

# Generating Choice Structures for Preplanned Interactive Narrative

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## 0: Branching Narratives

Many modern computer role-playing games are branching narratives, essentially the same as the classic Choose Your Own Adventure (CYOA) books. Most work in interactive narrative tries to generate dynamic stories instead, but generating branching stories poses unique challenges. The distinction between playing **through** and playing **with** a system helps illustrate this:

- To read about playing *through* a game, go to box #1.
- To read about playing *with* a game, go to box #2.

## 1: Playing Through

Playing **through** means playing linearly without investigating alternatives. Important choices are made once and never revisited, and the player experiences a linear story.

:: Your playthrough of this poster is now complete.

## 2: Playing With

Playing **with** is the opposite of playing through. Playing with a system means testing alternatives to see what they are like. If you took the first branch from #0 and you're reading this, then you're playing *with* this poster.

→ Continue to box #3 to read about choice poetics.

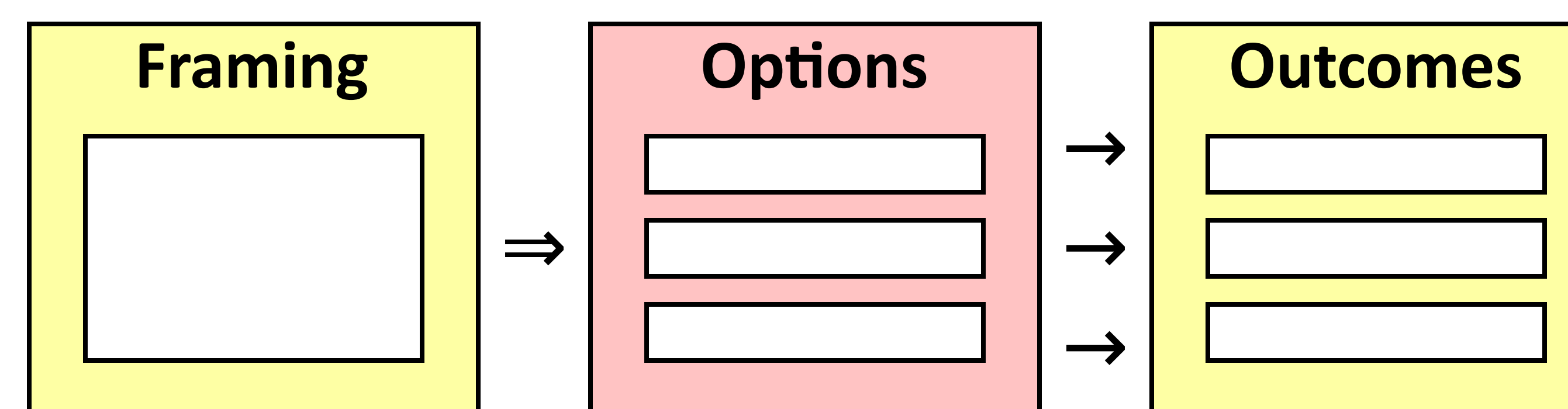
## 3: Choice Poetics

When a player plays with a system, they can investigate the outcomes associated with a choice. The aesthetics of a choice being played *with* depend on the construction of all of its options and outcomes. Choice design can influence many different dimensions of player experience:

<i>Agency</i>	<i>Influence</i>	<i>Roleplaying</i>
<i>Autonomy</i>	<i>Identification</i>	...

- To read about planned choices, go to box #4.
- To hear more about choice poetics, talk to the presenter.

Anatomy of an Explicit Choice:

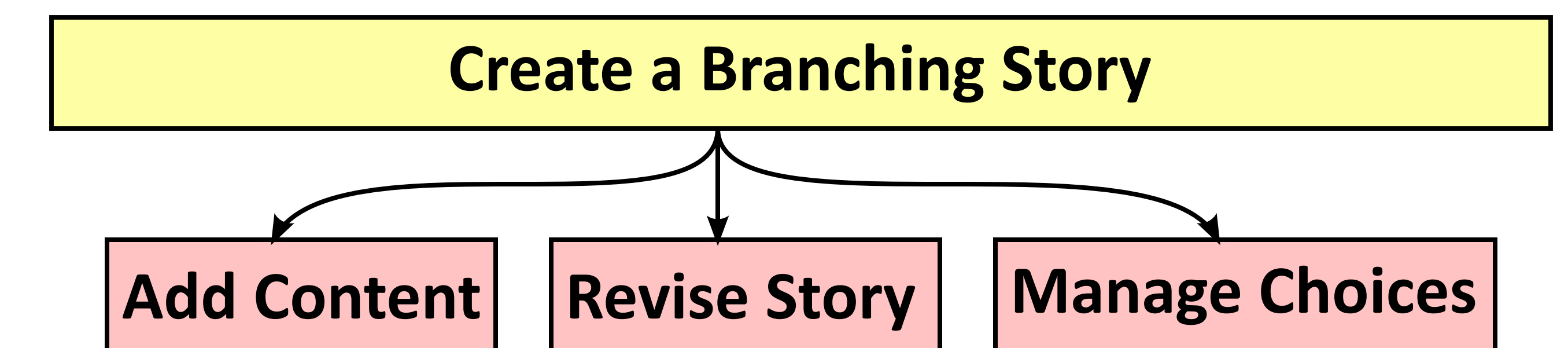


## 4: Planned Choices

This proposal consists of building an interactive narrative system that generates branching stories. Such a system must reason about players who play *with* the system. Instead of trying to react to arbitrary player activity, it will decide what choices to offer the player in order to further an aesthetic goal, and it will reason about the aesthetics of the choices it creates.

→ Continue to box #5 to read about the technical approach.

Top-level Plan Architecture:



## 5: Technical Approach

The system will borrow the idea of author goals from Turner's Minstrel<sup>1</sup>, but it will use a hierarchical task network planning approach to author goal pursuit. As in Minstrel, author goals will incrementally expand and improve the current story, with three top-level goals focused on expanding the story, maintaining narrative consistency, and introducing and managing choices.

- Continue to box #6 to read about evaluation.
- To hear about the system domain, talk to the presenter.

## 6: Evaluation

The system will generate conventional CYOA stories as well as convergent stories, which force all branches back to a single path, and divergent stories, where options lead to radically different paths. Reader experiences will be compared across versions under conditions that encourage playing either through or with the work.

:: The end.

<sup>1</sup>S. Turner. Minstrel: A Computer Model of Creativity and Storytelling. Ph.D. Thesis, UCLA, 1993.