

Repression and Redistribution: Elite Control and Strategic Purges in Qing China

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Abstract

Motivation: The Collective Action Challenge

- Dictators face a fundamental trade-off: they must dismantle rival factions to consolidate authority, yet aggressive removal risks triggering coordinated retaliation

Context & Data

- We investigate the strategic sequencing of elite removal using a novel dataset of bureaucratic networks from the Yongzheng Emperor's reign.

Mechanism: Network Centrality

- Our results reveal that survival depends on network topology:
- The Constraint: High-centrality bureaucrats impose a binding coordination constraint, preventing immediate purging.
- The Strategy ("Periphery-to-Core"): The dictator optimally targets isolated figures first
- The Dynamics: While network depth offers initial protection, this value systematically depreciates as the dictator erodes the support structure from the periphery inward.

Data & Empirical Strategy

Data Source

We construct a granular panel dataset of the Chinese bureaucracy by digitizing and merging two primary archival sources:

- A collective Qing Dynasty historical archive: primary sources featuring Imperial Edicts (《上諭》) and Stratagems (《方略》), that captures contemporaneous elite relations and high-frequency bureaucrat activities.
- Biographical Records (官员简历): Detailed career trajectories, including familial ties and professional affiliations, for the universe of high-level officials.
- Sample Selection: We focus on the Early Yongzheng Reign (1723–1727), the critical window of power consolidation and intensive elite turnover.

Empirical Strategy: Network Centrality

- We argue that an official's ability to impose a binding constraint derives from their PageRank Centrality—a recursive metric capturing their structural depth and capacity to coordinate collective action.
- The PageRank Algorithm:

$$PageRank(u) = \frac{1-d}{N} + d \sum_{v \in B(u)} \frac{PageRank(v)}{L(v)}$$

The Model: Strategic Repression

Players and Objectives

- The Dictator (D): Maximizes long-term political rents
- The Bureaucracy (B_i): Maximizes survival probability

The Desperation Effect

- Individual bureaucrats endogenously choose their rebellion investment (x_{it}^*). As the perceived risk of being purged (d_t) increases, the marginal benefit of resistance rises: $\frac{\partial x_{it}^*}{\partial d_t} > 0$
- Officials fight harder when their survival is at stake (Gambling for Resurrection).

Incentive Compatibility

- The dictator is constrained by a Coup-Proofing Constraint: $\sum_{i \in N_t} x_{it}^*(d_t) \leq \bar{X}_t$
- Unrest is triggered if aggregate capacity exceeds the threshold.

Theoretical Predictions Prediction 1: Survival Premium

- The Survival Premium:
 - High Structural Power ($\phi \uparrow, x_{it}^* \uparrow$) \Rightarrow Tighter Constraint
 - the dictator to maintain a lower purge rate (d_t) for High-centrality elites, granting central elites a "Survival Premium" in the early stages.
- Dynamic Relaxation:
 - Purging Peripherals ($N_t \downarrow$) \Rightarrow Relaxed Constraint
 - By purging peripheral figures first, the dictator incrementally reduces the total population and the potential for collective action.
 - Protection depreciates; eventually, even the core is purged.

Main Results

Fig2: The Sequence of Purges

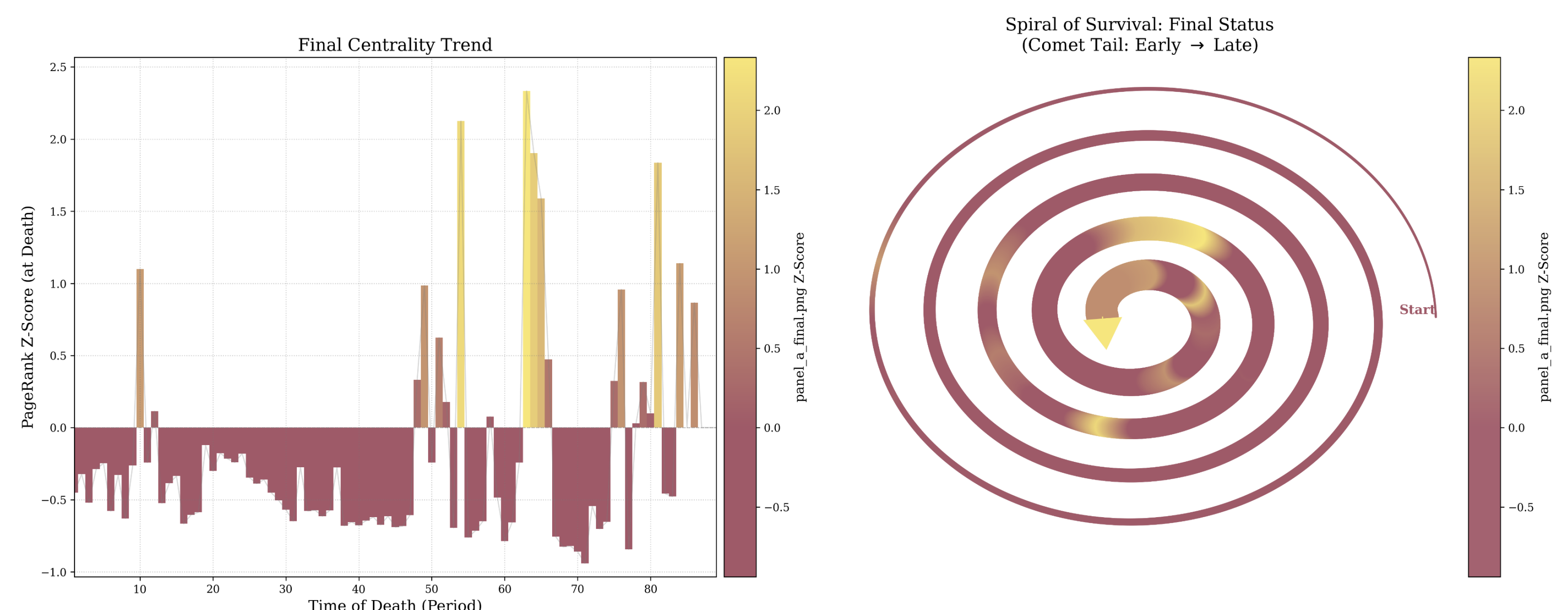


Table1: Baseline Survival Analysis

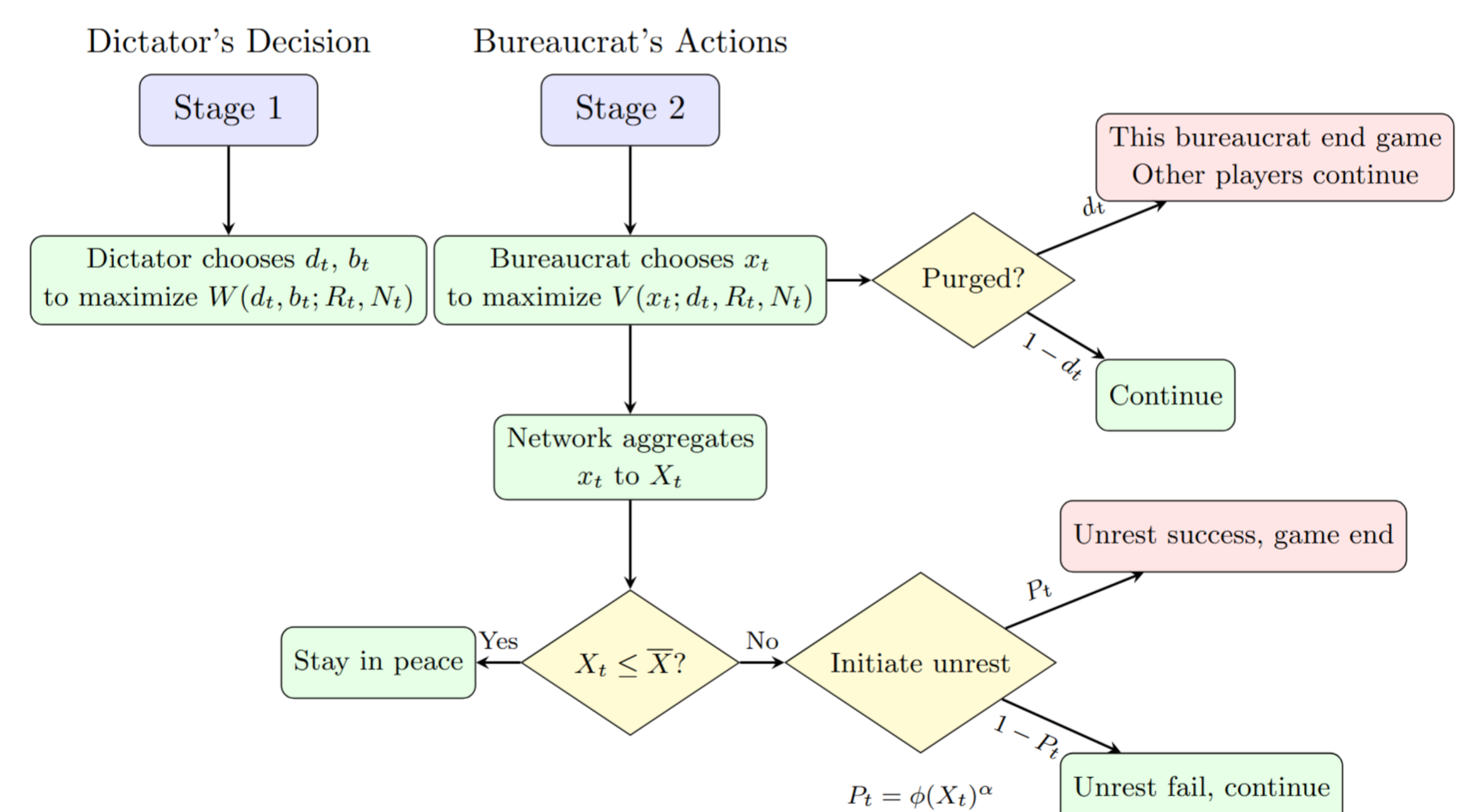
| | Hazard of Purge | Interpretation |
|---------------------------------------|----------------------|---|
| Relative Centrality $Z_{PageRank}$ | -1.185*** (0.458) | Survival Premium: 1 SD increase in centrality reduces initial hazard by approximately 69% |
| Centrality × Time TVC | 0.024** (0.012) | Depreciation: The protection erodes over time. The Break-even point is $T \approx 50$ |
| Controls | Yes | Includes individual and political controls |

- Row(1): This confirms the Binding Constraint: high-centrality elites impose prohibitive retaliation costs.
- Row(2): This shows the Dynamic Effect: The protective value of centrality depreciates systematically

Table2: Robustness & Mechanism Discussion

| | (1) Multiplexity | (2) Placebo | (3) Homophily | (4) Decomposition |
|---------------------|------------------|-------------|---------------|-------------------|
| Relative Centrality | -3.397*** | | | |
| Placebo Network | | -1.224*** | | |
| Multiplexity | 2.334 | | | |
| Eigenvector | | | | -10.211** |
| Homophily | | | -1.715*** | -4.214*** |
| TVC | Yes (+) | Yes (+) | Yes (+) | Yes (+) |

- Depth vs. Visibility: Results hold when controlling for Eigenvector and Homophily. Survival depends on occupying an irreplaceable structural position (Depth), not mere social visibility (Breadth).
- Horizontal vs. Vertical: Both vertical status (PageRank) and horizontal cohesion (cliques) provide initial defense, but both are susceptible to the dictator's "peripheral dismantling" strategy.



Conclusion

This study illuminates the structural logic of authoritarian consolidation. Our findings yield some key insights into the mechanics of autocratic power:

- Non-Indiscriminate Purges: Political removals are not random acts of violence but follow a strict strategic sequence dictated by the network topology of the elite.
- The Sequential Solution: The dictator overcomes the coordination challenge not through immediate confrontation, but a dynamic strategy of peripheral erosion.
- The Limits of Network Power: In a persistent consolidation process, no elite is "too big to purge" once their network foundations have been strategically fragmented.