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Merchant Protection and Repair Owed to the Harmed Party

A merchant absorbs a loss when an automated system departs from the policy it was supposed to follow. Something makes the merchant whole, or nothing does, and the design question is where the authority to close the matter sits. Chapter 8 of U.S. Provisional Application No. 64/117,812 answers it one way: each reparation arc is designated by the class of party the deviation harmed, and an arc bound to a counterparty is discharged only by that counterparty's own acceptance, not by the deviating agent's self-assessment, not by an adjudicator, and not by elapsed time. This article compares that architecture with merchant protection as the category is publicly described, including Shopify merchant protection.

When the Party Who Absorbed the Loss Is Not the Party Who Closes the File

A merchant ships an order, the payment is later reversed, and the merchant is out both the goods and the money. Or an automated ordering system reprices a listing outside the bounds it was configured with, and a supplier eats the difference. Someone specific bore the loss, and the question that follows is not whether the loss was logged but who is entitled to say it has been repaired.

Settlement machinery generally locates that decision in a process rather than in the injured party. A dispute engine reaches an outcome, a risk policy determines that an order was covered, a remediation workflow closes a ticket once a fix is applied. For a payments network that is a defensible design, since volume demands that most cases resolve without a bilateral negotiation. It becomes harder to sustain when the actor causing the harm is an autonomous agent that will keep acting, at machine cadence, against the same counterparties.

Consider the specific failure. An agent that harms parties it cannot identify, or that will not settle with the parties it does identify, keeps its freedom of action for as long as some other process is willing to mark the matter closed on those parties' behalf. Nothing in the agent's own state changes, and its next deviation is as available as the last one.

Merchant Protection as the Category Is Publicly Described

Shopify merchant protection, offered under the name Shopify Protect, is presented in public materials as a merchant-facing feature of the Shopify commerce platform that covers eligible orders against certain fraudulent chargebacks, with Shopify absorbing the disputed amount and taking on the dispute process on the merchant's behalf. The intent, as publicly described, is that a store owner should be able to fulfill an eligible order without carrying the full downside of fraud the merchant had no practical way to detect, and without assembling evidence for the dispute by hand.

Read on its own terms, this is a serious piece of merchant-side engineering. Chargeback fraud falls hardest on operators least able to absorb it, and contesting a dispute is a cost even when the dispute is won. Moving both the loss and the procedural burden off the merchant, for orders that qualify, is a meaningful improvement over the card-not-present default. Nothing below is an audit of that product.

The same category includes chargeback guarantee services, marketplace seller protection programs, platform trust-and-safety remediation, and the dispute tooling built into payment service providers. What those systems settle is a monetary claim: the harmed merchant is made financially whole and the merchant's procedural load is reduced. The architecture described below is directed at a different object, namely the standing of the party that caused the harm and what that party is permitted to do next.

Reparation Designated by the Class of Party Harmed

The mechanism disclosed in Chapter 8 of U.S. Provisional Application No. 64/117,812 begins after an agent has already admitted a departure from policy. Under Chapter 7, a deviation likelihood (706) can admit a policy-forbidden mutation as a permitted deviation record (710) rather than a fault, with harm above a deviation deductible carried forward. Chapter 8 asks what that admission owes, and to whom.

On appending a permitted deviation record, and before creating any reparation arc, the semantic agent (100) performs an **affected-party resolution** (802). It extracts the affected-party class from the conduct descriptor of the admitted action and tests it against the counterparty identity records (114) held in the scope partition where the action is recorded. A record resolves as a member only where the class maps to the interpersonal scope and the identity primitive it carries is recorded, in an entry of the append-only lineage field (104), as a party to or a recipient of the deviating action. Exactly two outcomes are possible, and a counterparty resolution record is appended carrying the class extracted, each record tested, and each test's outcome.

Where a counterparty resolves, the arc created for the amount exceeding the deductible is designated **other-directed** (804) and bound to that counterparty's identity primitive, both written at creation and neither removed nor modified afterward. Such an arc is discharged only by a completed matched pair (600) whose second governed observation (610) is a **reparation acceptance determination** (806) produced by the bound counterparty itself, emitted within a discharge window declared in the signed policy object (112) and expressed as a count of successor epochs of the agent's own hash chain. That determination is expressly not produced by the agent, by the agent's principal, or by any adjudicator, arbiter, or third party appointed to determine sufficiency.

Should the agent instead perform a restorative mutation on its own, the record is appended and retained, but as a non-discharging restorative mutation record. The arc stays pending, the amount accumulated for it is not reduced, the self-esteem aggregate (108) receives no positive entropy-scaled increment, and the integrity compliance score is unchanged. The filing states the point plainly: the record discloses that restoration was attempted and discharged nothing.

Where no counterparty resolves, the arc is designated **unaddressed** and is undischargeable. Not by restorative mutation, not by elapsed time, not by a period of standing without further incident, not by a succession of the signed policy object, not by a co-signature of a governance address, and not by a counterparty identity record resolving into the class later, the designation being fixed at creation. The arc's contribution to the retention register is its amount multiplied by an unaddressed multiple declared in the signed policy object and not less than unity. The affected party in that case is designated the structurally silent party, and the filing is careful about what the designation means: it is a determination that the agent's own records disclose no counterparty of the class, not an assertion that none exists.

Consequences here are metered rather than moral. The retention register accumulates the amount of each pending arc. Where the accumulated amount exceeds the aggregate retention (800) declared in policy, a retention foreclosure record (808) is appended and the permission condition of Chapter 7 is foreclosed: a deviation likelihood (706) exceeding unity thereafter produces the withholding outcome, the authorization gate (300) is written to the withheld state (310), and no permitted deviation record is appended. A successor policy object declaring a larger aggregate retention is not admitted while that foreclosure record stands unreversed, under a retention monotonicity constraint holding a monotonically non-increasing floor. Where the accumulation consists wholly of unaddressed arcs, the loss of the capacity to deviate is permanent.

Two Different Objects Being Settled

Divergence here is architectural rather than competitive. A protection program settles a monetary claim. The disclosed architecture settles a question of standing, and its discharge condition names the harmed party.

Three structural requirements follow. The first concerns **closing authority**. An other-directed arc admits exactly one discharging signature, and it belongs to the bound counterparty; the agent, its principal, and any appointed adjudicator are excluded by construction. Discharge is a property of the counterparty's own emission and not of any workflow the agent or its host controls.

Bounding is the second. Reparation under this architecture is partial and capped by design. The deviation deductible is drawn once against aggregate harm and not per counterparty, and where multiple counterparties resolve, the amount above the deductible is apportioned among them so that the shares sum to the amount exactly. Apportionment discharges no portion and neither reduces nor increases the total accumulated.

Third comes **non-weaponizability**. Non-response resolves nothing against either party: the arc remains pending, no counter of the counterparty or of the agent is incremented, nothing adverse is appended to the counterparty identity record (114), and no standing quantity of the counterparty under Chapter 3 is modified. Where a counterparty has emitted a non-execution attestation (504) enumerating the action class within which an acceptance would be produced, the agent appends an abstentionsuspended accumulation record and that arc's contribution is held at the amount then standing. The arc is not discharged, redesignated, removed, or reduced; the suspension bears upon accumulation alone.

The two designs are complementary. One restores the merchant's money. The other conditions the agent's continued capacity to deviate on an acceptance the harmed counterparty produces itself.

Coexistence, and What This Architecture Does Not Do

Picture a storefront where autonomous purchasing and support agents transact on both sides. Fraud losses on eligible orders would route through whatever protection program the merchant's commerce platform provides, and the merchant would be made whole in currency on that platform's terms. Nothing in the disclosed architecture displaces that path.

Separately, an agent operating under the disclosed architecture would carry its own retention register. Where such an agent admits a deviation whose affected-party class resolves to the merchant, the merchant receives a reparation acknowledgment artifact enumerating the permitted deviation record that occasioned the arc, being its lineage identifier and integrity displacement vector, the policy constraint overridden, the amount apportioned to that merchant, and the action classes to which it is directed. Emission decrements the agent's authorization budget (404) by a declared amount, without regard to whether it was warranted, and re-emission at a declared cadence is bounded by a declared count whose exhaustion neither discharges nor redesignates the arc. The merchant may accept, may say nothing, or may withhold. Money moves through the platform; permission moves through the arc.

State the limits just as flatly. The disclosed architecture transfers no funds, prices no harm in a currency, and settles no chargeback. It detects no fraud and determines nothing about whether a deviation was well founded, the unaddressed multiple being applied without regard to that question. It surveys no party absent from the agent's records, the structurally silent party being silent precisely because those records name no counterparty of the class. It compels no counterparty to respond. The deductible, the aggregate retention, the unaddressed multiple, the discharge window, the re-emission cadence, and the bounding count are policy-declared quantities, and the filing supplies mechanism for them rather than operative values. A deployment that wants merchants made financially whole still needs a financial instrument to do it. What the architecture adds is that the agent cannot record the merchant's harm as repaired on its own.

Disclosure Scope

This article describes subject matter disclosed in U.S. Provisional Application No. 64/117,812, and is published for defensive purposes. It is not legal advice, not an offer to license, and not an assertion of any right against any party. The application is pending, and claim scope is determined by the claims as ultimately allowed and not by this article.

References to Shopify merchant protection are to public materials and are used for comparison only; no relationship, endorsement, or infringement is asserted.

Counterparty-Directed Reparation (/counterparty-reparation)

All 49 steps → (/inventive-steps)

Repair directed at the harmed party — bounded and resistant to weaponization.

Provisional application

PRIMARY TECHNICAL DISCLOSURE

- Counterparty-Directed Reparation: Repair Owed to the Party Actually Harmed (/articles/counterparty-reparation/reparation-directed-to-the-party-harmed)

SECONDARY TECHNICAL

- The Costly Acknowledgment Artifact (/articles/counterparty-reparation/costly-acknowledgment-artifact)
- Completion by Non-Worsening Re-Encounter (/articles/counterparty-reparation/completion-by-non-worsening-re-encounter)
- Partial Reparation Acceptance and the Residual Arc (/articles/counterparty-reparation/partial-reparation-and-residual-arc)
- Dual-Lock Escrow of the Discharge Itself (/articles/counterparty-reparation/dual-lock-escrow-of-discharge)
- Per-Integrity-Scope Aggregate Retention and OR-Firing Foreclosure (/articles/counterparty-reparation/aggregate-retention-or-firing-foreclosure)
- Costless Rehearsal of Repair: Speculative Evaluation of Acknowledgment Artifacts and Restorative Mutations Inside the Non-Executing Cognitive Mode (/articles/counterparty-reparation/costless-rehearsal-repair-non-executing-mode)
- Delegated Acceptance Authorization: Discharging a Reparation Arc Through a Counterparty's Delegate or Principal (/articles/counterparty-reparation/delegated-acceptance-authorization)
- Capping Pending Reparation Arcs: The Outstanding-Arc Bound, Untendered Marking, and the Refusal-Meter Exemption (/articles/counterparty-reparation/outstanding-arc-bound-untendered-marking-refusal-meter)
- Commitment-Conditioned Reparation Acceptance: A Counterparty-Evaluated Conformity Determination Within an Epoch-Count Observation Interval (/articles/counterparty-reparation/reparation-conformity-determination-epoch-count-interval)
- Reparation Containment Suspension: Holding an Arc's Accumulation While a Scope Partition Stands Contained (/articles/counterparty-reparation/reparation-containment-suspension)
- Structured Inquiry to the Principal on Retention Foreclosure: Disclosing an Agent's Foreclosed Permission Condition Without Supplying an Override Path (/articles/counterparty-reparation/structured-inquiry-principal-foreclosure)

APPLICATIONS · GENERAL

- Automated Consumer Redress: Repair Directed at the Party Harmed (/articles/counterparty-reparation/consumer-redress-automation)
- Insurance Claims Networks: Discharging Harm to the Counterparty That Holds It (/articles/counterparty-reparation/insurance-claims-agent-networks)

APPLICATIONS · SPECIFIC

- Card Network Chargebacks: Counterparty-Directed Remedy in Practice (/articles/counterparty-reparation/payment-chargeback-systems)

- Stripe Disputes: Refunds and Counterparty-Directed Repair (/articles/counterparty-reparation/stripe-disputes)
- **Merchant Protection and Repair Owed to the Harmed Party (/articles/counterparty-reparation/shopify-protect)**

TERMINOLOGY

- other-directed reparation arc (/glossary#other-directed-reparation-arc)
- reparation arc (/glossary#reparation-arc)
- restorative mutation (/glossary#restorative-mutation)
- unaddressed reparation arc (/glossary#unaddressed-reparation-arc)

Counterparty-Directed Reparation overview → (/counterparty-reparation)