

M. Gennert (CS)  
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LITERARY VALUE  
IN VIDEO GAME TECHNOLOGY

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of the  
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By

.....  
**Petre Rontea**

Date: 2/27/2007

Approved:



.....  
**Professor Michael A. Gennert, Advisor**

## Authorship

### *Abstract*

Rontea, Mercado

### *Introduction*

Mercado, Rontea

### *Focus Question*

Rontea, Mercado

### *Problem Statement*

Mercado, Rontea

### *Overview of H.B. 1381*

Rontea

### *Analysis of H.B. 1381*

Mercado

### *Overview of H.R. 5912*

Mercado

### *Analysis of H.R. 5912*

Mercado

### *Overview of MSAC*

Rontea

### *Analysis of MSAC*

Rontea

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Rontea

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Rontea

### *Overview of Sex in VG*

Rontea

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Rontea

*Methodologies Overview*

Rontea, Mercado

*Interview with Prof. Ciaraldi M.*

Rontea

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Rontea

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## **Abstract**

This project will examine the ways to assess literary value in video games, as well as the responsibility of developers to include literary value in video games. We will examine the impact that literary value has on video games from a social standpoint, as well as examine case studies and legislation related to literary value in video games as well as other media. We will also attempt to build a decision tree model that will help us classify literary value as 'absent', 'low', 'moderate', 'high'.

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*Brenda Brathwaite*

Interlocutor.

*Professor John Sanbonmatsu*

Interlocutor.

Michael Ciaraldi

Interlocutor.

*Carlos A. Mercado*

Contributor and Collaborator.

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## Introduction

The video game industry has been attacked over sex and violence during the last few years.. Ever since its early days, with the concern of the amount of violence in Doom and Mortal Kombat, there have been strong responses whenever the industry commits, to the minds of its opponents, an error in judgment concerning ratings or content.

This project looks at opinions on this topic from legislators and video/computer game developers, as well as those involved with the greater video game issues at large, in an effort to find a common ground. It also examines case studies and case law dealing with other forms of media, including music, books, and movies. Past court rulings and current government bills seek to find a level of literary value that is appropriate at different levels for different age groups. It becomes difficult, then, to construct something that effectively rates literary value acceptable for minors. The main goal of our project is to show the current level of literary value in video games, as well as its importance; and to answer the question of who or what decides it.



### ***Focus Question***

What gives a game literary value and what are the responsibilities of video game makers to include literary value in video games?

### ***Problem Statement***

The question of literary value is one that is difficult to answer, as it is not simple a matter of defining what it is. From that question, 'What is literary value?', one needs to be able to answer the questions of who should define it, is there a way of universally defining it, and, most importantly for this project, how it applies to video games and video game technology. Because of the way technology impacts society on a daily basis, it is important to make sure that it has something worthwhile to impact us with. The question of responsibility, while secondary to the project, is an important one. The video game industry as a whole may or may not have a civic duty to include or have literary value in their products.

## Literature Review

### *Introduction*

This section presents an overview and an analysis of H.B. 1381, H.R. 5912, Murder Sex and Censorship, Hot Coffee Scandal, Sex in Video Games and James Joyce's Ulysses. All of these cases have revolved around the term 'literary value' and have used them in context.

The main reason why we have selected these cases is because of their direct relationship with the term literary value and because of their major potential to help us formulate questions for our interlocutors which in turn will help us design our survey.

## ***Overview of H.B. 1381***

In Louisiana, governor Kathleen Blanco has signed H.B. 1381 covering violent video games. “This bill empowers a judge to pull inappropriate games from store shelves and fines persons who are guilty of selling such a game to minors with fines of up to \$2000 plus a prison term of up to one year” (Carless). The main purpose of the bill is to prove Louisiana’s commitment to protect its citizens from ‘physical’ ‘psychological’ and financial harm during the time in which they are particularly vulnerable due to their age and immaturity.

As a response to the bill the Entertainment Software Association and Entertainment Merchants Association have announced that they are filing suit against the bill. On March 31, 2006, The Honorable George Caram Steeh, US District Court, Eastern District of Michigan, stated that video games were ‘expressive free speech, inseparable from their interactive functional elements, and are therefore protected by the First Amendment.

The president of Entertainment Software Association, Doug Lowenstein, said that the bill is an unnecessary effort because both parents and industry are working together to ensure that videogames are purchased responsibly. Moreover, he accused Louisiana’s politicians of wasting the taxpayers’ money saying that ‘the taxpayers of Louisiana will end up having to pay for the legislature’s reckless gamble’.

## *Analysis of H.B. 1381*

Louisiana bill 1381 is a bill that formally makes selling PC or video games to minors a crime, sufficing that these criteria are met: that someone can use “contemporary community standards” to determine that the game appeals to a minor's “morbid interest in violence,” the game is considered too violent for minors, and that the game lacks any real value for minors. The final criterion of this bill is something that is closely related to the focus of this project. The actual criterion is written, “the game, taken as a whole, lacks serious literary, artistic, political, or scientific value for minors.” It explicitly states literary value being a proverbial bar to judge the game’s content by. Unfortunately, because it is difficult to universally define literary value, questions about the language of the bill could arise, such as who defines 'literary value' or 'contemporary community standards' in the state of Louisiana. Since people's opinions of what is acceptable will change from state to state, and even from street to street, simply stating that anyone can use their standards to determine whether or not a game is acceptable, or forcing communities to adhere to a standard that may be too lenient or strict (depending on the community) is a poor way of policing video games.

## *Overview of H.R. 5912*

House of Representatives bill 5912 is also known as the “Truth in Video Game Ratings Act.” Its main purpose is explicitly stated at the beginning of the document, “to direct the Federal Trade Commission to prescribe rules to prohibit deceptive conduct in the rating of video and computer games.” It is in two main parts. The first part of the act defines three criteria for this deceptive conduct, ratings games only on part of the content, game companies withholding content to achieve a different rating, and gross mischaracterization of content. The second part of the act charges the Comptroller General to conduct a study on the following subjects: the effectiveness of the ESRB<sup>1</sup>, the question of peer-reviewing for the ESRB rating system, the question of an independent ratings system, the “prevalence of marketing video and computer games to audiences that fall under the age-based content of those game (H.R. 5912 3.18), and the question of a universal rating system for all visual media. They also ask the Comptroller General to submit a report of his findings no later than 180 days after this bill is enacted.

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<sup>1</sup> ESRB: Electronic Software Rating Board

## ***Analysis of H.R. 5912***

H.R. 5912 is written with the intent of making sure that content in video games is accurate and deserving of its rating, as well as making sure that the ESRB is accurately rating their video games. The language of the bill is effective, as the criteria outlined in the first part of the bill can still be applied regardless of what happens in the second part of the bill. For example, if at the conclusion of his study, the Comptroller General recommends that a universal ratings system would be more effective, and it is implemented, video game developers and companies would still be held to the same standards outlined in the first part of the bill. As to the question of 'literary value,' H.R. 5912 can be interpreted as helping to keep literary value in games, and making sure those games are able to be distributed and sold. However, there is always a risk. For example, a game that can be considered to contain literary value (however it may be defined), but withholds content for some reason, may not see the light of day, as opposed to a game lacking any value, but completely examined and reviewed. It becomes the responsibility of the developers and companies to ensure that their game is complete and ready when it is sent off to be reviewed.

## ***Overview of Murder, Sex and Censorship***

In 'Murder, Sex and Censorship (August 10, 2006 Gamasutra), Brenda Brathwaite, is putting face to face government and video game industry representatives to discuss the effects of massive legislation against 'ultra-violent' videogames. As stated by Brathwaite, 'the nutshell of the debate is that over the last year over a dozen bills targeting video games were put before state assembly and senate throughout America'.

During the debate one of the government representatives complained that the ESRB rating system doesn't work. As a proof for his statement, the government representative choose the 'Hot Coffee Scandal' which is a mini-game hidden inside GTA San Andreas that leads to sexual encounter. His argument was that parents can't rely on a rating system which rates games on a trust policy when we have developers hiding adult rated games like the "Hot Coffee" inside games that received a Mature rating.

One of the first 'spicy' question was 'Can violent games harm our children?'. Most participants remained reserved for this questions. The ones that didn't , avoided a direct answer by covering it with a blanket of implicit assumptions. One of the participants of the debate reminds us that literacy, drawings, music, movies were all considered dangerous when they first came out. However, during the debate a compromise was reached between the two sides and they agreed that playing video games in the right context can be good for you.

The next 'spicy' issue that was addressed was how do we teach parents what's in video games so that they can be able to select good games for their children. One suggestion was that government spending should be redirected more towards educating

parents how to educate their children and not on educating the children for them. 'We have to learn how to use this new technology to benefit people'.

Another issue that was discussed at the debate was the fact that the video game industry has been blacklisted by the media. The immediate effect, as acknowledged by many of the participants is that video game developers are becoming more and more embarrassed of their job. This malefic outcome affects the creativity of the industry and in the same time the number of students willing to register for a video game major.

One of the most important issue discussed at the debate was whether or not video games prepare us to become more violent or to kill. The analogy with violence in sports came immediately.... One of the participants talked about how violence can be taught from sports pretty much in the same manner as it can be taught from video games. In one of his examples he verbally depicted a judo tournament that he witnessed. The participant found as ironic the fact that we can let our kids watch rugby or football let them compete in judo tournaments while parents are cheering for them but we raise our eyebrows when we see children playing violent videogames? The debate ended in a spirit of friendship and willingness to cooperate on finding an unambiguous way to rate literary value in video games.



## *Analysis of Murder Sex and Censorship*

After listening to the debate, my first reaction was to make a list of all the games I've played so far and somehow rate them in terms of things I've learned from them. However, I've realized that such analysis will, at best, rate my own learning skills at the time I've played the games rather than the games themselves. I then tried to imagine my mother in a video game store trying to buy a videogame for her son. For this reason, my mind instantaneously depicted a scene in which my mother is asking the clerk if a game is suited for a teenager. Convinced by the clerk that the game is appropriate for a teenager, my mother gives me the game which I play for a few days and then I let the dust cover the embarrassing title. Without any surprise, I then realize that I don't like playing videogames that my mother buys. Therefore, within days, I am again playing my favorite violent videogames without my mother's accord.

Continuing the analysis of this debate I am wondering, like the participants of the debate, how is it alright for a child to participate in violent sports like Judo or Tae Kwon Do but is wrong for him or her to play violent videogames. Perhaps one of the reasons why a child likes to play violent videogames in the first place is because he/she can relate the violence found on the screen with the violence they can find in the Tae Kwon Do or Judo gym.

As far as finding a better way to rate literary value in videogames, I believe that as long as we can't tell why are the children playing videogame they shouldn't play in the first place, our chances of finding a metric for literary value are close to none.

## ***Overview of Hot Coffee Scandal***

According to Gamespedia, most people found out about the Hot Coffee Scandal when a hacker revealed the sexually explicit mini game hidden in the PC version of GTA: San Andreas. In the mini game the protagonist's girlfriend invites him for a cup of coffee which as you've probably guessed leads to 'sexual encounter' (Hot Coffee Scandal). After the finding, the Dutch hacker release an unauthorized patch for the game that would unlock the mini game. As stated by the source, the mini game could not have been accessed through normal game and the only way to reveal it was by modifying the source code which would be considered a violation of the End-User Licensing Agreement. Whether or not Rockstar, the company that created the game planned, planned to later uncover the hidden game was irrelevant and ultimately the AO version of the game was pulled from most store shelves and a new version of the game was released in which the mini game 'Hot Coffee' was entirely removed and the game received a new M rating.

The frenzy that this scandal generated made legislators ask for a more drastic video game legislation and made them question the efficiency of the ESRB rating system (Hot Coffee Scandal).

## *Analysis of 'Hot Coffee Scandal'*

GTA San Andreas was not the only game to have secret content locked. Mortal Kombat, the game that is mostly responsible for the foundation of the ESRB had its most violent content locked. On the Sega version of the game, the violent content had to be unlocked with a secret code. On the Nintendo version the content was completely removed. The result was a predictable one: the Sega version outsold the nonviolent Nintendo version of the game. What could be a reasonable explanation for the developers of GTA San Andreas to hide the code that would have made the game an AO (adult only) one. Some people believe it was a publicity scam and that the 'Dutch Hacker' had something to do with the marketing department from Rockstar. Other people believe that the Rockstar company never actually intended to use the hidden code. Personally, I believe that regardless of what Rockstar's intention was with the hidden code, ESRB should have been informed of the existence of the code. The immediate effect of this story was to question the efficiency of ESRB rating system.

The process of rating video games is a really simple one. Everything is based on a honor system, with the publisher sending a footage to ESRB with the most extreme parts of the game where three raters watch the footage and independently decide on a rating. If all three raters agree on a rating then the rating is added and the publisher is notified. Not everyone can become a rater however. Potential raters must demonstrate that they do not have any kind of ties to the video game industry and must have had some kind of experience with children. For security reasons the identity of the raters is kept confidential. This honor system was first challenged by Republican Cliff Stearns who proposed U.S. legislation HR5912. If this bill is passed, it will force ESRB to play a game completely before giving it a rating. The biggest dilemma is why are developers scared of a more drastic rating system when most video games are bought by adults.

## *Overview of Sex in Videogames Conference*

In “Sex In Videogames Conference: Organizer Brenda Brathwaite’s Opening Note” <[http://gamasutra.com/features/20060613/reynolds\\_01.shtml](http://gamasutra.com/features/20060613/reynolds_01.shtml)>, Ren Reynolds summarizes Brenda Brathwaite’s conference on Sex in Video Games. The summary is divided into four sections as follows: ‘The Blame-The-Game Game’, ‘Sex in Games-The Taxonomy’, ‘Myths About Sex in Games’ and ‘What Issues Face Sex and Video Games’(Reynolds).

In the first section, The Blame-The-Game Game, the author tells us how Brathwaite reminded the audience that video games are not only for children. She further challenged the audience to remove all sexual themes from any form of art (music, movies, sculptures, paintings or novels) and imagine art without them. The key point that was made in this section was that video games are not only for children and that adults should have access to their favorite form of art regardless of how inappropriate its content might be for children.

In the next section, Sex in Games-The Taxonomy, the author talks about Brenda’s attempt to provide the audience with a guide for ways in which adult content can be included in video games. Educational Games, Dating Games, Hardware Integration and Advertising Games (Advergaming<sup>2</sup>) are just four from the eleven ways that were presented in the summary to include adult themes in video games.

In the ‘Myths About Sex In Games’ section, Branthwaite ensured that the audience is familiar with the myths about sex in video games. She reminded her audience

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<sup>2</sup> Advergaming is the practice of using games, particularly computer games, to advertise or promote a product, organization or viewpoint (Advergaming).

that there is a demand for sex in video games, sex video games have the potential of becoming popular and that sex in games is not a new thing. In the last section, the author reminds the audience that the media remains one of the most difficult issue facing developers and publishers.

## ***Analysis of Sex in Videogames Conference***

After reading the article I was shocked by the number of applications that adult video games can provide us with. Coming from an ex-communist country where mercantilism was still considered a non-retaliatory economic policy and where the access to Occident's freedoms were being punished by imprisonment, I was at first appalled by the possible application of adult video games in hardware integration. Apparently, the vibration function of the major video game consoles doesn't have to be used only to simulate the recoil of different weapons or the heartbeat of your character. A form of teledildonics<sup>3</sup> can be implemented with today's technology which integrates the vibration function of the respective console with different sex toys and thanks to the internet the intensity of the vibration can now be controlled remotely by another person.

Being raised as a Christian-Orthodox the above lines seem like a twentieth century verbatim translation of the Apocalypse; however, when sheltered from religious dogma, one can much better see the advantages of having such technology. The first advantage of such technology which I recognized, was a better prevention of rapes. Another advantage that I came across was a possible decrease in unwanted and premature pregnancies. Less unwanted pregnancies lead to less abandoned children and less premature pregnancies lead to more children staying in school rather than getting a no-career type of jobs in an effort to ensure the survival of their progeniture. The last advantage of such technology that I could think of is the prevention of sexually transmitted diseases which for me by itself is a strong enough reason to accept such technology with the same fanfare I would use to celebrate the finding of a cure for Cancer or HIV.

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<sup>3</sup> Teledildonics are electronic sex toys that can be controlled by a computer (Teledildonics).

## ***Overview of James Joyce's Ulysses***

Written in 1914, James Joyce's *Ulysses* was to become a symbol of cultural freedom. Published in installments in the American journal *The Little Review* until the episode entitled *Nausicaa* was accused of obscenity. In that episode, the protagonist, Leopold Bloom masturbates while watching a woman showing her underwear on a beach in Dublin. The novel gets the attention of the New York Anti-Vice Society because of its acute sexual content found in Molly Bloom's monologue that ended the novel. In the monologue, the author reveals Molly's sexual fantasies using a very descriptive language, especially for those years. The book is banned for obscenity from both, the United States and The United Kingdom. Even though the book is considered to be 'Joyce's greatest achievement' (Bibliomania) the ban is not going to be lifted until the 1934.

"The publisher of *The Little Review* was tried under section 305 of the Tariff Act of 1930, Title 19 United States Code, Section 1305. The publisher was found guilty of not being allowed to publish any more versions and suffered a fifty dollar fine. The argument was that Joyce's unintelligible narrative was due to his glaucoma and that the magazine was too small to cause any severe harm to the public" (Schanck). During the ban the book was smuggled in the United States and United Kingdom with Joyce being crowned in whispers as the 'greatest modern writer of English prose' (James Joyce's *Ulysses*).

## *Analysis of James Joyce's Ulysses*

The smuggling part reminds me, again, of communism when a VCR was forbidden by law and punished with imprisonment because some movies contained nudity<sup>4</sup>. The ban didn't stop the people from owning VCRs, they just had to pay more for it. The meaning of the word 'obscene,' as defined by the Courts in *Dunlop v. United States*, 165 U.S. 486, 501 is "tending to stir the sex impulses or to lead to sexually impure and lustful thoughts (Schanck).

The word obscenity, the main reason *Ulysses* was banned for, has different meaning from person to person that depend on such factors as age, ethnicity, religious orientation, sexual orientation and political system. Therefore, until one finds what group of people have found the book 'obscene' one cannot classify the book as 'obscene'. Why should any group of people be deprived the fundamental values of any art form because its content is not suited for some other group of people. The whole trial of *Ulysses* is irrefutable proof that books, like people, can suffer from being prejudiced by our respected ones<sup>5</sup>. How can anyone consider a book obscene by just reading a passage from it? Was obscenity the main reason why the book was written for? In my opinion censorship creates personality problems. How are we ever going to find out who we are, what we like and what we don't like if someone else is always going to decide that for us. I believe that art censorship can only be useful when people refuse to think for themselves. Until then, art censorship is just dirt that covers America's brightest jewel from its crown--freedom of speech and expression.

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<sup>4</sup> Here the term 'nudity' is used to describe the drastic level of censorship practiced in Communism

<sup>5</sup> Sarcastic remark at how judges judge—especially, 'the book by its cover'.



## Methodologies

### *Overview*

To be able to predict the content of literary value as 'absent', 'low', 'mediocre', or 'high' in a given video game, we used the following methodologies to help us build a decision tree model.

We will start by creating a website with the complete description of our project, and the entire work schedule for our team. The website will also contain an Archive page that will be updated weekly and where various information related with literary value will be posted. The website will also try to facilitate the process of integrating the work of other IQP teams on related topics by creating a Forum where other teams could upload links and papers on video game legislation and literary value.

We will next look at various case studies so that we can become familiar with past and current issues involving literary value and get an idea of where the issue currently is. The main reason why we started our methodology process here, was because we wanted to be able to formulate relevant questions that will help us classify literary value. Another reason why we started our methodology process with case studies was because once we knew the type of questions we were going to ask we wanted to ensure that we will seek answers to them from the right people.

Our next step in our methodology process is interviewing selected individuals. One reason why we have included interviews in our methodologies was because we wanted to know how to best design our survey which will help us collect the required

data needed for creating our decision tree. The most important reason why we have included interview in our methodology process was because we wanted to see the opinions of the people we have selected on the issue of game-makers' responsibility to include literary value in video games. For this particular step of the methodology process we have created a list with all the possible interlocutors. After we had all their contact information we have sent interview request letters to most of them. Our last step in the methodology process was the creation of the survey. This step of the methodology process includes the collection of the data; the preprocessing of the data and experiments. To collect our data necessary for our experiments, we will design a survey using SurveyMonkey.com. Once the design step was completed we will save the results in various file formats including ARFF (attribute relation file format), CSV (comma separated values) and plain TXT files. Once we have all our data in multiple file formats, we will preprocess our data set to look for potential outliers. After preprocessing our data set we will create various experiments to help us find a decision tree with the best accuracy and the least number of nodes. In this step of our methodology is where we will actually create our decision tree model that will be able to predict the literary value of a video game after answering questions similar to the ones our survey takers answered. Therefore, our final decision tree model should be able to predict with certain accuracy the content of literary value in a particular video game.

The entire methodology process will follow a recursive pattern. The added content will be weekly checked for errors instead of checking the errors after the entire content has been added. Moreover, the entire team will have collective ownership of the paper so that in case errors are detected. Therefore, in case some one finds an error he/she will have full privileges to modify the content without asking for permission from the individual that created the content originally.

## ***Case Law***

In this section we will look at different case studies in order to become more familiar with the legislative terms used in ruling cases that involve different media materials. This will help us get a better understanding of how a cases involving literary value are conducted and what was the main factor in determining the ruling.

### **James Joyce's Ulysses**

The legal cases involving James Joyce's *Ulysses*, including the original District Court hearing in 1933, and the appeal in the Second Circuit Court of Appeals in 1934 provide some interesting insight into the way concepts such as obscenity and literary value were perceived at the time, as pertaining to works of literature. The book was originally deemed obscene in a 1921 trial, owing to the efforts of the New York Society for the Suppression of Vice. However, publisher Random House persisted in its attempts to publish the book, and arranged for a copy to be imported into the United States and seized by US Customs, leading to the 1933 trial, where it was found to be fit for publication, a decision upheld during the appeal by the United States in 1934.

The literary value of *Ulysses* was a large factor influencing the rulings in both cases. The fact that it was one of the earliest works employing stream-of-consciousness writing, a new literary technique at the time, which was particularly effectively used in the book, provided a convenient means of assessing the book's literary value objectively. Both court rulings acknowledged the contribution of the book's prose to the evolution of literature, thus affirming its literary value. Furthermore, the judges stressed that the use of

the technique was crucial in providing a context in which the obscene passages became integral parts of the book's storyline, rather than being an exercise in gratuitous lewdness.

However, the main argument given by both judges was that despite numerous passages of *Ulysses* being unarguably obscene in their opinion, the book as a whole was not. The appeals court judge stressed the importance of considering the book as a whole by stating that if a judgment of obscenity was to be based on select passages, celebrated works by authors such as Chaucer and Shakespeare would be banned, citing numerous past legal cases where similar opinions were expressed. The definition of obscenity used by judges in both cases was "tending to stir the sex impulses or to lead to sexually impure and lustful thoughts", derived from the 1896 *Dunlop v. United States* trial.

Also of note is the markedly weak dissenting opinion in the appeals case. The dissenting judge disagrees with the notion that the obscenity of a book cannot be determined by only considering select passages, however his opinion is undermined by broad sweeping and overly conservative statements such as "masterpieces have never been produced by men given to obscenity or lustful thoughts", which begs the question of what the judge thought of celebrated artists such as Oscar Wilde and Pyotr Tchaikovsky, whose homosexuality, especially the pederastic tendencies of Wilde, would no doubt be considered obscene and lustful at the time of the trial.

The basis of the dissenting opinion lies in the 1879 *Bennett v. United States* trial, which specifically states that select passages can define the obscenity of the work as a whole. The trial is also mentioned in the majority opinion, where its conclusions are refuted by citing several contradictory opinions expressed in trials that supersede the *Bennett* case. Incidentally, *Bennett v. US* also offers insight on the evolution of the

definition of obscenity, where it is given as "whether the tendency of the matter is to deprave and corrupt the morals of those whose minds are open to such influences".

Some interesting parallels can be drawn from these legal cases concerning Ulysses and contemporary video game regulations. One of these is the judges' evaluation of the book's literary value based on its novel stream-of-consciousness literary style and its contribution to the evolution of literature. This raises the question of whether such contributions and novel literary styles can be equated to various novel aspects of a video game, such as pioneering efforts in a new video game genre or advancements in video game graphics. If a parallel can in fact be drawn there, then we may be able to automatically assume that any novel contribution to the field of video games by a new game implies literary value, though the question of which aspects of a game to hold in consideration may still be open to question.

Yet another parallel can be found in the importance the judges placed on considering the work as whole. This is in direct contrast to the manner in which games are currently rated by the ESRB, where the rating is based on an evaluation of the most objectionable parts of the game experience. The Ulysses trials suggest that such a means of evaluation is flawed, and the ESRB should consider the game as a whole when assigning a rating. It should be noted that this differs from the intentions of the recently introduced Truth in Video Game Ratings Act, which, if passed, would require the ESRB to play the entire game before rating it. The Act aims to allow the ESRB to find additional objectionable content, which may not have been included by the game publishers in the demonstrations of objectionable game sequences they are currently required to present, thus potentially leading to a more restrictive rating to be assigned. However, if a parallel is to be drawn from the Ulysses trials, the purpose of playing the

game in its entirety would be to evaluate the game experience and intent as a whole, thus potentially leading to a less restrictive rating.

The importance of the context of the objectionable passages in *Ulysses* was also noted in the trials. An argument used by the judges to support their opinion that the book is not obscene was that the passages were integral to the story and appropriate within its context, rather than being gratuitous. A parallel can be drawn between this and the Hot Coffee scandal, which centered around scenes of simulated sex in the game *Grand Theft Auto: San Andreas*. Since the game included a simulation of the dating and courtship process between the protagonist and other women, where sexual intercourse would take place at the end of a successful date once the relationship had progressed to a certain level, the scenes in question were entirely appropriate within the game's context. While this does not make the scenes any less obscene, it should be considered an alleviating factor if we are to use the *Ulysses* trials as guidance.

## *Interviews*

### **Interview with Professor Michael J. Ciaraldi**

Our first interlocutor, Professor Ciaraldi, has been with WPI for over eight years-- where he is still teaching courses in the Computer Science department. A course of particular importance for us, that he is teaching, is the Social Implications Of Information Processing also known as CS 3043. As written in WPI's Course Catalog, "the course is making students aware of the of the social, moral, ethical, and philosophical impact of computers and computer-based systems on society". However, this course was not the only reason why we've decided to send Professor Ciaraldi an Interview Request letter. Professor Ciaraldi, is also a play writer and the author of "Captions" which premiered at New Voices 22 in March 2004 (masque). Another thing worth mentioning, is that when we've contacted Professor Ciaraldi for an interview, he agreed to participate without any hesitation and displayed a spontaneous increase of enthusiasm, when he heard the term 'literary value'.

We will next present some of the highlights of the interview with our first interlocutor, Professor Ciaraldi. For the entire interview please see Appendix F.

*Petre:*

Do you believe that video-game-makers have a civic responsibility to include literary value in video games?

*Prof. Ciaraldi:*

No! It's entertainment. Entertainment does not have to have literary value although as people become more sophisticated they might demand literary value.

*Petre:*

How do you think the video game industry will be affected by the acute legislation it faces?

*Prof. Ciaraldi:*

I know that doctors get extremely expensive insurance for malpractice and if you can get a policy for corrupting people, then video games companies will probably have to do the same.

*Petre:*

H.B. 2187 holds game makers responsible for user actions. Do you agree with such legislation?

*Prof. Ciaraldi:*

I think that makes no sense at all. But that doesn't mean the Congress won't do it.

*Petre:*

It seems like the entire software industry has been blacklisted by the media. As a Software Engineer, have you ever felt somehow embarrassed with your profession, especially after an incident like the Hot Coffee Scandal (GTA)?

*Prof. Ciaraldi:*

I've never had an experience like that and I don't think that the media plays it up.



## Interview with Professor John Sanbonmatsu

Our next interlocutor, professor John Sanbonmatsu, has earned a Ph.D from the University of California at Santa Cruz; he is a philosopher teacher at Worcester Polytechnic Institute of Technology and author of “The Postmodern Prince: Critical Theory, Left Strategy, and the Making of a New Political Subject”. The main reason why we stopped at Professors Sanbonmatsu’s office asking him for an interview is because the question ‘what is literary value’ is more of a philosophical question and Professor Sanbonmatsu is well known for his passion for philosophy. During the interview, we tried to ask similar if not identical questions that we asked Professor Ciaraldi so that one could compare the answer of a philosopher with those of a developer.

We will next present some of the highlights of the interview with our second interlocutor, Professor Sanbonmatsu. For the entire interview please see Appendix G.

*Petre:*

What does the term literary value mean for you?

*Prof. Sanbonmatsu*

For a material to have literary value, it has to have something esthetically redeemable about it; something valuable. The problem is that art is different from person to person and, in my opinion inherently subjective.

*Petre:*

Do you believe that the software industry has been blacklisted by the media

*Prof Sanbonmatsu:*

The software industry has been one of the most attractive industries for entrepreneurial capital and the media always goes to scandals because that's all part of the capitalistic society. Who owns the media? There are these big corporations that sell the news by emphasizing scandals and transforming the news into a commodity. It's hard to see how it has been blacklisted...just think at the adds that you see on TV., about software. Even the New York Times now has a video game critic. These critics are people who treat seriously even the most juvenile games and evaluate them in terms of game play and so forth. Therefore, it's hard for me to see that the industry has been blacklisted by the media.

*Petre:*

Do you believe that video games are a form of protest against government, similar to rock 'n roll, punk and then later hip hop.

*Prof. Sanbonmatsu:*

Not really. You see when protest is commodified then protest ends up being a celebration of power, it is not protest. It is cheerleading the dominant group and supporting empire.

## Interview with Brenda Brathwaite

Our third interlocutor, Brenda Brathwaite, is a game developer, the founder of International Game Developers Sex Interest Group and the author of *Sex in Video Games*. As a game developer, Ms. Brathwaite worked on 21 published titles including the Wizardry series Jagged Alliance Series, Dungeons and Dragons and Playboy: The Mansion. Moreover, Ms. Brathwaite is the creator of numerous articles on Gamasutra.com and she was one of the first developers to raise the question of literary value in video games.

We will next present some of the highlights of the interview with our third interlocutor, Brenda Brathwaite. For the entire interview please see Appendix H.

*Petre:*

What do you think literary value means, especially its application to video and computer games?

*Ms. Brathwaite:*

That's a huge challenge for video-games. The ability to tell story in video games was something we were only trying to do for 30 or 40 years. They are unlike any other media; when you are telling a story in a movie or in a book or even in a painting your audience is sitting and watching; and the author is in total control of everything: he knows for how long they are going to be there when to expect certain reactions etc.. In video games, you can do anything. In a video game, the player is not the audience but the protagonist and it is pretty much like giving someone a keyboard and let them write a story that you want it to have.

*Petre:*

Do you believe that the high level of interaction found in video-games is one of the main reasons why the video-game industry has been bombarded with legislation. In other words do you believe that as graphic cards become more powerful and games become more realistic, the video game industry will face even more legislation.

*Ms. Brathwaite:*

I agree with that but I don't think is for that reason. There is such a precedent for this—in the 1950 comics went under fire; in 1920s the movies went under the same degree of fire; even in Europe, when the books were invented, they were considered a horrible idea for the ideas that were putting inside the minds of the young. Any new technology creates fear; from television, internet, rock music etc.. Now, when some one commits a crime, the question that people are asking is 'did he play video games?'. The irony is that most people who are thirty and under are playing video games. When a new medium will come out video games will be forgotten.

*Petre:*

H.B. 2187 holds game makers responsible for user actions. Do you agree with such legislation?

*Ms. Brathwaite:*

I think that's absurd. I think that what really is happening is that in general games are protected by the first amendment and legislators are trying to find a way to control them.

## *Analysis of Interviews*

There is no doubt that the different people have different opinions about this topic. The term literary value differs in its definition from person to person and our interlocutors are our irrefutable proof to this. Nevertheless, there were questions on which our interlocutors agreed. For example they've all agreed that a rating system based solely on the content of literary value will not work. Most of our interlocutors agreed that gender and sexuality should be included as attributes when trying to classify literary value. Moreover, our interlocutors predicted that probably the most important attribute from the data set will be 'thought provoking'.

Interesting to note from our interviews, is the fact that philosophers and developers might have different answers when asked if developers should have a civic responsibility to include literary value in video games. On one hand developers believe that they have no civic responsibility to include literary value in video games and on the other hand, most philosophers might agree with Professor Sanbnonmatsu answer – that we all have a civic responsibility to engage in activities that are not harmful to other people.

In my opinion, when experienced developers like Brenda Brathwaite refrain from mentioning their profession trying to avoid an avalanche of questions, we know that art will suffer because art, in any form, is first a form of expression. The video game industry is getting bigger every day and to continue its growing, students need to have role models; we need to somehow make them aware of the satisfaction that video game creation provides us with. This industry needs to be supported by future generation and generate new ideas. It needs to attract investors and not scandal tabloids.

Even if our interlocutors have different opinions regarding civic responsibility, or the definition of literary value, they all have agreed that no matter how much scandal video games attract or how much they are criticized by the media or legislators one thing is certain: video games are here to stay.

After the conversation with our interlocutors we selected the following attributes for our survey:

1. Age
2. Gender
3. Genre
4. Type
5. Sexual Content
6. Year published
7. Violence
8. Thought Provoking
9. Official Rating
10. Literary value

We will use all of the above attributes, in our dataset and we will design experiments in an effort to find a decision tree for our target attribute, 'literary value' that has the maximum efficiency with the fewest possible nodes. Another important thing to note will be the selected root for our decision tree model. Because this attribute will be at the root of our decision tree it will account for the most important attribute from our attribute list. In other words, if we were to use only one attribute to classify literary value as 'absent', 'low', 'mediocre' or 'high' from our entire list of attributes, the one attribute that will be root node of our decision tree model will be able to classify our target attribute with a higher accuracy than any other attribute from our above mentioned list.

## *Survey*

### **Data Collection and Description**

To collect the data needed for our survey we've decided to use online forms. Online forms are rather easy to design, the hard part is actually sending the survey and advertise it. We were lucky to have our survey sent through the 'undergraduate' domain from WPI. Doing this, we were able to reach about 1500 people from which we got about 400 responses. The data was collected during approximately two weeks and the number of responses became overwhelming. In the beginning we thought that we would be lucky if we would get thirty responses.

We've decided to have the following attributes for our data set: 'Age', 'Gender', 'Genera', 'Year Published', 'Type', 'Sexual Content', 'Violence', 'Thought Provoking', 'Official Rating' and 'Literary Value'. The first attribute, 'Age', represents the age of the subject and it was suggested by Professor Sanbonmatsu as well. The reason why 'Age' can be important in our survey is because different age people can rate literary value differently. The attribute had four possible values: '18-30', 'Under 18', 'over 50', and '30-50'. The next attribute, 'Gender', was introduced in the survey because we believed that gender might play an important role in our analysis. For example females can have a different perception of literary value than males. Another reason why 'gender' was important in our analysis was because most video games that target a female audience tend to have less violence whereas games that target a male audience tend to have more violence.

The main reason why we've included our next attribute in our survey, 'Genera', was because we wanted to see if different types of games tend to get a higher literary value rating. This attribute had six initial values: 'Fighting', 'RPG', 'Adventure', 'Sports',

'Strategy', 'Simulators'. The reason why we previously said 'initial' was because the survey taker had the option of combining this attribute which gave us a total of  $(6C1 + 6C2 + 6C3 + 6C4 + 6C5 + 6C6)$  which yields a total of 63 possible values for this attribute. The next attribute from our survey was the 'Year Published' which was included to show if there is some kind a trend in rating literary value for games that were made in a certain year. This was a numeric field so the survey taker could have used any numeric value. The next attribute from our survey was 'type'. This attribute refers to the type of game played. The possible values for this attribute were 'Single' and 'Multiplayer'. The reason why we've included this attribute was because we wanted to see if is indeed true that people tend to rank single player games higher when it comes to literary value because the character development is usually better than in multiplayer games where the main purpose is to defeat the other players.

Our next attribute 'Sexual Content' was introduced in the survey to be able to clarify the supposition that games with strong sexual content usually tend to have low literary value content. For this attribute we've used six possible values: 'None', 'Mild Suggestive', 'Sexual Themes', 'Nudity', and 'Strong Sexual Content'. We couldn't have possible included the sex attribute without including the 'Violence' attribute. The reason why we've included this attribute was to see if it is true that video games with Strong violence content tend to have lower literary value content. The attribute had five possible values: 'None', 'Mild', 'Intense', 'Blood', 'Blood and Gore'.

The 'Thought Provoking' attribute was introduced in the survey because we wanted to see if subjects associate 'Thought Provoking' with literary value. The possible values for this attribute were 'Inspiring', 'Somewhat Inspiring', 'Moderate Inspiring', 'Uninspiring'. The next attribute from our survey, 'Official Rating' was introduced to find out if there is a direct relationship between the official rating of a game and literary



value. The possible values for this attribute were the current ESRB ratings: EC (early childhood), E (everyone), E 10+ (everyone 10+), T (everyone 13+), M (mature 17+), AO (adults only) and Unrated/don't know.

The final attribute 'Literary Value' was included in the survey so that we could see the relationship between the above mentioned attributes and the way the survey takers rate the content of literary value for a particular game. The possible values for this attribute are 'Absent', 'Low', 'Moderate', 'High', 'V High'.

## Preprocessing the Data

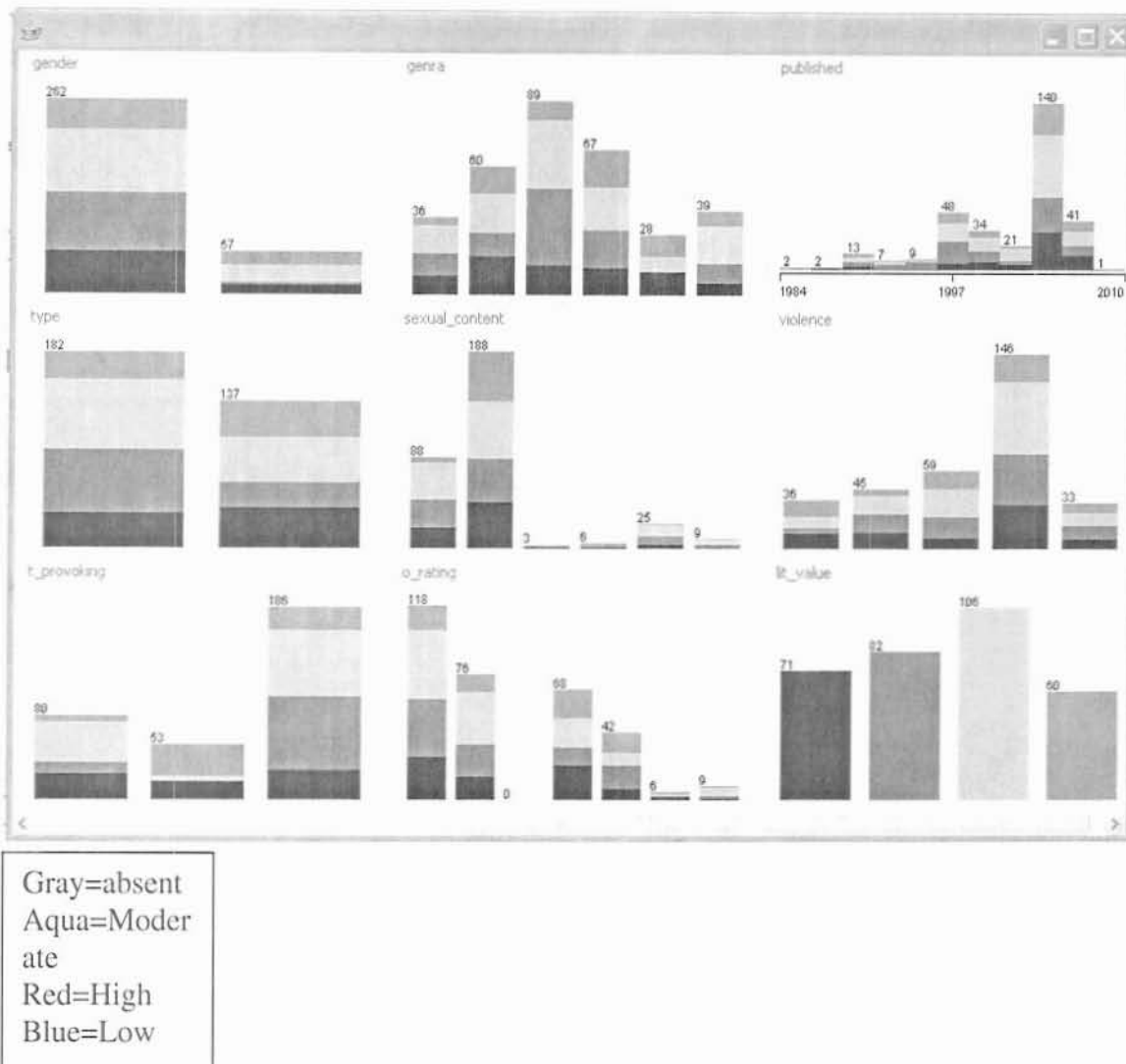
After collecting the data, we had to translate our set from a comma delimited values format (CSV) to an attribute relations file format (ARFF) type. The translation process was done using a parser created in Perl which is a programming language that contains very strong regular expression. The reason why we needed to translate between the two above mentioned file formats was because we wanted to use the Weka<sup>6</sup> system which deals much better with ARFF files than with CSV files for our analysis which provides a GUI for building decision tree models. Once we had the file in an ARFF format, we had to look for incomplete records, or instances that had no value for literary value. We were disappointed to find out that from almost eighty from the four hundred responses we've received had no value for the field 'literary value'. Since these records would not have helped us in our analysis, we've decided to remove all of them.

The first thing we did, once we were able to load the file in the Weka system was to actually look for outliers so that we can tell if there are any unrepresentative data points in our data set. We could have outliers in our data set for various reasons such as typing errors or machine malfunction or they can just be real but just very unusual data. To be able to better visualize the data we've used the Weka interface to look at the distribution of each attribute. For this we drew a graph for each of the ten attributes that displays their distribution. The graph from fig.1 shows that clearly that there are no outliers. Usually, statisticians check possible outliers only for the attributes in which the user could input anything. In our survey, the age attribute is of this type but as we can see from fig1 there were no instances that had values lower than 1984. Because we to translate the file from CVS to ARFF, errors could have occur anywhere in our data set; however, from Fig. 1, we can see that none of the attributes had outliers.

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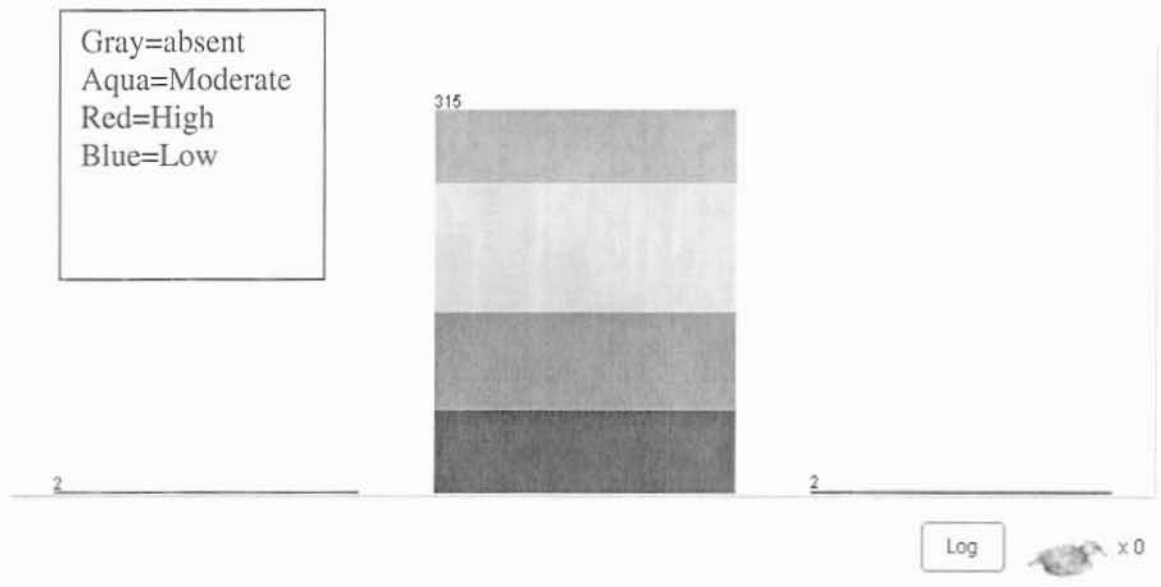
<sup>6</sup> See Appendix D for picture

Figure 1: the distribution of the attributes



After dealing with possible outliers, the next step in our Preprocessing stage was to actually decide whether or not we need to remove any attributes that have the same value. Including attributes in our data set that have a single value would lower our efficiency by increasing the processing time of the dataset and will also increase the final size of our decision tree model. Therefore, as we can see from Fig.2, since the attribute age had just two instances with the 'age' attribute value of 30-50 and two instances with values of 'under 18' we've decided to remove them from the data set.

Figure 2: Age distribution



## Experiments

The main purpose of our experiments was to find the best decision tree model for our data set with the clearest confusion matrix. For this purpose we've selected the J.48 decision tree model. This type of decision tree is the Weka implementation of the C4.5 algorithm which was an improvement of the initial ID3 algorithm. The main improvements were that the C4.5 can deal with missing values and numerical attributes. Moreover, C4.5 uses the sub tree raising technique as a pruning method. In our experiments we will use different configurations of this algorithm varying things like 'confidence factor' for which smaller values incur more pruning; 'number of folds' which determine the amount of data used for reduced-error pruning; 'seed' which is used for randomizing the data when reduced-error pruning is used; 'unpruned' which determines whether pruning is performed. We will select the configuration with the best decision tree model that has the clearest confusion matrix. In our experiments, we will also look at the readability of our model and we will trade Accuracy for readability.

Our experiments include tests of various decision tree models and various data sets. For example, we generated different data sets by excluding some attributes to see if we have any attributes in our initial data set that we don't need. This process will save us processing time and it will also make our decision tree smaller which should make it easier to read.

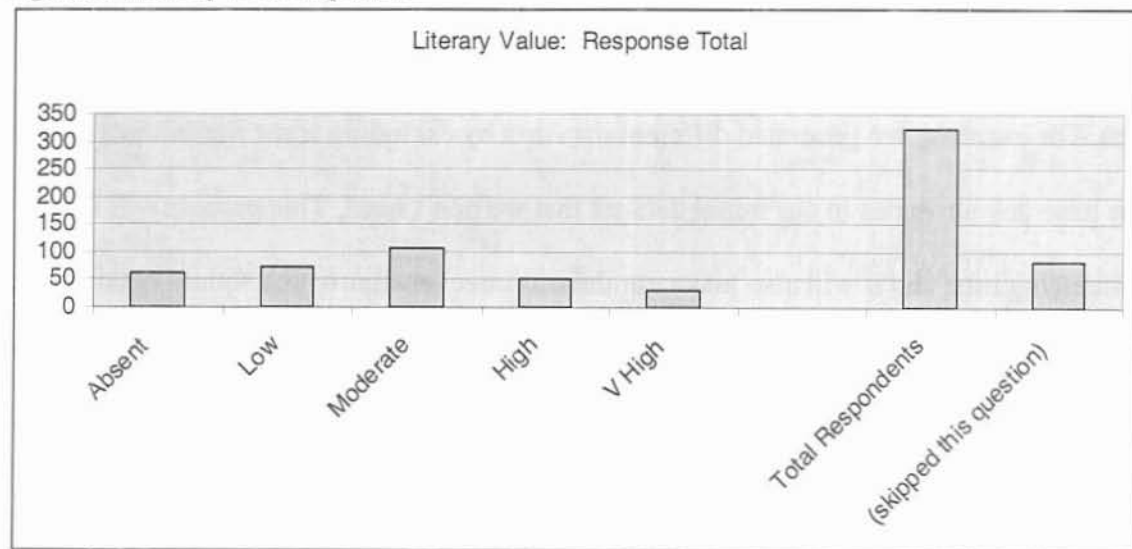
To be able to build our decision tree model we have designed a list of experiments that we have included in Appendix I.

## Analysis of Survey and Experiments

After all our experiments with different types of configuration for the J.48 classifier, we notice from Experiment 8 that the pruning technique increased the accuracy of our model, had the clearest confusion matrix and is the most readable tree. The tree build by this configuration has a total of 39 leaves compared to 176 leaves that we obtained with previous configuration of the model. This result will drastically improves the readability of our tree. To save space we've included the entire tree in Appendix E. From the tree, we can see that the most important attribute that classifies literary value is 'Thought Provoking' which was chosen as our root node.

From Fig.3, we can see that 106 people responded that their favorite game had moderate literary value content. Moreover, 71 of the people who took the survey responded that their favorite game didn't have any literary value.

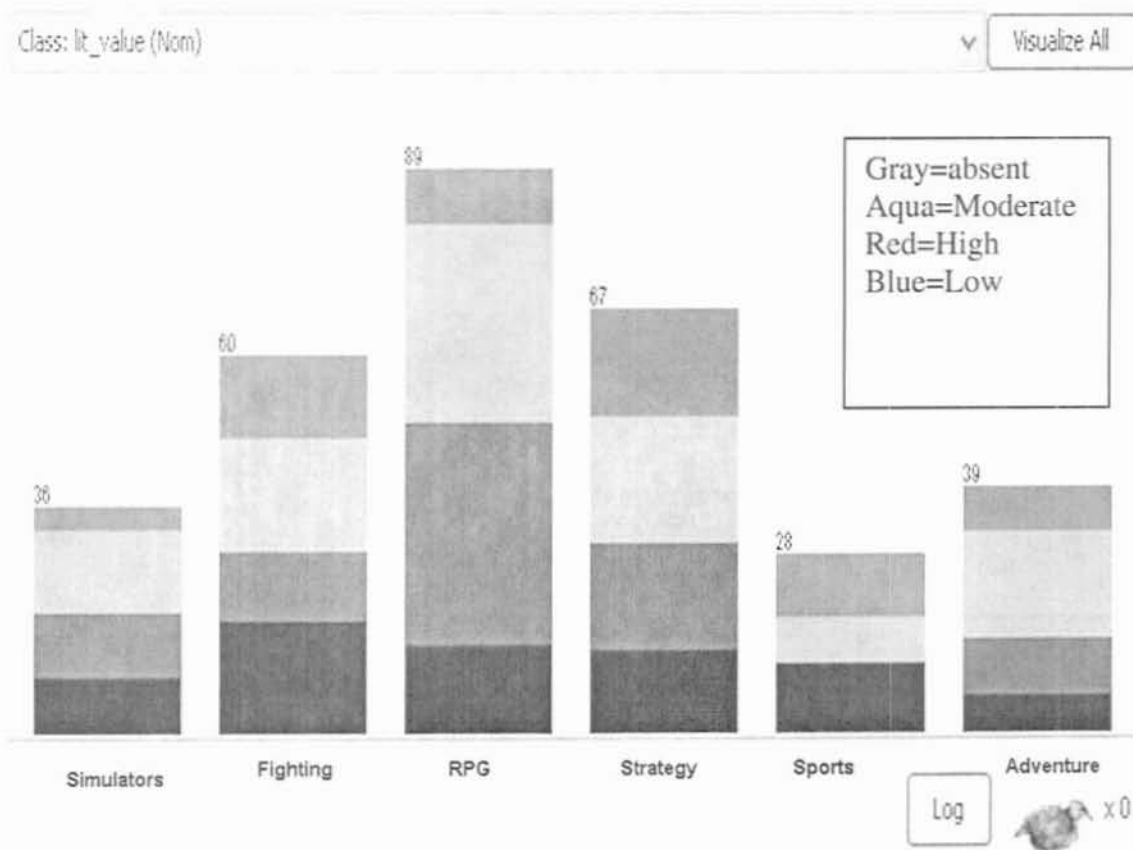
Figure 3: Literary value responses



We will now look at the people who rated literary value as high. From a total of 50 people that rated literary value as high only 3 instances were women. All the rest were males. On the other hand, from 71 people that rated literary value as low, 17 of them were women.

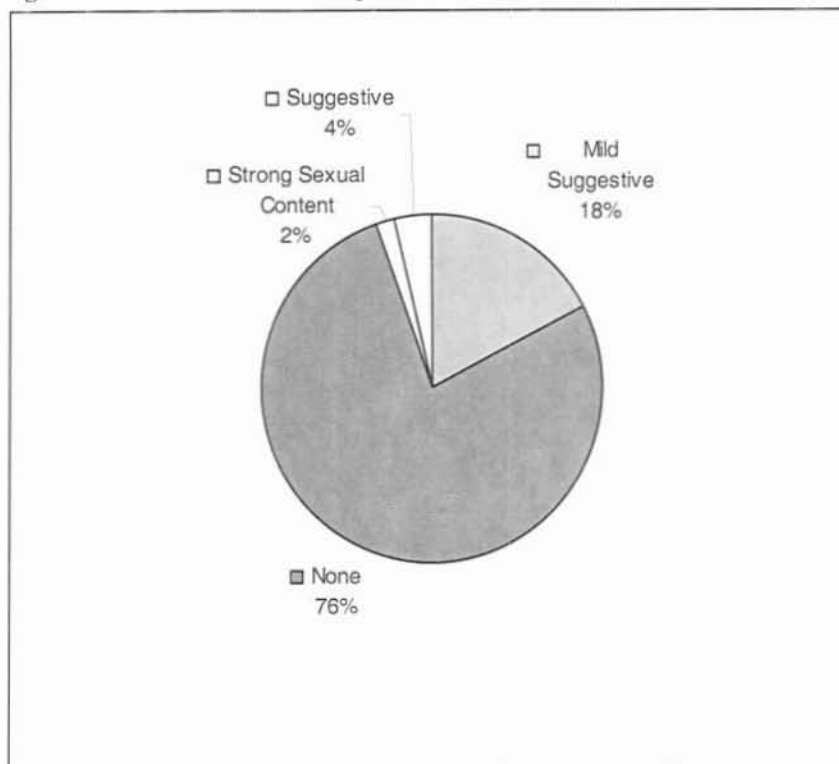
From Fig.4, we can see that that high literary value dominates in the RPG genre and that fighting game had a big chunk of responses that rated literary value as absent.

Figure 4: genra distribution



From Fig.5, we can see the pie chart of the responses that rated literary value as low in relation with their selection of 'Sexual Content' attribute. We can see that 76% of the people who rated literary value as low also selected no sexual content for their favorite game. This suggests that video games with low literary value have no sexual content in them.

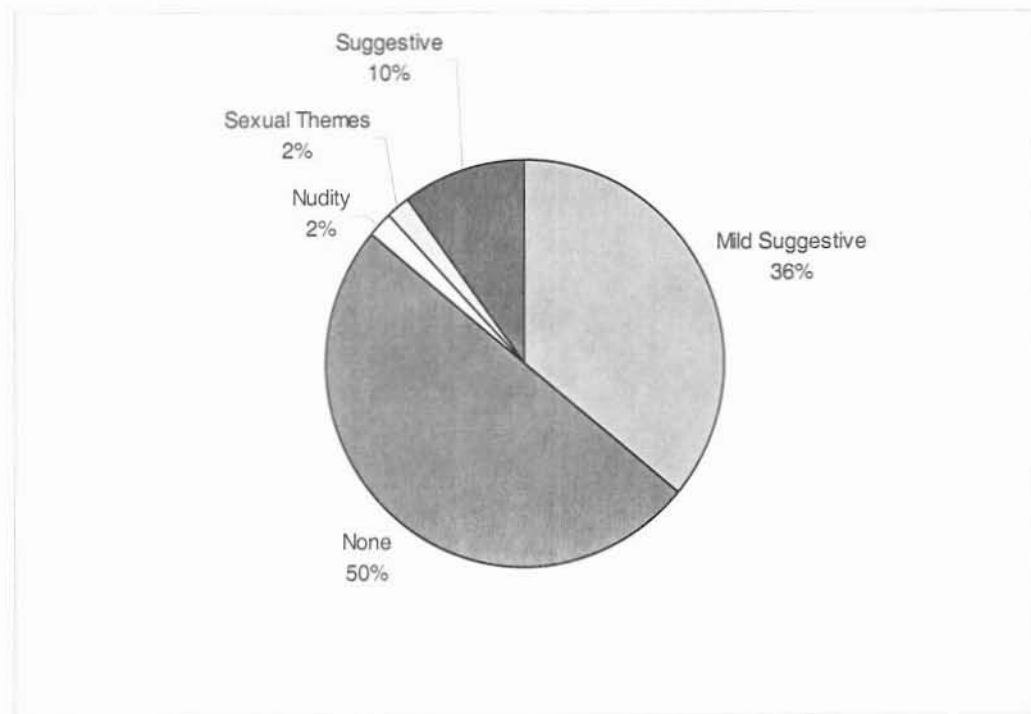
Figure 5: sexual content for responses with low literary value





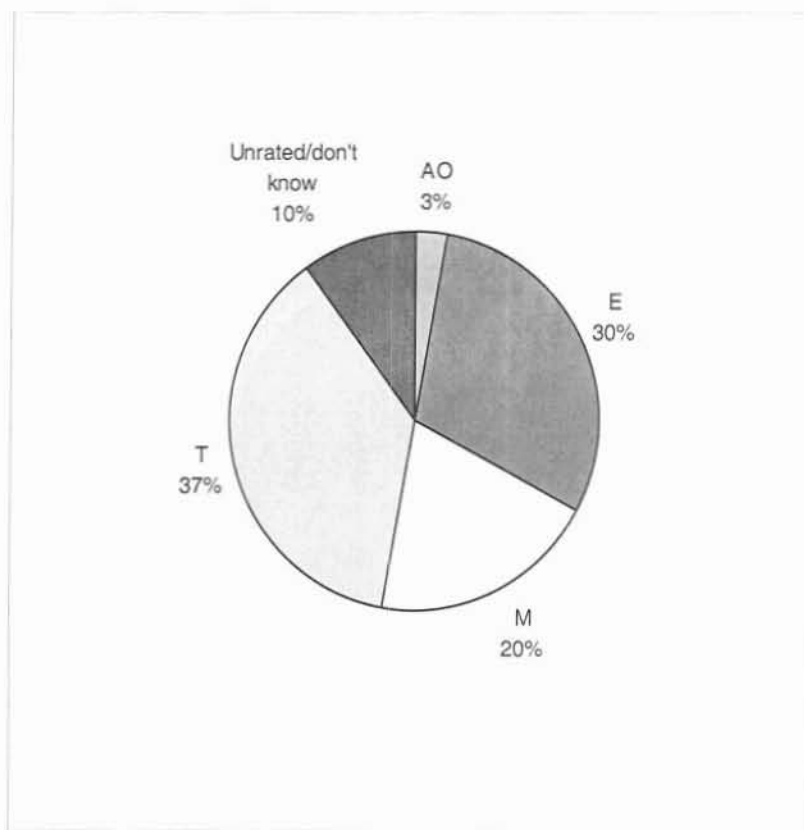
From Fig. 6, we can see the pie chart for the responses that rated literary value as high in relation with their selection of sexual content. From the chart below we can see that 36% of the people who rated literary value as high selected Mild Suggestive sexual content. Important to note is that only 2% of the people who selected 'Nudity' and 'Sexual Themes' ranked literary value as high.

Figure 6: sexual content for responses with high literary value



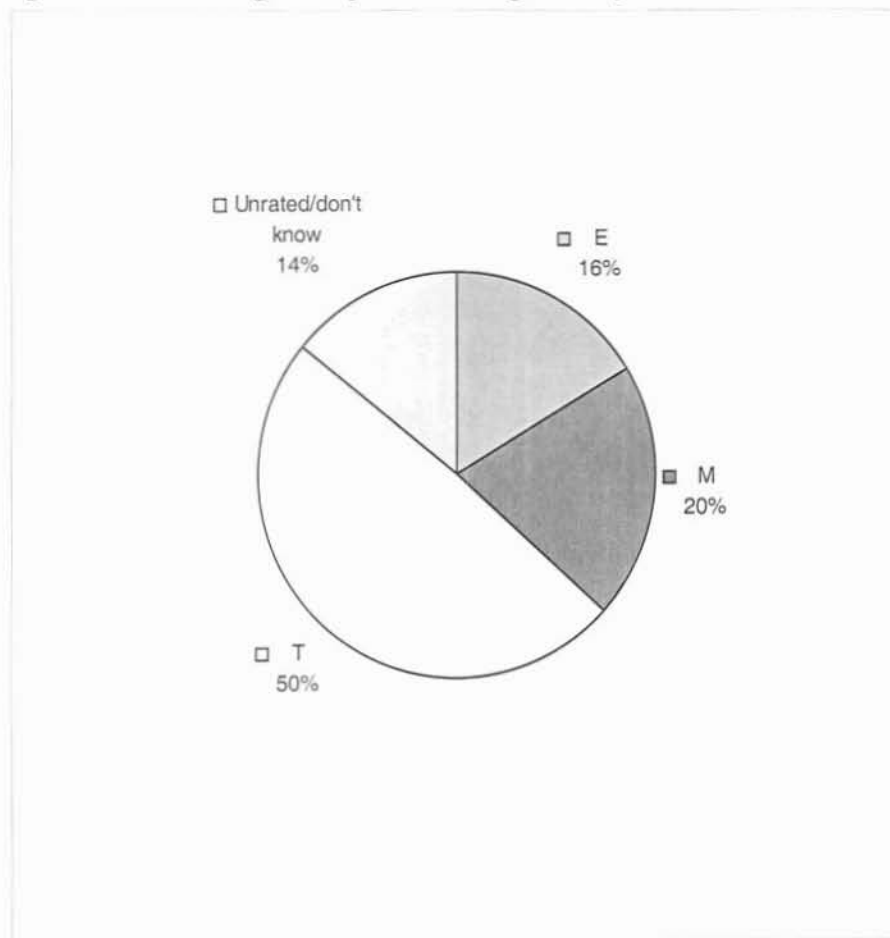
From Fig. 7, we can see the pie chart for the responses that rated literary value as low in relation with their selection of official rating. From the chart below we can see that 37% of the people who rated literary value as low selected T for the official rating of their favorite videogame. We can also see that only 3% of the people who rated literary value as low had an AO official rating for their favorite video game.

Figure 7: official rating for responses with low literary value



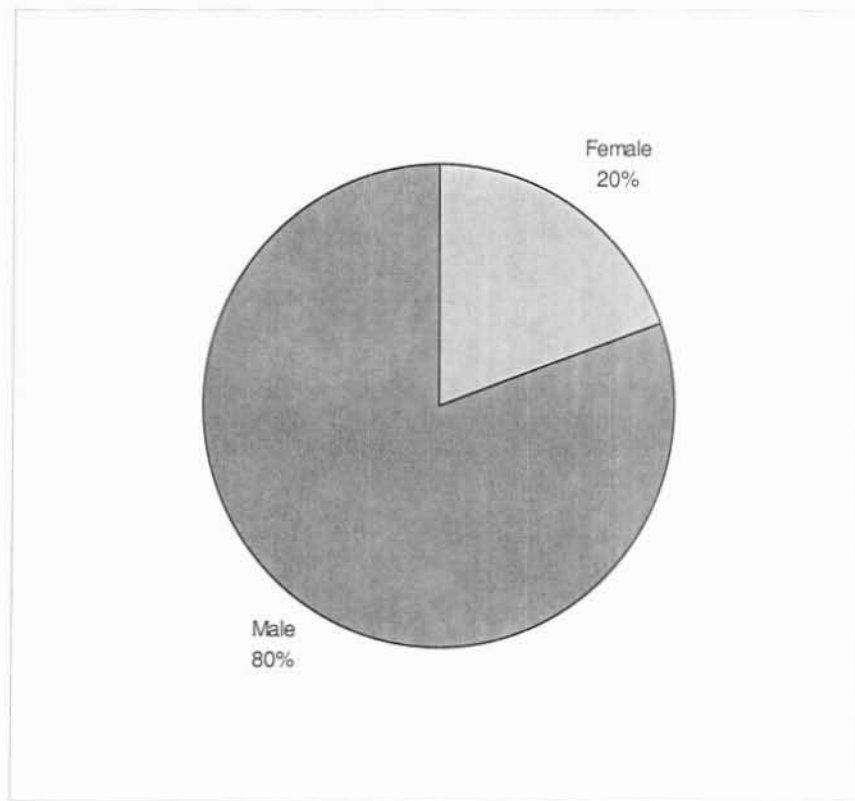
From the next figure, Fig. 8, we can see the pie chart of the responses that rated literary value as high in relation with their selection of 'Sexual Content' attribute. We can see that 76% of the people who rated literary value as low also selected no sexual content for their favorite game. This suggests that video games with low literary value have no sexual content in them.

Figure 8: official rating for responses with high literary value



From figure 9, we can see the relationship between males and females who didn't know what the official rating was for their favorite video game. From the chart we can see clearly that only 20% of the people who didn't know the rating for their favorite videogame were females. This graph suggests that females are more careful about what they are playing when it comes to rating than the males are.

Figure 9: responses that didn't know what the Official Rating was



To conclude our survey analysis, we also ran the PRSIM algorithm to look at perfect rules that our data set generated. One of the first rules generated by the Prism algorithm was ‘If age = 30-50 then literary value =Low’. Even though this rule is perfect, meaning that it holds for all our survey takers since there were only 3 survey takers within this range we believe that this we cannot categorize this rule as efficient when predicting ‘literary value’. One other rule that we found was ‘If age = Under\_18 and genra = Fighting then literary value = Low’. This rule was quite surprising for two reasons: first, we didn’t think we were going to have persons under 18 taking our survey about literary value and second, we thought that most persons under 18 prefer fighting game because of their literary value content.

Another important rule that we were able to find was ‘If thought provoking = Inspiring and genra = RPG and official rating = E and violence = None then High ‘. This rule actually agrees with our decision tree model where thought provoking was selected as our root node because of its high low entropy value. It also suggests that people tend to associate high values of literary value to RPG games that contain no violence. This result confirms our initial assumptions that RPG games will score high on the literary value attribute.

One other rule that we were able to find was ‘If genra = Fighting and sexual\_content = Suggestive and violence = Mild then literary value =Low ‘. This rule suggests that people tend to associate fighting games that have suggestive sexual content with low values for literary value. Before we started this survey we were actually thinking about this rule and we were wondering how much of it is true and how much is just a myth. Our survey confirmed that our initial assumption was not just a myth but a certitude.

## Conclusion

From our decision tree model we found out that the main attribute that gives a game literary value is 'thought provoking'. This suggests that if we would want to be able to assert the content of literary value in a video game, the main question we would have to ask is 'Is the game thought provoking?'. This direct relationship between thought provoking and literary value was somehow predictable in the beginning of the project; however, we had no proof of that.

The word 'responsibility' increases the concentration of most readers. Once we see the word 'responsibility' written down on a piece of paper or on a particular webpage, we tend to re read the entire sentence to make sure that we understood entirely what we are responsible for. Easy to notice is that responsibility and tasks come hand in hand and most people hate tasks not necessarily because they hate what they have to do but because someone else told them to do it.

The debate on whether or not the developers have a civic responsibility to include literary value in video games continues to grow as new video game related crimes appear. Movie producers were also in a similar debate in the 1950s. One example was Howard Hughes' *The Outlaw* when a special bra was designed to best highlight Jane Russell's mammarys. After Hughes was able to prove that there were other movies that use similar techniques, the case was dropped. In case legislation is passed so that video game makers have to include a certain content of literary value in their products, than similar laws should target the movie and music industry.

With the appearance of every new work comes the question of how much literary value does the respective work contain. Therefore, the need of a metric for literary value is instantly recognized. The attempt to define literary value globally, has ended with numerous failures since the evaluators of literary value are different from culture to culture and from individual to individual. In order to define literary value, we can look at the definition of, educational perennialism ,aesthetic value and literary merit.

If we assume that great video games are also great teachers, then they should teach us things that are of everlasting importance concentrating more on the reasoning and less on the facts. If we are to judge great works by the amount of things they teach us then, art becomes a science with practical applications and the evaluation of art will be based on its usefulness. However, we know that art becomes desirable not because of its usefulness but because of its beauty. Therefore, even though art can be used in educational perennialism it should not be mistaken for a practical science or substituted for a great teacher. The most important characteristic of art is its aesthetic which should also be its main evaluator.

“The science of how things are known through the senses” (wikipedi.org, aesthetic). If we think of this definition of aesthetic value in terms of what we can feel, hear, see or touch then aesthetic value “is just a collection of electrical impulses interpreted by the brain” (The Matrix) . Therefore, the evaluation of aesthetic value can be greatly influenced by judgments of economic, political or moral values (wikipedia.org, aesthetic). For example, in some cultures, one can display his or her status by wearing expensive jewelry and expensive cloths. Therefore, jewelry become desirable but not necessarily because of its beauty but because it raises one’s status. While this might make perfect sense in some cultures, there are other cultures where the lavish display of

jewelry might be seen as a wasteful allocation of one's financial resources. In such cultures jewelry will become less desirable and therefore its aesthetic value will decrease proportionally.

According to Wikipedia.org, a work is said to have literary merit if it is a work of quality or if it has some aesthetic value. The importance of literary merit is evident in our society; it helps us determine what works are worth reading, playing, watching or listening. But do we really want to be told what beautiful is. The definition of aesthetic differs from culture to culture; from person to person and in some way is describing who we are as human beings. For example we can't guarantee that if a certain movie won the Oscar, it will be recognized everywhere as a work of art. The same analogy applies to evaluators of literary value in videogames. Just because a videogame is accepted as a great work in some cultures or by an individual, we cannot accurately predict that it will preserve its status in other cultures or when evaluated by another individual.

The definition of literary value becomes even closer related with its evaluators when we consider what works should be censored and who should have the power of censorship. Although, we can decide on who to rate literary value it is almost impossible to decide how to rate it. It seems that each culture rates literary value differently and that the amount of literary value found in a certain work is closely related with the ideologies practiced in the culture where the work is being evaluated. As society continues to change so will our culture; our manners, our language, our rituals, our religion and ultimately our definition of literary value.



## Appendix A

BILL REQ. #: H-1205.2

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### HOUSE BILL 2178

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State of Washington

59th Legislature

2005 Regular Session

- 
- By Representatives Dickerson, McCune and McDermott
- Read first time 02/22/2005. Referred to Committee on Juvenile Justice & Family Law.
- 
- AN ACT Relating to violent video and computer games; adding a new section to chapter 4.24 RCW; and creating a new section.
- BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF WASHINGTON:
- NEW SECTION. Sec. 1 The legislature finds that:
  - (1) The graphic depictions of violence against others in video and computer games are becoming more disturbingly realistic, especially with the sophisticated advancements in technology;
  - (2) Some video and computer games give the player points or otherwise reward or encourage the player to assault, rape, torture, and kill other characters;
  - (3) Some of these games contain graphics of torture, sexual assault, and killing of women, persons of color, and law enforcement officers;
  - (4) These games choreograph violence in a stylized and romanticized way that encourages children and adolescents to associate violence and killing with pleasure, entertainment, feelings of achievement, and personal empowerment;
  - (5) Studies show a correlation between exposure to violent video and computer games and hostile behavior. Children and adolescents who spend hours playing these video games can become desensitized to violence against others, and such games can be a factor in creating conditions that lead to actual violence;
  - (6) Throughout the country, law enforcement officers report that offenders committing violent crimes admit that they are intentionally copying the types of violent acts they play out in video or computer games. There have been accounts reported in the media in which violent offenders boast of the similarity between their crimes and the games; and
  - (7) Manufacturers and retailers of these games are aware of the inappropriateness of violent video and computer games for children. Manufacturers and retailers are also aware of the studies and reports regarding the effects of these violent video and computer games on

adolescents.

The legislature declares that manufacturers and retailers of these games should do their part in taking responsibility when individuals copy in real life the violence they learn from these violent video and computer games. Therefore, the legislature intends to create a private cause of action against manufacturers and retailers of violent video and computer games.

- NEW SECTION. Sec. 2 A new section is added to chapter 4.24 RCW to read as follows:

A person may maintain an action for personal injury or wrongful death against a manufacturer or retailer of violent video or computer games if the manufacturer or retailer has distributed, sold, or rented a violent video or computer game to a person under the age of seventeen and the game was a factor in creating conditions that assisted or encouraged the person to cause injury or death to another person.

--- END ---

## Appendix B

### ENROLLED

Page 1 of 3

CODING: Words in struck through type are deletions from existing law; words underscored are additions.

Regular Session, 2006

HOUSE BILL NO. 1381 (Substitute for House Bill No. 421 by Representative Burrell)  
 BY REPRESENTATIVES BURRELL, ALARIO, ALEXANDER, ARNOLD, BADON,  
 BAUDOIN, BAYLOR, BEARD, BRUCE, BURNS, K. CARTER, CRANE,  
 CRAVINS, CROWE, CURTIS, DAMICO, DANIEL, DARTEZ, DOERGE,  
 DORSEY, DURAND, ERDEY, FANNIN, FAUCHEUX, FRITH, GRAY, GREENE,  
 E. GUILLORY, M. GUILLORY, HARRIS, HEBERT, HOPKINS, HUTTER,  
 JEFFERSON, KATZ, KENNEY, LABRUZZO, LAFLEUR, LAFONTA,  
 MARTINY, MCDONALD, MCVEA, PIERRE, M. POWELL, T. POWELL,  
 QUEZAIRE, RITCHIE, ROMERO, SALTER, SCALISE, SMILEY, GARY SMITH,  
 JANE SMITH, JOHN SMITH, ST. GERMAIN, STRAIN, THOMPSON,  
 TOWNSEND, TRAHAN, TRICHE, TUCKER, WADDELL, WALKER,  
 WALSWORTH, AND WHITE AND SENATORS BROOME, N. GAUTREAUX,  
 KOSTELKA, LENTINI, AND ROMERO

1 AN ACT

2 To enact R.S. 14:91.14, relative to offenses affecting the health and morals of minors;  
 to

3 provide with respect to the sale, exhibition, or distribution of material harmful to  
 4 minors; to provide for definitions; to create the crime of prohibited sales of computer  
 5 or video games to minors; to provide for definitions; to provide for penalties; and to  
 6 provide for related matters.

7 Be it enacted by the Legislature of Louisiana:

8 Section 1. The legislature finds that children are the most precious resource of this  
 9 state and that they are worthy of special protection from their government. The laws of  
 10 Louisiana contain extensive provisions which afford children additional protection by  
 11 prohibiting them from voting, entering into marriage, purchasing or publicly  
 possessing

12 alcoholic beverages, purchasing tobacco products, participating in gaming activities,  
 entering

13 into contracts, and purchasing harmful materials. The legislature has also enacted  
 wholly

14 distinct provisions for identifying children who are in need of care and establishing a  
 means

15 to provide those children with appropriate services. These laws demonstrate  
 Louisiana's

16 commitment to protect its citizens from physical, psychological, and financial harm  
 during

17 the time in which they are particularly vulnerable due to their age and immaturity. In  
18 enacting this Act, the Louisiana Legislature clearly demonstrates the state's  
compelling

HB NO. 1381 **ENROLLED**

Page 2 of 3

CODING: Words in struck through type are deletions from existing law; words  
underscored  
are additions.

1 governmental interest in protecting children and that it seeks to incorporate the  
extensive

2 protections otherwise afforded to minors in this state to the area of interactive video  
and

3 computer games.

4 Section 2. R.S. 14:91.14 is hereby enacted to read as follows:

5 §91.14. Prohibited sales of video or computer games to minors

6 A. An interactive video or computer game shall not be sold, leased, or rented  
7 to a minor if the trier of fact determines all of the following:

8 (1) The average person, applying contemporary community standards, would  
9 find that the video or computer game, taken as a whole, appeals to the minor's  
10 morbid interest in violence.

11 (2) The game depicts violence in a manner patently offensive to prevailing  
12 standards in the adult community with respect to what is suitable for minors.

13 (3) The game, taken as a whole, lacks serious literary, artistic, political, or  
14 scientific value for minors.

15 B. For the purposes of this Section:

16 (1) "Interactive video or computer game" means an object or device that  
17 stores recorded data or instructions, receives data or instructions generated by a  
18 person who uses it and by processing the data or instructions, creates an interactive  
19 game capable of being played or viewed on or through a computer, gaming system,  
20 console, or other technology.

21 (2) "Computer" includes an electronic, magnetic, optical, or other high-speed  
22 data processing device or system performing logical, arithmetic, and storage  
23 functions and includes any property, data storage facility, or communications facility  
24 directly related to or operating in conjunction with such device or system.

25 "Computer" shall not include an automated typewriter or typesetter, a machine  
26 designed solely for word processing, or a portable hand-held calculator, nor shall  
27 "computer" include any other device which might contain components similar to  
28 those in computers but in which the components have the sole function of controlling  
29 the device for the single purpose for which the device is intended.

30 (3) "Minor" means any person under the age of eighteen years.

HB NO. 1381 **ENROLLED**

Page 3 of 3

CODING: Words in struck through type are deletions from existing law; words  
underscored  
are additions.

1 C. Whoever is found guilty of violating the provisions of this Section shall  
2 be fined not less than one hundred dollars nor more than two thousand dollars or

3 imprisoned, with or without hard labor, for not more than one year, or both.

4 Section 3. This Act shall become effective upon signature by the governor or, if not  
5 signed by the governor, upon expiration of the time for bills to become law without  
signature

6 by the governor, as provided by Article III, Section 18 of the Constitution of Louisiana.  
If

7 vetoed by the governor and subsequently approved by the legislature, this Act shall  
become

8 effective on the day following such approval.

SPEAKER OF THE HOUSE OF REPRESENTATIVES

PRESIDENT OF THE SENATE

GOVERNOR OF THE STATE OF LOUISIANA

APPROVED:

## Appendix C

109<sup>TH</sup> CONGRESS

2D SESSION

**H. R. 5912**

To direct the Federal Trade Commission to prescribe rules to prohibit deceptive conduct in the rating of video and computer games.

IN THE HOUSE OF REPRESENTATIVES

JULY 26, 2006

Mr. STEARNS (for himself, Mr. MATHESON, and Mr. MCINTYRE) introduced the following bill; which was referred to the Committee on Energy and Commerce

### A BILL

To direct the Federal Trade Commission to prescribe rules to prohibit deceptive conduct in the rating of video and computer games.

1 Be it enacted by the Senate and House of Representa2  
tives of the United States of America in Congress assembled,

3 SECTION 1. SHORT TITLE.

4 This Act may be cited as the “Truth in Video Game  
5 Rating Act”.

6 SEC. 2. DECEPTIVE RATINGS OF VIDEO GAMES.

7 Not later than 1 year after the date of enactment  
8 of this Act, the Federal Trade Commission shall prescribe  
9 rules under section 553 of title 5, United States Code,

•HR 5912 IH

1 to prohibit the following as an unfair and deceptive act  
2 or practice prescribed pursuant to section 18(a)(1)(B) of  
3 the Federal Trade Commission Act (15 U.S.C.

4 57a(a)(1)(B)):

5 (1) RATING GAME ONLY ON PARTIAL CON6  
TENT.—Such rules shall prohibit any person or enti7  
ty from providing a content rating of any video or  
8 computer game that is to bear a label containing  
9 such content rating when sold or distributed in  
10 interstate commerce unless such person or entity has  
11 reviewed the content of the video or computer game  
12 in its entirety.

13 (2) WITHHOLDING CONTENT FOR RATING.—

14 Such rules shall prohibit any person who produces,  
15 sells, or otherwise distributes video or computer  
16 games in interstate commerce from withholding or  
17 hiding any content of the video or computer game  
18 from, or in any other manner failing to disclose any

19 content of the video or computer game to, the person  
 20 or entity to whom the video or computer game is  
 21 submitted for the purpose of obtaining a content  
 22 rating.

23 (3) GROSS MISCHARACTERIZATION OF CON24  
 TENT.—Such rules shall prohibit any person or enti25  
 ty that provides a content rating for a video or com-

1 puter game that is to bear a label containing such  
 2 content rating when sold or distributed in interstate  
 3 commerce from providing a content rating that  
 4 grossly mischaracterizes (as defined by the Commis5  
 sion in such rules) the content of the video or com6  
 puter game.

7 SEC. 3. G.A.O. STUDY.

8 (a) STUDY.—The Comptroller General shall conduct  
 9 a study to determine—

10 (1) the effectiveness of the ESRB video and  
 11 computer game content ratings system, including  
 12 content ratings for on-line or Internet-based games;

13 (2) whether content ratings systems, like that  
 14 used by the ESRB, should be peer-reviewed;

15 (3) whether an independent ratings system  
 16 would offer better accuracy and effectiveness in con17  
 tent ratings for video and computer games;

18 (4) the prevalence of marketing video and com19  
 puter games to audiences that fall under the age20  
 based content ratings of those games; and

21 (5) the efficacy of a universal ratings system  
 22 for visual content, including films, broadcast and  
 23 cable TV, and video and computer games.

24 (b) REPORT.—The Comptroller General shall trans25  
 mit a report on the findings of the study conducted pursu-  
 1 ant to subsection (a) to Congress not later than 180 days  
 2 after the date of enactment of this Act. The report shall  
 3 contain recommendations regarding effective approaches  
 4 to video and computer game content ratings that address  
 5 the unique ratings challenges of on-line and Internet6  
 based video games.

7 SEC. 4. DEFINITIONS.

8 As used in this Act—

9 (1) the term “content”, with respect to video  
 10 and computer games, means all of the visual images  
 11 and sounds that are included as part of the recorded  
 12 data of the video or computer game;

13 (2) the term “content rating” means any rating  
 14 of the content of a video or computer game provided  
 15 to notify consumers of any content which may be of16  
 fensive to consumers or may not be suitable to per17  
 sons of varying ages, including such content as viol8

lence, graphic sexual content, nudity, or strong language;

20 (3) the term "ESRB" means the Entertainment Software Ratings Board; and

22 (4) the term "video or computer game" means

23 any electronic object or device that creates an interactive game capable of being played, viewed, or expe-

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1 rienced on or through a computer, gaming system,

2 console, or other technology.



## Appendix D:

Figure 10: Decision Tree for rating literary value

```

t_provoking = Moderate
| o_rating = T
| | sexual_content = Mild
| | | published <= 2003: High (6.0/3.0)
| | | published > 2003: Moderate (9.0)
| | sexual_content = None: Low (19.0/10.0)
| | sexual_content = Nudity: Moderate (0.0)
| | sexual_content = Strong: Moderate (0.0)
| | sexual_content = Suggestive: High (2.0/1.0)
| | sexual_content = Themes: High (1.0)
| o_rating = M: Moderate (16.0/3.0)
| o_rating = EC: Moderate (0.0)
| o_rating = E: Low (15.0/4.0)
| o_rating = U
| | sexual_content = Mild
| | | published <= 1999: High (2.0/1.0)
| | | published > 1999: Low (2.0)
| | sexual_content = None: Moderate (4.0/2.0)
| | sexual_content = Nudity: Moderate (0.0)
| | sexual_content = Strong: Moderate (0.0)
| | sexual_content = Suggestive: Moderate (0.0)
| | sexual_content = Themes: Moderate (0.0)
| o_rating = AO: Low (2.0/1.0)
| o_rating = E10+: Moderate (2.0)
t_provoking = Uninspiring: Absent (53.0/22.0)
t_provoking = Inspiring
| sexual_content = Mild
| | gender = Male: High (45.0/22.0)
| | gender = Female: Moderate (6.0/1.0)
| sexual_content = None
| | violence = None: Moderate (17.0/12.0)
| | violence = Blood: High (11.0/5.0)
| | violence = Intense: Moderate (15.0/6.0)
| | violence = Mild
| | | published <= 1997: High (12.0/4.0)
| | | published > 1997
| | | | type = single_player: Moderate (33.0/13.0)
| | | | type = Multiplayer: Low (11.0/7.0)
| | violence = Gore
| | | genra = Simulators: Absent (0.0)
| | | genra = Fighting: High (3.0/1.0)
| | | genra = RPG: Absent (0.0)
| | | genra = Strategy: Low (1.0)
| | | genra = Sports: Absent (0.0)
| | | genra = Adventure: Absent (2.0)

```

- | sexual\_content = Nudity: Low (3.0/2.0)
- | sexual\_content = Strong: Absent (4.0/2.0)
- | sexual\_content = Suggestive
- | | type = single\_player: High (10.0/4.0)
- | | type = Multiplayer: Moderate (8.0/4.0)
- | sexual\_content = Themes: High (5.0/2.0)

## Appendix E

### Prsim Rules:

- If age = 30-50 then Low
- If age = Under\_18 and genra = Fighting then Low
- If genra = Sports and t\_provoking = Moderate and sexual\_content = None then Low
- If sexual\_content = Nudity and type = single\_player then Low
- If genra = Fighting and o\_rating = AO and type = single\_player then Low
- If o\_rating = E and t\_provoking = Moderate and genra = RPG then Low
- If t\_provoking = Uninspiring and o\_rating = E10+ and gender = Male then Low
- If genra = Sports and violence = Blood and gender = Male then Low
- If genra = Fighting and sexual\_content = Mild and gender = Female then Low
- If violence = None and t\_provoking = Moderate and gender = Male then Low
- If t\_provoking = Uninspiring and genra = Simulators and violence = Mild then Low
- If genra = Sports and o\_rating = E and violence = Mild then Low
- If genra = Fighting and t\_provoking = Moderate and o\_rating = U then Low
- If sexual\_content = Strong and violence = Mild then Low
- If violence = Blood and genra = Adventure and sexual\_content = Mild then Low
- If violence = Blood and t\_provoking = Moderate and o\_rating = U then Low
- If o\_rating = T and violence = Gore and genra = Fighting and type = Multiplayer then Low
- If genra = Fighting and sexual\_content = Suggestive and violence = Mild then Low
- If genra = Strategy and violence = Gore and sexual\_content = None then Low
- If age = Under\_18 and genra = Strategy then High
- If sexual\_content = Themes and o\_rating = U then High
- If genra = RPG and o\_rating = E10+ then High
- If genra = RPG and sexual\_content = Suggestive and o\_rating = M then High

If t\_provoking = Inspiring and violence = Blood and genra = Strategy then High

If genra = RPG and sexual\_content = Themes and gender = Male then High

If sexual\_content = Nudity and gender = Male then High

If t\_provoking = Inspiring and violence = Gore and o\_rating = AO then High

If genra = RPG and violence = Blood and sexual\_content = None then High

If genra = Adventure and sexual\_content = Mild and type = Multiplayer then High

If o\_rating = U and violence = Intense and type = single\_player then High

If t\_provoking = Inspiring and o\_rating = E10+ and genra = Strategy then High

If genra = Adventure and sexual\_content = Mild and violence = Intense then High

If o\_rating = U and sexual\_content = Mild and genra = Adventure then High

If o\_rating = E10+ and genra = Simulators then ModerateIf t\_provoking = Moderate

If sexual\_content = Themes and gender = Female then Moderate

If sexual\_content = Suggestive and gender = Female then Moderate

If genra = Adventure and sexual\_content = Suggestive then Moderate

If genra = Adventure and violence = None then Moderate

If genra = Adventure and o\_rating = E10+ then Moderate

If t\_provoking = Moderate and genra = Adventure and o\_rating = T then Moderate

If sexual\_content = Mild and genra = Strategy and o\_rating = E then Moderate

If o\_rating = T and sexual\_content = Nudity then Moderate

If o\_rating = T and violence = None and gender = Female then Moderate

If genra = Adventure and violence = Intense and sexual\_content = None then Moderate

If sexual\_content = Mild and genra = Sports and gender = Female then Moderate

## Appendix F: Interview with Professor Ciaraldi

*Petre:*

Do you believe that video-game-makers have a civic responsibility to include literary value in video games?

*Prof. Ciaraldi:*

No! It's entertainment. Entertainment does not have to have literary value although as people become more sophisticated they might demand literary value.

*Petre:*

In your opinion, what do you think are some good evaluators of literary value in video/computer games--what do you think is the main attribute of a video game which makes people play it again and again.

*Prof. Ciaraldi:*

I believe that replay value is directly connected with literary value. There is a certain depth and complexity that replay value adds to the meaning of literary value. Most people replay a video game for the accomplishments; however, if after having it done once it becomes very trivial to do it again, then that doesn't really give you any replay value. The same holds true if things are very random in a videogame and every time you play it you'd have to start off from scratch. One of the main attribute of replay value can be the fact that the same goal can be accomplished using a different path. However, in games like Grand Theft Auto, you can just drive around without really having any real goal. Regarding the first part of the question, one evaluator of literary value can be education, provided that it has applications in the real world.

Petre:

So, do you believe that there should be a direct relationship between literary value and reality in the educational sense?

Prof. Ciaraldi:

Yes...definitely!

Another evaluator of literary value can be the esthetic of the game. However, it seems like people are willing to go with something less refined aesthetically if the game has more excitement. There is probably a minimum level that a game has to have of both: esthetic and excitement.

*Petre:*

How do you think the video game industry will be affected by the acute legislation it faces?

*Prof. Ciaraldi:*

I know that doctors get extremely expensive insurance for malpractice and if you can get a policy for corrupting people, then video games companies will probably have to do the same.

*Petre:*

H.B. 2187 holds game makers responsible for user actions. Do you agree with such legislation?

*Prof. Ciaraldi:*

I think that makes no sense at all. But that doesn't mean the Congress won't do it.

*Petre:*

It seems like the entire software industry has been blacklisted by the media. As a Software Engineer, have you ever felt somehow embarrassed with your profession, especially after an incident like the Hot Coffee Scandal (GTA)?

*Prof. Ciaraldi:*

I've never had an experience like that and I don't think that the media plays it up.

*Petre:*

Do you believe that the amount of legislation on video/computer games will have a detrimental effect on the enrolment of CS majors?

*Prof. Ciaraldi:*

No! WPI gets roughly about 100 CS students every year from about a total of 700 students. However, WPI doesn't admit based on your declared major; therefore, if you get in the school you can pick any major you'd like. So, even if this number might look good people might change majors once faced with the difficulty of a CS major.

*Petre:*

Do you believe that gender and sexuality could affect a person's definition of literary value?

*Prof. Ciaraldi:*

We cannot really generalize and say that males would do this while females will do something else. Although we might have some clichés that are true—that in general things like shooting people and blowing things up appeal more to the male while things like building virtual businesses and social interaction would appeal more to the females, we also have some outliers with males playing Dance Revolution and females watching action movies. In general, when you talk about literature, *the average male tends to appreciate plot while the average woman tends to appreciate characterization*. Developers can aim their video games at a group of people with certain sexual orientation; so yes, sexuality does matter.

*Petre:*

If another rating system could be devised based on the idea of 'literary value', do you think it would be a better one than the current rating system in effect?

*Prof. Ciaraldi:*

The current rating system...well you can't really show the amount of literary value of any work by just reading one page of the material.



## Appendix G: Interview with Professor Sanbonmatsu

*Petre:*

What does the term literary value mean for you?

*Prof. Sanbonmatsu*

For a material to have literary value, it has to have something esthetically redeemable about it; something valuable. The problem is that art is different from person to person and, in my opinion inherently subjective.

*Petre:*

Do you believe that video-game-makers have a civic responsibility to include literary value in video games?

*Prof. Sanbonmatsu:*

Yes, I think so. I believe that all cultural producers should have a civic responsibility to include literary value in their content and actually this debate goes back to Plato and *The Republic*, where Socrates was in a conversation about what the idea of a republic should be and he basically says: "Look, first thing we have to do is shut up and censor the poets and playwrights who go on and on about men crying on the battlefield and stop all this sissified stuff. Even from birth we have to create an environment where people are not going to be exposed to stuff that is going to erode the foundation of the republic". This has been a debate since Plato wrote it, over 2500 years ago. Who is going to decide what literary value is; who is going to decide what pornography is and who is going to decide what high art is. There is no question, in my mind that culture shapes

consciousness and that the forms of culture to be consumed has an impact on us as citizens; on how we relate sexually to one another; the way we think about participating in the public sphere, in politics. This is definitely not a cut-and-dry issue because there is no question that culture shapes our consciousness. We are creature which like to imitate, and that what Socrates says in the Republic. Doesn't everyone have a civic responsibility to engage in activities which are not harmful to our neighbors and our society.

*Petre:*

Do you believe that the software industry has been blacklisted by the media

*Prof Sanbonmatsu:*

The software industry has been one of the most attractive industries for entrepreneurial capital and the media always goes to scandals because that's all part of the capitalistic society. Who owns the media? There are these big corporations that sell the news by emphasizing scandals and transforming the news into a commodity. It's hard to see how it has been blacklisted...just think at the adds that you see on TV., about software. Even the New York Times now has a video game critic. These critics are people who treat seriously even the most juvenile games and evaluate them in terms of game play and so forth. Therefore, it's hard for me to see that the industry has been blacklisted by the media.

*Petre:*

In your opinion, what do you think that are some good evaluators of literary value in video games.

*Prof. Sanbonmatsu:*

Are the characters stereotypical or are they fully developed with believable qualities like motivation, character development. One could also look at the kinds

of conflicts that occur; are they psychological conflicts or fist fighting. Do the characters have any kind of recognizable human features. Is there a theme in the game? The educational value of the game can be another element; however, the type of education is also important—if the game is educating you on how to shoot people in the head.... Violence could be another element especially, when it is used to degrade the human character or degrades a particular sub group of people. It has to have aesthetic value; good dialog; good writing and it has to be structured. A work that contains literary value doesn't necessarily have to have all of this elements but at least some of them

*Petre:*

Do you believe that video games are a form of protest against government, similar to rock 'n roll, punk and then later hip hop.

*Prof. Sanbonmatsu:*

Not really. You see when protest is commodified then protest ends up being a celebration of power, it is not protest. It is cheerleading the dominant group and supporting empire.

*Petre:*

How do you believe that the video game industry will be affected by the acute legislation it faces?

*Prof. Sanbonmatsu:*

I don't think it will have any economical impact.

*Petre:*

Do you believe that the marketing of most video games is aimed at a certain group of people.

*Prof. Sanbonmatsu:*

It seems like the gaming industry has boxed itself into the young white male corner and it's realizing that is just a small segment from a potential much larger market. This economic pressure might force developers to think outside the box

*Petre:*

What do you think of legislation that holds game makers responsible for user actions?

*Prof. Sanbonmatsu:*

I think that is a good idea. You should be responsible for hate propaganda. The idea that culture and art could be harmful to society; therefore needing some kind of state remedy goes, again, back to Plato and *The Republic*.

*Petre:*

Do you believe that gender and sexuality could affect a person's definition of literary value.

*Prof. Sanbonmatsu:*

I think that gender would probably count more than sexual orientation.

*Petre:*

If another rating system could be devised based on the idea of 'literary value', do you think it would be a better one than the current rating system in effect?

*Prof. Sanbonmatsu:*

No! I don't believe that the rating system should be about literary value. Art should not be commodified. Much more radical changes need to happen in the American culture.

## Appendix H: Interview with Brenda Brathwaite

*Petre:*

Would you tell us a little bit about your latest publication 'Sex in Video Games' and about the IGDASIG.

*Ms. Brathwaite:*

I've finished a book which was released in 2006 called Sex in Video Games and it talks about the entire history of sex in video games; we created IGDASIG in 2005.

*Petre:*

What do you think literary value means, especially its application to video and computer games?

*Ms. Brathwaite:*

That's a huge challenge for video-games. The ability to tell story in video games was something we were only trying to do for 30 or 40 years. They are unlike any other media; when you are telling a story in a movie or in a book or even in a painting your audience is sitting and watching; and the author is in total control of everything: he knows for how long they are going to be there when to expect certain reactions etc.. In video games, you can do anything. In a video game, the player is not the audience but the protagonist and it is pretty much like giving some one a keyboard and let them write a story that you want it to have.

*Petre:*

Do you believe that the high level of interaction found in video-games is one of the main reasons why the video-game industry has been bombarded with

legislation. In other words do you believe that as graphic cards become more powerful and games become more realistic, the video game industry will face even more legislation.

*Ms. Brathwaite:*

I agree with that but I don't think is for that reason. There is such a precedent for this—in the 1950 comics went under fire; in 1920s the movies went under the same degree of fire; even in Europe, when the books were invented, they were considered a horrible idea for the ideas that were putting inside the minds of the young. Any new technology creates fear; from television, internet, rock music etc.. Now, when some one commits a crime, the question that people are asking is 'did he play video games?'. The irony is that most people who are thirty and under are playing video games. When a new medium will come out video games will be forgotten.

*Petre:*

H.B. 2187 holds game makers responsible for user actions. Do you agree with such legislation?

*Ms. Brathwaite:*

I think that's absurd. I think that what really is happening is that in general games are protected by the first amendment and legislators are trying to find a way to control them.

*Petre:*

What do you think are some good evaluators of literary value in video games.

*Ms. Brathwaite:*

Games are not about letting you watch a story, they're about letting you make a story; an experience. The first one will probably be the ability to let you think that

you control the advancement of the story. Another one is the actual story of the video game.

*Petre:*

How do you think the video game industry will be affected by the acute legislation it faces.

*Ms. Brathwaite:*

I think it will cost a lot of money which could be better spent education parents about video games. Most of these cases go up to the Supreme Court and get rejected on the first amendment grounds. In the end, we will all have to pay for it.

*Petre:*

As a developer, have you ever felt a little embarrassed when asked about your profession especially after the Hot Coffee Scandal (GTA).

*Ms Brathwaite:*

I'm proud to be a game designer and I never wanted to not be what I am. I have had refrained from mentioning it on numerous occasions. Most of the times I'll say I work with computers or I will just say that I teach interactive media.

*Petre:*

Do you believe that gender and sexuality could affect a person's definition of literary value?

*Ms. Brathwaite:*

Absolutely! Up until 1980 you couldn't even pick your gender in video games; you were just a man.

*Petre:*

Do you believe that video-game-makers have a civic responsibility to include literary value in video games?

*Ms. Brathwaite:*

No! Not unless that's what they were trying to do. I've read books that have no content of literary value. People from other forms of art don't have this civic responsibility.

*Petre:*

If another rating system could be devised based on the idea of 'literary value' do you think it would be a better one than the current rating system in effect?

*Ms. Brathwaite:*

No! Literary value is something very subjective. It will be impossible to create a rating system based solely on literary value.



## Appendix I: Experiments

Experiment 1:

==Configuration==

Test Option: Percentage Split 66%

Confidence factor: .25

Number of Folds: 3

Number of instances: 319

Unpruned: True

==Results==

Number of Leaves : 176

Size of the tree : 222

Accuracy: 37.62%

=== Confusion Matrix ===

a b c d <-- classified as

7 8 7 2 | a = Low

4 12 11 1 | b = High

9 10 13 7 | c = Moderate

2 3 4 9 | d = Absent

Experiment 2:

==Configuration==

Test Option: Percentage Split 50%

Confidence factor: .25

Number of Folds: 3

Number of instances: 319

Unpruned: True

==Results==

Number of Leaves : 176

Size of the tree : 222

Accuracy: 29.375%

=== Confusion Matrix ===

a b c d <-- classified as

14 6 11 6 | a = Low

5 14 17 2 | b = High

20 21 14 5 | c = Moderate

12 3 5 5 | d = Absent

## Experiment 3:

==Configuration==

Test Option: Percentage Split 75%

Confidence factor: .25

Number of Folds: 3

Number of instances: 319

Unpruned: True

==Results==

Number of Leaves : 176

Size of the tree : 222

Accuracy: 37.5 %

=== Confusion Matrix ===

a b c d <-- classified as

4 4 8 2 | a = Low

5 6 7 0 | b = High

7 9 14 3 | c = Moderate

3 1 1 6 | d = Absent

## Experiment 4:

==Configuration==

Test Option: Percentage Split 80%

Confidence factor: .25

Number of Folds: 3

Number of instances: 319

Unpruned: True

==Results==

Number of Leaves : 176

Size of the tree : 222

Accuracy: 43.75 %

=== Confusion Matrix ===

a b c d <-- classified as

4 2 5 3 | a = Low

2 5 9 0 | b = High

6 5 15 0 | c = Moderate

2 1 1 4 | d = Absent

## Experiment 5:

```
==Configuration==
```

```
Test Option: Percentage Split 82%
```

```
Confidence factor: .25
```

```
Number of Folds: 3
```

```
Number of instances: 319
```

```
Unpruned: True
```

```
==Results==
```

```
Number of Leaves : 176
```

```
Size of the tree : 222
```

```
Accuracy: 41.37 %
```

```
==== Confusion Matrix ====
```

```
a b c d <-- classified as
```

```
3 1 5 3 | a = Low
```

```
2 4 9 0 | b = High
```

```
6 5 14 0 | c = Moderate
```

```
2 1 0 3 | d = Absent
```

## Experiment 6:

```
==Configuration==
```

```
Test Option: Percentage Split 81%
```

```
Confidence factor: .25
```

```
Number of Folds: 3
```

```
Number of instances: 319
```

```
Unpruned: True
```

```
==Results==
```

```
Number of Leaves : 176
```

```
Size of the tree : 222
```

```
Accuracy: 44.26 %
```

```
==== Confusion Matrix ====
```

```
a b c d <-- classified as
```

```
3 1 5 3 | a = Low
```

```
2 5 9 0 | b = High
```

6 5 15 0 | c = Moderate  
 2 1 0 4 | d = Absent

#### Experiment 7:

==Configuration==  
 Test Option: Cross Validation  
 Confidence factor: .25  
 Number of Folds: 10  
 Number of instances: 319  
 Unpruned: True

==Results==  
 Number of Leaves : 176  
 Size of the tree : 222  
*Accuracy: 35.73 %*  
 === Confusion Matrix ===  
 a b c d <-- classified as  
 22 15 15 19 | a = Low  
 15 37 26 4 | b = High  
 27 30 41 8 | c = Moderate  
 24 11 11 14 | d = Absent

#### Experiment 8:

==Configuration==  
 Test Option: Cross Validation  
 Confidence factor: .25  
 Number of Folds: 30  
 Number of instances: 319  
 Unpruned: True

==Results==  
 Number of Leaves : 176  
 Size of the tree : 222  
*Accuracy: 35.73 %*  
 === Confusion Matrix ===  
 a b c d <-- classified as  
 19 13 21 18 | a = Low  
 16 35 28 3 | b = High  
 26 30 42 8 | c = Moderate  
 20 8 14 18 | d = Absent

## Experiment 9:

## ==Configuration==

Test Option: Percentage Split 81%

Confidence factor: .25

Number of Folds: 3

Number of instances: 319

Unpruned: False

## ==Results==

Number of Leaves : 39

Size of the tree : 52

*Accuracy: 49.18 %*

## === Confusion Matrix ===

a b c d &lt;-- classified as

2 2 4 4 | a = Low

1 5 9 1 | b = High

3 3 17 3 | c = Moderate

0 1 0 6 | d = Absent

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