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Cooperation with Animals? What is and what is not[1]

Federico Zuolo

1. *Introduction*

The notion of cooperation is employed in different philosophical disciplines. Political philosophers have widely discussed the normative implications of social cooperation, while theorists in social ontology have investigated the preconditions of cooperation. In these works, the analysis turns around the questions of which intentional states participants are supposed to share, what it means to form a social group, what kind of common knowledge the co-operators should have, and so on and so forth (Paternotte 2014; Tuomela 2000). Cooperation is also studied in other non-philosophical disciplines such as psychology, sociology, management studies, and so on. Despite the methodological and substantive differences, there is a widespread assumption regarding the individual entities that can cooperate. Whether they constitute small informal groups or societies, whether they are restricted to the national domain or to the global arena, parties to a cooperative scheme have implicitly been assumed to be human beings. This is because only human beings have the mental capacity to engage in a collective

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enterprise.[2] However, recently some have attempted to apply the idea of cooperation to (some) relations with animals. The purpose of this paper is to check whether such attempts make sense and more generally to examine what cooperation with animals is. In short, I will ask whether we can meaningfully apply the notion of cooperation to the relations that human beings have with animals, and if so, under what conditions.

It is immediately worth specifying that my question is different from asking whether there are cooperative interactions among animals. If we have a sufficiently relaxed understanding of cooperation, namely not as something dependent on there being certain mental states, but as something we can simply observe as the salient outcome of a pattern of group interaction, cooperation among animals certainly occurs, as has been widely attested by many studies in ethology.[3] Rather, I will specifically ask whether and under what circumstances we may talk about cooperation between human beings and animals. Posing this question raises more difficulties than asking whether and under what conditions there can be cooperation among human beings, or among non-human animals. In the case of human–animal cooperation, we have to confront the problem that the two poles of this possible cooperative relation are deeply different in kind,

[2] Significant in this regard is Cynthia Stark's extension of a cooperation-based approach to dependent and disabled individuals. See Stark (2009).

[3] On this understanding, cooperation is not a joint action in which individuals share such mental states as beliefs and/or commitments. Rather, it can be defined in two ways, which are not to be thought of as mutually exclusive. Cooperation can be defined as a scheme of interaction where individuals of the same or different species benefit from the outcome of the coordinated action. See Balcombe (2010: 103-120). Cooperation can be also seen as an attitude fostering typical behaviour of 'generalized reciprocity', which also extends to unfamiliar animals. On this, see Bekoff and Pierce (2009: 55-84).

capacities, mental states, language, needs, and so on.[4] The idea of cooperation among human beings seems to imply that the parties participate voluntarily. This seems to be a fundamental precondition. Building on this, standard accounts of cooperation seem to entail some further requirements of reciprocity between the parties, and/or that the parties are jointly committed to reaching the same goal, and/or that the mental states of the cooperating parties are the same, and so on. But this can hardly be the case in human–animal relations, because of the diversity of mental capacities, lack of common language, and the epistemic impossibility of ascertaining animals' mental states. How are we to check whether animals voluntarily cooperate and do so with similar mental states as human beings? Even admitting that animals might have the same mental states as human beings, we seem to have an insurmountable epistemic problem in accessing them. And, before that, what counts as a marker of voluntary participation? Certainly, many animals do have intentions, desires, and volitions that can be counted as forms of voluntariness. However, it is not clear how we can presuppose that animals voluntarily do something with human beings. On the one hand, we may think that if an animal does not opt out of a relation with a human being, that animal voluntarily accepts it. But this is too minimal a condition because many animals, in particular domesticated animals, may not consider this option even when they find themselves in a non-cooperative

[4] To be sure, cooperation in some sense also occurs between animals of very different species with very different capacities. But these cases are nevertheless different from human–animal cooperation because many of them are likely to be instances of instinctual parasitism or symbiotic relations. Irrespective of whether we are willing to consider parasitism a form of cooperation, this is not a useful model for relations between human beings and animals, which, unlike parasitism, are not characterized by natural dependence.

relation. On the other hand, to respond to this problem, we might think that we can rationally reconstruct situations that might be voluntarily accepted by animals. This can be done by reconstructing the typical needs and behaviour of an animal, and by checking whether a task required by a possibly cooperative relation is compatible with the animal's needs and behaviour. This ethological reconstruction, however, has very little to do with the condition of voluntariness because it is purely deductively reconstructed on an objectivist basis. We will see below that this ethological condition, properly redefined, has a role in my account without there being any requirement of voluntariness.

All this is to say that in human–animal relations the idea of cooperation should be redefined in terms of its basic presuppositions. Epistemic problems regarding access to animals' mental states and the uneasiness of dealing with voluntariness make the usual idea of cooperation inapplicable. More generally, if an idea of human-animal cooperation is to make sense it must be hospitable to the differences between human beings and animals, but still capable of being a notion that bears some resemblance to the standard idea of cooperation.

The paper will proceed as follows. I will start by discussing some prominent proposals, outlined by Mark Coeckelbergh, Philip Kitcher, Peter Niesen, and Laura Valentini, that apply a cooperative account to human–animal relations (§2). Then, I will ask whether these accounts are convincing. Given that the idea of cooperation seems vague, how can we distinguish cooperation from what is not cooperation? To assess the applicability of the idea of cooperation to animals, I will provide two independent criteria that the idea of cooperation with animals should meet: the condition of specificity and of normative import (§3). Following them, we will be in a better position to distinguish cooperation

from other types of relations. These are interaction (§4), exploitation and use (§5), and (individualized) relationships (§6). Building on these distinctions we may come up with an idea of cooperation that can be applied to human–animal relations (§7). I will conclude with some considerations on the normative implications of this argument (§8).

2. *Assessing some accounts of human–animal cooperation*

Let us first consider the proposals by Coeckelbergh (2009), Kitcher (2015), Niesen (2014), and Valentini (2014). These theories have the following features in common. They all start from a broadly conceived Rawlsian account, where the principles of justice are to be to those who entertain a scheme of mutual cooperation. They all appeal in some sense to a reciprocity-based and practice-dependent account of justice (Sangiovanni 2007). According to them, the application of the principles of justice to animals is conditional upon the existence of relations. Hence, these proposals have little to say regarding wild animals. They may subscribe to an independent account of animals as bearers of subjective interests that obviously applies to wild animals too, but their cooperation-based theories do not apply to wild animals. As a consequence, all these theories are *political* in the sense that the treatment of animals is a matter of justice, because it concerns what we owe to some individuals in virtue of their contribution to society. More specifically, on Niesen (2014)'s view, which focuses on labour and farm animals, it is the fact of coercion and submission of animals that grounds the need for a fairer application of principles of justice according to the idea of cooperation, which may justify the inclusion of animals in society via some sort of representation.

Besides these commonalities, these theories differ with regard to the following issues. First, they differ as to the width of the extension of cooperation with animals. Kitcher (2015)'s and Valentini (2014)'s accounts are somewhat specific insofar as Kitcher targets only animals involved in scientific experiments, whereas Valentini focuses only on dogs. Niesen, as we have seen, focuses on working animals. We may say that Kitcher's and Niesen's restrictions are functional and include a number of diverse animals, whose commonality is that of being used in the same human enterprise of scientific research (Kitcher) or in large social schemes for producing goods (Niesen). Valentini, instead, restricts her concern to a species in virtue of its longstanding history of domestication. By contrast, Coeckelbergh (2009)'s account has a much wider scope and includes all the entities with which human beings entertain continuous interactions for the sake of commonly producing some goods.

It is in virtue of this last feature of Coeckelbergh's account that we can capture the second difference: the normative import of the idea of cooperation. Coeckelbergh's account has, indeed, scarce normative implications per se because it simply entails that we owe some consideration to those beings included in cooperative relations.[5] However, given the variety of entities and differences of relations, what duties of justice follow is left indeterminate. This is because in the wider idea of social cooperation Coeckelbergh

[5] 'Humans and non-humans are interdependent in various ways. And on closer inspection, what we call a 'social' scheme (our, human social scheme) is rather a social-artefactual-ecological scheme: … then distributive justice, usually applied to 'social' justice alone and thus to the 'merely' human sphere, should also be applied to this complex conglomerate of co-operation we sometimes call the 'world' and cooperative relations within that world. Then it becomes at least thinkable that we speak, as some do, about what we 'owe' to nature or to animals,' Coeckelbergh (2009: 75).

includes all the types of entities that contribute to the production of social goods. On this line of thought, even forms of artificial intelligence ought to be included. But this is troublesome because it is unclear what their moral status is, if any, and thus whether we owe anything to these entities. Leaving this issue aside for the moment and focusing on animals, at the end of the paper, Coeckelbergh surprisingly introduces a possible application of Rawlsian principles of justice into his account. On the one hand, he claims that we may apply sufficientarian or more egalitarian principles of justice to improve the condition of cooperating animals. On the other hand, even exploitative relations are still defined as forms of cooperation to the extent that there is a scheme of social production benefiting human beings and there is a situation of mutual dependence.[6] Hence, his understanding of cooperation begins without a normative commitment, which is, however, added at a later stage. But how can we maintain that we cooperate with beings if we admit that we are exploiting them? This move is possible only to the extent that we employ a non-normative understanding of cooperation. But this assumption is troublesome because, if we admit that cooperation is a non-normative term, then how can we lament that there are unfair or even exploitative forms of cooperation? This option is available to only those that start from some position on animals' moral status, which Coeckelbergh does not because he uses the

[6] 'For instance, if we breed animals for (our, human) consumption and treat them very badly in the course of that process, then these cases (1) fall within the scope of problems of justice (as argued above) and (2) would warrant the application of a difference principle since increases in the advantages humans get from the co-operation (we are clearly highly dependent on them for sustaining our current consumption habits) do nothing to maximize the position of these animals, which can be considered the 'worst-off', the most disadvantaged in human/animal society,' Coeckelbergh (2009: 82).

idea of cooperation to ascribe moral status. Moreover, this position is liable to the following charge:

> If we owe obligations of justice to cows while we are, for example, raising them for food, it seems at least somewhat strange to think that we could avoid retaining these obligations going forward by ceasing to interact with cows in ways that benefit us. (Berkey 2017: 684)

Valentini's and Kitcher's proposals do not fall prey to this normative ambiguity. While Valentini explicitly draws on a deontological view of animals' moral status, Kitcher seems less committed to a specific moral account, besides his overall allegiance to pragmatism. Kitcher, indeed, seems to think that the fact that we need cooperation for the pursuit of valuable goals (such as scientific progress) makes it necessary to find a better balance regarding the treatment of animals, either by granting better conditions to experimental animals, or by allowing some human individuals to voluntarily chose to undergo experiments. Here, the fact that they are employed in a practice (experiments) and our commitment to a minimal idea of fairness (understood as a distribution of the shares and burdens of cooperation to all) should prompt us to improve the condition of experimental animals. However, this argument too easily assumes that experiments on animals are legitimate in virtue of the overall good they contribute to producing. True, Kitcher engages in some discussion with liberationists by showing that in fact experimental animals would not exist without experiments and that they would not be capable of surviving outside the lab. Kitcher wants to do without discussing the worth of animal life and animal welfare, so as to provide an account of experimentation that is as comprehensive and neutral as possible. But it does not tell us that, for instance, some kinds of treatment are wrong. It simply demands that the burdens be distributed more

fairly.[7] However, it contains some sort of ambiguity, because his claims about the overall merits of research and the need to redistribute burdens are better accounted for by a sort of mild utilitarianism, even though it looks like his account is distant from this theory. Indeed, it is only in virtue of the overall gains provided by scientific progress that we can justify the individual sacrifice of animals, whose interests, however, are here discounted and not equally appreciated, as in other utilitarian accounts.

This brief discussion of current attempts to include animals within the idea of social cooperation has highlighted some shortcomings. Those attempts that want to be independent of a specific theory of justice either have scarce and unclear normative implications (Coeckelbergh) or implicitly reintroduce a normative set of principles (Kitcher). Before discussing what cooperation entails, we should have some criteria for establishing which entities should be considered part of cooperation. There is a risk of including too many and too different entities, thus diluting the specificity of the notion of cooperation and making it indistinguishable from other sorts of relations (see below). Valentini eschews these problems by focussing only on dogs and by assuming a normative theory of animal interests. But more general accounts should have something to say about these problems.

[7] 'It is bad enough that nonhuman animals are recruited to participate in an allegedly cooperative project without their consent, but the hollowness of the supposed 'cooperation' is revealed by the fact that *they* make the sacrifices and *we* reap the benefits. That version of the rejoinder overstates. The use of animals in experiments has enriched veterinary medicine, as well as its human counterpart. Nevertheless, the benefits are primarily enjoyed by human beings and the sacrifices are (with a tiny number of exceptions) all on the nonhuman side. Genuine solidarity requires a different balance,' Kitcher (2015: 305).

Finally, all these accounts too easily assume that we can apply the idea of cooperation in human-animal relations in the same way as we understand practices of social cooperation among humans. The idea of social cooperation as a collective practice of interaction in order to produce some goods is taken to be a fact from which normative theorizing can start. However, if it is true that social cooperation among human beings is an unquestionable fact and the role of a normative theory is to claim for a fairer redistribution of the shares and burdens of cooperation, this is not necessarily the case for cooperation among human beings and animals. First, as seen, the very idea of cooperation might not be applicable because animals lack some capacities that are the pre-requisites for a meaningful application of the idea of cooperation. Second, and independently of this, some people, namely animal liberationists, hold that this social fact of human-animal interaction should not be taken as a given and should rather be abolished. For all these reasons, the possibility of human-animal cooperation should be discussed both as a conceptual and normative problem.

Before proceeding, it is worth clarifying that in what follows I will not discuss Donaldson and Kymlicka's proposal (Donaldson and Kymlicka, 2011). This choice might seem strange and unjustified because their approach is political, and recognizes the multiple contributions of animals to our societies. However, in their account cooperation plays a marginal role. Their proposal to include animals in our societies is based on a theory of citizenship and on the fact that animals are domesticated, *plus* the condition of the mutual dependence of (some) animals and human beings. Domestication is not the same as cooperation, although there are certainly some areas of overlap. First, domestication is a concept that stresses the historical dimension of the relation at stake. Moreover, domestication, unlike cooperation, does not focus on the

production of a desired outcome, thus including companionship (see below §6). Finally, domestication is both a private and a public fact that may simply demand some actions and attitudes in one's private life, while cooperation concerns the demands of justice that require an institutional response. To make the difference between domestication and cooperation more vivid, consider the flow of the argument of the theories based on cooperation:

- *Normative premise*. The fact of cooperation triggers duties of justice.
- *Factual premise.* Human beings and animals cooperate to produce some valuable goods.
- *Normative implication*. We ought to apply (some) duties of justice to those animals with which we cooperate.

Donaldson's and Kymlicka's argument, instead, seems to be the following.

- *First normative premise*. Animals have fundamental (moral) rights.
- *Factual premises*. Many animals are domesticated and can no longer live in the wild. Moreover, domesticated animals and human beings are in many senses interdependent and form a communal way of life.
- *Second normative premise*. Those individuals with which we have relations of interdependence and, thus, are part of our life, should be included as fellow citizens in our political communities.
- *Main normative implication*. Domesticated animals ought to be included as citizens in our societies.

- *Minor normative implications*. The capacity to cooperate of domesticated animals ought to be fostered and the norms of interaction should be negotiated with them (Donaldson and Kymlicka 2011: 116-122).

As we can see, the role of cooperation is completely different in Donaldson and Kymlicka's argument. Donaldson and Kymlicka also allow some space for animals' cooperation, but it is restricted to those (few) activities that are compatible with animals' nature.[8] In their account, cooperation is what is to be justified within the rights-based framework, not what justifies the application of the principles of justice to animals. The task of clarifying the idea of cooperation and distinguishing it from other forms of relations is necessary if cooperation is a foundational notion, while in their account, which relation is cooperative is determined by the constraints of rights. Hence, there is little need to distinguish cooperation from other forms of relations and tease out its normative purchase.

3. *Two conditions: Specificity and normative import*

If we want to make sense of the idea that there can be cooperation between human beings and animals, we need some criteria to clarify the ambiguity of cooperation. On the one hand, cooperation is a very ordinary notion that we employ every day to characterize the accomplishment of a common goal, or to make sense of the idea that something proceeds smoothly without problems. On the other hand, cooperation also is

[8] They only allow those activities that are natural animal activities (production of wool and eggs) and are more suspicious about activities that need training (for instance, therapeutic assistance). See Donaldson and Kymlicka (2011: 134-144).

a term of art, which may occur only under certain conditions. Insofar as we are asking whether we can extend it to animals, we have to accommodate the fact that its current ordinary use and its technical understanding may pull in opposite directions. In other words, in order to apply the idea of cooperation to (possibly some) relations that we have with animals, we may have to reformulate or remove some parts of its definition or some of its assumptions, regarding for instance the voluntariness of participation, or the requirement that the participants have common beliefs and/or awareness of the common goal. Such features are hardly applicable to animals.[9] However, this reformulation should be somewhat consonant with the ordinary use of the term. This is not because of a fetishism of the ordinary linguistic use of a term, if any. Rather, it is due to the need to explain why we use one term instead of another.

Hence, I propose to employ the following two conditions in order to test the tenability of any formulation of idea of animal cooperation;

- *Specificity*: The core of the concept should be clearly distinguished from other cognate concepts, despite the possibility of overlap.
- *Normative import*: A normative concept, be it broad or restricted, should have something to say regarding what we ought or ought not to do, or how we should assess a state of affairs.

[9] To repeat, I do not say that animals do not have such mental states. On the contrary, at least some higher animals are most likely to have them. However, even if we admit this, we cannot ascertain whether the conditions for cooperation apply to animals without recurring to a biased and anthropomorphic presumption.

These two conditions are hardly controversial, and are applicable to other cases too. At first sight, they may seem too banal and incapable of unravelling our problem. And in a sense, they are banal. But satisfying these conditions requires that we try to distinguish cooperation from other similar and sometimes overlapping notions, and we should bear mind that cooperation should retain some clear normative meaning. This is important because I take the idea of cooperation to be a normative notion. This assumption needs some justification. Indeed, one may object that we can conceive of some cases of 'exploitative cooperation', or 'harmful cooperation', where the joint action is cooperative but detrimental to one of the parties, and, hence, is to be blamed and rectified. How can we conciliate these usages and the normativity of cooperation? If these expressions are correct, we cannot say that cooperation is per se a positive notion because there can be instances of wrong forms of cooperation. What, then, is the normativity of cooperation?

The only way to make sense of this ambiguity is by saying that cooperation is a notion that covers a range of possibly diverse instances that deserve different degrees of (positive) appreciation. In this sense, it is a notion that characterizes states of affairs and includes descriptive features, but also includes some sort of internal norm. This norm indicates that some instances of the notion properly realize its normative sense, while others are forms of imperfect expression. This idea may echo the Aristotelian notion of the citizen, which not only indicates a set of individuals who are members of the polis and have some political entitlements, but also includes an internal norm of behaviour and virtues that are appropriate to citizens. Without fully subscribing to an Aristotelian teleology, I think this idea nicely captures the nature of notions such as cooperation, which are not purely descriptive but also include some internal norm. Indeed, when we

say that a certain relation is cooperative, we also tend to introduce some normative criterion that discriminates cooperation from what is not cooperation and establishes a norm of conduct. If this is correct, we can keep the ordinary usage of wrongful forms of cooperation, but still try to disentangle what cooperation properly is and what it normatively demands from other relations that do not properly comply with the internal norm of cooperation. In this sense, the term 'exploitative cooperation' may be accepted as indicating an instantiation of a relation that is at least in principle (or in its intention) cooperative, but that deviates from its correct realization of the norm internal to the idea of cooperation. Obviously enough, not all deviations can still be called cooperative, but only those that rest within the range of cooperation. We will see below what the norm of cooperation can be and how cooperation can be seen as a range within a normative continuum.

In what follows, in order to reach a possibly satisfying sense of cooperation with animals, and in compliance with the two conditions above, I will try to distinguish cooperation from other types of relations (interaction, exploitation, use, and relationship).

4. *Cooperation and interaction*

First of all let us try to put forward a minimal and general definition of cooperation, which in virtue of its minimality may be applied to animals and not only to human beings.

> *Cooperation is a common enterprise of diverse individuals for the sake of producing some valuable outcome.*

In this preliminary and minimal definition, we can single out the following elements.

> *Common enterprise of diverse individuals*. As a form of relation, cooperation is something that is done together with other individuals. Individuals participating in this common action may have radically diverse functions – one party may undertake the physical work, another party may simply establish the plan or supervise the action. But irrespective of this, cooperation cannot be done alone, within occasional and fortuitous relations, or by unconnected individuals.
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> *Production of a desired outcome*. We usually cooperate in order to produce something. Hence, cooperation is a purposeful activity. At least some members of the common enterprise have the capacity to set goals and implement them by using their instrumental rationality.

This definition seems intuitively correct and applicable to our relations with animals, but too minimal. Indeed, it does not specify with which kinds of entities we may cooperate, and whether reaching the desired outcome is the only value at stake or whether in a cooperative relation we should accept other normative constrains.

The problem with the first component of this preliminary definition is that it seems correct but over-inclusive. Indeed, here the kinds of entities that can take part in the common enterprise are not specified. Accordingly, this means that we may also have cooperative relations with inanimate things, technological devices, robots, and so on. There's a general question of whether advanced forms of artificial intelligence may be attributed some moral status, to the extent that they have high computational levels and possibly some form of agency. This is a possibility that I do not want to deny, although

I'm intuitively a bit sceptical about it.[10] But, even if we grant that some forms of artificial intelligence have some kind of agency, there are other two reasons for rejecting this position. First, in order for an entity to be capable of cooperating perhaps we need to set the condition that such an entity might in principle do otherwise. I suggest this condition in order to make sense of the idea that cooperation is, even in a minimal sense, a common action, not simply an individual action performed through the use of tools. This means that I do not cooperate with my computer even if the computer has high levels of computational capacities, because the computer cannot refuse to operate with my (formally correct) orders. In a commonsensical manner, I may say that today my computer is not cooperative, meaning that it does not respond to my inputs. But that simply means that there is something blocking my inputs or that my inputs are incorrect.

These considerations point to a further question. Can we cooperate with an entity that has been created to be at our complete disposal and that we can use in whatever way we please? This seems improper because, even in a minimal sense, cooperation must be a normative notion, thus entailing that the cooperative relation does not cause structural and significant harm. Otherwise we do not cooperate but exploit (see the next section). But before ascertaining whether there is a significant harm we must check whether it makes sense to pose this question in general. In other words, the entity with which we have a relation must be capable of being harmed. And this means that it must have a good of its own. More generally, the question is: can a computer as an individual entity be harmed? I doubt that it can. A computer may be damaged or destroyed but not

[10] Floridi and Sanders (2004) have proposed a reformulation of the notion of agency in order to include some forms of artificial entities such as computing systems. For a sceptical position denying that computer systems can be moral agents, although they are certainly moral entities, see Johnson (2006).

harmed because computers don't have a good of their own. What features determine the capacity for being harmed is a controversial and complicated question.[11] But the following considerations should be sufficient for the specific needs of my argument. First, computers don't have mental states. Second, computers are not sentient entities. Thus, they do not have a wide array of capacities to experience positive or negative states of affairs as good or bad for themselves. Moreover, computers don't share with other sentient beings the most typical harm that human beings share with non-human animals – i.e. the harm of suffering. Third, computers can be replicated in a way that genetically engineered animals cannot. If we agree that computers can be replicated, it follows that it is permissible to replace them – that is, that they can be destroyed and replaced with equivalent items. This fact marks a difference with respect to animals. In a slogan, even if computers can be moral agents in virtue of their computational capacity, they can't be moral patients because of their lack of sentience.

Against the possible implication that computers are morally inert, one may object that a computer is not a tool like a knife because we do something with and not only through the computer. That seems correct. And, to characterize the kinds of things that we do with computers, I'd rather say that we *interact*, rather than cooperate, that is, we have sustained and complicated forms of continuous relations, with entities that operate according to our instructions but cannot be harmed. In sum, the implication of these considerations is that we ought to reject Coeckelbergh's application of the idea of

[11] Bernstein (1998) has argued that being morally considerable means being at least a moral patient. To be a moral patient an entity must have the capacity to have (subjective) experiences, which animals have and computers do not. Although I find this position quite plausible, my claim does not depend on Bernstein's argument.

cooperation to inanimate objects with which we may have forms of interaction for the sake of producing some goal.

5. *Cooperation, exploitation and use*

Now we can better specify the normative import of these considerations. To cooperate, is it sufficient to have a sustained relation with individuals that are capable of having a good of their own for the sake of producing some good? No, this is not sufficient because first we have to check whether such a relation may significantly disadvantage one of the parties. If the action to produce a common good is structurally detrimental to the welfare of one of the parties, we could hardly say that the parties are cooperating because we have assumed the normative character of cooperation. As anticipated, the case of exploitative cooperation is to be seen as a deviation from an internal norm. Instead, if a relation is structurally detrimental to one of the parties, I think it would be more appropriate to talk about *exploitation*.

For instance, we would hardly say that slaves in the old American tobacco plantations cooperated with their owners to produce tobacco because they had been compelled to work and they were deeply harmed. Hence, they were capable of having a good of their own (unlike machines or computers), but were treated merely as machines for the sake of producing tobacco irrespective of their interests and will.

But what do I mean here by exploitation of animals? I mean simply that I use the individual with which I pursue the desired goal in a purely instrumental way without taking into account its welfare at all. Before proceeding, it is worth clarifying that here I understand welfare in a very broad sense as a notion encompassing all subjective

experiences, thus including suffering, pain, distress, boredom, pleasure, joy, etc. In this sense, welfare is the collection of all conscious experiences. In animal ethics and animal management, welfare is sometimes understood as a set of objective criteria regarding health, living conditions, nourishment etc. I do not want to deny that these criteria are correct. However, here I understand these criteria as a sort of a proxy for approaching what counts, namely conscious states.

In the literature on human exploitation, the moral requirements for avoiding exploitation are usually demanding. A non-exploitative relation is fair, and/or does not harm, and/or does not violate human dignity, and/or does not entail domination, and so on (Zwolinski and Wertheimer 2012). Moreover, working without having decent alternative opportunities does not meet the condition of non-exploitation either. However, these characterizations are, I think, inapplicable to animals. Some sort of human domination seems inevitable because domesticated animals depend on human beings. Moreover, animals do not have human dignity. And, against Kitcher's optimistic take, what fairness with animals demands is unclear. If fairness is not applied to individuals with equal moral status (namely animals and human beings), it might be realized by granting only survival and basic needs. Finally, it is difficult to establish the other available options for an animal. True, wild animals held in captivity may seem to have an option, namely that of going back to their natural condition. In this sense, the alternative to exploitation is liberation, but not cooperation.

Hence, in the case of animals failing the criteria of voluntariness, dignity, and other typical human conditions, we need criteria to define a type of relation, which I call exploitation, that represent the range of worst types of human-animal relations. In cases of exploitation, I submit, animals are instrumentally employed for the sake of producing

something without taking their interests into account. Like cooperation, exploitation is a scalar notion that admits of degrees with regard to how much animals are instrumentalised and their welfare disregarded.

Should we conclude that by instrumentalising animals we do not exploit them, because we cannot apply this concept to animals? Or should we say that by instrumentalising animals we always exploit them? This conclusion seems rushed because it leaves out the possibility that there might be relations that are partially instrumental but not detrimental to the well-being of animals that could be called cooperation. Such relations are those where human beings and animals have a relation for the sake of producing a good through a common action (with different tasks), where not only human beings benefit from these actions, and the well-being of animals is positively affected.

Now the following question arises: if in exploitation animals (and sometimes human beings) are merely treated as instruments that are at the disposal of the more powerful party, do we exploit an animal whenever we have an instrumental relation with it? I would resist this implication because cooperation is also a form of instrumental enterprise for the sake of reaching some goal. But cooperation is not the only form of non-exploitative instrumental relation, and should be distinguished from other forms of instrumental relation in virtue of the specific type of admissible actions.

To appreciate this difference, consider the further conceptual distinction between *cooperation* and *use*. I am aware that the idea of use might be misleading insofar as it also denotes the general notion of all instrumental relations, including both exploitation and cooperation. However, I think we need a neutral and intermediate notion between the two extremes, and I cannot see any other alternative. Therefore, let me be a bit

stipulative about its function in this context. This distinction is, I think, necessary in order to posit the notion of some intermediate level between exploitation and cooperation. If we put these two terms on a continuum from the negative (exploitation) to the positive (cooperation), we can find intermediate levels that could be measured in terms of whether and how much the relation causes harm to the welfare of the animal, or on the contrary benefits it. Building on this, we can add the related question of whether the relation is compatible with the natural ethological features of the animal. The more a relation is in conformity with the natural specificity of an animal, the less it is likely to harm it, and the more it is likely to benefit it. In the light of this, we can ask whether there is an intermediate term between cooperation and exploitation. I think there is such a term, and it is the idea of use. This is not an unnecessary sophistication because if there were not an intermediate term we would have to establish a point, a threshold after which exploitation becomes cooperation, and vice versa. But that is controversial and counterintuitive given the radically different moral import of the two notions. By positing the idea of use, instead, we can map the intermediate area between the two terms. Furthermore, the notion of use, in general, is a non-normative notion, which can have positive, negative, or neutral senses depending on further specifications or on the context. Hence, here I understand use as a form of relation where animals are employed to obtain a certain goal, which is different from exploitation because the instrumentalization of the animal does not lead to a total disregard of the animal's welfare. In the light of this, the difference between use and cooperation is scalar, not qualitative. Cooperation, therefore, is a kind of non-exploitative instrumental relation where the welfare of animals is taken care of and the kinds of tasks required of them are compatible with their nature.

6. *Cooperation and relationships*

Building on this we may think that all forms of relations where the welfare of the animal is taken care of are forms of cooperation. But I think this supposition is over-hasty, because we have yet to distinguish cooperation from another type of relation. To see what I mean we may ask whether I cooperate with my cat. I would resist accepting this statement. Indeed, I may have a meaningful and respectful relation with my cat, and maybe such a relation also entails some form of reciprocity. But I don't think I cooperate with my cat. We may live together more or less peacefully, and we may have a meaningful relation. But there's something missing in it in order to make it a form of cooperation. What is missing is the dimension of producing some desired good. If we think that entertaining an affective relationship entails the production of a good, we may think that, to the extent that the cat enjoys staying with me more or less as I do, we cooperate in some sense. But I'd be sceptical about this conclusion because I am not sure I would be ready to apply it to relations among humans too. Does it make sense to say that I cooperate with my wife insofar as we keep each other company? Maybe we can say so. But I think it makes more sense to say that we cooperate to the extent that we do something together for the sake of producing an outcome that is external to the act of doing something together. For instance, we cooperate in order to keep the house clean, take care of our daughter, and so on. But having a good relationship as a couple is not per se cooperation. We just do many things together and have appropriate attitudes insofar as we have a relation and for the sake of keeping it alive. Being in this kind of relations entails the production of some good that is internal to the relation; or better still the successful continuation of the relation is the good itself. Instrumental rationality

may play a role in this kind of relation too, but the purpose of acting is intrinsic to the relation itself, not instrumental for the sake of bringing about some external good.

In order to characterize this idea, we may employ the notion of *participatory goods*. A participatory good is a special kind of good in which the act of participation, the production of the good, and the enjoyment of the good are all the same action, seen from different angles.

> It is not merely that the *production* of a participatory good (bringing it into existence or sustaining it in existence) requires more than one individual to participate in a certain kind of activity – although that is certainly true. Rather, a participatory good just *is* the activity in which those individuals participate. The activity of producing a participatory good also *constitutes* the participatory good. (Morauta, 2002: 94-5, emphasis in original)

Examples of these kinds of goods are the goods of speaking a language, having a party, praying in common, and, I submit, enjoying a relation with a pet, too. The relation of companionship with an animal, typically a pet, entails a participatory good because the parties to this relation for most of the part do not reproduce anything else than the relation itself. No further external good should be produced in order to sustain a meaningful relation.

Hence, I call these kinds of relations, involving participatory goods, (*individualized*) *relationships*, to characterize the non-instrumental nature of the relation and its idiosyncratic feature, which makes all individualized relationships different from other types of relations, and each of them different from other relationships too. Moreover, unlike in other cases of cooperation, the parties to a relationship are not (easily) replaceable, while in a relation of cooperation they are. If I substitute my cat with

another cat I (possibly) create another relationship, and do not continue the same one, while if I substitute a laying hen with another similar hen, I continue the same form of cooperation with a different individual.

This does not exclude the possibility that we develop individualized relationships with cooperating animals. One may ask whether my dog does not cooperate with me. I think we may still say that our companion animals cooperate with us to the extent that they also help us in other ways besides being a companion animal. This could be the case, for instance, with a dog acting as a guard dog. In this sense, there can be multiple relations that add to each other. One may be not convinced yet, and still think that the relation of companionship is cooperative because it brings about positive effects to humans (and animals too). In this case, we add a type of relation (relationship) to an underlying level of cooperation, without substituting it. Companionship should be thought of as a proper form of social cooperation when it is the only support for the elderly, people living alone, or those who are depressed. In this sense, pets perform a sort of continuous activity that substitutes caring services. In reply, I admit that this is true in many cases. However, if we are ready to consider animal companionship a substitute for professional services of care, we should also be willing to consider relationships among humans as having this value. Of course, in many cases they have this value, but it would certainly be reductive and sometimes inappropriate to identify the proper value of human sentimental, affective, and family relationships by the criterion of how far they substitute for professional care services that benefit mental and physical health. Hence, relationships for companionship are to be distinguished from relations of cooperation, although they also produce some benefit, because their purpose is mainly intrinsic.

7. *Summary of the argument and examples*

To recap what we have been saying so far, for there to be cooperation between animals and human beings there must be:

1. some form of relation (thus excluding wild animals),
2. which should be continuous (thus excluding occasional relations with those that Donaldson and Kymlicka call 'liminal animals'),
3. between entities that have the capacity to be positively or negatively affected in terms of their welfare by that relation (thus excluding interactions between human beings and non-living intelligent entities), and
4. not detrimental to the good of the animal (thus distinguishing cooperation from exploitation),
5. whose purpose should be the production of an external good, not the pure continuation of the relation itself (thus distinguishing cooperation and use from relationships with companion animals).

Now we may offer a revised definition.

> *Cooperation between human beings and animals is a non-occasional form of relation for the sake of producing an external good that does not harm the animal but rather benefits it. Hence, it is a kind of relation where the animal's natural capacities are instrumentally employed, but within the boundaries of the animal's ethological features.*

This definition of cooperation has normative purchase in that it distinguishes relations on the basis of their being favourable or detrimental to an animal's well-being and

ethological features. But it is rather abstract because it is invariant as to other features. For instance, it is compatible both with forms of close cooperation where all participants know each other, and with impersonal forms of cooperation characterized by anonymity.

Let me summarize what we have been saying so far with the following table featuring the main forms of possible relations with animals, the purpose of the relation, and its normative assessment. As anticipated, these categories map a scalar reality and the boundaries between them are fuzzy.

Table 1. Types of human-animal relations and their normative assessment

Type of relation	Purpose	Normative character
Exploitation	Purely instrumental	Total disregard of animal's welfare and natural features
Use	Instrumental	Partial concern for animal's welfare and natural features
Cooperation	Instrumental but compatible with animal's nature	Concern for animal's welfare and natural features
Individualized relationship	Intrinsic (no production of a good outside the relationship itself)	Full concern for animal's welfare and natural features

Table 1. Types of human-animal relations and their normative assessment

In practice, what kind of relations would be cooperative ones? The possibility of there being cooperative relations in practice that are respectful of these conditions also depends on the moral account used to establish what the well-being of an animal consists in. I cannot outline this account here. In what follows I will simply provide some possible examples, which should be taken with a pinch of salt because I am not committed to saying that they are fully justified and correct.

A clear case of exploitation is represented by industrial farming. Here the minimal needs of animals are totally disregarded in every sense. Although one may say that such animals are better off insofar as they have been created rather than not created, still such a condition of minimal existence is hardly satisfying for any account of animal welfare.

Examples of use may be, perhaps, those experiments that apply the three-Rs principle (reduce, replace, and refine) and some (e.g. free range) animal farming for meat production. These cases are not totally exploitative insofar as some concern for the animals' welfare is at place. However, in order to establish which labs and farms represent cases of use and not of exploitation (or of cooperation!) we would need, again, a substantive account of animal welfare.

Building on these distinctions, examples of cooperation may be no-kill farms,[12] guide dogs for blind people, some forms of animal therapy. These examples are admittedly a

[12] This is so if we assume that in our preferred substantive theory of animal welfare cooperation demands not disposing of animals' life. However, if one rejects this assumption, one may also argue that animals do not have an inherent interest in living and that, therefore, free range and pasturing methods of rearing animals for meat production are legitimate forms of cooperation.

bit vague and are only meant to given an idea. But insofar as we don't have a substantive theory of animal well-being, this should sketch the idea of a common action where an animal's needs are taken care of and the activity itself is not at odds with the animal's ethology.[13]

Finally, examples of (individualized) relationships are those where companion animals are involved. Obviously, here we are considering only positive cases where the species and individual needs are well taken care of. No doubt there are cases in practice where this is not so.

In sum, if there is some space for cooperation between human beings and animals this space is a small one on the boundary between use and relationships. On the one hand, cooperation may be barely distinguishable from some forms of use compatible with animals' well-being; on the other hand, in some forms of cooperation animals and human beings are very likely to develop individualized relationships. Still, despite these overlaps and fuzzy contours I think it makes sense to distinguish these concepts.

As a general objection, one may point out that the criteria for distinguishing cooperation from other relations are at odds with the standard understanding of cooperation among human beings. Indeed, in cooperation among human beings, we hardly consider welfare to be the most distinctive criterion. To the extent that people voluntarily enter a relation, they may encounter risky and harmful situations but still cooperate because they have

[13] A substantive account has been provided by Cochrane (2016). Cochrane claims, among other things, that some uses of animals (guard dogs, pet therapy, races, police dogs, etc.) can be made compatible with a non-harming conception of cooperation, if animals are appropriately trained and treated as labourers with their own labour rights.

consented to doing so. As an example, consider missionary groups or discovery enterprises. These are risky and possibly harmful forms of cooperation. This might be a problem for my commitment to make the idea of animal cooperation somewhat compatible with ordinary uses of the term. However, as we have seen, the condition of voluntariness is almost inapplicable to animals. We can hardly ask them whether they consent to do something, and the mere fact that they do not escape is not sufficient to suggest voluntariness – in particular for domesticated animals, which have developed some sort of hard-wired adaptive preferences. Hence, failing the possibility of applying the subjective criterion of voluntariness, we cannot but apply the objective criterion based on what we presumptively know about animals' welfare and ethology.

8. *Conclusion: What normative import?*

From this analysis, it follows that in order to have a conceptually specific and normatively significant idea of cooperation with animals, we need a substantive account of what the main interests of animals are. Typically, such an account would primarily, but not necessarily only, concern their welfare.[14] One may be suspicious about this and ask what the point of outlining a treatment of animals based on the idea of cooperation is, given that in the end we need a further normative step. If we were to agree on a substantive conception of animal interests, the objection goes, we would have a set of

[14] In this final section, I focus only on interests based on welfare without presupposing that animals have only these types of interests. This is not a quirky restriction. Rather, my point is simply that whatever the diverse substantive account, there is wide agreement on the idea that animals have at least some interests regarding their welfare (e.g. not to suffer, to have pleasant experiences, and so on).

duties regarding animals without the need to plug in the idea that duties arise from cooperation. In reply to this, we may say that this worry is misplaced because this is a problem only for those theories (Coeckelbergh's, and to some extent Kitcher's too) that seem to do without an explicit substantive account of animals' interests. In other words, it is a problem for those theories committed to saying that we have duties of justice towards animals in virtue of the fact of cooperation even though we do not have other normative commitments. But this is not a problem for other human–animal cooperation theories, to the extent that the idea of cooperation does not do all the fundamental normative work but, rather, only specifies the duties of justice that we owe to those with whom we cooperate.

In closing, we may start to sketch the normative contours of a theory of cooperation with animals. As I cannot here outline a substantive theory of animals' interests, I will limit myself to a few further considerations.

First, one may ask whether the idea of cooperation entails the requirement that animals have an interest in liberty. Indeed, one may argue that if animals had no interest in liberty, they could not entertain cooperative relations, but only forms of use. However, I have not characterized cooperation in these terms. The difference between use and cooperation is a matter of degree of concern for animals' welfare. Hence, my account is compatible both with those who think that animals have an interest in liberty (Donaldson and Kymlicka 2011), and those who reject this claim (Cochrane 2012). But it stands in contrast with those (liberationists) who think that any kind of relation between human beings and animals turns out to be a form of exploitation (Francione 2009).

Second, if, for there to be cooperation, the welfare of the animal is to be taken care of, it follows that imposing tasks on animals that are at odds with their nature is not compatible with cooperation. But what about genetically engineered animals that are programmed and created with features amenable to specific purposes (now typically those of undergoing specific lab tests)? As genetic engineering is a radical form of instrumental approach, it might seem to stand in contrast to the spirit of cooperation. However, if genetic engineering is devised in order to make animals more suited to performing a specific task or to make them not suffer (or suffer less), perhaps genetic engineering is compatible with the spirit of cooperation. However, I leave this question open and conditional upon an account of animals' moral status establishing that there is no right to genetic integrity.

Finally, we can ask: what are the normative implications triggered by cooperation, in my account? If cooperation does not do all the normative work – for there should be a preliminary theory of moral status and a substantive account – what is left to cooperation? This worry is strengthened by the fact that a substantive account may be sufficient to rule out exploitation as unacceptable, without making appeal to the content of cooperation, because exploitation is a direct neglect of animals' interests. In this case, cooperation would still have a role because the substantive account of animals' interests might simply establish prohibitions (for instance, to inflict significant suffering) without outlining further duties or opportunities for animals. If so, the role of cooperation may be that of outlining a set of duties to distribute to animals fairer shares of the output of social cooperation (Kitcher 2015; Niesen 2014). Furthermore, cooperation might justify the animals' rights to retire and receive a pension after many years of service, or special

entitlements that do not necessarily concern animals' interest in welfare.[15] In sum, whether the normative work of cooperation is wide-ranging or limited depends on the substantial account specifying animals' moral status. If such an account is minimal, the role of cooperation can be wide; if it is larger and more robust, the role of cooperation is diminished, but still not void or negligible.

Although these considerations do not touch all the issues at stake, they offer a glance at the possible development of a theory of human–animal cooperation that is compatible with the framework proposed here.

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[15] More generally, these considerations go in the same direction as Cochrane's argument for labour rights for animals. See Cochrane (2016).

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