

As if by Magic: On Harry Potter as a Novel and Computer Game

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ABSTRACT

This paper examines the computer game *Harry Potter and the Philosopher's Stone* in relation to the novel with the same title. The analysis focuses on the temporal aspects of the works, and differences and similarities regarding both media structure and artistic devices are described. The notion of *content space* is central and a distinction is made between *information content space*, *action content space*, and *task content space*, which form various kinds of works and structures. Moreover, instead of the traditional pair *story* and *discourse*, the four concepts of *performed discourse*, *performed story*, *omnidiscourse*, and *omnistory* are used to reveal temporal effects and characteristics of the game. Finally, it is concluded that the two works, although different in many ways, play with the same user effects, *suspense*, *curiosity*, and *surprise*, to capture and keep the user's interest.

Keywords

computer game, ergodic literature, hypertext theory, ludology, narratology, media theory, Harry Potter, Rowling.

INTRODUCTION

In *Harry Potter and the Philosopher's Stone* [21], the first book in J.K. Rowling's Harry Potter series, young Harry Potter leaves his stepparents to attend Hogwarts School of Witchcraft and Wizardry. At Hogwarts, there is a keeper of keys and grounds, Rubeus Hagrid, who helps Harry with all sorts of things and who is fascinated by dragons: "Crikey, I'd like a dragon. [...] Wanted one ever since I was a kid," (52) he says to Harry as they walk along Diagon Alley. When Hagrid on a later occasion wins a black dragon egg from a mysterious stranger, he doesn't think twice but defies the official school prohibition of dragon-breeding and brings the egg with him back to Hogwarts. Harry and his best friends Ron and Hermione soon find out about Hagrid's secret after their suspicions are aroused on spotting him in the section on dragons at the library. In his hut, Hagrid keeps the big egg in the fire because, as he explains to Harry and his friends, the dragon mother breathes fire on her eggs instead of sitting on them like a hen. When the egg finally hatches, they are all gathered around the table to witness the event. Unfortunately, they are not the only spectators – the villain Draco Malfoy sees everything through the window.

Having discovered Malfoy at the window, Hagrid and the others realize that it is probably only a matter of time before Malfoy tells the principal, Professor Dumbledore, about Norbert the dragon. This must be avoided at all costs and the only alternative is to get rid of the dragon as soon as possible. Harry comes up with the great idea to send Norbert to Ron's brother Charlie who studies dragons in Romania, and by the following week, everything is arranged. Using Harry's invisible cloak, Hermione and Harry are to bring Norbert up to the top of the tallest tower where friends of Charlie's will pick up the dragon. Harry and Hermione manage to get rid of the dragon despite the fact that Malfoy finds out about the plan and nearly ruins it. With their mission accomplished, however, they get dizzy with joy and forget their cloak on top of the tower, which results in detention.

This episode takes place mainly in Chapter XIV of *Harry Potter and the Philosopher's Stone*. Published in June 1997, the novel was an immediate success and by November the same year, it had been published in eight countries and sold 30,000 copies in the U.K. alone. The film industry recognized the novel's cinematic potential and in October 1998 a contract was signed with Warner Bros. The film *Harry Potter and the Philosopher's Stone* [7] opened in the U.K. and the U.S. some three years later, on 16 November, 2001. This type of media migration of a work, that is, from novel to film and from literary work to cinematic work, is common and well established. In recent years, however, best-sellers have also come to provide the computer game industry with raw material in the form of fictional worlds, characters, and plots, often via or in close association with the film adaptation [cf. 25]. The game *Harry Potter and the Philosopher's Stone* [14] was released in four versions (different platforms) on the same day as the premiere of the film.

The Windows version of the game gives you a chance to "[b]e Harry Potter™" and "[l]earn to master all things magical in a world filled with wizardry, fun, and danger. Attend lessons, learn and casts spells, explore Hogwarts™ and its grounds, and take flight to play Quidditch™". [3]. The aim of the present paper is to analyze and describe this version of the computer game in relation to the novel *Harry Potter and the Philosopher's Stone*. Of course, there are numerous parallels between the computer game and the film, but the primary focus here will be on the computer game in comparison to the novel.

The *Harry Potter and the Philosopher's Stone* computer game is different from the novel in many ways; for example, the novel is mainly temporal while the game is both temporal and spatial [1]. Even so, the game is still considered a Harry Potter work, as indicated by the fact that the answer to the query "Have you read the first Harry Potter novel?" might be "No, but I've played the computer game", as well as "No, but I've seen the film". Why is this so? What are the devices used to obtain this effect? In order to answer these questions, an examination of the differences and similarities regarding the media structure (i.e., structural organization, navigation, linking, storage, and presentation) must be conducted. In addition, it is crucial to investigate how the computer game handles the narrative structure of the novel, i.e., how the game works compared to the novel's artistic devices and narrative technique. Naturally, an exhaustive analysis covering these issues is not possible within the scope of this paper and I have therefore chosen to discuss *time*, which touches on media structure as well as on artistic aspects.

In the game *Harry Potter and the Philosopher's Stone*, the sections "Hogwarts Front II", "Forest Edge" and "Fire Seed Cave" in the second chapter and "The

Sneak” and “The Sneak II” in the fourth chapter correspond to the Norbert episode in the novel. In other words, the events that occur primarily in one chapter of the novel, namely Chapter XIV, entitled “Norbert the Norwegian Ridgeback,” correspond to several parts, or puzzles, in the game. First, in “Hogwarts Front II” and “Forest Edge,” the puzzle is to find the way to Hagrid’s hut. Next, Harry is to help Hagrid collect fire seeds so that the egg can hatch. Later in the game, in “The Sneak,” Harry must sneak up to the tower with Norbert without getting caught by the caretaker Argus Filch. This section ends with a video clip showing Norbert flapping his wings when he is fetched by Charlie’s friends. Finally, in “The Sneak II,” the task is to sneak back down the tower.

In my opinion, computer games like *Harry Potter and the Philosopher’s Stone* share certain traits with narratives and it is therefore fruitful to use both ludology [9, 23] and narratology in descriptions of this type of games. Hence, perspectives are combined from three main theoretical traditions, namely traditional narratological methods, hypertext theory, and ludology. It is worth mentioning that this particular issue, i.e., games and their relation to narratives, has long been a subject of lively discussion among theorists [4, 5, 9, 11, 13, 15, 19, 22].

Finally, it is important to emphasize that the structural aspects of texts and works in this paper are discussed and described primarily from a user perspective.¹ It should also be noted that the lines of argument in this paper follow my doctoral thesis, which will include an essay on the *Harry Potter and the Philosopher’s Stone* computer game and its relation to the novel (work in progress).²

CONTENT SPACES AND STRUCTURES

The computer game, being a multisequential work with links, is structurally quite unlike the novel, which is monosequential and lacks links (since it has no table of contents). The novel offers only one track through the text, with no side roads or alternative paths. Players of the game, on the other hand, have to make choices and direct Harry to the left or to the right, have him jump up on a bookshelf or not, and have him cast spells on every vase or just on three. In

¹ It should be stressed that in this paper the term *user* designates the person experiencing a work, i.e., the reader, player, viewer or listener. For purely practical reasons, I refer to the user (as well as the player, the reader etc.) as “she” throughout the presentation.

² For a full bibliography, I refer to this coming essay. I am writing my Ph.D. thesis, *Hyperliterary Narration: Narrative Structures and Ergodics in some Hyperworks* (prel. title), within the research project “IT, Narrative Fiction, and the Literary System” run by the Section for the Sociology of Literature at Uppsala University. The research project is funded by The Axel and Margaret Ax:son Johnson Foundation for Public Benefit. Professor Johan Svedjedal is the project leader. Part of my doctoral dissertation includes the essays “Berättelsens spel: berättarteknik och ergodicitet i Michael Joyces *afternoon, a story*” [“The Game of Narration: Narrative Technique and Ergodics in Michael Joyce’s *afternoon, a story*”] [11] and “Forming the Text, Performing the Work – Aspects of Media, Navigation and Linking” [12]. (See also <http://www.litvet.uu.se/lsoc/itlit/research/gunder.htm>).

other words, there are innumerable ways through the game and it is hence a multisequential text.³

However, the multisequentiality of the game depends not only on what the player chooses to do, but also on her ability to solve problems along the way. Some players may have great difficulties with a certain puzzle or task while others find them easy. This, a problem and its solution, or, to use Espen Aarseth's terms, *aporia* and *epiphany*, is a fundamental figure in adventure games [2]. One could say that in the game *Harry Potter and the Philosopher's Stone*, the player herself explores Hogwarts, solves problems, plays Quidditch – and has to do so. In contrast, the novel tells the reader about how Harry runs in the corridors, plays Quidditch, and solves problems. In other words, the game is an *ergodic* work since nontrivial effort is required to experience it, whereas the novel is a *nonergodic* work [2].

Central to discussions of multisequential structures is the notion of *content space* [12; 24]. Content spaces are delimited units of text made up of textual elements (sound, moving pictures, still pictures, and alphanumeric characters) in any quantity: a single letter, a simple drawing or a graphically advanced scene in a computer game. Of course, content spaces may hold one exclusive sort of textual elements or several. A key characteristic of content spaces is that they are provided with borders that may be easier or more difficult to cross. In many cases, the content spaces are connected by links of various kinds, which then function as bridges by which the user may leave one content space for another. There are three main categories of content spaces, namely, *information content spaces*, *action content spaces*, and *task content spaces*. It is important to stress that these definitions are based on user activity and have nothing to do with the content as such (theme, genre, subject, etc.).

Information content spaces are nonergodic, and very limited user activity in the form of physical actions (by means of, for example, a mouse, keyboard or joystick) or calculated decisions (as in sophisticated, printed hypertexts) is required to experience this type of content spaces. Instead, you sit back and listen, watch or read. Information content spaces convey information but do not exhort or urge the user to do anything (like the task content spaces) or require her to do anything (like the action content spaces). Moreover, a useful distinction can be made between information content spaces that the user experiences at her own pace (typically reading) and information content spaces that are intended to unfold at a certain pace (watching a movie, listening to music, etc.).

The novel *Harry Potter and the Philosopher's Stone* is one example of an information content space and the film with the same name is another. In fact, it is possible to distinguish video content spaces as one of several subdivisions of information content spaces. Video content spaces are characterized by their use of cinematic text. The film consists of one or several video content spaces

³ As I see it, all man-made products are systems of signs. All these sign systems (consisting of, to mention only a few examples, alphanumeric characters, sound, still pictures, and moving pictures) can be considered as texts presenting works. Thus, by "text," I refer not only to texts consisting of typographic characters but also to computer games, web pages, films, etc. [12].

depending on the version. Of course, there are numerous video content spaces to be found in the game *Harry Potter and the Philosopher's Stone* as well.

Action content spaces may be ergodic as well as nonergodic. In contrast to the information content spaces, the action content spaces require a high degree of what previously was described as user activity. As for computer games, action content spaces in general correspond to what often is referred to as action sequences. Thus, in the game *Harry Potter and the Philosopher's Stone*, the action content spaces are the parts of the game where the player controls Harry and makes ergodic choices when deciding what to cast spells on, whom to talk to, etc.

Thirdly, the task content space is often nonergodic but it may also be ergodic. A characteristic of the task content space, as its name implies, is that it gives instructions or information of some kind on what the user can do, is expected to do or must do to experience the work. In computer games, the task content space often precedes an action content space. In the game *Harry Potter and the Philosopher's Stone*, the task content spaces are single screens displaying what looks like a sheet of parchment with information on what the player is supposed to do and look for in the coming action content space. However, the main menu of the game as well as indexes in printed books and menus on DVDs are also task content spaces.

The following figure depicts the different types of content spaces and their possible characteristics in schematic form with regard to textual elements (alphanumeric characters/sound/moving pictures/still pictures) and user activity (ergodic/ nonergodic). Naturally, the model is intended to serve in descriptions of content spaces in single works as well.

	Information CS (ICS)	Task CS (TCS)	Action CS (ACS)
Textual Elements			
Alphanumeric Characters	x	x	x
Moving Pictures	x	x	x
Still Pictures	x	x	x
Sound	x	x	x
User Activity			
Ergodic		x	x
Nonergodic	x	x	x

Figure 1: Types of content spaces

These three types of content spaces are combined, forming various kinds of works and structures that use all sorts of narrative and ludic devices. As a consequence, analyses of, for example, the user functions [2], the narrative technique, or the link structure involve other levels of a work.

The computer game *Harry Potter and the Philosopher's Stone* consists of action content spaces, information content spaces, and task content spaces, which are all to be characterized as authorial content spaces since they have been defined by the originators of the work [12]. Some of these are linked to each

other, forming a sequence, i.e., they are core content spaces intended to be played in the same order by every player. The debug function “Level Select” clearly exposes this intentional order of events as it provides a table of contents with the events of the game ordered chronologically in chapters.

In this game, only the action content spaces are to be characterized as ergodic content spaces. In the action content spaces, the player makes ergodic choices when deciding where to go, what to cast spells on, and whom to talk to. It is in the action content spaces that Harry may faint and force the user to start over (and over again) from the last point where the game was “saved.” Naturally, these multisequential, ergodic content spaces have a vital function in the game; it is in the action content spaces that the real playing takes place. The ergodic content spaces make the game, and their significance is emphasized by the fact that the work as a whole, including the nonergodic content spaces, is conceived as ergodic.

Ergodic content spaces have a strong onward drive, encouraging and compelling the player to advance, to move forward. The action content spaces are challenges that put the player’s skill to the test and the goal is to get past the obstacles to the next content space, hence continue in the game. Often, getting through an action content space consists of traversing one or several rooms, i.e., conquering new areas, new space. This is accomplished mainly through the use of spells, which move blocks, open doors, make foes fall asleep, etc., so that Harry may pass. In discussions of the ergodicity of a work, however, it is important not to forget the individual user and the fact that what is a nontrivial act for one person may be a trivial act for another.

Indispensable to the ergodic content spaces is the existence of yet another type of content spaces. Characteristic for these is that they appear from a user perspective to produce some kind of change in the current action content space. Vases containing Bertie Bott’s Every-Flavour Beans may serve as an example: the player casts a spell on the vase, resulting in the vase breaking and the beans popping out and falling onto the floor. Formally, however, these content spaces function exactly like the ones discussed above, with the only difference being that the setting and the character of the content space remain the same. Thus, what appears to the user to be one and the same action content space is in reality a number of slightly different action content spaces. The spell activates a conditional link that manifests itself through the popping out of beans that land on the floor [12]. In the new content space, there are a number of beans on the floor that the player may or may not make Harry pick up. A new content space is presented for each bean collected, i.e., one with four beans on the floor, one with three, etc. Another example, from the dragon episode in the game, is the fire seeds that Harry is supposed to fetch for Hagrid.

Collecting a bean or a chocolate frog is optional, by which follows that the content spaces can be described as such. Other content spaces of the same kind are mandatory as they, on their own or in combination with other mandatory content spaces, constitute the condition that must be fulfilled if the link to the next core content space is to be activated or available. For example, the gate near the first fire seed plant opens only if all three fire seeds in the room are collected. It should also be noted that optional content spaces may constitute a condition or be part of one.

It is not always obvious to the user if a content space is optional or mandatory – she may, for example, think that she has to cast “Flippendo” on the slugs to get past them, when, in fact, it is fully possible just to run. Of course, the

number of optional and mandatory content spaces of this kind is vast in every ergodic content space. In addition, there are often optional video content spaces; for example, when Harry walks up to another character (NPC), a link is activated that leads to a video content space in which the character says something. Pure navigation as such (walking around, running, etc.) of the spatial action content space is considered a trivial act. This does not mean that it may not trigger links to content spaces. Falling may, for instance, cause Harry to faint, i.e., activate a link that leads back to the spot where the player last “saved.” Similarly, navigation skills as such make up the puzzle, for instance, in the Quidditch matches (broomstick flying) and when escaping the troll (running and jumping).

To sum up, the game structurally consists of a sequence of core content spaces which have links and are either nonergodic or ergodic. The core content spaces constitute the game’s spine and, together with the mandatory and optional content spaces attached to it, they form a structure that resembles the classical axial structure with one main sequence of content space (or just a single one) with content spaces linked to it [16]. One important difference, of course, is that the main text cannot be experienced irrespective of the links, since some of the attached content spaces form the conditional links between the core content spaces. The description of the game as a type of mainly axially structured multisequential work fruitfully captures its defining mix of “free choice” and “one way through,” or, if you will, between game and narration.

PERFORMED DISCOURSE AND OMNIDISCOURSE

The distinction between *story* and *discourse* [6] helps reveal temporal aspects of monosequential works and hence of Chapter XIV in *Harry Potter and the Philosopher’s Stone*. However, this traditional, dualistic distinction is insufficient in discussions and descriptions of multisequential works like a computer game. Instead, four concepts are necessary, and the terms I hereby suggest are *performed discourse*, *performed story*, *omnidiscourse* and *omnistory* [11]. Each playing session of the game generates a discourse and consequently a story. The performed discourse is the discourse of this single session, while the performed story is the story of the single session. The performed discourse is a generated number of content spaces arranged in a certain order depending on links, conditions, and the reader’s choices while playing. The performed story is the content in these selected content spaces arranged chronologically and multisequentially. All performed discourses of the game *Harry Potter and the Philosopher’s Stone* begin in the same content spaces, but then differ significantly after that. Some players cast spells on all vases, while others only cast on one every now and again, which results in different performed discourses. A performed discourse may end at the end of the game, so to speak, but it could also just as well end in the middle, if the player for some reason chooses not to continue.

What is more, there is also a discourse that comprises all performed discourses, an omnidiscourse, and, consequently, an omnistory. The omnidiscourse is all content spaces with links and conditions; the omnidiscourse sets the rules that decide what performed discourses may appear. Just like the performed story, the omnistory is chronological and multisequential. It is the content in all content spaces arranged in chronological order. It is vital not to forget the complexity of the omni-levels and the vast number of performed discourses

and performed stories. It is also important to remember that the four levels presented here are analytical tools and do not coincide with constituents in the technical construction of games. Jesper Juul's distinction between program, material, and output, for example, involves a deeper level, and the concepts discussed here are principally applicable to the result of the processes captured in his model [13].

A short excerpt from "Fire Seed Cave" may serve as an illustration of the four-level model. When Harry leaves Hagrid's garden, he is attacked by a doxy (a blue, flying insect). Inside the first cave there is another doxy, a hidden door in the wall, and a chocolate frog on the floor. When Harry exits the cave, slugs cross his path and near the first one there is a path down the cliff wall to a secret room with two chests. In one performed discourse, Harry faints from getting hit by the first doxy and the game is resumed from Hagrid's hut, while in another, he opens every door and chest and collects every single bean. Obviously, this short, individual passage may appear in an enormous number of performed discourses. The performed stories are the events arranged chronologically. As a consequence of the extremely scenic character of the action content spaces, there is little difference as to the order of events. This does not change the fact that the performed story is an abstract reconstruction of the events displayed on the screen (the performed discourse). The omnidiscourse is the rules that say, for example, that Harry must cast "Alohomora" on the secret door to open it and that Harry faints if he falls from the cliff by the waterfall. The omnistory is the content of all content spaces arranged chronologically and multisequentially.

Temporal components of duration, order, and frequency as defined in traditional narratology [10; 20] are also found in the adventure game *Harry Potter and the Philosopher's Stone*. The game is highly scenic and if the reader of the novel has the impression that the events unfold before her eyes, they really do so before the player [cf. 13]. In other words, performed discourse time very often corresponds to performed story time. This is always the case in the ergodic action content spaces. The scene predominates the nonergodic content spaces as well, but there are also instances of summary, stretch [17], ellipsis, and even descriptive pause.

Furthermore, traditional analepses and prolepses can be found in particular in the nonergodic content spaces of the game. For example, Hagrid says: "Welcome to me home, Harry! It's small, but still roomier than yer cupboard under the stairs, eh!" ("Fire Seed Cave"). Interestingly, since the cupboard passage is omitted completely in the game, this is what in Genette's terms would be labeled an external analepsis [10]. It is also an explicit manifestation of what Wolf calls extradiegetic narration, as it refers to a diegetic world presented in another medium [18]. The flute that Hagrid gives to Harry when he has collected the fire seeds could be considered a prolepsis and more precisely an advance notice (fr. *annonce*) since it anticipates a coming puzzle ("Fluffy"), especially in combination with, for example: "Thanks, Harry. Here take this flute. It can be used to help some creatures sleep."

Concerning the frequency of events, the singulative form, "telling one time what 'happened' once," is predominant. What is important to remember is that from the perspective of a single performed discourse, the form is still singulative when Harry faints and the player has to start over from the point where the game was "saved." This is because the events of the performed discourse, for example, each attempt to jump over a moat, correspond to an

event in the performed story. As in the novel, there is iterative narration connected with the summaries; *lately* in “Snape’s been acting very suspicious lately. He may be planning to steal the Philosopher’s Stone,” as well as *always* in “What about Filch? He’s always watching the forbidden corridor,” imply that the same thing has happened several times. It is also possible to distinguish traditional repetitive narration in the game. Although rather weak, so to speak, considering the limited information given by the advance notice described above, the flute refers to an event that occurs yet another time in many performed discourses, i.e., what happened once is “told” more than one time.

However, the time in ergodic multisequential works cannot be captured and described unless the performed discourses (and performed stories) are considered in relation to the omnidiscourse (and the omnistory). Aspects of the temporal components of duration, order, and frequency discussed above can also be applied on this level, where ergodicity de facto rules [cf. 8; 11; 26]. The player’s ergodic choices and actions generate a performed discourse (and story) from the omnidiscourse (and story). Thus, instead of dealing with the discrepancies between discourse time and story time (or, as above, performed discourse time and performed story time), duration, order, and frequency could be said to concern the relationship between the performed levels and the omnilevels.

Here, the varieties of duration or speed have to do with which content spaces that occur. Roughly, the possibility to follow a link presents four alternatives: activation of a link resulting in the presentation of a scenic content space, activation of a link resulting in the presentation of a summarizing content space, activation of a link resulting in the presentation of a stretch content space, and no link activation. In *Harry Potter and the Philosopher’s Stone*, the action content spaces are scenic and have no acceleration in discourse time. In other words, no action content space can be characterized as summary or stretch.

An ellipsis is when a link is not followed and the player misses out on a content space. This is sometimes a good thing, especially with faint links that result in the player having to start over again from the point where the game was “saved.” Just as often, however, an ellipsis of this kind cheats the player on, for example, beans, frogs or wizard cards. Ellipses are only noticeable in retrospect, if at all, which in itself is a genuine trait of many adventure games, often sought for by players. In fact, a better term in many cases might be *paralipse*, defined by Genette as “une autre sorte de lacunes, d’ordre moins strictement temporel, qui consistent non plus en l’émission d’un segment diachronique, mais en l’omission d’un des éléments constitutifs de la situation [...] Ici, le récit ne saute pas, comme dans l’ellipse, par-dessus un moment, il passe à côté d’une donnée” (92-93).

The fifth pace, the pause, is when there is no player-induced progression and Harry stays put waiting for the player to do something [cf. 18]. Despite the lack of player activity, the performed discourse is not frozen, as sound and surrounding activity maintain the impression of scene. This passing of time, however, induces no progression or exploration of the omnidiscourse, and therefore recalls the traditional descriptive pause where discourse time has no story time.

Temporal discrepancies with regard to the order of events occur in a slightly different form as a result of the ergodicity. Like the traditional analepses, ludic analepses, as they may be labeled, are closely associated with ellipses. Unlike

the classical, narrative analepses which generally fill in a previous ellipse, the ludic analepses tend to simply inform the player of the existence of ellipses. A principal analepsis that may or may not occur in the end of the game *Harry Potter and the Philosopher's Stone* is that, unless you have collected all wizard cards during the performed discourse, you cannot have the last card. In other words, ludic analepses reveal game rules or premises at a point when the only way to correction is to fill in the required ellipses by going back and playing the section again (or replaying the entire game).

Lastly, the category of frequency and the number of occurrences of an event also involve the relationship between the performed discourse and the omnidiscourse. Here, repetition, or repetitive occurrence, is when a content space or a sequence of content spaces is repeated in a performed discourse [cf. 26]. For example, if you fail to enchant the doxy outside Hagrid's hut (or run away from it), Harry faints and you must try once again. The game automatically rewinds and you must listen to Hagrid all over again before getting another try. This can be repeated many times, but players may also succeed and knock out the doxy the very first time, which thus is to be considered a singular occurrence.

SUSPENSE AND CURIOSITY

In fictional works of all kinds and in all media, there is generally a narrative drive that compels the user to continue reading the novel or watching the film. Basically, this narrative drive consists in arousing the user's interest in the coming discourse and what it will tell. In other words, the interest is directed towards untold events. From a chronological point of view, though, these may be future events answering to the question "And then?" or past events addressing the question "Why?". In traditional narratology, the established terms for these narrative drives are *suspense* (future-oriented) and *curiosity* (past-oriented). Another important narrative device is the *surprise*, which, as the name indicates, is an unexpected event of some kind. For an exhaustive discussion on these concepts, see [24].

Of course, the novel *Harry Potter and the Philosopher's Stone* uses these traditional strategies to maintain the reader's interest in the course of events and make her read to the ending. To mention only a few examples, in the chapter "Norbert the Norwegian Ridgeback", readers worry about the Philosopher's Stone: will whoever it is who is after the Stone get their hands on it or will Harry be able to save it (suspense)? They wonder what Hagrid hides behind his back and why he reads about dragons (curiosity) and if Harry and Hermione will manage to get rid of the dragon (suspense). And they are surprised when, for example, Malfoy is suddenly at the window or when Professor McGonagall appears in the corridor (surprise).

In the novel as a whole, suspense, curiosity, and surprise create an effective and tight pattern that quickly engages the reader and keeps her interest in a firm grip until the last page. Also, as a consequence of the work being mainly scenic, the reader's experiences often appear to coincide with the characters' feelings; like the reader, Harry, Ron, and Hermione wonder about the Stone and Hagrid's whereabouts and they are taken by surprise when Malfoy and McGonagall show up unexpectedly.

Similarly, the driving force of the computer game consists in the effects of suspense, curiosity, and surprise. A crucial difference is that in mainly ludic

works, including a computer game like *Harry Potter and the Philosopher's Stone*, these effects apply primarily to the user's activity. Instead of reading about problem solving, lessons in magic, and close encounters with trolls, the player herself is supposed to solve problems, take lessons, and fight trolls. This means that, unlike the reader of the novel who wonders if Harry and Hermione will manage to sneak up to the top of the tower, the players of the game ask themselves "Will *I* manage to sneak up to the top of the tower with Norbert?"

Suspense also works on another level associated with the alternation between aporia and epiphany. Having managed to run away from the troll, the player is eager to take on the next challenge. This becomes obvious when considering how hard it is to stop playing once you have started. If you're stuck in aporia, you want epiphany before quitting, but then, when epiphany is obtained, you have to continue to the next aporia "just to see what it's like," and before you know it, you're craving for epiphany again before taking a break: "I'll just do one more." In essence, the player constantly lacks information, wondering, when facing aporia, how to accomplish epiphany and, when facing epiphany, what the next aporia consists of and what it will be like.

Furthermore, the player may ponder over why certain things have to be done or why they happen. "Why do you collect wizard cards?" "How important is the number of house points collected?" and "Why does Hagrid give you a flute?" are questions that have to do with curiosity. In addition, curiosity comes into play when the player fails to solve a puzzle and has to try again: "Why did I faint?" "What did I do wrong?" Surprise is an equally important effect of the game where, for example, doxies attack you out of the blue and gnomes suddenly come running toward you. As in the novel, suspense, curiosity, and surprise are intertwined and work closely together: when entering the cave in "Fire Seed Cave" (suspense - what will happen here?), a doxy attacks (surprise) and you faint (curiosity - what did I do wrong?).

To conclude, although dissimilar in many ways, the novel *Harry Potter and the Philosopher's Stone* and the computer game with the same title function very similarly when it comes to capturing the user's interest and maintaining it. The user effects of suspense, curiosity, and surprise are effective tools successfully applied by both works. Or, to put it differently, the enchantment of a computer game or a novel may seem as if by magic, but it is created by artfully playing with time.

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This paper examines the computer game Harry Potter and the Philosopher's Stone in relation to the novel with the same title. The analysis focuses on the temporal aspects of the works, and differences and similarities regarding both media structure and artistic devices are described. The notion of content space is central and a distinction is made between information content space, action content space, and task content space, which form various kinds of works and structures. In the postulated ontological theory the article identifies the storygame primarily as an extrademanding narrative work: a narrative work whose progression entails input that is either strategic (constrained by indeterminacy) or time-critical (constrained by time limits). In J. K. Rowling's Harry Potter series, magic is depicted as a supernatural force that can be used to override the usual laws of nature. Many fictional magical creatures exist in the series, while ordinary creatures also sometimes exhibit magical properties. Magical objects are also described. The small number of humans who are able to perform magic (witches and wizards) refer to the rest of the population, oblivious to the existence of magic, as "Muggles" in the United Kingdom and "No-Maj" in the The Harry Potter Phenomenon. The first novel in J.K. Rowling's Harry Potter series, Harry Potter and the Philosopher's Stone, was published by Bloomsbury in June. It was an immediate success and by November the same year, it had been published in eight countries and sold 30,000 copies in the U.K.

5. 6 HUMAN IT REFEREED SECTION
alone. Warner Brothers licensed Electronic Arts (EA) to develop the Harry Potter computer games and the game Harry Potter and the Philosopher's Stone was released in four platform versions on the same day as the premiere of the film. The versions differ as a consequence of the developers wanting each version to make maximum use of the technology available on the specific platform.