Characters in Computer Games: Toward Understanding Interpretation and Design

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ABSTRACT
Interpretation of characters is a fundamental feature of human behavior. Even with limited information available, people will assign personality – even to inanimate objects. Characters in computer games will be attributed personality based on their appearance and behavior. The interpretation of these characters affects the whole game experience.

Designing the protagonist character in computer games is different from the design of static characters (e.g. film or literature), because the player's actions will affect the nature of the character. There are, however, many ways to control and guide the actions of the protagonist and thus the character's nature. By setting goals, scripting pre-defined actions and choosing what kind of actions to implement, the game designer can restrict the player's freedom. This, together with the characterization of the character, will affect the interpretation of the character.

Keywords
Characters, Design, Interpretation

INTRODUCTION

Many computer games involve the use of characters. The careful design of these characters is a powerful way to strengthen the gaming experience. Although there is plenty of research on characters including their function and design, this area has been more or less neglected in computer games research. This article analyses the importance of characters. Characters are seen as motivators of action. Additionally, this article proposes ways of using dramatic writing of characters as a game design approach.

Steve Meretzky points out the importance of the main character in his article *Building Character: An Analysis of Character Creation*. He accentuates the importance of knowing the character thoroughly and of making good characterizations of it i.e. designing everything observable about the character. He argues that a good primary character in a game is the one most likely element to leave a positive lasting impression on the player. [12] *The History of Tomb Raider* also highlights how import an aspect the character design was of the game series' success:

> Lara Croft enjoys a very detailed and well-developed character profile. Lara Croft's virtual personality helps draw you into the game, setting up your relationship of sorts with the game's central character and her resulting plight. [3]

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Still, one issue surrounding computer game characters has been, whether they actually are important as parts of a game.

According to Forster, literary characters can be divided into flat characters and round characters. Flat characters are simple and they can usually be described with one sentence. Their actions are predictable. Round characters are believable even when they surprise the reader. A round character should indeed be capable of surprising the reader. [7] Based on Forster's classification Gonzalo Frasca has noted that most game characters would be judged as flat. Moreover, Frasca questions whether the protagonist (the character that the player controls) in a game even is a real character, as it will act merely as a vessel of functions, a cursor for the players actions. [8]. In addition, Frasca claims that game characters are flat (or inexistent) for a reason: "[t]he question that needs to be answered next is 'what happens next?' and not 'why the character behaved in such a way?'" [8].

We believe that characters in games are usually flat due to the sad fact that no one bothered to design them well. While Frasca's argument that "[t]he more freedom the player is given, the less personality the character will have" [4] (and Steve Meretzky's similar consern [12]) is valid, he seems to have overlooked the fact that players never have limitless freedom in the game. Indeed, a system without restrictions and rules would not be a game anymore [5,10,4] The rules, on the other hand, will always limit the player's freedom (or, at least restrict the players progress in the game, should he choose to act against them). As we will show, limiting a player's freedom is an effective and frequently used method of creating personality to the protagonist character.

It is easy to agree that players are probably most interested in the question "what happens next?" It is perfectly reasonable that the question "why did the character behave that way?" loses some of its importance, as the player who just made the character act knows exactly why it acted as it did.[1] However, we don't believe that this viewpoint excludes the need of good characters. We will show how the design of the character can be used to help the player identify what s/he can do, how s/he can act and – essentially – find the answer to the question "what happens next?"

This paper will discuss the design of computer game characters, mainly the protagonist. We will show how the nature of the protagonist is interlinked with the mechanics of the game and vice versa: how the functions of a game will affect how the character will be interpreted. By applying methods from dramatic writing and literary theory, we provide useful tools for writing and designing computer games around the nature of the protagonist.

It is important to note that characters in games appear in very different roles and their function in a game is dependent on their surroundings (like in literature or film). For example the function and role of a character is different in a computer football game, a role-playing/adventure game (e.g. Tomb Raider, Eidos Interactive 1996-2003, or Deus Ex, Eidos Interactive 2002) or a beat-em-up game (e.g.Tekken 4, Namco 2001/2002). Although many of the examples of the text focus on role-playing/adventure games, in which characters usually portray a very broad spectrum of features and characteristics, the methods presented are not exclusively applicable to this type of games. The examples have been chosen only in order to highlight the aspects considered. The methods we present can equally beneficially be used to script the protagonist of any game that has one (i.e. the player is controlling a person of sorts). For example Tekken

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[1] Providing the controls of the game work; e.g. in Tomb Raider – Angel of Darkness (Eidos Interactive 2003) bad controls make Lara seem clumsy.

characters are defined by their fighting style more than anything else. Thus the focus of the design should change accordingly with the sort of character one is designing.

THE INTERPRETATION AND FUNCTION OF CHARACTERS IN COMPUTER GAMES

Literary theory argues that characters are constructed in three different ways: 1) The character can tell other characters (and the audience) about him/herself. Alternatively 2) another character can describe the character of interest. Finally, 3) the actions of the character define and describe the nature of the character. [14]

It is evident that all of these ways can be used and are used in computer games to describe the characters of the game to the players. As long as the player has no direct control over the character, the methods can be used just like in literature, drama or film.

The protagonist (that is, the character that the player controls) is an exception. Action in part is what defines a character [14, 1] What this means in the context of computer games is that as the player controls the character, the actions the player takes in the game also define what the character is like. However, actions can be restricted and directed and so can interpretations[2].

In this section we explore, by analyzing computer games, how a player's possible actions can and should be restricted and directed to support the consistent nature of the protagonist. In games, these methods can be divided as follows:

- Building pre-defined functions of the character
- Setting the goals of the game
- Choosing and implementing possible and impossible actions
- Characterization.

Predefined functions

Predefined functions are the parts of a game where the designers have control over the protagonist and it's actions. This control can take different forms (this list is not meant to be exhaustive):

- Cut-scenes: Static, pre-designed movie-clips take the control away from the player.
- Dialogue: The player can have some control over the dialogue, but the lines are always predefined. (Dialogues can be alternatively presented fully in cut-scenes.)
- Character animation: The style of the character's movement and its mannerisms and facial expressions.

For example, Thief II (Eidos Interactive 2000) uses cut-scenes in the beginning of every mission where Garrett recounts the details and background of a mission (and the reasons why he chose to do it) in a personal way. The cut-scene hints at Garrett's cynicism and also teaches the player details about the character's thinking, his attitude and point of views. The cut-scenes are thus used to construct the nature of the protagonist similarly as in film or literature.

In The Secret of Monkey Island (LucasArts 1990) parts of the dialogue of the protagonist are presented in cut-scenes or cut-scenes where the player is offered choices on what kind of stance s/he wants to take or what direction s/he wants the game to take. The structure of the dialogue and the choices offered to the player in The

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[2] E.g. Hirsch [9] discusses methods for directing interpretation in detail.

Secret of Monkey Island present Guybrush Threepwood, the protagonist of the game, in a consistent way. The player is not offered choices that would be alien to Guybrush at any point.

Ico in Ico (Sony Computer Entertainment 2002) needs to encourage Yorda to follow him. He can either call her or lead her by holding her hand and moving. These actions are always animated and in them Ico seems kind and patient towards Yorda.

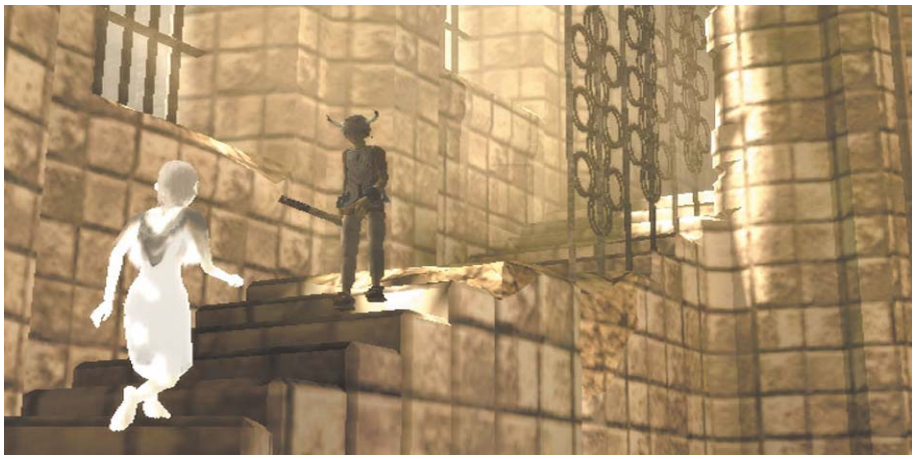

Figure 1. Ico calling for Yorda to follow him up the stairs.

In Dead or Alive 3 (Tecmo 2001) the characters have a set of different attacks, which are all predefined functions. These also portray the character in certain ways. E.g. some of the Drunken style Kung Fu master protagonist's movements will end in him lying leisurely on the ground even in the heat of the fight. These movements make him seem like a very relaxed and easy-going person – or perhaps annoyingly arrogant to the opponent.

Some people may claim that the thought of people attributing personality to every character seen on the screen is overstated. Some game characters can certainly seem quite distant from proper characters. E.g. in Pac-Man the "protagonist" is a ball with a mouth. It doesn't seem to have much of a personality. However, Byron Reeves and Clifford Nass have showed strong evidence that people have a powerful tendency of assigning personality traits to fictional characters – and even inanimate objects invoke a sense of personality. This applies, even if an object doesn't have a special set of psychological traits. They argue that assigning personality traits is automatic and something very basic for people. Even if personally is assigned with very limited information, inconsistencies in the presentation can diminish purity of the personality [10]. Thus consistency of presentation is important in any type of game, using any type of characters.

A particular form of predefined action is the way other characters in the game act towards the protagonist. At it's simplest; characters can describe (talk about, refer to etc.) the protagonist. E.g. in Silent Hill 2 – Director's Cut (Konami 2003), the player will come upon a letter/dialogue describing the protagonist. Other characters' actions or reactions to the protagonist's actions also describe aspects of the protagonist. E.g. in Ico Yorda's reaction towards Ico is trusting and obedient. This will further establish the nature of the character as friendly and caring.

Goals

Goals are one way to reduce a player's freedom in a game: If a player wants to make progress in a game s/he needs to achieve goals set by the game. Goals are a very powerful tool of presenting the nature of the character. Goals can be presented to the player directly (e.g. as a list of goals) and this makes them a very straightforward objective towards which the player will guide the character. Alternatively goals can be given less directly, as in Silent Hill 3 (Konami 2003), where they are implied by the back-story and setup of the beginning of the game. Goals, when given explicitly, will imply a lot about the character. The goal to smash a city will imply that the character actually is strong enough to do that and, that s/he doesn't care whether a whole city is put to ruins. Vice versa, the character affects how reasonable the goals seem and how the player will attempt to solve the problems s/he is presented with. The use of implicit goals requires solid characters that make the goals seem natural and reasonable. If the goals (whether given or implicit) and the interpretation the player makes of the character are inconsistent, it will affect how the whole game is interpreted.

One example of the use of goals to communicate character is the goals in Ico. The game ends if Yorda is captured (before the predefined point at the end of the game, where capture is unavoidable). This means that in order to succeed in the game, the player must take good care of Yorda. Without Yorda, Ico cannot open the magic doors, so he will need to keep the girl with him or get stuck in the game. Together with character animation (e.g. Yorda is scared of the shadows, but not of Ico) these two game mechanics illustrate Ico as a caring character.

As another example let's take Garrett, the protagonist in Thief II. The goals present him as a professional thief, with some concerns for other people and some respect for human life. The goals of the game, during its progression, present an anti-hero that in the end is forced to stop the villains' evil plans. An interesting detail is that game difficulty levels are affected by restricting the amount of killing Garrett is allowed to do while fulfilling his missions. Garrett is a potentially much more brutal person on the moderate difficulty level than he is in on the expert level, as challenge is added by restricting the amount of killing allowed (missions on the expert difficulty have the additional goal "don't kill anyone").

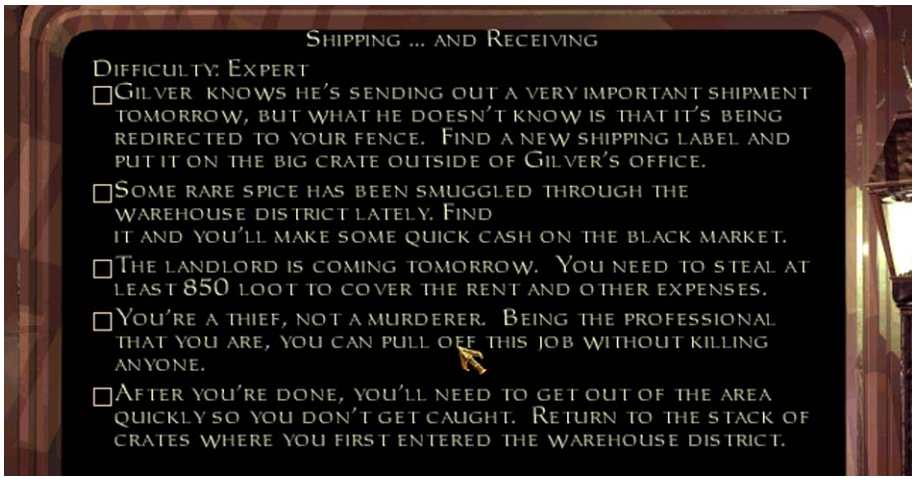

Figure 2. Goal list (expert level) from Thief II.

An important aspect in Thief II is that every goal presented is very well motivated. This means that the goals are a product of the situation where Garrett is and, because of this,

the goals also always seem to be a very plausible and reasonable approach to handling the problem or situation Garrett is in at each time.

Possible and impossible actions

Implementing certain types of actions is another way of constructing a character. One extremely straightforward example is Hulk (Universal Interactive 2003), where the protagonist(s) Bruce Banner/Hulk have totally different abilities. Hulk has an ability to damage or break almost anything in the game world. While playing Hulk, the player can only combat against enemies, pick up objects and use them as weapons, move around the game word or break things. When Hulk in transformed back to Bruce Banner the actions available to the player change. Banner has evasive maneuvers that he can use to move unnoticed. Banner can also use and manipulate various objects in the game world (but not break them with physical force). The game presents a very simple way to sketch two totally different kinds of characters and their personalities by making some actions possible or impossible. This in conjunction with predefined functions i.e. how Banner's and Hulk's facial expressions and mannerisms are animated construct two different characters or two sides of one character.

Similarly in Thief II (Eidos Interactive, 2000) aspects of Garrett, the protagonist of the game, define what Garret can do, what he is good at and what not. The player of Garrett cannot freely initiate conversation with other characters. He can, however, listen to other characters having discussions or talking by themselves. The profession of a thief further implies some of his abilities, like stalking, climbing and picking locks, which he can use to achieve a goal.

Garrett can also use a bow, sword or blackjack to knock out guards. However, Garrett is not very good with a sword, hence fighting through guards is not usually a very good approach. Yet he can easily knock out guards if the player can manage to get Garrett close enough to the guards by stalking. Garrett's strengths and weaknesses define some aspects of the characters and his nature. By looking at his skills, you can tell that Garrett prefers cunning solutions to problems over the use of force. He can for example sneak past several guards unnoticed but if the player tries to fight his way through, he will probably end up dead.

In Grand Theft Auto III (Rockstar Games 2001), the player's lack of communication is brought to extremes. The protagonist can go to meet other characters, mainly his criminal contacts to get jobs, but even then the protagonist usually just listens to other characters talking. The only "communicative" actions left to the player are either sounding the horn of the car or picking up a whore and having action with her. This guy doesn't even talk to himself.

Actions made possible in Grand Theft Auto III are moving by foot or by car (and of course hurting people with the car) and using weapons. The character can steal a car, but not buy one. Although the game offers some possibilities to perform tasks other than the missions from crime bosses (like driving taxis, police cars, ambulances or fire trucks), these new occupations are available only by first stealing the car in question. These possible and impossible actions present an amoral character that is an outsider from society. His only choice is to lead a criminal life.

"47" in Hitman 2 (Eidos Interactive 2002) also presents a limited set of options regarding which kind of actions are available. The name of the game is informative enough: the aim is to kill certain people, not engage in social activities. Hence, there are lots of different ways of killing people but not many possibilities for other action. In addition, 47 can stalk people, disguise himself by stealing other people's clothes and pick locks. In the garden of his home base, he can practice killing on a scarecrow – but

not tend to the plants. This could be seen as inconsistency between the character's presented background (trying to give up a life as an assassin), or as an indication of change in the character: he has fallen back to his previous life

Characterization

Characterization, which is designing the observable aspects of a character, is an important part of building a character. This is because of the fact that physical abilities and features contribute to assigning personality traits to the character. Several aspects of the character can be communicated to a player by characterization. In Hulk, the sheer difference in size implies different traits to Hulk from those held by Bruce Banner.

Characterization is strongly linked with the definition of pre-defined functions like animation of facial gestures and movement. These are all visible features and hints of the nature of the character and they should be used to indicate possible actions and intentions. Together, these turn the character into a potential for action, in a sense the cursor Frasca indicates. Moreover, the functionality of the character is strongly dependent on the integrity of the character. Inconsistent hints can lead to situations in which the intentions and possibilities of the character are not clear enough and the player gets confused.

In conclusion, characterization in computer games doesn't differ from the design of any character in other media and there are guidelines on how to do this (e.g. [12]). In essence, designing the visuals of a character is part of the fine-tuning work done, after the designer has come up with an inherently solid character.

DESIGNING FUNCTIONS OF THE PROTAGONIST

Our analysis shows how games construct natures to protagonists and other characters. By designing the characters of the game in detail and using the character design as a fundamental part of game design it is possible to create complex and well designed protagonists for the games. In this chapter we present a method for designing characters and integrating them as a fundamental part of a game.

Robert Berman lists six important aspects of dramatic personae:

- Dramatic need provides a purpose, focus and direction of story; it is the reason why the protagonist is in the story
- Point of view how does the character see the situation(s)
- Attitude explains the stance the character takes to the situation(s)
- Change makes the character intriguing and realistic
- *Weakness/negative trait* makes the character realistic and is also a convenient way of building obstacles. This is also perhaps the aspect that the character will be able to change in her/himself.
- Mannerism/*habits* Identifiable parts of the character that differentiate it from other characters

[2]

These aspects are all important parts of game design, too. Dramatic need is crucial in order to give the character a good reason to be in the game. Conflict and struggle, which are the basics of dramatic need, will translate directly into character goals. These describe to the player what to do in the game. If the dramatic need isn't there, the player will feel no need to act and the goals of the game will feel superimposed and shallow.

The point of view and attitude of the character give the player a reason plus means and methods to act. These explain why and how the character is likely to act and thus guide the player to act within the limits of the character (and the game). Game mechanics should support this kind of action.

The character's weakness or negative trait is an ideal way of guiding the player towards a certain type of action. If something is clearly lethal or impossible to achieve, players will certainly try other options to solve the problem. Disadvantages are also useful for making possible actions sufficiently difficult. They also make characters more interesting than characters without flaw; how boring would Superman be without his weak spot kryptonite.

Mannerisms and habits highlight the characters personality. Actually, any predefined animation may be interpreted as a mannerism of the character. These can be used to make the characters lifelike and interesting, or annoying as hell.

Although deliberate dramatic change can be difficult to implement in a game, some game designers, like Warren Spector [15], consider it important. In some games the only change in the character will be the player learning to control the character better and master the game (e.g. Tekken, DOA and other manually demanding games). In other games, change is used to keep the action interesting and to present the player with new methods of acting. Often this is achieved by adding to the character's skills along the road. The development of skills can, however, affect the game more drastically. For example JC Denton, the protagonist in Deus Ex (Eidos Interactive 2002) will develop during the game. The choices the player makes (which skills to invest in) will probably also direct the behavior of the character in the rest of the game, as the player probably prefers these skills when handling problems in the future. The development of skills and abilities offers a possibility to change the character and play the game in slightly different ways.

Moreover, dramatic change can explicitly be expressed through the goals of the character. If the change is natural, so will the goals be. In Deus Ex JC Denton's goals in the beginning of the game express his commitment to his employers. In the course of action JC's goals change as he (and the player) finds out details that contradict his earlier beliefs concerning his employers and his own values. This change is explicated as new goals.

Designers should know their characters in detail before they start to design characterization, rules and game mechanics. Lajos Egri has presented a methodology for writing dramatic personae with depth. He sees a character as the sum of her/his physical, psychological and sociological qualities [6]. We believe that Egri's method is usable in the context of computer games: his focus is on the conflict that rises from the personality and the goals of the characters in the story. This approach is analogous to building conflict between the characters in the game.[3]

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[3] We have previously shown, how the opposing needs of characters will introduce conflict in a game. We see conflict as a basis of any game design. In our point of view, a game's structure can be seen as a repetition of the following form: As the character's goals are met with obstacles, the situation will lead to conflict and struggle. Solving the conflict ends the struggle and the player reaches achievement. [11].

The three-dimensional character

Egri presents an outline for a "bone structure" for building what he calls a three-dimensional character. These dimensions are presented in table 1, with some additions and modifications made by us:

Physiology	Sociology	Psychology
Sex	Class	Moral standards, sex life
Age	Occupation	Goals, ambitions
Height and weight	Education	Frustrations, disappointments
Color of hair, eyes, skin	Family life	Temperament
Posture	Religion	Attitude towards life
Appearance and distinct features (tattoos, birthmarks, etc.)	Race, nationality	Complexes, obsessions
Defects (deformities, abnormalities, diseases)	Place/Standing in community (i.e. social status among friends, clubs, sports)	Imagination, judgment, wisdom, taste, poise
Hereditary features	Political affiliations	Extrovert, introvert, ambivert
Physique	Amusements, hobbies	Intelligence

Table 1: Bone structure for a three-dimensional character [6] *with adaptations.*

Every item listed in Table 1 is not always needed for a character. For example a small child will probably not have any formal education. The list is also not exhaustive and its function is merely to be a checklist about the areas a designer needs to think about when constructing complex characters. The skills and abilities of a character must reflect its physiological, sociological and psychological profile. For example, a gang member probably has different skills and abilities than a jet setter, even if they are the same otherwise, e.g. their physiological and psychological profiles are identical.

Egri's sociological profile will determine what kind of skills, abilities and professions are natural to the character. For example, a character with poor parents is more likely to become a thief than a wealthy character; or at least the character will need different motivations or reasons to why he is currently a thief than a poor character would. A character's profession, on the other hand, limits the skills and abilities s/he will have or what s/he will be good at. When a designer knows what a character should be able to do, this can be translated into game mechanics. For example a player can guide Garrett in Thief II through shadows. As long as Garrett remains motionless in the shadows, guards and other characters will not see him, except if they come extremely close to him (literally bump into him). Other characters will probably not spot him even if he moves in the shadows, as long as the surface doesn't cause noise. On the other hand, if Garrett stands in or moves through well-lit areas, other characters will spot him if he is in their line of sight. Character features motivate these mechanics. In the final product (the game) the mechanics will be interpreted as traits of Garrett's, that is, skills that are part of his profession.

The sociological profile also describes the character's family, friends and probable contacts and acquaintances. For example Garrett is likely to know a fence (dealer of stolen property), whereas some high-class character would not. The sociological and psychological profiles together with the situation the character is in translate into goals for the protagonist.

The basic idea is that every character does things in his personal way, which in turn is defined by the character's three dimensions. By adjusting the dimensions according to the desired goals of the games one can create both protagonists and other characters that fit in with the desired environment. Conflict in the game then arouses from opposing qualities of the characters or the environment of the game. As pointed out earlier, designing and implementing a non-protagonist character is quite similar in games as in other media. Next we focus on how the nature of the protagonist can be implemented in the form of game mechanics.

The Protagonist and Game Mechanics

The design of a game should reflect the needs of the protagonist. In spite of which idea was first; whether the character gave basis for the game or the character was written according to the needs of the game, the mechanics are what, in the end, constitute the nature of the character.

Let's get back to our earlier example about Hulk and take a brief look at the character dimensions of Bruce Banner and Hulk. Bruce Banner is an intelligent and well-educated scientist. He is not particularly strong or athletic. If Banner gets angry he changes into Hulk. Hulk is extremely strong, resilient and he is notably bigger than normal humans (and Bruce Banner) and very muscular. When Hulk gets angrier he also gets stronger. He is not very clever and most skills Banner has Hulk does not have. Hulk's most prominent skill is that he is able to break almost anything.

To be interpreted in the game, these qualities must be implemented in game mechanics. As we argued earlier, this can be done in many ways. However, it is best done by designing and implementing what actions are possible and impossible and on what terms. Other ways of expressing these aspects of characters will be only cosmetic and have no impact on the game experience itself. E.g. implicitly telling the player that Hulk actually is incredibly strong (through cut-scenes or character dialogue) but not making him that in the game will only contradict the way the player interprets the character. Hulk in the game will be interpreted as weak and puny, if he acts that way.

Next we will inspect closer, how character design translates into specific game mechanics. The following presents some requirements that differentiate between Hulk and Bruce Banner.

Hulk:

- Is able to break or damage everything with pure force.
- Is not able to use equipment (except as a weapon and hit somebody with it or throw it at them).
- Gets stronger when enemies hit him.

Bruce Banner:

- Is not able to break or damage most things with pure force.
- Is able to use equipment.
- Is able to move unnoticed easily.

These features are then implemented in the game structure: Hulk's attacks make N amounts of damage – enough to damage or destroy most things. Bruce Banner's attacks are only half that efficient and usually not enough to break or damage things. Bruce Banner can interact with or manipulate objects in the game word, whereas pressing the same buttons on the control makes Hulk attack the object. The player will have more powerful attacks available for a while after Hulk has received damage. Most other characters (the game engine/AI) won't pay attention to Bruce Banner when he walks in the city and Banner has the ability to hide and sneak. Hulk cannot go unnoticed if there are other characters nearby.

Of course these mechanics are emphasized and brought forth to the player by the physical appearance and mannerisms of Hulk and Bruce Banner. Obviously, it is important that the visuals and their prescribed actions present two different characters instead of one. The beautiful design would get totally lost without the visual change between characters. Additionally it is important that the change of mental state within a character is transmitted to the player e.g. Hulks facial expressions will show more anger when he receives damage (and imply that he consequently is getting stronger). Characterization is discussed in more detail elsewhere [12].

CONCLUSION

Designing protagonist characters for computer games is a difficult task, but necessary. Although it is true that the player controls the character in the final game, game designers have no reason to give up on the construction of character. Even if the player is the one who holds the joystick, the game designer still controls the character.

A perceived character will direct a player's decisions to act. Character interpretation can be involuntary, even subconscious, but still affect a player's attitude towards a game. Therefore, if a game has a protagonist character, designing with its needs in mind should be a fruitful approach. In this paper, we have pointed out explicit ways of affecting the perception of characters. The design section exemplifies how character aspects can be translated into game mechanics.

The needs of the protagonist define the needs of the player and will guide them towards the goals of the game. We propose the use of a three-dimensional approach of aspects to build rich and well-founded protagonist characters. By then fine-tuning the game mechanics accordingly, the game will reflect and support the solid nature of the character.

Making actions and goals natural for the character doesn't mean that the solutions will be trivial or easy to achieve. On the contrary, natural-seeming goals provide a good background upon which to build intricate and demanding conflicts – the basis for an enjoyable game.

REFERENCES

1. Aristotle, *Poetics,* London: Penguin Books, 1996.
2. Berman, R.A. *Fade in: The Screenwriting Process,* Studio City: Michael Wiese Productions, 1997.
3. Blache, F.I. and Fielder L., History of Tomb Raider. *GameSpot* Available: http://www.gamespot.com/features/tombraider_hist/
4. Caillois, R. *Man, Play and Games,* Urbana: University of Illinois Press, 2001 (1961).
5. Costikyan, G. "I Have No Words & I Must Design: Toward a Critical Vocabulary for Computer Games," in CDGC Conference Proceedings, 2002, pp. 9-33.
6. Egri, L. *The Art of Dramatic Writing,* New York: Simon & Schuster, 1960.

7. Foster, E.M. *Aspects of the Novel,* London: Penguin Books, 2000.
8. Frasca, G. "Rethinking Agency and Immersion: playing with videogame characters," in Siggraph 2001. Available: http://www.siggraph.org/artdesign/gallery/S01/essays/0378.pdf.
9. Hirsch, E. D. Jr., *Validity in Interpretation,* New Haven: Yale University Press, 1967.
10. Järvinen, A., Heliö, S. and Mäyrä, F. *Communication and Community in Digital Entertainment Services: Prestudy Research Report,* Tampere University Press, 2002.
11. Lankoski, P. and Heliö, S. "Approaches to Computer Game Design - Characters and Conflict," in CGDC Confrence Proceedings, 2002, pp. 311-321.
12. Meretzky, S., Building Character: An Analysis of Character Creation. *Gamasutra* 2001. Available: http://www.gamasutra.com/resource_guide/20011119/meretzky_01.htm.
13. Reeves, B. and Nass, C., *The Media Equation: How People Treat Computers, Television, and New Media Like Real People and Places,* Stanford: CSLI Publications, 1998.
14. S. Rimmon-Kenan, *Narrative Fiction: Contemporary Poetics,* London: Routledge, 2002.
15. Spector, W. Remodelling RPGs for New Millenium. *Gamasutra.* 1999. Available: http://www.gamasutra.com/features/19990115/spector_01.htm.