



Approaches to Computer Game Design – Characters and Conflict

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Abstract

From the player's point of view, action is an important feature of a game. Action can be created and directed by raising expectations, building up motivations and setting goals for the players. An important tool for setting up motivations and goals for the player are well-defined characters with distinct natures and needs. Those will create the basis of conflict in the game. Expectations, which guide the choices of players, are the expectation of gaming, genre and also intermediality as a whole. Space and architecture can be used for communicating the genre, thus creating some expectations and removing others. On the other hand, by using the design of space and the rules of the game the players can be guided into using the space in a manner that endorses the gaming experience.

Keywords

Game design, character-driven action, conflict, expectations, spatial design

INTRODUCTION

What is it that all games have in common? When comparing games like *Chess*, *Tetris* (Pazhitnov 1985), *Myst* (UBI Soft 1993), *Doom* (id Software 1993), *Grand Turismo 3* (Sony 2001) and *SSX Tricky* (Electronic Arts 2001), it is fairly easy to point out how different they are. Indeed, they do not seem

to be similar at all. However, there is one element, which they all have in common and that is action. In each of the games mentioned, the player needs to *play* the game by reacting to events in the game, exploring or taking control over the space. Without action there would, in fact, be no game at all. From the player's point of view, action is the most important (though not the only) feature of a game. This is congruent with what Aristotle emphasizes of drama: He argues that a good story is told through action, rather than through description [1]. Therefore, we want to focus on the action and explore the creating and directing action in a computer game.

We will not try to interpret games as stories, storytelling or dramatic narratives, as done by for example Murray [16] or Laurel [13]. We do use some of the theories of dramaturgy and theory of text to strengthen our theory even though we agree on Juul's [11] and Frasca's [9] point that games should be studied as games, not as narratives.

We argue that one can learn about computer game design from the context of several related phenomena: the design of theme parks and free-form live action role-playing games. In this paper we explore these tools for creating and directing action by building expectations, motivations and goals for players (lessons learned from designing live action role-playing games) and with the designing of space (applications from theme park design).

In this paper we theorize action and the effects of space on action. We take a look on games using character-driven action techniques and consider the effects and usage of expectations in the context of computer game design.

Our theory is derived from analysis of (Finnish) free-form live action role-playing games (*flarp*), discussions of played flarps and various computer games and literature research. Although we have applied the theories of various fields (namely dramaturgy, theory of text, ludology) rather liberally, we believe that selected theories complement our approach and explain parts of the phenomenon consistently to our data. The analysis presented in this paper is useful for game designers and critics in the context of computer game design.

ACTION

Lev Manovich [15] notes that designers should be focusing on designing the users' experience of time and space, and that thus the object itself is secondary. He also states the following: "Instead of narration and description, we may be better off thinking about games in terms of *narrative actions* and *exploration*. Rather than being narrated to, the player herself has to perform actions to move narrative forward." [15]

His view emphasizes action in the game space. In this chapter we explore how this action can be produced and guided as well as how the players can be persuaded to act in the way that it supports (designed) gaming experience.

The motivations of the character must translate into motivations of the player to make the gaming experience meaningful. The consistency

in character motivations and game structure is prerequisite for players to perceive a game as logically whole.

Character Driven-Action

Finnish free-form live action role-playing games have their own way of creating action and experiences to players. The main idea behind flarps is that the *intrigue*¹ is created by setting motivations and possible goals (both mutual and opposing goals and motivations) for players and by describing the nature of their characters. In the basic form this means that the game is constructed by creating a beginning by setting up a tense situation; the choices made by the players during the game define how the game will end.

For example, one part of the intrigue of the game could be the following: The duke has to find a ruler for a county where the order of succession is obscure. There are several characters in the game, all of whose backgrounds make them potential choices for the post and, accordingly those characters also want that post. However, each candidate has advantages and disadvantages, and therefore none of them is an obvious choice. Each candidate needs to strengthen their position, which they can do for example by negotiating support from the barons of the county.² In this case the designers' tools to influence the outcome (i.e. 'who will be selected' or more so 'what actions will take place during the game') are to write preferences toward candidates and towards other characters (the barons of the county or towards the duke), or to give some usable resources to one candidate to use for bargain or blackmail and so on. (According to our experiences, however a balanced starting situation usually seems to create a more interesting game, though the outcome will be more unpredictable than in a weighted one).

As pointed out in the example, other tools used in flarps to guide the direction of the action are connections, resources and influences (one should note that resource management is an important feature of the computer games too [18]). One character could have influence over another (i.e. the character could be written as a leader so his decisions could have a greater impact on the outcome of game. Similarly, giving resources to one character can be used in the game to direct the outcome to match the needs of that character. We discuss the effect of resources in the game space later in this paper.

The idea of character-driven action is the same as in character driven story in dramatic writing (about dramatic writing refer to Berman [4], Egri [7]). As Berman describes: "Your character's need will create action as well as conflict, the basis of drama." [4] In a flarp, however, instead of writing a story, characters and their needs are designed so that there will be enough action and conflict in the game to make it playable and interesting.

Premises discussed earlier can be found in a pure and simple sense in the game *Space Invaders* (Taito 1977) even though there are no characters as such. The ship's (and the player's) need is to save the planet from invaders (by staying alive and shooting the invaders). Conflict and action is created by the opposing need of the invaders (to destroy the space ship).³

Motivations or needs are important for directing actions and keeping a game interesting. The game designers of *The Nomad Soul* (Eidos Interactive 1999) have trusted that the player's desire to play is enough to make things move forward in an interesting way. The result is that one usually ends up not knowing what to do next because motivations are presented too vaguely. Even when one is clearly informed of the next task in the game, the tasks are badly motivated and one ends up wondering why they should be done in the first place. For example in one point of the game the main character, who is from another dimension and has possessed the body of a police officer, is alarmed to handle an armed robbery of a drug store. There is no apparent reason why the character, or the player, should take the risk to handle that assignment but the assignment cannot be skipped.

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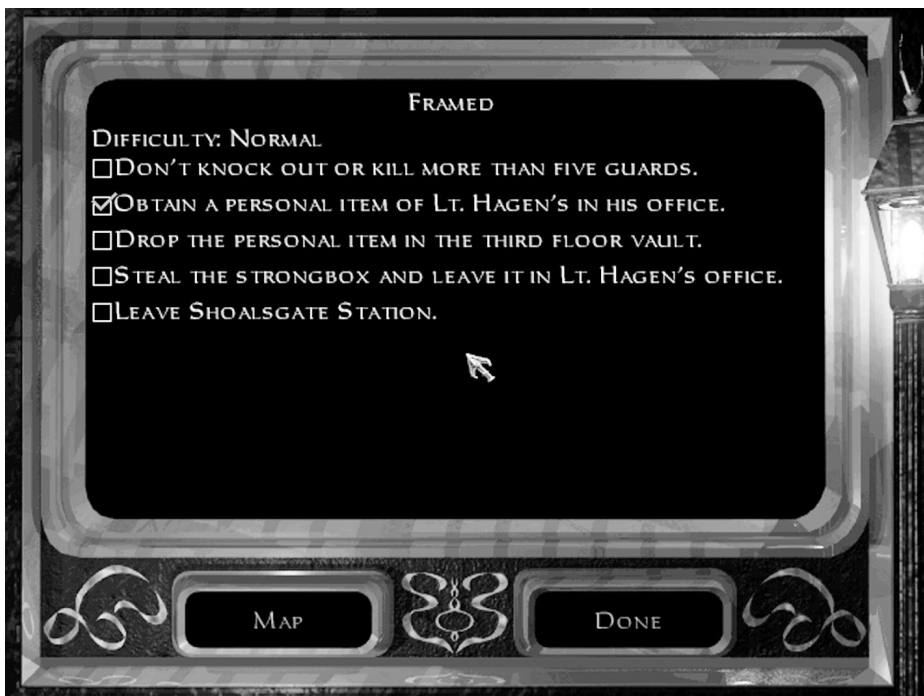


Image 1: The goals screen of the scenario Framed in Thief II

Thief II – The Metal Age (Eidos Interactive 2000) fares better in this sense. The player is never left to wonder what s/he should be doing and why something should be done. The game lists goals for every scenario (see example in the Image 1), which are used to create the need. Goals are formulated as simple objectives and their motivations (which are well designed and build consistent personality for the main character) are described by using a short narrative. Nevertheless the format how the motivations are communicated to player is not an issue here.

Fallout 1 (Interplay 1997) and 2 (Interplay 1998) leave the creation of the character to the player (both selecting the qualities for the character and playing it in a way appropriate to the qualities selected). The interesting part of *Fallout* is how action is directed by the choices the player makes while selecting character qualities: different characters encourage or demand different styles of playing (a charismatic character will obtain needed information by talking while agility enables the character to steal the same information). Selections during the game affect the behavior of other characters in the game. The needs and the basis of conflict are set up by the background story. This could ideally be done in an even more defined way because now the player is sometimes left wandering around the game world trying to figure out what to do next.

Flarps are examples of games where intrigue (and thus action and conflict) is created almost purely by using the needs of characters. The examples of computer games mentioned above show that action in computer games can be created and guided similarly as in flarps. The connection between drama and games is obvious: the characters. Their function is similar in both games and drama. In the center there are the needs of the characters. Their conflicting interests are the basis of action; there can be no game without conflict. Like Egri [7] points out: “there is no play if there is no conflict.” However, this does not mean that the other areas of drama theories would necessarily be applicable in the context of games.

Expectations

[S]ome preliminary generic judgment is always required even before we begin the process of reading. [19]

If it [the attraction] is the ‘Wizard of Oz,’ I had better not tell story without Dorothy or more importantly, without Tin Woodsman, the Lion, and Scarecrow. [10]

While analysing the debriefs⁴ of flarps which we have arranged and the discussions on the suoli list⁵ we have learned that players’ basic assumption that a game should be interesting and challenging affect the way the game is played. Players are often actively seeking action even if it is against the nature of the character they are playing. We use the term the *expectation of gaming* to describe this phenomenon.⁶

Schell and Shocket [20] have noted that in the context of theme parks “interactive and virtual carries with it an expectation that it [attraction] will be a video game.” People seem to associate game-like qualities for virtual realities in general: guests of Disney’s virtual world of *Aladdin* wanted to have a reason and goal for being there [17]. We believe that the expectation of gaming is central in the context of computer games. As one starts to play a game, it is reasonable to expect that there will be action and the player can make decisions, or in another words: play it. Expectation of gaming as a process is similar to that, which Fiske describes (using ideas of Barthes [3])

as *the hermeneutic code*. “This code sets and resolves the enigmas of narrative and it is motivated by the desire for closure and ‘truth’” [8].

The *code of action* (the proairetic code) is similarly intertextual [...] It suggests that we understand any action in a narrative by our experience of similar actions in other narratives, and that our experience is an aggregate of details arranged in generic categories of actions – murder, rendezvous, theft, perilous mission, falling in love, etc. [8]

This understanding of the code of action is the basis for decision making in a game. In addition to the expectation of gaming, expectations are also created by *intermediality* and especially by *genre*. Genre and intermediality⁷ function similarly to the codes of action. Theory of intermediality proposes that all texts are read and encoded in relation to other texts [8, 14]. However games are not only read in relations to other texts but the reading also affects the choices made by the players. Players usually behave according to the rules of the genre and they use patterns of behavior learned from other sources while playing (i.e. sources to which the game refers).

Grand Theft Auto III (Rockstar Games 2001) is an example of how genre can be used to strengthen a character. Although the character’s motivations are described rather sparingly and the reasons why one should do the given assignments are left vague (the player is not given backgrounds or other reasons to motivate him/her after the initial setup in the beginning of the game), this never poses a problem. The game refers to characters similar to those of Steve McQueen (for example in the *Getaway 1972*, dir. Peckinpah). Such characters have also been seen in many other movies. This referral to a certain genre acts as a description of the character: The main character of *Grand Theft Auto III* is in some aspects an antihero, and acting without asking too many questions is part of the character.

Steven Poole [18] also emphasizes the importance of expectations by pointing to the opposite. He discusses the incoherencies in games and shows how frustrating these incoherencies are. He divides incoherencies into three types: causality, function and space. Poole gives an example of incoherence in causality: a rocket launcher in *Tomb Raider III* (Eidos Interactive 1998) blows up people but does not work on a wooden door. Incoherencies of function are inconsistencies in how the artifacts of a game work. One example would be a lighter, which can be used to illuminate one room but not another. By incoherence of space Poole refers to inconsistencies in spatial design and function. For example a game has a hole that looks big enough for a character to crawl through, but it is not possible to do so (at all or only in some areas). [18] The incoherencies Poole describes are linked to intermediality and expectations, which the player has got from the functionality of items and actions player is able to take. These expectations may vary greatly depending on the genre of the game: in a game that looks like a Hong Kong action

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movie one is not surprised if martial artists can fly or use their bare hands to break things, which are impossible to break in real life. If one uses a rocket launcher in a game one expects it would have effects, similar to e.g the ones seen on film.

In addition to intrigue and character-driven techniques, expectations can work likewise as tools for creating action. On the other hand, they also set constraints that should be kept in mind: fulfilling expectations is a crucial part of creating a satisfactory gaming experience [10, 8].

Expectations that are set up by goals, motivations, implicated rules of behaviour (genre and codes of action) and game rules are link to game environment (space and architecture). Thus the game environment will, in part, support the players throughout the gaming experience.

SPACE

All design elements are loaded with meaning and hence shape the gaming experience. They should therefore be used to enhance the experience, not just to look cool. [5, 6] One function of design elements is creating atmosphere. Others are setting expectations and, in conjunction with the rules of a game, to guide action. To quote Hettema:

Just as in animation or puppetry, the task [of leading someone through an experience] involves distilling the message, giving visual and audio cues, and understanding how to manipulate focus. [...] You literally have to lead the guests' eye through an experience, and you do that by carefully positioning everything – the guests, the displays, the vehicle they're riding in, and the things they perceive [...]. [10]

The design of space can and should be used to guide the players towards the build up potential of action. Theme park designers have come up with useful solutions on how architecture and design can be used to lead players through an experience. These theories can be applied to the game design as well. The focus of the players can be guided by light, placement of objects and structure of game space.

Setting Expectations by Architecture and Spatial Design

Space and architecture can be used for communicating genre and thus setting expectations. A small town looking like it is from a western is perfect for a western game. An alley with an atmosphere borrowed from a film noir movie sets up different expectations for the game – it could be the right set for a detective story. Carson [5] notes that “[i]f you are creating arenas for gladiators to blast each other to bits, play up the gladiator arena aspect of the game rather than guild it in unrelated ornate textures.”

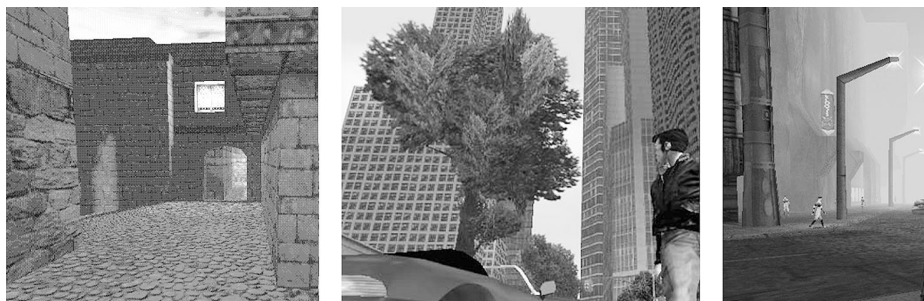


Image 2: *Thief II* (left), *Grand Theft Auto III* (middle) and *Nomad Soul* (right) create different expectations about the game with architecture.

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An architectural archetype is something that draws the eye of the player and awakens their interest. It could be a castle, an island, a volcano or another distinct element in the spatial construction of the game. [6, 20] Players tend to navigate towards these. If players see an island in the otherwise empty sea, it is probable that they visit it (when playing a game).

Another applicable method of building expectations is through what Carson [5] calls *cause and effect*. For example when character finds the body of a recently killed character in the area, player will be expecting problems nearby: someone has killed the character and might still be around. On the other hand, if the all the corridors of a mansion are covered in thick dust one does not expect to find characters living there.

Creating Atmosphere

Space and architecture can be used to support the immersive gaming experience. Designer can affect the atmosphere of a game with textures, colour or lighting. The space also constantly reminds the players of where they are and what they can do. [5]

Familiarity in design is important. It gives something for the players anchor to and to base their interpretations of the space and action in the game. [5] An oddelement that cannot be recognized as a space ship is just a weird element, but if it looks even vaguely like a space ship player have seen before (like Giger's design in *Alien*, 1979, dir. Scott) the design communicates the desired meaning.

Carson notes that archetypes “are powerful tools that can be used to draw your audience to experience certain ‘feelings’ about the space you have designed.” [6] Thus archetypes not only direct action, but also provide atmosphere to create action.

Contrast is a way to add impact and variation in the space. Churches are a good example of how to create a dramatic effect: a small hall before the main hall adds impact on the entrance to the monumental interior of the church. [5]. Other similar techniques in architecture are exploitable in spatial design of computer games.

Rules and Spatial Design

The rules of a game (programmed in the game engine) together with spatial design can be used to define which areas are accessible and also in what kind of conditions one must meet access to it. These factors can be used to make some areas more alluring than others. For example in *Thief II* Garrett, the main character of the game, needs to move through an area unnoticed and he can do this, for instance by hiding in shadows. Guards can spot Garrett easily in well-lit areas so those areas are potentially dangerous. Surface materials are used in a same way in *Thief II*. Walking through areas causes different amounts of noise depending on the floor materials or the ground (it is impossible to move silently over some surfaces, which gives surface materials a similar effect on game play as lighting). *Thief II* also provides the player/character with some (usually limited) resources that can be used to modify the space for (easier) access. For example keys and lock picks can be used to open doors. Different kinds of arrows can be used to counter some elements in the area (water arrows can be used to put out torches, rope arrows to gain access to areas in higher ground). These kinds of rules and space design can be used to guide the player to use some areas of the game world rather than others.

Grand Theft Auto III uses assignments to guide the player to certain areas in the game world. The same mechanism is used in *Thief II*. One goal or assignment is a link to an area thus ensuring that it is visited. The difference between *Thief II* and *Grand Theft Auto III* is that in the latter one can ignore assignments and still have (a lot of) fun in the game space. Potential action built in different areas creates conflict and keeps the game interesting even if one decides to ignore the assignments.⁸

The functions of different spaces are implied by their design. Thus, a design can also become a symbol of the function of the space. If one recognizes a place as restaurant one knows how to behave in it. Rules of the game can affect this in two ways: (1) If actions associated to a place are not possible, the place might be perceived as defunct. (2) Rules of games can change the function of a place. For example the flarp *Wanderer II* had a space designed as a nightclub. Since players were not allowed to use airsoft-weapons in that space, it became a resting place – similarly in *Might and Magic 6* (3DO 1998) there are some places where character can shoot through closed door but character cannot be hit.

CONCLUSIONS

Our premise is that action is the most important feature of the game from the player's point of view. We have discussed the bases of motivated action in a game and how one can design the action of a game. An essential part of a well-structured game are the characters with distinct natures. A game profits from characters with conflicting interests, which helps to create action. Consistent characters are an important part of creating a believable

gaming experience and the needs of a character can be used to link players' motivations to game. The needs and the nature of a character create action for the game.

We have presented ways to analyse how the design of space affects to the action in the game in conjunction with the rules of the game. The design of space can also be used to set expectations to communicate genre or sensible patterns of behaviour in that area (like how one behaves in the shop or in the bar).

As proposed earlier, expectations are important factors that need to be considered during the design process. Expectations can be used to strengthen the game design but they can also work against it, if ignored.

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NOTES

- 1 According to Aarseth intrigue is “a secret plot in which the user is the innocent, but voluntary, target [...] with outcome that is not decided.” [2]
- 2 The presented intrigue is a simplified form of that which Lankoski has used in a few flarp games e.g. as one part of the intrigue in 476 part I.
- 3 Like Juul pointed out in Games telling stories? [11] there is no reason to think the structure of Space Invaders as a narrative even if we will argue in this paper that basis of the action and conflict is built similarly as in drama.
- 4 With debrief the players explain what happened in the game and how they perceived and experienced it.
- 5 Suoli list is a mailing list for discussing topics related to flarps (see <http://live.roolipeli.net/>).
- 6 Expectation of gaming works likewise to Rabinovitz's [19] rules of configuration that guide interpretation of narrative. According to the rule it's appropriate to expect that something will happen and that not anything can happen.
- 7 We use intermediality in a sense as Fiske defines intertextuality [8]. Lehtonen defines intermediality as intertextuality that crosses boundaries of one medium [14].
- 8 *The Sims* (Electronic Arts 2000) is a game, which is all about the rules built in the game engine and space. Player is never given needs; s/he needs to decide his/her own, thus conflict is not built in the game; player needs to decide his goals by himself. That makes the game more like a toy as Järvinen points out [12].

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