

Subtracting Suffering: An Anti-Aggregationist Approach to Suffering in Nature

Restando sufrimiento: un enfoque anti-agregacionista del sufrimiento en la naturaleza

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Abstract

In recent years, there is an increasingly higher number of people who believe in a prevalence of suffering over welfare in nature. This belief is usually coincident with a sentiocentric axiology according to which what is morally relevant are the mental states of pleasure and pain. This combination leads to the diagnosis that the prevalence of suffering has an enormous moral significance. This paper rejects this traditional line of thought and instead argues that could not be coherent. The claim that there is an ontological prevalence, in the abstract, of suffering in nature is unproblematic. However, the same is not true when considering its moral relevance. A sentiocentrist cannot consider an aggregationist calculation to be morally valuable, strictly speaking, since there is no subject that feels it. Nevertheless, the need for positive intervention in nature with the aim of reducing existing suffering could remain.

Keywords: aggregationism, anti-aggregationism, animal ethics, animal suffering, interventionism.



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Resumen

En los últimos años, cada vez es mayor el número de personas que creen en una prevalencia del sufrimiento sobre el bienestar en la naturaleza. Esta creencia suele coincidir con una axiología sensocentrista según la cual lo moralmente relevante son los estados mentales de placer y dolor. Esta combinación conduce al diagnóstico de que la prevalencia del sufrimiento tiene una enorme relevancia moral. Este artículo rechaza esta línea de pensamiento tradicional y argumenta, en su lugar, que podría no ser coherente. La afirmación de que existe una prevalencia ontológica, en abstracto, del sufrimiento en la naturaleza no es problemática. Sin embargo, no sucede lo mismo al respecto de su relevancia moral. Un sensocentrista no puede considerar que un cálculo agregacionista sea moralmente valioso, estrictamente hablando, pues no hay sujeto que lo sienta. No obstante, podría mantenerse la necesidad de una intervención positiva en la naturaleza con el objetivo de reducir el sufrimiento existente.

Palabras clave: agregacionismo, antiagregacionismo, ética animal, sufrimiento animal, intervencionismo.

1. Introduction

In recent decades, more and more people have become concerned about the suffering of non-human animals. In academia, this phenomenon translates into a growing theoretical interest in the suffering of wild animals (e.g.: Dawkins, 1995; Rolston III, 1992; Ng, 1995; Horta, 2010a, 2010b, 2015; Faria, 2016; Villamor, 2018). Although not a necessary condition,¹ most of these authors maintain that some kind of consequentialism to defend that suffering predominates over well-being in nature. More specifically, by incorporating an aggregationist component² into their theories, these positions conduct a controversial inference from the following statement:

Ontological Prevalence of Suffering in Nature. There is an ontological prevalence of suffering over welfare in nature. That is, the net sum or iterative comparison (one by one) of

¹ It is important to remember that there is no relation of necessity between consequentialism and aggregationism. Some theories, such as Maximin or Leximin, are clearly consequentialists but not aggregationists (Hirose, 2015, 30-31). Likewise, as Hirose has shown, aggregationism can be present in deontological theories such as Scanlon's theory (Hirose, 2015, 147-161).

² Even though the consequences could be similar, in this paper we will only focus on a conception of additive aggregation. As Larry Temkin emphasizes, there are different types of aggregation beyond mere addition: "So, for example, one might have principles of aggregation that focused on averages, like average utilitarianism, or on weighted totals, like prioritarianism, or on the highest or best achievements, like some forms of perfectionism, or on the wellbeing of those who are worst off, like maximin" (Temkin, 2012, 25).

the negative experiences of animals living in nature [$X = -10, -15, -30, -9 \dots$] greatly exceeds the positive experiences [$Y = 5, 9, 3, 12\dots$].

Some people assume that from the ontological prevalence of suffering in nature it follows that this prevalence has, *per se*, a moral significance of enormous magnitude. Nonetheless, it seems incompatible to sustain this assertion from a sentiocentric axiology according to which only lived experience has intrinsic value.³ By way of illustration, the ontological assertion according to which there is more general suffering in, "a vast number of people [who] are experiencing fairly minor headaches" than in a person who "is killed" (Norcross 1997, 135) cannot be equated with that which affirms that the first case is morally more relevant than the second one. Therefore, the purpose of this paper is to demonstrate that maintaining the moral relevance of suffering is precisely what prevents identifying ontological aggregation with moral duty.

The following text is structured in five parts. In the first, the concept of sentiocentrism will be briefly introduced. In the next, focused on aggregationism, the concepts of interpersonal and intrapersonal aggregation are introduced, as well as their respective criticisms. In the third, the anti-aggregationist critique is applied to the question of whether suffering is greater than welfare in nature. The next section applies the problems of aggregationism to the idea that the prevalence of suffering in nature is morally significant. This point also introduces the Vallentyne's thesis (2005) that there are limits to the experience of well-being or suffering: not all sentient beings have the same quality or intensity in their subjective experiences. The fifth section argues that this last idea, combined with the objections to aggregationism, forces us to manage the duty to intervene in nature according to the maximum capacity of individuals to feel pleasure or pain. In the following point, some objections against the ideas presented are considered. Finally, we will make briefly some concluding remarks about the implications of the main thesis held.

2. Sentiocentrism

In the field of value theory—also called axiology—, there are several conceptions about what is ultimately worthy. Broadly speaking, some authors (Parfit, 1984 or Feldman, 2004) have distinguished three main types of theories: hedonism, preferentialism, and the objective list

³ It could be compatible with other alternative axiologies, such as some versions of the objective list. Similarly, it could also be compatible with a sentiocentrism that argues that experience is not the only valuable thing. For example, it could argue that something would still possess moral value by deriving its moral value from the experiences. The latter is an overly broad conception of sentiocentrism that we will not consider. Nor shall we take into account the conception of sentiocentrism to refer to a view about the moral community.

theory. Certainly, through any of these theories one could argue that nature is largely a morally undesirable place. Yet, in this paper we will focus on the first theory.

With origins dating back at least to Epicurus, hedonism is a diverse view with multiple versions. At the heart of its theoretical framework, it has a fundamental principle that we will refer to as sentiocentrism. We understand sentiocentrism as follows:

Sentiocentrism. The subjective experience of well-being (positive experiences, pleasure...) and suffering (negative experiences, pain...) are the two unique morally relevant criteria.

It is relevant to understand this definition in a narrow sense. So, when it refers to 'subjective experiences', this means that only the factual existence of an experience (positive or negative) can be considered something that matters morally.

3. Aggregationism

3.1 The concept of interpersonal aggregation

Consider this popular case from Taurek:

The situation is that I have a supply of some life-saving drug. Six people will all certainly die if they are not treated with the drug. But one of the six requires all of the drug if he is to survive. Each of the other five requires only one-fifth of the drug. What ought I to do? (Taurek, 1977, 294).

Following a consequentialist theory, it seems clear which of the different viable options is the right one: *ceteris paribus*, we should give the drug to the greatest number because the net sum of the benefit provided is greater than the suffering caused to a single individual. This normative conclusion has been inferred by the acceptance of aggregationism. But what is aggregationism?

There are multiple and varied characterizations of aggregationism (see, for instance: Hardin, 2008; Temkin, 2012; Hirose, 2013, 2015). In this paper, aggregationism is understood as a methodological principle whose main aim is to determine which of at least two possible situations is morally more desirable. Since the nineteenth century, aggregationism has typically been associated with utilitarianism. However, this principle is not restricted exclusively to utilitarianism, nor to any given consequentialist theory. In fact, although aggregation is usually conducted by comparing welfare and suffering, it is also possible by quantifying "claims, reasons, and so on" (Hirose, 2015, 31). Which makes it possible for deontological theories, such as Thomas Scanlon's (1998), to incorporate an aggregationist calculus. With these factors in mind, it is relevant to note that the aggregationism we are referring to deals only with the aggregation of well-being and suffering.

Although there are numerous variants of it, for the purpose of the work we will only consider a useful double distinction made by Hirose in his *Moral Aggregation* (2015) between interpersonal and intrapersonal aggregation. In this section, we will focus on the former.

Interpersonal aggregation is defined as, "the combination of different people's morally relevant factors (i.e., good, well-being, happiness, pleasure, desire-satisfaction, claims, reasons, and so forth) into a real value that represents the relationship of sets of morally relevant factors" (Hirose 2015, 24). Take the famous World Cup Case used by Scanlon as a counterexample against utilitarian aggregationism:

Suppose that Jones has suffered an accident in the transmitter room of a television station. Electrical equipment has fallen on his arm, and we cannot rescue him without turning off the transmitter for fifteen minutes. A World Cup match is in progress, watched by many people, and it will not be over for an hour. Jones's injury will not get any worse if we wait, but his hand has been mashed and he is receiving extremely painful electrical shocks. Should we rescue him now or wait until the match is over? Does the right thing to do depend on how many people are watching—whether it is one million or five million or a hundred million? (Scanlon, 1998, 235).

Does the choice of the right decision depend on the number of people watching the match? The utilitarian would undoubtedly answer yes. Thus, let us imagine that the match is being watched by approximately 100 million people around the world. On the one hand, supposing that the average discomfort produced by the interruption of the match for fifteen minutes will be -10 in each individual, this interruption would cause about -1 billion points of suffering. On the other hand, the pain experienced by Jones during the hour of electric shocks will be about -250. Once the aggregation of spectators's suffering has been performed, and the result is compared interpersonally with the suffering of Jones, the classical utilitarian would determine that the correct action is not to interrupt the match. Like so many others, this case can be analyzed from different theories. But, in any case, the right choice depends on the acceptance or rejection of interpersonal aggregation.

As we have just seen, the advocate of consequentialist aggregationism would argue that the correct action is determined by two variables: the total suffering produced by the interruption of the match and the total suffering experienced by Jones for one hour. Due to the immense difference in value between the viewers (-1 billion) and Jones (-250, -300 or whatever the reader wants to assign) the correct action would be to wait until the end of the match to rescue Jones.

Recall that this decision assumes a sentiocentric axiology by which we must take into consideration the "subjective experience" of suffering in both cases. And here consequentialist aggregativism runs into a problem since its own theoretical assumptions are incompatible. From a sentiocentrist perspective, the interpersonal aggregation of all the spectators lacks moral relevance since, as a whole, it is not subjectively experienced by anyone. The suffering of -1 billion does not exist, so to speak, for anyone in particular. Strictly speaking, there is only a set of 100 million negative experiences that have on average a discomfort of -10. The statement "There is more suffering in the set of spectators of the game deprived of this for fifteen minutes than in the experience of Jones' discharges in one hour" may have a descriptive sense, but not axiological. From the latter, it is not true that "There is more suffering in the set of spectators..." unless the suffering experienced during fifteen minutes by any of them exceeds that of Jones for one hour, which is highly improbable.

This criticism of interpersonal aggregation is not new. The same intuition can be found in Temkin's *The Minimize Great Additional Burdens View*:

The Minimize Great Additional Burdens View. In general, if additional burdens are dispersed amongst different people, it is preferable for a given total burden to be dispersed amongst a vastly larger number of people, so that the additional burden any single person has to bear within her life is "relatively small," than for a smaller total burden to fall on just a few, such that their additional burden is substantial (Temkin 2005, 219).

In addition to this non-additive *aggregative* principle, Taurek's criticism of aggregationism resembles the one already mentioned. Regarding the already introduced example of a doctor who could save the lives of six individuals, says Taurek:

For each of these six persons it is no doubt a terrible thing to die. Each faces the loss of something among the things he values most. His loss means something to me only, or chiefly, because of what it means to him. It is the loss to the individual that matters to me, not the loss of the individual. But should any one of these five lose his life, his loss is no greater a loss to him because, as it happens, four others (or forty-nine others) lose theirs as well [...] Five individuals each losing his life does not add up to anyone's experiencing a loss five times greater than the loss suffered by any one of the five (Taurek 1977, 307).

The key to the matter lies in the mereological error made by aggregationists, in this case consequentialists, when they confuse the abstract descriptive utility, let us call it ontological,

of aggregationism with its truly axiological and normative value. In the latter case, the whole is not equal to the sum of its parts. This error is clear in the following text by Sidgwick:

So far we have only been considering the 'Good on the Whole' of a single individual: but just as this notion is constructed by comparison and integration of the different 'goods' that succeed one another in the series of our conscious states, so we have formed the notion of Universal Good by comparison and integration of the goods of all individual human -or sentient- existences. And here again, just as in the former case, by considering the relation of the integrant parts to the whole and to each other, I obtain the self-evident principle that the good of anyone individual is of no more importance, from the point of view (if I may say so) of the Universe, than the good of any other (Sidgwick 1981, 382).

As many authors have already expressed,⁴ sentiocentrism understood as a theory of value centered on subjective experience cannot attribute moral relevance to a Universal Good not experienced by anyone in Sidgwick's way. Such is the case of Rawls, Scanlon, Nagel or Nozick.

In his *A Theory of Justice* (1971) John Rawls enunciates the problem of the separation of persons. For him, "utilitarianism does not take seriously the distinction between persons" (Rawls, 1971, 26-27). Since it allows sacrificing the welfare of a few, as long as this is compensated by the majority or universal good, aggregationism does not take seriously the distinction between persons. Strongly based on the Rawlsian objection, although without making explicit reference to the notion of separateness between people (Hirose, 2015, 84), Scanlon elaborates a contractualist theory according to which: "[A]n act is wrong if and only if any principle that permitted it would be one that could reasonably be rejected by people with the motivation just described" (Scanlon, 1998, 4). The existence of a single person who has a compelling reason to reject a principle implies that the principle cannot serve as a criterion for determining when an action is right (Hirose, 2015, 148): "no matter how many people would benefit if we adopted this principle" (Hirose, 2015, 148-149). It is important overall to keep in mind that Scanlon did not maintain a completely anti-aggregationist position. He will appeal in certain cases to a sort of exception, called "tie-breaking" argument (Scanlon, 1998, 235), which was synthesized by Parfit as follows:

⁴ Among them Nozick: "[T]here is no *social entity* with a good that undergoes some sacrifice for its own good. There are only [...] different individual people, with their own individual lives. Using one of these people for the benefit of others, uses him and benefits the others. Nothing more." (Nozick 1974, 32-33).

Tie-breaker View. When the strongest opposing claims are a roughly equally wrong, numbers break ties, and we ought to do what would meet the claims of more people (Parfit, 2003, 375).

Scanlon combines an individualistic principle that respects the Rawlsian separation of persons. He does it with a minimal aggregationism which avoids certain counter-intuitive conclusions that follow from a purely anti-aggregationist view. As soon as the suffering of two groups of individuals is similar, an aggregationist perspective that considers the number of individuals should be kept in mind. The World Cup Case is a paradigmatic example of the type of case that Scanlon wants to avoid with his contractualism. The low frustration of each viewer would hardly justify the suffering of Jones, regardless of how high the number of viewers may be. But, by the above, the number of viewers would have moral relevance if their suffering were similar to Jones's.

However, as Parfit pointed out, this combination is hardly feasible to the extent that "the sum of the smaller benefits to others has no justifiable weight, since there is no individual who enjoys these benefits" (Parfit, 2003, 378). That is to say, insofar as what is at stake is a similar amount of suffering, and as long as he maintains his individualistic restriction, it is incoherent for Scanlon to accept an aggregationist position in this kind of case. Let us consider an example from Parfit:

Lifeboat. White is stranded on one rock, and five people are stranded on another. Before the rising tide covers both rocks, we could use a lifeboat to save either White or the five (Parfit, 2003, 376).

Since the benefits at stake are highly similar, Scanlon's proposal should examine the number of individuals, which would result in White's death. Nonetheless, White could certainly reject this choice by claiming that the individualistic restriction is not being applied. In fact, as Parfit puts it: "this sum of benefits has no justifying weight, since there is no one who would enjoy these benefits. If we saved the five, none of them would live five lives" (Parfit, 2003, 378). Scanlon's moderate aggregationism, while claiming to respect the separation between people, still lacks moral justification.

Given the above problem of sentiocentrism with aggregationism, we are led to an anti-aggregationist position. John Taurek's paper "Should Numbers Count?" (1977) is possibly the most relevant anti-aggregationist work published. Taurek accepts the anti-aggregationist consequences with extreme consistency by arguing that, in a case where we must choose between saving the life of an individual or saving the lives of five, it is doubtful that, *a priori*, the right thing to do would undoubtedly be to save the five. It is not clear that "other things being equal, or special considerations apart, one ought to save the greater number" (Taurek,

1977, 294). It is questionable that the death of five individuals is worse than the death of one: "it is a worse thing that these five persons should die so that this one should. It is this evaluate judgment that I cannot accept" (Taurek, 1977, 303-304). Determining which situation would be worse is an issue that varies depending on the point of view. Of course, from an "impersonal point of view," in the manner of Sidgwick's Universal Good, the death of one individual is better than the death of five. Things change if we keep in mind the point of view of each individual:

For each of these six persons it is no doubt a terrible thing to die [...] It is the loss to the individual that matters to me, not the loss of the individual. But should any one of these five lose his life, his loss is no greater a loss to him because, as it happens, four others (or forty-nine others) lose theirs as well. And neither he nor anyone else loses anything of greater value to him than does David, should David lose his life. Five individuals each losing his life does not add up to anyone's experiencing a loss five time greater than the loss suffered by any one of the five (Taurek, 1977, 307).

Again, we find the error that seeks to equate the ontological possibility of aggregationism with its axiological and normative senses. This mistake is a problem that Taurek glimpsed when he stated that "it is the loss to the individual that matters to me, not the loss of the individual" (Taurek, 1977, 307). When it is not experienced by anyone, the aggregation of well-being or pain between individuals lacks moral significance. For this reason, an individual belonging to a minority that will be harmed compared to another due to the fact of being numerically smaller could be considered discriminated against for their belonging to this group.

Imagine a hypothetical situation in which we can only eliminate the suffering of -20 experienced by a single individual, or the suffering of -10 experienced individually by 5 individuals. While it is true that the net addition of the suffering of these five individuals would be -50 , it would be a mistake to conclude that we should avoid this suffering and not that of -20 . This is a mistake that derives from equating the possibility, in the abstract, of adding the suffering of each of those five individuals with the moral relevance of the resulting figure. Because it is not experienced by anyone, it cannot be said that the aggregation of the suffering of the five individuals is morally relevant, at least from a sentiocentric perspective. Since interpersonal aggregation lacks moral utility, because it leads to abstract aggregations not experienced by anyone, we should choose to eliminate the -20 points of pain suffered from a single individual. Consequently, when considering a sentiocentric theory, interpersonal aggregation for moral purposes must be rejected.

3.2 The concept of intrapersonal aggregation

In this section we will briefly discuss intrapersonal aggregation. If the objection against interpersonal aggregation for a sentiocentric axiology were successful, the present section would be unnecessary. Even if we can say that in a certain outcome there are more individuals with lives of net suffering than in another, lives of suffering could still not be aggregated in any morally meaningful way. Nevertheless, this version of aggregationism must be considered since someone could argue that the idea of the prevalence of suffering over well-being in nature resists without interpersonal aggregation.

In Hirose's words, intrapersonal aggregation, "holds that a course of a person's life, W , is at least as good as another course of his or her life, W' , if and only if the aggregate value of the morally relevant factors at different periods within his or her life in W is at least as great as that in W' " (Hirose, 2015, 89). If intrapersonal aggregation had moral relevance, it would allow us to discern the set of individuals with a positive balance life from those individuals with a negative one. For instance, suppose the life of an individual x with a negative mean value as follows:

$$x = [12, 23, -9, -24, -30, -33].^5$$

From the perspective of intrapersonal aggregationism, it could be concluded that the life of x has been, in general terms, negative; that is to say, it has been a life not worth living. However, from the anti-aggregationist position held, intrapersonal aggregationism would incur the same problem as interpersonal aggregationism in determining, for the life of x , that its average value was approximately -10. Again, this average value has not been experienced by anyone. What has been experienced is the succession of values over x 's lifetime. Which is quite different from saying that the lifetime of x has been negative once it has been lived.

Someone might say that this position entails, for instance, that an agent cannot rank outcomes according to their expected impact in their overall future well-being and has no reason to prefer the one containing the greatest net total amount. This is partially true. It is irrational for someone to choose to do something that will result in a greater overall well-being for their life. For example, studying computer engineering because it will give them a life with a positive net result. But it is not irrational for someone to choose to do something to the extent that, in a concrete and experienced way, it will result in a moment of well-being as opposed to another possible less pleasant situation. In this case, studying computer engineering instead of philosophy because it will give them more opportunities to get money.

⁵ In this scheme each figure represents the average value for each temporal portion of the life of x . Thus, this life is divided into six parts or temporal moments.

And getting money will make it more likely that every *particular* day of their life will be positive. Thus, prudential rationality can survive this view.

4. Is there a prevalence of suffering in nature?

The prevalence of suffering in nature has been defended in numerous works (e.g., Dawkins, 1995; Rolston III, 1992; Ng, 1995; Horta, 2010a, 2010b, 2015; Faria, 2016; Villamor, 2018) from the field of animal ethics and welfare biology. All of them emphasize the existence of a series of natural conditions (reproductive strategies, predation, natural disasters...) that make suffering predominate over welfare in a vast majority of animal lives. This idea is mainly based on an aggregationist conception of mental states in nature. Specifically, from the ontological prevalence of suffering in nature according to which:

Ontological Prevalence of Suffering in Nature. There is an ontological prevalence of suffering over welfare in nature. That is, the net sum or iterative comparison (one by one) of the negative experiences of animals living in nature [X = -10, -15, -30, -9 ...] greatly exceeds the positive experiences [Y = 5, 9, 3, 12...].

The acceptance of the ontological prevalence of suffering in nature leads many to the defense of the moral prevalence of suffering in nature. As we have seen, the aggregationist requirement can be understood in two separate ways: either through interpersonal or through intrapersonal aggregation. To criticize this idea, in this section we will first tackle the application of the interpersonal conception and then deal with the intrapersonal one. In both cases, it will be shown that the movement from an ontological prevalence of suffering to axiological or normative consequences is not justified if it is assumed a sentiocentric axiology.

Imagine a hypothetical situation in which we must choose between avoiding a suffering of -2 for each ant of the billion ants living in an anthill or a suffering of -50 of an adult human being. From the perspective of interpersonal aggregationism, the calculation is overwhelmingly clear: we must avoid the suffering of the ants as a whole. Someone might object to this result that, in reality, interpersonal comparison cannot be performed when the welfare or discomfort at stake is so minimal:

Incomparable. The state of affairs constituted by *any* number of fairly minor headaches is incomparable with the premature death of an innocent person (Norcross, 1997, 136).

For Norcross, regardless of the number of headaches involved, this can never justify the death of a person. Simply, there are incommensurable magnitudes, such as headaches, which are not "morally relevant" (Scanlon, 1998, 239). This problem leads to the question of the

transitivity of "better than", which would not occur, according to some authors, with "irrelevant utilities" (Kamm, 1998, 144-164) or "trivial harms or benefits" (Temkin, 2005, 226). If the existence of these irrelevant utilities is accepted, from interpersonal aggregationism it would be possible to avoid the duty to save ants instead of the human being.

Nevertheless, the existence of irrelevant utilities is at least questionable, which is shared by Parfit. "Among these conclusions, Parfit showed that it can be a great mistake to overlook, or ignore, imperceptible or trivial harms or benefits" (Temkin, 2005, 226). For the Oxonian philosopher, the rejection of small amounts of well-being or discomfort is the fourth "error in moral mathematics" (see Parfit, 1984). Ignoring this type of pain represents a kind of unjustified arbitrariness, at least from a sentiocentric perspective.

Despite the illusion that these amounts are so insignificant that they should not count, it is a mistake to consider that they should not add up in moral aggregation. Both the error of ignoring very small or imperceptible effects share, according to Parfit, the same drawbacks (Parfit 1984, 75-78). To illustrate this point, take the example proposed by Glover and recovered by Parfit:

Suppose a village contains 100 unarmed tribesmen eating their lunch. 100 hungry armed bandits descend on the village and each bandit at gunpoint takes one tribesman's lunch and eats it. The bandits then go off, each one having done a discriminable amount of harm to a single tribesman. Next week, the bandits are tempted to do the same thing again, but are troubled by new-found doubts about the morality of such a raid. Their doubts are put to rest by one of their members who does not believe in the principle of divisibility. They then raid the village, tie up the tribesmen, and look at their lunch. As expected, each bowl of food contains 100 baked beans. The pleasure derived from one baked bean is below the discrimination threshold. Instead of each bandit eating a single plateful as last week, each takes one bean from each plate. They leave after eating all the beans, pleased to have done no harm, as each has done no more than sub-threshold harm to each person (Glover & Scott-Taggart, 1975, 174-175).

Since it would be absurd to consider that none of the bandits has caused any damage, we must accept that, however small the damage, it has moral significance. This counterexample gives us a glimpse of the fact that we cannot speak of "irrelevant utilities".

Going back to the case of the ants and having evaded the possibility of appealing to "irrelevant utilities", the aggregationist is forced to prevent the suffering of the anthill as a

whole to the detriment of the adult human being. They would defend his choice by combining interpersonal aggregationism with a sentiocentrist axiology. Nonetheless, as it has noted above, this choice derives from the error of aggregating positive or negative mental states and granting them moral relevance. This calculation is only possible at a strictly ontological level, that is, as a purely abstract tool. Let us see it structured in the form of a small argument:

(P1) Morally relevant criteria consist respectively of the experience of pleasure and pain.⁶

(P2) The experience of pleasure and pain are felt only by individual entities.

(C1) Morally relevant criteria are satisfied only by individual entities.

As a consequence of C1, it can be seen that the set of ants composing an anthill cannot have "moral priority" with respect to an individual entity, at least from a sentiocentric point of view. The sum of the individual suffering of each ant, equal to -2, is not experienced by any particular ant, so it is morally irrelevant. Since the set is not an individual entity, the suffering of each ant cannot be prioritized because it belongs to such a set. In such a case we could even be facing a discriminatory situation with respect to those individuals who do not belong to that set.

Although it is complex to find a unique definition of discrimination, following the *Stanford Encyclopedia of Philosophy*, it could be understood, in general terms, that "discrimination consists of acts, practices, or policies that impose a relative disadvantage on persons based on their membership in a salient social group" (Altman, 2016). The same consequence would follow from other possible definitions, but this one already serves to maintain that the benefit of one individual over another taking as a criterion their membership in a certain set of individuals is discriminatory in this kind of case. Here, the "salient social group" is precisely the largest group. This is a discrimination already intuited in Taurek (1977) when he states that individuals harmed by belonging to a smaller group could claim that their interests are not being equally taken into account in comparison with those of the larger group (Taurek, 1977, 314-316). In the same vein, on the basis of P2 there is no *prima facie* justification for preference for the larger set of individuals.

Given the error incurred by the aggregationist calculus, it is important to change our image of aggregation itself: from the fact that the aggregation of pleasure or suffering is

⁶ This premise is usually supported by the so-called argument of relevance. According to it, the moral significance of actions lies in the effects, whether in the form of benefit or harm, that they produce in individuals. If it is accepted that only sentient beings can be benefited or harmed, it follows that only the interests of sentient beings must be morally considered. For a detailed development of the argument see Horta, 2018.

possible in the abstract does not follow that the result has moral significance. Likewise, the ability to think in a geometric body with 10^{1000} faces does not imply that it has an instance in the natural world. Under no circumstances should the sum of the suffering of a billion ants be prioritized over that of an adult human being, since that sum is not experienced by anyone. In reality, the maximum suffering experienced in the anthill is -2. Hence, the case of the human being with a suffering of -50 is clearly worse.

In contrast, Norcross (1997) provides a different case from the previous result. From a consequentialist theory combined with a sentiocentric axiology, "there is some finite number of headaches, such that it is permissible to kill an innocent person to avoid them" (Norcross, 1997, 135). The author maintains this idea showing that it is less counterintuitive than it seems. However, he commits the error mentioned in assuming that the result of the interpersonal aggregation of the set C of headaches is experienced by anyone. Therefore, on the basis of C1, set C does not meet the morally relevant criterion of experiencing suffering and, consequently, should not be morally taken into account. It is worse to murder an innocent human being regardless of the number of headaches since, while in the first case the harm is real, in the second it is simply an ontological abstraction orphaned of a referent in the world.

The impossibility of applying interpersonal aggregation to the field of ethics leads to the corollary that there is no prevalence of suffering over well-being in nature, at least, not in a sense that we should be worried about it. For this to be the case, it would have to be possible to compare the suffering of different individuals interpersonally, and to give the respective results moral significance. The problem lies in the latter point. To use the expressions of Norcross (2009, 77), there is no metaphysical but a moral error.

Now, from this thesis, it cannot be concluded that we should not be concerned and act in favor of wild animals. The main claim of the paper is limited to highlighting the inconsistency of maintaining that there is a morally important predominance of suffering in nature once sentiocentrism is assumed. At first glance, the practical consequence of recognizing that we cannot speak morally about a predominance of suffering seems trivial. It will be shown that this is not exactly so. But first, let us focus our attention on intrapersonal aggregation.

Someone could maintain that the idea of the prevalence of suffering in nature in a moral sense does not have interpersonal aggregation as a necessary condition. This idea could be sustained with intrapersonal aggregation by comparing one by one the set of sentient lives with positive balance with the set of sentient lives with a negative balance. That is, taking as reference the set of sentient individuals of the planet it could be differentiated:

$x = [10, 14, 5, 23 \dots n]$ where x is the set of individuals with positive lives.

$y = [-30, -23, -34 \dots n]$ where y is the set of individuals with negative lives.

It could be argued that there is a prevalence of suffering in nature over well-being to the extent that there is a greater number of sentient individuals with lives that are not worth living: $y > x$. The possibility of making this assessment of the quality of life of each individual presupposes the intrapersonal calculation of the different stages of that life.⁷ For instance, take a one-year-old pigeon who has had, in each sufficiently relevant time fragment of its life, the following approximate level: 4 (t_1), 2 (t_2), 3 (t_3), 1 (t_4), 5 (t_5). Each figure corresponds approximately to two and a half months. And so, the general outcome of the value of this pigeon's life would be 3.

Following Hirose, four main characteristics of intrapersonal aggregation can be highlighted. Namely:

1. **Intra-personal comparability.** For any pair of stages, it is possible to compare a person's temporal good at one stage with his or her temporal good at another stage.

2. **Temporal symmetry.** Permutations of temporal good at different stages do not alter the amount of lifetime good.

3. **Monotonicity.** If temporal good at one stage increases and temporal good at the other stages does not decrease, then lifetime good increases.

4. **Intra-personal continuity.** For any instances of temporal good, define $A(w_i) = \{w_j \mid w_j \text{ is at least as good as } w_i\}$ and $B(w_i) = \{w_j \mid w_i \text{ is at least as good as } w_j\}$. Then, $A(w_i)$ and $B(w_i)$ are closed (Hirose 2015, 93-94).

All these characteristics are not exempt from several objections. For example, according to Hirose, Temkin's objection, called *The Single Life Repugnant Conclusion*, affects *Intra-personal continuity*. Like the well-known Parfitian Repugnant Conclusion, Temkin's objection seeks to take the idea to an absurd extreme:

The Single Life Repugnant Conclusion. For any possible life, no matter how long or how high the quality of that life might be, there must be some much longer imaginable life whose existence, if other things are equal, would be better, even though each period of that life would be barely worth living (Temkin 2008, 20).

⁷This would not be necessary according to certain theories, such as the capability approach (I am grateful to a reviewer for the comment). However, it is worth remembering that this work is focused on hedonistic axiologies. Preferentialisms or objective list theories are not considered.

Beyond this objection, there are other possible ones to the rest of the properties of intrapersonal aggregation. This is the case, for instance, of *Temporal symmetry* (Hirose, 2005, 99). However, it is not necessary to criticize any of these characteristics to conclude that intrapersonal aggregation does not work. It incurs the same problem as interpersonal aggregation as soon as a sentiocentric axiology is adopted. The comparison between the lives of different individuals is possible and useful if it is accepted that the experience resulting from intrapersonal aggregation is experienced by someone. But it makes no sense to sum the different morally relevant mental states (pleasure and pain) throughout the life of an individual since no one experiences that outcome as a whole. Therefore, even if the different characteristics of intrapersonal aggregation are accepted so as to obtain an average value, this value would be morally irrelevant. Recalling the previous case of the pigeon, only the values that have actually been felt by it in its life can be taken as morally relevant: *pigeon* = [4, 2, 3, 1, 5]. The consideration of the average value of 3 should be useless from a sentiocentric perspective.

To make it clearer, imagine that due to the death of a very beloved relative, you find yourself for a month with a level of discomfort of -50 approximately constant. Suddenly, everything changes the following month. You forget your beloved relative, and everything goes well for you, so your level of well-being during this month is about 80 points. If we take these two months as a reference, the result of the intrapersonal calculation is positive. However, if we ask you if the resulting figure (15 positive points) really represents what you have experienced, you will probably answer negatively. You have not experienced during the two months a mild well-being of 15 points but great pain and, subsequently, great pleasure. Those phenomenal sensations that you have really experienced are the ones that count for sentiocentrism.

It is important to insist that the *Ontological Prevalence of Suffering in Nature* is true to the extent that can be a faithful description of reality in the same sense of a mathematical one. But, by assuming sentiocentrism, we are nullifying its applicability to ethics. As mentioned above, this corollary may seem, on a practical level, indifferent. Since we accept sentiocentrism, we must care about all sentient beings regardless of whether their suffering is greater than well-being on the planet. A new idea will now be introduced that does not affect what has been defended so far, but if true, it would establish some changes at the practical level.

This idea comes from Peter Vallentyne,⁸ who in his article "Of Mice and Men: Equality and Animals" (2005) argues:

⁸ Although it should be noted that Vallentyne's reflection, as he acknowledges, is profusely inspired by

Mouse Wellbeing. Mice have the capacity for wellbeing (because they are sentient), but most human beings have more wellbeing (opportunity for wellbeing, or brute luck wellbeing) than most mice (Vallentyne 2005, 403).

Not all sentient individuals have the same capacity to experience well-being or pain with the same degree of intensity. Thus, in the particular case of mice, Vallentyne states:

The typical human capacity for pain and pleasure is no less than that of mice, and presumably much greater, since we have, it seems plausible, more of the relevant sorts of neurons, neurotransmitters, receptors, etc. In addition, our greater cognitive capacities amplify the magnitude of pain and pleasure (Vallentyne 2005, 406).

Undoubtedly, this is an extremely controversial thesis that would need to be strongly grounded. For the goal of the present work, one point to keep in mind gravitates around the fact that not all sentient individuals have the same capacity to feel pleasure once their basic needs are met: "[T]ypical mice are much less efficient than typical humans at generating wellbeing from resources—at least once their basic needs are met" (Vallentyne, 2005, 408). This point may not be particularly controversial. The mental states of a common ant are predictably much simpler and less intense than those of any mammal because of the greater simplicity of its central nervous system. Consequently, if a crow would have a maximum welfare level of 30, an arthropod would hardly have the same.

A more controversial point consists of the possibility that humans have a greater capacity to experience well-being or pain than other non-human individuals. This assumption presupposes a highly questionable difference between species. In order not to incur in a speciesist argumentation, differences between individuals will not be established according to their belonging to one or another species. A human individual with severe cognitive impairment may have a lower capacity to generate well-being than many other individuals belonging to other species.⁹ Therefore, we must accept that the estimation of the potentially maximal well-being experienced by sentient beings must be carried out individually. Although it could be orientatively based on the species.

McMahan in his article "Cognitive Disability, Misfortune, and Justice" (1996) and in the work *The Ethics of Killing: Problems at the Margins of Life* (2002).

⁹ Even individuals of the same species differ widely in the possession of certain characteristics that may provide a greater experience of well-being or suffering: "For example, certain phenotypic characteristics, such as attractive facial features, are notoriously advantageous for securing a variety of goods; certain genotypes offer greater prospects for longevity than others; and so on." (McMahan 1996, 3).

This debate has its roots in Mill's traditional distinction between "higher pleasures" and "lower pleasures": "It is better to be a human being dissatisfied than a pig satisfied; better to be Socrates dissatisfied than a fool satisfied" (Mill 2003, 188). As rational beings, humans would have a greater capacity for well-being. For instance, only they can appreciate intellectual pleasures such as reading or enjoying a sunset from the beach. But this would happen also for suffering, for example, by being able to anticipate their own death. In order not to exceed the limits of this paper, this is an issue that must inevitably remain open. We can hardly determine whether a human can have a greater capacity than other mammals more similar and phylogenetically closer than, for example, insects. In the latter case, it seems simpler, without a high level of precision, to determine that mammals have a greater capacity to experience well-being and suffering.

5. The investment of resources for intervention in nature

The conclusions reached in the previous section leads to the final question of whether humans should intervene in nature in order to prevent or reduce existing suffering since:

Intervening in nature would not be of foremost concern if the idyllic view of nature were true. That is, if it were the case that the aggregate value of wild animal well-being was net positive. Nonetheless, as I have explained throughout this chapter, nature is not a source of well-being for animals. Instead, it is a source of permanent suffering and death (Faria, 2016, 86).

Accepting a sentiocentric theory of value, the conclusion to be drawn is that there is a moral duty to consider morally all sentient beings, whether they are human or not. Without bearing in mind the suffering of the latter would result in a speciesist discrimination (see, for instance, Singer, 1990; Pluhar, 1996; Horta, 2010c or Faria & Paez, 2014). Therefore, from sentiocentrism, there is a moral duty to avoid the suffering of wild animals. Saying this is certainly not a trivial matter. Bearing in mind both the suffering (Tomasik, 2015) and the number (Tomasik, 2014) of the set of all sentient animals present in nature, the dimensions of the aforementioned duty are magnified. Just consider some of the main sources of suffering in nature: population dynamics, physical injury, hunger, thirst, extreme weather conditions, psychological stress, predation, parasitism, or disease (Faria, 2016, 57-85).

If the conclusion reached in the previous section about the maximum capacity to experience well-being and suffering is true, then we must be cautious in determining the resources that should be invested for the reduction of suffering in nature. See again two mutually incompatible situations. We have the responsibility to choose which of the two is morally more desirable:

A: a mammal whose capacity to experience pain has a maximum of -100. With intervention, we are able to avoid that level of -100 in a time period t_1 .

B: a hundred of spiders whose capacity to experience pain has a maximum of -25 each. With the intervention, we are able to avoid that level of -25 in each of the spiders in the same time period t_1 .

We reiterate that the exact numbers of suffering are merely indicative and presumably highly inaccurate. Nonetheless, the idea that spiders have a much lower capacity to suffer than a mammal is not very questionable. According to what was argued above, resources should be invested in achieving *A*. Since the aggregationist calculus has no moral relevance, the individual in a worse situation is the mammal. None of the spiders suffers at such a high level and, since no one would experience the sum of the suffering of the whole, this cannot be considered to the detriment of the mammal.

In the absence of further research on the qualitative and quantitative divergences between sentient individuals, their existence implies that we should express greater concern for those with a greater capacity for suffering without incurring in any discrimination. What would be discriminatory is to favor lesser sufferings because they belong to a larger group of beings who suffer. The case for natural intervention to help nonhuman animals must consider (i) that we must differentiate at the individual level the different capacities of sentient individuals and (ii) that it is problematic to hold this intervention by appealing to a prevalence of suffering in nature.

Consider the following quote from Brian Tomasik: "If insects are conscious, it's plausible to consider them "less conscious" than vertebrates. Humans have at least 100,000 times more neurons than most insects. But collectively, many insect minds may add up to something quite morally significant" (Tomasik, 2016). While the first sentence coincides with one of the assumptions made in this paper, the second commits the mistake we are precisely trying to eliminate. No suffering insect will be able to have the moral significance of a bird. This is crucial when planning a consequentialist plan to eradicate as much suffering as possible from nature.

6. Objections

In private conversation, Oscar Horta, who is a relevant advocate of interventionism in nature (Horta, 2017), has presented some objections that should be considered. First, Horta asserts that this work maintains that interventionists hold their position on the sole assumption that suffering predominates over pleasure in nature. Yet, according to Horta, they just argue that the reason for helping animals is that in nature there is suffering that can

be ended or reduced. Thus, the interventionist argument is compatible with anti-aggregationism.

Contrary to this, the present paper in no way denies, from sentiocentrism, the duty to intervene in nature to the extent that no additional suffering is caused by such intervention. Certainly, intervention is compatible with anti-aggregationism. Rather, the text attempts to undermine the idea that suffering in the wild (the world, the universe...) is to some extent greater than welfare and that this alleged fact is morally relevant. This view is not true as long as we accept sentiocentrism.

Secondly, Horta accuses this paper of mistakenly identifying sentiocentrism with a combination of sentiocentrism and anti-aggregationism, whereas one can be a sentiocentric aggregationist. Likewise, ethical theories need not directly derive moral considerations from axiological ones. Regarding the previous point, Horta is right. The problem raised refers to theories that accept the relevance of axiology for normativity. Although it should also be noted that this is the majority position in the works that defend that there is a prevalence of suffering over well-being. Otherwise, if the arguments presented here are correct, any sentiocentric aggregationist position is problematic since it requires an additive aggregation of mental experiences. Therefore, in his critique, Horta presupposes the thesis questioned in the work.

Finally, Horta gives the following counterexample: "According to the paper, saving someone from undergoing an extreme torture inflicting her a suffering of -210 during a single day should have priority over saving someone else from a similar torture inflicting her pain of -200 during all her life. This would seem implausible for most of us." Let us suppose that Anna is the one who will be tortured for one day and, afterward, she will have a pleasant life. Julia, on the other hand, will be tortured for her whole life. We can schematize both lives as follows (in italics are the temporal moments of torture):

Anna = [35, 20, -210, 15, 25, 30...]

Julia = [30, 25, -200, -200, -200, -200, -200...]

Horta is right in stating that, according to an anti-aggregationist sentiocentrism, we should avoid Anna's suffering. Since there is more real suffering experienced by Anna than by Julia, Anna's pain should prevail.¹⁰ He is also right when he states that this is implausible for many people. But is unclear how this type of case affects the idea that sentiocentrism and aggregationism are not compatible. Anyone who disagrees with the conclusion that we should

¹⁰ The fictitious nature of the example should be emphasized. In such a real case, it is clearly unlikely that Julia's suffering over time would have been constant. Predictably, it would increase. This would shift the balance in her favor.

prevent Anna's suffering rather than Julia's, simply needs to revise his or her moral principles. For example, by rejecting a sentiocentrist axiology. The fact that sentiocentric anti-aggregationism leads to extravagant or counterintuitive choices does not imply that aggregationism is compatible with sentiocentrism.

Put another way, the following differentiation lacks moral relevance since the intrapersonal calculation that gives -30 as the average result of the set γ , has not been experienced by anyone as a whole:

$x = [10, 14, 5, 5, 23\dots n]$ where x is the set of individuals with positive lives.

$\gamma = [-30, -23, -34\dots n]$ where γ is the set of individuals with negative lives.

Someone might say that the argument does not work because of the following point. The fact that in certain outcomes different instances of suffering are experienced by different individuals rather than by a single one does not make it less true that each instance is experienced by someone. Which is why it matters. But again, this objection would commit a fallacy by presupposing what this paper intends to demonstrate. The fact that there are more instances of suffering in a group of individuals does not imply that there is more experienced suffering in that group. In a similar way, Parfit maintains that "those who believe that suffering is "additive" do not believe that many lesser pains might be the same thing as one greater pain. What they believe is that the lesser pains might together be as bad" (Parfit, 1978, 293). The idea supported in this paper tries to turn the tables. From a sentiocentric position, the lesser pains cannot together be as bad as one greater pain because they are not one greater pain.

In sum, it is not true that the units of value can be meaningfully added even if no one experiences the aggregation. Moral aggregation can only be sentiocentrically coherent if it is experienced by someone. Here is the limit of sentiocentrism: it can only be applied when some mental state is directly experienced. Otherwise, it is going beyond its borders to introduce, *ad hoc*, some kind of alternative assumption. For example, that the moral calculation of well-being or suffering, the ontological situation in the abstract, is morally more relevant than the experience *per se*.

7. Conclusions

The aim of this work has not been to argue that interventionism in nature is not a moral duty, but instead, it intends to show the problematic of affirming that there is an overwhelming prevalence of suffering in nature based in a sentiocentric axiology. Having rejected the possibility of defending a sentiocentric aggregationism, we cannot talk about

suffering in general, but of sufferings in the plural. Of course, this would leave the door open for someone to hold a sentiocentric anti-aggregationism. Nonetheless, this implies accepting a large number of counter-intuitive consequences. In addition, all of this does not mean that we should remain unconcerned about the pain of individuals with a lower capacity to experience it. It is a matter of assuming certain priorities according to the intensity with which different beings can feel pleasure and suffering. It is also about avoiding aggregationist calculations that can lead to the discrimination of those who have a greater capacity to experience well-being and suffering in favor of others who belong to a larger group of individuals.

There are several noteworthy consequences of the ideas defended here. Thus, for example, maintaining that an empty world might be morally preferable to the present one (see Benatar, 2006 or Knutsson, 2017) is questionable if what is argued in this article is correct. This is an assertion that cannot be presented as a universal or collective claim. An empty world might be morally more desirable for many individuals in many moments of their lives. For example, at a time when someone is feeling a pain of -30, the null value of death would be preferable. But it is problematic, from a sentiocentric axiology, to say that the current world is not preferable to an empty one. It depends on the individual perspective on which we establish the comparison with 0¹¹ (value of the empty world).

Likewise, on this view, it would seem to follow that a world in which 3,000 people lose one leg is not necessarily worse than one in which 1 person loses both legs—for none of the 3,000 other persons would lose the two legs, and from the point of view of each individual, the harm is smaller¹². Many find this implication hard to accept, and lean on it to motivate aggregationism in general. If this is the case, perhaps these people should change their intuitions or, I think better, replace their axiological framework to accommodate the intuition that a world where 3,000 lose one leg is worse than one where one person loses both legs.

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¹¹ Some population ethicists could challenge the affirmation that non-existence equals '0' welfare instead of, for instance, a value of '-1' (see, as an example, Višak, 2013). The discussion of this topic would exceed the purpose of this paper.

¹² This observation along with the example comes from an anonymous reviewer, to whom I thank for the note.



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