**A Treatise on Videogames**

<http://www.armchairarcade.com/neo/node/223>

Mon, 05/22/2006 - 5:21pm — Matt Barton

*Author:* Matthew D. Barton  
*Artwork:* Elizabeth Katselis  
*Online Layout:* Buck Feris  
*Notes:* All screen shots used within the article were taken directly from the author's copy of MAME.  
*Special Thanks:* Bill Loguidice

When most people use the word "critic," they have in mind someone who makes and explains decisions about why a certain movie, book, or videogame is or isn't worth buying. This connection to money is one reason why so few critics earn the public's trust, especially in cases where the critic is "owned," either directly or indirectly, by the corporations which make the products they are criticizing. In other words, most "critics" produce little more than ad-copy, and we encounter their work mostly as endorsements--for instance, phrases mumbled by some well-fed critic may appear in the trailer of a movie, or on the back of a new novel. This problem has long plagued the videogame industry, in which most videogame journalists lacked professional backgrounds and had little sense of traditional journalistic ethics.

I bring up this commonly held definition of "critic" so that I may contrast it with another one: The critic as a scholar. Such a critic is less concerned with the subjective features of the works he studies than the objective features common to all of them. Instead of asking whether a certain videogame is worth $50, for instance, these critics may inquire into its technical or literary aspects; consider what it has in common with other videogames, where it fits into the historical evolution of its genre, and so on. These critics would look at videogames not as commodities, but as works of art--serious works that deserve serious study and cogent analysis. These critics are called "literary critics."

Now, at this point, I may as well address the argument that videogames are not literature by definition. Since the word "literature" is a form of "literate," which means the ability to read and write, some people argue that only books and other forms of writing can properly be considered "literature." Indeed, some literary critics deny that film is literature; to these people, any genre but the hallowed book is not worthy of serious study.

I respond to these arguments concerning the literary aspect of videogames in a simplistic way: Writing is only a technological medium used to give commands; this imperative aspect of language trumps the declarative aspect and thus allows videogames to become a particularly suitable vehicle for its delivery. Probably the only real difference between speaking and writing is that speaking requires only natural "tools," whereas writing requires artificial tools. This is an important point, because so many literary critics have gotten bogged down in this discussion and tried to make a clean break between writing and speaking, only to flounder at the last minute by horrible incongruities in their logic.

I mentioned that writing is a medium used "to give commands," which is a function I also ascribe to speaking. All acts of communication are commands, even if those commands are implicit rather than explicit. I say this realizing that most critics claim (and this is a tradition that goes back at least as far as Ancient Rome) that there are at least three purposes for writing: "to inform," "to persuade," or "to entertain." All of these are merely variations of "to command." Even if I tell you to "sit back and enjoy my story about a man shipwrecked on island," I am telling you what to do. If someone is "giving you information," they are telling you what to believe. As far as "persuasion" goes, the command implicit in all persuasive discourse is "consider what I am asking you to do." Thus, there is no form of communication whatsoever that is not in its pure form a command. As if further evidence is needed, consider that the simplest decipherable sentences in the English language are one-word commands: "STOP!" "GO!" "RUN!" "ATTACK!" Consider that even when the common person does not quite understand what his friend has said to him, he may respond with "*Do* what?" Thus, he anticipated a command in the garble. The verb is the soul of any language, and verbs are commands.

All of this talk about language and literature may seem a bit abstract and unrelated to videogames at first. What does an understanding of how language works have to do with *Pac-Man*? There's not even any text in *Pac-Man*!

The reason for my apparent digression is that to properly understand my literary theory of videogames, someone should first know some of my assumptions about literature and language. These assumptions will form the foundation of my critique of videogames. The command-aspect of language is what makes videogames worthy of being considered literature. What I will develop later in this paper is the idea that game authors have a more complex relationship with players than book authors do with readers; the game author must take into considerations not only the commands he will give his players, but the commands he will let them give his game, and how that game will respond to them.

Most literary critics cite Aristotle as the first literary critic, although Plato had some things to say in a couple of his dialogues. Aristotle is called the great empiricist because he studied things "in the real world." For instance, when Aristotle turned his attention to tragedy, he studied the plays themselves and invented a terminology to describe their features. This is a vastly different approach than that taken by Plato, who was the "rationalist" thinker. I won't go into detail the differences here, but suffice it to say that Plato thought literature was evil because it was "a copy of a copy of a copy." The perfection of an object exists only as a "form" or "idea," a physical manifestation of it is only a "copy" of this otherwise inaccessible form. A word used to describe this physical manifestation is yet another "copy" of it, and, finally, if the word is written down, yet another "copy." Just as second, third, and fourth generation copies of a VHS tape are exponentially distorted, so is the written word a wretched copy of the "original" idea which exists only in some metaphysical realm. Aristotle was less concerned with this abstraction and focused instead of classifying and defining literature and its parts.

My goal in this work is to do for videogames what Aristotle did for tragedies. While this goal may seem overly academic and even pedantic, I feel that the end result may well change the way enlightened people think and talk about videogames. I would also hope that any lover of videogames is a lover of challenge, and will consider the more difficult passages in this work to be far less difficult than Epyx's *Impossible Mission!*

**Part One: The Soul of Videogames**

In his famous work *Poetics*, Aristotle defined "plot" as the soul of tragedy. Here, I ought to define two terms as Aristotle understood them; namely, "plot" and "tragedy." "Plot" for Aristotle did not mean the story behind a work; for instance, we might say that the "plot" of Moby Dick is that a man loses his leg to a whale, hunts down the whale, and is eventually destroyed by it. This is not how Aristotle used the term. Instead, Aristotle meant the arrangement of incidents and episodes that would lead to the expected conclusion. In Greek tragedy, the audience already knew the "story," i.e., they knew in advance that Oedipus would kill his father, marry his mother, and eventually discover the truth and stab out his eyes. The challenge a Greek tragedian faced was not inventing a story, but inventing and arranging the events that would lead to the conclusion. What would be the scenes? What would the characters say to each other? In other words, "plot" for Aristotle was not the story itself, but rather the manner in which it was told.

"Tragedy" in Aristotle's time meant a very specific kind of play that ended, as we might expect, rather badly for the main character. The finer points of tragedy can be overlooked for our present purpose, but one vital point Aristotle makes is that the purpose of tragedy is "catharsis," or the purgation of the emotions. Aristotle viewed tragedies as a sort of emotional orgasm, which, once enjoyed, relieved the audience of bottled up emotions and allow them to live normal and healthy lives. We might almost consider catharsis a form of "stress relief." Now, the way this catharsis was reached in tragedy was by having the audience live vicariously through the characters; the audience identified with the characters; that is, they placed themselves in the characters' shoes. For a crude but effective example, consider horror films. Even though a viewer realizes she is not actually being chased by a madman with a butcher knife, she may discover that her heart is pounding. How is this possible? The answer is that she, to some degree, is living vicariously through the movie star. If the movie star is brutally killed, our viewer may reach catharsis: Her fears turned out to be unjustified; it was the movie star, not her, that was stabbed to death. She can now breathe easily; the fear was built up and has now been purged. As you may already guess, these notions of "living vicariously" and "catharsis" will be a very important part of my videogame criticism. In the case of tragic plays, catharsis depends on how well a viewer identifies with the protagonist. Videogames are better than traditional literature in this regard: Videogames effect this identification so strongly that players are known to refer to a moveable block on the screen as "me;" i.e., "Look--that's me on the screen." This type of identification is not possible in tragedy; someone may see a performance by an actor and say, "I know exactly how he feels!" but never, "That's me on the stage."

Let me turn now to the heart of my criticism.

Like tragedies, the soul of videogames is their "plot." However, I, like Aristotle, do not mean "the background story" or any such thing related to fiction. The average game player does not care about "narrative" elements and finds most efforts to map a story onto a game to be cumbersome and intrusive; few are the gamers who praise the "cut-scene." When I say the "plot" of a videogame I mean the way the author has invented and arranged the events and devised the control mechanism. The best way to understand what I mean by "plot" in this context is *gameplay*, which is a strange coinage nevertheless familiar to almost all videogame enthusiasts. I want to be very specific about my use of the term "gameplay." I define the term to mean *the way in which the player performs physical actions to manipulate objects (play), and the inherent challenges and assets offered by the game which make such actions necessary or desirable (game)*. This is a fair approximation of what Espen Aarseth refers to as the *ergodicity* of videogames; however, for the sake of simplicity, I will use the more common term. Let's start by analyzing the gameplay of a game most of us are intimately familiar with: Taito's *Space Invaders*.

Space Invaders typically offers a player two methods of physical control: A joystick for moving an object, in this case a spaceship, left and right, and a button for firing objects, namely missiles (or photon torpedoes). The control mechanism is easy, simple, and quite limited. This constitutes the "play." Now, the challenge of Space Invaders is likewise simple: Avoid being hit by an enemy ship or its missiles, and destroy as many enemies as possible before the inevitable tragic result. In addition to these simple elements, there is also a strategic factor created by the four barricades, which are assets. A player can hide behind these barricades and take potshots, or even destroy them himself, either by accident or design. If the game offered "power ups," like extra firepower, speed boosts, or extra "lives," these would also be considered "assets" for the player.

Like tragedies in Aristotle's time, Space Invaders' story is obvious and irrelevant. We also know how the story must end--eventually, the player will be destroyed. The "fun" of this videogame is not the story, but rather the gameplay. In the case of Space Invaders and other tragic games, the player's satisfaction arises not from the literary contemplation of a story, but the measurement of his gameplay skill as represented by the score.1

A game designer must ask herself three questions in regards to gameplay when inventing a new videogame:

1. What is the player to do physically?

2. How can what happens on the screen make these physical actions necessary and enjoyable?

3. How can the game help the player achieve catharsis?

All games, whether we are discussing videogames or Tic-Tac-Toe, involve the manipulation of objects. In videogames, these objects are usually "sprites," or images such as the spaceship in Namco's *Galaga* or the puzzle pieces in Alexey Pajitnov's *Tetris*. In chess, the objects are the chess pieces. In basketball, the object is the basketball. Finally, in word games, the objects are words, which are not treated as words but objects. Consider crossword puzzles and scramble games, which ask us to see words and letters themselves as objects to be manipulated.

Videogames allow players to interact with objects in ways that other games cannot. Game control devices have evolved along with graphics abilities to give players almost total control over objects; the only limitations to that control are artificially created by the programmer. Whereas the limitations of a player's control of a basketball are practically limited by her height, speed, sight, and agility, the only limitations imposed on players of basketball videogames are those directed by the programmers.2

A videogame designer must take into consideration the various input devices available when conceptualizing a game. Not surprisingly, there have been many such devices, and their history is probably one of the more fascinating aspects of videogaming. Nowadays, arcades sport machines with input devices ranging from fire hoses to fishing rods. More traditional devices, like joysticks and game pads, were originally quite simple, but evolved into almost staggeringly complex controllers with a myriad of buttons, knobs, switches, levers, and "throttles." While modern controllers typically provide six or seven buttons, a single joystick is itself capable of an infinite number of inputs--eight naturally, and more if "combos" are utilized, or rapid combinations of movements such as left-left-up-down-right. Such "combos" are used extensively in the popular title from Midway, *Mortal Kombat*3. Unfortunately, as is true of gameplay as well as joysticks, complexity is not always desirable, and may ruin gameplay with excessive and confusing controls.

Ultimately, the control mechanism is more significant for its limitations than its features. If a designer was developing games for a console restricted to two push buttons as input devices, a game like *Mortal Kombat* would be highly impractical. An interesting thing to note here is that the world's first computer game, *Spacewar!*, was so cumbersome to control-players had to flip switches on a mainframe--that clever hackers were led to create the first true game controllers. Often enough, control limitations are themselves a critical factor in the challenge of a videogame; interesting limitations often cause the player to think strategically, which players will find either enjoyable or frustrating depending on their temperament and ability.

The second question--How can what happens on the screen make the player want to play--is more important than the first, because no matter how well a joystick was designed, no one but the smallest child would delight in playing with it if it were not being used in conjunction with a videogame. The designer must find a way to interest the player in using the device to interact with objects on the screen. Many critics and players mistakenly place the appeal of videogames in features like graphics, sound, and so on, but it makes no more sense to say that a videogame is great because it is has good graphics as it does to say the game of chess is great because the pieces are ornate or made with exquisite materials.

All videogames have only one way to stimulate prolonged and recurrent interest: catharsis. Successful videogames must begin by building up an emotion in the player, then relieving it vicariously through catharsis. The best videogame designers are those who understand what factors in a game will achieve the desired emotional effect. What is most sorely needed in videogames are designers who understand human emotions and the surest way to affect them; though we have yet to see games of Homeric proportions, that certainly is a fault of videogame artists, not the medium.

Let us turn now to the types of videogames and their not-so-subtle differences. There are three types of videogames: Tragedies, comedies, and epics. Games in which the player must inevitably be destroyed are tragedies. If the player can "win" the game, we rightly call it a comedy. "Epics" are vastly different than other games because they involve a long and complex narrative, or story, presented as "episodes." *Tetris* is a tragedy, *Mega Man* is a comedy, and *The Bard's Tale* is an epic. Games that cannot be lost at all are not rightly called games.

**Part Two: Tragedies**

Let us now consider how these three types of videogames strive towards catharsis. As will soon be shown, games that fail often do so because they do not effect catharsis in players, instead leaving them either anxious or bored.

Now, I said earlier that tragedies are different from comedies in that they do not end well. I must at this point add to this definition. Tragedies work because they cause the player to perceive himself in a certain relationship with reality; specifically, the cold realization that the universe does not make sense. Bad things happen to good people, no matter how well they act or how hard they try to avoid catastrophe. The stark truth is that the universe must remain an enigma. Being reminded of this truth is necessary because we find it natural to impose an artificial "order" or "understanding" on the universe; indeed, without such artificial constructions we couldn't survive in this world. However, exposure to the eternal mystery of the cosmos is a wondrous and elevating experience, which helps restore our sensibilities and relieve us of the anxieties associated with trying to fit the square pegs of reality into the round holes of our understanding. This is true for videogames as well as tragic plays and even great cathedrals, whose mystical architecture is designed with such catharsis in mind. Whereas very ancient cultures saw no logical order to the universe at all, seeing every physical phenomenon as the workings of magic or gods, and found catharsis only in strange rituals, modern cultures see every physical phenomenon scientifically; we assume rational explanations exist for even the most inexplicable occurrences. Unfortunately, this relationship to reality is ultimately incapable of satisfying the needs of the human psyche, and some "patch" is needed, such as religious experience, fiction, and so on. Joseph Campbell talks about this extensively in his work on myths--Even the most sane, rational, and well-mannered people need to participate in some mythic ritual every once and awhile, whether that means whooping at a football game, preparing a romantic dinner for a spouse, or playing a round of *Pac-Man*.

Interestingly, the Greeks (and even late Renaissance critics) argued that tragedy was far more noble, "High," and lofty than comedy. They assumed that the best people, or the aristocracy, needed tragedy, whereas only peasants or "common" folk enjoyed comedy. The reason for this is quite simple: The common folk want a happy ending because their current station in life is often dismal. For instance, Christianity teaches that we shouldn't worry about living miserably here on earth, because we will live in eternal richness in heaven. People with limited access to wealth or even basic resources tend to live disorderly and harsh lives. They find the greatest catharsis in fantasies involving the acquisition of happiness and order; the proverbial "happily ever after." Contrarily, the upper classes dwell less on prosperity because they already possess it; for them, the artist prescribes tales of woe; that is, tragedies, to balance out their psyche. For the same reason that too much meat and sweets are bad for your diet, too much suffering or satiation dulls your wits.

So what does this all this mean? I will use a crude but effective analogy: a rib eye steak. If someone seriously contemplates why human beings enjoy eating good food, she will discover that it is a "mixed pleasure," to borrow a term from hedonism. A "mixed" pleasure involves the satisfaction or satiation of an appetite which, left unattended, would become painful or at least unpleasant. Let us consider the pleasure of eating a delicious steak. This pleasure is "mixed" because, while the seasonings and texture of the steak are very pleasing to the senses, part of our satisfaction comes from relieving our hunger. If we were previously satiated and attempted to eat a steak, our pleasure would not be nearly as great, and we can here recall the adage, "Hunger makes the best gravy." If we found it pleasurable and delightful to eat steak anytime, and this pleasure was in no way connected with pain, then we could call eating delicious food an unmixed pleasure. Unfortunately, that is not the case, and it is also not the case with tragic videogames. All bodily pleasures are mixed, and the only unmixed pleasure is the pursuit of knowledge (learning)--after all, learning is almost always pleasurable, yet how can we suffer lusting after something we are not aware exists?

How is playing *Tetris* a mixed pleasure? After all, someone could say that he enjoyed playing *Tetris* anytime, never grew tired of doing so, yet never suffered from lack of playing *Tetris*. This last part I would find unlikely; though a person could obviously "live" without his favorite videogame, such a life would be, if even in a small way, less satisfying than the life where his desire to play was routinely fulfilled.

Thus, on a simple level, we find the pleasure of *Tetris* emanating from the desire to satisfy an appetite. I say "simple" because, one cannot acquire a taste for a fruit one has never eaten. It is only through habit and repetition that players become "addicted" to *Tetris*. We always refer to *Tetris* as a "mixed pleasure" because the pleasure of winning is impossible without the real (in this case inevitable) pain of losing. What makes *Tetris* particularly enjoyable for most people is that the pleasure of winning outweighs the pain of losing. While this may explain why people return, again and again, to *Tetris*, it does not explain what attracted them to it in the first place. Now, I will demonstrate this origin.

*Why do people play videogames?* The critical answer runs something like this: Videogames enable the player to live vicariously through a subject, be it a character or merely a cube. This is the first part of the pleasure, and it seems to be shared by all of humanity. Who hasn't had a pleasant fantasy about temporarily assuming another body, such as a bird? This impulse may be related to the sex drive, which is about as close to two bodies becoming one as we are likely to experience in this life. Aristotle explained the tendency to imitate nature as *mimesis*, and said that only through mimesis can we learn anything about the world (think about how we learn to talk, for example). Furthermore, Aristotle thought that human beings instinctually enjoy mimesis. This makes a lot of sense when we consider that children mimic their parents' speech for no possible reason other than pleasure; anyone who has been around an infant for longer than a few minutes realizes that desire for pleasure is the only reason infants perform any action.

While we're talking about infants, we may as well bring in some observations about babies that may be enlightening. Psychologists are aware that the youngest babies have not yet developed a sense of self; that is, they are not aware of the limitations of their body. As far as they know, their mother's nipple is part of their body. When they at last realize that they are confined in a body, and have no direct control of matters external to it, they experience a profound sense of loss; a knowledge of that split between self and other, a catharsis, that begins their journey into human consciousness. Freud and Lacan refer to this stage as the "Mirror Stage." The pain of this stage is probably responsible for the creation of most myths and religions, almost all of which share at their core a relinquishing of this rift, whether we are talking about being "one with the force," "being one with God," or even visions of the world as some giant computer matrix, ultimately capable of being totally controlled (with no division between the one and the many.) It obviously follows that art which ends in "catharsis" is a revisiting of this reality-forming rift first glimpsed in infancy.

The second part of pleasure comes from this type of catharsis. In an effective videogame, the vicarious control of the subject will build up a certain emotion in the player which climaxes when the player either wins or loses the game. In the best games, winning or losing matters--the player feels he has something to gain by winning and lose by losing. Since the ultimate "loss" a human being can suffer is his own life, the most profound game of history is war, and other games are simply variations of war with lower stakes. Most videogames, especially the first videogames, end in death. This is true for traditional games as well as videogames; for instance, it's obvious to anyone that ancient games like chess and cards find their origins in war and domination, and, when glancing back through history, we find that the possibility of dying was quite real in ancient games--whether we are talking about the first Olympics or [Mesoamerican ballgames](http://www.newarkmuseum.org/pages/pressoffice/pdf/mesoamerican_ballgame.pdf). As societies and cultures advanced, games (and religion), became less concerned with the "actual" and more concerned with the "representational." This is simply an abstract way of saying that the ancient games involved death; newer games involve only imaginary death, and some games only involve death at the most abstract level. In fact, tragedy itself likely evolved from mystic religions involving human sacrifice, as many prominent "[Goat Song](http://depthome.brooklyn.cuny.edu/classics/dunkle/tragedy/intr2.htm)" scholars have noted. The catharsis involved in this representational violence is an integral part of all human societies; subsequently, we should praise videogames' ability to represent it so vividly and involve players in it so actively--otherwise, people may seek the "catharsis" of representational killing and dying in the real world.

Whether or not a videogame player "dies" in some graphically-realistic way on the screen is ultimately not important. What is critical is whether or not that loss with achieve a similar effect; a pain of loss and a moment of mystical awareness. At some point, a player has to realize that he lost not in spite of his mastery of the controls, but because he has control. Just as everyone must die no matter how well they plan their diet and how hard they exercise--a harrowing realization that requires quite a bit of maturity--the physical universe always gets the last laugh. The catharsis of losing a game of Pac-Man is responding to that terrible truth that the physical reality we live in must, in the end, betray us to some other metaphysical universe that we know nothing about. Games are, in their finest, purest, most significant form, a preparation for the enigma of death. As long as we're being metaphysical here, we might posit that the experience of death will be some realization as profound as that we experienced when we first learned that our body was separate from our mother's and the world around us; perhaps death will bring yet another such rift.

So, if this explains the appeal of tragedy and tragic videogames, what about comedy? Like Aristotle, I must postpone my treatment of this topic for a later treatise--in the second issue of *Armchair Arcade*.

1 In the age of modern computer gaming, when games are more likely played at home alone rather than at a crowded arcade, the "score" factor has become irrelevant. Subsequently, skill games emphasizing scores on "High Score" tables are becoming rare. The whole "score" phenomenon has a rich and interesting history, and I may take on the task of analyzing this history in a future article--for now, suffice it to say that producers of early home videogame consoles like the Atari 2600 tried to maintain the score/competitive spirit by hosting magazine contests, in which players were asked to photograph the screen when they reached a high score and mail it in for a special patch.  
  
2 An exception is the case of differently-abled players, especially those without sight, who have been deprived of the pleasures of videogaming for perhaps too long.  
  
3 One peculiar and highly popular new arcade phenomenon is Dance Dance Revolution (DDR), which lets players dance about on a special platform to display their dancing prowess.