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Narrative Design

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Synonyms

Allegory; Digital storytelling; Interactive narratives; Interactive storytelling; Semiotics in games

Definition

Narrative design combines game design and game writing. It uses the mechanics of game design to create a dramatically compelling story to the game player. In a broader sense, narrative design is a unity of carefully selected game mechanics that would adhere the story elements in either textual or symbolic/visual form with the aim to fulfil the desired gaming experience for the players. Narrative design can be textual, visual, or aural. It is usually a tight bond of all these mediums telling the story directly through players' senses in a form of gaming experience that was set by the game designer.

Introduction

A narrative designer works together with the rest of the game development team from the conception to the release of the game (Heussner et al. 2015). The collaboration is closest with the game designer, who is responsible for the vision and idea of the whole game. The narrative designer focuses on bringing in and integrating the story so that it seamlessly fits into the game design and complies with the game mechanics and art style. Narrative design requires a special set of skills, and many writers coming from more traditional media might find it difficult to give up authorial control and to adapt to work within the confines of the game system and as a part of a multidisciplinary development team. Furthermore, the narrative designer commonly directs the graphics and audio team in creating the right environment, character design aesthetics, and all other visual elements that would highlight the story content for more immersive gaming experience.

What sets narrative design apart from traditional storytelling is the player's influence on the story being told. This creates a friction that the narrative design has to solve. There are different approaches on how to handle this depending on how much narrative control is given to the player. The narrative designer can employ different methods for guiding the player to make impact on the story progression, which we will present later in this article.

N. Lee (ed.), *Encyclopedia of Computer Graphics and Games*,
https://doi.org/10.1007/978-3-319-08234-9_140-1

Academic research on digital storytelling has a long history (Koenitz et al. 2015), but from 1990s onwards it has focused especially in interactive narratives. Seminal works in this field include books by Laurel (1991, 2014) and Murray (1997, 2017) and the proceedings of the International Conference on Interactive Digital Storytelling (http://icids.org/). One of the key problems tackled by the research is the role of the player's narrative agency with respect to the author's control over the story, which we will discuss next.

Narrative Control Versus Narrative Freedom

Interactivity is the key difference between games and other forms of media, and game technology provides a new medium of expression where an essential part of experiencing the story happens through a direct participation with the narrative progression. In traditional storytelling, the flow of the story is linear with clear stream from the author to the audience. In interactive storytelling, the audience has an active part in shaping up the story and co-creating it with the author (see Fig. 1). Outside of the digital realm, this kind of storytelling happens, for example, in improvisation theater and (live action) role-playing games. Also, teaching and tour guiding are such endeavors where the audience participation – ideally – has a significant effect on the outcome of the story. This also opens the topic of diversity in experiencing the narrative within a solitary gameplay or as a part of a group effort.

Interactivity allows the player to have *agency* in the story, which means that the player can make meaningful choices affecting the story's direction. This requires that the game conveys information on the possibility of a choice to the player. Moreover, the player must, at the time of making the choice, have an idea on the possible consequences of that decision. Finally, to have agency, the ramifications of the choice in the story must be seen immediately and – to maximize the effect – they should also show an effect at the end of the game.

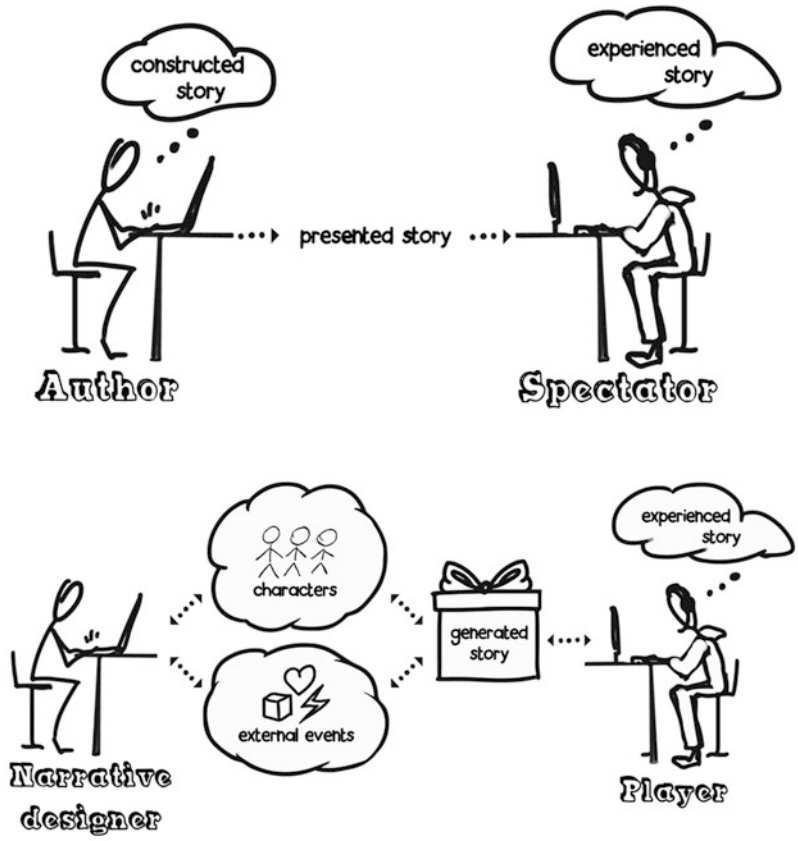
The requirement of narrative agency – or freedom of choice – contradicts with the idea of a story being authored. The player can refuse to follow the intended story and do something else instead. For example, imagine a game based on the film *Star Wars: A New Hope*. Now, the player controlling the character of Luke Skywalker could refuse to leave Tatooine preferring to lead a life of a farmer. How could the author persuade the player to follow the intended story and leave the planet with Obi-Wan Kenobi and the droids?

One possible answer is to increase the limits of the freedom of choice and forcing the player into a certain direction – either by hinting or even by coercion. This resembles the situation in the film *Stranger Than Fiction*, where the main character is hearing a voiceover of his life. At some point, he decides not to follow it and instead goes back to his apartment only to discover how hints (e.g., mail, news program, commercials) turn into coercion (wall being bulldozed down) forcing him eventually to follow the voiceover's story (this same conceit is also used in the game *The Stanley Parable*).

This problem is called the *narrative paradox*, and there are different proposals on how to solve it. One possibility is to take a high-level approach that posits that the player enters into a contract with the author meaning that the player will obey the constraints of the storyworld (Adams 2013). The same happens in games in general: the game designer is the one setting up the moral of the game world (i.e., which actions are "good" and which "bad"). For example, a pacifist stance is not "good" in the moral system of a first-person shooter game, because it makes impossible proceed in the game.

A design-oriented solution to the narrative paradox has two opposite approaches (Smed 2014). Author-centric approach puts the author's control in the first place. This leads to having a part of the software, a *drama manager*, which acts as a proxy for the author and tries to manipulate the game world and its entities so that the player follows the intended route lined out by the author. Naturally, this can lead to a situation called "railroading" where the players – regardless of their skills and abilities – are at the mercy of the game story.

Conversely, the character-centric approach sees the author as a Newtonian god, setting up



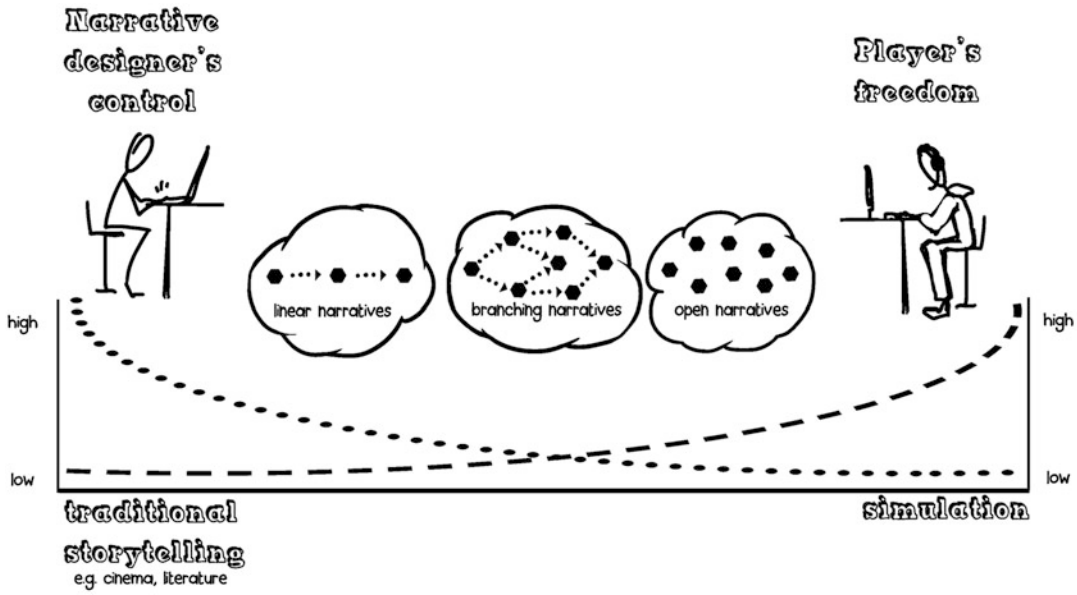
Narrative Design, Fig. 1 In traditional storytelling, once the author has created the story, it is presented the same way to all spectators. In interactive storytelling, the narrative designer is responsible for the characters and events in the storyworld, which are used to generate the story in line with the player's individual preferences and expectations

the game world and its entities and leaving them alone to interact once the game starts. This so-called *emergent narrative* depends highly on the underlying simulations, especially the computer-controlled characters, but gives no guarantee whether a story comes up from this process. Naturally, this can be enhanced by reintroducing the drama manager as a behind-the-scenes partaker, which the characters can consult for making dramatically compelling decisions, leading to a hybrid approach.

Designs for Interactive Narrative

Figure 2 illustrates the continuum of narrative types used in games. As the narrative paradox indicates, the narrative designer's control over the story and player's narrative freedom exclude one another: the higher the narrative designer's control, the less narrative freedom the player has, and, conversely, high narrative freedom of choice means reduced control for the narrative designer. At one extreme, we have the case where there is no freedom, which constitutes a reduction back to traditional linear storytelling (e.g., cinema, literature). At the other extreme, we have no authorial control of the narrative, and the game is reduced to just a simulation.

Between the extremes we have three different approaches to incorporate narrative into games (Heussner et al. 2015; Zeman 2017). The most widely used is *linear narratives*, where the story progresses linearly (e.g., through cutscenes between the levels or environmental changes) but the player has freedom in the gameplay. This means that every player will every time encounter the same story in the same order. Although the player, therefore, lacks narrative agency, the story can be woven into the level design such a way that the player's actions seem to have an influence in the story as well. For example, the killing of a level boss can be followed by a cutscene, where the allies of the boss get involved in the conflict.



Narrative Design, Fig. 2 The spectrum of narrative types in games

Although the killing of the boss was necessary for the player to proceed in the gameplay, now it seems to have repercussions in the story as well. This pseudo-agency provides the players with a feeling that they can affect also the story.

Ideally, each narrative choice would lead to a new and different situation meaning that the player could try out all possible scenarios like in the film *Groundhog Day*. However, this full branching leads to a combinatorial explosion, where the shear amount of narrative alternatives becomes infeasible to handle. In practice, these kinds of *branching narratives* use pinch points, where the divergent paths join reducing the number of alternatives. An early and nondigital example of this approach is the *Create Your Own Adventure* book series, where the reader has to choose at the end of a chapter how the story continues and then skip to the indicated page to continue reading. A classic example of a game using branching narrative is *Indiana Jones and the Fate of Atlantis*, where the story early on branches to three alternative paths – team, wits, or fists – and later on a pinch point brings all three paths back together.

In branching narratives, a key question is the critical path, which connects the start to the end of the narrative. Maintaining the critical path is an important task for the narrative designer so that the story progresses no matter what the player chooses. To enlarge the storyworld the designer can add short linear narratives that are separate from the critical path and optional to the player. They can be individual quests or tasks that the player can take, which can expand the overall fabula of the game.

Open narratives present the biggest challenge to the narrative designer. Here, there is no imposed sequence for the narrative events but each player can take their unique path. These kinds of sandbox games can include preconditions for the narrative elements, which provide some structure. For example, the game *Her Story* has a complete but deconstructed underlying story, which can be experienced in any order by entering keywords to the game's internal search engine. However, the players are most likely to search terms related to events happened recently, hence creating a loose structure into the open narrative.

Another possibility to create a structure into the openness is to scatter the story throughout the levels (i.e., each level has its own set of open narratives). Also, some story elements can be

threaded so that they form short linear sequences. These (possibly optional) threads can include missions, quests, jobs, or rescues taken inside of a larger context.

The Form of Storytelling

Although narrative design is often thought as textual, it can also include visual or aural elements – or even omit the textual narrative and focus on other forms of conveying the story. Let us look and compare how some games present a complex narrative design to a player using different forms of storytelling. A common feature to these games is they have a deep narrative design with a main protagonist that reflects to the players' preferences in a gameplay – the player can decide the course of the narrative from aggressive/achievement-driven to more adventurous/story-driven experience.

To provide an open world experience with a feel of free exploration in *Horizon Zero Dawn,* the narrative designer and the game designer have used a variety of traditional methods of literary and rhetorical allegory in revealing the story. Conversely, in games such as *ABZÜ* or *Journey*, the creators have focused fully on the visual storytelling methods with an almost complete absence of textual content in the game. In such an approach, semiotics theory (Schapiro 1969) and iconography (Panofsky 2003) have an essential role in creating the interactive narrative experience for the players, where even the symbolism of a color or the type of light and the texture in a scene can provide necessary information for the player to progress in the game. Naturally, this makes high demands on the graphics team, since their task is to translate the narrative design into a visual narrative by using all possible tools from semiotics, psychology, and symbolism theories. Moreover, this visual translation of the story-driven experience needs to be easily understood via a seemingly simple user interface design and clear indicators in the game environment that guide the player in the story progression.

The game *Life is Strange* is based on more traditional storytelling methods, where the player makes clear choices from a given branching narrative. The story progresses as an episodic interactive narrative, which is also common in visual novels and interactive fiction. In these games, narrative designers focus on specific segments of the story that give a full loop and a sense of conclusion by the end of the game, and, at the same time, the story has enough of open-endedness that it can continue in another episode as a sequel, or even completely new game-titles that refer to the previously given narrative experience. Still, the follow-up game can usually be played and experienced without having played the previous game in the series, which is the case in adventure games such as *Zelda*, *Tomb Raider,* or *Assassin's Creed*. The storyline binds all the games – and the big narrative construction that represents the game world and all its content – under one title. The introduction and tutorial parts of a game serve as an "onboarding" to the given narrative framework for the players not already familiar to the preceding games in the series.

Conclusion

Narrative design takes the challenge of combining stories and games. This requires an understanding of the needs of interactivity and narratives. The end result should be a game that is dramatically compelling without hindering the player's agency too much. To realize this, the narrative designer has three broad approaches – linear narratives, branching narratives, and open narratives – to choose from and can then refine it to fit in with the gameplay and the story being told. Contemporary game design tendencies highlight the importance of an individual gameplay experience that accommodates to the player's personal preferences. Therefore, the player is provided with necessary tools to shape the narrative progression according to their own individual expectations and desired game experience.

Every game – no matter how simple or complex its structure may seem – has a goal for the player to achieve. Narrative design is where the game mechanics, visual and aural content come

together to give the feeling of a purposeful experience in pursuing that goal.

Cross-References

- ▶ Game Design
- ▶ Game Writing
- ▶ Interactivity
- ▶ Level Design
- ▶ Media Studies
- ▶ Semiotics

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