

Ethics of Cockfight, Botfight and other Fights

J.-G. Ganascia

LIP6 – University Pierre and Marie Curie

B.C. 169, 4, place Jussieu, 75252 Paris Cedex 05, FRANCE

Tel. +33 (0) 1 44 27 37 27 – fax +33 (0) 1 44 27 70 00

Jean-Gabriel.Ganascia@lip6.fr

Abstract

In the present age, with the development of autonomous machines, “botfighting”, i.e. organizing fights between robots, is becoming usual. There even exists a Robot Fighting League (cf. <http://botleague.net/>), which institutionalizes the organization of botfights. Those fights are essentially public performances, which fascinate people. Many could argue that there is nothing more in those games than debris of metal scrap and of non living materials, which is not problematic, except from an economical and ecological point of view. However, the ethical value of public shows and, more precisely, of the mimetic representation, has long been debated. This dispute could be prolonged today with the discussion of the ethical value of botfights, which can be assimilated to mimetic representations. The main interest here is to arbitrate between different possible foundations of robot ethics. From a pure utilitarian point of view, botfighting looks to be positive, because it leads to increase the pleasure, without adding any suffering. But, as we shall see in the following, this positive attitude towards botfights opposes to the feelings of the many people who are shocked by the violence of botfights. We aim to introduce another ethical perspective, based on Peirce semiotics, from which some excessively brutal botfights can be condemned.

Keywords: cockfight, botfight, robot ethics, utilitarian ethics, semiotics, violence, spectacle.

*Who killed Davey Moore
Why an' what's the reason for?*

*“Not me,” says the boxing writer
Pounding print on his old typewriter
Sayin’, “Boxing ain’t to blame
There’s just as much danger in a football game”
Sayin’, “Fistfighting is here to stay
It’s just the old American way
It wasn’t me that made him fall
No, you can’t blame me at all”*

Bob Dylan

INTRODUCTION

Let start by reminding the lyrics of the famous Bob Dylan’s song “Who Killed Davey Moore”: “Boxing ain’t to blame [...] Fistfighting is here to stay. It’s just the old American way.” Undoubtedly, the fights between men, between animals and between men and animals are part of almost all the human cultures since the dawn of mankind. For instance, let us recall that fist fights were mentioned on Mesopotamian stone tablets and in Homer’s Iliad. Organized animal fights are also important parts of human cultures. The tauromachy, i.e. bullfighting, is traditional in Spain, Portugal, south of France and some Latin America countries (e.g. Colombia, Peru, Mexico etc.).

Cockfighting is practiced in many different areas of the world including Asia, North, South and Central America, Europe, Pacific Islands etc. And, there are also, especially in Asian countries, “bugfighting”, cricket fights and spider fights etc.

In the present age, with the development of autonomous machines, “botfighting”, i.e. organizing fights between robots, is becoming usual. There even exists a Robot Fighting League (cf. <http://botleague.net/>), which institutionalizes the organization of botfights. Those fights are essentially public performances, which fascinate people. Many could argue that there is nothing more in those games than debris of metal scrap and of non living materials, which is not problematic, except from an economical and ecological point of view. However, the ethical value of public shows and, more precisely, of the mimetic representation, has long been debated. Let us mention, for instance, the antique condemnation of the theater by Plato and, on the opposite, the notion of *catharsis* introduced by Aristotle to defend the ethical value of the tragedy. This debate could be prolonged today with the discussion of the ethical value of botfights, which can be assimilated to mimetic representations. The main interest here is to arbitrate between different possible foundations of robot ethics. From a pure utilitarian point of view, botfighting looks to be positive, because it leads to increase the pleasure, without adding any suffering. But, as we shall see in the following, this positive attitude towards botfights opposes to the feelings of the many people who are shocked by the violence of botfights. In this article, we aim to introduce another ethical perspective from which some excessively brutal botfights can be condemned.

To approach the problem and analyze the ethical value of botfights in the light of ethical value of combats between men and of animal fights, this article is divided into four main parts. The first identifies the ethical problem nowadays with botfights. The second recalls the main ethical issues about fights between men, between animals and between men and animals. The third investigates the problem of botfights from an ethical point of view. The fourth proposes a theoretical framework, inspired from the Peirce semiotics. Lastly, we shall conclude on the ethics of virtual worlds and, more generally, of artificial worlds.

WHERE IS THE ETHICAL PROBLEM WITH BOTFIGHTS?

Botfights

For more than thirty years now, combats between robots are regularly organized by a few institutions (e.g. the Robot Fighting League) in Japan and in the United States. Usually, those combats are spectacles, which show the technical qualities of the robots that are fighting as wrestlers or gladiators in arenas or, again, as *rikishis* on *dohyo* that are the rings on which the *sumo* wrestlers are fighting. Many people, especially youths, adore those combats, which look innocent, because the robots are just considered as pieces of metal adjusted to each other and controlled by easy to reproduce computers. Besides, these fights help to promote robotic technologies towards the population, which is commonly seen as positive. Moreover, the development of such robots requires overcoming many technical difficulties that constitute a real challenge.

Among those combats, some are very violent. There, robots are not only proud wrestlers fighting with loyalty and equal footing, but autonomous weapons designed to be as cruel as possible. They may include all kind of arms¹ designed to destroy more and more, including huge spinning blades, flame-throwers, rams, etc. Specialized weaponry has even been developed to categorize and inventory those equipments (see wikipedia article on “Robot combat”²). The names of those combat robots suggest the fury and the wildness: Mortician, Nightmare, Mortis, Trasher, etc. Lastly, the

¹ The interested reader may consult the following websites where he/she could have a look at interesting videos and photographs of botfights

<http://www.hardcorerobotics.com/videos.htm>,

http://www.wat.tv/video/combats-cup-maker-faire-08-o2j0_2gvqt_.html,

http://www.youtube.com/watch?v=NhTVBHerQ-0&feature=player_embedded#, <http://videos.tf1.fr/infos/2010/combats-de-robots-aux-etats-unis-6114815.html>, <http://www.youtube.com/watch?v=zHZ40lVd2ms&feature=related>,

<http://www.youtube.com/watch?v=sckCuYiucXo&feature=related>,

http://www.youtube.com/watch?v=6NNY1_MoAjw&feature=related,

http://www.youtube.com/watch?v=_e4cHWS2758&feature=related,

<http://www.youtube.com/watch?v=EtjF6zcx7k8&feature=BF&list=QL&index=1>,

<http://www.youtube.com/watch?v=2upy6FzArws>

² Cf. http://en.wikipedia.org/wiki/Robot_combat

public combats generate noise, flames, destructions and showers of sparks on the rings, with huge laughs in the audience.

Combat robots vs. robot soldiers

Note that combat robots are not robot soldiers. They do not serve any military purpose; they are not built to make war or to help armies during a war, but just for the fun and for the sake of pleasure provoked by the spectacle of the pure fury, of the wildness and of the ferocity. Even if those robots are only inert physical objects and if the ways they are designed and programmed doesn't leave any doubt about their lack of phenomenological consciousness, their combats and their destruction provokes a feeling of malaise. Furthermore, showing so much violence to the public, especially to the youth public to which they are usually dedicated, is not a very healthy spectacle. This article is intended to provide ethical arguments that could lead to condemn some of the more violent botfightings. Doing so, our goal is neither to attack the botfightings, nor to promote legislation against them, but to discuss ethical arguments, which could serve as a basis to botfights regulation. In particular, we show that utilitarian ethics is insufficient to face this problem and to derive ethical arguments in accordance with our intuition, i.e. with our feel of unease in front of botfights.

Ethical status of this work

Usually, philosophers distinguish four branches of ethics: meta-ethics, normative ethics, applied ethics and descriptive ethics. *Meta-ethics* is concerned by the logical status of ethical statements. The *normative ethics* deals with the theoretical justifications of the ethical statements, which might be, for instance, hedonism, consequentialism, deontology, etc. The *applied ethics* examines particular issues of human life that touch for instance the reproduction, health, environment, etc., in a philosophical perspective; its goal is to identify the correct line of action in various fields of activities, from a moral standpoint; there exist many subfields of applied ethics depending on the domain on which ethics is applied, e.g. bioethics, professional ethics, nanoethics, roboethics, computer ethics etc. Lastly, the *descriptive ethics* describes, analysis and explains the rules that people abide.

While this paper deals with some particular field of human activity, i.e. building fighting bots and exhibiting botfights, its purpose belongs only marginally to the branch of applied ethics. Admittedly, botfighting is a human activity; therefore, according to the previous definition, the moral judgments concerning botfighting belong to a branch of applied ethics. However, the direct damages caused by botfights are minor. After all, there is nothing more than metal, plastic and silicon chips... Consequently, from a utilitarian point of view, harm is nothing more than ecological, especially as only a few people are concerned. It may then appear futile to discuss about the ethical status of botfights. To be clear and to avoid misunderstanding, let precise that the purpose of this article is not restricted to discuss the specific point of botfights, but it is to clarify the moral arguments that could be used to determine their ethical status in a way analogous to which command our ethical intuitions, i.e. our feel of unease. In particular, the utilitarian ethics seems inadequate for that purpose. This is the reason why we attempt to develop a conceptual argumentative scheme based on the Peirce semiotics. So doing, the purpose of this article belongs also to the branch of normative ethics and even, to many respects, it comes more under the branch of normative ethics than under the branch of applied ethics.

ETHICS OF FIGHTS

Ethical Statute of Fights

In almost all human civilization, human and organized animal fights are strictly regulated, except in exceptional situation, during wars or revolts. For instance, in Roma, the gladiators had to obey to precise rules. Everybody knows that taumachy is orchestrated by traditional phases and codified fairway to which the bullfighters need to conform. The weapons (e.g. "banderillas" and swords) are precisely specified for each step and there is no free choice there. And, it is similar with cockfights: depending on the geographic areas, either the cocks are equipped with iron needles to do more harm to their adversaries or they have their claw blunted in order to diminish the injuries caused by the clashes.

Without going into the details of those different rules, it appears that fights do not leave men indifferent. Some promote a prohibition, while others defend them as part of cultural identities. The

regulatory rules that are enacted make the combats acceptable by the majority, which certainly explain why they differ so much from one culture to another. Behind those rules, there are arguments in favor or against the fights. Among the arguments against the fights are the generated pain, the cruelty and the possible death of the protagonists. In favor of fights, there are not only the pleasure caused by the spectacle and its cathartic effect, but also the virile virtues of the fighters, which constitute an example for everybody, and the social cohesion generated by the view of striking scenes, similar to ritual sacrifices. While the last two arguments, i.e. the virile virtues of the fighters and the social cohesion generated by the sacrifice, are essentially applicable to traditional societies, the two first, i.e. the pleasure generated by the show and its cathartic effect, may always be more or less considered as valid in our contemporaneous world. Nevertheless, as we shall see, the cathartic effect is not borne out by psychological experiments on video games, movies and other contemporaneous media.

Remark that, despite that one of the main arguments against animal fights is the pain they cause, there have been, in the past, philosophers who negated beast suffering. It was the case with Descartes and his followers who asserted (Descartes, 1998) that animals were nothing more than machines, i.e. that they were made up of wheels, tubes and many other mechanisms. As a consequence, they were not sensitive, but only reactive to physical pressure and motion. On the contrary, in addition to their physical body, human beings were supposed to own an immaterial soul linked to the body through the “pineal gland” in the brain. Descartes’ views about animal insensitiveness were regarded as counterintuitive by many of his contemporaries, which caused a lively debate in the 17th and 18th century French philosophical community between modern rationalists, who thought that animals weren’t conscious and so didn’t feel pain, and traditionalists (Bouillet, 1737; Yvon and Bouillet 1798).

Contemporary Arguments about Animal Fights

Arguments against the fights, especially against regulated animal fights (e.g. tauromachy or cockfights), are always debated. For instance, the Catalanian parliament decided in July 2010 that tauromachy would be prohibited after 2012 in the Catalanian territory, which is a Spanish region. On the same way, in France, according to the Grammont law that was promulgated in 1850, all animal fights are prohibited, except when it encounters a local tradition. As a consequence, there are always, in the 21st century, bullfights in the south of France and cockfights in the north of France. In June 2010, two members of the French parliament, on both sides of the political spectrum, Ms. Geneviève Gaillard (socialist party) and Ms. Muriel Marland-Militello (conservative party) proposed to vote a law against tauromachy and cockfights. However, according to well informed sources, it seems that this proposal has no chance to be voted in the near future.

This review of ethical arguments in favor or in disfavor of animal fights does not intend to make us to take part to the dispute, but to show that, over time, the dispute remained while the arguments evolved. At present, it seems that many of our contemporaries are strongly opposed to animal fights, because of animal suffering. And it goes the same with human fights, for instance with boxing and wrestling. The cathartic effect does not seem any more to prevail over the arguments against animal or human fights; no more the educative virtues of fights. For instance, nowadays, in the case of tauromachy, nobody argues that it acts as an outlet for natural violence and that the show of animal death contributes to civilize the spectators. Nevertheless, tauromachy is always allowed in many countries.

Nowadays, it appears that the only acceptable motives in defense of animal fights concern tradition, culture and defense of identity. For instance, while the two above mentioned members of the French Parliament attempted to prohibit all types of animal fights, and especially tauromachy and cockfight, the tauromachy was officially registered, in April 2011, as a piece of the cultural immaterial patrimony of France³.

More generally, today, nobody seriously defends violent spectacles by saying that they contribute to diminish aggressive behaviors, i.e. by arguing their cathartic effect. One might claim that some people would learn about life from the show of violence, which could prepare them to confront reality. However, it has been proved (cf. (Villani, 2001) and (Cline & al., 1973)) that, when they are violent, the movies, TV, video and other media influence negatively our lives. Some

³ See, for instance, <http://fr.news.yahoo.com/4/20110422/tts-france-tauromachie-patrimoine-ca02f96.html>

children imitate the behavior they see in the movies, especially violent behavior, and become aggressive. More precisely, researchers have identified three ways in which kids and teens may respond to high levels of violence: increased fear, desensitization to real-life violence and augmentation of aggressive behavior.

AN ETHICS FOR BOTFIGHTS

Let us now come back to our main topic that is the ethics of botfights. To do this, let us examine the possible arguments in favor and in disfavor of botfights by reviewing the arguments in favor and in disfavor of fights between men, between animals and between men and animals. As it has already been said, the contemporaneous robots are supposed to be devoid of consciousness. Note that it has not always been the case. One of the most paradoxical episodes in the quarrel occurred in the mid-18th century when La Mettrie, who was a modern mechanist philosopher and, consequently, a firm partisan of the Cartesian doctrine, wrote a book (1748) entitled “Machine Man” (La Mettrie, 1996) where he claimed that not only animals were machines, men were machines too. As a result, the soul could be reduced to a machine and there was absolutely no difference between animals and men. And, subsequently, robots, which are nothing more than machines, may produce and possess souls, which is our contemporary question. Furthermore, the recent progresses of cognitive science and the debates in the philosophy of mind about the consciousness of robots and its nature render this question current. As a consequence, in the case where the robots would own an effective consciousness, they could suffer pain, which would feed the debate about the ethics of botfights.

However, at present, the type of robots that are engaged in botfights is very primitive. The nature of their consciousness, if they have one, is very restricted. For the sake of clarity, let us recall the different level of consciousness that have been identified by philosophers (cf. (Floridi, 2005) and (Dretske, 2003)). According to many of them, for instance to Floridi and Dretske, three types of consciousness have to be distinguished: the *existential consciousness*, which corresponds to the behavior as far as it can be perceived by an external observer, the *phenomenological consciousness* that covers perception and emotion, and lastly, the *reflexive consciousness*, which encompasses the reflexive thinking. In view of their ability to mimics human behaviors, the robots that are engaged in botfights could act as if they were conscious, but they don't own any phenomenological consciousness analogous to ours because they don't really feel pain in a way understandable to us. Therefore, the main argument against the fighting men and the fighting animals, i.e. the generated suffering, does not apply to robots.

Conversely, among the arguments in favor of the fighting men and the fighting animals, two that are more or less valid in our world, i.e. the enjoyment for the spectacle and the cathartic effect, could also be valid in case of the fighting robots. More precisely, as we previously said, the cathartic effect of fights is no longer accepted, because it has been proved that it didn't exist. On the contrary, it has been proved that violent spectacles augment the fear and the aggressive behaviors while they desensitize to real life violence. Contrariwise, the enjoyment for the spectacle is always valid. It fully justifies fights in general, violent movies and media, and, more specifically, the botfights. Undoubtedly, this argument is valid from an economical perspective. This is certainly the reason why so many films, TV shows, video games and media are violent. However, it does not constitute, by itself, an ethical argument, excepted from a utilitarian point of view, because those spectacles lead to increase the pleasure, without increasing pain.

Therefore, we should conclude to the positive ethical value of fighting bots, because the arguments against, i.e. the generated pain, disappear, while the arguments in favor, i.e. the increase of pleasure, remain. This would be the outcome of a purely utilitarian ethics. However, this conclusion does not respond to our intuition and to the feelings of many people, who are afflicted by the violence of such a show. In addition, let us remark that an important series of current arguments in favor of animal fights, which is related to the traditions and the defense of cultural identities, does not apply, because the actual robots are very new.

The gaps between the conclusions of a utilitarian ethics and the experience of the many people who feel hurt by the violent spectacles are very frustrating. During the past, utilitarians were happy to reach counter-intuitive conclusions, which proved, according to them, the usefulness of an actual measure of pleasures and pains. However, with this reasoning, there is a risk to fall in a kind of vicious circle according to which it would be exclusively possible to prove the ethical value by

computing the summation of pleasures and pains. This would be a kind of circle, because this would lead to deny any ethical value to what could not be reduced to such a computation. In other words, by postulating that the reckoning of pleasures and pains gives a simple criterion for evaluating the ethical value, it would lead to reduce all ethical criteria to this computation.

SEMIOTICAL APPROACH OF BOTFIGHTS

Ethical Status of Robots

One argument that could be invoked against the botfights has not been considered in the above mentioned reasoning, because it does not seem usually to apply to animal fights: it concerns the cruelty and the wildness shown without restraint in a public spectacle. Even if nobody is suffering from the direct consequences of this cruelty and of this wildness, many feel that it has to be condemned from an ethical point of view. This argument has not any place in a utilitarian ethics, because it appears too difficult to actually measure the effects of violent spectacles in terms of pleasures and pains. Some empirical works try to do it and conclude, with psychological experiments, on the negative effects of violent spectacles. But, it is not totally conclusive. In addition, according to François Jullien (Jullien, 1995), it seems that traditional Chinese philosophy was sensitive to the view of animal suffering. However, none of those arguments is fully convincing from a modern western standpoint. Our goal here is to develop a rational ethical argumentation against the above mentioned botfights, which is based on the development of theoretical considerations about the ethical effect of exhibition of violence. To do this, we need a more sophisticated conceptual apparatus than the only summation of pains and pleasures, which constitutes the exclusive foundation on which rely the utilitarian ethics. We do it by defining the ethical status of fighting robots.

Accurately, to identify the ethical status of botfights, we claim that the robots and, more generally, the artificial beings that take part as actors in a public performance, need to be viewed as what they actually are in this show, i.e. as signs. As a consequence, their ontological status has not to be defined with respect to a presupposed phenomenological consciousness, but solely with respect to their existential consciousness, in a semiotic perspective. Let us recall that, in Peirce semiotic theory (Peirce, 1982), signs have a ternary structure that distinguishes the sign itself that is sometimes called the *Representamen*, i.e. the physical signifying element, the *Object*, which constitutes the denotation of the sign, i.e. its reference, and the *Interpretant* on which the sign determines its effect. For instance, if we consider the American flag, the *Representamen* is a piece of tissue, with a well ordered assembly of 50 white stars on a blue background and an alternating of 13 red and white stripes; the *Object* is a powerful symbol of Americanism that represents not only the United States of America, but also the present union of 50 states and the 13 British colonies which originally rebelled against the British Monarchy; the *Interpretant* may be any person who look at this flag. Some adore it to the point they display it on vehicles, on buildings, on gardens, etc. Others hate it, because they view it as a symbol of America, which leads them to burn it.

The fighting robots are exclusively built for public combats. In that way, they have to be distinguished from robot soldiers, which are designed to destroy and to kill. As a consequence, the ethical status of fighting robots has to focus on their role in public combats, which is to impress audience by showing warier and hunter qualities, i.e. courage, endurance, vigor, animosity, etc. So, to determine their ethical status it is better not to regard their actual effects, but what they represent. In other words, the best is to assimilate them to signs, i.e. to representations, and to analyze their function by reusing the Peirce semiotics framework. Note that this interpretation is restrictive. On the one hand, it does not take into consideration the physical destruction of other robots, which has ecological consequences that are of ethical concern. On the other hand, the soldier robots or the use of fighting robots in the outside world is not taken into consideration within this framework. Those two ethical consequences can be analyzed with more classical framework, while the case of botfights is more difficult to satisfyingly elucidate, within those classical frameworks. This justifies our effort to build another ethical framework based on Peirce semiotics.

Semiotic Status of Botfights

Let us now examine the semiotic status of fighting robots by assimilating them to signs and by making reference to the status of signs in the Peirce semiotics. The fighting robots that are constituted by assemblies of metal, silicon chips, plastic etc., are physical signs, i.e. *Representamen*;

as such, they are the analogous of the piece of tissue for the American flag. The *Objects* to which the fighting robots refer are some artificial beings, which correspond to their existential consciousness, i.e. to the intentional systems to which their behaviors are attributed. During the combats, not only the fighting robots are physically hurt, but also those existential beings. The third and last component of signs is the *Interpretant*; in the event of fighting robots, *Interpretants* are the spectators watching the performance. They may be afflicted by the violence of the combats.

More precisely, in the case of rampage and of physical destruction, the physical robots that are damaged, i.e. the *Representamen*, can be easily replaced. The negative consequences are material; the damage is ecological, which may have an ethical dimension, as earlier mentioned, but this does not exhaust the ethical issues of botfights.

Even if the *Objects*, i.e. the artificial beings to which refer the robots, are affected, they don't really experience pain like us, so they don't need to be taken into consideration. No serious damage affects those artificial beings. As a consequence, the *Objects*, i.e. the artificial beings to which refer the robots, are not to be taken into consideration here.

Lastly, the *Interpretants*, that are, in this instance, the members of the audience for which the robots are designed and by which their meaning is determined, suffer the consequences of the violence of the show. The watchers are affected by the violence of the spectacle. The above mentioned empirical works of psychology (Villani, 2001; Cline & al. 1973) prove that the spectacle of the violence perturbs the individuals. The violent combats contribute to augment fear, to attenuate the reaction to real-life violence and to increase the aggressiveness. Independently of those empirical justifications, it is also possible to achieve a philosophical analysis, by reference to Emmanuel Levinas. Without going into details, the ability to open his mind to the others, that is to say to what Levinas (Levinas, 1961; 1990) could have named "the face of the Other" or the "Epiphany of the Other", cannot remain intact after having watched such fury and ferocity. Consequently, the spectators of botfights, who correspond to the *Interpretants* of fighting robots viewed as signs, in a semiotics perspective, are directly affected by the violence of the spectacle.

AN ETHICS FOR ARTIFICIAL WORLDS

To conclude, the conceptual apparatus based on Peirce semiotics that we have roughly sketched here can be generalized to artificial worlds. Not only the botfights and the robot spectacles can be approached with it, but also the virtual worlds as Second Life and, more generally, all the artificial worlds that are built for the spectacle.

We claim – and we hope to have clearly shown – that the botfights reveal the limits of an ethics that would be restricted to utilitarian arguments. We could also imagine more abstract situations where the utilitarian ethics are helpless. It is the case, for instance, of the virtual pornography, and, more precisely, of the virtual pedophilia, where the images of children are only computer programs, without reference to real persons. In an excellent paper that has appeared in a recently published book edited by Charles Ess and May Thorseth, and that is entitled "Virtual Child Pornography - Why Images Do Harm from a Moral Perspective" (Strikwerda, 2011), Litska Strikwerda develops similar arguments to ours by showing that the question of virtual child pornography is analogous. More precisely, in the case of traditional child pornography, the main ethical argument is that children who were involved into the movies are harmed, because, being used for commercial prospects, their images are sullied and corrupted. In the event of virtual child pornography, the argument falls down, because no individual is sullied and corrupted, since the image is nothing more than bits, without reference to any actual person. From a utilitarian point of view, it appears that nobody, i.e. no identifiable person, suffers, except virtual children, which are the denotations of the images. Does it really mean that virtual child pornography does not offend anyone? This would have been the conclusion of a pure utilitarian ethics, because the watchers augment their pleasures without harming anybody, i.e. without increasing the pains. Nevertheless, many people feel that this virtual child pornography has to be condemned from an ethical point of view. It then appears necessary to develop a conceptual apparatus that helps to justify this condemnation. We claim that the conceptual apparatus that we developed to identify the ethical status of botfights could be reused for virtual child pornography.

In this respect, our work constitutes a primary reflection in which we try to establish the theoretical grounding of an ethics of the artificial world in general, and of the virtual world in

particular. Our intuition is that this ethics is not reducible to Floridi's information ethics, even if it is not incompatible with it. This opens new perspectives in which we would like to go in depth in the future.

REFERENCES

- Boulliet, D.R. (1737) *Essai philosophique sur l'âme des bêtes*, Amsterdam, François Changuion.
- Cline, V., Croft, R. and Courrier, S. (1973) Desensitization of children to television violence, *Journal of Personality and Social Psychology*, Vol 27(3), Sep 1973, 360-365.
- Descartes, R. (1998) *Discourse on Method and Meditations on First Philosophy*, translated by Donald A. Cress, Hackett Publishing Company.
- Dretske, F. (2003) "How do you know you are not a zombie?" in Brie Gertler (ed.), *Privileged Access : Philosophical Accounts of Self-Knowledge*, Ashgate.
- Floridi, L. (2005) Consciousness, agents and the knowledge game", *Minds and Machines*, vol. 15, n° 3-4, November 2005, p. 415-444.
- François Jullien, *Fonder la morale*, Paris, Grasset, 1995.
- La Mettrie, J. O., 1996, *Machine Man and Other Writings*, Cambridge Texts in the History of Philosophy, ed. Ann Thomson.
- Levinas E. (1961) *Totalité et infini*, Essai sur l'extériorité, La Haye, M. Nijhoff.
- Levinas E. (1990) *Autrement qu'être ou au-delà de l'essence*, Paris, LGF, Le Livre de poche, col. "Biblio-essais", 1990
- Peirce C.S. (1982) *The Writings of Charles S. Peirce: A Chronological Edition*, Volumes 1–6 And 8. Eds. *Peirce Edition Project*. Bloomington I.N: Indiana University Press.
- Strikwerda L. (2011) Virtual Child Pornography -Why Images Do Harm from a Moral Perspective, in *Trust and Virtual Worlds: Contemporary Perspectives*, eds. Charles Ess and May Thorseth, chapter 8, p. 139-161, Peter Lang.
- Villani S. (2001) Impact of Media on Children and Adolescents: A 10-Year Review of the Research, *Journal of the American Academy of Child Adolescence Psychiatry*, 40:4, April 2001
- Yvon and Bouillet D.R. (1798), 'Bêtes (âme des)', in *L'esprit de l'encyclopédie*, tome 1, Paris, chez Fauvelle et Sagnier, p. 349-381

ACKNOWLEDGMENT

I would like to acknowledge Marie-Françoise Saron who first attracted my attention on the problem of botfights. I am also indebted to the anonymous referees who reviewed my paper. By their judicious comments, they helped me to improve it and to remove ambiguities.

Biography: Jean-Gabriel Ganascia was first educated in mathematics and physics. He then studied Philosophy — "licence de Philosophie" université Paris I (Sorbonne) — and computer science — DEA Paris VI university. He got his "Doctorat d'ingénieur" in 1983 and his "Thèse d'état" in 1987. He was successively named assistant professor at Orsay University (Paris XI) (1982) and Professor at Paris VI University (1988). He acted as a program leader in the CNRS executive from November 1988 until April 1992 before moving to direct the Cognitive Science Coordinated Research Program since January 1993 until 2000. He led for 20 years now the ACASA team in the LIP6 that is the computer science laboratory of Paris VI University. His scientific activities focus on Artificial Intelligence, Scientific Discovery, Cognitive Modeling, Computer and Philosophy, Computational Philosophy and Computational Ethics.