

Design of computer video games

4. Game storytelling

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Agenda

- Game storytelling:
 - definitions
 - development
 - fundamental concepts
- Structured stories
- Journey of the character
- Linear and nonlinear stories
- Precision and mechanisms to speed up the narrative
- Stories control the player
- Examples

References

- Main reference:

- Adams, E. Fundamentals of Game Design, Third Edition, Pearson Education, Inc., ISBN-13: 978-0-321-92967-9, 2014

- Other references:

- Cited on the slides

Two groups of computer games

- Games without story



- Games with story



Why put stories in games?

- Stories can add significantly to the entertainment that a game offers
 - Without a story, a game is a competition: exciting, but artificial
 - A story gives the competition a context
 - Provides greater emotional satisfaction
 - Sense of progress toward a dramatically meaningful, rather than an abstract, goal
- Stories attract a wider audience and help to sell the game
- Stories help keep players interested in long games

How much of a story a game should include?

Key factors:

- Length - the longer a game, the more it benefits from a story
- Characters - if the game focuses on individual people, it is easy to include a story
- Degree of realism:
 - abstract games are hard for storytelling;
 - representational game are suitable for it (excluding realistic vehicle simulators)
- Emotional richness

Story

- Definition: a story is an account of *series of events*, either historical or fictitious
- A minimally acceptable story must be:
 - *credible*
 - *coherent* – *with* harmonized events creating a pleasing whole
 - *dramatically meaningful* - story's events have to involve something, or preferably someone, the listener cares about

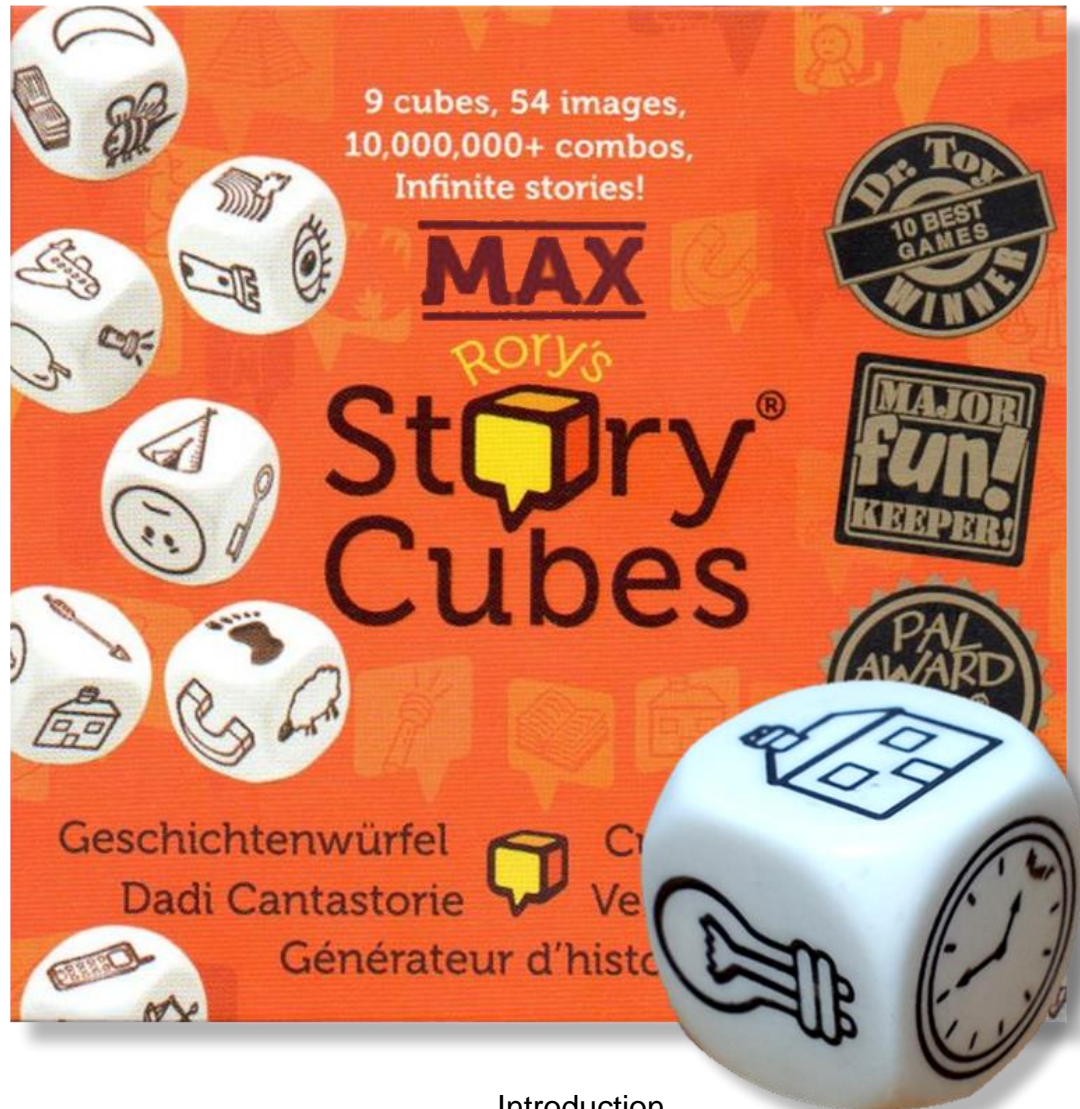


Story must be *credible*



Hunters at rest, by V. Petrov, 1871

Story must be *coherent*



Story must be *dramatically meaningful*

TODAY, HER HUSBAND BEAT HER AGAIN.
SHE HAD GOT USED TO IT NOW;
AND DID NOT GROAN OR COMPLAIN.

She simply got up and put the chessboard back, determined to beat him one day in the game he had mastered.

SCOOP
WHOO

Interactive story

- An interactive story takes place now, *not in the past*
- Player's actions form part of the story itself
- An interactive story is a story that the player interacts with by contributing actions to it
- *A story may be interactive even if the player's actions cannot change the direction of the plot.*

Literature

3rd-person

the author describes the subject to the audience



Cinema

2nd-person

the audience observes the subject



Games

1st-person

the audience is the subject



Image credit:

<http://thewayofgivingway.blogspot.bg/2016/07/the-art-of-telling-story-critical.html>

Videogame storytelling: basic (theoretical) delivery methods

- Not TYPES (genres) of games but delivery methods.
 - Story develops in direct RESPONSE to player action
 - **B happens BECAUSE player did A**

OR

- Story develops partially in response to player action (for example in strictly linear games)
 - **B happens AFTER player did A**

OR

- Story develops irrespective of player action.
 - **B happens anyway, it's just a matter of time...**

Interactive story includes three kinds of events:

- **Player events** - actions performed directly by the player:
 - *non-dramatic* actions to perform as part of gameplay (intended to overcome challenges)
 - *dramatic* actions - can affect the plot of the story
- **In-game events** – events initiated by the core mechanics of the game. The player might be able to:
 - intentionally cause these events to occur
 - change the way they occur
 - prevent them entirely - which is part of what makes the story interactive
- **Narrative events** - the player cannot change them, but he may be able to change whether they occur or not
 - a narrative event narrates some action to the player;
 - he does not interact with it.

Narrative

- *Refers to story events that are narrated by the game to the player.*
- *Narrative consists of the non-interactive, presentational content of the story.*
- Role:
 - to present events over which the player has no control - events happening to the avatar that the player cannot prevent (scenes of failure are usually narrative events)
 - lets you show the player a prolog to the game or the current level
- Timing:
 - narrative blocks presented between levels tend to last from 30 seconds to 4 or 5 minutes
 - all narrative material **must** be interruptible by the player

Forms of narrative

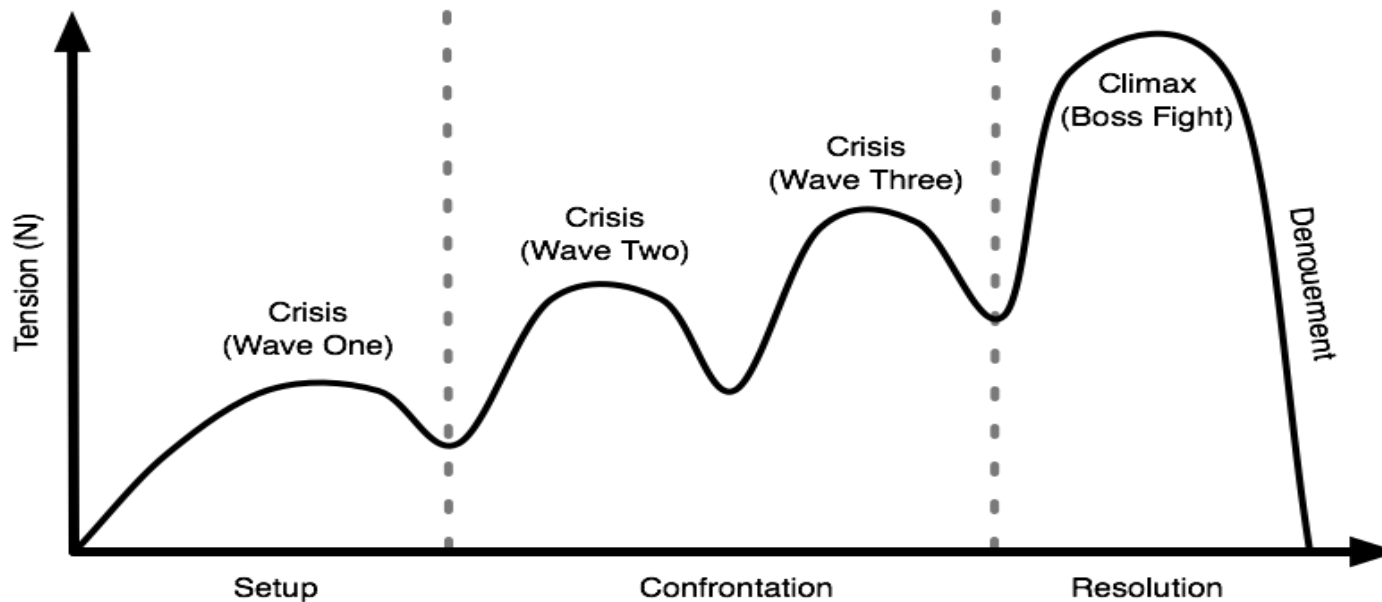
- a pre-rendered movie
- a cut-scene - on completion of a certain level or death
- scrolling text that introduces a mission
- voiceover commentary that explains the backstory of the game
- a long monolog by a character
- a single, pre-recorded and unchangeable line of dialog spoken by a game character (but not individual lines of interactive dialog)

RULE: within narrative segments, try to avoid seizing control of the player's avatar

Two superficially similar concepts 1/2

■ *dramatic tension* –

- the sense that something important happens in the story, coupled with a desire to know what happens next
- is the essence of storytelling, whatever the medium
- destroyed by **randomness** and **repetition**

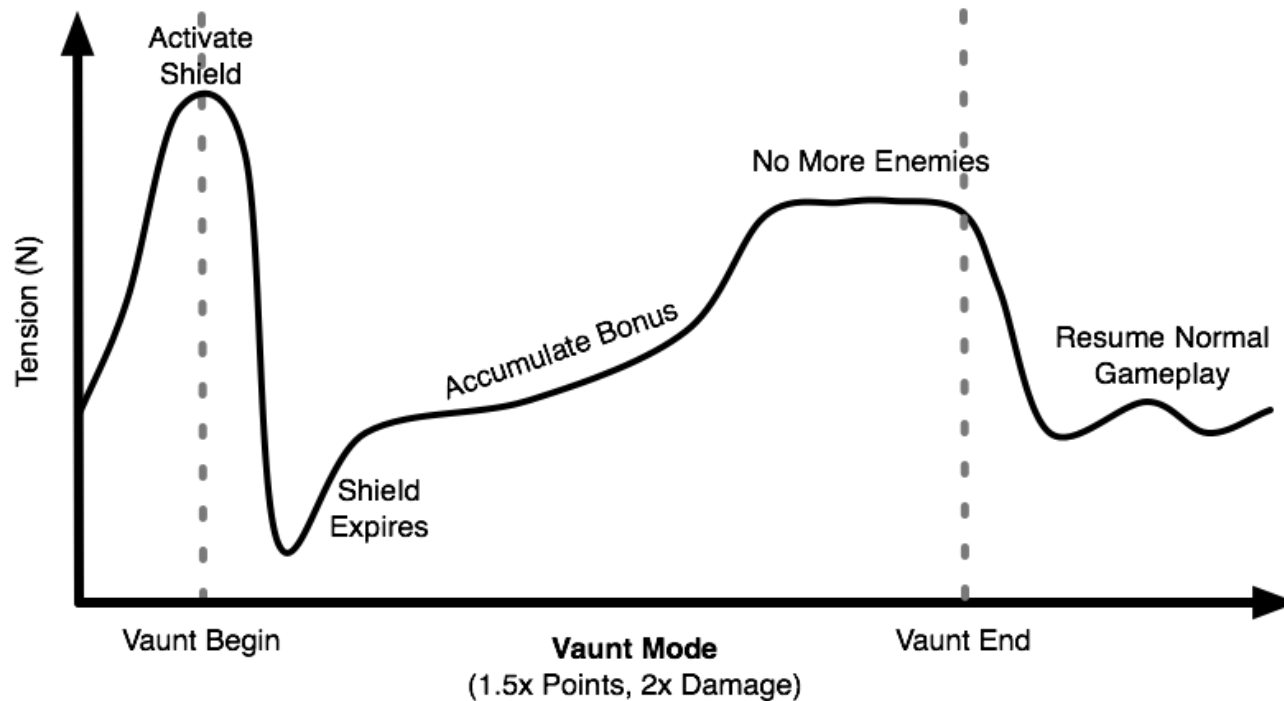


Source to be read:
Mechanical Drama in Jamestown, by
Matthew Gallant,
<http://gangles.ca/2011/07/>

Two superficially similar concepts 2/2

■ *gameplay tension* –

- comes from the player's desire to overcome a challenge and his uncertainty about whether he will succeed or fail
- tolerates both **randomness** and **repetition**

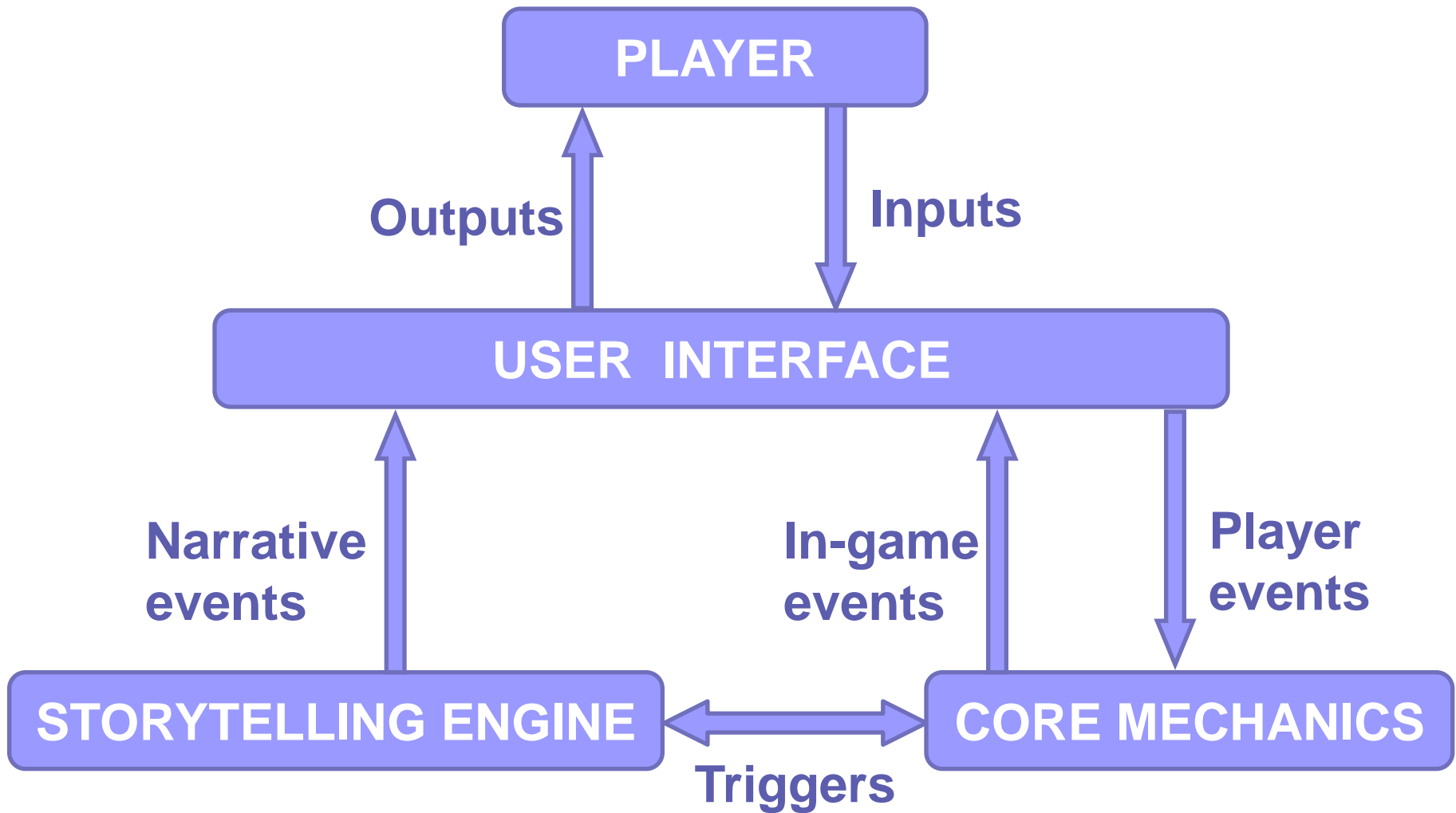


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The storytelling engine

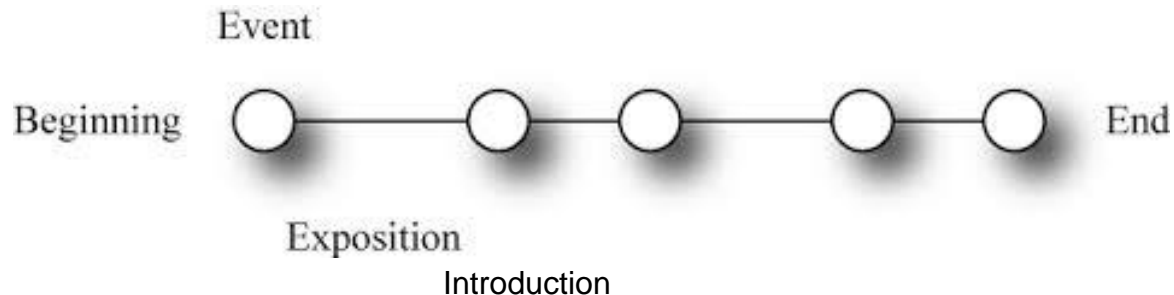
- Narrative events must be interspersed among the gameplay events in such a way that:
 - all events feel related to each other and
 - form a single sequence that entertains the player
- The gameplay should concerns exactly the same subject matter as the narrative
- in order to present a coherent and harmonious whole
- then the entire experience, play and narrative together, will feel like one continuous story.
- The core mechanics (*mandatory*) controls the player's progress through the game's challenges
- The storytelling engine (*optional*) controls the player's progress through the game's story

Storytelling engine, core mechanics, and user interface



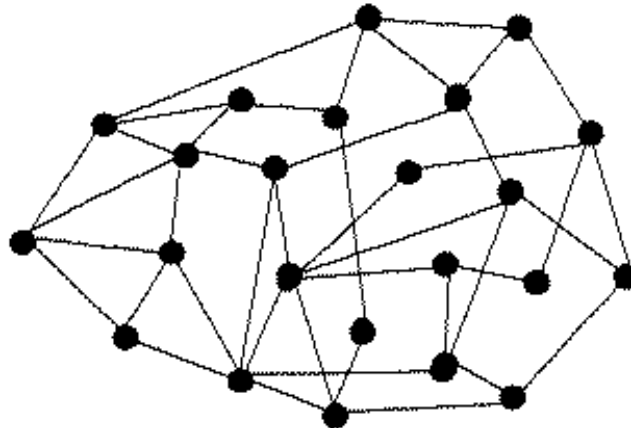
Linear stories

- *Linear stories* - the player cannot change them
- Pro's and con's:
 - Linear stories require less content than nonlinear ones
 - The storytelling engine is simpler – no need to record critical decisions that the player makes
 - Linear stories are less prone to bugs
 - Linear stories deny the *player agency* (the degree the player can influence the game's progress)
 - Linear stories are capable of greater emotional power



Non-linear stories

- Game events - either player events or in-game events generated by the core mechanics (such as an action taken by an AI-driven NPC) - determine which branch the story will take.
- Player events that influence the direction of the story fall into two categories:
 - efforts to overcome a challenge or
 - decisions that the story asks the player to make.



Immediate, deferred or cumulative influence

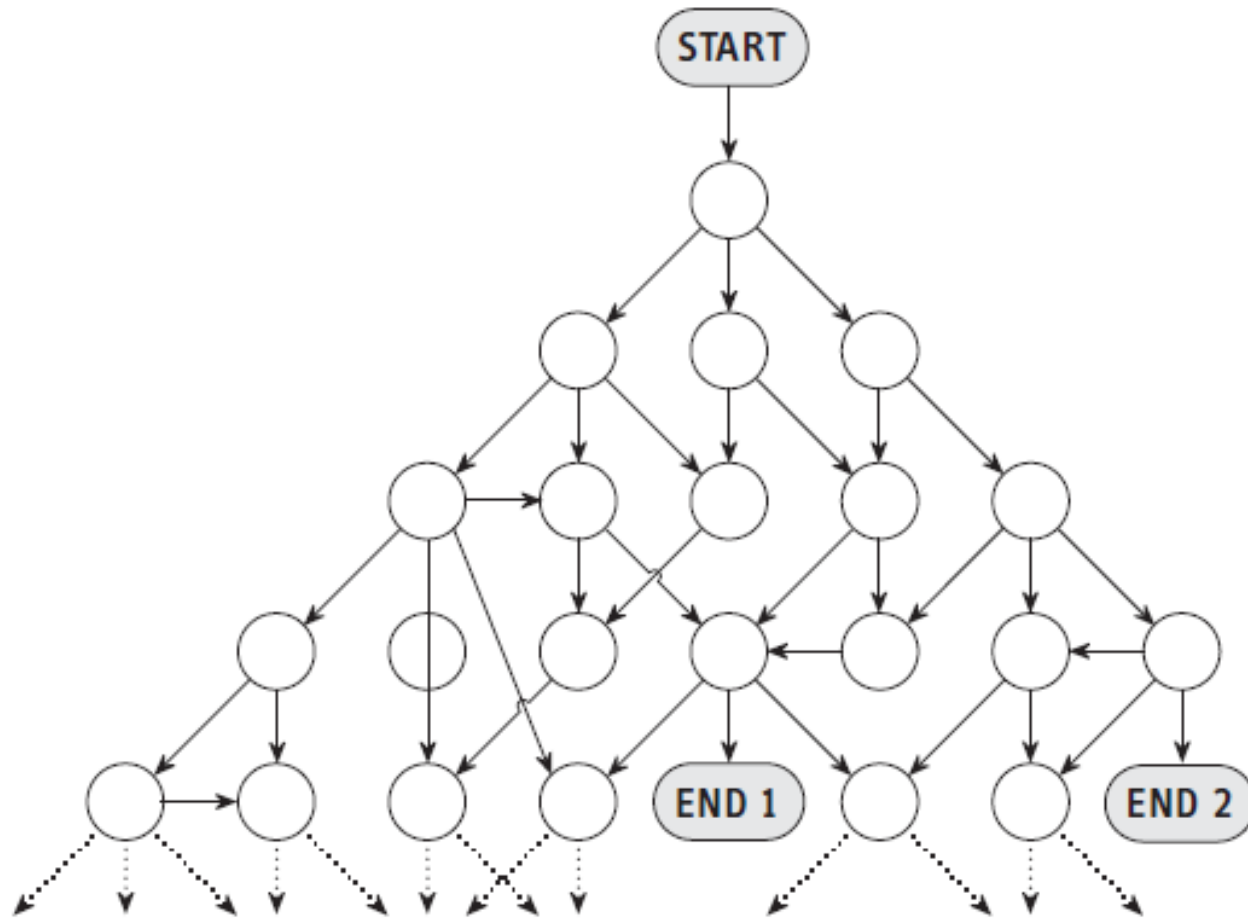
- If an event in the game causes the plot to branch right away, that event has an *immediate* influence on the story
- Sometimes the player can make a decision early in the game that influences a branch point much later, in which case that decision has *deferred* influence
- Or, if he makes actions and decisions throughout the game that cumulatively affect a branch point - *cumulative* influence.

HINT: Give players a reasonable amount of information about the possible consequences of their decisions, especially if the decision's consequences are deferred, so that they can make informed choices.

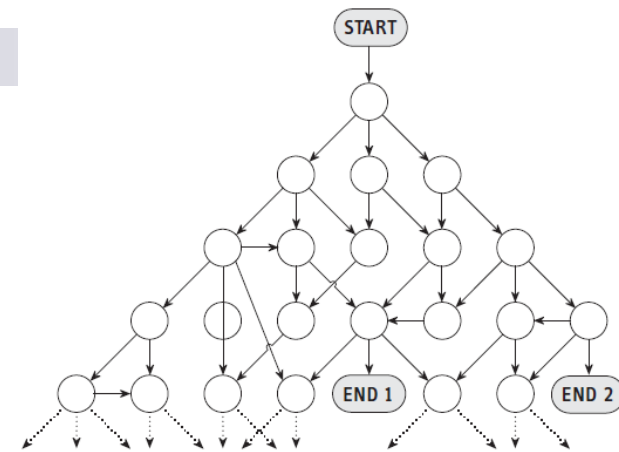
Non-linear stories types

- *Branching story* – allows the player to have a different experience each time he plays the game
 - the designer decides on the different possible plot lines and how they relate to each other
 - at a *branch point* - where the current plot line subdivides - the core mechanics must send a trigger to the storytelling engine to tell it which of the possible branches of the story the player will follow next
- *Foldback (multilinear) story* - the plot branches a number of times but eventually *folds back* to a single, *inevitable event* before branching again and folding back again to another inevitable event.

Branching story 1/3

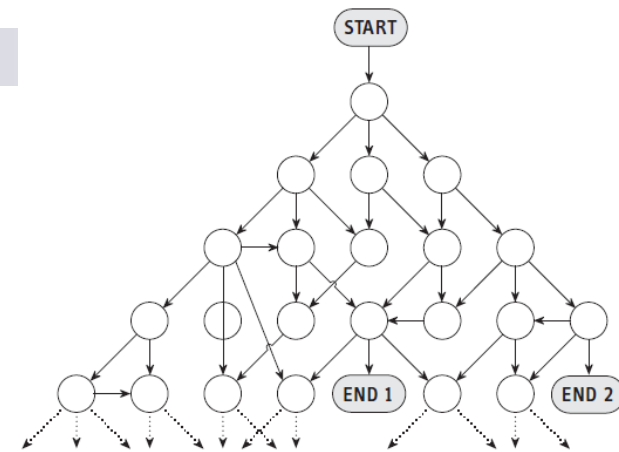


Branching story 2/3



- A story can branch in any number of directions at any given point.
- The branches go down or sideways, but they never go back up again (stories always move forward in time, never backward)
- Stories must not contain identical repeating events
- Unlike branches on a real tree, different branches can merge; that is, different plot lines can converge
- A story could have several start points if the player made a key decision before the story actually began.

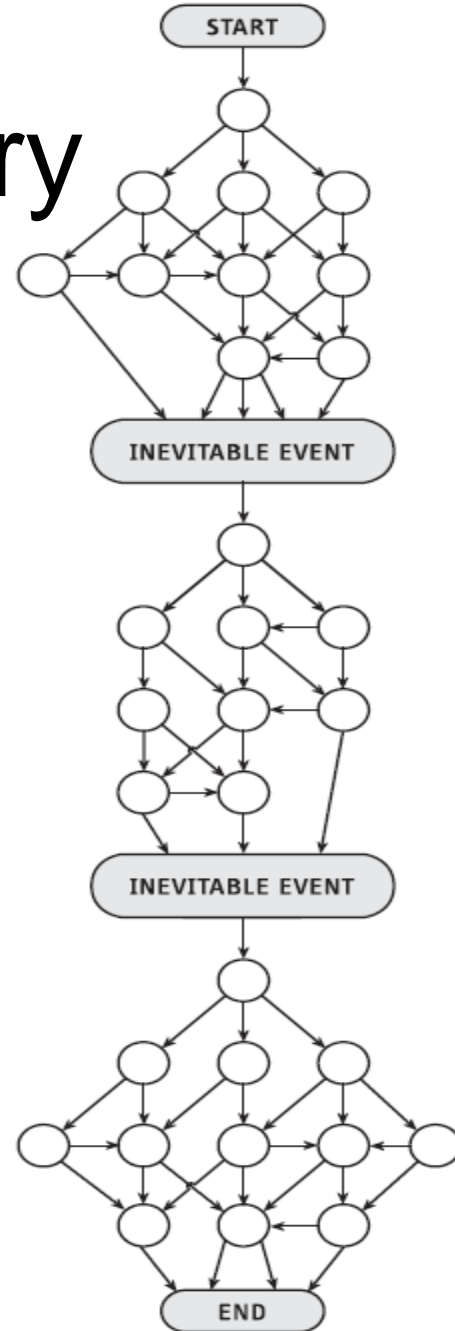
Branching story 3/3



- Branching stories are extremely expensive to implement because each branch and each branch point require their own content
- Every critical event (e.g., player dies) has to branch into its own unique section of the tree
- The player must play the game repeatedly if he wants to see all the content

Foldback (multilinear) story

- You can construct a foldback story that branches outward to multiple endings from its last inevitable event
- Limited *agency* - the player believes that her decisions control the course of events, and they do at times, but she cannot avoid certain events no matter what she does.



Emergent narrative

- Introduced by designer Marc LeBlanc in “Formal Design Tools” at the 2000 Game Developers’ Conference
- Refers to storytelling produced entirely by player actions and in-game events
- Emergent narrative storytelling does not contain narrative blocks created by a writer. The story *emerges* from the act of playing.
- There is no separate storytelling engine and no preplanned story structure
- Requires that the core mechanics be able to automatically generate credible, coherent, and dramatically meaningful stories
- Example: playing *The Sims*



Granularity of the story

- *Granularity* - refers to the frequency with which the game presents elements of the narrative to the player

- Types:

- coarse granularity* - storytelling in *StarCraft* (missions take 20-60 min.)
- fine granularity* – like in *Indiana Jones*



Mechanisms for advancing the plot

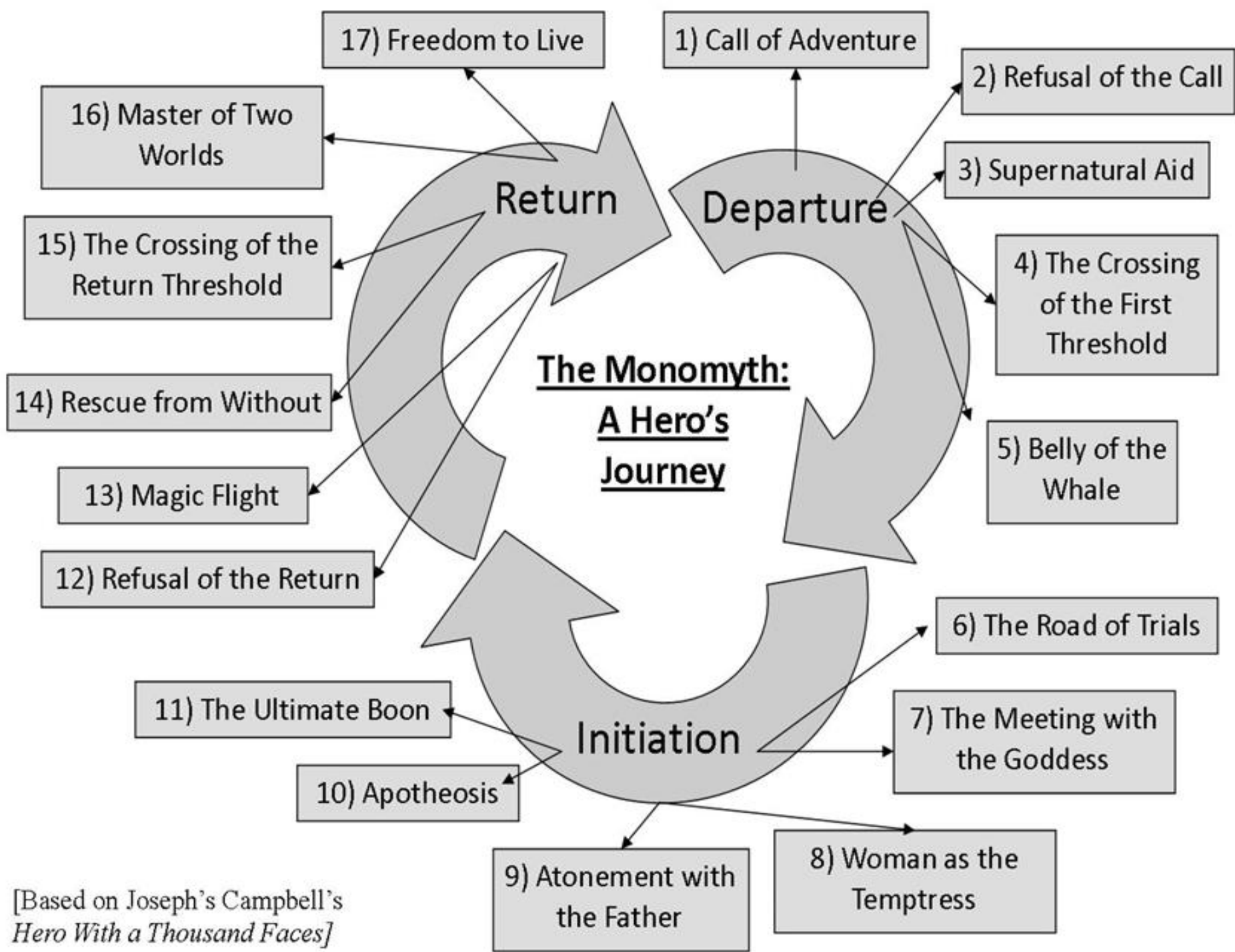
- The story as a series of challenges or choices – typical for adventure games and RPG. Examples: StarCraft, Wing Commander
- The story as a journey - much of the activity involves moving the avatar from place to place in the game world, you may choose to have the avatar's movements trigger the storytelling engine to advance the plot
 - automatically provides novelty
 - allows the player to control the pace
- The story as a drama -



The story as a journey

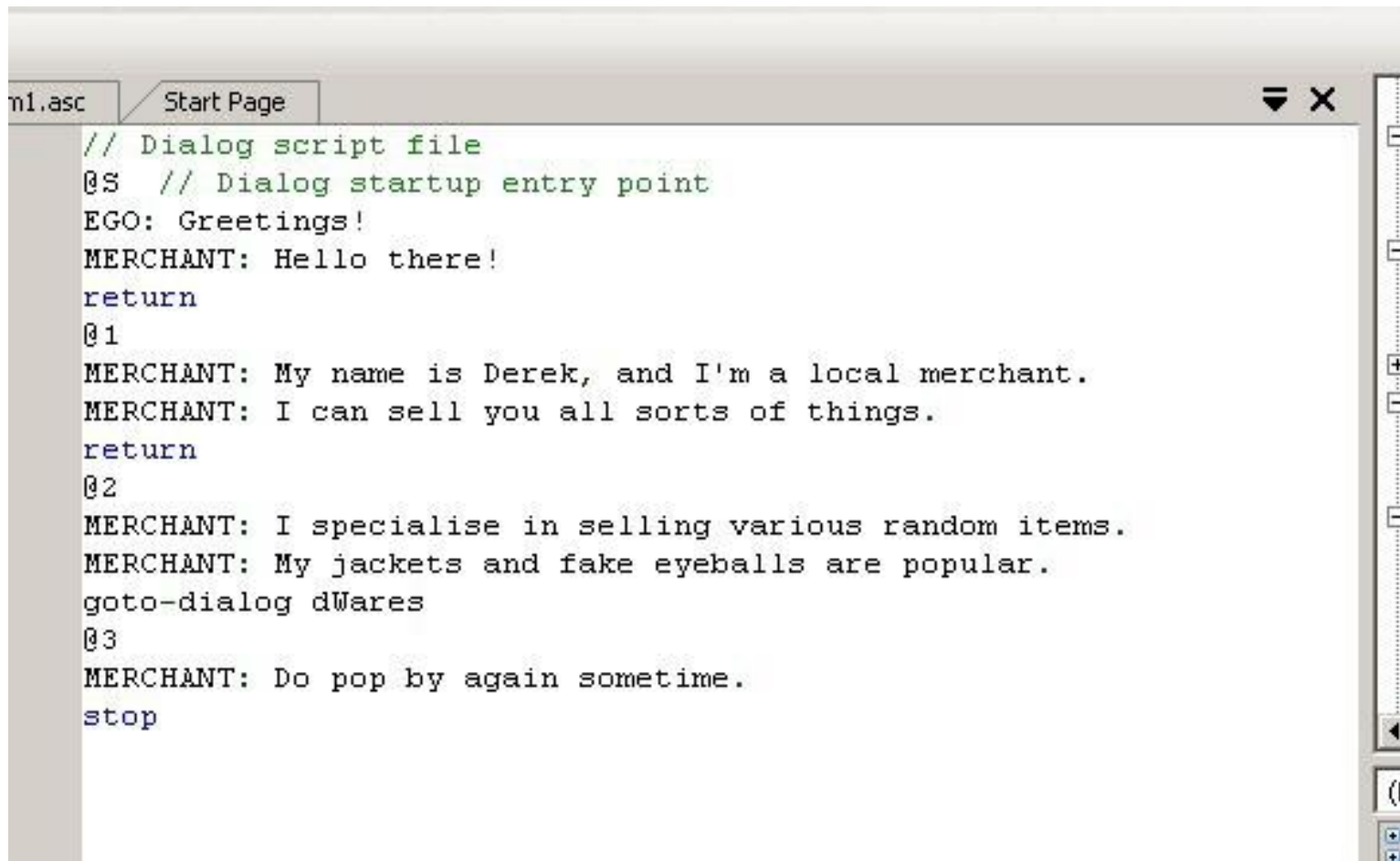
Joseph Campbell (*The Hero with a Thousand Faces*, 1949) - the concept of hero's journey (Monomyth) + 8 archetypes

1. Hero - the public experiences the story through his eyes
2. Mentor - teaches the hero how to survive and to use his abilities
3. Herald - announces the need for change in the hero's life
4. Ally - supports the hero
5. Threshold Guardian - tests the hero before great challenges
6. Shapeshifters - can change their character at will
7. Shadows - villains in the story
8. Trickster - adds fun and humor to the story



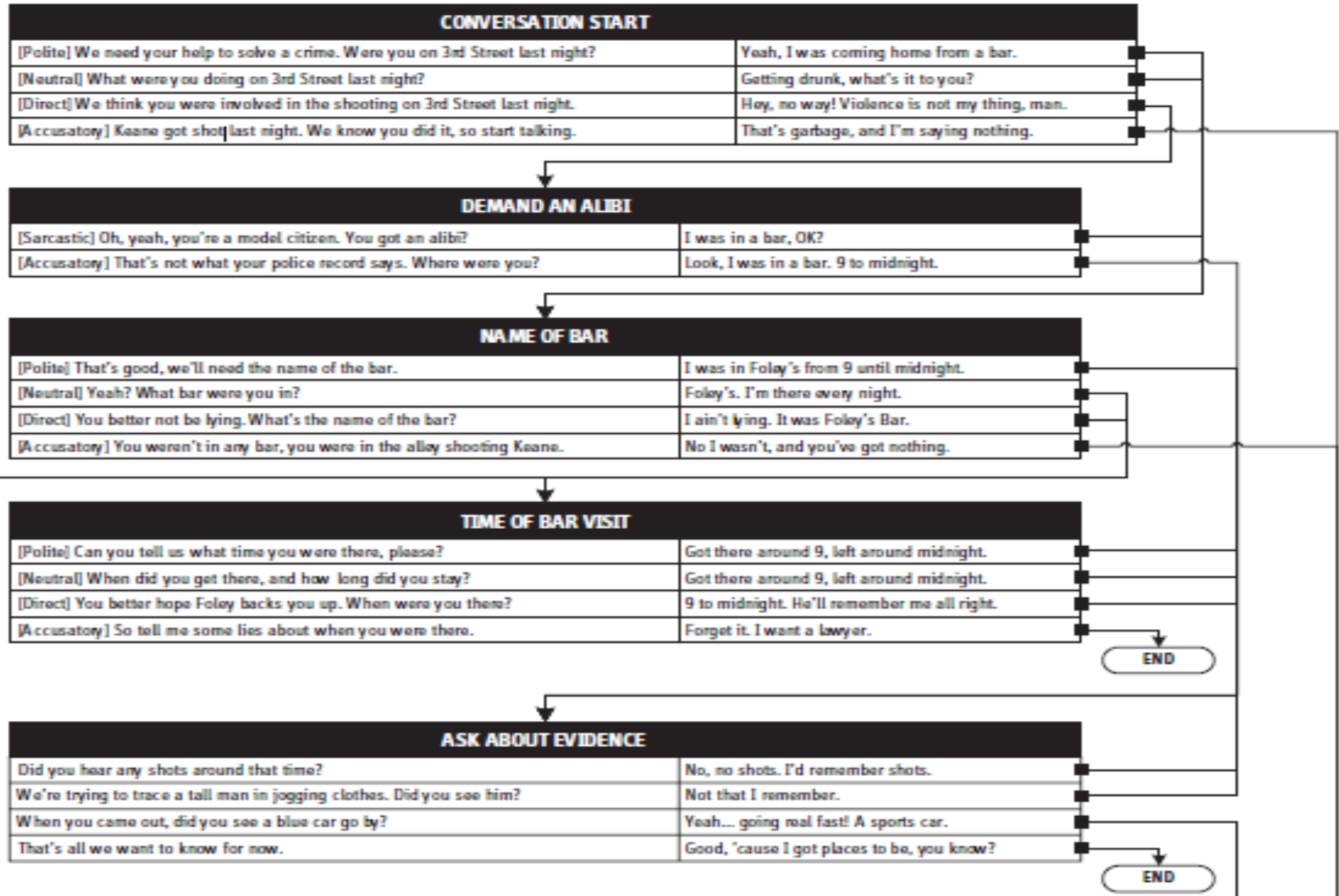
[Based on Joseph's Campbell's *Hero With a Thousand Faces*]

Scripted conversations



```
nl.asc Start Page
// Dialog script file
@S // Dialog startup entry point
EGO: Greetings!
MERCHANT: Hello there!
return
@1
MERCHANT: My name is Derek, and I'm a local merchant.
MERCHANT: I can sell you all sorts of things.
return
@2
MERCHANT: I specialise in selling various random items.
MERCHANT: My jackets and fake eyeballs are popular.
goto-dialog dWares
@3
MERCHANT: Do pop by again sometime.
stop
```

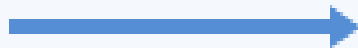
Dialog trees



Conclusions

Books

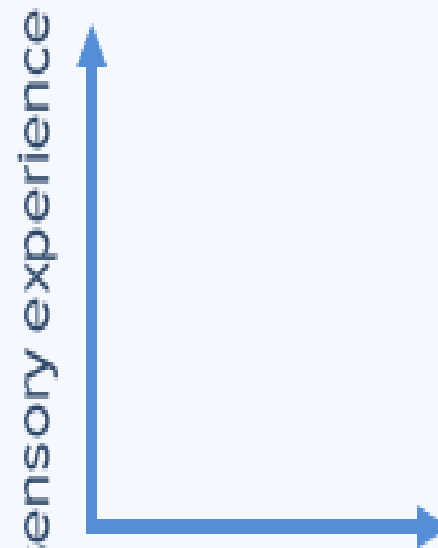
ideas over time



Movies

sensory experience

ideas over time

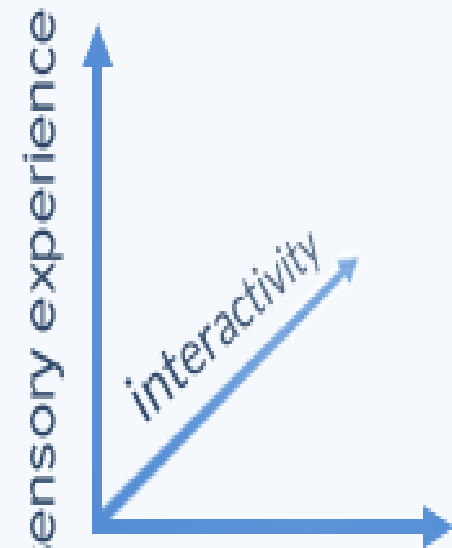


Games

sensory experience

interactivity

ideas over time





Въпроси