

Detecting the “Structural Wall” (Price–Velocity & Volume Exhaustion)

The “Wall” is the level where the early impulse has petered out and the slow grind exhausts. Mechanically, we look for **decelerating price momentum** accompanied by **volume divergence**. In practice the bot computes price velocity ($\Delta\text{Price}/\Delta\text{time}$ on 1-min bars) and acceleration (second derivative). When an uptrend grinds toward resistance, the velocity will taper off (acceleration turns negative) even as price makes new highs. If this slowdown is accompanied by **declining volume** (price–volume divergence) or a brief *climactic volume spike* without further price follow-through, it flags exhaustion ¹ ². In other words, an up move that fails to attract fresh volume (or ends with a heavy-volume blow-off) suggests the “Wall” has been reached. For example, if successive 1-min up candles shrink in range and volume drops below its recent average, that signals waning buying pressure. Wyckoff/volume analysis calls this “rising prices on falling volume,” a classic trend-exhaustion sign ¹. We can formalize a rule: if price velocity falls toward zero while volume falls (or a single huge spike occurs) as price nears a known resistance (e.g. prior day’s high), mark the Wall. (Note: Raschke’s “Objective Points” also uses previous-day high/low as natural resistance/support ³.)

Aligning Intraday Exhaustion with the 5-Day Cycle (Pullback vs Reversal)

The bot maintains a 1-hour bias based on the 5-day swing. (E.g. if 3–4 consecutive days were up, bias is “up,” per the 3–5 day cycle pattern ⁴.) When price hits the intraday Wall under that bias, the bot must decide if it’s a normal pullback or a cycle reversal. Key mechanical signals include **subsequent price action and flow of OI**. A *healthy pullback* (in a bullish 5-day up cycle) looks like a modest retracement: price holds above short-term support (e.g. last consolidation low), yields shallow lower highs, and volume **dampens** on the retrace. Option metrics reinforce this: calls may be closed (call OI drifting lower) but put OI not spiking aggressively – market sentiment stays mostly bullish. In contrast, a *cycle reversal* shows more vigor to the downside: price breaks below short-term support on the 1-min chart with **increasing volume**, often making a lower low below the morning pivot. We would see a pickup in put interest (rising put OI or rising PCR) and/or rapidly dropping implied volatility. In practice the bot watches for price turning down **on high relative volume** and possibly accelerating down (negative velocity) right after the Wall. For example, after touching the Wall, if the next few 1-min bars close progressively lower with expanding range and volume, that suggests a reversal. Raschke’s Taylor method explicitly notes that after 2–3 up days a “Sell Day” or even “Sell Short Day” often follows ⁵. Thus, if on Day 4 of an up cycle price *plummets* through intraday support with **momentum and volume confirming**, treat it as cycle break (reversal) rather than a mere pullback. If instead the decline is shallow (small-range bars, low volume) and then price steadies or bounces, it’s a likely healthy pullback. In summary, **volume and velocity on the bounce** distinguish the two: weak, low-volume bounces = pullback; strong, high-volume declines = reversal.

Detecting a Cycle Break (New Runaway Trend)

Because the 5-day cycle is only an average, the bot must catch when a rotation fails and a trending move takes over. Mechanically, a *cycle break* is signaled by **range expansion + volume/OI acceleration** beyond normal patterns. Concretely, if price breaks the intraday Wall (or prior swing) and continues moving with **increasing velocity and high volume for multiple consecutive bars**, that suggests a new trend. For example, if a breakout above resistance is accompanied by a surge in volume above the moving average and open interest **accelerating** (OI rising faster than before), it's likely genuine momentum ⁶ ⁷. Similarly, if in a bearish scenario the index drops through support on widening range with rising volume and puts accumulating, a new downtrend is forming. One can also track the slope of the 1-hour trend line: a decisive break of the multi-hour swing high/low with strong follow-through is a clue. In option-chain terms, a true breakout often sees ATM call deltas jump (for up moves) and put deltas surging (for down moves), and **OI injection** on the trending side (calls for up, puts for down). In sum, look for **sustained momentum (velocity upward or downward) plus reinforcing flows** (OI and volume increasing). If these conditions persist past the normal 5-day horizon (e.g. day 6+), the mean-reversion cycle has likely broken.

Trap vs. Breakout Filter (False Moves at the Wall)

When the market tests the Wall, false breakouts ("liquidity traps") are common. The bot uses mechanical filters to distinguish them. The primary rule is **volume confirmation**: a true structural breakout needs a spike in participation ⁷. Thus, if price barely pokes above the Wall but volume is flat or dropping, treat it as a trap. For example, a small breakout candle on low volume that is immediately followed by a sharp sell-off is a classic bull trap. Conversely, a wide-range breakout candle on heavy volume, followed by sustained trade above that level, indicates a real break ⁷. Open interest behavior also helps: if price breaks resistance but call OI does not increase (or even falls), that suggests no fresh buying (a failed breakout). Likewise, if PCR is extremely low (extreme bullish sentiment), a breakout is more likely to fail ⁸. In practice, the bot looks for quick reversals: if the breakout candle closes near its low, it likely trapped traders. As a rule: **No volume + immediate reversal = trap; large volume + consolidation above = breakout**. This aligns with textbook advice that rising prices on waning volume signal a weak move ⁹, whereas price moves on surging volume are sustainable.

Execution Strategy (Mechanical Entry/Exit Rules)

The bot proceeds only when macro bias and micro signals align. First, it sets **Daily Bias** from the 5-day cycle (e.g. bullish if mid-cycle up). It then watches the morning impulse (≈ 100 pts) and ensuing consolidation. During the "Slow Grind," it monitors price velocity and volume on 1-min bars. **Entry**: when hitting the Wall, apply the above rules: if price at resistance shows exhaustion (decelerating up bars, low volume), enter a *bearish* option trade (buy ATM Put). Conversely, if at support showing exhaustion of down move, buy ATM Call. If a breakout appears valid (strong volume/OI), reverse – enter in the breakout direction (buy Call on up-break, Put on down-break). The bot uses OI/PCR to confirm sentiment: e.g. before entering a put on resistance, it checks that put open interest is not already extreme (too high OI might mean others are loaded). **Exit**: define fixed stops and targets in mechanical terms. For example, if the position is long puts, a stop might be a rebound back above the Wall or a certain price-gap. Profit-taking could occur when the 1-min velocity abates or price approaches the next support. The bot also tracks theta: since positions are ATM/ITM, it may exit as profit arrives rather than hold to expiry. All rules use absolute price/velocity comparisons (e.g. "if last 2 bars reversed beyond X points") and OI changes (e.g. "if call OI rises 20% in 5 mins while buying puts, exit"). Importantly, given

the ₹10k capital, position size is minimal (often 1 contract) and a tight risk management is enforced (e.g. 1-2% of capital per trade).

Summary: The strategy detects the exhaustion Wall by a falling price-velocity plus volume divergence ¹ ² . It aligns this with the 5-day bias (per Taylor cycles ⁴) to decide if an intraday reversal is just a pullback or a cycle break. Sustained breakouts (high volume, rising OI) trigger trend trades, while low-volume pokes trigger trap trades. Entry/exit are governed by purely mechanical rules on price levels, 1-min momentum, and option-chain sentiment (OI/PCR). No trade is taken unless all signals coincide, preserving capital and avoiding choppy noise.

Sources: The above logic is grounded in classic volume-price analysis and cyclic trading principles. For example, declining momentum on rising price is a well-known exhaustion sign ¹⁰ , and rising OI + price is bullish while falling OI + rising price indicates short-covering (a weak rally) ¹¹ . The 3-5 day swing pattern comes from established cycle trading techniques ⁴ , and put/call ratios are used contrarianistically (low PCR often precedes pullbacks ⁸). Breakout confirmation via volume is standard practice ⁷ , as is using prior-day highs/lows as intraday objectives ³ . All rules above follow these mechanical market microstructure signals.

¹ Trading Volume Interpretation: A Guide to Market Signals - Trade with the Pros

<https://tradewiththepros.com/trading-volume-interpretation/>

² Using Volume Analysis to Identify Reversals and Continuations | Medium

<https://ultimamarkets.medium.com/using-volume-analysis-to-identify-reversals-and-continuations-fe60fadaae9c>

³ ⁴ ⁵ Linda Bradford Raschke - The Taylor Trading Technique.ppt

<https://www.slideshare.net/slideshow/linda-bradford-raschke-the-taylor-trading-techniqueppt/262013129>

⁶ Open Interest Tracking – Market Experts Trading Docs

<https://docs.marketexpertstrading.com/kb/open-interest-tracking>

⁷ ⁹ How do volume and volatility affect breakout trade decisions? | IG AU

<https://www.ig.com/au/learn-to-trade/ig-academy/shorts/breakout-volume-and-volatility>

⁸ Using The Put-Call Ratio as a Contrarian Indicator | TraderLion

<https://traderlion.com/technical-analysis/put-call-ratio/>

¹⁰ Reminiscences of a Stock Operator: 7 Proven Trading Strategies That Still Work Today

<https://pocketoption.com/blog/en/knowledge-base/trading/reminiscences-of-a-stock-operator/>

¹¹ Leveraging Open Interest for Bull and Bear Market Signals

<https://www.investopedia.com/articles/technical/02/112002.asp>