Space Policy 30 (2014) 197–201

Contents lists available at ScienceDirect

Space Policy

journal homepage: www.elsevier.com/locate/spacepol

Space exploration and human survival☆

Gonzalo Munévar

Lawrence Technological University, United States

ARTICLE INFO

Article history:
Received 17 October 2014
Accepted 17 October 2014
Available online 15 November 2014

Keywords:
Ethics
Space exploration
Survival
Balance of nature

ABSTRACT

I am sympathetic to the view that, given the likelihood of massive natural disasters, such as collisions between the Earth and large asteroids, we should engage in large-scale space exploration and colonization so as to hedge our bets against extinction. I will consider several criticisms of this view. For example, some philosophers may raise objections against the notion of long-term human survival as a value. How can we have obligations towards beings who have not even been conceived yet and thus cannot be properly said to have rights? On a different note, Wendell Berry argues that the abundance of resources in space will produce bad character, for good character requires the discipline of finitude. Others challenge the connection between space exploration and survival, for they fear that by entertaining the promise of new Earths in the heavens we are more likely to neglect our planet, thus leading to our downfall. Presumably, we should instead increase our efforts to restore and preserve the balance of nature. I will advance a variety of replies. For example, we do decide for posterity to a great extent. We may plant the trees from which "our" descendants will receive nourishment and shade, or we may destroy what could have given them a fighting chance against drought and famine. We have an obligation not to plant a bomb that will go off two years from now in a hospital nursery, and another to ensure that the buildup of chemicals in the hospital water tank will not reach critical mass and kill most of the newborns in ten years. The "balance of nature" involved in another objection is a myth that cannot be justified by natural history, whether astronomical or biological. Moreover, the inevitable changes in the environment, independent of asteroid impacts, will make the Earth uninhabitable in a few hundreds of millions and years. In addition, in order to act wisely we need an understanding of the Earth as a planet, and this requires the exploration of space.

H.G. Wells said once that our choice is the universe or nothing [1]. He meant that failure to move into the cosmos would condemn us to oblivion. As I have argued elsewhere, the way humans view the world, the way we interact with the world, gives us a panorama of problems and opportunities that will change as we strive to satisfy our curiosity, for a dynamic science leads to a constantly evolving panorama. This allows us to adapt to a changing environment or to a variety of environments [2]. If we choose the universe, we hedge our bets against extinction.

If this reasoning is correct, one would expect that most reasonable people would then find it as a strong justification for the exploration and colonization of outer space. As it turns out, however, objections to such a justification may still be presented by philosophers who question why survival should be a value, and, in particular, why human survival should be a value. There are also objections from some who oppose big science on ideological grounds. Thus Wendell Berry argues that the abundance of resources in space will produce bad character, for good character requires the discipline of finitude [3]. My purpose in this paper is to reply to several objections along these two lines.

That the survival of the human species is a value may seem beyond question to most of us, although there might be some who prefer extinction to bad character (not that I wish to suggest here that Berry would go that far) or to decreased chances of spiritual salvation. But even overwhelming agreement on the value of survival might not satisfy some thinkers in their more philosophical moments. It seems that we value survival very highly, they might say, but why should we so keen on leaving behind imperfect creatures much like ourselves?

In such philosophical moments, questioning a value is normally taken as a demand to identify some other, more basic value from which the first one is derived. This is similar to how we presumably justify actions: "This is the right action because it will bring about X

☆ This paper is largely extracted from Ch. 10 of my *The Dimming of Starlight* (manuscript in preparation).

E-mail address: gmunevar@ltu.edu.

http://dx.doi.org/10.1016/j.spacepol.2014.10.002
0265-9646/

and X is a good thing." But the more basic value (or good thing) that does the justifying can itself be questioned, so we then look for an even more basic value (or good thing) until eventually we arrive at a good thing that is not merely good but good in itself, that is, whose goodness does not depend on anything but its own nature. We work because we get paid. Money is good because it allows us to buy food and clothes, pay the rent, etc. We want to do those things because they contribute to our happiness. And in happiness, Aristotle thought, we find an end that is complete and self-sufficient [4]. The question "why do we want to be happy" makes no sense. Aristotle had in mind not transient happiness, but a happy life as a whole. He also thought it was obvious that the happiness of a society was of greater value than the happiness of a single individual. Of course, there seems to be a clear connection between human happiness and human survival.

Since this approach grounds ethical justification on a human value, human happiness, some may object that it is therefore relative to our own species. This objection seems to underpin the notion that we should not prefer the good of our own species to that of other living things in our planet, or even to the rocks of another planet. Oftentimes the objection is expressed as the view that ethics and other disciplines of value are "objective" only insofar as their laws are eternal and universal. As characterized by Peter Singer, who criticizes it, the view claims that "The laws of Ethics … existed before there was life on our planet and will continue to exist when the sun has ceased to warm the earth" [5]. Moreover, eternal (absolute) laws of ethics seem to demand eternal (absolute) values. Thus, according to this peculiar view, a relative value such as human happiness (or human survival) cannot provide an adequate justification for our actions.

Absolute values, however, are not all they are cracked up to be. Conflict may arise between two or more absolute values. Or an absolute value may be of small significance in a particular context and thus should yield to relative values. Besides, absolute laws could in principle be derived from values that always depend on context or on subjective preference, i.e. relative. For example, consider utilitarianism (i.e., roughly, the view that the balance of good vs. bad consequences of an action–its utility–determine its rightness, given the utilities of the alternative actions). At least one version of utilitarianism would calculate utility in accordance with the values assigned by the individuals who would enjoy or suffer the consequences of the action being contemplated [6].

I thus need not show that human survival is an absolute value, or that there must be an absolute law of ethics that gives survival a very high priority. I appeal to it in order to show that space exploration is in the interest of the species. When I point out that space exploration can save us from the dangers posed by asteroids and the sun's becoming a red giant, I give a strong reason to pursue it.

A reason in matters of prudence, or of ethics, need not be one that appeals to an absolute ground of any kind. A reason must be a reason for action, and so it must be aimed to convince the intended audience. This is not to say that efficacy alone is sufficient to commend reasons. The fallacious reasoning of much advertisement may well appeal to the masses of the unwary but would be exposed to ridicule in less superficial disputes. In some polemics the stakes and the standards may be very high. This need not mean that some ideal is approached but that greater care must be exercised to take into account the sorts of considerations that may be brought up by all the parties concerned. And greater care must be exercised not because some of those parties are in possession of truly higher standards of reason or a more direct line to the truth — they might or might not — but precisely because we have more perspectives in play, because their diversity demands a sharper, more comprehensive case if their potential objections are to be met.

To give ethical reasons to others is then to give them reasons that take their concerns and interests into account [7]. In discussion with members of another society, we can hardly make way with claims to the effect that our customs are better than theirs because ours are ours, or because our customs appeal to us. A convincing argument would have to show them that, in some respect that they may come to see as important, our customs work better for us than theirs do for them. Or if what we really want is for them to adopt ours, we must show them that our customs will work better for them, too. If action is the intended goal of reason in matters of prudence and ethics, how can reason succeed if it cannot appeal to the audience? And what appeal can there be where the aims, desires, and interests of the audience are ignored?

In an important respect this view preserves an element of universality, although not the peculiar ground of objectivity of so many views in ethics. As J.L. Mackie put it: "If there were objective values, then they would be entities of a very strange sort, utterly different from anything else in the universe. Correspondingly, if we were aware of them, it would have to be by some special faculty of moral perception or intuition, utterly different from our ordinary ways of knowing everything else" [8]. No. The element of universality depends rather on the realization that, as Singer says, "… one's own interests are one among many sets of interests, no more important than the similar interests of others" [9]. In this respect, many neo-Kantian views are similar. For example, John Rawl's famous "Veil of Ignorance" requires us to put ourselves in the shoes of all those who will be affected by a decision, and to avoid results that would be completely unacceptable to us, were we in the position of those most affected (e.g. being a slave) [10].

Where the only relevant difference between my wish and yours is that it is mine, I am generally not in a position to give you reasons why you should behave as I want you to. Intelligent beings should presumably be able to detect what the relevant factors in a dispute are, and discard those that are revealed as arbitrary. Or else they would go ahead with the full knowledge that their case is also arbitrary and that they have no rational claim upon the behavior of those they were trying to persuade. Practical reasoning that will not treat impartially the interests of all parties will not succeed: It cannot motivate action.

These considerations lead Singer to conclude that all rational beings should come to this process of reasoning. If so, this reasoning would have an eternal and universal aspect. For according to Singer, "Wherever there are rational, social beings, whether on earth on in some remote galaxy, we could expect their standards of conduct to tend toward impartiality, as ours have" [11]. This is not to say that all rational beings would adhere to the same specific norms of conduct, for those specific norms may have developed to meet entirely divergent constraints on behavior [12]. Nor is it to say that ethical behavior between all intelligent species is possible, since such behavior requires a possible commonality of interests that may not always be there (such commonality need not be of prior interests, since in new circumstances complex intelligent beings are capable of developing new interests, surely no less than chimps and dogs can; although there is no guarantee that new, appropriate interests will in fact be developed).

In this manner we can explain why the appeal to values is thought to provide reasons, for values themselves, as Singer points out, are inherently practical. "To value something," he says, "is to regard oneself as having a reason for promoting it. How can there be something in the universe, existing entirely independently of us and our aims, desires, and interests, which provides us with reasons for acting in certain ways?" [13]. Accordingly, I point out the connections between space science and survival intending to appeal to the interests of most normal human beings. Nevertheless, is the long-term survival of the human species really in our interest?