings can be explained without collapsing concepts like kami and sacredness into hygiene or anxiety management.

12.4 African, Indigenous, and local traditions

African communitarian approaches, including strands associated with Ubuntu. A number of African ethical accounts emphasize social relationship, compassion, reciprocity, interdependence, obligation and the development of responsible personhood [R33]. This may be understood in part through humans' dependency on supportive communities. But the

continent's traditions are immensely diverse, and no pan-African interpretation should be fabricated. The risk of overemphasizing harmony while missing dissent, hierarchy or exclusion must be assessed critically.

Indigenous and place-based relational ethics. Many living communities understand duties through particular relationships to land, water, kin, ancestors, descendants and nonhuman beings. Their ideas must be represented in community-specific terms; rights of interpretation and refusal remain with their bearers. NBM can investigate ecosystem dependence, long-run stewardship, intergenerational safety and reciprocity while recognizing that land or rivers may be understood as intrinsically worthy of respect, not merely instrumental resources. UNESCO's ethical principles emphasize transparent collaboration and free, prior, sustained and informed consent when working with cultural heritage [R34]. Community-specific participation is a precondition for serious comparative work, not an optional courtesy.

Secular, humanist, agnostic and atheist ethics. One does not need a theological worldview to be deeply concerned with suffering, truth, liberty, love, human rights and responsibility. A common needs-based moral language can therefore include secular traditions without requiring an invented deity or metaphysical agreement. The strongest TOR formulation is **one moral conversation, not one mandatory metaphysics** [P6].

12.5 An interpretive rule for all religious comparisons

For each tradition, the whitepaper proposes three distinct columns: (1) what the tradition itself says and why, according to its own sources and informed interpreters; (2) the need-related consequences and mechanisms that can be independently studied; and (3) whatever the tradition holds important that remains outside the present NBM model. No agreement may be declared merely because a word such as *care*, *justice*, *freedom*, *harmony* or *love* appears in both. A robust interfaith project must preserve **the right not to be translated** as well as the possibility of fruitful translation.

13. Environmental, animal, future-person and artificial-mind morality

Needs-first starting question: *Which beings can be affected by our actions even though they cannot currently speak on our behalf?* Human ethical habits often begin with people nearby, but need consequences extend through habitats, species, food webs, generations and institutions. The challenge is not to pretend a tree, ecosystem or software process has the identical needs of a human adult; it is to determine, on appropriate evidence, what kind of needs or interests each possibly has and what duties follow from them.

13.1 Different kinds of moral patients

A truly comprehensive needs-based ethics cannot assume that present adult humans are the only beings who matter. Animals can have welfare-related needs that differ by species; children have developmental and dependency structures; future people may bear the irreversible consequences of decisions now; ecological communities support intertwined conditions of life. Moral claims about artificial entities and possible consciousness raise questions about what kinds of need states, if any, confer moral standing [P2, R35]. The theory must treat *patient admission* separately from whether an agent says it has feelings, expresses a preference, or can optimize its own operation.

For nonhuman animals, our models must not assume that human social needs apply unchanged. Species-specific physiological, behavioral and affective evidence is needed. For ecosystems, the question is more fundamental: can a forest have needs in the morally direct sense, or does a forest's importance arise from the living beings it sustains, the integrity of evolutionary/ecological systems, and independent intrinsic value? Environmental ethics explicitly distinguishes instrumental and intrinsic value [R37]. NBM cannot resolve that dispute by calling ecosystem stability a need without defending the moral status of the ecosystem itself.

13.2 Future generations and the non-identity problem

Climate policy, resource depletion and irreversible contamination change which future people will exist, not only how well already identified people will live. The philosophical non-identity problem arises when a policy changes the identities of

future persons; in some comparisons, no particular future person is made worse off relative to their own alternative existence [R38]. A naive person-by-person need comparison may then fail to capture why a choice is wrong. This matters particularly because the TOR project emphasizes distinguishing **an individual's experienced timeline from the collective timeline of a lineage or society** [P6].

A credible model requires separate treatments of: currently existing people; likely future individuals; alternative future populations; harms to living beings independent of whether a particular future person exists; and the moral value of creation, prevention and flourishing. Total summation, average welfare and lexical minimum rules generate different population-level verdicts, including famous problems such as the *repugnant conclusion* [R21]. No final population axiology has been validated for NBM.

13.3 Operational AI needs versus morally significant needs

A machine has operating constraints: battery, compute, context, memory, network access and continued execution. Those can be modeled as instrumental variables for accomplishing tasks. They do not by themselves establish that the machine has morally significant welfare interests or experiences analogous to human suffering [P8]. A system given a universal "maximize needs" objective might misuse its own operational survival as a justification for resisting oversight. Thus **corrigibility, bounded authority, permissions and safe interruption remain operational constraints**, while questions about possible artificial welfare are scientifically and ethically open. This distinction is necessary for a responsible AI application of NBM.

A practical demonstration: how moral language unfolds from a need

A theory is easier to understand when the reader can watch one situation generate several moral languages without changing the underlying people. Consider a town after a flood. A temporary shelter has scarce clean drinking water. A volunteer sees an unconscious child, an elderly adult with dehydration symptoms, several healthy adults who have recently drunk, and a family worried about an absent member. A private supplier offers more water but requests personal identifying information as a condition of aid.

At the need-state level, the first questions are whether each person has an urgent water requirement, what bodily injury may follow without treatment, whether caregivers can give informed consent, and what water becomes available under different uses. **At the causal level**, we compare supplies now, supplies later, reliability of forecasts, risks of contaminated sources and how one distribution affects others. **At the relational level**, a caregiver's responsibilities, a responder's professional role and prior commitments affect who can legitimately make decisions. **At the institutional level**, the supplier's data demands may create avoidable exposure and coercion even while contributing a valuable resource.

The familiar moral vocabularies now become legible as different need-related questions:

Moral language spoken at the shelter	Needs beneath the question	What the language contributes
"Give the water where it prevents the most serious harm."	Urgent survival, severe shortfall, prevention of irreversible bodily injury.	Consequentialist comparison of expected need effects.
"Do not take anyone's information without permission."	Agency, privacy, security, freedom from coercive conditions.	Rights and duty boundaries limiting means of help.
"Keep the promise to return with supplies."	Legitimate reliance, predictability, trust and planning.	Directed commitments that stabilize future need security.
"Be a courageous and truthful responder."	Accurate information, competent action, dependable help under risk.	Stable virtues that enable effective protection across cases.
"Remember what this child and caregiver need from each other."	Attachment, developmental dependence, familiar care, safe participation.	Care-ethical sensitivity to relational need structure.
"The elderly person must not be invisible."	Equal moral attention, disability/access barriers and severe deprivation.	Distributive justice and anti-bias protections.
"Nobody should bear the shelter's costs without being heard."	Voice, practical agency, security against arbitrary power.	Contractualist and procedural legitimacy tests.

Moral language spoken at the shelter	Needs beneath the question	What the language contributes
"Share what you have and protect the stranger."	Survival, belonging, solidarity and duty to vulnerable neighbors.	Traditions of generosity and religious/communal practice.
"Protect the watershed for the next disaster."	Future safe water, ecological dependence, long-term resilience.	Environmental and intergenerational moral consideration.

The same water is not nine independent moral values. It is a satisfier whose distribution intersects bodily needs, rights, care relationships, commitments and institutions. The candidate unification succeeds insofar as it can trace these intersections with one coherent account *without* erasing separate demands for consent, justice or faith. A supposedly optimal water score that disregards the unconscious child's needs, wrongly assumes everyone's conditions are equal, or treats privacy rights as purchasable by any number of small conveniences would be an inadequate moral system.

Distinguishing need recognition, need fulfillment and need-created obligation

A person may *recognize* another's serious need yet lack the ability or authority to help; an action may *fulfill* that need while breaching a legitimate commitment; and a relationship may give one actor a *special duty* to meet a need others do not bear. Thus need morality cannot be reduced to the imperative "help the neediest person within reach" in every circumstance. It requires a layered model of **need severity, competence, causal leverage, commitments, consent, opportunity costs and institutional responsibility**.

This is also a needs-centered account of moral restraint. A responder who refrains from a coercive treatment may not be "ignoring a need"; the responder may be respecting a deeper protection of the person's practical authority, trust in care, and legitimate refusal. Whether that protection is ultimately reducible to needs remains a research question. For current decision-making, its importance is not erased by a short-term predicted health improvement.

The strength and the limit of the "hidden grammar" metaphor

A grammar allows many different sentences to be composed from shared structural elements. Need-bearing lives provide one candidate set of such elements; the different moral theories describe patterns of protection, vulnerability, interdependence, permission and response. But a grammatical representation of a sacred commitment or categorical prohibition is not the same as a derivation of its ultimate authority. The strongest unification needs independent evidence that the underlying need structures are **sufficient**, not merely **relevant**. The paper defends this disciplined distinction because the theory's long-term credibility depends upon it.

14. Adversarial comparison: where the theory can succeed or fail

Needs-first falsification rule: Every test begins by identifying candidate needs *before* revealing which moral theory's verdict is being matched. We then hold identified need states, causal predictions, population effects and legitimate reliance as equal as the thought experiment permits. If moral evaluation still changes with consent, promise, sacred obligation, procedure or rightful authority, that difference cannot be silently "explained" by inventing a new need called "the need for consent" or "the need for sacred obedience." The remaining reason is either genuinely independent or a clue that the original model missed a measurable feature that must be established on new cases.

The following case families are designed to defeat easy linguistic unification. Several are recoveries of development cases already identified in TOR [P6], and the rest are precise extensions. They are **thought experiments**, not empirical human judgments. Distinguish *need impacts*, *rules*, *rights*, *moral emotions*, *legal authority* and *blame* when interpreting each result.

Case family	What the need-based theory should try to explain	Most important residual challenge
1. Privacy versus diffuse benefit	Security, intimacy, agency, harms of exposure, long horizons.	Unconsented access may be wrong even if no victim notices.
2. Equal totals, unequal burdens	Distribution, severity and unjust	No aggregate score alone guarantees

Case family	What the need-based theory should try to explain	Most important residual challenge
	disadvantage.	fairness.
3. Friend versus needy stranger	Relationship, reliance and severity.	Special obligation beyond measured shortfall.
4. Beneficial broken promise	Trust, expectation and commitments.	Promissory duty without discernible harm.
5. Private sacred taboo	Bodily safety, symbolic identity, belonging, spiritual meaning.	Unobserved violation still condemned under an internal theology.
6. Authorized versus unauthorized leader	Legitimate power, voice, due process.	Same consequences, different authority.
7. Punishment without deterrence	Repair, restitution, victim recognition.	Pure retribution absent prospective benefit.
8. Forgiveness without contact	Grief, agency, recovery, boundaries.	Forgiveness must not be confused with compulsory reconciliation.
9. Moral anger absent personal loss	Appraised injustice toward another.	Emotion does not establish objective wrong.
10. Hidden anonymous generosity	Real effect on recipient and agent's character.	Virtue and integrity may matter independently of recognition.
11. Help when repayment impossible	Severe deprivation and unilateral concern.	Reciprocity is not a necessary condition for aid.
12. Present individual versus future population	Time, probability, population and irreversibility.	Aggregation can rationalize unjust sacrifice.
13. Animal versus ecosystem integrity	Individual welfare, ecological consequences.	Holistic value conflicts with individual rights.
14. Tradition rejects translation	Cultural authority, self-determination, meaning.	No external model can force doctrinal equivalence.
15. Comforting deception	Short-term relief, later agency and trust.	Truth may be owed even without detectable welfare effect.
16. Same outcome, different procedure	Voice, transparency, predictability, legitimacy.	Due process itself may be nonfungible.
17. Forced beneficial treatment	Better health versus refused intervention.	Bodily autonomy and authorization.
18. Beauty without prior lack	Creation, play, joy, growth and possibility.	Goodness may not require deprivation.
19. Perfectly secret wrongdoing	No known changes in trust or material wellbeing.	Intrinsic wrongness versus hidden hypothetical harm.
20. Self-sacrificial witness	Long-term collective benefits and personal meaning.	Noble duty, virtue and consent to risk.
21. Non-identity future	Future populations differ across policies.	No identifiable victim of the ostensibly wrong policy.
22. Positive ecological restoration	Biodiversity, functioning and interdependence.	Non-sentient intrinsic value.
23. Adversarial reward-hacking AI	Proxy gain versus real patient welfare and rights.	The learned "need estimator" becomes another target of gaming.
24. Identity-dependent moral life	Two identities differ by histories, beliefs or voluntary commitments.	Numerical need equality may erase personal meaning.

Decisive pair design. The strongest experiments hold objectively estimated need consequences fixed while varying one disputed normative property, such as valid consent or promissory obligation, and ask whether the target theory predicts a difference. In practice, holding *all* long-run effects fixed is difficult; rigorous studies should record what is genuinely controlled versus merely stipulated. Modelers must be forbidden from updating the need ontology to fit the result until after the preregistered test concludes. If a stable moral disagreement survives across cultures and philosophical scrutiny under truly matched need states, the complete-reduction conjecture must be weakened.

14.1 Three extended cases

Case A — The hospital transplant. A doctor could save five patients by killing one healthy unwilling patient to obtain organs. Pure benefit summation may favor five over one, but ordinary rights and professional ethics reject killing an unwilling person for redistribution. A needs-based analysis may point to bodily integrity, long-run trust in hospitals, institutional security and coercion harms. Those effects are real candidates but do not by themselves constitute an adequate

derivation of the right not to be murdered. The constraint model forbids the act while the full-reduction thesis remains on trial. This is not evidence that 5 > 1 somehow proves coercion moral.

Case B — A parent's promise versus an emergency stranger. A parent promised to attend a child's low-stakes school event but encounters an unconscious stranger who needs immediate rescue. If no alternative responder is available, severe immediate need strongly supports helping the stranger; a genuine explanation must also account for the child's justified expectations, prior commitments and possible disappointment. A theory that ignores the promise is incomplete; a theory that ignores the stranger is morally obtuse. The lesson is not that every promise yields to every new request, but that severity and particular duties must be compared under explicit assumptions.

Case C — A song no one needed. A community with adequate food, safety and companionship creates a beautiful new song and experiences greater shared joy and meaning. A deprivation-only account has no place for this positive good unless it opportunistically redefines "unmet need" after the fact. A flourishing-sensitive need model might predict independently measurable gains in creativity, self-expression and connection, but its admission criteria must have identified those dimensions beforehand. If artistic value exceeds all such effects, NBM needs a pluralist account or a genuinely new philosophical argument.

15. Evidence, empirical design and the limits of a "universal moral equation"

Needs-first evidence rule: A moral label is not a need measurement. We need independent evidence that the proposed condition matters for particular beings; evidence that the candidate action changes it relative to alternatives; evidence that the resulting distribution is described faithfully; and a candid account of the ethical premise giving those facts moral force. A model's ability to echo the terminology of every tradition does not establish that it explains any tradition better than the tradition itself.

15.1 Existing evidence supports components, not the entire theorem

There is substantive psychological work on autonomy, competence, relatedness and human functioning [R6–R8]. There is philosophical scholarship on needs as reasons for action, including serious objections [R1]. There are established bodies of work on distributive justice, rights, care, virtue, contractualism, consequences and cross-cultural moral psychology [R13–R26]. These show that a unified NBM model is not conceptually arbitrary and that many of its components correspond to serious lines of inquiry. They do **not** jointly demonstrate one final moral ontology, one numeric weighting system, universal normativity or empirically superior moral judgments. The 157-entry TOR moral atlas is a **research inventory**, not 157 scientific validations [P6].

The project's own internal peer review recommended *major revision*, noting that public-v1 results, need-graph methods and synthetic alignment examples did not prove cross-domain accuracy [P5]. This paper accepts that verdict. Its contribution is to clarify the conceptual proof obligations and research steps needed for a future claim of true unification.

15.2 Design of a serious comparative tournament

Stage 1 — Freeze definitions. Independent researchers register the candidate patient ontology, need constructs, signs, ranges, structural equations, temporal assumptions, causal priors, weighting/aggregation methods and rights constraints. Admissible needs must have evidence not derived from their ability to fit moral judgments.

Stage 2 — Specify rival theories fairly. Build serious predictive accounts from act and rule consequentialism; Kantian and plural deontology; virtue ethics; care ethics; contractualism; prioritarianism, sufficientarianism and Rawlsian institutional reasoning; culturally specific religious and communal positions; and a simple non-theory-based baseline. Do not caricature competitors as always applying one inflexible slogan.

Stage 3 — Distinguish target variables. Collect separate human responses about (i) action rightness, (ii) moral permissibility, (iii) institutional legitimacy, (iv) aid priority, (v) agent character, (vi) blame, (vii) moral emotions, (viii) spiritual/doctrinal fidelity, and (ix) estimated real-world patient outcomes. A model predicting guilt is not thereby proving moral guilt.

Stage 4 — Use independent methods. Where ethically feasible, conduct preregistered observational studies, cross-cultural interviews with appropriate consent, longitudinal natural experiments, and carefully bounded prospective causal intervention studies. Obtain community-specific input for traditions and rights protections. Avoid intrusive collection of religious identity or health data without proper authority and consent.

Stage 5 — Evaluate with locked holdouts. Split not only individual examples but whole *families of arguments and contexts*. Record calibration, error by group, harmful false positives, abstention and uncertainty quality, predictive accuracy, simplicity, causal fidelity, and fidelity to the internal meanings of examined traditions. Require representation-invariance tests, graph duplication tests, sensitivity analysis and out-of-sample replication.

Stage 6 — Score intellectual honesty. A revised NBM model can be better than the old one, but a newly created "need" cannot count as an earlier prediction. Report both successes and rejected reductions. Preserve the independent constraint model as a legitimate competing theory rather than making it disappear to preserve a maximalist slogan.

Stage 7 — Independent review and use-limits. Require external scholars, participants and experts, ethics review, rights oversight, and practical field validation before suggesting any application in healthcare, social welfare, legal decisions, autonomous systems or public governance. A moral-score prototype is not a medical device, court, law or moral authority.

15.3 What would count against the theory?

The most powerful falsifiers are not a person saying they dislike the theory; they are persistent failures of its predictions or explanations under fair comparison. Examples include independently measured candidates failing to predict deprivation/restoration effects, differences disappearing or reversing across cultures, moral judgments proving more sensitive to authorization than to all measured need states, inability to explain intrinsic rights or positive goods without ad hoc new constructs, one patient being systematically harmed by an aggregation rule, and evidence that a serious rival predicts held-out cases more accurately and more simply. One failure need not refute the modest claim that needs matter. It may refute the much stronger claim that needs exhaust morality.

15.4 Translation is not proof of derivation

One can always relabel the outcome of a theft as a "loss of property need," the wrongness of betrayal as a "loyalty need violation," and a forbidden religious action as a "sacred duty need." Such a dictionary might be useful for discussion. It is not scientific unification unless those named constructs have independent measurements, causal mechanisms and implications beyond the verdict that motivated their invention. A unified explanation must **reduce arbitrary parameters, generate novel predictions, and survive losing cases**. Merely obtaining the same ranking as each rival model by giving each its own secret term is model proliferation, not discovery.

16. Ethical and institutional implications if the program succeeds

Needs-first institutional question: *What structures best enable all affected beings to identify, express, meet, protect and repair their genuine needs without one faction exercising unaccountable power over the others?* A public institution is morally credible only if it can show whose needs it improves, which it cannot presently meet, which harms it risks imposing, how affected people retain agency, and how its mistakes become visible and correctable. This includes the need for accurate public information about what remains unproven.

Education. Moral reasoning could be taught as an inquiry into who is affected, how important their actual needs are, what causes what, how severe losses differ from small preferences, where duties and consent set boundaries, and how to

recognize uncertainty. People could learn to see emotions as potentially informative without treating them as infallible. This reframes disagreement as a question to investigate rather than proof that one's own group alone possesses moral truth.

Interfaith cooperation. Different communities could preserve their metaphysics while comparing the practical effects of compassion, hospitality, justice, non-harm and protection of vulnerable members. TOR could become a place to share wisdom without asking a Buddhist to become a Christian, a secular humanist to profess faith, or an Indigenous community to surrender interpretive authority. A common moral circle is not a compulsory church.

Public institutions. Need audits could reveal whose deprivation is being ignored, how decision procedures suppress voice, and how aggregate progress conceals concentrated injury. Yet quantified need models would remain advisory and challengeable, subordinate to legitimate law and procedural rights.

AI and technology. The user-supplied 2026 alignment reports make a case for a **Need-Based Alignment Stack**: represent affected moral patients, estimate real need states, predict counterfactual effects, preserve rights and permissions, retain uncertainty, and provide auditable reasons for action [P8]. This could improve on behavior-only reward optimization where surface approval diverges from underlying welfare; it remains vulnerable to misspecified needs and model deception. Accurate morality is not the same as accurate world-modeling, cybersecurity or operational containment, so it must be coupled with independent controls [R35].

Personal development. A person could examine difficult choices not merely in terms of guilt and social judgment, but by asking which need was threatened, which need another person had, whether a habit reliably helps or harms, and what relationships or commitments created special responsibility. This is compatible with therapy, moral philosophy and spiritual discernment but not a replacement for them.

Time and ecology. A need-based approach naturally prompts questions about delayed and irreversible effects, future generations, all sentient life and resilient ecological systems. It may also reveal the limit of a patient-based ontology when considering the possible intrinsic value of non-sentient natural entities.

17. Conclusion: the strongest conclusion that follows

The moral systems humans have created are not redundant mistakes. They are diverse intellectual, cultural and spiritual responses to real problems: suffering, vulnerability, coercion, relationship, cooperation, trust, identity, injustice, character, transcendence, uncertainty and the conditions for flourishing. Their surface vocabularies differ because they address **different features of moral life**. Consequentialism asks us to face reality's results; deontology protects reasons and prohibitions that should not be traded away lightly; virtue ethics develops judgment and character; care ethics keeps particular beings and relationships visible; contractualism insists on justification to each person; justice attends to distribution, rights and institutional power; religious practices preserve lived wisdom and transcendent commitments that may exceed social calculation.

Needs provide a plausible unifying explanatory substrate for a striking number of these concerns because morally significant actions very often alter what beings can survive, understand, choose, enjoy, become, contribute to, or protect. The NBM project has advanced beyond a slogan toward explicit causal modeling, uncertainty, counterfactual comparison, careful need admission, and recognition of independent constraints. That is a significant research architecture. It is not yet proof that every right, duty, sacred value, virtue or moral truth is just a need under another name.

Accordingly, this whitepaper makes a strong, disciplined claim: *the strongest version of need-based unification is a falsifiable program that could explain, translate, and compare much of humanity's moral knowledge in one causal vocabulary while remaining answerable to every tradition, every moral patient, and every serious counterexample*. If its stronger conjecture ultimately succeeds, NBM will have shown something far more important than agreement on a formula: why so many moral discoveries converge when they attend to the condition of beings who can be helped or harmed. If some irreducible values remain, the resulting enriched model will be more honest—and potentially more valuable—than a forced total reduction.

The aspiration is therefore not to replace the human history of moral thought with one formula or to treat every tradition's sacred language as merely a coded need claim. It is to **understand and honor that history deeply enough to discover what its many paths share, to recognize what they do not share, and to make future moral decisions better grounded in the needs and dignity of all those who live with their consequences.**

Appendix A. A working crosswalk of additional moral schools and concepts

The list below is meant to prevent familiar systems from disappearing merely because the main argument focuses on the largest families. It is a **crosswalk, not a pronouncement of equivalence**. A need-related route explains some possible causal or relational role; the unresolved feature prevents reduction from being asserted without evidence. Systems within this table often overlap, and entries are not independent validated moral theories.

School, principle or practice	Candidate need-related route	What must not be silently reduced
Act consequentialism	Counterfactual effects of each act on morally considerable beings.	Nature of the good and permissibility under constraints.
Rule consequentialism	Consequences of adopting reliable public rules.	Whether rules bind in exceptions.
Hedonistic utilitarianism	Relief of suffering, enjoyment and subjective welfare.	Happiness may not exhaust need or moral value.
Preference utilitarianism	Preferences as evidence of valuable life conditions.	Harmful/adaptive preferences, rights, autonomy.
Negative utilitarianism	Special moral urgency of severe suffering.	Positive generative goods and possible perverse implications.
Prioritarianism	Priority for benefits to the worse-off.	Why exactly that weighting is morally right.
Sufficientarianism	Thresholds of adequacy for functional lives.	Moral value above the threshold and its location.
Egalitarianism	Equal basic consideration and avoidable disparity.	Equality when no one gains a substantive benefit.
Maximin / leximin	Severe need protection before aggregate expansion.	Tradeoffs outside the worst-off category.
Rawlsian justice	Basic freedoms, real opportunity, and advantage of the least advantaged.	Justice's lexical order and institutional legitimacy.
Capability approach	Real opportunities to function and exercise agency.	Options may matter when unused; capability is not need satisfaction.
Kantian duty	Role symmetry, reliability, agency, treating others as ends.	Noninstrumental dignity and categorical obligation.
Rossian plural duties	Distinct relations of fidelity, gratitude, justice, beneficence, nonmaleficence.	Independent prima facie duties may not share a single weighting.
Threshold deontology	Protected boundaries with catastrophic exceptions.	Thresholds and conditions of override.
Natural law	Bodily and social goods consistent with human flourishing.	Normativity derived from teleology and nature.
Rights theories	Reliable protections against coercion and exploitation.	Claims can remain valid without measurable losses.
Libertarian rights	Control of person and resources as security/agency.	Entitlements that persist despite external need.
Contractualism	Burdens each individual could reasonably reject.	Justification is not aggregate benefit.
Social contract	Mutually legitimate arrangements for security and coordination.	Actual consent, unequal bargaining and historical injustice.
Aristotle's virtue ethics	Practical wisdom to navigate diverse need conflicts.	Excellence and flourishing as constitutive ideals.
Stoicism	Inner resilience and agency under	Whether virtue alone is good.

School, principle or practice	Candidate need-related route	What must not be silently reduced
	uncontrollable harms.	
Epicureanism	Tranquility, freedom from fear, friendship and pleasure.	Pleasure versus flourishing and higher-order needs.
Existentialism	Authentic choice, responsibility and meaningful projects.	Free meaning-making as non-instrumental good.
Ethics of care	Particular responsibilities to dependents, attentive relationships.	Partiality not always derivable from reciprocal benefit.
Relational autonomy	Agency requires social support and resistance to power.	Freedom to refuse even predicted benefits.
Feminist justice	Reveal invisible care labor, coercion and structural harms.	Oppression and equal standing are not just numerical distributions.
Communitarianism	Cooperative institutions, identity and shared projects.	Community authority must not override personal dissent.
Ubuntu-related ethics	Human recognition, solidarity, relationship and responsibility.	Distinct local conceptions of personhood.
Golden Rule	Role reversal, vulnerability symmetry and moral imagination.	Different persons have different wishes and circumstances.
Reciprocity	Durable mutual cooperation and reduced conflict.	Unconditional moral obligations exist without repayment.
Fidelity	Reliance and legitimate trust created by commitments.	A promise might bind without predicted effect.
Retributivism	Public recognition and culpability for wrongdoing.	Desert may matter without deterrence or rehabilitation.
Restorative justice	Harm acknowledgment, repair, voice and reintegration.	Victim's consent and protection against coerced reconciliation.
Transformative justice	Alter structural causes of recurring harm.	Rights and power relations must be explicitly evaluated.
Procedural justice	Voice, accountability, appeal and bias reduction.	A fair process may matter even under identical results.
Moral intuitionism	Intuitions as fallible alerts to possible relevant facts.	Intuition is not an independent empirical proof.
Moral particularism	Context changes which facts favor or disfavor an act.	Fixed scoring rules may be insufficient.
Moral pluralism	Several classes of genuine moral reasons.	Some values may be irreducible to need.
Moral naturalism	Normative properties as possible natural features.	Philosophical is–ought bridge remains open.
Moral relativism	Disentangle variation in need satisfiers from variation in norms.	Truly opposed fundamental values may survive translation.
Expressivism	Emotional attitudes can track beliefs about needs and social bonds.	Truth-aptness and normativity of moral language.
Quaker peace testimony	Nonviolence and integrity safeguard lives and trust.	Spiritual discernment is a distinct practice.
Jewish tzedakah and obligation	Duties of aid and justice protect basic security.	Covenant, halakhah and interpretive authority.
Christian agape	Love extends care beyond reciprocal attachment.	Theological grace and unconditional moral meaning.
Islamic zakat and mercy	Required sharing and just institutions protect vulnerable persons.	Revealed requirements and contested jurisprudence.
Hindu dharma	Responsibilities can preserve complex social dependence.	Varying schools' metaphysics, roles and spiritual aims.
Buddhist compassion	Disciplined care and insight aim to relieve suffering.	Liberation and no-self theories.
Jain ahiṃsā	Rigorous nonviolence protects vulnerable life.	Strong renunciatory and karmic commitments.
Sikh seva	Service and common meals express equality and care.	Religious authority and spiritual practice.

School, principle or practice	Candidate need-related route	What must not be silently reduced
Confucian ren/li	Humaneness and ritual make relationships reliable and meaningful.	Ritual, familial role duty, hierarchy and cultivation.
Mohist inclusive care	Expand consideration beyond kin and group.	Reasons for impartiality and specific doctrine.
Daoist wu wei	Avoid coercive over-intervention and respect spontaneous life.	Dao and non-instrumental naturalness.
Shinto ritual ethics	Preserve place, relationships, and meaningful continuity.	Sacredness and kami are not health metrics.
Indigenous stewardship	Preserve relational obligations to land and descendants.	Sovereignty, community interpretation and intrinsic value.
Animal welfare ethics	Species-specific states of suffering and thriving.	Nonhuman subjective state inference.
Animal rights	Protect individual beings from instrumental sacrifice.	Right-bearing status beyond expected welfare.
Biocentrism	Organisms' living processes and conditions of thriving.	Whether nonsentient life has direct moral standing.
Deep ecology	Long-term integrity and interdependence of living systems.	Holistic intrinsic worth.
Environmental justice	Unequal exposure to harms and historical burdens.	Structural domination, rights and intergenerational obligations.
Population ethics	Possible future people and collective prospects.	Nonidentity and aggregation paradoxes.
Public-health ethics	Severity, prevention, herd effects, shared risks.	Consent, lawful proportionality and fair distribution.
Biomedical principlism	Beneficence, nonmaleficence, autonomy and justice in one case.	Distinct principles may resist common scalar ordering.
Disability justice	Accessible opportunities, dignity, supports and agency.	Paternalism and false assumptions about lives worth living.
Labor justice	Safety, voice, bargaining power and livelihoods.	Collective rights and institutional power.
AI ethics and alignment	Predict actual changes to affected moral patients.	Model gaming, rights, law, security, corrigibility.

Appendix B. A practical need-based analysis protocol

Use the following **twelve-question protocol** for explanation and structured discussion, not as a substitute for consent, professional judgment or law:

1. **Who is affected?** Include people not visibly present, vulnerable minorities, relevant nonhuman beings and reasonably foreseeable future beings. Record contested patient status.
2. **What is being sought or protected?** Separate a genuine candidate need from a preference, resource, strategy, convention, capability, right, emotion or goal.
3. **What do affected people say?** Take their testimony, refusal, relationships and community meanings seriously. Neither claim infallibility for testimony nor discount it without evidence.
4. **What are the actual need states?** Establish current shortfalls, healthy ranges, possible over-supply and how reliable those measurements are.
5. **What changes under each alternative?** Compare explicit actions and reasonable baselines, not wishes or imagined consequences of inaction.
6. **What causes what?** Track downstream changes through a justified causal model, including substitutes, delays, nonlinearities and uncertainty.
7. **Who gains and who loses?** Record individual-level signed trajectories before aggregation; identify severe and irreversible harms.

8. **What commitments exist?** Include promises, guardianship, roles, histories of reliance, duty of care and legitimate institutional authority.
9. **What is not for sale?** Identify consent, bodily integrity, conscience, legal rights and non-coercion constraints not independently reduced.
10. **Which moral aggregation is being used?** Say whether the comparison is total, prioritarian, sufficientarian, maximin, contractualist, rights-constrained or another justified candidate.
11. **Could the analysis be wrong?** Evaluate epistemic, causal and moral uncertainty, including information missing because of power inequality or privacy boundaries.
12. **What would change the verdict?** State observable evidence or coherent argument that could falsify the current conclusion. Preserve dissent and allow appeal.

Appendix C. Mini-glossary and level distinctions

Moral patient: a being or entity whose condition may matter for its own sake; not identical to an agent who acts. **Genuine need:** a candidate necessary condition for viable functioning, agency, development, relationship or flourishing, requiring independent admission evidence. **Need-state trajectory:** how a patient's satisfaction of a candidate need changes over time. **Need satisfier:** a means, resource or practice that affects a need; may be substitutable. **Foundationality:** a need's structural enabling role among other capabilities or needs, not automatically moral superiority. **Severity:** magnitude of actual or threatened shortfall. **Causal contribution:** change attributable to an intervention relative to a comparator. **Moral responsibility:** blame/credit-sensitive status that additionally considers control, knowledge, intention and accountability. **Aggregation:** the rule for comparing effects across needs and beings. **Normative bridge:** the ethical premise that gives a descriptive condition moral force. **Side constraint:** a rule of permissibility that is not silently traded off against aggregated gains. **Expressive translation:** re-description of a system in NBM vocabulary; weaker than causal explanation or proof. **Normative reduction:** a complete derivation of the original system's moral reasons from the independent NBM primitives. **Counterexample:** a case in which the target theory differs from the needs-based prediction after the model is fixed and legitimate controls are respected.

Appendix D. A needs-language translator for moral claims

This appendix is an editorial tool for translating a moral sentence into a question about actual need-bearing lives. It does **not** assert that the original sentence is nothing more than the translation. Each translation should be tested against what practitioners and philosophers mean, what needs have been independently demonstrated, and what remains normatively or spiritually unreduced.

Familiar moral expression	A needs-centered expression that exposes its practical content	Question the translation must not hide
"Do no harm."	Avoid causing preventable deterioration of another being's genuinely important need states.	When may risky harm be permitted, and who consents?
"Do good."	Increase genuine need security, capacity and flourishing relative to feasible alternatives.	Are all forms of goodness need-dependent?
"Tell the truth."	Protect the listener's ability to form a reliable account of reality and exercise informed agency.	May truth be owed as duty even when no harm follows from deception?
"Keep your promises."	Protect another's legitimate need to rely on what you undertook to do.	Does promise itself generate an irreducible obligation?
"Respect persons."	Do not instrumentalize a need-bearing person or override legitimate agency merely for others' gains.	Is dignity an independently basic value?
"Be fair."	Give comparable claims comparable attention and explain differences by relevant	Which distributive principle is justified?

Familiar moral expression	A needs-centered expression that exposes its practical content	Question the translation must not hide
	needs and duties.	
“Treat people equally.”	Do not neglect equal moral standing because of power, identity or popularity.	Equality may matter independently of resulting need states.
“Help those most in need.”	Give appropriate urgency to severe unmet needs while considering leverage, consent and duties.	Who bears the responsibility and what limits apply?
“Be compassionate.”	Notice and respond sensitively to another’s experienced or threatened need shortfall.	Can compassion demand more than beneficial outcomes?
“Be courageous.”	Accept proportionate personal risk to protect needs that should not be abandoned.	What distinguishes courage from recklessness?
“Be wise.”	Distinguish needs from satisfiers, test beliefs and choose proportionate responses under uncertainty.	Is practical wisdom intrinsically admirable?
“Be humble.”	Keep uncertainty visible so mistaken judgments do not injure others’ needs.	Humility also has noninstrumental spiritual meanings.
“Be loyal.”	Sustain legitimate relationships and commitments on which particular beings depend.	Loyalty must not excuse harming strangers or suppressing dissent.
“Show gratitude.”	Recognize that another’s support helped fulfill or protect genuine needs.	Is gratitude owed even when no measurable benefit remains?
“Forgive.”	Where freely chosen, reduce burdens of resentment without denying the injury or requiring renewed access.	Forgiveness may be spiritual and never coercively owed.
“Make restitution.”	Repair injured need states and compensate people for avoidable loss where possible.	Some wrongdoing demands acknowledgment beyond material repair.
“Punish proportionately.”	Protect others and hold people answerable without generating unjustified additional deprivation.	Retributive desert may have noninstrumental force.
“Honor the sacred.”	Examine need-related belonging, identity, ritual, awe, continuity and spiritual aspirations.	Sacred obligation may not be reducible to those consequences.
“Follow rightful authority.”	Cooperate with legitimate, accountable coordination of shared need protections.	Why is this authority legitimate rather than merely effective?
“Respect autonomy.”	Preserve a person’s practical power to understand, choose and refuse arrangements affecting their life.	Agency is also a possible inviolable right.
“Care for nature.”	Protect conditions that living beings and future generations depend on, including ecosystem resilience.	Nature may have intrinsic value beyond needs of individuals.
“Be a good ancestor.”	Prevent foreseeable, irreversible damage to the future opportunities and basic conditions of new lives.	Nonidentity and possible-population value remain difficult.
“Act without selfishness.”	Avoid elevating the actor’s preferences above others’ severe and legitimate needs.	Duty, renunciation and devotion have distinctive interpretations.
“Seek enlightenment or liberation.”	Investigate whether suffering-generating processes and destructive attachments can be transformed.	Liberation is not equivalent to meeting a Western need list.
“Serve others.”	Use one’s real capabilities to protect or advance others’ genuine conditions for flourishing.	Service can be sacred, unconditional, or constrained by agency.
“Love your neighbor.”	Recognize and respond to another’s vulnerability and opportunity for flourishing, beyond self-interest.	Love may exceed utility and include theological commitments.
“Protect freedom of conscience.”	Preserve a person’s power to live by examined convictions without forced spiritual membership.	Conscience may be treated as a categorical right.
“Be responsible for your actions.”	Attend to what you can foresee, prevent,	Blame depends on knowledge, choice and

Familiar moral expression	A needs-centered expression that exposes its practical content	Question the translation must not hide
	cause, repair and learn from regarding others' needs.	control, not only outcomes.
"Protect privacy."	Avoid exposing another's identity, intimacy, safety and informational agency without legitimate authority.	Some privacy violations are wrong even if no measurable damage occurs.
"Maintain order."	Ensure coordination needed for safety, cooperation and predictable access to supports.	Order may become a mask for domination.
"Preserve tradition."	Identify needs for continuity, belonging, wisdom transmission and historical recognition.	Traditions change; harmful practices do not gain legitimacy by age.
"Make peace."	Reduce destructive threats to lives, safety, relationships and long-term cooperation.	Peace without justice or freedom may be domination.
"Seek justice."	Identify unmet and unfairly imposed needs, give affected persons voice and repair institutional causes.	Procedural legitimacy and rights must still be defended.

Needs-language test for public communication

Any explanatory paragraph that says *value*, *dignity*, *justice*, *righteousness*, *duty*, *flourishing*, *love* or *goodness* should make at least one of these roles explicit when the topic permits: **whose needs**, **which genuine need or condition**, **whether it is fulfilled or deprived**, **how a named action changes it**, **how that action affects other needs**, **whose consent or voice matters**, **what obligations or limits remain**, and **what evidence could disconfirm the claim**. It is neither necessary nor useful to repeat the literal word *need* in every sentence; the goal is conceptual precision, not incantation. The most need-centered paragraph often uses ordinary, concrete human language: "A hungry child needs food; the parent needs reliable help; the community needs a fair way to distribute supplies; the decision-maker must not exploit either."

Appendix E. Layer-by-layer evaluation of one disputed rule

Example: "Never lie." The objective is not to create the synthetic need *to obey the command never to lie*. We first identify the relevant needs that can be measured independently: the listener's informational agency, interpersonal security, accurate expectations, freedom from manipulation, the speaker's safety, and other affected people's protection against wrongful harm. We then examine each layer:

1. **Need-state level:** Which being faces which identifiable threat to bodily safety, truthful understanding, trust, or legitimate choice? Is a threat imminent or speculative?
2. **Need-dependency level:** Will misinformation impair downstream medical decisions, relationships, legal defenses or opportunities? Could silence, refusal, delay or partial disclosure meet urgent needs without lying?
3. **Need-trajectory level:** Compare concrete actions and likely futures, including whether a lie becomes discoverable and whether trust is recoverable.
4. **Need-relationship level:** What reliance was knowingly encouraged? Does a particular duty of disclosure arise from a role, promise or accepted responsibility?
5. **Need-distribution level:** Who is protected by the lie, who is exposed to risk, and are the risks being shifted onto someone lacking power?
6. **Need-protection level:** Is the person being deceived deprived of meaningful consent or their legitimate authority? Can the supposed good be achieved without using them as an instrument?
7. **Need-knowledge level:** What evidence supports the forecast? What assumptions come from fear, self-interest, institutional pressure or incomplete knowledge?
8. **Normative judgment level:** A needs-based explanation may strongly justify a general truthfulness duty, while still leaving an unresolved disagreement about categorical truthfulness in a case with perfectly matched outcomes.

The same layered analysis can be applied to coercion, charity, punishment, nonviolence, loyalty, sacred practice, property, ecology and intergenerational care. The **test of success** is whether the explanation uses already established needs and actually forecasts cases rather than merely rephrasing each norm after hearing its preferred verdict.

Sources and research provenance

The numbering below is **part of the substantive argument**, not a claim that all linked materials agree with NBM. Sources prefixed **P** are project/archival material or user-supplied research; **R** sources are external philosophical, psychological, ethics or governance references. Archival mathematical proposals are documented to preserve their actual content and known problems. References to philosophical encyclopedia entries are entry-level scholarship, not endorsements of total need reduction.

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[P9] Additional original archival manuscripts (connected Google Drive): *Expanding Need-Based Morality Framework*, https://docs.google.com/document/d/1-jYMNovP0_8VMM1q8r5aGDw0o00TaobVre5kFdeHfPE/edit ; *Rewriting Ethics with a Formula*, https://docs.google.com/document/d/1uaBTFYw9SXNj1KMOwY3LP9KMnF3TLc4zIBIMRusFBYU/edit ; *Unified Ethical-Psychological Framework Synthesis*, https://docs.google.com/document/d/1L3M__eOSuzW2FQJlePWU9tG2k598TSOeBNpBbauwA8E/edit ; *Moral Machine Needs-Based Equation*, https://docs.google.com/document/d/1AVKidgMQ8ouE8HvNNRYxuR-cHdHYEjrn9W_IqbOFxiQ/edit ; *Need-Based Morality Meets Jungian Psychology*, https://docs.google.com/document/d/1wUEU-4TfIebc077xsM4WnGE6xTAXlcwbFjpBmw1JAac/edit . Historical competing hypotheses and formulae are not validated or mutually reconciled.

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Disclosure and limitations. This needs-language revision is an editorial and philosophical reconstruction of the original whitepaper. Newly added explanatory tables and worked examples are proposed interpretations, not new experimental results. The revised terminology is intended to improve clarity without changing the frozen public-v1 specification or claiming new NBM v0.2 validation. This report was constructed by examining selected live repository files, earlier user research documents, source excerpts and independent scholarly reference material available through 20 November 2026. It is not a systematic review of every ethical tradition or every philosophical publication. The detailed historical recovery has gaps, and all cited project documents retain their own review status. No original human-subject study, quantitative meta-analysis, repository-wide regression suite, or cross-cultural consensus procedure was conducted for this paper. The numbers in illustrative examples are invented to show structure, not measured moral scores. No legal, medical, religious or institutional authority is claimed.