Interstellar Communication of Compassion-Based Altruism

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Abstract

One may behave in an altruistic fashion out of duty or out of an inner virtue based on compassion. It will be investigated whether this compassion-based altruism can be conveyed to aliens. The answer depends on the type of consciousness of the receiver. Conclusions will be drawn for our situation on Earth.

1. Forms of altruism

Altruism is a form of behavior in favor of the benefit of others rather than for that of the individual itself. One may choose to loose something when another individual or the community gains. For example, several animals like ants and bees but also birds, show altruistic behavior. Individuals take care of the strength of their group, e.g. by taking care of the young, at the expense of their own fitness. This kind of altruism is based on instinct, hardwired in the behavioral protocols of the species. Some ethologists call this apparent altruism, as the motivation for it is different from that among humans.

Indeed, also humans often behave in such a way that they think about others before thinking about themselves. In some cases this is based on *pseudo-altruism*: I do this for you, on the condition that you do something else for me. This belongs to merchandising, well-known in politics and in some cases even defendable, but will not be considered here. Then there is altruism because one is educated that one ought to do so. Whether this *duty-based altruism* is beneficial, depends on the system of morality on which it is based.

Finally there is a fourth form of altruism. It is the result of the quality of humans to imagine the state of mind of others (empathy). If other people suffer, then they suffer as well (compassion). For this reason humans may act in the favor of others, in the same way as they would act towards themselves. This is compassion-based altruism and belongs to virtue-moral rather than duty-moral. This form of altruism may be considered as preferable, as it is not dogmatic hence flexible and is directed to the genuine well-being of others. In this chapter it will be investigated whether this way of acting can be conveyed to aliens on other planets.

2. Different Worlds

Whether the intended (compassion-based) form of altruism can be explained to aliens, depends on the state of their mind. For example if a being does not know suffering or does not have consciousness at all, then there seems to be no way to explain compassion. In order to describe different types of beings we will make use of the classification of different 'worlds' occurring in Buddhist mythology, both in the Sutras (popular stories) and in the Abhidhamma (deeper psychological theory). In the last section it will be shown that the discussion is also relevant for the situation on our planet Earth, not needing any mythology.

Each different Buddhist world (loka) houses beings with different states of mind. We will distinguish the following types of worlds containing beings with a corresponding type of consciousness.

- 1. Hells and other woeful places;
- 2. the heavenly worlds of the Devas;
- 3. 'our' type of world with human-like beings;
- 4. the Asunnasatta world of 'zombies' without consciousness;
- 5. the Buddha-fields.

The inhabitants of these worlds are as follows. Hells, in total 168 places including the $Mah\bar{a}$ Roruva and the densely packed $Av\bar{i}ci$, have inhabitants that constantly suffer in many possible ways. The worlds of the *Petas*, hungry ghosts that always have insatiable desire, and that of the Asuras, demigods that constantly are jealous, are slightly better than the hells, but still woeful. The Deva worlds contain gods that always are happy and therefore cannot get enlightened during their lifetime. For example in the *Tusita*, the Delightful Realm, the Bodhisatvas live just before reaching Buddhahood; the Nimmanarati is the place of gods that are able to create objects of sensual enjoyment by thought, following their desires. The human-like beings in our type of world are beings that sometimes are happy, sometimes unhappy and are capable of becoming enlightened. Zombies are beings with a body, but without consciousness. Their world is included, as SETI is directed towards intelligence. This concept is defined in such a way that the beings should be able to construct devices that can receive radio signals. Now for such a level of intelligence consciousness may not be needed. We can imagine robots that are able to construct radios without having any consciousness. Finally, the Buddha-fields are the sojourn of the enlightened Arhats, beings that are beyond suffering but still know it.

In the message to the aliens it is important to introduce the notion of 'values'. This is not meant in the ethical sense of what is good, but in the sense of what is desirable. In what direction is the behavior of the aliens going? What are the reasons for this? Then it is important to know whether suffering occurs if the aliens cannot do what is desirable to them. If this is the case, then they probably can observe when another alien is suffering. Perhaps there are other causes for suffering? The main criterion is whether suffering of an alien can be

observed by their fellows. If this condition is satisfied, then compassion-based altruism is easy to define. It consists of acts that comfort others when they are suffering, possibly at the price of pursuing one's own values to a lesser extent.

It is clear that for the Devas with their lasting pleasure there is little hope of conveying the idea of compassion. They do not know what suffering is and hence cannot see it in others. From the Buddhist point of view their situation still may be improved. Even if they always feel pleasure, they are bound to it and have no freedom to follow anything else but their desires. So compassion for the Devas is needed but it cannot come from themselves. Also for the zombies without any consciousness compassion seems to be an inexplicable phenomenon. To humans and Arhats, that both know suffering, the notion of compassion will be clear. It is possible that the inhabitants of the hells and woeful places are capable of compassion.

3. The Extended Turing Test as Thought Experiment

The traditional 'Simulation Game', involving at least three individuals, can nowadays be played conveniently on the Internet. The main player is chatting with a man and a woman. The woman pretends she is a man. The main player can ask questions or start discussing any topic with either of the two. If after a while the main player cannot figure out who is the woman and who is the man, than the woman has won. If, on the other hand, a correct guess is made who is the woman, then then the main player has won.

In order to discuss whether computers may have intelligence, Turing modified this simulation game. Instead of the woman now a computer takes place as opponent of the main player. The goal of the computer is to simulate that it is a human. If it succeeds in this, then the computer is said to have passed the Turing test. Turing argued that, while we do not know exactly what intelligence is, at least the computer should pass the test if it is going to be regarded as possessing this quality. The same can be said about consciousness.

There are some very partial successes for programs being subjected to the Turing test. In 1966 there appeared a program by Joseph Weizenbaum called Eliza. It is well-known and present in the Linux text-editor Emacs under the name 'Doctor'. The program simulates to be a Rogerian therapist. If a naive main player keeps talking about him or herself, then sometimes the program is able to fool him or her in thinking it is a real therapist. If, however, knowledge of the world is needed, then pretty soon the program fails the Turing test. Similarly there are on the Internet many robots engaging in erotic chats, simulating to be women. For men thinking only about one thing these seem to be successful. Examples of (non-erotic) chat robots can be found at <alice.pandorabots.com> and <www.mrmind.com>, the later one for an inverse Turing test. There are several machine assistants that are able to answer a class of problems in mathematics much faster than humans can. Commercial ones are Maple and Mathematica. On the other hand, for the full class of mathematical problems, beyond equations, such programs will not pass the Turing test.

Since intelligent aliens may be many light-years away, it is not very practical

to engage in an interstellar chat. Moreover, we do not want to test whether an alien is capable of compassion-based altruism, we want to convey the idea. Therefore we will use the extended Turing test in a thought experiment. We are going to describe some hypothetical conversations with aliens. After that we comment on the session. The purpose is to suggest to real aliens what compassion-based altruism is.

Session between A_1 (alien) and H (human)

- A_1 Hello there.
- H Hi. How do you feel today?
- A₁ A little low on energy. Will be better soon, thank you.
- H What is your source of energy?
- A_1 ATP in pills. What is yours?
- H Carbohydrates. My body has to transform these into ATP.
- A₁ How clumsy.
- H What are your goals, what do you strive for?
- A_1 To have enough energy.
- H And if you have got enough of it?
- A₁ Then we strive for more, storing it for future times.
- H What do you do with this energy?
- A_1 Nothing special, just looking for more. We do not wear out, so that we do not need to reproduce ourselves.
- H I previously told you what mathematics is. Do you like it?
- A_1 We only use it, if we need to find more energy. But we are pretty good at it.
- H Do you know that there are independent statements that neither can be proved nor refuted (from some axioms)?
- A₁ We know that, but these kind of statements never seem to be needed when looking for energy. For the purpose of energy finding the class of statements that are relevant has a solvable decision problem, i.e. can be solved by an algorithm that is known to us.
- H Do you know that there is a class of statements with an unsolvable decision problem?
- A₁ Yes, we know, but we do not need to decide these problems for obtaining our energy.

- H When you are together with someone, do you share your energy?
- A_1 No, we are too much in need of it.
- H But if you have much and the other is lacking, do you give it then?
- A_1 No, as we may be in need later.
- H If you give some now, he or someone else may give you later in case you happen to have too little.
- A₁ That may be the case, but rather than giving away one's own energy and betting on getting back some of it later, one better may save it for the future.

Comment. It is certain that A_1 is intelligent. They do not seem to have any altruism.

Session with A_2

- A₂ Hello there.
- H Hi. How are you today?
- A₂ What do you mean? I am. But there are no degrees of being.
- H What are you doing?
- A_2 Am doing my duty.
- H Like what?
- A_2 Arranging the energy distribution. There is enough of it on our planet, but it should be properly distributed.
- H Do you get a reward for it?
- A₂ No. But we, the 21 inhabitants of our planet, take turns to do this.
- H What do you do when it is not your turn?
- A_2 Just wait until it is my turn again.
- H Don't you do something for fun?
- A_2 I don't understand you.
- H What do you do if the energy distribution failed and one of you is very low on energy.
- A₂ Then that one of us who first notices brings that fellow some extra energy.

Comment. So far this A_2 does not show much signs of possessing consciousness. They do have apparent altruism.

Session with A_3

 A_3 Hello there.

H Hi. How are you today?

A₃ Great. I just found after some months of search on the local Internet on our planet two sexual partners for our reproduction.

H Tell me more.

A₃ I did not yet tell you that on our planet our race has three genders, male, female and it. The names have nothing to do with your genders. We need all three in order to reproduce. If we find each other, we temporarily form a unit and in this way our offspring is made. At that time our personalities dissolve, in order to form a new unit with the other two. Judging from your literature you call this 'falling in love'. The experience is great, specially if you have been without partners for a long time.

H What happens if you find one partner, but still are missing a third one?

A₃ Then we search real hard. In case we encounter another couple one of which is the needed gender, we try to get that missing person. Sometimes that person will simply walk over to us. But we also have to watch out that one of us that necessarily will be needed by them does not walk over or get kidnapped. Our literature has plenty of examples of love stories where such plots do happen.

H What happens if two male-female couples find at the same time an it?

A₃ Then the resulting fight may be devastating. If in this fight the male from one of the couples and the female from the other are killed, then the remaining two will form a unit with the available it person.

H No hard feelings?

A₃ After a while one can deal with it. As a matter of fact, our survival mechanism is such that if one person of one of the two couples is wounded, then the person of the other incomplete couple of different gender sacrifices him or herself by killing the wounded one in a kamikaze act. In this way one complete triple remains.

H Isn't it more beneficial for your race to give the free it person a choice, or, in case your race does not have a free will, you may let him toss a coin. In this way there is less killing and destruction. Eventual the incomplete couple will find a third partner.

A₃ This sounds like a great idea. It, however, will not work in regions on our planet where one of the three genders forms a minority. Then the desire for such a partner is too strong.

- H Don't you realize that killing the other creates suffering in them and in their relatives? Moreover it also increases the chance that you will be killed yourself.
- A₃ Some of us do realize this. Still it is hard to act accordingly. Our feelings may turn into greed and then we cannot stop ourselves.

Comment. The race to which A_3 belongs seems to be like humans, but living in an era comparable to our prehistoric times. They may be capable of understanding what is compassion-based altruism.

Session with A_4

A₄ Hello there.

H Hi. How are you today?

- A₄ Great. I discovered new ways to enhance ecstatic feelings in all my senses and in my mind as well.
- H Does it involve other beings of your planet?
- A_4 Not at all. We are completely independent.
- H Would you share your discovery with others?
- A_4 Everyone is too busy to pursue his or her own pleasures. If someone would ask me and I had to wait for the completion of one of my objects of desire, then I could tell him. There are enough resources anyhow.
- H Have you ever felt miserable?
- A₄ No. But I do feel better and better. I hardly can wait to indulge in my newly found pleasures. Excuse me, in an hour I will be back.
 - ... [An hour passes.]
 - Ah, that was great. I can see variations of the pleasures that will allow me to enjoy them even more.
- H What is the difference between your previous pleasures and the ones now?
- A₄ They are just stronger. Stronger and stronger all the time. The sky is the limit. As our planet doesn't have one, our pleasures are limitless, hahaha.

Comment. This A_4 seems to be a Deva. Their obsession did not differ much from that of A_1 . They are willing to share, but are not interested in the mind of others. We did not test the intelligence of this A_4 .

Session with A₅

A₅ Hello there.

H Hi. How are you today?

A₅ I am very well, thank you for asking. How about you?

H Pretty good, thank you. What are you doing lately?

 A_5 I am enjoying to be.

H Do you mean that you enjoy a particular thing or thought?

A₅ No, I am neither enjoying a particular thing that one may posses or just see, nor a thought that one may have, not even a particular deed that one may perform. Am just enjoying the state of being, existing.

H Do you need to cooperate with others?

A₅ Sometimes. We need to distribute our energy. If one person does not have enough we redistribute, taking into account the needs of that person.

H And when everyone has enough for the time being?

A₅ Then most of us enjoy the pureness of being. Some of us work on mathematical problems. In any case, what we like most is to be directed to unconditioned permanent things. Our bodies are conditioned and impermanent. The same applies to our minds. Therefore we are not too much concerned with ourselves. This is only done to sustain life.

H How does one obtain the outlook on pure being that you did describe?

A₅ One needs to sharpen one's vision. Then one sees that consciousness is discrete, consisting of small fluctuating pieces, mind moments. At first this is utterly shocking, but it is possible to accept this fact in a balanced way. This is the basis of the attitude of the beings on our planet.

Comment. This A_5 creates the impression of being a person with compassion-based altruism.

The five examples of a chat between a human and an alien have been given in order to be illustrative for the definition in the next section.

4. Types of Consciousness

In the context of search for extraterrestrial intelligence it is natural to consider worlds with beings having a different type of consciousness. As was mentioned above, such places occur in Buddhist mythology. In some Tibetan Buddhist traditions one is more down to earth. The different types of consciousness are not necessarily to be found in distant worlds, but present in different fellow humans, see Trungpa [1987]. Indeed, the sketches above of the reactions of aliens A_1 - A_5 can be interpreted as a stylistic rendering of well-known behaviors

of other humans. If we want to survive on planet Earth, it shows the need for us humans to purify consciousness.

The question arises whether consciousness including its qualia, e.g. the quality of the experience of redness, is needed in order to explain what is compassion. I am afraid¹ it is not. The capacities of a mind to make models of other minds and to have some value system seems to be sufficient. Indeed, if a mind has a model of the contents² of someone else's mind, and moreover if that mind is subject to suffering, then compassion can be defined as follows. It is the condition that observing someone else's suffering causes oneself to suffer also. Suffering occurs if one wants something but doesn't have it; or if one doesn't want something but has it. Therefore suffering needs a system of values, desires³. Such values without consciousness can in some sense be ascribed to a simple device like a thermostat. Together with a heater it 'strives' to have the temperature within a certain range. Two thermostats that are coupled to a heater and an air-conditioner may keep the room temperature within set limits. If the system is installed in the wrong way, then under certain circumstances the two thermostats will be both turned on and work with full force against each other. This can be considered as a rudimentary form of suffering, as its behavioristic skeleton.

In order to have compassion one needs, next to knowing suffering, also a model of someone else's mind. This can be understood best if there is an absence of this quality. The following test for discovering autism may be illustrative. A three year old child is shown a tall box for smarties (disc-shaped sugar-covered chocolates) and is asked to guess what he thinks is in it. After saying the obvious ("Smarties!") the experimenter shows the child that the box contains in fact pencils. The child is slightly disappointed. Then another child comes in. The experimenter asks the first child: "What would he say if I ask him what is in the box?" The three year old usually will answer: "Pencils." Five year old children give at this stage what we consider to be the correct answer: "Smarties." If, however, the five year old child is autistic, then it often will answer like the three year old: "Pencils." It seems that such an autistic child does not learn what a normal child does between age three and five: making a model of the other person's mind.

Compassion consists of making a model of another persons' mind in one's own and resonating some of the suffering they may have. Compassion-based altruism consists in helping the other at such occasions. Those beings that are incapable of modelling the mind of others and those that are unfamiliar to suffering will not be able to have compassion-based altruism. Those beings that do have these two qualities are capable of this proper form of altruism. The resonated suffering resulting from an other person is often more mild than that of that other person for him or herself. For this reason it can be overshadowed

¹Finding an essential task for consciousness would be a first step towards approaching the hard consciousness problem: giving it a proper formulation.

²In Dennet [1992] it is argued that speaking about the contents of consciousness implies a form of dualism. First of all we disagree with this view and secondly we are not afraid of being called a dualist. This does not imply that we agree with dualism.

³So we are not speaking of the values of society but of the ego.

by one's own desires, as was the case with alien A_1 . Nevertheless, if a person is willing and has the right type of mind, compassion is a quality that can be taught. This happens notably in the cultivation of insight meditation, see Goldstein [1994]. Programs consisting of instructing insight meditation at some prisons to volunteers inmates have had impressive effects, see e.g. Al-Hussaini, Dorvlo, Chavan, Dave, Purecha, Al-Rahbi and Al-Adawi [2001].

A final word to those that might object to the last paragraph on the grounds that the given description of altruism is at best 'apparently compassion-based'. If consciousness is not present, they may claim, then no real compassion is present. I agree, but this is the best I can do. Let me say this to all: "Aliens and humans of all worlds, those of you who understand my uneasiness will probably have proper consciousness!" The example of successful insight meditation training of prisoners shows that humans with little or no compassion can be trained to obtain it. The resulting acquaintance with compassion is not theoretical but internalized as experience. Altruism will follow by itself. On the other hand, some zombies may not be capable to be trained to obtain these mental qualities. The reason is simple: their programs may be very simple, without any room for reflection. Therefore although some Zombies are ahead of some humans with respect to their experience of compassion, humans are more flexible. It therefore it seems to be preferable being a non-compassionate human over being an apparently compassionate Zombie.

5. Conclusion

Having introduced the terminology of this paper it may be summarized as follows. Compassion-based altruism can be explained to a being if and only if two conditions are satisfied. 1. The being knows what is suffering. 2. The being has a model of the mind of its fellow beings. As a consequence there are beings in this universe that will not be able to understand compassion-based altruism and there are beings that do. For example, some humans will be in the first class, while some Zombies will be in the second. It is still better to be a human, as in that case one may be develop compassion and altruism. For some zombies this will not be possible.

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