Focalization in 3D Video Games

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ABSTRACT
This paper investigates Bal's concept of *focalization* for 3D video games. First, the argument traces *focalization* in the historical development of camera strategies in 3D video games. It highlights the detachment of the camera into an own interactive operator. Then, it exemplifies the visual *focalization* in video games using two case studies. In the following, it looks at possible problems and effects of *focalization*. The argument concludes that dynamic *focalization* allows video games to apply narrative guidance without the linearity of a "telling" voice.

Keywords
Video game, camera, focalization, narrative perspective.

1. Introduction
This papers looks at the notion of narrative perspective and Bal's concept of *focalization* in 3D video games [2]. Although tools from literary studies have influenced games research from the start [5], a number of gaps are left open. Bal's concept of "focalization" has been recognized by researchers in the field (e.g. [16, 19]) but remains largely undeveloped. Even books that support a narrative in games (e.g.[11]) it is heavily underrepresented. This paper aims to fill this gap, exemplify the effect of *focalization* in games and offer some tangible impact points.

As it will be outlined in the next section, *focalization* grew from an earlier distinction between the narrative agent who "sees" the action and the one who "tells" about it. *Focalization* is part of the "seeing". Applied to games, this effect reaches into the realm of the camera and leads the discussion into a delicate area of games research: the interplay of visual presentation and play functionality. One reason for the lack of interest in the narrative perspective in video games is the frequent side-by-side of video games with traditional games such as board games, sports, or card games.

As Aarseth stated so eloquently: video games are not movies [1] – neither are they traditional physical games. If they were, we could discuss them entirely in that field and would not battle with terminology, definitions, and frameworks – not to speak of the entirely new production pipeline. Eskelinen's critique of narrative in video games that 'if I throw a ball at you, I don't expect you to drop it and wait until it starts telling stories' [8] reaches too far. In contrast to board games or physical games, video games present us not with a ball but a moving video image of one. The ball in *Pong* (Nolan Bushnell for Atari/ Atari, USA 1972) as well as in *MVP Baseball 2005* (Brent Nielsen for EA/ EA, USA 2005) is "shown" from a certain perspective and in a certain context. That is why *focalization* is important for games.

A narrative situation is at work in the presentation of the ball. The level of its complexity might vary and the narrative situation might be dwarfed next to other more dominant factors during the gameplay (e.g. in *Pong*), but it is an essential part of the way especially 3D video games operate. Locating this narrative situation – and the element of *focalization* in it – does not imply that games tell stories in the same way as traditional media (e.g. rejected in [13]).

In contrast to literature or film, modern video games offer navigable 3D spaces that often depend on a range of visualization strategies. The basic challenge of a navigable 3D world is, that any three dimensional object, whether it is a whole game level or a single item in it, is perceived only over time and in selected portions. The necessary selection poses challenges to the point-of-view, the perspective – or as this paper argues more in detail: the *focalization.* Thus, f*ocalization* emerges from the toolbox of narratology but it offers a structuring mechanism to improve dramatic experiences in 3D worlds.

2. Approach
2.1 What is *Focalization* – in Games?
Genette [10] outlined many helpful tools that have been applied by games researchers (e.g. [1] [14]) – one is the mentioned distinction into "who tells" and "who sees". From this distinction Mieke Bal developed the concept of *focalization* [2]. In contrast to Genette's references to literary written texts, Bal includes visual ones: reliefs, movies, pictures. She elaborates Genette's "who sees" into a narrative feature of visual storytelling and makes it more directly applicable to video games. Any visual presentation contains a certain perspective. Consequently, Bal defines *focalization* as 'the relationship between the "vision" the agent that sees, and that which is seen' [2].

'That which is seen' refers to the event or object of interest, the entity that delivers this vision is the *focalizer*. Events and their *focalizers* are interconnected but separate entities. This paper will utilize this distinction to distinguish between the event, that drives the game forward, and the *focalizer*, who generates a narrative perspective towards it. Bal identifies different kinds of *focalizers*:

> 'The subject of focalization, the *focalizer*, is the point from which the elements are viewed. That point can lie with a character (i.e. an element of the fabula), or outside it. (…) When focalization lies with one character which participates in the fabula as an actor, we could refer to *internal* focalization. We can then indicate by means of the term *external* focalization that an anonymous agent, situated outside the fabula, is functioning as focalizer.' [21]

We can find *internal* and *external focalizers* also in video games – as will be demonstrated in selected game analyses below. What is the effect of these *focalizers*? And what are their advantages?

The choice of example games was influence by Taylor, who argues for a representation of space via a narrative perspective delivered by flexible cameras examples [24]. Historically, the first person point-of-view has been singled out for the experience of virtual environments from [17] to notions in [3, 19, 22]. *Focalization* can be traced in first-person titles (e.g. *Breakdown* (Yasuhiro Noguchi for Namco Lim./ Namco Hometek Inc,, USA 2004)) but this paper will concentrate on more flexible camera styles as they offer a wider range of expressive freedom. It argues, that camera entities – much like Bal's *focalizers* – have become detached from the event creating entities and operate in the narrative situation that generates the perspective to the game world.

2.2 Detaching the Camera

Super Mario 64 (Shigeru Miyamoto for Nintendo/ Nintendo, JP 1996) features a defining moment in the distinction between camera control and avatar control. The game predominantly uses a following camera's third-person point-of-view to depict the famous plumber's movement through the 3D world. The revolutionary camera system of the game allowed the player to control this following camera and circle it around the main avatar to explore the spatial positioning of Mario in relation to the surrounding video game space. To highlight this invention, the game introduces the camera as a separate character: Lakitu – an occasionally visible camera operator, who automatically follows Mario in his adventures but does not affect the events themselves. Players control Mario, the performer of all relevant actions in the game world, as well as the *external focalizer* Lakitu. The camera turns into an own entity that "sees" that is connected to but intrinsically different from the hero interacting with the game world. The player shares control over both: event creation and event presentation.

Figure 1. Lakitu – floating on a cloud – sees himself and his guiding hero Mario in a mirror.

Lakitu has effectively invaded most 3D exploration games, as this form of camera control has grown into a standard that increased in complexity and finesse over time. Developments include refined collision controls, elaborate movement (e.g. into the characters point-of-view), and special effects (e.g. using shaders to simulate different "vision"). While Lakitu concentrates on a single focal point (Mario), other forms of the detached interactive camera are less rigid. *Ico* (Ueda Fumito for SCEI/ SCEA, USA 2001) features pre-set – clearly external – perspectives that usually orient themselves towards the main hero. But unlike Lakitu, their spatial positioning in the game world is pre-defined. The player has limited control over their orientation and field of view but not their position. The result is a guiding perspective through the spatial puzzles that are posed by the game. The *focalization* includes interactive options while interpreting the space and assisting the player.

In both games, players are not simply looking at a play ground but receive an articulate vision of it. This perspective is partly shaped by rules defined in the system (e.g. the camera movement restrictions in *Ico*) and the player's decisions (e.g. controlling Mario's maneuvers). Through the structured presentation, the player steps into a dramatic position in relation to the game events. This effect has been acknowledged and explored in film theory (for an introduction see [4] for practical guidelines see [15, 25]), so a cross-reference seems appropriate. But a direct transfer of cinematic approaches to video games lacks the necessary focus on interactivity. To avoid this error, the argument shall grow out of the actual gameplay, not a media comparison. It is from the game that we look at other media to support and understand certain elements at work, not the other way round. Thus, we will look at games that feature focalizing interactive camera work and

provide a strong narrative setting in order to look for the relationship of "seeing" and "telling" in video games.

3. *Focalization* in Video Games

3.1 Examples

In the beginning and throughout *Prince of Persia: The Sands of Time* (Jordan Mechner for Ubisoft Montreal/ Ubisoft Entertainment, USA 2003), the character of the Prince is established firmly as the narrator as well as impersonator of the events. He narrates and directs the linear storyline to an extent that can reject actions just realized by the player. For example, whenever yet another fatal failure stops the player (and the Prince), the Prince informs us, that "That didn't happen" in contradiction to the just actualized event. Rhody even argues that due to this narrating voice '*The Sands of Time* is a game *about* storytelling. (…) the goal of the game is a process of actualization, where the player must work through the Prince's various memories to complete his recollection.' [23] The position of the narrating voice is often internal in the form of inner monologue delivered by the Prince remembering his adventures.

In contrast, the visual presentation, the *focalizer* that "sees", is external. The game offers access to a first person point-of-view option but it excludes any further interaction apart from looking around from this viewpoint. The dominating view is a player-controlled version of the Lakitu camera. In addition, the game offers access to fixed establishing-shot-like views, that direct and focus attention, elaborate cut-scenes to introduce new levels as well as pathways through them, and complex automated cameras during the fight-sequences. The game cameras feature a range of mainly external *focalizers* that clearly differ from the narrating voice and often have specific functions (e.g. for fight or level explanation).

Max Payne (Petri Jarvilehto/ Markus Stein for Remedy, 3D Realms/ Gathering of Developers, USA 2001) also works from the premise of a memory flashback. Starting at the end of the game's fictional time frame, the player "jumps back" to retrace the hero's path towards the final battle. Again, the narrating voice is that of the hero and is enforced during game play as well as in the cut-scenes. The disillusioned perspective of Max Payne, who tells the player his story, adds a distinct noir style to the game. This "telling" voice is so strong, that Max can reflect upon a nightmarish vision of him being part of a video game controlled by somebody else. Such a level of self-referencing indicates a strong character in a personalized game world.

At the same time, the dominating camera is a mixture between following camera and over-the-shoulder shot – a clearly external *focalizer*. Mirroring the acting hero's self-referencing, the camera is also self-aware and cross-referencing by quoting typical cinematic Hong Kong film genres in its special features, such as the "bullet time" or "bullet ride".

But *Max Payne*'s most versatile examples of *focalization* feature in the dream/ drug sequences. During these scenes Max has to revisit a spatially distorted vision of the source of his internal wound: the house in which his family was slaughtered by drug addicts. The context, shape, and relevance of the location clearly grows from the character and his voice. Technically, the visualization stays external in the form of an interactive following camera. At the same time, the focalizing camera applies Max's internal, perception "on drugs". It includes red filters, paths of blood, distorted architecture, and foggy abysses that have no counterpart in the realistic style of the rest of the game. The camera still looks *at* the hero but seemingly filtered through his eyes. The focalizer applies the conditions of the game state to his view to increase the impact of the sequence.

The same effect features in *American McGee's Alice* (American McGee for Rogue Entertainment/ Electronic Arts, USA 2000) where the whole game is set inside the heroine's mind that has been hurt – like Payne's – by a horrible event: Alice's parents' death by fire. This initial event triggered an extreme guilt complex in Alice, who did not report the fire fast enough. Mirroring Lewis' creation of an imaginary wonderland within Alice's creative mind, McGee throws the player into a horror version of such a world distorted by guilt.

Alice is another strong character with a distinct voice that provides quirky humor and cleverness. For example, she complains that 'it troubles me that anonymous oracles [the provider of objectives] know more about my business than I do'. The comment refers to the wide-spread game mechanics of deus-ex-machina-like entities that deliver new objectives and goals whenever they see fit and independently from the hero's or player's own opinion.

Figure 2. Alice finds herself at the heart of evil; the caption starts: 'If you destroy me, you destroy yourself!'

The final battle in *Alice* is one against her own guilt and evolves over multiple stages. First, it is a battle against the Queen of Hearts, a monster that gets resurrected as Alice literally destroys different parts and versions of the shapeshifting enemy, only to discover and ultimately defeat herself (see figure) at the heart of the final version. The ultimate fight is staged in an almost entirely dark world of nothingness. After the destruction of "herself" (see caption), a ring of stones is all that is left of Alice's self and the game world. Here, Alice battles an almost shape-less monster, that we can identify as the personification of her guilt complex.

The camera visualization is an interactive following camera throughout (interestingly enough for a title using the *Quake* engine and much of this seminal first-person-shooter's gameplay) with occasional cut-scenes and a first-person point-of-view that allows for orientation but excludes further interaction. Technically, the focalizing camera view is external looking at Alice – but as part of the overall game setting the *focalization* is very much internal. It is part of Alice's "vision" that defines the game setting and includes the *focalizer* within it.

3.2 Discussion

While the examples illustrate complex and changing relationships between instances that "tell" and those that "see" in video games, two counter-arguments arise from these examples and need to be addressed:

1) These games are "hard-rail" games: players have to follow the only path possible through the game world. Is focalization dependent on such a *limitation*?
2) These games use an interactive following camera. How can such a view claim Bal's *focalizing power* when it is under the control of the player?

Both arguments will be addressed and used to outline features that this paper sees as strong arguments for a more prominent use of *focalization* in 3D video games.

1) *Limitation*: The three examples were chosen partly to emphasize the distinction of telling voice and seeing camera, thus they include a strong story"telling" aspect. Distinguishing between focalization and narrating voice in open structures, such as simulation or strategy games, can be more difficult as their "voices" are often less present or articulate. But a weakened voice does not necessarily imply a weaker *focalizer*. The critique is not directed against a focalizing entity but against the linearity of a narrating voice in those games. In fact, many open structure games offer strong and directed visual *focalization*. *Age of Empires* (Rick Goodman/ Angelo Laudon for Ensemble Studios/ Microsoft, USA 1997) loosely connects its battles along a storyline but no distinct narrative voice "tells" or comments on the battles as in *Max Payne* or *Alice*. The player commands the troops on the virtual battlefield and the camera at the same time. The game exclusively uses a god-like overhead view onto an isometric game world. A crucial feature of the game is the instant repositioning of this camera. Players have severely limited control over height and camera angle, but they can teleport the camera to look at any location of the virtual playground, e.g. they can focus in an instant on a new battle or check their bases. The feature is essential, because access and fast response to events spread throughout the game world is crucial. It is also a good example for detached camera and variable *focalization* based on interaction.

While the narrative in the Blizzards single-player *Warcraft* series is more concise, the same feature of *focalization* is present and essential. Both examples indicate that *focalization* can be vital for elements of an "open" gameplay, while the narrative voice can be watered down.

2) *Focalizing power*: As stated in the introduction, real-time 3D video games rely on moving images, but they are not films. *Focalization* in video games cannot simply copy cinematic traditions. If it does, the result is a return to a linear format – the cut-scene. In contrast, an interactive detached camera like Lakitu empowers the player to direct the view at any detail – significant or not. How can this lead to a focus on selected objects as demanded by Bal?

Video games occasionally operate against the freedom offered by their interactive cameras to "structure" the view. For example *Prince of Persia: The Sands of Time* can automatically activate certain camera position, when the system considers such adjustments necessary. Such semi-autonomous camera behavior is a clear example of *focalization* that offers powerful visualization but has also faced a lot of criticism. A less rigid view direction tries to encourage the focus on points of significance. Based on Fencott's concept of "perceptual opportunities" [9], which aim to structure the player's perception of a virtual space via stimulating rather then enforcing, Isdale et al. suggest to include "attractors". 'Attractors are POs [= Perceptual Opportunities] that seek to draw the attention of a user directly to areas of interest or to situations that require action.'[12] These objects can either repel (as "objects of fear") or attract (as "objects of desire"). The overall-model of Isdale/ Fencott/ Heim is an ambitious combination of presentational features and events, which complicates a proper validation. However, the notion of "attractors" points towards an interesting method for focalization that combines the user-driven camera and the design of the game world. The view might be interactive, but the game can direct it through its total control over space and event. This happens all the time in games, but rarely is acknowledged as meaningful *focalization*. In order to destroy the final monster, Alice has to look at it (Alice has to face and overcome her guilt). Likewise,

Max Payne has to look at the bloody path in order to follow it through the dream levels (he has to deal with his past). *Focalization* is achieved via directed spatial design (e.g. excluding almost any other geometry in the final level of *American McGee's Alice*), camera limitations (Lakitu was limited and so are his descendents; Davis has even argued that *Max Payne* uses noir style in its camera work [7]), and staged dramatic situations (e.g. enemy encounters in both games).

DOOM III (Tim Willits for id Software/ Activision Publishing Inc., USA 2004) can serve as a counter-example. Although its appearance is dark and gloomy, the game overwhelms the player with ever-changing objects to focus on. Much like in a survival horror game, the enemy could come from anywhere at anytime. Film audiences might miss the introduction of the monster in a carefully directed horror movie but still enjoy the rest of the show without any disruption. Missing the arrival of an enemy in a 3D video game usually leads to an untimely death and to the punishment of having to re-load.

A player constantly looks for clues and receives a mixture of visual overload in a basically dark game world due to the quality of the render engine and the game design. Facing a twisted corridor with hidden corners, flickering lights and shadows, fog effects, strange machinery moving at the edge of the sparse light, and sparkling effects contrasting the near complete darkness of other sections, makes it difficult to focus on one single object. Players' attention is drawn towards multiple objects at the same time. The sudden appearance of the monster demands their complete attention and causes a shock.

DOOM III illustrates that in video games *focalization* is not only a "pushing" technique as it is in film, but also a "pulling" one. The object to focus on becomes a directing force and the relationship between *focalizer* and focused object is strengthened not weakened because it is dynamic and interactive.

4. Power of Focalization

It has been a battlefield for games researchers and a Gordian knot for game designers alike: the combination of interaction and its presentation within one game world – the gameplay activity and the visualization through moving images. *Focalization* enters the video game world from the linear presentation side, but its connection to and importance for gameplay has been demonstrated especially for interactive cameras. The *focalizer* can serve both masters and thereby address issues of a closely related debate: that on narrative qualities of video games.

Focalization through the eyes of a virtual camera has been identified as a narrative element, which is conceptually as well as practically separable from a linear narrating "telling voice." In other words, it has the power to increase a game's drama and narrative without forcing it into a linear spine. Genette's initial distinction of "who tells" and "who sees" grew out of a literary tradition in which the "telling" was a given. Bal untied them further for visual media and it is even more apart in video games. But a total dominance of the presentation layer would be the death of the video game.

References to a similar effect can be found in movies that rely too much on carefully arranged special effects with little to none operating "voice." Some plainly lack a story to tell. Ndalianis agrees with Buci-Glucksmann in a 'denarrativization of the ocular' (Buci-Gluckmann c.f. [20]) in forms of contemporary entertainment. Yet, in contrast to the film effect, that can leave the audience in stunned silence, awe, and dumb-folded surprise, the spectacle in a video game needs the player to be active and to act upon it. Referring back to Aarseth's video distinction: a player cannot "just watch" a video game. If the focalizing camera grows to the single most dominant feature, we end up at the game replays of the *Gran Turismo* series. Instead, *focalization* helps players have to comprehend any given game situation, contextualize it (e.g. in its spatial setting), create strategies to address the event, and ultimately to trigger the event generation. The process of comprehension, planning, and action refers to Crawford's definition of interaction as 'a conversation: a cyclic process in which two actors alternately listen, think, and speak' [6]. It positions the narrative moment of *focalization* right at the heart of the game. Where can it take it from there and what kind of game features might grow from it?

One possible development calls for a fuller implementation of *focalization*. As argued above, the effect is unavoidable, tied to the events in the virtual world, and dynamic. That means, when the state of the world changes, any consciously applied *focalization* should adjust to that. By and large, modern 3D video games with dynamic camera systems concentrate on the state of the player character, not the world. They might change the view depending on the character state (e.g. Max Payne on drugs), but not on the state of the location. That means, even if I enter the same game location for the x time and all the possible objects of interest are gone, the camera does not respond to that. The resulting camera work is flat and repetitive. A consciously applied *focalizer* would *have* to react whenever the objects of interest change. In return, cameras would become visual indicators, providing the player in a subtle way with extra information (e.g. whether this area has been "cleared" or where a never before used passage might be located).

Another possibility is its value in an overall change in the visualization style of the game. Films vary their editing rhythm and camera style constantly depending on the drama. In games, the player is presented with exactly same camera philosophy from the first to the last hour of gameplay. A changing camera strategy in dependency of the player's proficiency would be a new way to offer

more expressive freedom and customization. Here, *focalization* offers itself as an effective tool.

Ultimately, the outlined element of *focalization* has considerable impact on relevant issues that drive current debates in video game research and game design. Thus, it offers itself as a helpful anchor for both, academic debate and practical design issues.

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