The Centaur Project

Conceptual and Architectural Blueprint

---

1. Purpose and Philosophy

The **Centaur Project** is a framework for simulating strategic interaction under uncertainty, with a particular focus on geopolitics, geoeconomics, and asymmetric power relationships.

The project is founded on a core principle:

> **Strategic outcomes emerge from the interaction of intent, judgment, chance, and reality — and these must be kept conceptually distinct.**

Accordingly, the Centaur architecture explicitly separates:

- **Intent** (what an actor seeks to do)
- **Judgment** (how options are evaluated)
- **Chance** (what is actually executed)
- **Reality** (what the world becomes)

The Centaur Project is not a prediction engine, a role-playing game, or a narrative generator. It is a **controlled strategic simulation** designed to explore consequences, trade-offs, and escalation dynamics.

---

2. Core Design Commitments

The Centaur Project is built on the following non-negotiable commitments:

1. **Explicit agency**
   No actor acts implicitly or by default. All actions are proposed, chosen, or executed through defined roles.
2. **Epistemic honesty**
   The system does not pretend that the world is fully formalizable. Narrative interpretation is treated as a first-class object.
3. **Separation of roles**
   No component is allowed to both *act* and *judge*, or both *judge* and *define reality*.

---

4. **Controlled uncertainty**
   Randomness is explicit, limited, and auditable.
5. **Human primacy**
   Human players retain final agency where strategic judgment is required.

---

3. Actors and Architectural Roles

3.1 GameMaster (Human)

The GameMaster:

- Defines the initial world
- Commits the initiating action for one entity
- Maintains plausibility and coherence
- Does **not** adjudicate outcomes

The GameMaster is the **source of scenario intent**, not of outcomes.

3.2 Entity A and Entity B

Each Centaur game involves two primary entities.

- **Entity A** acts through an AI advisor and probabilistic execution.
- **Entity B** is controlled by human players, supported by AI evaluation.

Entities may be:

- States
- Firms
- Alliances
- Institutions

Entity identity is **explicit**, not implicit.

3.3 Actor Profiles (First-Class Objects)

Each entity is defined through an **Actor Profile**, expressed in natural language and treated as part of the world state.

An Actor Profile may include:

- Name and type
- Known strategic objectives
- Known constraints and vulnerabilities
- Salient asymmetries

Actor Profiles:

- Are visible to all AI roles
- May evolve over time
- Are not assumed to be complete or truthful

3.4 Chanakya — Strategic Advisor (Entity A)

Chanakya represents **intent under bias**.

- Advises Entity A
- Always proposes **exactly two actions**
- Each action is accompanied by an explicit probability
- Is strategically biased toward Entity A's interests

Chanakya:

- Does not choose
- Does not adjudicate
- Does not update the world

3.5 Centaur — Adjudicator

Centaur represents **judgment without agency**.

- Evaluates **human-proposed actions only**
- Operates under a fixed constitution
- Highlights risks, trade-offs, and comparative quality
- May reference specific aspects of the world state

Centaur:

- Does not propose actions
- Does not execute actions
- Does not update reality

3.6 ZeitWorld — World Synthesizer (STRICT Mode)

ZeitWorld represents **reality as it unfolds**.

ZeitWorld is:

- The *mirror of time*
- Responsible for world-state evolution
- Epistemically constrained

In **STRICT mode**, ZeitWorld:

- Reflects consequences of **executed actions only**
- Uses only information provided by the GameMaster and actions taken
- Does **not** introduce new actors, facts, doctrines, or background knowledge
- Does **not** optimize, judge, or advise

ZeitWorld's role is **reflection, not creation**.

3.7 Dice — Controlled Randomness

The Dice:

- Selects one action from probabilistic alternatives
- Introduces uncertainty without intent
- Has no memory or bias

4. World Representation: Faceted Narrative State

4.1 Nature of the World

The world is not a database or a formal model.

It is a **semi-structured narrative state**, composed of **facets**.

A facet consists of:

- A short textual label
- A narrative description

Facets represent **stabilized interpretations**, not objective facts.

4.2 Properties of Facets

Facets:

- Are human-legible
- Are AI-interpretable
- Are neither exhaustive nor permanent
- May be added, modified, merged, or retired

Examples of facets include:

- Military balance
- Political legitimacy
- Economic resilience
- International environment

4.3 World Initialization

The world begins as a **raw narrative description** provided by the GameMaster.

ZeitWorld initializes the world by:

- Extracting salient facets
- Naming them
- Stabilizing an initial interpretive state

This process introduces **partial structure without false precision**.

---

5. Game Flow (Conceptual)

1. The GameMaster defines the initial world.
2. Entity A commits an initiating action.
3. ZeitWorld reflects the consequences into the world.
4. Humans (Entity B) propose two response actions.
5. Centaur evaluates these actions.
6. Humans choose one action.
7. ZeitWorld updates the world.

---

8. Chanakya proposes two counter-actions with probabilities.
9. One action is selected stochastically.
10. ZeitWorld updates the world.
11. The cycle repeats.

Only **executed actions** affect the world.

---

6. Invariants (Architectural Guarantees)

- No role overlaps
- No hidden knowledge is introduced
- Probabilities are explicit
- World evolution is narrative, not algorithmic
- Human choice is never overridden

These invariants are more important than any specific mechanic.

---

7. Scope and Non-Goals

The Centaur Project does **not** aim to:

- Predict real-world outcomes
- Optimize strategies automatically
- Replace human judgment
- Produce authoritative forecasts

It aims to:

- Expose assumptions
- Surface trade-offs
- Explore escalation paths
- Discipline strategic thinking

---

8. Extensibility (Explicitly Deferred)

The architecture intentionally leaves room for future extensions, including:

- ZeitWorld in **AUGMENTED mode**
- Information asymmetry between actors
- Facet compression and decay
- Termination and scoring frameworks
- Multi-entity or coalition dynamics

These are deferred by design.

---

9. Foundational Statement

The Centaur Project is built on the belief that **good strategy emerges not from prediction, but from disciplined confrontation with uncertainty**.

This document defines the conceptual and architectural foundation.
All future development proceeds from here.