

# **The Principle of Proportionality: the Concept and Its Application to Animal Protection Issues such as Killing for Disease Control Purposes**

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## **ABSTRACT:**

In order to guarantee a constitutional democracy, the German Constitutional Court developed a concept named the “principle of proportionality” in the decades after World War II. During the 1960s the court came to the conclusion that the principle of proportionality should be respected as a general guideline for public authority. Since then it has been treated as unwritten constitutional law in Germany. This is the spirit that shaped the new German Animal Protection Act in the year 1972. Today, in dilemma-like situations the animal welfare legislation of the European Union (EU) also follows the principle of proportionality. This paper illuminates the nature of the principle and how it is applied to animal protection issues. But since the principle turns out to be a function of rationality, it can generally be used to structure deliberations about the best options. Three interacting models of people’s moral sense and sense of justice are presented here in order to demonstrate this ability. In regard to the example of the killing of animals for disease control purposes, serious ethical concerns are deduced from this well-established principle.

**Keywords:** Animal ethics, animal welfare, disease control, principle of proportionality, respect for life

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# 「比例原則」之意涵與適用

## ——從防疫撲殺所引發之動保爭議談起

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### 摘要：

為確保憲政民主，德國聯邦憲法法院在二次世界大戰後逐步確立了「比例原則」。1960年代，該原則經憲法法院明定，成為公權力行為過當與否的重要判準。自此，「比例原則」提升為德國不成文憲法法則，自然也形塑了1972年所頒布的「動物保護法」。而後，歐盟（EU）所推動的動物福利法，針對進退維谷的兩難，所依循的同樣是比例原則的精神。本文旨在說明該原則的內涵，以及如何妥適運用於動物保護上。值得一提的是，「比例原則」既是一項理性思考法則，自可廣泛應用，以建構嚴密的思維脈絡，得出解決問題的最佳路徑。對此，本文提出三項彼此交互作用的倫理道德與正義模型來進行剖析，予以佐證。至於動物傳染病防疫撲殺的案例，其中所引發的倫理省思，也可由此一既定原則，窺得一二。

**關鍵詞：**動物倫理、動物福利、疾病控制、比例原則、尊重生命

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## 1. Introduction

In 2005, the World Organisation for Animal Health (OIE),<sup>1</sup> which at that time had 172 Member States, unanimously adopted animal welfare guidelines for the humane killing of animals for disease control purposes.<sup>2</sup> Apparently, ethics has influenced these standards, but is the common practice of killing not only the infected animals but also huge numbers of healthy animals nearby ethically acceptable? – In order to answer this question we ought to go back some sixty years.

One of the lessons Germany learned from its Nazi history was that, in order to guarantee a constitutional democracy, the constitution and the Constitutional Court must regulate public authority in a way that is felt to be balanced – that is never more drastic than necessary and acceptable, while always sufficiently strong. This thin line is defined by the “principle of proportionality” which the German Constitutional Court developed in the 1950s and which since then has been treated as unwritten constitutional law in Germany. In the decades that followed the 1950s the German Constitutional Court realised that the principle of proportionality (commensurability) works like a representation of people’s moral sense and sense of justice. Therefore, the German Constitutional Court concluded that, generally, it should be considered when laws are made, applied, or interpreted.<sup>3</sup> This is the spirit that shaped the Animal Protection Act of 1972

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<sup>1</sup> OIE Terrestrial Animal Health Code (n.d.),

<http://www.oie.int/international-standard-setting/terrestrial-code/access-online>.

<sup>2</sup> Vallat, B. “Animal welfare: global issues, trends and challenges,” *Rev. sci. tech. Off. int. Epiz.* (2005), 24(2): 467-468. <http://web.oie.int/boutique/extrait/preface467468.pdf>.

<sup>3</sup> Hirschberg, L. *Der Grundsatz der Verhaeltnismaessigkeit*, Goettinger *Rechtswissenschaftliche Studien*, Band 106. Diss. iur. habil. (Goettingen/Germany: Verlag Otto Schwartz, 1981), pp.1-2.

in West Germany.<sup>4</sup> Today, the animal welfare legislation of the European Union (EU) follows the principle of proportionality too.

## 2. The principle of proportionality

“The use of [European] Union competences” is explicitly “governed by the principles of subsidiarity and proportionality” (Treaty on European Union, Article 5)<sup>5</sup> – principles that are fundamental to the functioning of the EU. Subsidiarity is an organising principle of decentralisation, stating that a matter ought to be handled by the smallest, lowest, or least centralised authority capable of addressing that matter effectively. Formally similar, proportionality is a normative principle, stating that legitimate power “shall take account of the need for any burden”, to be “minimised” and “commensurate with the objective to be achieved” (Protocol on the Application of the Principles of Subsidiarity and Proportionality, Article 5).<sup>6</sup> The principle of proportionality aims to protect against all kinds of disproportionate interventions. Since disproportionality means either a quantitative or a qualitative deficiency, the principle of proportionality consists of two “subprinciples”,<sup>7</sup> a quantitative and a qualitative one.

The quantitative principle is called the “principle of necessity”. It

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<sup>4</sup> Maisack, C. *Zum Begriff des vernuenftigen Grundes im Tierschutzrecht*, Diss. iur. Hamburg. (Baden-Baden/Germany: Nomos, 2007), p.389.

<sup>5</sup> “Consolidated Version of the Treaty on European Union,” *Official Journal of the European Union* (26.10.2012) C 326, pp.13-45. [http://eur-lex.europa.eu/resource.html?uri=cellar:c382f65d-618a-4c72-9135-1e68087499fa.0006.02/DOC\\_2&format=PDF](http://eur-lex.europa.eu/resource.html?uri=cellar:c382f65d-618a-4c72-9135-1e68087499fa.0006.02/DOC_2&format=PDF).

<sup>6</sup> “Protocol on the Application of the Principles of Subsidiarity and Proportionality,” *Official Journal of the European Union* (26.10.2012) C 326, pp.206-209. [http://eur-lex.europa.eu/resource.html?uri=cellar:c382f65d-618a-4c72-9135-1e68087499fa.0006.02/DOC\\_4&format=PDF](http://eur-lex.europa.eu/resource.html?uri=cellar:c382f65d-618a-4c72-9135-1e68087499fa.0006.02/DOC_4&format=PDF).

<sup>7</sup> Hirschberg, op. cit.

states that people's moral sense and sense of justice cannot accept as justified any harm or burden which is obviously not necessary and therefore is avoidable. Thus, the use of means which cause avoidable harm is unjustifiable (e.g. arresting all participants in a mass rally because a few throw stones). The principle of necessity is a quantitative principle, because it is applicable only when a quantity of individuals or a quantity of the harm is considered as unnecessary to reach the objective. However, it does not facilitate a judgement about whether the objective is justified or not.

For this reason, the principle of necessity should only be applied together with its counterpart, the "principle of proportionality in the narrower sense", which is a qualitative principle. It states that people's moral sense and sense of justice cannot accept as justified any harm or burden that is intuitively valued as not commensurate and, therefore, disproportionate (e.g. shooting dead participants in a mass rally who merely throw stones). From a philosopher's point of view it is noteworthy that the German Constitutional Court accepts the intuitive judgement of people's moral sense and sense of justice without any further substantiation. This accommodates the fact that human beings usually come to intuitive decisions, without further substantiation, whether, for example, a price, a salary, or a punishment is commensurate – or disproportionate and therefore not acceptable.

Apparently, in dilemma-like situations (simply called 'dilemma' below, even if there are more than two options) the principle of proportionality in the broader sense works like a representation, not only of people's moral sense and sense of justice, but – as we shall see – of rationality in general. It can generally be used to structure deliberations about the best option, when there are options to choose from.

### **(1) The principle of necessity and the Three Rs**

In 1959 the British scientists William M.S. Russell and Rex L. Burch

coined the phrase with which the principle of necessity is applied today in laboratory animal ethics. In their publication “The Principles of Humane Experimental Technique“, they describe three ways to diminish or remove inhumane treatment from experimental science: Replacement, Reduction and Refinement – the Three Rs of humane technique. “Replacement means the substitution for conscious living animals of insentient material. Reduction means reduction in the numbers of animals used to obtain information of a given amount and precision. Refinement means any decrease in the incidence or severity of inhumane procedures applied to those animals which still have to be used.”<sup>8</sup>

Russell and Burch do not discuss the question of the conditions under which a procedure might be accepted as justified by people’s moral sense and sense of justice. They regard the use of conscious living animals in procedures as inhumane and needing to be replaced in the future. Today, their vision of full replacement of procedures on living animals for scientific and educational purposes is the “final goal” of EU legislation too (Directive 2010/63/EU, Preamble 10).<sup>9</sup> The EU, however, has to regulate the path to that objective, and this path is governed by the principle of proportionality. Therefore, the EU rephrases Russell’s and Burch’s “three Rs” in the normative wording of the principle of necessity:

#### *Article 4*

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<sup>8</sup> Russell, W. M. S. and R. L. Burch (first published 1959), “The Principles of Humane Experimental Technique.” In: M. Balls (Ed.), *The Three Rs and the Humanity Criterion: an abridged version of ‘The Principles of Humane Experimental Technique’ by W. M. S. Russell and R. L. Burch* (Nottingham/UK: Frame, 2009), p.33.

<sup>9</sup> Directive 2010/63/EU of the European Parliament and of the Council of 22 September 2010 on the Protection of Animals used for Scientific Purposes. Official Journal of the European Union (20.10.2010) L 276, pp.33-79. <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32010L0063&rid=2>.

### **Principle of replacement, reduction and refinement**

1. Member States shall ensure that, wherever possible, a scientifically satisfactory method or testing strategy, not entailing the use of live animals, shall be used instead of a procedure.
2. Member States shall ensure that the number of animals used in projects is reduced to a minimum without compromising the objectives of the project.
3. Member States shall ensure refinement of breeding, accommodation and care, and of methods used in procedures, eliminating or reducing to the minimum any possible pain, suffering, distress or lasting harm to the animals.
4. [...] <sup>10</sup>

In addition, the EU Directive also applies the principle of proportionality in the narrower sense: “It is also essential, both on moral and scientific grounds, to ensure that each use of an animal is carefully evaluated as to the scientific or educational validity, usefulness and relevance of the expected result of that use. The likely harm to the animal should be balanced against the expected benefits of the project. Therefore, an impartial project evaluation independent of those involved in the study should be carried out as part of the authorisation process of projects involving the use of live animals.”<sup>11</sup>

### **(2) The principle of proportionality in German animal welfare law**

During the 1960s the German Constitutional Court came to the

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<sup>10</sup> *ibid.* Article 4

<sup>11</sup> *ibid.* Preamble 39; *cf.* Article 38

conclusion that the principle of proportionality directly results from the concept of constitutional democracy and must be respected as a general guideline for public authority.<sup>12</sup> After a decade of preparation, in 1972 West Germany adopted a new Animal Protection Act to replace the old one that dated from pre-war times. Central to that new law is the maxim that “no one may cause an animal pain, suffering, or harm without reasonable ground according to the principle of proportionality (ohne vernuenftigen Grund)”. It is noteworthy that both subprinciples of the principle of proportionality are meant and addressed by the phrase “ohne vernuenftigen Grund”.<sup>13</sup> Although literally “ohne vernuenftigen Grund” merely conforms to the phrase “without reasonable ground”, the derivation of the 1972 Animal Protection Act from the principle of proportionality necessitates a stricter interpretation. As Maisack (2007) shows, there is a clear link between the wording “ohne vernuenftigen Grund” and the principle of proportionality. Thus, the central sentence of the 1972 Animal Protection Act conveys the meaning “no one may cause an animal pain, suffering, or harm without *acceptable justification*”. On the occasion of an amendment of the Animal Protection Act, the Federal Ministry of Food, Agriculture and Forestry (1986) explained the wording “ohne vernuenftigen Grund” with the arguments of the principle of proportionality: “Not every ground, but only a reasonable ground / *an acceptable justification* justifies certain restrictions in regard to animals. It is necessary here to weigh animal protection and human interests against each other according to strict criteria. As long as animal experiments cannot be fully replaced by alternatives, as long as humans are in need of meat and other products of animal origin, the legislature will have to support a balanced restriction of animal protection. It follows from this principle that after careful weighing of the interests of humans and animals and upon a reasonable ground / *an acceptable justification* being shown animal welfare

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<sup>12</sup> Hirschberg, op. cit.

<sup>13</sup> Maisack, op. cit.

be restricted to a certain degree.”<sup>14</sup>

In order to enable a fair application of the principle of proportionality to animal protection issues, the German-speaking countries established two accompanying supportive measures. With the phrase “animals are not things”, firstly they created a third category – between human beings and things – in civil law in Austria in 1988 (ABGB, Article 285a),<sup>15</sup> in Germany in 1990 (BGB, Article 90a)<sup>16</sup> and in Switzerland in 2003 (ZGB, Article 641a).<sup>17</sup> Secondly, in order to allow for the application of the principle of proportionality in conflicts between animal welfare and basic rights – in particular freedom of science, freedom of religion, and freedom of the arts – animal protection was incorporated into the German Constitution in 2002. In the Swiss constitution animal protection was already included in 1992 and Austria did the same in 2013. Theoretically, this could enable a fair application of the principle of proportionality to animal protection issues, but NGOs still hold the authorities in Germany, Austria and Switzerland culpable for often treating animal protection cases like parking violations. This probably happens because many lawyers do not know how to apply the principle of proportionality within a system in which they know that animals

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<sup>14</sup> Bundesministerium fuer Ernaehrung, Landwirtschaft und Forsten / Federal Ministry of Food, Agriculture and Forestry, *Tierschutz* (Broschuere zur Erlaeuterung der Neufassung des Tierschutzgesetzes am 12.08.1986) (Bonn: Bundesministerium fuer Ernaehrung, Landwirtschaft und Forsten, 1986), p.7. Translation by the author.

<sup>15</sup> Allgemeines Buergerliches Gesetzbuch (ABGB, Austria), [http://www.jusline.at/Allgemeines\\_Buergerliches\\_Gesetzbuch\\_%28ABGB%29\\_Langversion.html](http://www.jusline.at/Allgemeines_Buergerliches_Gesetzbuch_%28ABGB%29_Langversion.html).

<sup>16</sup> Buergerliches Gesetzbuch (BGB, Germany), <http://www.gesetze-im-internet.de/bundesrecht/bgb/gesamt.pdf>.

<sup>17</sup> Schweizerisches Zivilgesetzbuch (ZGB, Switzerland), <http://www.admin.ch/opc/de/classified-compilation/19070042/201307010000/210.pdf>.

have no legal rights (the animal protection acts do not include animal rights). More precisely, many lawyers and some official veterinarians understand the principle of necessity and how it is applied to animal cases, but only a few know how to apply the principle of proportionality in the narrower sense, because in some cases one must use empathy while in other cases this is not even possible.

### **3. Animal Protection: Deliberations about the best option**

In dilemma-like situations, the principle of proportionality in the broader sense resembles a representation of rationality. Thus, generally it can be used to structure deliberations about the best options. Three interacting models of people's moral sense and sense of justice will be used to demonstrate this ability, one for issues with and one for issues without pleasant or unpleasant sensations, and a third one for decision making.

#### **(1) Empathy**

The first model – we can call it the Empathy Model – simulates valuations of human actions towards sentient beings. It is a Three-Bridge-Model which associates sensations with empathy, empathy with valuations of human actions, and the latter with provisions. The trait of reacting with pleasant sensations to beneficial environmental influences and with unpleasant sensations to damaging events is widespread among animals. Linked to a memory, this trait enables individual animals to learn from their experiences. On the part of the animals this trait is the central precondition of the human belief that it is immoral to cause animals unpleasant sensations. Therefore, EU legislation aims to protect all sentient beings, when there is “sufficient scientific evidence” of their ability to experience pain, suffering, distress and lasting harm.<sup>18</sup> At least all vertebrates and cephalopods, such as

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<sup>18</sup> Council Regulation (EC) 1099/2009, Preamble 19, and Directive 2010/63/EU, Preamble 8, in conjunction with the Treaty on the Functioning of the European

the octopus, feel pleasant sensations in reaction to beneficial environmental influences and feel unpleasant sensations when they are subjected to damaging events.<sup>19</sup> Humans (and perhaps some other species) are even responsive to such environmental influences as are beneficial or damaging not to them, but only to others. This trait is called empathy. If the environmental influence is caused by intentional or careless human action, empathy triggers a valuation of this action. As a rule, actions that cause pleasant sensations are considered acceptable and actions that cause unpleasant sensations are considered unacceptable. On the part of humans, empathy is the central (but not the only) precondition of valuations of human actions. In order to prevent human actions that are considered to be unacceptable, humans use provisions. In democracies, human actions that are considered to be unacceptable by the majority are legally prohibited. As a result, the pace of legislation proves to be dependent on the progress made by science. The human belief that it is immoral to cause animals unpleasant

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Union, Article 13.

Council Regulation (EC) No 1099/2009 of 24 September 2009 on the protection of animals at the time of killing. *Official Journal of the European Union* (18.11.2009) L 303, pp. 1-30. <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32009R1099&rid=1>.

Directive 2010/63/EU of the European Parliament and of the Council of 22 September 2010 on the Protection of Animals used for Scientific Purposes. *Official Journal of the European Union* (20.10.2010) L 276, pp. 33-79. <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32010L0063&rid=2>.

Consolidated Version of the Treaty on the Functioning of the European Union. *Official Journal of the European Union* (26.10.2012) C 326, pp. 47-199. [http://eur-lex.europa.eu/resource.html?uri=cellar:c382f65d-618a-4c72-9135-1e68087499fa.0006.02/DOC\\_3&format=PDF](http://eur-lex.europa.eu/resource.html?uri=cellar:c382f65d-618a-4c72-9135-1e68087499fa.0006.02/DOC_3&format=PDF).

<sup>19</sup> *ibid.*

sensations grew alongside increasing knowledge about animals. It is noteworthy that plants have not entered this stage, because there is no sufficient scientific evidence for their being sentient so far. Based on these considerations, the Empathy Model carries the following normative message: as long as there is no dilemma, people's moral sense and sense of justice claims that it is immoral and wrong to intentionally or carelessly cause sentient beings unpleasant sensations, in particular suffering. The message substantiates the popular conviction that "one should not treat others in ways that one would not like to be treated". Apparently, most people have no problem with the unidirectional inclusion of animals. Here, empathy proves to be a stronger trigger than reciprocity, which is considered a paramount element of ethics by contractarian philosophers.

## **(2) Respect**

The second model – we can call it the Respect Model – simulates valuations of human actions with regard to beauty. It is also a Three-Bridge Model which associates beauty with respect, respect with valuations of human actions, and the latter with provisions. While the Empathy Model traces valuations of human actions back to the motive to avoid unpleasant sensations (firstly, of the valuing person and, secondly, of those concerned by the action in question), the Respect Model traces such valuations back to the motive of preserving pleasant sensations (firstly, of the valuing person and, secondly, of other observers). The link between respected entities and provisions is often "clarified" by what is known as intrinsic value, a hypothesis which is unnecessary in this model. Besides empathy, respect is a second trigger of valuations of human actions. Although there is no accounting for taste, each individual claims that entities of beauty must be treated respectfully. In democracies disrespectful human actions considered unacceptable by the majority are legally prohibited.

Even though not much information about the reasons for the German prohibition of "killing vertebrates without reasonable ground (ohne

vernuenftigen Grund)” was given by the 1972 legislaturer,<sup>20</sup> it is most likely that the reason was “respect for life (Achtung vor dem Leben)”. In the early 20<sup>th</sup> century two German philosophers, Magnus Schwantje and Albert Schweitzer, independently developed ethical concepts they each called “reverence for life (Ehrfurcht vor dem Leben)”. After analysing both concepts, Schwantje, who had published his concept first, concluded that it would be more precise to name Schweitzer’s concept “respect for life (Achtung vor dem Leben)” and his own “reverence for life (Ehrfurcht vor dem Leben)”, because Schweitzer’s concept does not amount to a vegetarian lifestyle, while his own deliberations do.<sup>21</sup> In accordance with the German government, who stated in their official reason for the law that the new prohibition is not contrary to justified and reasonable human interests in food from animal origin,<sup>22</sup> Professor Bernhard Grzimek – the well-known zoo director and documentary filmmaker – based the new prohibition of “killing vertebrates without reasonable ground (ohne vernuenftigen Grund)” explicitly on “respect for life (Achtung vor dem Leben)” in his foreword to a jurisprudential annotation of the 1972 Animal Protection Act.<sup>23</sup> Today, there are some more examples of provisions that are apparently based on respect. Switzerland protects the “dignity” of all creatures (since 1992: Swiss

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<sup>20</sup> Ennulat, K. and G. Zoebe. *Das Tier im neuen Recht – Kommentar zum Tierschutzgesetz* (Stuttgart u.a.: Kohlhammer, 1972), pp.110-111.

<sup>21</sup> Schwantje, M. *Ehrfurcht vor dem Leben, Bruederlichkeit und Vegetarismus* (Zuerich: Verlag Volksgesundheit, 1949), pp.5-31.

<sup>22</sup> Bundesregierung, “Entwurf eines Tierschutzgesetzes mit Begrueendung” (Drucksache VI/2559), 1971. In: Gerold, H. (Ed.), *Tierschutz* (Frankfurt/Main: Athenaeum, 1972), pp.25-67. (p.46)

<sup>23</sup> Grzimek, B. “Geleitwort,” In: Ennulat, K. and G. Zoebe. *Das Tier im neuen Recht – Kommentar zum Tierschutzgesetz* (Stuttgart u.a.: Kohlhammer, 1972), pp.7-8.

Constitution, Article 120),<sup>24</sup> German law protects nature and landscape – explicitly including its “beauty” – both because of “its intrinsic value” (aufgrund ihres eigenen Wertes) and as the basis for human life and health (since 2002: German Nature Conservation Act, Article 1),<sup>25</sup> and (since 2010) EU Directive 2010/63 on the protection of animals used for scientific purposes (Preamble 12) states: “Animals have an intrinsic value which must be respected.” Monument protection apparently is based on respect too. According to these considerations, the Respect Model carries the following normative message: as long as there is no dilemma, people’s moral sense and sense of justice claims that it is immoral and wrong to kill (at least higher) animals as well as to cut down very old trees or to destroy crystal caves or other representatives of environmental or cultural heritage. This point of view, which includes plants and crystals, was foreshadowed by the philosophers Immanuel Kant (1797) and Albert Schweitzer (1917).<sup>26</sup>

### (3) Decision making

Interacting with the other models, the third one – we can call it the Dilemma Model – is able to simulate decision making in complex dilemmas. It is a Sequential-Question Model which describes the way to find the best option when there are options to choose from. Applied to a simple dilemma (i.e. costs and benefits adhere to the same individual), for example a standard

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<sup>24</sup> Bundesverfassung der Schweizerischen Eidgenossenschaft (Swiss Constitution), <http://www.admin.ch/opc/de/classified-compilation/19995395/index.html#a37>.

<sup>25</sup> Gesetz über Naturschutz und Landschaftspflege (German Nature Conservation Act), [http://www.gesetze-im-internet.de/bundesrecht/bnatschg\\_2009/gesamt.pdf](http://www.gesetze-im-internet.de/bundesrecht/bnatschg_2009/gesamt.pdf)

<sup>26</sup> Kant, I. (1797), *Die Metaphysik der Sitten*, Königlich Preussische Akademie der Wissenschaften (Ed.): *I. Kant / Die Metaphysik der Sitten* (Berlin: Reimer, 1914), p.443.

Schweitzer, A. Manuscript from 4.2.1917. In: Graesser, E. (Ed.) *Albert Schweitzer – Ehrfurcht vor den Tieren* (Muenchen: Beck, 2006), pp.70-75. (p.71)

purchase decision, this model is obviously rational. Applied to a complex dilemma (where those who pay the “costs”, i.e. those who are harmed, are not identical with those who benefit) this model resembles perfectly the principle of proportionality and, thus, enables an understanding of the problem of how to structure deliberations about the ethically best option. The model assumes that, confronted with a number of options to choose from (e.g. in a simple dilemma at the dentist’s), human decision making is based on four sequential questions:

1. What is the objective (that I am aiming for)?
2. What are the options that achieve the objective with an acceptable probability?
3. Which of those options that achieve the objective with an acceptable probability brings about the fewest disadvantages (for me, the patient; costs included)?
4. Do I consider the disadvantages of this option as acceptable or as disproportionate in relation to the objective and the probability of achieving it?

The model enables the application of ethical logic. It assumes that rational decision making chooses the comparatively best option by the first three steps, while it uses the fourth step to decide whether this option is worth the trouble or not. If the comparatively best option is not worth the trouble then this is true of all options and we choose none of them (we waive a treatment).

The model can be used for simple dilemmas like standard purchase decisions (all questions refer to the viewpoint of the person who intends both to enjoy the benefits and to pay the “costs”) and, in combination with the other models (which import additional valuations into the process of decision making), for complex dilemmas where those who pay the “costs” are not identical to the ones who benefit. The killing of animals for disease

control purposes represents such a complex dilemma. In complex dilemmas the first three questions are asked on behalf of those who pay the “costs”, while the fourth question is asked with reference to the Empathy and/or the Respect Model from the viewpoint of the person who is involved with the decision making. The first three questions implement the principle of necessity, while the fourth question demonstrates how the principle of proportionality in the narrower sense is applied.

1. What is the objective (the animals are to be killed for)?
2. What are the options that achieve the objective with an acceptable probability?
3. Which of those options that achieve the objective with an acceptable probability brings about the fewest disadvantages?
4. Do I consider the disadvantages of this option as acceptable or as disproportionate in relation to the objective and the probability of achieving it?

Regarding the person who is involved with the decision making, the disadvantages of an option correspond to the clash of that option with the claims expressed by the Empathy and/or the Respect Model. The more important the person considers these claims to be, the bigger is the clash and the more likely the answer that the option is not acceptable. The fourth question of this model demonstrates that taking into account ethical considerations in complex dilemmas is a process formally identical with the simpler decision whether an option is worth the trouble or not in a simple dilemma. Thus, ethical decision making in complex dilemmas appears to be an act of rationality too. If that is true, it would indeed be advisable to include the principle of proportionality in all provisions on issues where politicians, authorities, or citizens are confronted with dilemmas. If the persons concerned make their decisions with reference to this model it is most likely that the decisions will be accepted by the people as ethically justified. On the other hand, the models suggest popular outrage when

decisions obviously conflict with the principle of proportionality.

#### **4. Application to the killing of animals for disease control purposes**

The objective of killing for disease control is to rapidly remove infected animals and animals at a high risk of infection to prevent disease spread within the susceptible animal population.<sup>27</sup> Strategies for disease control will usually involve complete depopulation of herds/flocks, and may extend to depopulation across designated areas. Live animals present the major risk of spreading infectious agents, so their killing should be completed as quickly as possible.<sup>28</sup> From an animal welfare point of view, reasons for killing during disease outbreaks are eliminating suffering in diseased animals (if there is prolonged suffering or no cure), preventing suffering in susceptible animals, and maintaining a healthy national herd or flock.<sup>29</sup>

Applied to the question of ethically acceptable animal disease control the three models suggest that people's moral sense and sense of justice might accept humane ways of killing of such infected animals that neither should be cured nor could be humanely slaughtered for human consumption. On the

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<sup>27</sup> Garcia, R. "Killing of animals for disease control purposes," Abstract and Presentation for the 3<sup>rd</sup> OIE Global Conference on Animal Welfare, Kuala Lumpur (Malaysia), 6-8 November 2012. <http://www.oie.int/eng/AW2012/presentations.htm>.

<sup>28</sup> Galvin, J.W., Blokhuis, H., Chimbombi, M.C., Jong, D. & S. Wotton, "Killing of animals for disease control purposes," *Rev. sci. tech. Off. int. Epiz.* (2005), 24(2), 711-722. <http://web.oie.int/boutique/extrait/galvin711722.pdf>.

<sup>29</sup> Raj, M. "EU experience of animal welfare during killing for disease control," Presentation delivered in the Workshop on EU Legislation on Animal Welfare, Seoul/Republic of Korea, 9-11 October 2012. [http://www.fao.org/fileadmin/user\\_upload/animalwelfare/1.8\\_MRaj\\_Killing%20for%20disease%20control.pdf](http://www.fao.org/fileadmin/user_upload/animalwelfare/1.8_MRaj_Killing%20for%20disease%20control.pdf).

other hand, the models suggest popular outrage concerning, first, inhumane methods of killing (e.g. burying live animals, as practised by a number of countries) and, second, the mass culling of healthy animals around an infected farm in order to control the disease (which still belongs to the popular ‘stamping out’ strategy). Both scenarios appear, therefore, problematic (culling = killing of animals not for consumption, but for destruction).

Apparently, ethics has influenced the global animal welfare standards of the World Organisation for Animal Health (OIE) which in 2005 had 172 Member States who unanimously adopted animal welfare guidelines for the humane killing of animals for disease control purposes. On this occasion the OIE proved to be in line with the principle of necessity: “For some diseases, applying stamping-out measures to the infected sites is sometimes unavoidable, but the OIE makes every effort to limit the use of such measures by providing for the use of vaccination for disease prevention purposes. When there is no alternative to stamping out, the OIE recommends using methods that are designed to limit animal suffering as far as possible.”<sup>30</sup> Concerning the question of humane methods of culling, Chapter 7.6 of the OIE Terrestrial Animal Health Code (n.d.) lists the state-of-the-art technology for the humane mass culling of animals for disease control purposes and explains: “These recommendations [...] address the need to ensure the welfare of the animals until they are dead. When animals are killed for disease control purposes, methods used should result in immediate death or immediate loss of consciousness lasting until death; when loss of consciousness is not immediate, induction of unconsciousness should be non-aversive or the least aversive possible and should not cause avoidable anxiety, pain, distress or suffering in animals.”

As aforementioned, the principle of necessity is just a quantitative principle. It does not facilitate a judgement about whether the objective is

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<sup>30</sup> Vallat, *op. cit.*

justified or not. For this reason, the principle of necessity should only be applied together with its counterpart, the “principle of proportionality in the narrower sense”, which is a qualitative principle.

### **(1) The principle of proportionality in the narrower sense**

In regard to the killing of animals for disease control purposes the application of the second subprinciple has obviously fallen behind. With reference to the killing of healthy animals the question is: do I consider the disadvantages of the mass culling of healthy animals around an infected farm as acceptable or as disproportionate in relation to the objective and the probability of achieving it? As stated above, the answer depends on the clash with the claims expressed by the Empathy and/or the Respect Model. The more important these claims are considered to be, the bigger is the clash and the more likely the answer that the option is not acceptable. Apparently, some people notice a bigger clash than the OIE does.

Since both the enforcement of the Animal Protection Act and the responsibility for disease control are among the duties of the German veterinary authorities, the killing of animals for disease control purposes has frequently raised the question as to whether there is a “reasonable ground”. A number of official veterinarians who are/were members of the Veterinary Association for Animal Welfare (TVT) repeatedly argued, although without results, that the killing of healthy animals for disease control purposes is not lawful in Germany (e.g. TVT 1997).<sup>31</sup> But, since the term “reasonable ground (vernünftiger Grund)” in the law is considered a vague legal concept, the ongoing debate about its implications is more than twenty years old (e.g.: Schwabenbauer 1992).<sup>32</sup>

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<sup>31</sup> Tieraerztliche Vereinigung für Tierschutz e.V. TVT, “Stellungnahme,” *VETImpulse* (August 1997), 6(8):4.

<sup>32</sup> Schwabenbauer, K. “Der vernünftige Grund im Sinne des § 17 Nr. 1 des

Regarding the question of culling healthy animals, science has made good progress in developing special vaccines and diagnostics to differentiate infected from vaccinated and other healthy animals (DIVA concept). To date, however, these tools are available for only a few infectious diseases and are hardly ever used, because of unresolved problems with trade regulations (cp. AfT 2011).<sup>33</sup> But, since not only the public but also the farmers and national governments are increasingly unwilling to accept the ever-rising costs of the stamping out strategy it is to be expected that in the future the trade problems will be solved and the mass culling of healthy animals be stopped.

## (2) Ethical logic

In regard to deliberations about the best option, the models facilitate the use of logic. In this way, they can help us with the question as to how the principle of proportionality must be applied in complex dilemmas, where those who pay the “costs” are not identical to those who benefit. Considering the least-disadvantage option as acceptable (in relation to the objective and the probability to reach it) is logically equivalent to considering the disadvantages of that option as less important than the disadvantages that arise from its omission. Considering the mass culling of healthy animals around infected farms as acceptable, for example, means considering this disrespectful action as less decisive than the “costs” of a differentiation between infected and healthy animals.

Another logical implication concerns the formation of groups according to characteristic traits. If people apply the fourth question, for example, to a variety of situations in which animals are killed, it is likely that the situations will be sorted into groups (at least those which are considered

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Tierschutzgesetzesk,” *Dtsch. tierarztl. Wschr.* (1992), 99(1): 8-9.

<sup>33</sup> Akademie fuer Tiergesundheit AfT (Ed.), “Impfen statt Keulen? Wohin geht die europäische Tierseuchenbekämpfung?” (partly in English), 2011, <http://www.aft-online.net/symposien/aft-fruehjahrssymposien>.

not acceptable). If it can be proved that a specific characteristic will be considered to be generally unacceptable, it would be logically legitimate to revise this statement so that it carries an absolute prohibition of all sorts of treatment showing this characteristic. For example, “mass culling of healthy animals around infected farms in order to control the disease” is such a group, because the objective itself is considered to be unnecessary today (for there are ways to differentiate between infected and healthy animals now).

From a more theoretical point of view it may be interesting that this logical implication seems to enable a reconciliation of utilitarianism and the rights view. The idea of rights might be the result of grouping according to specific traits within a process which primarily is deciding about individual cases. That way, the popular conviction that there is “right” and “wrong” behaviour might have evolved from “pleasant” and “unpleasant” sensations in the very beginning (as explained by the models). – From the viewpoint presented here, utilitarianism and the rights view appear more like parent and child than like contradicting concepts.

## **5. Conclusion**

In regard to the killing of animals for disease control purposes, serious ethical concerns are deduced from the well-established principle of proportionality which aims to protect against all kinds of disproportionate interventions. In order to check whether the killing of animals for disease control purposes is possible in line with the principle of proportionality, three interacting models of people’s moral sense and sense of justice are used. Applied to the question of ethically acceptable animal disease control the three models suggest that people’s moral sense and sense of justice might accept humane ways of killing of such infected animals that neither should be cured nor could be humanely slaughtered for human consumption. On the other hand, the models suggest popular outrage concerning, first, inhumane methods of killing (e.g. burying live animals, as practised by a number of

countries) and, second, the mass culling of healthy animals around an infected farm in order to control the disease (which still belongs to the popular ‘stamping out’ strategy). Since it is likely that neither inhumane methods of killing nor the mass culling of healthy animals can be accepted by the people as ethically justified it is advisable to develop solutions that are in line with the principle of proportionality. In particular the DIVA concept (which differentiates infected from vaccinated animals) has the potential to reduce ethical concerns of the public.

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