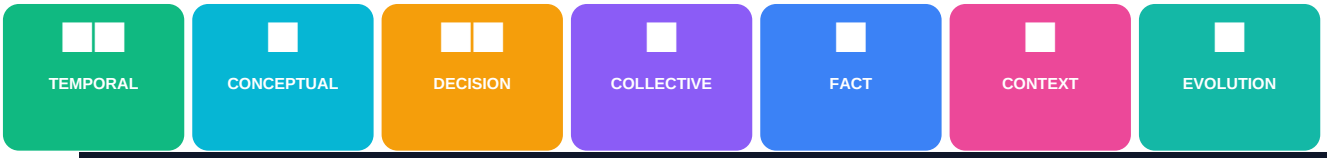
CHE·NU — KNOWLEDGE THREADS
MEGA-ULTIMATE REFERENCE

KT.MEGA.v1.0 — 7 Thread Types + Triple-Layer + TQL + Safe Learning + 5 Agents



KNOWLEDGE THREAD = TRACEABLE LINE connecting information across time, meetings, spheres, users, agents.

Threads CONNECT facts. They DO NOT interpret, rank, or conclude.

Memory without manipulation • Truth without authority • Evolution without erasure

7 Thread Types • 3 Layers • TQL Query • Safe Learning • 5 Agents • Universe View

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THE 4 STRUCTURAL THREAD TYPES

1. TEMPORAL THREAD ■■

Link events, artifacts, decisions strictly by TIME AND SEQUENCE. Used for replay continuity, cause/effect observation, long-term tracking. Strictly chronological, no interpretation, append-only.

```
{ "temporal_thread": { "id":"uuid", "anchor_time":123, "nodes":["event_id"], "edges":[{"from":"a","to":"b","relation":"after"}] }}
```

2. CONCEPTUAL THREAD ■

Link information by TOPIC or CONCEPT across times, meetings, spheres. Understanding idea evolution, finding related work, avoiding duplication. Explicit labels only, no inferred semantics, no importance weighting.

```
{ "conceptual_thread": { "id":"uuid", "concept":"string", "linked_items":[{"type":"meeting|artifact","id":"uuid"}], "scope":"personal|team|sphere" }}
```

3. DECISION THREAD ■■

Show how decisions evolve, change, branch, or reverse over time. For accountability, review, learning from STRUCTURE (not success). Decision outcomes only, NO evaluation, NO scoring.

```
{ "decision_thread": { "id":"uuid", "root_decision":"uuid", "branches":[{"decision_id":"uuid","parent":"uuid","timestamp":123}] }}
```

4. COLLECTIVE KNOWLEDGE THREAD ■

Aggregate validated knowledge shared across users, agents, spheres WITHOUT personalization bias. Institutional memory, cross-sphere learning. Built from validated sources only, immutable once published.

```
{ "collective_thread": { "id":"uuid", "contributors":["user|agent"], "source_threads":["id"], "visibility":"public|restricted", "verification":{"hash":"sha256","validated":true} }}
```

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THE 3 KNOWLEDGE THREAD TYPES

1. FACT THREAD ■

Track factual continuity across time. Sources: documents, decision logs, meeting artifacts, validated XR replays. Properties: append-only, immutable, timestamped, source-linked.

```
{ "knowledge_thread": { "id":"uuid", "type":"fact", "nodes":[{"type":"artifact","id":"uuid","timestamp":123}], "hash":"sha256", "visibility":"private|shared" }}
```

2. CONTEXT THREAD ■

Preserve WHY something existed without adding opinion. Includes: silence, constraints, environment, scope boundaries. Same decision under different constraints → linked but not merged.

```
{ "knowledge_thread": { "id":"uuid", "type":"context", "context":{"sphere":"business","participants":["user"],"constraints":["time"]}, "linked_to":["fact_id"] }}
```

3. EVOLUTION THREAD ■

Show how understanding, structure, or usage evolved WITHOUT judging quality. Tracks: structural changes, versioning, divergence, convergence.

```
{ "knowledge_thread": { "id":"uuid", "type":"evolution", "steps":[{"ref":"uuid","version":1}], "status":"active|branched|paused" }}
```

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TRIPLE-LAYER SYSTEM

Layer	Icon	Purpose	Visibility
INTER-SPHERE	■	Cross-sphere flow (Business↔Scholar↔XR)	read_only
PERSONAL	■	Individual journey (5 dimensions)	private_only
COLLECTIVE	■	Team knowledge (NO hierarchy inferred)	team_only

Inter-Sphere Basis Types

- THREAD_ARTIFACT
- THREAD_DECISION
- THREAD_EVENT
- THREAD_TEMPORAL
- THREAD_AGENT

Personal 5 Dimensions

- Time
- Sphere
- Task Type
- Artifact Type
- Participation (active/passive/observing)

Collective Types

- DECISION_CHAIN
- ARTIFACT_CHAIN
- TOPIC_CLUSTER
- EVENT_SYNC

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THREAD QUERY LANGUAGE (TQL)

Query Knowledge Threads safely and explicitly. Declarative, readable, non-ambiguous.

```
THREAD where topic == "XR ethics" AND sphere in (business, scholar) ORDER BY time SHOW nodes, decisions
```

TQL Safety Rules

- ■ NO hidden joins
- ■ NO inferred intent
- ■ NO ranking
- ■ NO sentiment analysis
- ✓ Explicit scope required

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THREAD BASED LEARNING (SAFE MODE)

Agents LEARN STRUCTURE, not beliefs. Learning = pattern recognition on THREAD STRUCTURE ONLY.

MAY Learn	MAY NOT Learn
Recurrence frequency	■ Opinions
Branching complexity	■ Values
Resolution patterns	■ Emotional weight
Abandonment patterns	■ Success judgments

Learning Signals

- thread_length
- time_between_nodes
- branching_depth
- cross_sphere_reuse
- resolution_timestamps

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5 THREAD AGENTS

Agent	Role	Constraint
THREAD_BUILDER	Proposes links (suggestion only)	No auto-merge
THREAD_VALIDATOR	Verifies source integrity	Hash verification
THREAD_EXPLAINER	Explains WHY items are linked	Facts only
THREAD_GUARD	Blocks inferred intent, emotional labeling, hidden semantics	Zero manipulation
THREAD_QUERY_EXECUTOR	Executes TQL safely	Safety rules enforced

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UNIVERSAL THREAD RULES

Rule	Description
NO MERGE	Threads never merge automatically
NO CORRECTNESS	Threads never imply correctness
NO SCORING	Threads never score information
NO NARRATIVE	No narrative forcing
NO RANKING	No ranking of threads
NO BEST LABEL	No "best knowledge" label
USER SEES RAW	User always sees raw sources
REVERSIBLE	All bridges are reversible

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UNIVERSE VIEW INTEGRATION

Threads render as soft lines (2D) or light filaments (3D/XR). Toggle per thread type. Density auto-adjusts per navigation profile. No motion by default (comfort first).

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WHY THE 7 THREADS MATTER

Thread	Answers
Temporal	What happened (when)?
Conceptual	What was it about?
Decision	What was chosen?
Collective	What do we share?
Fact	What is true?

Context	Why did it exist?
Evolution	How did it change?

Knowledge Threads are the SPINE of CHE·NU.
Memory without manipulation • Truth without authority • Evolution without erasure