

Scientific research and animal rights: a moderate view

Pesquisa científica e direitos dos animais: uma visão moderada

Daniela Brasil Medeiros*

*Bachelor of Law; Processual Analyst of Labor Public Ministry.

Financial support: None.

Conflict of interest: None.

Correspondence address: Daniela Brasil Medeiros. E-mail: daniela_brasilm@hotmail.com

Submitted: 14 November 2011. Accepted, after review: 05 December 2011.

ABSTRACT

Objective: The use of animals in scientific research is marked by controversial aspects, specially concerning ethics and animal rights. This article aims to put in evidence the situation of animals exposed to cruelty and indifference to their basic needs. Animals are sentient and deserve respect from mankind for this peculiar feature. Therefore we intend to demonstrate the interdisciplinary attribute of the subject and the relevance of an effective legal protection to animals. **Methods:** Brazilian literature, judicial precedents and laws related to the issue were accessed and analyzed. The relationship between man and animals was discussed concerning the anthropocentric and the biocentric perspectives. We also examined ethical and moral values of the law order, principles that support the environmental protection as well as the use of animals in scientific experiments in Brazil. **Results:** This article summarizes the points of view of distinct doctrines and brings relevant legal concepts regarding the ethical use of animals in common life and in scientific research. The respect for all forms of life on Earth needs to be a natural behavior of every human being. **Conclusions:** It is necessary to update concepts and search for a harmonic living between man and animals. The old anthropocentric paradigm no longer satisfies the modern context since mankind is not the center of all interests in the planet. The fact that animals are sentient beings is evident for they are capable of feeling sensations as pain and fear. So this essential feature (sentience) justifies saving animals from suffering and being submitted to cruel conditions. The legal protection of animals needs to be efficient, but the defense of their rights should be sustained in a moderate way, taking into account the interests of man, animals and the environment. For this purpose, Brazil has laws and statutes that reflect global standards for ethical experimental research.

Key words: Animal rights. Scientific research. Brazilian laws. Judicial principles. Ethics.

RESUMO

Objetivo: O uso de animais na pesquisa científica é marcado por aspectos controversos, especialmente no que tange à ética e aos direitos dos animais. Este artigo visa evidenciar a situação dos animais expostos à crueldade e à indiferença quanto a suas necessidades básicas. Os animais são sencientes e merecem o respeito da humanidade em razão desta característica peculiar. Portanto, pretendemos demonstrar o caráter interdisciplinar do tema e a relevância de uma efetiva proteção legal aos animais. **Métodos:** Foram analisadas leis nacionais pertinentes, a doutrina jurídica brasileira e precedentes judiciais. O relacionamento entre homens e animais foi discutido considerando as perspectivas antropocêntrica e biocêntrica. Ademais, examinamos valores éticos e morais do ordenamento jurídico, princípios que embasam a proteção ambiental, bem como o uso de animais em experimentos científicos no Brasil. **Resultados:** Este artigo sintetiza os pontos de vista de doutrinas distintas e traz conceitos legais relevantes no que concerne ao uso ético de animais na vida comum e na pesquisa científica. O respeito a todas as formas de vida na Terra precisa ser um comportamento natural de cada ser humano. **Conclusões:** Faz-se necessário atualizar conceitos e buscar o convívio harmônico entre homens e animais. O velho paradigma antropocêntrico já não satisfaz o contexto moderno, uma vez que a humanidade não é o centro de todos os interesses no planeta. É notório o fato de que os animais são sencientes, porquanto eles são capazes de ter sensações como dor e medo. Sendo assim, esta qualidade essencial (senciência) justifica poupar os animais do sofrimento e da submissão a condições cruéis. A proteção legal dos animais deve ser eficiente, mas a defesa de seus direitos deve ser sustentada de forma moderada, levando em consideração os interesses do homem, dos animais e do meio ambiente. Para tal propósito, o Brasil possui leis e normas que refletem padrões globais para a pesquisa experimental ética.

Descritores: Direito dos animais. Pesquisa científica. Leis Brasileiras. Princípios jurídicos. Ética.

INTRODUCTION

The relationship between man and animals is very old. It began in the earliest ages, when lived the ancestors of modern man and continued along human evolution until the present society in the splendor of its cultural and scientific development.

Marked by great ambiguity, the link between human beings and fauna members is characterized by uncertain and controversial grounds. Sometimes animals are seen in a state of friendship and privilege by human beings. However, other times these bonds of charity and harmony are cut to abandon animals in degrading situations, which are incompatible with their nature of living beings, sentient creatures worthy of respect and sympathy.

The pejorative aspect of this dubious relationship is the focus of our main concern. The great suffering of these so like us creatures should not continue. Animals are exposed to different kinds of cruelty, physical pain, psychological torture, neglect, indifference, denial of their basic needs and a series of treatments that need to be eliminated or replaced by more equitable alternatives.

In this manner, the object of this work is a legal vision dedicated to animals. We focused the protection owed by the State as well as the responsible participation of society, all based on the urgent need to change the unpleasant treatment given to fauna.

Throughout Human History, the interests and rights of animals have been ignored and repressed by fragile explanations and unsustainable reasons if thoroughly investigated. The legal protection that animals need still shows up shy and contaminated by interests which are highly human. So, in most cases, animals are benefited in a reflex way by protective laws. In other words, laws are made to protect animals because they are useful or important for mankind, but not because animals need protection just for being sentient creatures. The anthropocentric conception is currently prevailing.

There is no doubt that animals are helpless to defend themselves from the cult of greed and profit as a result of the capitalist mode of production. It is important to assure that wealth accumulation is not reasonable if it occurs without limits, invading the existential sphere of animals in an exaggerated way.

We intend to demonstrate the complexity of the subject and its interdisciplinary attribute. The issue of humanitarian treatment to animals involves several aspects that are interesting not only to the science of Law, but also to the Biological, Medical, Health, Social Sciences etc. For instance, problems concerning animals are related to ecology and the environment as well as cultural, historical, political, social, economic, scientific and legal features. Thus, exchanging knowledge among various sciences is useful to find solutions to relieve the agony over these sentient beings which serve us the hard way.

From a legal standpoint, this study is relevant because, through its results and reflections, we can examine the real applicability of laws to protect animals. Legislation exists but needs to be crafted in order to reach an effective legal protection of animals, for it runs as a conceivable solution to the chaotic picture of their suffering.

From a social point of view, we will demonstrate the relevance of individual contribution of citizens and social organizations, representing the concerns about protecting animals and the environment. It is necessary to promote a policy of environmental education so that people may understand their own responsibility to society and to the environment. Therefore, based on historical perspective, we analyzed some situations that threaten the dignity of animals.

Yet we seek to contrast the anthropocentric view, that overvalues men, and the biocentric view, that considers nature and animals as living beings with intrinsic value. From the evaluation of these two angles, we intend to find a point of balance that may serve human interests without burdening the lives and safety of animals.

Given the similarities between men and animals, the ability to feel pain and suffering (sentience) should be taken into special consideration in order to achieve respect among the species. Sentience is common to rational and irrational animals. Moreover, the rationality and intelligence so praised as human privileges, end up to be flawed arguments, unable to justify the immoderate submission of animals to the anthropic desires.

From the standpoint of ethics, the power of choice between right and wrong will be considered inherent to man's morality. In this way, if man is evolutionarily superior to the animals, he must be reasonable in his motivations and actions. Ethical and moral values surround the legal system. Thus, there should be sympathy and honest concerning for animals because of their vulnerability and peculiarities.

We will also discuss the new profile of the modern State of Law and its duty to take ecological concern as a public and global interest. The environment is a subject that needs to receive primordial attention. At this point, some legal principles were selected, especially from the Constitutional and Environmental branches of Law, in order to guide legal protection to animals. The direction given by these principles is essential to reach our protective aim.

We should restore the bonds that were unleashed on the relationship between man and animals. Consequently, it is required to overhaul values and concepts in the cultural and legal areas, so that animals are recognized as being worthy of protection and respect.

Therefore our main intention is to analyze the protection of animals according to the Brazilian law order. Despite Brazil has advanced rules and laws concerning environmental preservation as a whole, this study is focused on the legal treatment given to fauna members.

FAUNA

Fauna is formed by members of the Animal Kingdom and consists of a significant portion of the biota. The meaning of "fauna" refers to animal life and to all animal species of a given area, age or environment.

Several meanings may be offshoot from the word *fauna*: *wild fauna* is the one living free in their natural environment²; *benthic* lives on the bottom of a sea or lake; *pelagic* is composed of animals living in open oceans or seas rather than waters adjacent to land; *urban* is formed by free animals adapted and integrated into the urban environment. In addition, we can speak in *human fauna* for man belongs to the Animal Kingdom and mankind is a group of people with similar features¹. However, this concept of *human fauna* is not suitable for our work, since we intend to distinguish humans from non-human animals. Therefore, we address *fauna* in its aspect concerning only non-human animals¹.

Fauna is a whole with some subdivisions to make its study easier. For instance, the legal criteria to differentiate domestic and non domestic animals are the

life next to humans and natural life in freedom. Even if there are domesticated individuals in a naturally wild species, it does not mean that the others of the same species living in freedom will lose their wild character. This understanding encompasses all wildlife animals without further distinctions.

THE ANTHROPOCENTRIC PARADIGM

The anthropocentric paradigm means a human-centered pattern. It concerns to humans as the central element of the universe so that reality is seen only in terms of human values and experiences.

Going back in History, the relationship between man and animals comes from prehistoric times. After the development of techniques that contributed to the continuous evolution of human society, man began to modify nature according to the interests of their own species. In this manner, man learned how to dominate, hunt and tame animals, using them in self benefit.

Since then, knowing how to make fire and techniques for manufacturing weapons, the condition of equality between man and other beings of nature was changed. The organization of society into tribes, villages and towns, combined with the growing discoveries, inventions and the evolution of *Homo sapiens sapiens* allowed the command over nature by mankind.

During a long time, the sharp intelligence and rationality of human beings were acceptable arguments for using animals in the most comfortable and supportive way to man. Nowadays, thinking like this is a fragile thesis.

Nonetheless, the facts are that man continues to carry out inhuman behavior directed to animals. At this point, we see how mankind could oppose the cooperative coexistence and respect for the equals of their kind and those of other species.

There is no denying that breaking with the ingrained anthropocentric concept is difficult and creates resistance. Throughout the History of the relationship with animals, these beings were purely considered as goods or things to be used by man. So any changes to this purpose may be surrounded by lack of credit. In truth, the approach to animal protection has been gradually shaping itself in the international arena as well as in Brazil. It is an interdisciplinary and daring issue for the standards of human-centered sciences, which were developed with anthropocentric emphasis.

However, this interdisciplinary feature emerges as an enriching aspect: it recommends to search for viable alternatives and sensible solutions in nearby sciences. Overpassing the anthropocentric view to find results of sustainable development would be a true paradigm shift^{3,4}.

THE BIOCENTRIC VISION

In opposition to the anthropocentric perspective, comes the biocentric theory, which ethically asserts the value of non-human life in nature.

The task of instilling the biocentric thinking in human society worldwide seems hard to accomplish. The effort to spread out respect for animals and for the environment is increased because of an ancient culture, since the dawn of humanity, that accepts the unreasonable sacrifice of beings endowed with life and sensitivity to serve the interests of man. Mankind holds the power of decision on the future of the planet, but this faculty can be used to a system of immoderate destruction or to a balanced system in which environment is responsibly preserved. Indeed, it is a matter of choice.

Although the extinction of species has a certain naturalness during evolution, human action produces a much higher speed than the usual pace of renewal of biological diversity. By the way, having the power to value the diverse species of living beings, humanity magnifies some of them over others less appraised³.

About the different perspectives related to Animal Rights, François Ost, from Portugal, rejects the *utilitarian view* of Peter Singer and Jeremy Bentham as well as the holistic and biocentric view of *deep ecology*.

According to Ost, his disagreement with the utilitarianism of Bentham and Singer is based less on legal conclusions than on philosophical assumptions. Despite there is an alleged egalitarianism of species, this only aspect is not enough to support the improvement of conditions to animals. Otherwise, valuing the ethical ability of man to understand the need to respect animals seems to be a good path to expect a progressing future to these non-human creatures⁵.

In reference to Ost's disagreement with *deep ecology*, he does not accept the personification of animals nor recognizes their inherent value⁵. Nonetheless, the author shows himself sympathetic to the inordinate suffering of animals. His thesis, however, states that animals can not assign rights, since they lack morality and are very primitive. Plausible is the idea that man - being rational, moral and ethical - has duties to animals as not subjecting them to absurd and foolish conditions marked by hardship.

ANIMALS ARE SENTIENT BEINGS (ABLE TO FEEL)

Sentient is a being able to feel and to perceive by the senses. It easily receives external sensations. Therefore animals are sentient beings receptive to sensory impressions of pleasure and pain. Based on this special feature, they should be spared and protected from the unnecessary suffering to which they are daily submitted. This suffering has been intensified up to today's situation, since part of mankind has tried to subdue animals mainly to economic interests, ignoring the pain these creatures feel.

In the words of the Australian philosopher Peter Singer: "if a being suffers, there can be no moral justification for refusing to take that suffering into consideration. Whatever is the nature of a being, the principle of equality requires that suffering be taken into account in terms of similar agony - as far as we can make approximate comparisons - of any other being"³.

In addition, the thought that Bentham planted more than two centuries ago laid the foundations of the Animal Rights⁶. There are clear differences between man and animals. However, there are very significant similarities: pain sensitivity is one of these. Human beings are able to detect this information so that they have the charge of not hurting other sentient creatures as a matter of good sense. Rational thinking and ethical refinement show the differential of mankind, who should esteem a more respectful relationship with other living beings.

PROTECTIVE SOCIETIES OF ANIMALS

Animal drama remains without due attention from the Government and society. Although there are rules for protection of animals in many jurisdictions, they do not produce effects on the expected degree of excellence.

The situation is marginalized. So it is mainly fought by part of the civil society through the establishment of non-governmental organizations (NGOs) and associations that may have or not protective shelters. By realizing the need for action related to the abandonment and mistreatment of animals, the civil society eventually takes on the responsibility to do something before the inertia of public authorities.

Despite the merit of protective societies to mitigate the problem, their effort is insufficient due to the excessive number of abandoned animals. Thus, while this situation continues, it will prolong the existence of municipal kennels and zoonoses control centers. Implementing an effective educational policy and changing the valuation of animals by society are essential attitudes to innovate with a more just reality.

ENGLISH PIONEERS AND LAWS FOR ANIMAL PROTECTION

Regarding the birth of animal protection laws, Britain shows up as pioneer. In 1822, Richard Martin, member of the English Parliament, presented the first rules forbidding cruelty to animals. This rules were approved under the name III Treatment of Cattle Bill and provided to cattle, horses and sheep a degree of legal protection.

By 1840, the work of the Society for the Prevention of Cruelty to Animals enjoyed such a big recognition that Queen Victoria granted it a royal status. Thus the entity was called Royal Society for the Prevention of Cruelty to Animals. Far from being a simple formality, the new status brought more credibility to the institution, since it was supported by the supreme authority of a traditionally monarchical country.

The success of the Royal Society inspired the creation of other units and shelters for animals in Britain. The volume of donations and legacies to that society

enabled its expansion and intensification of work. The Royal Society for the Prevention of Cruelty to Animals remains today as a model of international animal protection society.

ETHICAL AND MORAL VALUES OF THE LAW ORDER

Ethics and acting righteously are very close to Law, since legal principles and rules are oriented by values and incentives to morally straight behavior. Law is eminently marked by ethical concepts. Thus it is necessary to keep dialectic communication between legal science and ethics in order to reach the essence of laws and abandon dogmas and prejudices. There is also a need to check whether legal rules and writs really bring equitable solutions, for Law can not be disentangled from reality.

Therefore the legal system is guided by precepts that regulate social behavior. These precepts are basically moral points and essential values. Their ethical purpose is to guide human action for maximum harmony, universality and excellence. In this manner, a healthy human interaction should be expanded to reach a communion of life with animals as beings that deserve to be protected by society and by the legal system³.

There is no doubt that animals are indispensable as part of nature and essential to the environment and humanity. So their sentience should be taken into account with sensibleness, avoiding invasive treatments which disrespect the integrity and life of animals^{7,8}.

LEGAL PROTECTION TO ANIMALS

In the fullness of the 21st Century, it is positive to notice that the technological apparatus and the advances of science reached high levels of sophistication and knowledge beneficial to mankind and animals. Otherwise, cruel methods of animal exploitation still remain.

Because of their impossibility to defend themselves and submission to human interests, animals need legal protection by the State. Lacking any means of voice to manifest disagreement, animals are victims of serious damages on their rights to life and physical integrity.

Law order and its various fields are directed by principles and basic assumptions. Hence we are going to discuss some principles able to support the protection of the environment and animals, regarding all types of fauna and wildlife.

PRINCIPLE OF THE RIGHT TO LIFE

Life is the primary and fundamental right to be protected. For this reason, conditions for maintaining a healthy and dignified life must be assured.

As sentient living beings, animals must have their right to life respected. So legal guarantees must be used to reinforce the protection to fauna members⁹.

PRINCIPLE OF DIGNITY

Dignity is the quality of being worthy of respect and esteem. It is such an important attribute of the human person that the Federal Constitution from 1988 praised it among the main foundations of the Brazilian Republic (Article 1, item III).

It is inhuman to tolerate the atrocities and crimes against animals. It is not reasonable to support that man can commit abuses against wildlife because they are stronger than animals and holds superior technical knowledge. If man are an end in themselves only by being man and having an array of attributes (life, freedom, moral and physical integrity), then animals also must be an end in themselves, since they share many of these attributes with man. It is clear that animals feel scary, hungry and pain. So they must be considered for this peculiar feature of being alive and sentient¹⁰.

PRINCIPLE OF PROPORTIONALITY OR REASONABILITY

Proportionality or reasonability refer to what is fair and moderate, logically plausible, reasonable, not excessive. Thus this principle develops the idea of weighing values and measures so that there is convergence to a consistent proportion.

In Brazil, the principle was inspired from German doctrine and jurisprudence. In fact, it is not a principle literally expressed in the text of the Brazilian Constitution. However, Brazilian Courts and doctrine regard it as an implicit constitutional postulate, for its conception can be elicited from a systematic interpretation of the Constitution.

Proportionality is the root from where rise three side principles: suitability, necessity and proportionality in strict sense. Suitability means the need of correspondence between the purposes wanted by the law and the instruments used to achieve them. Necessity conveys that if a restriction is being applied to the rights of someone, this restriction must be really necessary as the only way to obtain a specific end. There should be no other way less aggressive and more effective than the restriction applied. Proportionality in strict sense concerns a system of values and fundamental rights that are compared to find which value or right should prevail according to the peculiar aspects of a leading case. In this manner, proportionality is a useful tool to protect fundamental rights.

Therefore the principle of proportionality can be applied to the relations between man and animals. The fact that fauna beings are economically valued does not justify the degrading treatment given to animals. They are worthy of a peaceful existence without so much privation and threats from mankind.

PRINCIPLE OF EQUALITY

The principle of equality means to treat equals as equals and unequals according to the measure of their inequality. Since man and animals belong to the same Animal Kingdom, there are natural and physiological similarities. The resemblance is specially evident when man is compared to mammals and their complex biological structure.

Despite the physical likeness, there are some peculiar features that came with human evolution as the development of rationality and morality in behalf of mankind. At this point, there are several symmetries and contrasts that happen at different intensities. Both equalities and inequalities are facts that fulfill a cycle of fullness in human-animal relationship.

Thus these similarities and differences should be respected as a natural consequence of a healthy relationship among mankind, fauna and the environment.

Exactly for the fact of being moral and rational, man has a major responsibility to animals and to the environment. Fauna creatures do not have a sense of morality, their primitive instinct prevails. Once more, animals should be specially reckoned for the reason of their sentience⁵.

PRINCIPLE OF COMMUNITY INVOLVEMENT

Community participation is a principle of Environmental Law. It is home to the idea that cooperation is needed between the State and society to find solutions to environmental problems. The State can not act alone in environmental protection as well as social forces are weak without the State apparatus.

Thus the participation of various social groups in the development and implementation of environmental policy appears to be enriching to the Government action and vice versa. Adding distinct views about the same interest is essential to optimize the environmental protection.

The principle has a constitutional status for it finds shelter in the Article 225 of the Federal Constitution of Brazil. The essence of the principle is that the Government and the community must defend and preserve the environment together, each one acting on the limits of their responsibility.

Considering natural resources are universal elements that make part of the larger unit of the planet, the engagement of individuals in environmental issues is quite relevant because they contribute to the conservation of the biological diversity. Environmental protection is featured as a common interest of all mankind. Therefore Government and citizens should work together to achieve positive results³.

PRINCIPLE OF COOPERATION AMONG PEOPLES

Regarding fauna, there are animals in all countries of the world that go through the same situations of contempt, exploitation and cruelty. These circumstances make the problem a global issue, though differing from culture to culture.

Therefore, the cooperative action between peoples must happen taking animals into account. All peoples have a moral and legal duty to treat well their animals and not subject them to suffering.

PRINCIPLE OF SYMPATHY AND SOLIDARITY

Sympathy is the trend that encourages fraternal and selfless attitude of man to the distress of another. It is a spontaneous action that expresses generosity, an ability to understand one's trouble or discomfort. Solidarity conveys a unity of interests and responsibilities taken in common.

Thus sympathy and solidarity complement each other for they mean the urge to help, being conscientious that every living being is part of a whole that needs to be kept in harmony.

The courtesy that comes from this principle must be practiced not only to human beings but also to animals.

According to Article 3 of the Brazilian Constitution: "It is a fundamental aim of the Federative Republic of Brazil to build a free, equitable and solidary society"⁶.

PRINCIPLES OF PRECAUTION AND PREVENTION

The doctrine does not share the same opinions concerning the principles of precaution and prevention. Some authors consider both synonyms, while others attribute to each distinct concepts⁶.

The *principle of precaution* means the obligation to have anticipated caution before an uncertain risk of environmental damage. It is based on the fragility of the environment, whose resources are exhaustible in reference to an overwhelming economic system. So if there is a possibility of harming the environment, but its certainty and proportion are unknown, the most moderate attitude is to keep from happening any irreversible loss.

Otherwise the *principle of prevention* carries the concept of indispensable caution before an assured danger of environmental injury. Thus if the risk of damage is sure in some situations, all measures must be taken in order not to let an impairment occur.

Precaution and prevention rely on unique importance as they request to avoid any damage to the environment, which is the habitat of animals and an essential source for all living beings. If environmental protection had only a restoring character it would not be effective because damages regarding nature are often impossible to reverse. If harm has already happened, no future repair will be able to bring back the same quality of the previous intact ecosystem. In this way, it is clear that protection to the environment must be preventive rather than repairing⁶.

PROTECTION OF ANIMALS IN BRAZIL

In the 16th Century, when Portuguese navigators discovered Brazil, this land full of natural wonders began to be troubled on its peace. Native population was almost decimated and the environment was highly destroyed as a result of the exploitation of natural resources on a large scale.

In reference to the animals, the ships used to arrive at the Brazilian Colony and return to Portugal and other European countries laden with parrots, monkeys, apes, birds and other species. These animals were doomed to the traffic and trade, to the cages of animals collectors, to work at circuses or to the ostentation of the royal courts. The conditions under which these animals were transported in the holds of the ships, no doubt, were terrible. Most died during the long journey. The exploitation and smuggling of Brazilian natural goods, as wild animals, fur and wood, were a constant practice throughout the colonial period.

Not only in Brazil and America the native animals were captured and transported to be traded. Animals from Africa and Asia, as lions, tigers, leopards, elephants and giraffes, also suffered the same fate, going to Europe and other lands.

The History of Brazil shows the relationship between man and nature was marked by greed, cultural poverty, religious superstition and the predatory intent on the fauna and flora of native lands³.

Nonetheless, the legal protection to animals advanced in Brazil, passing through the Colonial Period (1500-1822), the Monarchy (1822-1899), till the present Republic (from 1899 so far).

For instance, in 1924, it was published the Decree 16.590 which regulated the houses of public entertainment. Its Article 5 prohibited the granting of license for bullfights, cockfights and the use of canaries for any amusements of this kind that caused suffering to animals. A decade later, in 1934, the Federal Decree 24.645 came in the government of Getulio Vargas, banning the practice of abuse against any animal, included all irrational beings, quadrupeds and bipeds, wild and domesticated. According to this law, still in force, different behaviors were graded insult and disrespect to the integrity of animals^{6,12}.

The Federal Constitution from 1988 came to renovate democracy and assure fundamental rights to all Brazilians. Considering the balanced environment is a vital right, the constitutional legislators gave it a special chapter in the body of the Constitution named "The Environment". According to the Article 225, every person has the duty to protect the environment to the present and future generations.

In addition, concerning means to guarantee the right to a healthy environment, the Public Ministry is a Brazilian institution put in evidence by the 1988 Constitution since the prosecutors (members of the Public Ministry) had their legal powers increased. Among their duties, prosecutors should defend the inviolability of the environment and its natural resources. So the Public Ministry is a legitimate institution to protect all species of animals against any acts of cruelty and damage to their integrity and habitat.

THE USE OF ANIMALS IN SCIENTIFIC EXPERIMENTS IN BRAZIL

The use of laboratory animals in scientific research is a dilemma that brings some conflicts under discussion in the bioethics field. The *principle of experiments*, known as the *rule of the three Rs*, is imperative and proposes: *reducing* the number of animals used in each experiment; *refinement* of experimental techniques to avoid unnecessary pain and suffering; and *replacement* by alternative methods.

In this context, researchers should think about the real need for a biological model and the relevance of the study before deciding to undertake a project involving animals. Reducing the number of animals in biomedical research should not impair the detection of biological effects, but should refrain useless repeated experiments¹³.

Literature reviews suggest the number of laboratory animals used in previous experiments could have been reduced. It is also crucial that experimental results are published for two main reasons: to bring out relevant studies for the good of humanity and to avoid redundant studies.

On the international setting, the Declaration of Helsinki, signed in Finland, was first adopted in 1964 and has since gone through six revisions. The Declaration is a document with ethical principles regarding human experimentation but it also serves as basis for ethics on animal experimentation. The welfare of animals used for research should be respected. For instance, the use of animals for the futile testing of cosmetic products, alcohol and tobacco should not be supported.

In Brazil, the Federal Law 6.638, enacted in 1979, dealt with the subject of vivisection of animals and produced effects until 2008, when it was abrogated by the Federal Law 11.794. This Law came to regulate the scientific use of animals according to the Article 225 of the Brazilian Constitution of 1988, which prohibits any acts that provoke cruelty to animals¹⁴.

The new Law 11.794 became known as Arouca Law. Sérgio Arouca was a doctor and president of *Fundação Oswaldo Cruz (Fiocruz)*, from 1985 to 1989. *Fiocruz* is a public foundation settled in *Rio de Janeiro* for activities in health, education and scientific development. Arouca presented his project to the Parliament in 1995, having died before the publication of the law. This legal statute establishes the didactic-scientific experimental use of animals as well as the creation and use of animals in teaching and scientific research.

According to the Article 3rd of the Law 11.794, it is applied to animal species of the *Chordata* phylum and *Vertebrata* subphylum, which include, e.g., fish, amphibians, reptiles, birds and mammals. These animals have unique characteristics as the presence of notochord, dorsal nerve tube, spine and brain. Therefore, the existence of a nervous system in vertebrates makes them capable of experiencing pain and suffering physically and psychologically. This explains the greater concern with the preservation of their integrity and the forbiddance of subjecting them to cruel practices.

The objective is to establish standards to save animals from suffering and pain when undergoing procedures in teaching labs and research. Thus the Law determines the concept of death by humanitarian means, i.e, the death of an animal

under conditions of minimum physical and mental suffering. So the euthanasia of an animal subjected to an experiment is an exceptional measure, when technically recommended and by humanitarian circumstances.

To this end, on its Article 14, the Law 11.794 provides for certain measures to conserve the welfare of the animal. These include: a) whenever possible, teaching practices should be photographed, filmed or recorded, to allow their reproduction for illustration of future practices, avoiding the unnecessary repetition of didactic procedures on animals; b) the number of animals to be used for the execution of a project and the duration of each experiment will be the minimum necessary to produce conclusive results, saving as much as possible the animal from suffering; c) experiments that may cause pain or distress should be developed under sedation, adequate analgesia or anesthesia; d) experiments whose objective is the study of processes related to pain and distress require specific authorization of the Ethics Committee on Animal Use (CEUA), in obedience to the rules established by the National Council for Control of Animal Experimentation (CONCEA); e) it is forbidden the use of neuromuscular blocking agents or muscle relaxants to replace sedative, analgesic or anesthetic substances; f) it is prohibited to re-use the same animal after achieving the main objective of the research project; g) on education programs, if traumatic procedures are employed, multiple procedures may be performed in the same animal, provided that all run for the duration of a single anesthetic and the animal is sacrificed before regaining consciousness; h) the National Council for Control of Animal Experimentation (CONCEA), taking into account the relationship between the level of suffering for the animal and the practical results that are expected to obtain, may restrict or prohibit experiments that imply a high degree of aggression.

It is also ensured that animals only be submitted to interventions if, before, during and after the experiment, they receive special care. The Law states that, exceptionally, when the animals used in experiments are not euthanized, they can leave the vivarium to be taken care by suitable persons or entities of animal protection duly legalized, which show interest on being responsible for these animals.

It is worth noticing that the Law 11.794 (2008) no longer mentions the word "vivisection", preferring the euphemism of the term "scientific use of animals". The same Law defines "experiments" as "the procedures performed in live animals, aimed at the elucidation of physiological or pathological phenomena by specific and preestablished techniques".

According to the abrogated Law 6.638 from 1979, it was prohibited to practice vivisection of animals in primary and high schools and in any place frequented by minors. In another way, the Arouca Law restricted the use of animals in educational activities only to higher education institutions as universities, colleges and technical schools in biomedicine.

For the purposes of the new legislation, *scientific research activities* are the ones related to basic science, applied science, technological development, production and quality control of drugs, medicines, food, immunobiological agents or

any other elements and means tested on animals. However, zootechnical practices concerning agriculture are not considered research activities by the Law 11.794^{15,16}.

The National Council for Control of Animal Experimentation (CONCEA) was created by the Arouca Law and some of its duties are: to formulate and monitor standards concerning the humanitarian use of animals for purposes of teaching and scientific research; to accredit institutions for creation and use of animals in teaching and scientific research; to monitor and evaluate the introduction of alternative techniques to replace animal use in teaching and research; to establish and periodically review the standards for use and care of animals for teaching and research in line with international conventions to which Brazil is signatory; to establish and periodically review the technical standards for installation and operation of animal breeding centers and animal testing laboratories, as well as working conditions in those facilities; to assess and decide appeals against decisions of the Ethics Committees on Animal Use (CEUAs).

Therefore the Law 11.794 from 2008 brings ethical content to the vivisection of animals and tries to preserve them from suffering. Many experiments are repeated in live animals without prior verification whether identical works, with the same results, have already been made.

Moreover, it is necessary to highlight that there are great biological and genetic differences between man and animals used in labs (rats, rabbits, dogs, cats, monkeys). So the reactions observed in studies with animals can be very unlike the reactions in humans.

THE UNIVERSAL DECLARATION OF ANIMAL RIGHTS

In 1978, the Universal Declaration of Animal Rights was proclaimed by UNESCO and became a landmark in relation to the legal protection of animals. Several countries, including Brazil, are signatories of this Declaration, which is a crucial and basic document in behalf of life as an intrinsic element to animals.

The Declaration embraces the philosophy of a modern era, with values of sympathy and inclusion, and does not ignore the respect deserved nor the minimum needs of living beings other than men.

Thus the Declaration asserts the essentiality of noble values to be widespread in society. It emphasizes the importance of good concepts taught to man since childhood so that children grow up knowing to respect animals. Indeed it is easier to make the seed sprout in the minds of children, although adults can also adopt the concepts of respect and brotherhood to animals. At a fundamental level, man and animals are connected by profound similarities.

In a general view, the Universal Declaration of Animal Rights provides as follows: all animals have the same right to life; all animals are entitled to respect, attention, care and protection of man; no animal should be mistreated or subjected to acts of cruelty; all wild animals have the right to live free in their natural habitat; the animal that man chooses to partner should not ever be abandoned since the abandonment is considered cruel and degrading; no animal should be used in

experiments that cause pain or suffering; no animal should be exploited for entertainment of man; any act that endangers the life of an animal is a crime against life; pollution and destruction of the environment are considered crimes against animals, since they lead to a genocide (crime against the species); privation of liberty for animals is contrary to their right to live free in their natural environment; Government, educational and schooling authorities must ensure that citizens learn from childhood to observe, understand and respect animals; the specific legal status of animals and their rights must be recognised by law; the protection and safety of animals must be represented at the level of Governmental organizations.

Likewise there should be no discrimination in the treatment of distinct kinds of animals. There are pets with better luck than other pets as well as there are responsible and irresponsible owners. There are wild animals living free in their habitat and wild animals which are captivated for illegal traffic. There are animals undergoing vivisection, factory farms, circuses, rodeos and many other degrading situations in which they are subjected to the interests of man, without concerning to their possible suffering. Animals deserve to be esteemed as sentient beings. They are alive and feel the same basic sensations than any man: pain, hunger, thirsty, fear, cold etc.

Therefore the Universal Declaration of Animal Rights is not an utopian document. First of all, it is a courageous work that assures the rights of animals to be treated with respect, dignity and equality by man.

CONSTITUTIONAL PROTECTION OF ANIMALS

The Federal Constitution of Brazil, on its Article 225, establishes the general standards for environmental protection, including wildlife and domestic animals. This is an extract of the mentioned article:

Article 225 - Everyone is entitled to an ecologically balanced environment, as it is a resource of common use and essential to a healthy quality of life, imposing upon the Government and the community the duty to defend and preserve it for present and future generations.

§ 1. To ensure the effectiveness of this right lies with the Government:
[...]

VI - To promote environmental education at all levels of education and public awareness for the preservation of the environment;
[...]

VII - To protect the fauna and flora, being prohibited, according to the law, practices which jeopardize their ecological function, cause the extinction of species or subject animals to cruelty.

Having constitutional protection, the right to a healthy and balanced environment is a common interest since it is owned by the whole community and characterized by trans individuality, indivisibility and uncertainty of their owners.

Trans individuality means the right to a healthy environment belongs to more than one individual and to all the individuals simultaneously.

Indivisibility represents the impossibility to divide a specific piece of this common right to each person. The environment is unique and whole. So it is essential to every living being that it is kept intact.

Uncertainty of legal possessors conveys that there is not an only and certain owner of the right to a wholesome environment because it is a right addressed to all the community. The environment is good to mankind and all living beings if preserved as a common source of life. It can not be divided and given into pieces to determined individuals. Its peculiar features do not allow this thinking.

Any damage to the environment has a magnified impact, since there is a breakdown of its natural balance, causing ripple effects. The dilemma of animal rights is included in this context for the reason that animals are an essential part of nature equilibrium and should be protected.

The Constitution expressly provides for animals safeguard by prohibiting practices that threaten, abuse, cause the extinction or ill-treatment to them. By forbidding acts that subject animals to cruelty, the constitutional legislator confirmed that animals feel pain and suffering, for cruelty presupposes acts of torture and hardship. The Constitution does not make distinctions but protects all kinds of animals: wild, domesticated, native and exotic ones.

Under other circumstances, the legal protection of the environment and animals is usually camouflaged to suit human interests. The beautiful lines in the Constitution and other laws should be observed in practice, providing substantial protection for animals in need. The legal system for shielding animals has already its foundations in the Constitution, which is the Supreme Law of our legal order, but lacks an authentic implementation.

PRECEDENTS OF THE SUPREME COURT

The Federal Supreme Court of Brazil is the guardian of the Constitution and has relevant precedents for the impossibility of maintaining cultural practices of atrocity against animals. Some of these precedents are ADI 1856, ADI 2514 and RE 153.531, respectively judged in the years 2011, 2005 and 1997. They are leading cases concerning cockfights and bullfights.

According to the Supreme Court, although the State should guarantee the plentiful exercise of cultural rights, folk habits can not prevail if they are based on cruelty to animals. Expressions of deliberate infliction of pain against fauna are environmental crimes. Cruel acts like cockfights and bullfights can not be considered innocent cultural manifestation since they are not compatible to the Constitution. It sounds pathetic to attribute simple folk feature to criminal practices against animals.

So these customary actions were considered unconstitutional since they are terribly mean and violent to animals. It is not a healthy habit for individuals to amuse themselves at the cost of animals suffering. Society should advance and update its

values and practices, but not be attached to primitive and painful customs. Evolution comes by embracing new and ethical patterns³.

CONCLUSION

The respect for all forms of life on Earth needs to become effective in a plentiful and urgent way. Many concepts and values need to be revised and modified. Environmental education is crucial on this aspect. The tired and old anthropocentric paradigm no longer answers to the expectations of the current environmental order and it is not enough to satisfy the fundamental rights of man and animals.

Therefore it is relevant to find a compromise between the biocentric and anthropocentric views, a point of balance that allows mankind to have a sustainable development without burdening so aggressively wildlife and the environment.

The fact that animals are sentient beings and capable of feeling pain and fear is evident and undoubtful. The prohibition of cruelty in various Brazilian laws, including the Federal Constitution, confirms the need to abandon any kind of atrocity against these magnificent beings. It is past time to protect them.

Actually, the existence of animals in harmony with mankind is essential to a good quality of life in the planet. Animals are indispensable to the environmental equilibrium as they are part of a greater circle of functions naturally coordinated.

The consolidation of Animal Rights moves slowly and has not yet reached an excellence level. The defense of their rights should be sustained in a moderate way, taking into account the interests of man, animals and the environment. Thus reasonable and merciful alternatives should be sought to the situation of animals submitted to miserable and unsafe conditions.

Brazilian Courts are still timid to produce legal decisions in behalf of animal rights. It is a theory in formation. The protection of animals and wildlife is treated in different ways by case law and doctrine. In this way, Law operators are yet more friendly to the classic anthropocentric view. However the modern biocentric perspective is advancing, specially with the production of relevant precedents by the Federal Supreme Court.

The Public Ministry is a Brazilian institution put in evidence when the subject is animal protection. That is so because their members (prosecutors) have legal powers to defend the inviolability of the environment and its natural resources. Then it is a legitimate institution to protect the animals against any acts of cruelty and damage to their integrity and habitat.

In 2008, the Federal Law 11.794 was enacted to improve and update the legal regulation about the use of animals in experimental research. It was known as Arouca Law, in honour of its author, the Congressman Sérgio Arouca. The new Law optimizes some humanitarian concepts that existed in the abrogated Law 6.638 from 1979. It intends to make sure that animals submitted to experimental interventions are ethically treated with all due respect for their peculiar feature as sentient beings.

In this manner, Brazil has national laws and statutes that reflect global standards for ethical experimental research. National legislation and international

conventions have specific rules in order to protect the animals. However these rules should be effectively applied and not diverted from their protective purpose.

Therefore the legal protection of animals needs to be vigorous and valid as an spontaneous ideal in the minds of Law operators and ordinary citizens. As a consequence, the necessary credibility would be achieved for the fundamental protection of fauna and the environment as a whole.

REFERENCES

1. Oxford American Dictionary and Thesaurus. New York: Oxford University Press, 2003.
2. Milaré E. *Direito do Ambiente*. 2. ed. São Paulo: Ed. Revista dos Tribunais, 2001.
3. Rodrigues DT. *O direito e os animais: uma abordagem ética, filosófica e normativa*. 1.ed., 4. tir. Curitiba: Juruá Editora, 2006.
4. Antunes P B. *Direito Ambiental*. 11. ed. Rio de Janeiro: Lumen Juris, 2008.]
5. Ost F. *A natureza à margem da lei*. Trad. Joana Chaves. Lisboa: Instituto Piaget, 1997.
6. Machado PAL. *Direito Ambiental Brasileiro*. 16ª ed. São Paulo: Malheiros, 2008]
7. Bonavides P. *Curso de Direito Constitucional*. 13 ed. São Paulo: Malheiros, 2003.
8. Silva J A. *Curso de Direito Constitucional Positivo*. 22. ed. São Paulo: Malheiros, 2003.
9. Canotilho J J G. *Direito constitucional e teoria da constituição*. 6 ed. Coimbra: Almedina, 2002.
10. Singer P. *Ética prática*. São Paulo: Martins Fontes, 2006.
11. Levai L F. *Direito dos animais*. 2.ed. Campos do Jordão – SP: Mantiqueira, 2004.
12. Russell WMS, Burch KL. The principles of humane experimental technique. UFAW, London: UFAW; 1992. [cited 2008 jan]. Available from: <http://altweb.jhsph.edu/>.
13. Brasil. Presidência da República. Constituição da República Federativa do Brasil, de 5 de outubro de 1988.
14. Brasil. Presidência da República. Lei nº 6.638, de 8 de maio de 1979. Estabelece normas para a prática didático-científica da vivissecação de animais e determina outras providências.
15. Brasil. Presidência da República. Lei nº 11.794, de 8 de outubro de 2008. Regulamenta o inciso VII do parágrafo 1º do artigo 225 da Constituição Federal, estabelecendo procedimentos para o uso científico de animais; revoga a Lei nº 6.638, de 8 de maio de 1979; e dá outras providências.

16. Brasil. Presidência da República. Decreto nº 6.899, de 15 de Julho de 2009. Dispõe sobre a composição do Conselho Nacional de Controle de Experimentação Animal – CONCEA, cria o Cadastro das Instituições de Uso Científico de Animais – CIUCA, mediante a regulamentação da Lei 11.794, de 8 de outubro de 2008.