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Narrative & World Building

**Narrative Structure and Theory in Games:
Stories and Games**



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Narrative Structure and Theory:

Stories and Games

- Interactive Storytelling
- Simple Strategies That Don't Work



Combining Stories and Games

“Everybody loves a great story, and everybody loves a great game.

It seems natural to bring these two very human activities together to create something new that is different from either, but artistically engaging and a lot of fun.”

(Glassner, 2004, p.3)



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Combining Stories and Games

*“For the game to be an **interactive** experience, the gamer must take a **participatory role in the story** in the sense that the gamer’s actions will influence how the story unfolds.”*

(Thorn, 2014, p27)





Narrative Structure and Theory

Interactive Storytelling

Chris Crawford: *Chris Crawford on Interactive Storytelling* (2005)
& Andrew Glassner: *Interactive Storytelling* (2004)



Extrapolation from Games

Interactive storytelling and games share some **common elements**.

- **Both are played on a computer**
- **Both are interactive**
- **Both can be entertaining**

From this, Crawford suggests that interactive storytelling should be some sort of **extrapolation of games**.



Extrapolation from Games

- The game's **opponent** is the same as the story's **antagonist**.
- The **player** in the game is the **protagonist** in the story.
- The player **has goals**, and the opponent acts to **hinder those goals**.

In this simple definition, there appears to be **no difference** between a game and an interactive storytelling system.



Extrapolation from Games

Crawford offers this **definition of videogames** as they are actually played:

*“A form of **interactive entertainment** involving **simple and/or violent themes**, relying heavily on **cosmetic factors**, in which players must exercise **precise hand-eye co-ordination**, **puzzle solution**, and **resource management skills**.”*

(Crawford, 2005, p46)



Extrapolation from Games

This definition **does not cover all games**, but it does a good job of covering **most games**.

- 1 Simple and/or Violent Themes
- 2 Relying Heavily on Cosmetic Factors
- 3 Precise Hand-Eye Co-Ordination
- 4 Puzzle Solution
- 5 Resource Management

These areas have been compared alongside **stories** by Crawford.

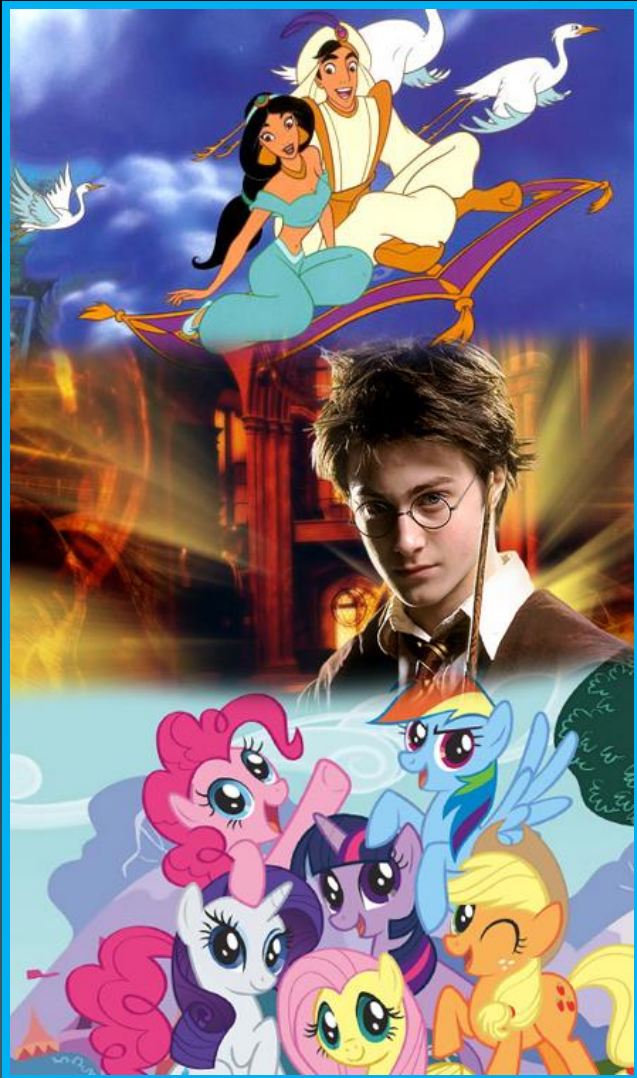


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1

Simple and/or Violent Themes



This comparison shows a huge chasm between games and stories.

Stories for young children are simple, but the full range of stories is characterised by complexity of themes and story structure.

(Crawford, 2005, p.47)



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1 Simple and/or Violent Themes

Even the simplest movies, such as *The Terminator* or *Godzilla*, have more **plot twists** than the most intricate computer game.

The level of **character development** and **plot intricacy** demanded of stories goes far beyond what games are on offer.

(Crawford, 2005, p.47)





2 Relying Heavily on Cosmetic Factors

Movies that rely on **cosmetic factors** are often criticised and perform poorly. *Final Fantasy: The Spirits Within* relied explicitly on cosmetic factors and bombed.

Movies will take advantage of cosmetic factors wherever possible, but they can't rely on cosmetics to sell the product.

Cosmetics are a **supporting element** - the **story** should come first.

(Crawford, 2005, p.47)





3

Precise Hand-Eye Co-Ordination

Hand-eye co-ordination plays a role for some characters in movies – **swordfights and action sequences** are examples of this.

However, physical prowess never plays a major role in any genre except **action movies**, and even these often portray physical prowess **falling prey to intelligence**.

Crawford states that as far as stories are concerned, hand-eye co-ordination is for the kids.

(Crawford, 2005, p.47)



4

Puzzle Solution

Plenty of stories focus on **puzzles**.

All mystery stories are elaborate puzzles and puzzles often play a role in **action movies**.

Their role is always **subsidiary to the story**, but most games include puzzles, and some games revolve around their puzzles.

(Crawford, 2005, p.48)





5 Resource Management

Stories have always played fast and loose with resource management issues. In *The Lord of The Rings*, characters can run for **days on end** without food and water.

Stories don't worry about accounting problems but game players revel in maintaining exactly the right amount of ammunition, food, money, etc. as they play.





Extrapolation from Games

From the comparison, Crawford concludes that stories and games are distant cousins at best, and states the following:

Interactive Storytelling Systems
are NOT
“games with stories”



Andrew Glassner: Structures

Because games usually contain **confrontation**, it's very tempting to develop that conflict into a **story**. But the game itself is not a story.

To form a story from a typical game of *Monopoly* requires a storyteller to shape the game's events and players into a **narrative** – the game itself does not translate into a good story.

“like most other arts, storytelling is a craft that can be learned. Inspiration is necessary, but once one has the skills to see it, inspiration is all around us.”

(Glassner, 2004, p.203)



Plot Versus Interactivity

“Comparing plot with interactivity leads many to conclude that there’s a fundamental conflict between the two.”

(Crawford, 2005, p.49)

Crawford states that this conflict is not without reason – Plot creation is an **enormously difficult task**, demanding talent and creative energy.



Plot Versus Interactivity

Permitting an audience (players) to interact with a carefully crafted plot will surely **ruin its delicate balance** – writers insist that any audience intrusion into the process yields only garbage.

If interactivity requires the audience to involve itself in the direction of the plot, Crawford suggests that perhaps **interactivity and plot are incompatible**.

(Crawford, 2005, p.50)





Plot Versus Interactivity

The game world is an orderly place with **free will** for the player – the designer's control is exercised by the **rules** of the game world rather than the **events** of the game world. A plot specifies **events**, not **rules**.

Crawford concludes that plot and interactivity are **incompatible**, though states that there is something higher and more abstract than plot.

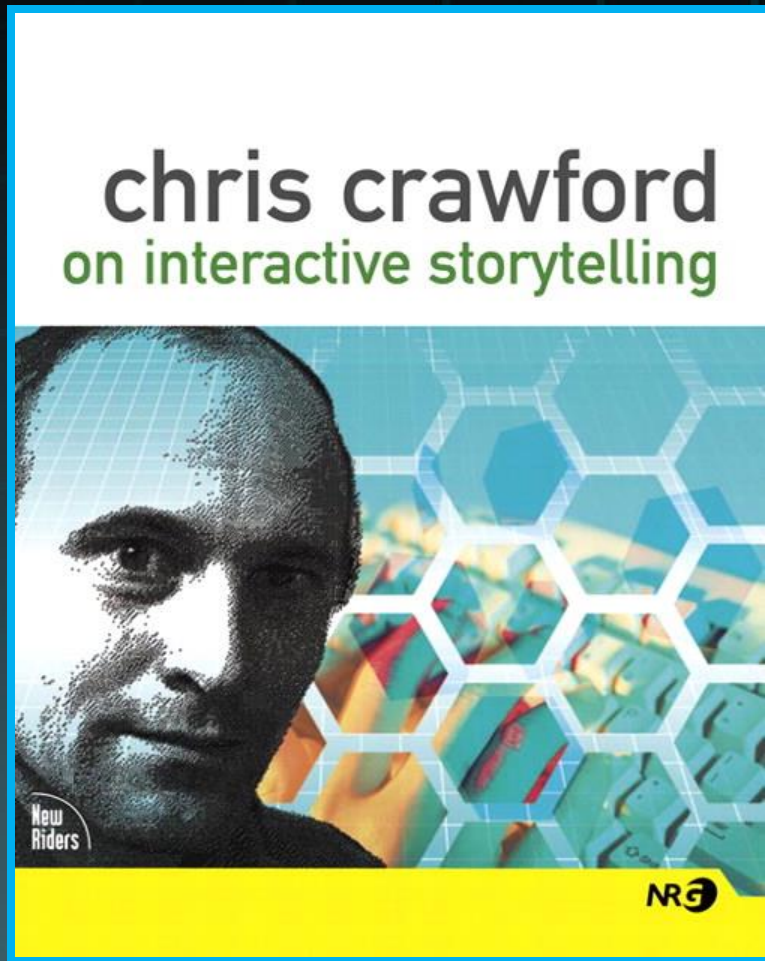
He describes this as '**metaplot**', which is similar to a plot, only specified by **rules**, not **events**. There is no clash between metaplot and interactivity.



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Plot Versus Interactivity



Chris Crawford

*Chris Crawford on Interactive
Storytelling.*

(2005)

New Riders, USA.

(794.81526/CRA in Owen Library)



Interactive Storytelling is Different

The conclusions drawn from this material should be this:

Interactive Storytelling is different to games and story.

You cannot apply tried and true expertise from games or stories to this unprecedented medium. The only way is to return to the **absolute fundamentals** and work forward from there.

(Crawford, 2005, p.52)



Interactive Storytelling is Different

Ask yourself the following:

“What should the user of an interactive storyworld be able to do?”

The user should be able to make **lots of dramatically interesting decisions**, and not have to make **boring decisions**.

(Crawford, 2005, p.53)



Interactive Storytelling is Different

Three problems arise from this answer:

- **How do you generate enough interesting decisions?**
- **How do you pare away the boring decisions?**
- **How do you keep the storyworld interesting?**



Interactive Storytelling is Different

How Do You Generate Enough Interesting Decisions?

At each step in the storyline, the character's decisions must be **so natural and obvious** that the audience **believes** them.

If a character violates the audience's expectations, the story **loses credibility**. For this reason, storytellers bend over backward to create circumstances that make a character's decisions believable.

(Crawford, 2005, p.53)



Interactive Storytelling is Different

How Do You Generate Enough Interesting Decisions?

The interactive storyworld must present the player with decisions that hang on a razor's edge – decisions that could readily go either way.

A conventional story must give its characters decisions that can be made only in one way.

“A storyworld is composed of closely balanced decisions that can reasonably go either way.”

(Crawford, 2005, p.54)



Interactive Storytelling is Different

How Do You Generate Enough Interesting Decisions?

This last point presents one of the **most important conceptual shifts** that the storybuilder must make in moving from conventional stories to interactive storyworlds.

(Crawford, 2005, p.54)





Interactive Storytelling is Different

How Do You Generate Enough Interesting Decisions?

A storyteller creates a conventional story by striving hard to create a sequence of entirely reasonable **decisions** that lead to an interesting and perhaps unexpected **conclusion**.

The storybuilder, however, must banish such thinking and instead concentrate on decisions that could **plausibly go either way**.

(Crawford, 2005, p.54)





Interactive Storytelling is Different

How Do You Generate Enough Interesting Decisions?

A storyworld must be equipped with **dozens or even hundreds** of such decisions. Some of these decisions will be much **less dramatic** than others, but they must still carry some dramatic import if they are to be **interesting** to the player.

The task of creating so many decisions is a gigantic one – stitching them together into a coherent whole is an even bigger task.



Interactive Storytelling is Different

How Do You Generate Enough Interesting Decisions?

These tasks are clearly the most difficult ones a storybuilder must face.

They become the focus of the creative efforts in building a storyworld.

“The storybuilder’s most important task is creating and harmonizing a large set of dramatically significant, closely balanced choices for the player.”

(Crawford, 2005, p.55)

Interactive Storytelling is Different

How Do You Pare Away the Boring Decisions?

To reduce or eliminate these decisions, you can bundle them together as inevitable outcomes.

You simply bundle together all the consequent events as part of the reaction to the protagonist's **decision**, jumping the story **ahead** to the next interesting decision.

(Crawford, 2005, p.55)



Interactive Storytelling is Different

How Do You Pare Away the Boring Decisions?

Crawford states that there's no reason that an interactive storyworld can't have long chunks of **noninteractive exposition** – as long as those chunks are **necessary** to set up the context for the next stage of interaction.

However, if the story is well designed, those long chunks of noninteractive exposition **shouldn't be necessary**.

(Crawford, 2005, p.55)



Interactive Storytelling is Different

How Do You Keep The Storyworld Interesting?

The essential task is to envision a dramatic **storyworld**, not a **storyline**.

If you want to build an interactive storyworld, you must **banish all notions of plot and storyline from your head** and instead think in terms of a storyworld.

A storyworld is a **universe of dramatic possibilities**, revolving around a central theme and exploring all the **variations** on that theme.



Interactive Storytelling is Different

How Do You Keep The Storyworld Interesting?

This is the key to creating interactive storyworlds: multiple but **connected themes**.

An interactive storyworld must present the possibility of **romance, betrayal, battle, spiritual growth**, and many other possibilities.

Only in this way can the player explore a **dramatically interesting** universe.

(Crawford, 2005, p.56)



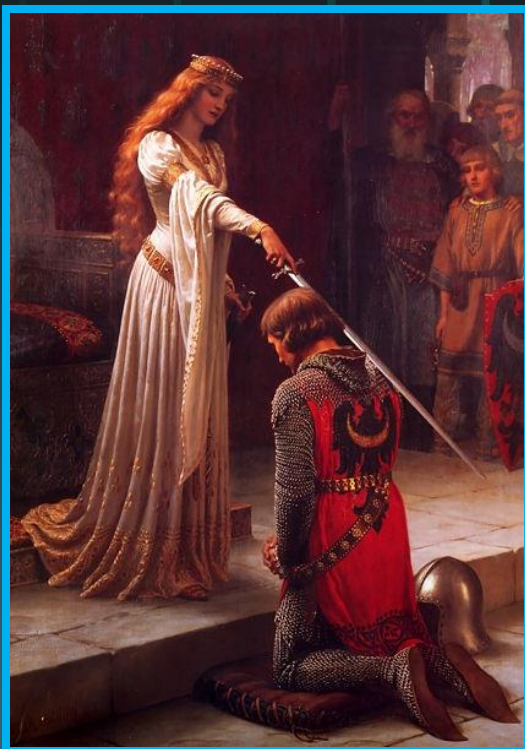
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Interactive Storytelling is Different

How Do You Keep The Storyworld Interesting?

Example: Arthurian Legend Storyworld





Interactive Storytelling is Different

How Do You Keep The Storyworld Interesting?

If the storyworld is confined to a single theme, such as a love triangle, it can develop and conclude in **only a few ways**.

The key realization is that a storyworld is a **much larger** creation than a story.

A single playing of that storyworld generates a **single story**. When a player goes through a storyworld, they produce a story. The **player's path is a linear sequence** of events – a **storyline**.



Interactive Storytelling is Different

How Do You Keep The Storyworld Interesting?

Different playings of the storyworld can yield **many different stories**, however.

Bear in mind that building a storyworld is a **necessarily huge task**, much larger than any single story.

(Crawford, 2005, p.57)



Substories

Crawford describes a concept he calls **substories** as fragments that can be used to create interactive narrative.

“A substory is a dramatic step; it’s an event or change. This event can be tiny or big.”

(Crawford, 2005, p.58)



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Substories

Substories are not measured with a clock – A substory cannot be a chunk of time.

Stories **do not move forward in synch with the clock** – they crawl through moments of intense emotion and then leap forward hours, days, even years.





Substories

The size of substories is one of the fundamental **artistic decisions every storybuilder must make.**

Dramatic emphasis is achieved by using **small substories**; tedious material can be compressed into a **single, larger substory.**

The storybuilder's **ambition and effort** determine the total number of substories in any storyworld.

(Crawford, 2005, p60)



What can't be part of Interactive Storytelling

Crawford suggests that some elements of traditional storytelling **cannot be used** in interactive storytelling.

For example, what he calls the **“third option”** – the protagonist's sudden **stroke of genius** that gives them a third option for escaping a dilemma - cannot be presented as an on-screen choice.

If it was, the other options would be made completely redundant. The trick lies in the fact that the audience could not have anticipated it, which creates the tension and surprise it requires in order to be effective.

(Crawford, 2005, pp.61-62)



What can't be part of Interactive Storytelling

Another element he suggests that cannot be included is **real-time play**.

Requiring players to make decisions that require thought in real-time **cannot be made in a split second**. If the story keeps moving, players may lose the opportunity to choose before they make up their mind.

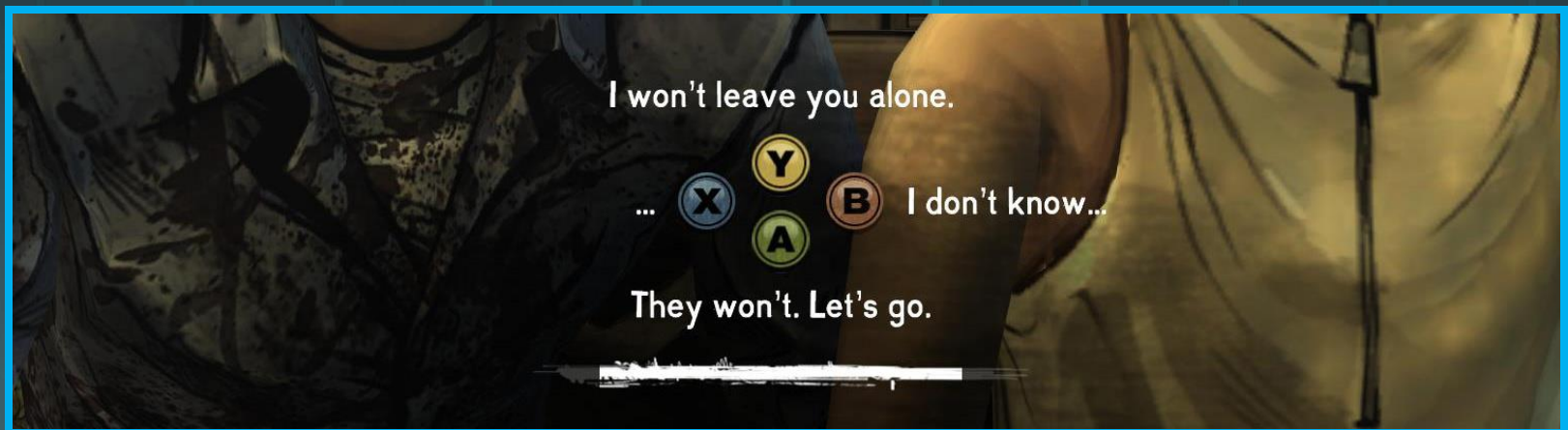
(Crawford, 2005, p.62)



What can't be part of Interactive Storytelling

However, **Telltale Games** present an option in *The Walking Dead* games to be hesitant or undecided.

This may often work against the player, but it adds a lot of **tension and urgency** to make decisions which can potentially be emotionally influenced due to a limited amount of time to think.





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Simple Strategies That Don't Work

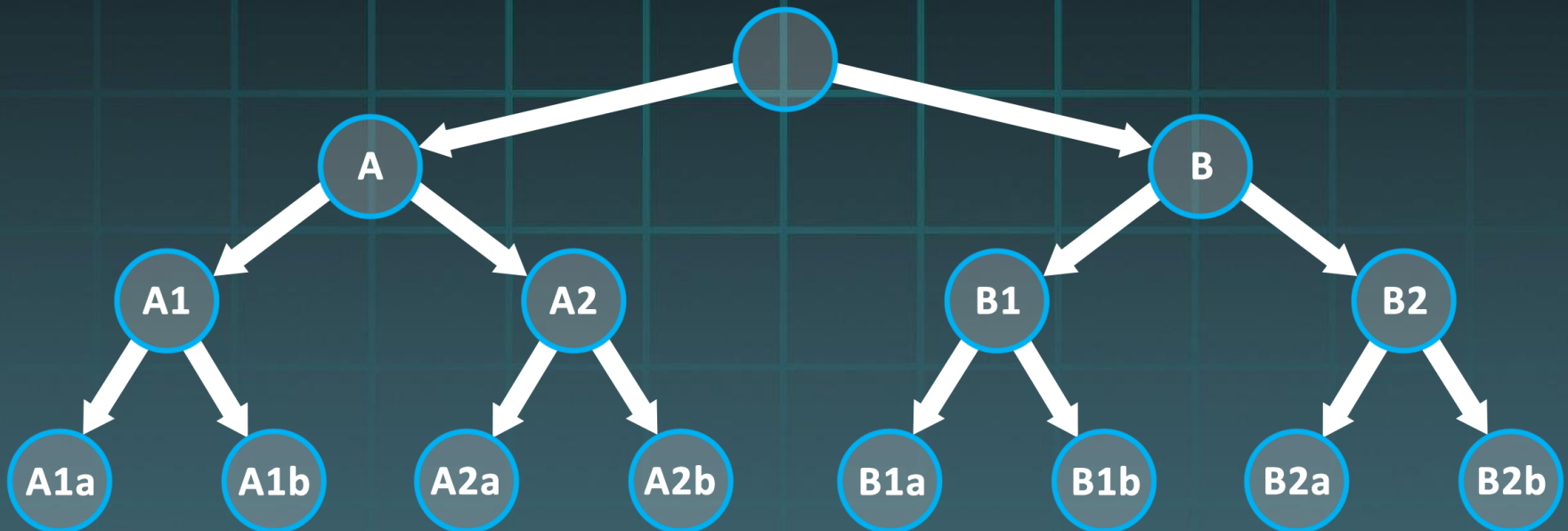
Chris Crawford: *Chris Crawford on Interactive Storytelling* (2005)
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Branching Narrative / Branching Trees

“Everybody seems to make the same mistake when they first approach interactive storytelling: They build a branching tree structure.”

(Crawford, 2005, p.124)





Branching Narrative / Branching Trees

“Real stories have a wide array of decisions.

*Only a few are dramatically crucial, but a **myriad of tiny decisions help define character**: the way one addresses another, the degree of impatience or willingness with which a character operates, and so on.*

*A real story contains **hundreds or thousands of these tiny decisions**; this kind of fine detail just isn’t possible in a branching tree.”*

(Crawford, 2005, p.125)



Branching Narrative / Branching Trees

Branching narratives ask the audience to make decisions at points in the story where choices matter.

Glassner states that this is where the writer's control is most essential – **how a character behaves under stress is precisely what reveals their real personality!**





Branching Narrative / Branching Trees

Without a coherent core for a character, the audience just has a person doing **unrelated things**.

A character who behaves completely unpredictably becomes **uninteresting**, because we have no idea what they are going to do and **no understanding** of why they do it.



(Glassner, 2004, p.243)



Branching Narrative / Branching Trees

Another problem with branching narratives is that they destroy the delicate state of **trance** that people fall into when in the thrall of a great story.

In such a state, we become **lost in the world of a story**, whether it's in a book or on a screen, and our intellects and emotions get wrapped up in the events.





Branching Narrative / Branching Trees

“Branching narratives, by virtue of suddenly making people move back into their own heads in order to make a decision, destroy the delicate thread that binds them to the story.”

(Glassner, 2004, p249)





Branching Narrative / Branching Trees

Crawford states that branching tree designs are always **too much work for the designer** and not enough meat for the player, who may never see all of the possibilities this model offers.

(Crawford, 2005, p.126)

The hard work that the development team have put into many different narrative branches may be an **expensive waste of time.**

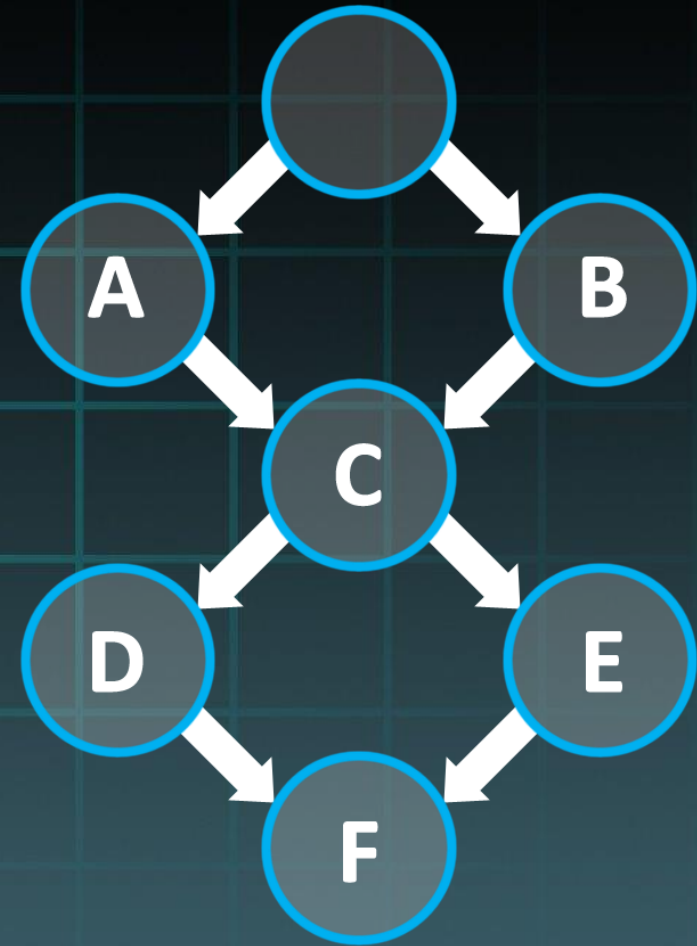


Foldback Schemes

Crawford describes **Foldback schemes** as branching paths that fold the storyline back to an already predetermined path.

A foldback scheme does give players **more decisions** without requiring a lot of additional effort from the storybuilder.

(Crawford, 2005, p.126)





Foldback Schemes

However, Foldback schemes merely **trick players** into thinking they're making a choice.

When players discover this, they will feel **cheated**.

Every single case of foldback renders a player's decision **meaningless**.

(Crawford, 2005, pp.126-127)





Foldback Schemes

“In general, branching stories don’t work, even with foldback. If you twist a branching tree system around enough, however, so that low-level branchpoints can feed back to upper-level branchpoints, you can transform it from a tree into a network.”

(Crawford, 2005, p.130)





Foldback Schemes

“If you then set up appropriately differentiating contexts, you can have your players move through the network of dramatic possibilities, revisiting each point with a different context each time.”

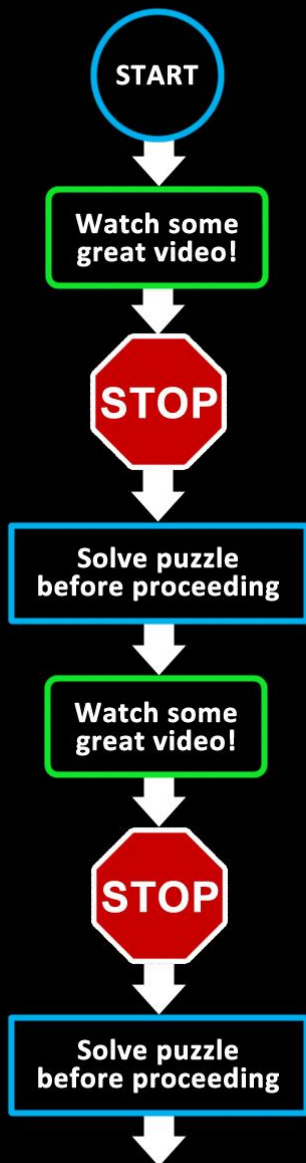
(Crawford, 2005, p.130)





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Constipated Stories

“Another commonly used strategy is the **constipated story**. This offers a story in **fragments**, with each succeeding fragment earned by successfully completing a game segment.”

(Crawford, 2005, p.130)



Constipated Stories

Sometimes the obstructions are puzzle-like; some are more game-like. The story in these cases is **never** interactive.



The 7th Guest (1993)



Kill 'Em If They Stray

The basic idea is to set up a single storyline and make **alternative paths** available to the player.

However, should the player try one of these paths, the game **kills the player**.

(Crawford, 2005, p.130)



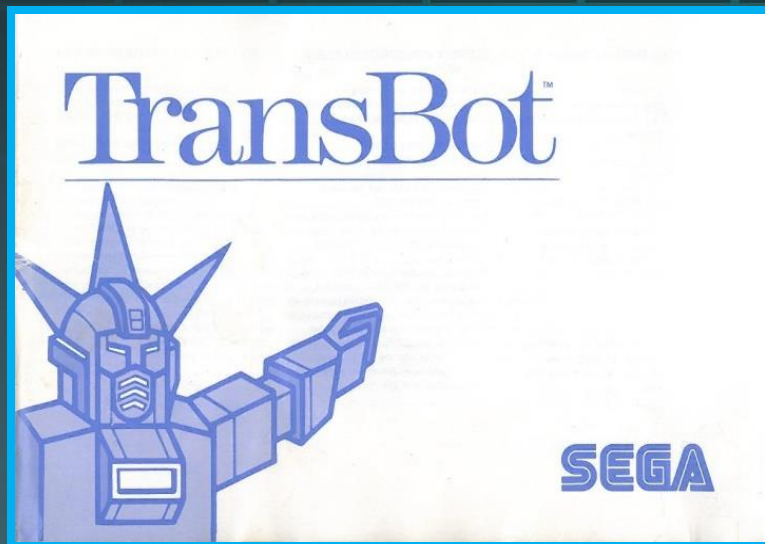
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Storified games

In the early 1980s, stories were put into game documentation.

The story wasn't part of the game; it served as **dramatic context** for the game.

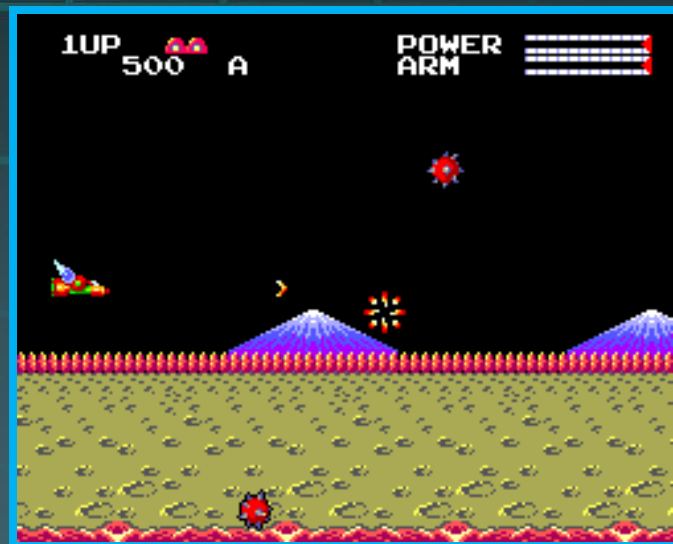


A MESSAGE TO THE PLAYER

After the Nuclear war in the solar year 2XXX—, having survived by escaping into a nuclear shelter, we are now starting to reconstruct the Earth. However, we have come upon a terrible monster, a remnant of the now defunct highly cultivated society that once existed, an Artificial Intelligence computer whose code name is DALUAS. A dictatorial empire to be created by DALUAS in nearing its completion. Part of the ground surface has already been turned into a mechanized city that is controlled by DALUAS. Becoming a huge fortress, DALUAS itself still continues to increase underground. On the ground, the security guards who are DALUAS' menials, as well as different kinds of living creatures are everywhere, and it is just a matter of time before DALUAS' ambition to "control the entire Earth" materializes. The Earth must be saved by all means. At last, the CA-214 weapon that enables you to battle against DALUAS has been developed.

However, an important problem with the CA-214 that has to be solved still remains, it being that since the CA-214 is so complicated, and its performance so high, that an average pilot can't maneuver it. Therefore, only you as a capable aviator can accomplish the mission. According to a detailed investigation made, you are the only person who can handle the CA-214. The number of the enemies and their power are far beyond your imagination. However, don't concern yourself about this. There is a way to destroy the enemy's ARM CARRIER, deprive them of their weapons, and advantageously go forward in your battle. The whereabouts of the DALUAS fortress is unknown. We also have no knowledge of it. Find out for yourself how to get into where DALUAS is, so that you may make an attempt to destroy it. There is very little time left. Save us and the Earth. We anxiously look forward to receiving your reply.

J.B. Walken
Supreme Commander
General Headquarters,
The Federal Forces of the Earth





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Storified games

Crawford describes **interleaved story/games** in his work, using the *Wing Commander* series as an example.

In these games, The player would have a story arc, but the manner in which players played the game **did not affect the story** beyond simply winning and losing playable sequences, and the **story had very little effect on the game.**



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Storified games

In the *Wing Commander* games, a player would play some of the interactive game, then view some of the non-interactive story, and then went back to the game.





Storified games

A better attempt at an interleaved story/game was *Half Life* (1998).

Previous games alternated the display between the game screen and story screen – this was not the case with *Half Life*, which was seen **entirely from the main character's perspective**.

This change was **cosmetic only** – the basic architecture of interleaving was unchanged.





Storified games

“For many designers, the game is the core of the entertainment, and the story exists to embellish the gaming experience, often being nothing more than a crude justification for the game’s mayhem.”

(Crawford, 2005, p.133)

Crawford states that **games are ultimately about things**, and **stories are fundamentally about people**. Game designers go to great lengths to dehumanize victims.

The gamer plays with things, never people. **Stories** always have been and **must be about people**.



Storified games

According to Crawford, as long as games are stripped of human relationships, they can never be compatible with stories.

“Attaching a non-interactive story to an interactive game yields a product that’s neither good game nor good story. These two elements stumble over each other.”

(Crawford, 2005, p.133)



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Any Questions?