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Because It's Not There: Verbal Visuality and the Threat of Graphics in Interactive Fiction

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ABSTRACT

In this paper I analyze two contemporary works of interactive fiction (IF), Nick Montfort's Ad Verbum and Emily Short's City of Secrets, as examples of two contrasting ways in which IF reacts to the perceived threat of computer graphics. In the postcommercial era of IF, graphics represent a factor that, without being acknowledged, has profoundly shaped the development of the medium. Post-graphical works of IF may be distinguished according to how they respond to the threat or promise of graphics. Ad Verbum's response to graphics is to emphasize the purely textual, and thus anti-graphical and anti-visual, aspects of the medium. The implication is that IF's closest affinities are not with visual prose but with printed works of procedural textuality, and that IF is a visual medium. By contrast, City of Secrets activates a mode of visuality that depends less on immediate presence than on emotional affect and imaginative participation. Short suggests that IF is a visual medium, but that it differs from graphical video games in that its visuality depends on absence rather than presence.

Categories and Subject Descriptors

K.8.0 [Personal Computing]: General – games.

General Terms

Human Factors

Keywords

Interactive fiction, ekphrasis, word-image studies

1. INTRODUCTION

The basic premise of this paper is that interactive fiction, or IF, also known as the text adventure game, is a visual medium which can be usefully analyzed with the tools of word-image studies. This claim may seem counterintuitive since IF, by definition, is a genre which uses words rather than images to represent the world of the game or program. Indeed, as we will see, current scholarship on IF usually treats it as a primarily verbal and textual phenomenon, belonging to the canonical tradition of ergodic textuality. Yet I contend that IF is also descended from an ancient tradition of visual prose that extends from Homer's shield of Achilles through Ruskin's word-painting to contemporary ekphrastic poetry. IF poses problems of word-image relations that

can productively be understood by comparison to the aporias of other types of visual writing.

In IF, room and object descriptions represent translations of the avatar's visual experience into words. One example is the description of the living room in *Zork*:

You are in the living room. There is a doorway to the east, a wooden door with strange gothic lettering to the west, which appears to be nailed shut, a trophy case, and a large oriental rug in the center of the room.

Above the trophy case hangs an elvish sword of great antiquity.

A battery-powered brass lantern is on the trophy case. [2]

This description lists all the visible exits from the room and the visible objects in the room. All these objects are "implemented," meaning, in short, that the avatar can interact with them. The description mentions no objects that aren't implemented, and doesn't fail to mention any visible objects that are implemented. The description neglects to mention that there's a trap door under the rug, because the player isn't supposed to know the trap door is there; finding it is a puzzle. The player may know about the trap door before moving the rug (perhaps from having played the game before), but this knowledge doesn't extend to the *avatar*. If the player tries to refer to the trap door before the avatar moves the rug, the game responds "You can't see any trap door here!" [2]

So a room description takes a visual experience which can't be accessed directly, since there are no graphics, and translates that visual experience into words. This lets player to back-translate those words into his or her own images, so as to visualize the world his or her avatar is inhabiting. Such descriptions are examples of the ancient rhetorical trope of ekphrasis, definition of which is "a speech which leads one around [...] bringing the subject matter vividly [...] before the eyes" [qtd. in 7, p. 23]. In contemporary literary theory the term refers primarily to poems that describe works of art, but for ancient rhetoricians, ekphrasis simply meant describing an absent visual scene vividly enough that an audience could see it as if it were present. The classic example of ekphrasis is Homer's description of the shield of Achilles. Richard Lanham notes that ekphrasis originated as a replacement for the highly visual gestural language used by ancient rhetoricians, and that in the computer era "ecphrasis is once again coming into its own" [8, p. 34] now that it's possible to visually manipulate text and mix it with images. Yet the computer also affected the history of ekphrasis in another way, by making it possible to create ekphrastic texts that could be interacted with.

In ekphrastic literature, a running theme is the *paragone*, or the contest between words and images. Ekphrastic poems repeatedly dwell on the simultaneous inferiority and superiority of words to images: words can engage with conceptual issues that are difficult to represent in images, yet words cannot match the immediacy and vividness of images. In an increasingly image-obsessed culture, the question may arise as to whether the representation of images in mere words is still a viable pursuit.

For IF, this question is especially pressing because the purpose of the words in IF is to serve as the player's interface to a simulated gameworld. As a tool for this purpose, prose directly competes with graphics. Concurrently with the rise of sophisticated computer graphics in the 1980s, IF became commercially unviable and is now seen by most non-experts as an obsolete medium. For Espen Aarseth, this is natural because "images, especially moving images, are more powerful representations of spatial relations than texts, and therefore this migration from text to graphics is natural and inevitable" [1, p. 102]. By Aarseth's logic, the purpose of a game is to serve as a transparent window into an imagined space. According to what Bolter and Grusin call the logic of transparency [3], the game seeks to erase its own materiality and present the player with a vivid, sensuously present experience of existence in another world. For this purpose to be fulfilled, the gameworld must be presented with maximum visual richness. Clearly games that translate the avatar's visual experience into text do all these things less effectively than games that display the avatar's visual experience onscreen.

IF still survives today thanks to the dedicated efforts of a group of amateur programmers centered around the rec.arts and rec.games.int-fiction newsgroups. Yet for contemporary IF authors, graphics are an elephant in the room, a topic that may not be directly discussed but can't be ignored. Authors of IF in the post-graphical era cannot avoid the question of why they should bother, if graphics are better than IF text at doing what IF text does. Within contemporary IF work we can distinguish two very different responses to the perceived threat of computer graphics, or to the perceived obsolescence of ekphrasis as a means of representing the gameworld.

These two responses address two unexamined assumptions behind the standard explanation for the decline of IF. Again, that explanation is that graphics are naturally superior to text because of their greater transparency. The first assumption here is that games must necessarily follow the logic of transparency instead of its opposite, the logic of hypermediacy. My first case study, Nick Montfort's Ad Verbum, calls this assumption into question. The second assumption is that text is necessarily less transparent than graphics. My second case study, Emily Short's City of Secrets, problematizes this assumption.

2. AD VERBUM

One way in which IF responds to the seemingly superior representational capabilities of text is by ignoring ekphrasis almost entirely and foregrounding purely textual and verbal effects. The paradigmatic example of this approach is Nick Montfort's 2000 game Ad Verbum.

The player's goal in this game is to remove all the objects from a house belonging to the Wizard of Wordplay. Nearly all of the game's puzzles must be solved by entering commands according to various linguistic constraints. Some of these puzzles are in fact purely verbal or linguistic in nature, in that they involve no interaction on the part of the avatar with objects or spaces, only manipulation of language. For example, on the first floor of the mansion, the player encounters a little boy, Georgie, who refuses to give up his toy dinosaur unless the player can name more dinosaurs than Georgie can. Georgie knows an arbitrarily large number of real dinosaur names, so the solution is to input fake dinosaur names - i.e. nonsense words ending in "saur" or "saurus" - until Georgie gets frustrated and gives up. Since all the player has to do to solve this puzzle is think of nonsense words, it does not matter whether or how the player visualizes the space where Georgie is located.

Other puzzles in the game do force the avatar to interact with rooms and objects, but in order to make the avatar do so, the player has to satisfy certain linguistic constraints. For instance, the game contains several "constrained rooms" where the output text consists entirely of words starting with a specific letter. One such room, the White Wardrobe, is described thus:

Wee warehouse warily warded wearable wares - when wares were within. Wan, whitewashed walls wait without woolens. Wooden, weathered wainscoting wobbles weakly.

Within: ... wooden weapon [9].

In this room the player must obey the same constraint. If the player enters a command containing a word that doesn't start with W, the parser replies "Wha? Wha? Withhold wrong words. Write wholesomely" [9]. To escape this room with the two objects in it, the player must think of words beginning with W that refer to the actions he or she wants the avatar to take. One solution is WIELD WEAPON, then WHACK WAINSCOTING WITH WEAPON (wevealing a weird widget) then WIN WIDGET, then WITHDRAW. This constraint applies even to nondiegetic commands like HINT, SAVE, RESTART, RESTORE and QUIT, and on first entering a constrained room, the player must read a warning alerting him or her to this fact.

The constrained rooms call attention to the fact that the world of this game is a linguistic construct, a tissue of words and letters. This is true of any IF game: the white house in Zork doesn't exist independently of the language that describes it. But Ad Verbum's innovation is to make explicit the linguistic nature of the IF gameworld. Since the spaces of Ad Verbum are called into being by language, it's logical that these spaces can have linguistic properties, like the property of only containing objects that start with W. These spaces also resist translation into images. What would a room would look like if it contained only things beginning with S? The first letter of an object's name is not a property which can be perceived by looking at it, especially if the object has various possible names. One can imagine a space based on the physical form of a letter – for example, a room based on the letter S where the walls, ceiling and furniture have sinuous, snaky curves, with no rectilinear objects in sight. But there is no suggestion that the Sloppy Salon in Ad Verbum shares any of the visual properties of the letter S. Ad Verbum's spaces are organized not according to the visual aspects of letters, but according to their linguistic aspects.

Descriptions in IF are translations into words of what the avatar sees, but the *Ad Verbum* avatar sees things that can't *be* seen – for example, what letter an object's name starts with, or whether its name contains the letter E. This avatar's visual experience is fundamentally anti-visual. So the game frustrates the player's ability to imaginatively reproduce the avatar's visual experience. If the things the avatar "sees" are unseeable, the player can't imagine what it's like to see those things. This forcibly reminds the player that IF is at bottom a linguistic rather than a spatial experience. The IF player never truly interacts with an independently existing diegetic world, but merely reads verbal descriptions and types verbal commands in response.

So Montfort demonstrates that the world represented in an IF game is dissimilar to the material, namely language, that represents that world. This is the trope that James Heffernan, in a book on ekphrastic poetry, calls representational friction. In this trope the ekphrastic poem calls attention to the artificiality of the artwork it describes. For example, in his description of the shield of Achilles, Homer observes: "the earth darkened behind [the ploughmen] and looked like earth that has been ploughed / though it was gold" [qtd. in 5, p. 19]. Homer celebrates the ability of art to depict real objects, but reminds the reader that the work of art itself is ontologically dissimilar to the object it depicts. Heffernan notes that Homer celebrates "the wonder [...] of graphic verisimilitude" specifically by telling the reader "that what appears on the shield is not the ploughed earth itself, but gold that has been somehow made dark enough to resemble it" [5, p. 19]. Because the shield is made of gold, not dirt, it can represent dirt only via artifice and convention.

By analogy, because poetry is made of language and not images, it can represent images only through a similar artifice. Representational friction foregrounds the dissimilarity between the descriptive poem and what it describes. It asserts that the poem *is* a poem and not a painting or sculpture. It reminds the reader that he or she is not beholding a representational image, but merely interpreting graphic signifers. So representational friction reminds the reader of the nature of the activity he or she performs in reading a poem. It defines the specificity of poetry as distinct from painting and sculpture.

But of course IF players perform an activity that readers of poetry don't. In IF, the player does more than interpret signifiers; he or she also enters commands in response to those signifiers. And Montfort also reveals the true nature of this activity. The typical conceit is that when the player types a command, this is equivalent to, and can be visualized as, the avatar performing that action. When I type "take lantern" and press enter, I can imagine my avatar reaching out his or her hand and takes the lantern. Of course, what actually happens is that the game interprets the words "take lantern" as an action, then checks for whether the action succeeds or not. If the check succeeds, the lantern is moved from its current position and added to the player's inventory [6].

When Montfort places constraints on the player's ability to enter commands, he reminds the player that commands don't actually involve interaction with a diegetic world; all they involve is the generation of signifiers. For example, one room in the game is a library containing four books, which can only be taken using commands that obey the same linguistic constraints that were used to write the books. One of the books, the "wee writ", only accepts commands written with the top row of the QWERTY keyboard. Another, the "copybook," must be referred to with words whose

only vowels are O and Y. If the player tries to take these books using an inappropriate verb, "a mysterious force holds the book to the ... shelves" [9]. So the player must think of commands like HOLD COPYBOOK or UPROOT WRIT.

Now in the context of obtaining a book, the words TAKE, GET, HOLD, and UPROOT all describe the same action. When I watch someone picking up a book. I can use any of these verbs interchangeably to describe what he or she is doing. But in Ad Verbum, the "mysterious force" that holds the books to the shelves will accept only some of these actions and not others. The force will allow the avatar to rip or uproot the copybook but not take or get it, merely because the former two actions satisfy the constraint and the latter two don't, even though the semantic or visual distinction between them is nil. Here Montfort is deliberately subjecting the player to the problem known as "guess the verb," phenomenon, where the player knows what he or she wants the avatar to do, but has difficulty finding the specific verb that tells the avatar to do it. When this phenomenon occurs in games, players typically see it a design flaw, because it violates the logic of transparency. In real life, if you know what you want to do and you are physically capable of doing it, you can just do it. Or in a graphical video game, you can just press the button that makes the avatar do what you want it to do. So why should it be any different in an IF game? That's a rhetorical question, but Montfort's answer to it is: because an IF game is *not* real life nor is it a graphical video game. An IF game is neither the real world nor a transparent representation thereof, but rather a computer program in which the user inputs text in response to other text.

In Ad Verbum, both these strategies – representational friction and guess-the-verb – ultimately serve to define the specificity of IF as opposed to graphical video games. Now that IF is largely forgotten and seems incapable of competing with graphical video games, establishing the specificity and the artistic legitimacy of IF is a pressing task. Montfort does this by stressing that the visual and spatial aspects of IF are metaphorical, not literal, because IF is a fundamentally linguistic medium. IF is an independent and aesthetically legitimate medium because of, not despite, its lack of graphics. IF is not an atavistic precursor to the graphical video game but an artistic medium in its own right, because text has unique properties that graphics lack. By situating IF as a textual medium, Montfort is also able to connect it to earlier, more canonical forms of ludic textuality; thus, Ad Verbum contains explicit references to famous constrained texts like Walter Abish's Alphabetical Africa and Georges Perec's La Disparition.

Montfort doesn't refute the allegation that computer graphics are better than words at representing fictional spaces. He tacitly accepts this critique and suggests that the true strength of IF lies elsewhere, in its ability to manipulate the material of language, an ability that graphical video games lack. If the graphical video game is a visual medium, then IF is a textual medium. Visual effects are the proper province of graphical games, while textual effects are specific to IF.

A similar strategy is at work in many other more recent games that exploit the textual properties of the IF browser, although I don't know of any other game that does this to the same extent as *Ad Verbum* does. For example, Jon Ingold's *Insight* (2003) is unwinnable on the first playthrough. In order to win, the player has to play the game until he or she learns a particular word, then restart the game with this knowledge in mind. Jeremy Freese's *Violet*, the winner of the 2008 Interactive Fiction Competition.

features a parser which is personified as the avatar's girlfriend. These effects would be difficult to replicate in graphical video games.

Moreover, if IF is an independent artistic medium in its own right, rather than an atavistic precursor of graphical video games, then the question arises as to whether IF can or should be used for purposes other than games. In demonstrating the independence of IF from graphical games, *Ad Verbum* resembles the genre of puzzleless IF, which uses IF scripting languages but often abandons the elements of spatial exploration and puzzle-solving. The classic example of puzzleless IF is Adam Cadre's *Photopia* (1998) and the genre also includes sophisticated chatbots like Emily Short's *Galatea* (2000).

But Emily Short has also written other games that serve as counterexamples to Montfort's argument, by demonstrating that IF can in fact present the player with an immediate experience of a fictional world, precisely by exploiting strategies that are only possible with text and not graphics. In the next section we examine one such game, *City of Secrets*.

3. CITY OF SECRETS

City of Secrets (2003) is a game about spaces. For most of the game the avatar's goal is simply to explore the setting of the game, known simply as the City, in order to find a mysterious woman named Evaine. The game's puzzles are mostly about overcoming barriers to further exploration, and the primary reward the player gets for solving these puzzles is the ability to explore previously unseen spaces. The City itself is inherently worth exploring because it's a tourist destination, a place of great historical and cultural importance.

The exploration of space in IF is, at least potentially, a visual process. In reading room descriptions, the player can translate them into his or her own imagined version of what the avatar must be seeing. The descriptions in *City of Secrets* invite the player to engage in this process. Short's descriptive language is precise and detailed, but also encourages the player to fill in additional details not mentioned. A sample description is:

The courtyard is paved in stone, and inlaid at the center with a wheeling gold sun. Streets lead out north and south, and a narrow alley west.

On every side the buildings rear back, all metalwork and awnings at the lower levels, sheer plaster above. The most magnificent, however, is the white stone temple at the east side of the court, many stories high and faced with columns and statues [11].

Now this description doesn't tell you what exactly these places and objects look like. Short doesn't describe the precise architectural style of the buildings, the number of buildings, or the specific objects depicted in the statues. Yet nothing stops the player from *filling in* these details and imagining the details Short doesn't provide. The notion of filling in gaps in the text comes from Wolfgang Iser's reader response theory, but in a book on readerly visuality, Peter Schwenger suggests that this process is visual in nature: the reader supplements the author's descriptions by drawing on his or her preexisting repertory of images [10, p. 57]. I imagine the temple in the Sun Court as resembling the U.S. Capitol, but a non-American player might visualize the temple very differently. If Short's descriptions translate what the avatar sees into words, then they aren't literal translations.

Similarly, this game makes limited use of graphics. The images Short includes, however, are more symbolic than representational; they subtly cue the player as to how to visualize the City, rather than supplanting the reader's visualization (see Figure 1).

Here, for example, we see a stylized representation of the sun against a field of orange fading into white. This image doesn't mimetically depict anything in the Sun Court, except perhaps the sun symbol on the pavement. But it does tend to color, literally, the way in which the player imagines the Sun Court. Accordingly, Jeremy Douglas calls the images in this game "ambient illustrations" [4].

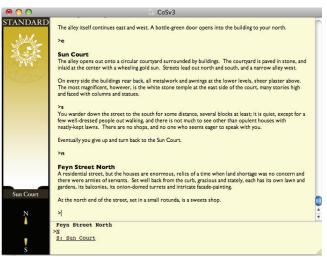


Figure 1. Screenshot from City of Secrets.

When I play *City of Secrets*, the pictures I imagine when I read are neither photorealistic nor richly detailed. I find it hard to clearly identify or describe the pictures I see when I read such descriptions; when I try to fix these pictures in my imagination, they slip away and lose some of their affective quality. Yet I see *something*; I see pictures that flicker in and out of being; pictures that remind me of many real sights or images I have seen, but without fully resembling any of them. I suspect, though I obviously cannot confirm, that what I see is different from what another player would see when playing the same game.

This game activates a *phantasmal* mode of visuality, to use Peter Schwenger's term for the visual experiences shared by both readers and authors of traditional prose fiction. Schwenger explains that in fiction

"[L]iterature consists of a steady stream of erased imperatives," according to Elaine Scarry, imperatives that are often instructions to produce mental pictures. Yet no matter how detailed or precise those instructions may be, they are never comprehensive enough to override the individual's memory bank of images and associations. These play upon the author's dictated pictures, an obbligato of the unconscious, of memory and desire [10, p. 4].

Something similar happens to me when I play *City of Secrets*. The descriptive text tells me what to visualize, but to a limited extent; it leaves certain things unmentioned, and describes others in nonspecific terms. But even if Short's descriptions were more detailed than they are, they couldn't prevent me from forming my

own idiosyncratic images of what she describes. Short's descriptions of places in the City don't override the player's preexisting visualizations of cities, and aren't intended to do so. What results is a complex and shifting interplay between what the author specifies and what the player brings to the equation. This phantasmal mode of visuality is different from, but not inherently worse than, the more mimetic mode of visuality we find in graphical video games.

Furthermore, Short is careful to emphasize *how* the avatar sees what he or she sees. She foregrounds the emotional and affective side of the avatar's visual experience. For example, the description of the Sun Court suggests that it's a grand, opulent place designed to impress the viewer with the power and wealth of the City's government. Yet we also get the impression that this place is artificial and insincere – the description of the mosaic reads "The mosaic is an elegant job and executed in rich materials, but the design has a facile modern quality that does not entirely appeal to you" and the temple is described as "[b]uilt in an old style, but unworn, unchipped, unpolluted" [11].

As a counterpoint to this, another room description, of a nightclub called Scheherazade, reads in part:

Despite the light that leaks in through the windows, the place seems to be trying for a dark and anonymous ambiance, with high-backed booths and wood paneling, a ceiling painted black, and hanging swatches of brocaded purple velvet. The decorations are mostly allusions to the City's distant shady past as an outpost of thieves and smugglers on the Vuine [11].

Again, most of the details mentioned here are not helpful in completing the game, but they do assist the player in visualizing the place and in drawing certain conclusions about it. The black ceiling, high-backed booths, and purple velvet permit the player to visualize what a place with a "dark and anonymous ambiance" might look like. The decorations, involving thieves and smugglers, suggest the reason why the place is "trying for" such an ambiance: it is a place of darkness, of secrecy and anonymity, a hideout for outlaws or at least for people who have something to conceal. But at least this is a place that doesn't seek to present itself as something it's not.

Describing a visual experience in subjective and personal terms is one of the main purposes of ekphrasis. Quntillian states that lawyers should use ekphrasis only where "motivated [...] by the speaker's emotional engagement with and amplification of his client's plight." And ekphrastic poetry and prose generally gives us not a mimetic description of what the speaker sees, but a subjective account of the emotions evoked in the viewer by the object seen. Similarly, Short's descriptions contain passages like:

The dominant feeling is one of incipient dread, as though a treat longed for for years is about to disappoint you. This, this is the City, you remind yourself, where the spice traders ran their ships, and sometimes lost them in the shallows, spilling bright and costly cargos and staining the river as orange as sunset [11].

Such "descriptions" enable the player to replicate the avatar's emotional responses to what he or she sees, and to supply corresponding images. This is important since in IF, unlike in static forms of visual prose, the player pretends to be the person whose visual experiences are reported and behaves accordingly.

Whereas the *Ad Verbum* avatar is little more than a mask for the player, the *City of Secrets* avatar is a character in his or her own right: we know, for example, that he or she comes from the lands north of the City, works in a factory, and was raised to value "pragmatism, austerity, [and] simple determination" and to disapprove of "the decadence and self-indulgence of the south" [11]. What results from Short's emotionally resonant descriptions is an imaginative fusion between the player and this unique individual that he or she impersonates.

So this game combines the emotional vividness of visual prose with the ability to interact with the visualized world through an avatar, a combination which is perhaps unique to IF. The existence of such an artifact implies that interactive fiction can and should continue to exist no matter how powerful computer graphics have become. For Short, IF offers a subjective and yet participatory mode of visual experience which complements, rather than being mutually exclusive with, the more objective mimetic visuality of graphics. This is the second possible way in which IF can answer the threat of graphics.

This point is reinforced by the symbolism of City of Secrets. The game's villain, Thomas Malik, and its heroine, Evaine, are associated respectively with light and dark. The Sun Court and Scheherazade, respectively, are two of the spaces associated with these characters. Malik's personal symbol is the sun and he uses magical illusions to make the City seem to be in perpetual daylight. He uses numerous hidden cameras to keep a close watch over all the City's citizens. He represents the gaze that enlightens and makes visible in order to dominate, in order to exercise the power that comes with superior knowledge. Evaine is nicknamed the Dark Lady and is associated with darkened spaces because her dominant values are concealment and secrecy: she represents the invisibility that rebuffs Malik's attempt to make everything visible. Where everything is visible, nothing is left to the imagination. For Short, the ability to activate the player's visual imagination is the property of IF that's missing from graphical video games.

Other more recent games that similarly rely on spatial exploration and readerly visualty include Gayla Wennstrom's *Finding Martin* (2005) and L. Ross Raszewski's *Moments Out of Time* (2001, revised 2006), although my impression is that IF works of this type are less common today than IF works that exploit the unique properties of text and of the browser. If so, this is perhaps partly for practical reasons: games like *City of Secrets* are extremely time-consuming and tend to be too long for the annual Interactive Fiction Competition, which is the primary venue for the release of new IF works. As a player who personally enjoys this type of game, I find this somewhat frustrating and I would be happy to see more games that make extensive use of visual prose.

So in conclusion, these two games represent two alternative responses to the perception that IF has become obsolete due to the increasingly sophisticated visuality of computer graphics. Both games implicitly accept that computer graphics are better than IF prose at mimetically rendering the gameworld. Montfort argues that this was never the goal of IF in the first place because IF is a textual medium, whereas Short instead argues that IF has access to a specific mode of visuality that's unavailable to graphics. I cannot disagree that graphics have certain advantages over text in terms of transparency. Yet IF remains artistically relevant today, if not commercially viable, because regardless of the power of computer graphics, text still has access to effects that are

unavailable in graphics – including visual effects. And as demonstrated by a comparison of *Ad Verbum* to *City of Secrets*, the question of visuality has been and will remain central to the history of the genre.

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