



Interactive Drama: Soar as a Story Director

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A Beautiful Vase

You build a game around the story of a great art heist – the theft of the beautiful *Vase of AnnArboria*.

The User of your system enters the museum; he should soon witness the theft firsthand.

Any second now....whoops, **he broke the vase.**

Now what? Game over? That stinks!

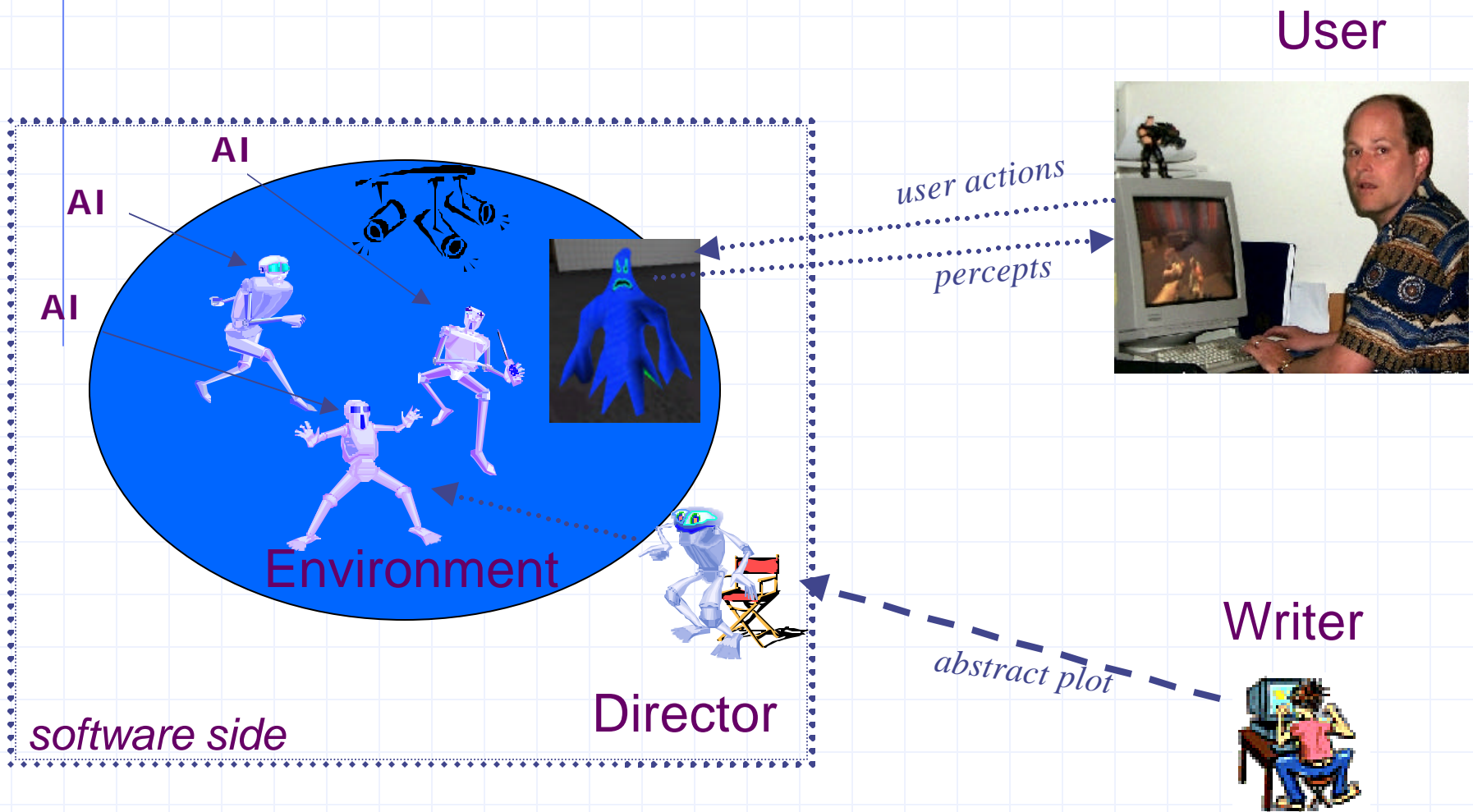
Interactive Drama

- ◆ “Interactive”
 - Decisions that influence the outcome.
- ◆ Drama
 - Achieving a goal by overcoming obstacles.
 - Conflict
 - Tension
 - Plot and character development
 - Traditional Aristotelian view: Setup → Confrontation → Resolution
- ◆ Problem: *interactive drama* = oxymoron
 - The User is a *variable character* (the protagonist)
 - How can writer control the pace, plot, etc.?
 - How can the user feel in control but be “led” through a story.

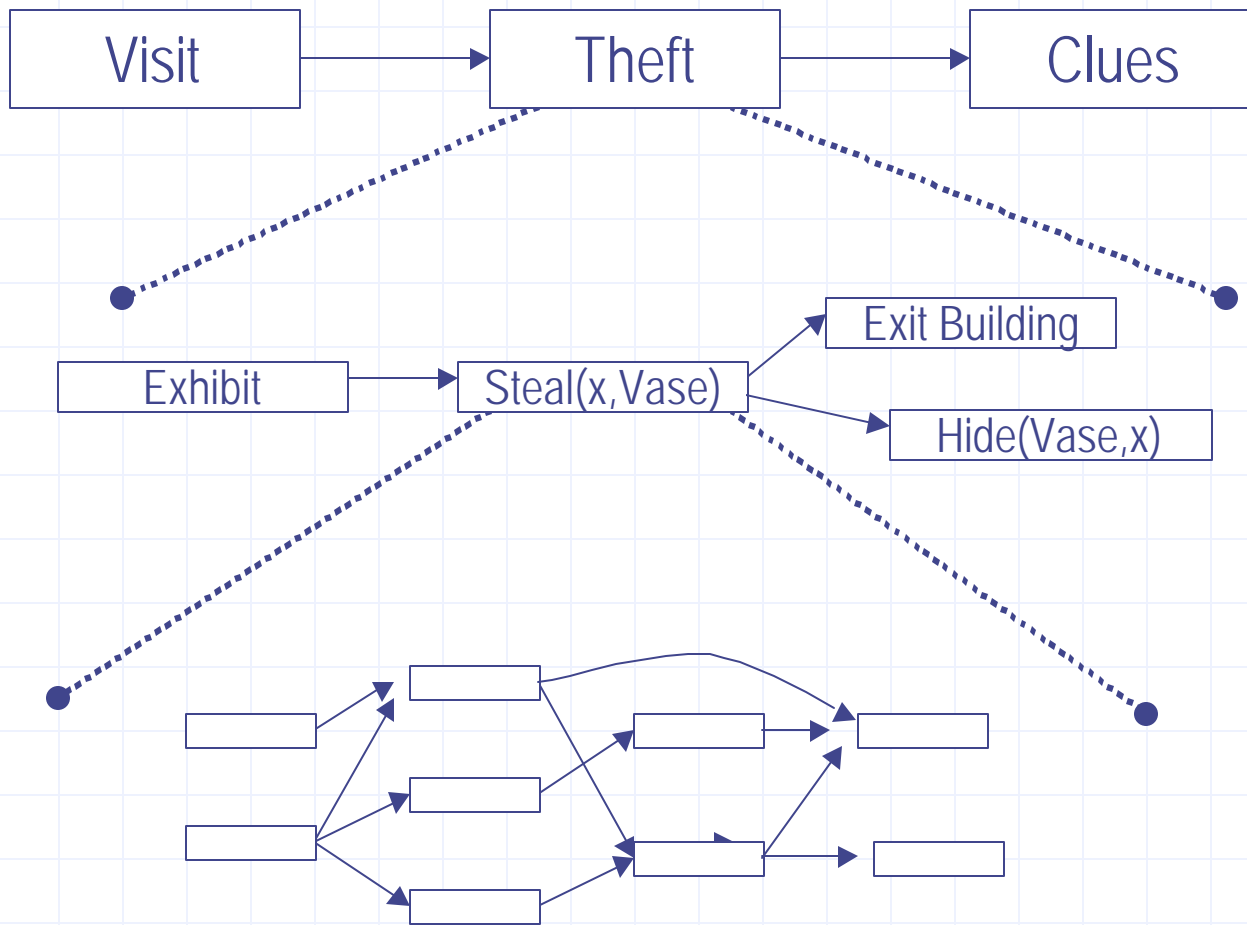
Our Requirements for an ID

- ◆ User Flexibility
- ◆ Writer Flexibility
- ◆ **Balance**
- ◆ Transparency
- ◆ Dramatically interesting

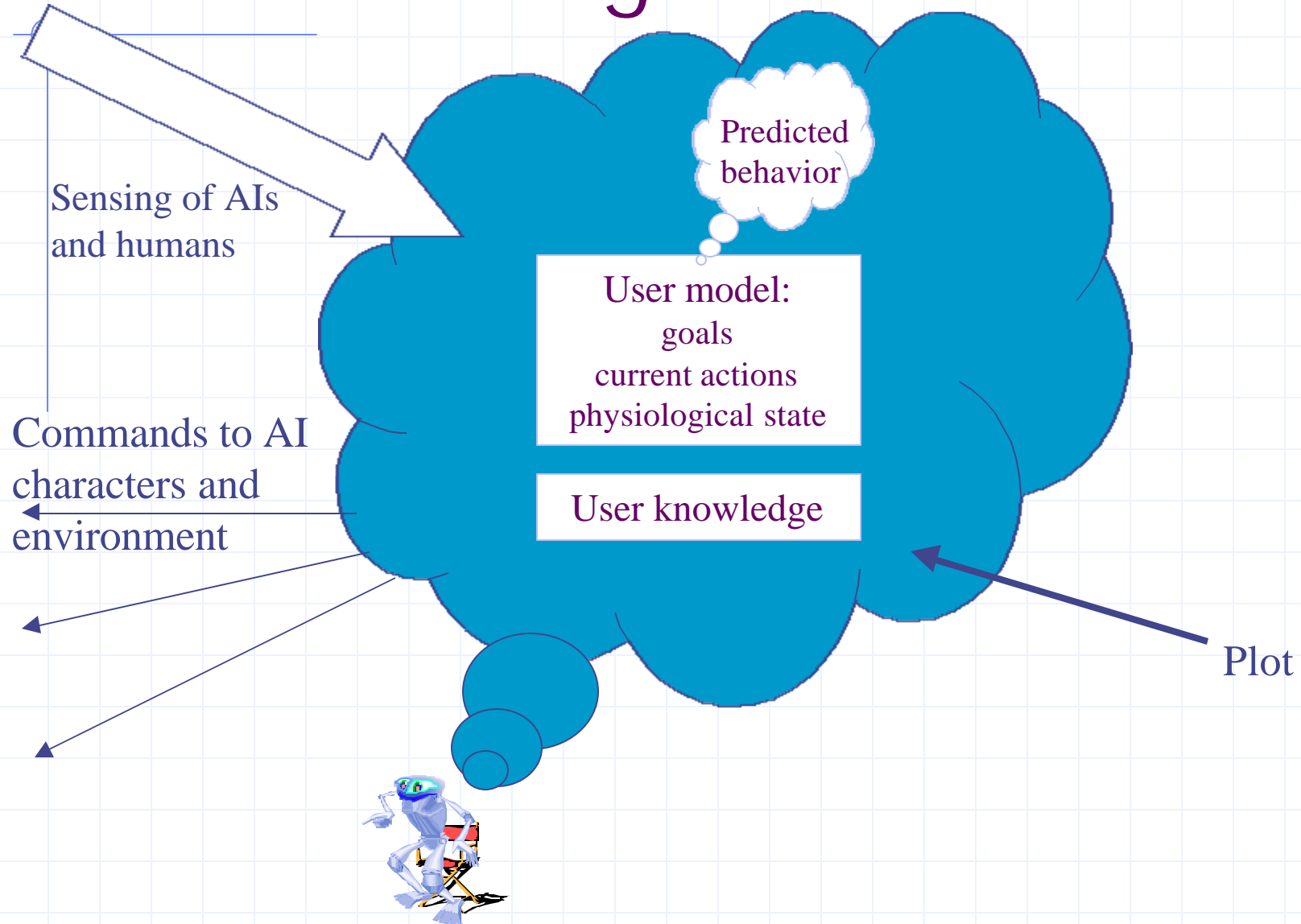
System Design



Scene Description



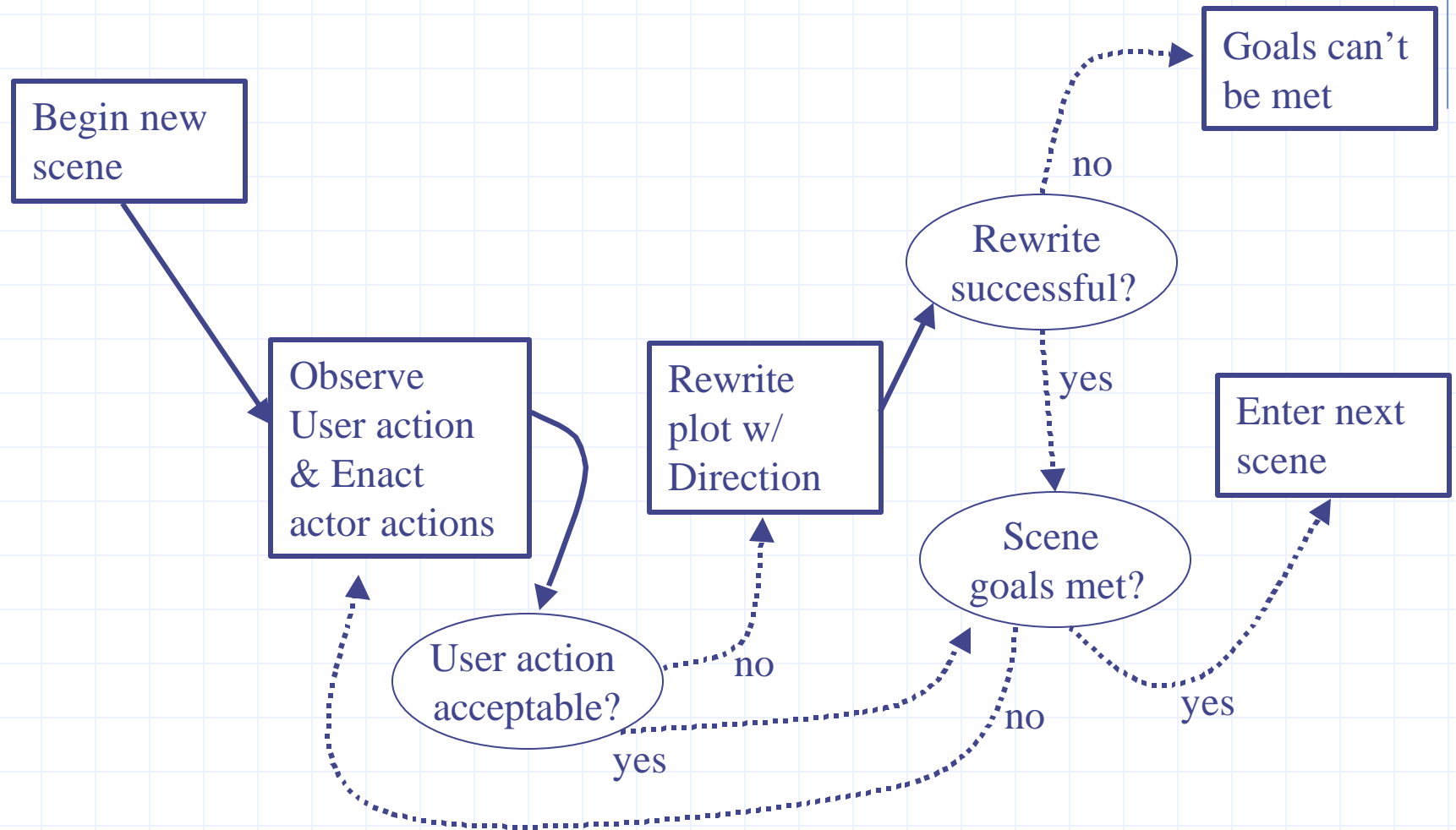
Director Design



The Director's Roles

- ◆ Commands actors according to story
 - ◆ Has special operators to alter the world & state of synthetic actors
- ◆ Reconciles errorfult User behavior w/ story goals:
Recognition & Action
 - **Recognize** when story goals are in jeopardy
 - ◆ Planning
 - ◆ User Modeling
 - **Act** in the world to address problem
 - ◆ Replanning
 - ◆ Both depend on story representation

Mechanism Design

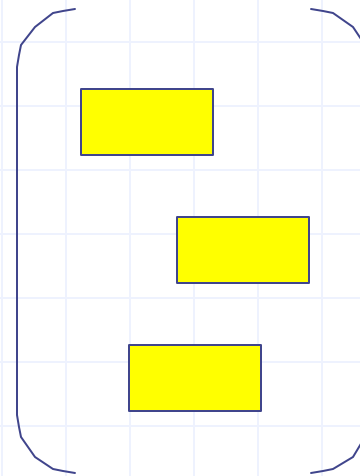
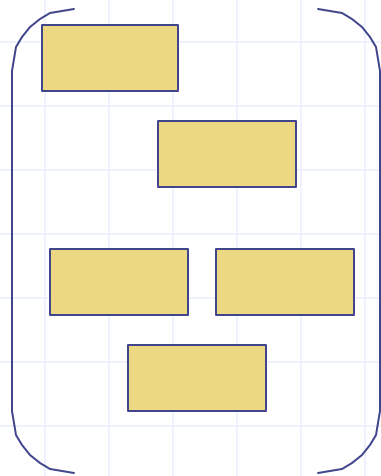


User Behavior

- ◆ **Ideal**: following along with the plot
- ◆ **Acceptable**: not negatively affecting the plot
- ◆ **Unacceptable**: irrevocably harming the plot (clobbering) as it has been written and instantiated (i.e. breaking the vase)

Rewriting the Plot

Current world state



Scene goals

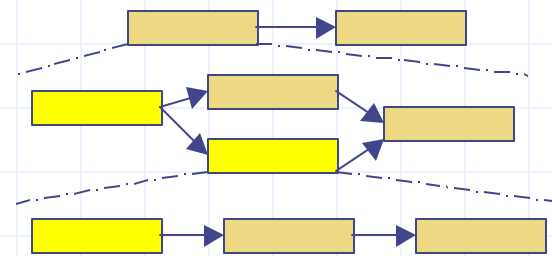
scene operators

Director operators

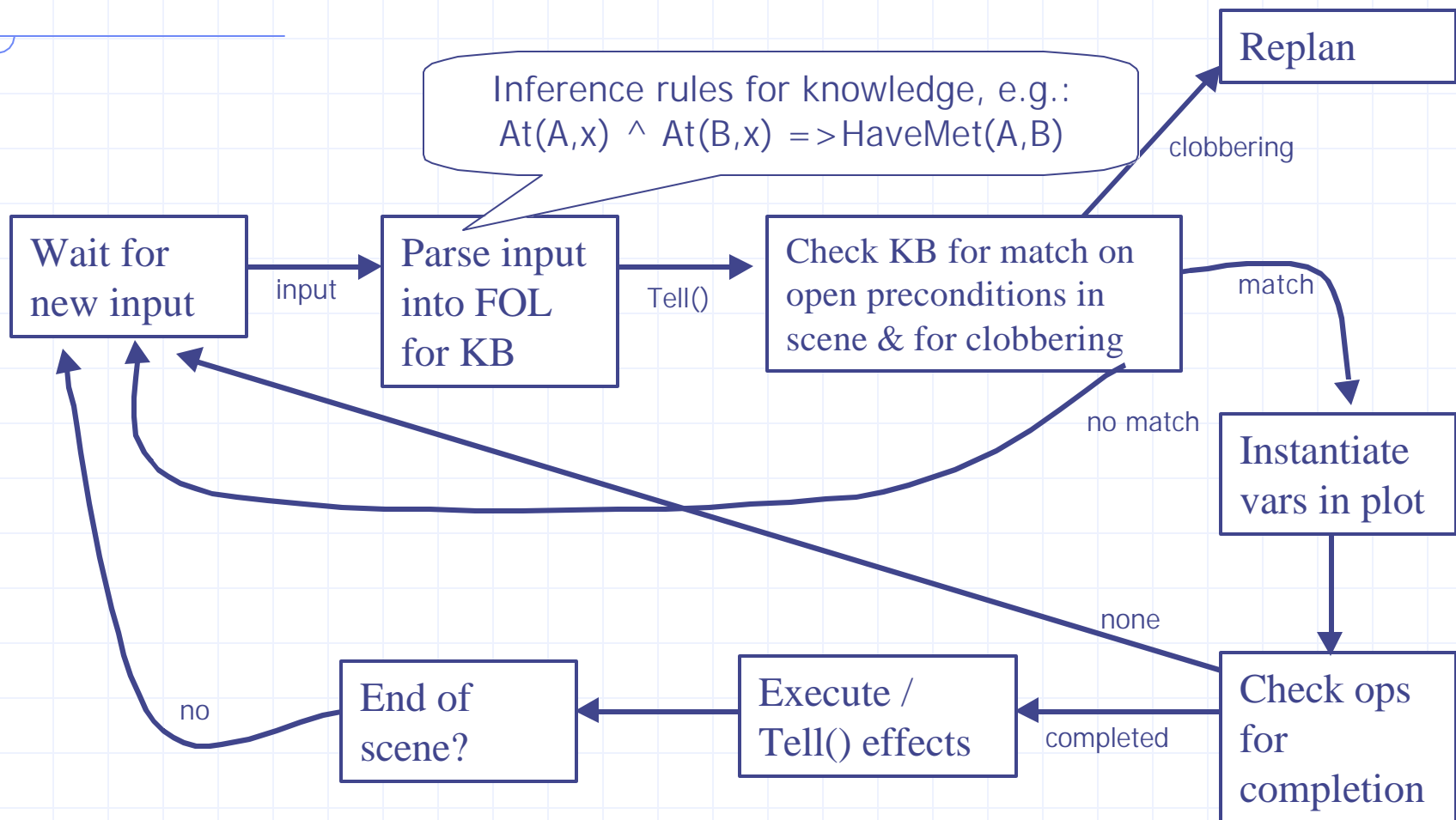


Planner
& Heuristics

new scenario?



The Director in Soar



Nuggets

- ◆ 3D Environment (Haunt II) is in alpha and usable for testing
- ◆ Infrastructure is in place (alterations to SGIO and Unreal Tournament)
- ◆ Simple actors are in place for experimentation
- ◆ Director prototype is near completion (*Recognition*)

Coal

- ◆ Planning in Soar? Parsing?
- ◆ Writing a story is hard (in Soar)
- ◆ How do we evaluate success?
- ◆ User Modeling not a key component – yet.
- ◆ Next prototype: Director with *Action*