IV. Thinking out of the box (and back in the plane)

Concepts of space and spatial representation in two classic adventure games

For the wise man looks into space and he knows there is no limited dimensions.

Lao Tzu

Even though games of progression are story-based, one aspect clearly distinguishes them from other narrative media, namely the virtual environment in which the gamer’s actions take place¹. On this most game researchers agree: “[t]he defining element in computer games is spatiality” (Aarseth, 2001a, p. 154). This is part of what makes a game unique compared to other media: “Linear media, such as books and films can portray space either by verbal description or image, but only digital environments can present space that we can move through” (Murray, 1997, p. 79). And gamers not only move through this virtual environment, they also interact with it. It is here that story and gameplay tend to collide:

She’s [the game writer] barely five minutes into her description of how the hero stumbles upon a nondescript cabin in the woods and goes inside, only to encounter the old women who’s been concealing the “Rubric of Time” beneath a glazed yellow flower pot for months, when the lead game designer interrupts her.

“Hold on. What if the player doesn’t go into the cabin?”
“Sorry?”
“I asked, what if the player doesn’t go in the cabin?”
“He has to go in the cabin.”
“Well, what if he doesn’t? What if he decides to check out the next town first? Or what if he decides to blow the cabin up? I mean, he’s just discovered the Rod of Cataclysmic Infernos hidden in a stump in the woods. What if he aims it at the cabin and fires?”
“Why would he do that?”
“Because he can.”
(DeMarle, 2007, p. 71)

Because of this special quality of gamespace it would be logical to assume that the way we play a game is influenced by the way the virtual environment is realized: the affordances and restrictions it poses on the gamer². Here, however, researchers do not agree. Frans Mäyrä, for instance, defines gameplay as “what doesn’t change when you

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¹ An earlier version of this chapter was first published as Veugen, C. & Quérette F. (2008). “Thinking out of the box (and back in the plane). Concepts of space and spatial representation in two classic adventure games.” Eludamos. Journal for Computer Game Culture, 2 (2), 215-239. This version has been rewritten to fit into the context of this dissertation.

² In the next chapter, looking specifically at setting (an aspect of mise en scène), I will discuss how the representation of game space differs from that of film.
change the surface: the rules” (2008, p. 16) and goes on to specify that “It’s not the interface [...] it’s not the graphics and it is not the story” (ibid). Here he separates gameplay from the audiovisual representation of the gamespace; a position adopted by other researchers, notably those that represent(ed) a more ludological standpoint like Aarseth, Juul and Järvinen. Others like Stockburger and Jenkins do not agree. Axel Stockburger stresses that “particular types of rules and gameplay result in very distinctive forms of audiovisual representation” (2006, p. 19). Whereas Henri Jenkins, focusing on spatially oriented narratives, observes: “However a game’s narrative is expressed, it is always influenced by the way the game creators designed and organized the gamespaces” (2004, p. 60). As the latter standpoints seem to oppose the former, I wondered whether a close examination of gamespace in two instalments of the same game could clarify matters. In this chapter, I will therefore look at two games that belong to the same classic adventure game series, but which were made using the prevailing or even emerging technology of the time, so that their audiovisual gamespaces differ. The first game, GABRIEL KNIGHT SINS OF THE FATHERS (GK1), was modelled in two dimensions (2D), while the second game, GABRIEL KNIGHT BLOOD OF THE SACRED BLOOD OF THE DAMNED (GK3), uses three dimensions (3D). These are the first and the third game in the series. The second game, GABRIEL KNIGHT THE BEAST WITHIN (1995), was made using pre-recorded video scores (FMV). As I explained in the previous chapter, interaction in FMV adventure games is very restricted due to the fact that the game can only show what has been pre-recorded.

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3 He clarifies his point as follows: “Gameplay embodies the rules of the game. For example, in a game like chess, each playing piece has its own rules, and along the playing field, the chess board, these rules interact to create gameplay” (ibid.). Ludologists often refer to chess, or checkers, as an example to show that representation has no influence on gameplay. You can play chess with all kinds of objects, instead of the formal game pieces, and the board can be as simple as lines drawn in the sand.

4 As I explained in the introduction, the debate between the ludologists and the narratologists has been laid to rest. The term is used here because it still played a role in most of the texts referred to.

5 I.e. graphic point-and-click third person point of view adventure games, where progress is measured in score-points (or by similar means), as opposed to the older text adventure games and the newer action and stealth adventure games.

6 In this chapter the term 2D refers to a game where objects and characters are represented in a flat space, like a drawing. The most common way of creating 2D games is the use of raster graphics or bitmaps (pixel images). 2D graphics can also be made using vector images, where the shapes displayed are not clusters of pixels, but consist of lines and geometrical shapes calculated on the basis of a few parameters. Vector graphics have the advantage that they can be shrunk or enlarged without losing detail. 3D games, on the other hand, use three-dimensional models of shapes to form objects and characters. Based on user input the computer can then calculate the motion and placement of the objects within the scene, in Mark Wolf’s words: “These objects can be turned and rotated and appear at different angles, unlike the flat grids of pixels in two-dimensional graphics” (Wolf, 2001, p. 21). 3D games can render the input of the gamer, such as the current position of the avatar or camera angles, in real time.

7 As I showed, FMV games were a stage in the pursuit of adventure games to survive. As this technique compromised the game’s interactivity, it was not very popular with gamers. When real time realistic 3D graphics became possible, the technique was therefore dropped. 2D graphics are less restrictive; therefore, the technique is still commonly used in adventure games, especially on specific platforms.
Consequently, FMV games are practically incomparable to their 2D or 3D counterparts. For this reason, the second game is not discussed here.\(^8\)

**Modalities of Space**

Before taking a closer look at the two games, Axel Stockburger’s (2006) modalities of space have to be briefly clarified, as they form the main counterargument against the views on gamespace and gameplay put forward by Mäyrä, Aarseth and Juul. Stockburger proposes viewing gamespace as the interplay of five distinctive spatial modalities: user space, narrative space, rule space, audiovisual representational space and kinaesthetic space. The first modality, user space, refers to the material physical space where the gamer and the device the game is played on are located. Stockburger distinguishes the game arcade; domestic space; mobile and location based games and Internet and networked games. One restriction the adventure game poses on user space is their complex lengthy narratives, which are incompatible with the limited playing time to maximize revenue typical of the game arcade\(^9\). In typical adventure tradition, the user space of the *Gabriel Knight* games is thus the domestic space. Both games are played on a Personal Computer in a home setting using a mouse as primary input device.

The second modality, narrative space, refers to the narrative elements “that play an important role in the generation of game space” (ibid, p. 107). Simplifying matters greatly, these are spatial elements that evoke pre-existing narrative associations\(^10\) (such as particular locations); frame narratives i.e. the extra-diegetic backstory (packaging, previews, marketing, booklets, etc.) which provides a thematic setting; and the spatial narrative which emerges while the game is being played (potential areas to be explored, boundaries, distribution of objects and functions, etc.). It is interesting to note that both *Gabriel Knight* games came with an accompanying graphic novel. For the first game the novel tells the story of how Gabriel’s ancestor Günther lost the family talisman to the Voodoo queen Tetelo (Image IV.1). For the third game it tells the prologue, detailing the kidnapping of a baby Gabriel was supposed to protect (Image IV.2).

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8 I will, however, discuss the second game briefly in the next chapter when discussing location.  
9 This is why adventure games never took off in the arcade, as we saw in the previous chapter.  
10 This concept is similar to iconography in film, which is “particular sets of visual motifs that become associated over a period of time with one kind of film or another” (King & Krzywinska, 2006, p. 119).
According to Stockburger, the modality of narrative space goes beyond classic narrative theory, as:

Story and space seem to be highly dependent on each other in computer games. There are source narratives or themes that evoke particular game spaces as well as elements within the *game space*, which are used in numerous ways to tell stories. This strong interdependence between narrative and game space is characteristic of the modality of *narrative space*. (ibid., p. 109)

He particularly stresses the interdependence in adventure games which “are often based on exploration and discovery [so that] those spatial themes are the core elements of the narrative” (ibid., p. 110). This modality will be addressed further on in this chapter.

The third modality, rule space, consists of both explicit and implicit game rules that influence how the gamer moves through gamespace. A common sense explicit rule in a racing game is, for instance, to avoid hitting obstacles as this will slow the car down and cost you the race. Implicit rules are there to be discovered during gameplay, like the mushrooms, flowers, and stars in the Mario games where the gamer first has to find them and then has to find out how they influence Mario’s powers. As will be shown, uncovering the internal rules of the gamespace is essential to successful gameplay.

Because of the now predominant graphical nature of computer games, the fourth modality, audiovisual representational space, dominates most debates on gamespace. But
it must be stressed that in Stockburger’s theory it is only one of the modalities. To classify the visual representation of the gamespace many researchers use the categories defined in Wolf (2001). These classify gamespace according to technical developments and the metaphor of the film camera. The audiovisual representation of gamespace is heavily influenced by the technical abilities of the computer or console the game is played on. The common endeavour of most designers over the years has been to make this representation ever more realistic. The game KING’S QUEST I: QUEST FOR THE CROWN (1984), discussed in Chapter III, achieved this by not using normal 2D graphics. It used a new visual mode, which in the game industry and literature would be called the 2½D category. Games using 2½D use different strategies, such as isometric shapes or overlapping layers, to produce an illusion of a third dimension – depth. The 2½D category was widely used in adventure games. The first GABRIEL KNIGHT game (GK1) uses 2½D. Stockburger points out that since 2D can be used to represent 3D without actually modelling 3D in the computer's memory, visual output in itself is not sufficient to distinguish between the two. For that reason, he proposes potential avatar movement in the gamespace as the criterion to differentiate between 2D and true 3D: whether the avatar can only move vertically and horizontally (2D game) or whether she can also move on the z-axis as in the third GABRIEL KNIGHT game (3D game). As GK1 does not have a true z-axis, I will adopt Stockburger's approach, classifying SINS OF THE FATHERS (GK1) as a 2D and not as a 2½D game.

The fifth and final modality, kinaesthetic space, refers to the embodied experience of the gamespace. Whereas the material side of the interface, the keyboard, the mouse, the joystick, etcetera, is located in the user space, the effects it has on the gamer are part of the kinaesthetic modality of space. And although both GABRIEL KNIGHT games use a mouse, we will see that pointing and clicking in SINS OF THE FATHERS (GK1) is different from moving and clicking in BLOOD OF THE SACRED BLOOD OF THE DAMNED (GK3). The kinaesthetic experience of different games can be very diverse, especially with the introduction in recent years of such varied input devices as the Sony EyeToy camera, the Nintendo Wii-mote controller, the Sony PlayStation move controller and the Microsoft Kinect camera, although all are designed for domestic use.

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11 See the next chapter.
12 The notable exception is of course Nintendo with their Wii and DS, focussing on gameplay, social gaming, casual games and a new gaming audience.
13 Salen and Zimmerman (2004) also take into account the way in which the objects in the game are modelled, completely flat (2d or 2½D) or with true 3D properties.
14 Microsoft’s Kinect potentially has the most immersive kinaesthetic space as it works with voice recognition and motion detection (so without a handheld controller). Of course, the EyeToy camera originally also worked without a controller, but it distinctly lacked accuracy. This, together with the success of the Wii-mote controller, led Sony to decide to introduce their own motion controller: the Sony PlayStation move.
Space and Spatial Representation

In Stockburger’s theory the above mentioned modalities of gamespace are interdependent; changing one, for instance porting a game from a 2D version to a 3D version, will influence the others:

The core narrative remains unchanged but rules, audiovisual setup and the resulting gameplay are transformed significantly, thereby changing the relationship between narrative modalities and specific interaction models or audiovisual spatial representation. (p. 85)

This is the main focus of this chapter. Did the rules and the audiovisual setup change significantly in the 3D game BLOOD OF THE SACRED BLOOD OF THE DAMNED (GK3) as opposed to the 2D game SINS OF THE FATHERS (GK1)? And were these changes significant enough to classify them as a change in gameplay?

Location and Space in GABRIEL KNIGHT SINS OF THE FATHERS

The first GABRIEL KNIGHT game (GK1) was released in 1993. The title character in the game, Gabriel, is a writer, self-styled private eye, and investigator of the supernatural. In GK1 Gabriel explores Voodoo related murders in his hometown, New Orleans. In doing so he becomes aware of his family history and his destiny as a ‘Schattenjäger’, a shadow hunter. Because Günther lost the family talisman (a medallion) to Tetelo, as explained in the graphic novel, Gabriel now has to reclaim it from Tetelo’s descendant Malia Gedde to literally end his nightmares and take up his role fighting (supernatural) evil.

The game was released for the DOS operating system, Windows 3.x and Macintosh. It was created using Sierra’s Creative Interpreter (SCI), also used to create other familiar Sierra games like the KING’S QUEST series. For the Sierra fans the game had a familiar look and feel with its 2D raster graphics and the by then well-known point-and-click interface. As it used a CD-Rom for storage, all music and dialogue were recorded. Contrary to what was usual at the time, the game did not use amateurs or low-budget voice actors but well-known actors like Tim Curry (as Gabriel) and Mark Hamill (as inspector Mosely). A Sierra advertisement in InterAction (1994) even quoted the Hollywood Reporter, stating that this was “the first time an all-Hollywood cast of name actors ha[d] been assembled for an interactive movie...”.

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15 Technical game specifications for GK1 and GK3 were taken from Mobygames.com, the original info on the games’ boxes and in the accompanying booklets and Bilas (2000).
16 With 640x480 pixel graphics with either 16 (VGA) or 256 colours (Super VGA).
17 See the previous chapter.
18 Quality depended on the audio card used. Most audio cards supported 8-bit audio at the time.
19 This also illustrates an interesting move from adventure games as interactive fiction, as discussed in the New York Times Book Review, to graphic adventure games as interactive movies, as discussed in The Hollywood
Jane Jensen, the creator of the games, uses narrative space consciously by placing GKF’s action in New Orleans. This city not only evokes atmosphere but also calls on pre-existing knowledge we have of its links with Voodoo. In this way Jensen puts to practice what Carson calls environmental storytelling “[t]he trick to play on [...] memories and expectations to heighten the thrill of venturing into [the] created universe” (Carson, 2000). Most places Gabriel visits in New Orleans have historic and/or Voodoo connections. There is a Voodoo shop, a Voodoo museum and Gabriel attends a Voodoo ritual on St John’s Eve in Bayou St. John. His investigations also take him several times to Jackson Square, Saint Louis Cathedral and Saint Louis Cemetery #1. During the course of the game we see that these places are more than simple tourist attractions; they are essential to the narrative and incorporated in the gameplay.

In the cemetery Gabriel (= the gamer) has to write coded messages on the tomb of Marie Laveau (New Orleans’ most famous Voodoo queen, Image IV.3 and Image IV.4) and under the cathedral he discovers the honfours (ceremonial site) of Malia Gedde. Jackson

20 Actually, Gabriel does visit two other locations in the game: Schloss Ritter, Gabriel’s ancestral home in Germany and Benin in Africa. But most of the time the game takes place in New Orleans.

21 This seems to be culturally determined as Dutch students of Comparative Arts and Media Studies who were explicitly asked to elaborate on the use of New Orleans in GKF did not associate the city as easily with Voodoo as perhaps an American audience would, even though they had seen movies that made the same link.

22 Henri Jenkins term for this use of game space is “evocative space” (Jenkins, 2004). It also corresponds with Ernest Adams’s secondary functions of allusion and atmosphere (Adams, E., 2002 and 2003).

23 Perhaps to our jaded eye (books, television, film) the embedding of location-based puzzles as natural parts of the story seems logical, but we must not forget that in many adventure games (then but even now) the story was interrupted with puzzles that often were very loosely tied to the subject of the game. At the time Mark J. Brader, one of the many people who played SINS OF THE FATHERS, remarked: “Although I have certainly played games with great depth to the puzzles, I have rarely found the story lines to be merged with the puzzles” (Sayes Wilson, 1994). The remarkable achievement of Jane Jensen is that she not only merges the puzzles with the story, but more so that both are firmly tied in with the location: GKF could not take place
Space and Spatial Representation

Square, with its wheel-within-a-wheel design\(^{24}\), ties many story elements together (Image IV.5 and Image IV.6). But most importantly, it represents the Vévé (religious symbol) of Tetelo and Malia\(^{25}\). This is why, as I will explain later, for the greater part of the game, we only see the square one quadrant at a time (Image IV.7). Furthermore, Jackson Square is the place where Gabriel discovers essential puzzle information.

But \textit{GK1} is also a detective game, so Gabriel visits suspects’ and witnesses’ houses or other places where he can find information related to his investigations into the Voodoo murders. Two examples are Tulane University, where he learns more about Voodoo and the police station, where he gets information about the crime scenes and the suspects. There are two exceptions: his bookshop\(^{26}\) and his grandmother’s house, where Gabriel finds essential information about his personal history (which will reveal his Schattenjäger ancestry and the origins of his nightmares).

We thus see that in \textit{GK1} the place of action and the game fiction interlock. But New Orleans does not only form the backdrop of the story and the primary source of puzzle information; it also sets the game’s boundaries. To make New Orleans interactive the game uses “adjacent spaces displayed one at a time” (Wolf, 2001, p. 59). Each screen shows a whole unit of space\(^{27}\) and has a fixed third person point of view\(^{28}\), with varying anywhere else. This use of story and location-based puzzles elevates the \textit{GABRIEL KNIGHT} games above similar adventure games like the \textit{BROKEN SWORD} series.

\(^{24}\) The wheel-within-a-wheel is of course a well-known symbol/metaphor, as in Ezekiel’s vision in the Bible.

\(^{25}\) It can also be found in Tetelo’s Benin honfour and in the New Orleans honfour.

\(^{26}\) There is an interesting parallel in the way Gabriel uses his bookshop (which is also his home) and the way Philip Marlow (Humphrey Bogart) uses his office (which is also his home) in \textit{The Big Sleep}. For a discussion of the use of places in \textit{The Big Sleep}, see Arts (1980).

\(^{27}\) This way of representing space conforms to Crawford’s definition of \textit{stage}: “a location containing actors and props. Actors simply disappear from one stage and reappear on another” (2003, p. 21).

\(^{28}\) As Järvinen (2003) points out, sound has become increasingly important in gameplay and the gamer’s perception of the gamespace. To account for this he proposes the concept of point of perception rather than point of view or perspective, which only takes the visual aspects of a game into account. For now the more common term will be used but the concept will return in the discussion of the game camera model below.
heights within different screens, ranging from the height of the characters (most common) to an oblique bird's-eye view - like the Jackson Square screens.

Jackson Square is depicted as four different screens, each showing one of its quadrants (Image IV.7)\(^{29}\). In *GK1* the gamer’s avatar moves from one screen to another without scrolling, but with a cut, somewhat like a film cut. In Jackson Square, for instance, Gabriel leaves one quadrant at the edge of the screen and reappears in the next screen in the adjacent quadrant, respecting the movement direction and space continuity rules set by film\(^{30}\). By dividing Jackson Square in four sections, *GK1* not only cleverly works around technical limitations, but also prevents the gamer from recognizing the important wheel-within-a-wheel pattern of the Vévé too soon.

Because *GK1* uses an icon-bar (Image IV.8), avatar control is indirect, i.e. the input from the gamer is not meaningfully related to the action (Wilhelmsson, 2001). So unlike more modern computer games in which the gamer presses right and the character goes to the right, in *Gabriel Knight* (and other 2D adventure games) the gamer clicks on an area (with the walk cursor, the boot) and then the character goes to that area. This gives the designers strict control not only over which locations are shown within New Orleans, but also over what and how much is shown. By merely not offering clickable areas, limits are set. Boundaries are either passageways (such as doors) or the edge of the screen.

\(^{29}\) This is the main way in which Jackson Square is shown in the game: the interactive way. Jackson Square is also shown as a whole from an airplane window and from an observation platform at the end of the game to direct the gamer’s attention to the wheel-within-a-wheel pattern. When Gabriel (i.e. the gamer) views Jackson Square interactively with a telescope from the observation platform, she again can only see one quadrant at a time, just as in the rest of the game.

\(^{30}\) Wolf suggests that “adjacent spaces displayed one at a time” can add suspense to a game, since the gamer sees what lies next suddenly instead of progressively. Although most of the time in *GK1* there is no monster going to attack the avatar in the next screen, with the exception of the possible snake attack at the Voodoo museum and the mummies in the connecting chambers in Benin, the atmosphere of the game supports the idea of choosing ways to cultivate suspense.
In a particular scene in *GKI*, the in-game world boundaries are broken once for the sake of the narrative: in this scene Gabriel and Malia are talking in St. Louis Cemetery #1. After the conversation, Malia leaves using a path that Gabriel cannot take (Image IV.9). In other moments in the game, clicking in that area does not do anything, whereas in that particular scene, clicking makes Gabriel say that he needs to give Malia some space. Verbally refusing to do something is another way of setting limits in gamespace. In fact, both games make use of the avatar’s speech to determine that places (and also actions) are out of reach, either to protect narrative coherence (for instance, Gabriel cannot see what is in that place just yet) or because that location is not detailed in the game at all. These often witty remarks of the game avatar are a common feature in adventure games.

Both games also make use of represented or “mapped” spaces: “not spaces in and of themselves, but rather simplified schematic versions of spaces designed to orient the player” (Wolf, 2001, p. 67). In fact, all three *Gabriel Knight* games use navigational maps where the gamer does not control the avatar movement, but merely chooses the next location she wants the character to go to. These maps serve to link different locations where the story takes place, on the one hand suggesting distance between them and on the other hand keeping overall unity (Image IV.11). The gamer’s global understanding of the gamespace is to some extent shaped by these maps. They start with a basic set of places and new locations are added only when they become relevant to the story,
consistent with the character's knowledge. These kinds of mapped representations are also a typical feature of adventure games. Since solving the game involves locating and using objects and locating and interacting with characters placed somewhere in the game, the gamer has to move between locations in order to do what is required of her. Mapped spaces as a ‘travelling device’ allow the gamer to go straight to a location without having to stop at every other place on the way.

Both games also make use of in-game spatial representations as part of puzzles. In *GK1*, Gabriel uses a tracking device to find the ritual site in Bayou St. John. This device shows the position of the place in relation to Gabriel in a radar-like fashion (Image IV.12). In *GK3*, Grace (the other playable character in the game) uses equipment to find a possible digging spot by combining precise coordinates found in the game. In both cases, the device gives feedback after the gamer’s actions.
**Location and Space in GABRIEL KNIGHT BLOOD OF THE SACRED BLOOD OF THE DAMNED**

The third *Gabriel Knight* game was released in 1999 for Windows95. The minimum screen resolution of the game is 640x480 pixels. Although a higher resolution will increase the graphic details of the game, choosing a higher resolution will both affect the speed of the game (gamers with low-end systems were advised to use the lowest resolution) as well as the gameplay (smooth camera movement will give the gamer the opportunity to play the game in a first person like mode, as we will see further on). *GK3* was going to be Sierra’s first fully 3D game; therefore, the design team had to build a new 3D engine from scratch (Bilas, 2000). So contrary to *GK1* the user, as well as the design team, could not fall back on a familiar look and feel from previous games. In *GK3* Gabriel and his assistant Grace are investigating the kidnapping of a noble baby, as described in the graphic novel, and the possible involvement of vampires, secret societies, the quest for the Holy Grail, the history of the French village of Rennes-le-Château, where the story takes place, as well as the origins of Gabriel's destiny as ‘Schattenjäger’.

Akin to the first game, in *GK3* Rennes-le-Château and the surrounding area were carefully chosen to fit in with the Grail theme of the narrative. In the game the Gabriel-Grace team re-enacts the search for the Holy Grail presented in such books as *The Holy Blood and the Holy Grail*, including the reconstruction of a pentagram using geographical information of the area\(^{31}\). However, as the game uses an interactive 3D environment, what we see of Rennes-le-Château and the surrounding area is markedly different from the way New Orleans was presented in *GK1*. This is because it is no longer a 2D stage-like representation of space but a 3D environment that can be freely explored\(^{32}\). Gabriel and Grace can just walk around in Rennes-le-Château and some of its key buildings (Image IV.13), as well as in interesting areas in its vicinity. The gamer thus sees more of the locations Gabriel and Grace visit than was the case with New Orleans.

\(^{31}\) This book is not explicitly mentioned, but for those who have read the book and seen the accompanying BBC programs, the landmarks and puzzles in the game are very familiar. As most modern Grail quests use the same sources, it is not surprising that part of Grace's information is also found in Dan Brown's *The Da Vinci Code*, which appeared much later (in 2003).

\(^{32}\) Wolf (2001) based this category on a technical aspect (by calling it 3D) but stresses the different levels in which gamespace is navigable by the gamer, thus sharing some of Stockburger's concern how space is experienced. Some 3D games give almost no control to the gamer, showing space through predefined points of view. Others, like *GK3*, offer the possibility of free exploration of space.
But Rennes-le-Château’s connection with the Grail Story is less universally known than New Orleans’ connection with Voodoo. Because of this, the evocative use of the narrative space feels less pronounced in $GK3$ than it was in $GK1$ (for most gamers)$^{33}$. Furthermore, Gabriel’s own interests in the mystery are not as marked as in the other two games$^{34}$, hence a lack of locations that are significant to his personal life$^{35}$. Combined with the many sub-narratives$^{36}$, this makes the connection between the narrative and the places Gabriel visits in $GK3$ feel more fluid but less immersive than in $GK1$.

$^{33}$ Note that this is independent of the fact that $GK3$ is 3D.

$^{34}$ In $GK1$, solving the Voodoo murders also solves the problem of Gabriel’s nightmares, gives insights into the early deaths of the male members of his family, and resolves Gabriel’s destiny as Schattenjäger. And, as a result, the Schattenjäger medallion (the talisman) is returned to its rightful owner (Gabriel). In $GK2$ Gabriel learns the ropes as a Schattenjäger, and is more than taken in by Von Glower (the game’s antagonist), although Gabriel does not know (or refuses to acknowledge) this for most of the game. Because of this, Gabriel is turned into a werewolf himself. In order for him to become normal again, Von Glower has to die. (For more information on this game, see Chapter V).

$^{35}$ One of the side stories the game explores is the relationship between Gabriel and Grace, but all the key scenes take place in the impersonal settings of a hotel. In fact we learn more about Grace in this game than about Gabriel. But what we learn about her could be learned anywhere. It is location-independent.

$^{36}$ If one was to draw up a table of all the locations and their role in the story $GK3$ would have more, not because the Grail quest needs more locations, but because some locations are only connected to one of the subplots.
The major difference between the 2D and the 3D game is the in-game camera. To operate the camera the gamer can either choose from a set of preset camera angles (Images IV.14 a-f) or she can customize the camera angle herself (Image IV.15). In the accompanying booklet, gamers with low-end machines are advised to use the preset camera positions to move quickly around the room as these show the most important elements. However, it also warns that the preset camera positions may not always show all that is important.

There are two exceptions to the third person perspective (not counting the game camera), one is when Gabriel uses the binoculars, and the second is when Grace uses the computer. In both cases, the gamer views the game from a first person perspective.
As the camera allows for a more or less fluent traversal of the gamespace, boundaries work differently in *GK3*. Although, as in *GK1*, doors are the way to enter closed locations (buildings), open areas can be just walked into. However, to economize on computing the modelled space, large open areas are divided and processed separately. This means that Gabriel or Grace can walk freely in a particular area and then reach an invisible wall\(^{39}\) where the cursor becomes an arrow and the gamer can choose to cross to and explore the ‘next’ area. Because the camera can move seemingly independently of the avatar, the gamer can also move the camera to the limits of the rendered area where the camera automatically stops. As the availability of the next area depends on the appearance of the arrow, the basic world constraints in *GK3* are the same as in *GK1*. However, the fact that the experience of space is not episodic but in a way fluid and larger also means that the gamer has to be able to navigate this space, knowing which way to go, based on the visual cues of the surroundings. In *GK3*, this need for orientation is not a challenging feature, but cannot be completely disregarded.

Movement of the camera by the gamer is not accounted for in Wolf’s gamespace categories\(^{40}\) as these are based on the metaphor of the film camera; as an alternative Stockburger (2006) proposes the game-camera model. Movement is one of the properties of the game-camera. The camera in *GK3* is predominantly gamer-controlled, but as we will

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39 These ‘invisible walls’ are technical restrictions caused by lack of graphic memory to render larger spaces. They should not be confused with Juul’s definition of ‘invisible walls’, where gamespace ends without a valid reason given in the game’s fiction (Juul, 2005).

40 See the explanation of the fourth modality of space on pp. 118-119.
see, sometimes the game takes over. The gamer can move, pan, zoom, and tilt the camera by using the mouse or cursor keys. Another property of the game-camera model is the concept of point of perception by the gamer. Stockburger, in accordance with Järvinen (2003), prefers point of perception to point of view because it not only includes what the gamer sees, but also what she hears. This adds a new and interesting element to the narrative: off-screen space. Off-screen space is what lies outside of the visible field (on-screen space). Unlike cinema, off-screen space in computer games does not exist but has to be actively created (Wolf, 2001). Before the use of 3D, off-screen space was used mainly as part of the logical construction of the diegetic world (being acknowledged, but not actively used) or to give the gamer an idea of what lay ahead. Nevertheless it was only relevant to the game action when - revealed by scrolling or clicking - it became on-screen space. While in GK1, what you see is what you get and off-screen space is not pertinent to game action, GK3 uses off-screen space differently. One example is when Gabriel enters the phone area. When he steps into one of the cubicles (at a specific time) he can hear a telephone conversation in Italian in the next cubicle. What is expected of the gamer is that she tapes this conversation so that it can be translated afterwards. As this action is time dependent, it is not crucial to progress in the story (although it also triggers other events later in the game), but it helps the investigation and - most of all - produces the illusion of a complex autonomous world, adding much to the gamer's immersion.

According to Stockburger, immersion is also enhanced by the constant presence of the avatar. He reasons that third person perception (as in the GABRIEL KNIGHT games) leads to more interest and complexity in character design and consequently to stronger narratives. One can also say that it only seems natural that story-structured games like the GABRIEL KNIGHT series would choose to constantly show the avatar mediating the gamer’s participation in the story. But although GK3 uses third person perception it shows a world no longer seen from a certain distance as in GK1, but ‘from within’. Since the camera is always inside the scene, the gamer cannot see a whole room anymore, but has to browse

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41 The other two properties are multiplication (GK3 only uses one camera) and the map function (see note 79 in the next chapter).
42 See note 28.
43 In 3D first person perspective games, what happens outside of the visible field can be as important as what is seen on screen, since the avatar can be attacked from behind, for example. Because of this, the use of sound and shadow also grew in importance as they link the gamer's perception and off-screen space. In modern open world games, which often use over-the-shoulder third person perspective, sound in the off-screen space has become very important. In READ DEAD REDEMPTION (2010), for instance, the yapping of coyotes or the howling of wolves is a valuable audible clue that an attack might be imminent. People screaming or gunshots in the off-screen space are also used to attract the gamer's attention.
and explore the space as if she actually were part of it. This solves a particular incongruence of gamer/character awareness. In \textit{GK1} and other games like it, the visual field of the character is not the same as that of the gamer. There are times in which the gamer can see an object that the character would not be able to see, taking normal viewing space and perspective into account. \textit{We see, therefore he knows} can be seen as a game convention (which is so intuitive that it goes unnoticed by most)\textsuperscript{44}. One could even say that in the context of the graphic adventure game, where one has to search for information/objects/clues, it is one of the affordances of the game type, because it gives the gamer a better overview of the screen (see below). In 3D games like \textit{GK3} the incongruence of gamer/character awareness is less of an issue, as the camera (the gamer's sight) is placed inside the scene. Moreover, it is aligned with the character's sight, thus blurring the separation between character and gamer, which produces a stronger game ego\textsuperscript{45}. It does, however, mean that the gamer now has to search the gamespace more actively (but also in a way that is more consistent with real life).

Finally, in \textit{GK3} the game-camera also allows the game experience to become more personal as it supports different styles of play, and a different involvement with the gamespace:

The gamer is not only playing to accomplish the mission but also actively involved in framing the game visually. S/he not only has to conceive and execute the best strategies for successful gameplay, but must also keep in mind the best positions to situate the camera for a tactically advantageous – and perhaps also aesthetically pleasing – viewpoint. (Tong & Tan, 2002, p. 106)

Some gamers, used to 2D adventures, will try to recreate a familiar setting by using one general camera angle, trying to play the scene as an observer, scanning the screen for important information, in this way emulating the indirect avatar control of the familiar point-and-click interface. Other gamers will simply leave the avatar behind and explore the gamespace using game camera movement, navigating through the space as if in first person perspective, only seeing the avatar when actually interacting with the world. Both styles of play were confirmed\textsuperscript{46} by gamers contacted through Sierra’s \textit{GABRIEL KNIGHT}.

\textsuperscript{44} Also, see the discussion of the game \textit{METAL GEAR SOLID 2: SONS OF LIBERTY} (2002) in the next chapter.

\textsuperscript{45} “The Game Ego can be thought of as a container in accordance with the experientalist theory of cognition. Our bodily container […] extends into the computer and can perform actions in the game via this tactile motor/kinaesthetic link” (Wilhelmsson, 2001, p. 50).

\textsuperscript{46} The different playing styles first came to light when I discussed the game with my student Felipe Quéréte (he had to play \textit{GK3} as part of one of my classes). He played the game in first person perspective, as this was his normal playing style. Unlike my other students (who had to play \textit{GK1} in another class), Felipe was not familiar with the 2D style of play. As we became intrigued by this difference (until then I had seldom used the first person camera in \textit{GK3}) I asked Felipe to contact fans of the game by way of the \textit{GABRIEL KNIGHT}.
Perhaps predicting this specific use of the game camera, the avatar in *GK3* always seems to be in the immediate off-screen space, so one does not have to wait for Gabriel or Grace to come walking all the way from their last on-screen position.

The camera’s flexibility, however, poses a possible new problem. As camera control now belongs to the gamer, how does the game take it back without offending? For the gamer it can be frustrating when after choosing to perform an action using a particular camera position, the game takes back control. In a way, this can cause a rupture in her involvement with the world; it “disrupts the feedback link between player and game-camera and avatar” (Stockburger, 2006, p. 160). At the end of *GK3* this can be even irritating, for example when the gamer has to perform skill based actions and the program dictates angles for the beginning of each task, such as the bridge crossing. The automatic angle shows Gabriel from behind (Image IV.16). Although the gamer can position the camera at will, as soon as Gabriel takes his first step the game takes over and again

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*Space and Spatial Representation*

[Image IV.16 Start of the bridge challenge.](Image)

*GABRIEL KNIGHT BLOOD OF THE SCARED BLOOD OF THE DAMNED*

(Sierra Online Inc., 1999)

Although the *GABRIEL KNIGHT* series ended in 1999, the games are still being played by fans all over the world. And, as they often end up in top ten lists of ‘must have played’ games, they also still attract new gamers. Fortunately, game sites like gog.com (Good Old Games) and www.sierrahelp.com have adapted the games to newer versions of Windows or they give advice on what emulators to use. Until 2008 the official *GABRIEL KNIGHT* forum on the Vivendi Sierra pages was still very active. But with the merger of Vivendi and Activision on 9 July 2008 the old Sierra forums were closed. That the *GABRIEL KNIGHT* games are still very popular can be seen from the many fan-sites and game forums at major gaming sites such as GameSpot.

These are called scripted events. They are often enforced to make sure that important story elements will take place, for instance the gamer entering the cabin where the “Rubric of Time” is located (the example at the beginning of this chapter (p. 115)). But they may also be as simple as pointing the in-game camera at an important object (as with film props, see the next chapter).
shows him from behind. Apart from the awkwardness of changing the camera back to the position preferred by the gamer, there is a time issue. The tiles Gabriel steps on dissolve so one has to act fairly quickly before he falls to his death.\textsuperscript{49}

\textit{Visual conventions: rules and their representation}

Espen Aarseth is probably the first game researcher to separate gameplay and the audiovisual representation of gamespace. While discussing the transition of text adventure games to graphic adventure games he notes:

The ergodic structures invented by Crowther and Woods twenty years ago are of course far from dead but in stead persevere as the basic figure for the large and growing industrial entertainment genre called [...] interactive games. [...] It is a paradox that, despite the lavish and quite expensive graphics of these productions, the player's creative options are still as primitive as they were in 1976. (Aarseth, 1997, pp. 102-103)

Juul follows this lead when he separates “a formally defined level, the program” from “a sign-based level the material” (Juul, 1999, p. 5, italics in the original).\textsuperscript{50} However, if we examine their statements more closely we see that what they, and Mäyrä, are actually describing is the type of game i.e. the genre and not the gameplay. In fact, what they say is that changing the audiovisual representation of a game will not change the rules that define the game genre.\textsuperscript{51} Yet by equating game genre with gameplay and consequently game rules they not only confuse the discussion but also refute technical developments that have changed the way we play a game. As Aarseth points out: “The adventure game user cannot rely on imagination (and previous experience) alone but must deduce the non-fictive laws of the simulated world by trial and error in order to complete the game” (Aarseth, 1997, p. 50). In a classic adventure game, she does this by searching for objects and clues that help solve the game's puzzles. This is what defines the genre, and this is what one does not expect to change. But is this independent of the audiovisual representation, as Aarseth, Juul and Mäyrä suggest? I propose that it is not. Below I will show that as the audiovisual representation of \textit{GK3} had changed (with respect to the two

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\textsuperscript{49} Even with cinematics turned off the game will take control of the camera in these tasks, choosing what the designers probably found the best camera position to accomplish the task. When the bridge challenge starts this is a good camera position, but the camera does not follow Gabriel, so for the last tiles it becomes more difficult as the gamer has to judge each step from an increased distance.

\textsuperscript{50} The formally defined level of the program would be the rules of the game. However, in his book \textit{Half-Real} it becomes clear that Juul does not equate these with the gameplay itself as Mäyrä does: “It is important to understand that the gameplay is not the rules themselves, the game tree, or the game's fiction, but the way the game is actually played” (2005, p. 83).

\textsuperscript{51} Please note that their use of the term rules is not the same as Stockburger's (2006) implicit and explicit rules that define rule space, although most of the explicit rules are game genre dependent.
earlier games), the way the gamer had to search for the objects and clues had also changed. Moreover, experience gained in previous 2D games (i.e. graphic adventure game skills) does not benefit the gamer as one would expect. On the contrary, it will hinder her progress.

In the above several changes the transition to 3D in *GK3* brought about have been pointed out; most notably the fluid transition of gamespace as opposed to the episodic one screen at a time model; the restrictions and enhancements of the game camera model which, amongst other things, allowed the gamer to choose between first and third person perspective and the new possibilities of off-screen space. Now I will discuss the way she finds the clues and objects that help her solve the game’s puzzles. In 2D games, the gamer generally cannot zoom in on a particular part of the room but is presented with the gamespace one screen at a time. In order to help the gamer to find clues and objects the design team therefore had to come up with a way to make them stand out, given the technical limitations of the time. One way *GK1* achieves this is by giving potentially important objects slightly more detail as opposed to other items in the vicinity. For instance, the objects Gabriel will need to carry out his investigation are a magnifying glass and a pair of tweezers. Image IV.17 clearly shows that these objects (A) are more defined than the books that are also on the table. The same goes for the daily newspaper (B) that will give Gabriel valuable information for his investigations. The last object is the coffee cup, as Gabriel has just finished drinking his morning coffee.

Image IV.17 Notice the objects on the desk.

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52 Room is used here in the classical adventure sense, see Chapter III, note 32.
53 Note when clicking on objects that are important (props, see the next chapter) or when a close-up is needed to solve a puzzle (etcetera), most adventure games will zoom in (after clicking).
54 Recently when students of Comparative Arts and Media Studies played the game it became very clear that graphic standards have improved vastly since *GK1* was made. Although explicitly instructed to pick up the magnifying glass and the tweezers, a lot of them could not find these objects.
55 When the gamer clicks on the coffee machine Gabriel will drink another cup (inconsistently one gets a “cannot do that” comment when clicking on the cup itself).
Inspecting these objects before picking them up will not give extra information on their possible usefulness, so the way the objects graphically stand out is the only clue the gamer gets. A different example can be found at the first crime scene. The object the gamer has to find is a piece of snake skin. To do so she is given another visual hint: instead of the subtly curved lines representing the grass blades, the pixels have alternating colours in a chequered pattern imitating a snake-skin as best as possible (Image IV.18). Given the present-day graphical details, these clues in the visual representation of the gamespace look crude, for the experienced 2D gamer however, they were common ground.

Before looking at the way gameplay changed in the 3D game, the matter of familiarity based on previous experience should be emphasized. One has to bear in mind that *GK3* was one of the earliest fully 3D adventure games. As Table 2 shows, other adventure games at the time were still 2D:

<table>
<thead>
<tr>
<th>Game series</th>
<th>Release dates 2D versions</th>
<th>Release dates of 3D versions</th>
</tr>
</thead>
<tbody>
<tr>
<td>GABRIEL KNIGHT</td>
<td>1993, 1995</td>
<td>1999</td>
</tr>
</tbody>
</table>

Table 2 Release dates of some well-known adventure game series (source Mobygames.com)

$^{56}$ These dates refer to the original games, not to the recent releases by Telltale Games.
As shown above, some gamers who play _GK3_ try to emulate the point-and-click playing style of _GK1_, attempting to view the screen as a whole in search of the most detailed objects. It stands to reason that at the time _GK3_ was released even more gamers would be unfamiliar with a flexible game camera and would therefore rely on the visual clues they had learned from playing 2D games.

To the (un)trained eye _GK3_ seems, at first glance, to use the familiar convention of detailing. For example, Gabriel can find a box of sweets in the hotel lobby, from which he can take one (at a time as the gamer will soon learn). The box appears to be open and one can see the sweets inside (Image IV.19). The gamer will take in the graphic detail of the box and conclude that since the box stands out it must be somehow significant\(^{57}\).

![Image IV.19 Note the box in the foreground.](image)

_GABRIEL KNIGHT BLOOD OF THE SACRED BLOOD OF THE DAMNED_  
(Sierra Online Inc., 1999)

Because of the game-camera she can now zoom-in to take a closer look at the box and see the individual sweets (Image IV.20). However, the details of the textured area now depend greatly on the technical capabilities of the gamer’s computer\(^{58}\). They are therefore no longer a reliable means to indicate a possible puzzle element. Note furthermore that a separate sweet will only really stand out after a “take-action” i.e. after clicking on the

\(^{57}\) Even if the game is played in the lowest resolution the difference in graphic detail is clear.

\(^{58}\) The images of the game _GABRIEL KNIGHT BLOOD OF THE SACRED BLOOD OF THE DAMNED_ used in this chapter were produced on a modern day computer using the highest resolution the game allows (1024x768 pixels), high texture quality and 32 bit colour mode. At the time the game was released, only gamers with dedicated graphic hardware could achieve this type of detailing.
content of the box (Image IV.21), whereas in the 2D game the important objects stood out immediately.

![Image IV.20 Box top view.](Image IV.20 Box top view.) ![Image IV.21 After having clicked on the content an individual sweet is taken.](Image IV.21)

**GABRIEL KNIGHT BLOOD OF THE SACRED BLOOD OF THE DAMNED** (Sierra Online Inc., 1999)

In more recent adventure games (also 2D games) graphical detail has become even more pronounced, countering any deliberate visual difference in the same gamespace. Consequently, the gamer has “to deduce [new] non-fictive laws [...] to finish the game” to paraphrase Aarseth’s words⁵⁹ and cannot rely on the visual game skills obtained from playing earlier 2D games.

One way to help the gamer to find objects, when graphic detail can no longer be used, is by changing the mouse-cursor. In **GK3** the tip of the normal orange arrow is given a yellow and red highlight when the avatar can interact with an object. More recent, adventure games like **BROKEN SWORD THE ANGEL OF DEATH** (2006)⁶⁰ use similar techniques; in this game the cursor changes into a cross-hair. But 3D in **GK3** not only means that all objects are graphically more or less alike; it also means that Gabriel can interact with almost all of them, even non-vital ones. Waiting for the cursor to change could therefore not only lead to a new kind of ‘pixel-hunting’⁶¹, it will also frustrate the 2D-gamer because it suggests that if the cursor changes, the object is useful. This, however, is certainly not always the case. Next to the box of sweets, we see a vase of flowers (Image IV.19). The flowers are as detailed in texture as are the sweets. This suggests that further action is called for. The idea that Gabriel should take a flower is enhanced because the cursor changes and the context sensitive menu shows a ‘take-action’ when the flowers are

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⁵⁹ Quoted above, p. 133.

⁶⁰ Also called **SECRETS OF THE ARK**.

⁶¹ Pixel hunting or Hunt-the-Pixel is a term especially associated with adventure games in which it is particularly difficult to find a specific object on the screen. This was often caused by the lack of graphic detail in 2D games and the size of the object (often only a few pixels), for more information see the Wikipedia entry on Pixel-hunting: [http://en.wikipedia.org/wiki/Pixel_hunting](http://en.wikipedia.org/wiki/Pixel_hunting). When my 21st century students first play **GK2** this often leads to frustration and pixel hunting (even when I give them an introductory playing guide), because they are not familiar with the visual language of the classic 2D adventure games.
clicked. But then Gabriel will just reply: “I’m not the type to give flowers or take them for that matter”\textsuperscript{62}. In this instance the gamer is thus not only left down when she relies on the visual grammar of the 2D game, but also when she relies on what seem to be helpful visual hints in the 3D game.

However, what she did not pick up on was the real change in the visual grammar of the 3D game, as it is much more subtle. If we take another look at the vase and the box of sweets (Image IV.19), we see that the box of sweets stands out because of the way it is lit. Highlighting the box became possible because of advancements in graphic technology. This not only meant more graphic detail but also more colours. For the game designers it meant that they could now borrow some of the lighting techniques used in art, film and photography. Yet although the gamers would be familiar with these techniques in other media, they were unfamiliar in a gaming context as the gamers were trained on the cruder graphics of the 2D games. At the time (but even now) many gamers simply would not notice the more subtle play with light and shadow\textsuperscript{63}.

\textit{Reasons for choosing 2D or 3D}

As we saw above, making the game 3D not only affected the audiovisual representation of the gamespace but also changed the way the game was played. Given the fact that there was no formal need\textsuperscript{64} to use 3D, one wonders why the designers did not stick to the familiar point-and-click interface. According to Jane Jensen: “...the decision to use a 3D engine for the game was due mainly to the fact that it was ‘the hot thing’ for companies to do so. There was no question of doing it any other way” (Wallis, 2007). The enormous impact 3D had on the gaming scene at the time had also come to the attention of other designers like Roger Rouse III, who noted that 3D was deemed a prerequisite “so that [a] game would be able to compete technologically with other games” even if it did not “improve gameplay” (1998, p. 64).

\textsuperscript{62} This may look like the same kind of difference noticed with the coffee cup. But with the coffee Gabriel at least drinks a cup (unless he has had enough), whereas with the flowers he takes no action at all.

\textsuperscript{63} The use of subtle clues such as the use of light and shadow is, of course, also game genre dependent, as it is only of use in slow paced games like the more cerebral adventure game. See the next chapter for a discussion of this genre dependency.

\textsuperscript{64} All three games were designed for the personal computer and are classic adventure games. And although they are visually different (the second game uses full motion video, yet the portrayal of space and the way the gamer interacts with the game are similar to the first game) the underlying narrative structure remains the same. One could even say that the three games in the series use three different representational strategies is a token of the stories’ spatial flexibility. Moreover, \textit{GK2} and \textit{GK2} sold extremely well and both games received several awards. And as the lively debates on the \textit{Gabriel Knight} forum showed, the audiovisual representation of the three games still received mixed reactions from the gamer community well after their first release. Also see Edge’s January 2009 ‘The Making of...’ feature, available online at: \url{http://www.next-gen.biz/features/the-making-of-%E2%80%93-the-gabriel-knight-trilogy?page=0%2C0}. 138
Nevertheless, although 3D in *GK3* was a strategic choice for the publisher, the development team’s ambition was directed otherwise:

GK3 offers a freely roaming camera that lets players go where they please and zoom in on whatever they like. This isn’t just a gimmick -- this single feature changes the game radically, making it more like an interactive movie and less like an interactive comic book. [...] Suddenly you have to start worrying about camera angles and dramatic effects that were never possible or necessary in 2D, at least not without resorting to a prerendered movie. (Bilas, 2000)

Here it is interesting to note that Bilas (technical lead on *GK3*) picks out the in-game camera as the most radical change the transition to 3D brought about. Yet although *GK3* was successful despite its new gameplay, it was not enough to save the series. Economics dictated that adventure games were no longer interesting:

Previously, Sierra had been fully committed to advancing the point-and-click genre, but by the time GK3 was in production Sierra had been sold [late 1998] and the Williamses [John and Roberta Williams, the founders of Sierra] were no longer in charge. No one believed in adventures any more, but the management had no idea what else to do. Hence the final King’s Quest being a mixture of action and adventure, and GK3 going 3D. I was the last dinosaur on the block, no doubt about it. (Jensen interview (Edge, 2009))

In recent years, however, old style adventure games have gradually made a comeback. In this changed climate, Jane Jensen will also be releasing a new adventure game called *GRAY MATTER*. Interestingly, the game is a “traditional mouse-controlled, 2D point-and-click adventure” (Grünwald, 2006). Bearing in mind that it has been more than ten years since the release of *GK3* and considering that the current trend dictates highly detailed free-roaming 3D environments, this deliberate return to 2D is remarkable. One reason could be the casual gamer, a market Jensen has been developing for in the last years. This does not, however, take into account the numerous *GABRIEL KNIGHT* fans who have been asking for a fourth instalment of their favourite series ever since *GK3* was released. It can be assumed that most gamers who played *GK3*, now are familiar with 3D audiovisual cues such as the play between light and shadow and the use of off-screen space. For them a 2D point-and-click interface would be a step back in time. Why then revert back to it?

[In the end I felt that while I played I didn’t use the 3D enough to warrant all the extra work. I got the feeling that most fans were pretty ambivalent about it—or even found it to be an impediment. I also think 2D, or 2.5D, art

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65 However, see the discussion of this use of colour and light in the next chapter.
can look better than 3D. I guess I’ve reached the conclusion that 3D doesn’t necessarily benefit an adventure game. (Jensen interview (Boyes, 2007))

So although having an in-scene camera which makes the game ego stronger and despite the fact that 3D now is the norm Jensen believes that the 2D representation of the game world better suits the requirements of the adventure gamer.

**Concluding remarks**

In the above, we saw how the audiovisual representation of the 3D *Gabriel Knight* game (*GK3*) changed, as opposed to the 2D version (*GK1*). The most notable changes were first of all the transition of gamespace, which became fluid in the 3D game (the avatar could now move through the gamespace), where it had been episodic in the 2D game (the movements of the avatar were ‘restricted’ to one screen at a time). Secondly, *GK3* introduced the game camera model that, amongst others, allowed the gamer to choose between first and third person perspective. Finally, the 3D game introduced new possibilities for the use of off-screen space. The enhanced graphic capabilities of the hardware *GK3* was played on also meant that the game could use more graphic detail and more colours than the previous 2D games. Combined with the user adjustable game camera (which now allowed zooming in on objects), this changed the visual grammar of the 3D game. Consequently, where in the 2D game the designers used pixel detailing to make potentially useful objects stand out, in the 3D game they switched to the more subtle light and shadow technique found in paintings, photography and film. However, in the context of the adventure game, this was a new and unfamiliar visual grammar for the gamers. Therefore, they had to adapt their gameplay not only to the new 3D environment, but also to the new visual grammar introduced in the 3D game. The basic rules of the adventure genre, however, did not change. To successfully finish *GK3* the gamer still had to find clues and objects, interrogate suspects and solve puzzles, as in *GK1*.

Thus the game rules did not change basically, but the way that the gamer had to apply these rules had changed significantly due to the transition to 3D, not only at the micro level (highlighting in stead of detailing), but also at the macro level (open explorable in stead of closed staged). When *GK3* was released, gamers had to learn a whole new visual grammar even though the game genre, the platform and the basic narrative did not.

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66 The release date for *Gray Matter* was postponed repeatedly, and the game changed studios in between. It has now been finally confirmed that the game will be released on PC and XBox360 in 2011. The characters in the final game are in 2D while the environment is in 3D, making the game look like a mix of a comic book and a card box theatre. As there is no gameplay video available as yet, it is hard to say whether the game will honour the ‘point-and-click’ feel with fixed camera position of the traditional adventure game or whether it will feel more like a true 3D game with a user-controlled camera.
change. Frans Mäyrä was right when he said that gameplay is what you do. But just because of what the gamer has to do, one cannot separate gameplay from the audiovisual representation of the gamespace, not only because this plays down the changes technical advancements have brought, which would imply that “categories of gameplay remain eternally fixed” (Rehak, 2007, p. 152), but also because particular types of rules and gameplay seem to benefit from distinctive forms of audiovisual representation. In this Jensen’s remark that 3D does not necessarily benefit an adventure game speaks volumes.

This chapter focussed on the way narrative space, rule space and the audiovisual representation of space influence each other and the way a game is played. The singling out of these three modalities of space does not mean that the other modalities proposed by Stockburger (2006) are less important. No one who has played THE LEGEND OF ZELDA: TWILIGHT PRINCESS (2006) on the Wii will put the kinaesthetic experience of its gameplay in the same category as that of other adventure games. Moreover, games like OKAMI (2008) on the same platform – a game that allows the gamer to literally draw on the game world, thereby altering its physical properties to successfully complete the game – bring to light yet other aspects of how gameplay and gamespace are intertwined. To account for such developments Stockburger’s interdependent modalities of gamespace are well suited.