

## Review of: "How can Ecological ethics assist in the progress of man? - Towards a reflection on the Encyclical letter Laudato si'"

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Potential competing interests: No potential competing interests to declare.

**Review of:** How can Ecological ethics assist in the progress of man? - Towards a reflection on the Encyclical letter Laudato si´

I need to say before you can read the few notes I am including in this revision that I consider myself an illiterate people on theological studies; however, reading your paper I can see that many, if not almost all, your statements can be subscribed by a natural scientist as I am. Your first phrase from the abstract "Our living space is in such a crisis, that its solution cannot be resolved by technical tools but firstly and mainly by

changing a human's mind towards his surroundings' is clearly what we (natural scientist) are just saying from many years ago.

I need to say too, that this revision is made when Pope Francis is visiting Portugal and he has made several speeches that you can also find in the news related to this encyclical Laudato si. It is impossible to be in contradiction with that and, all people, however preferently western people and those coming from emerging economies, independently of her/his religion or color should respond to this need of changing their mind.

The paper is fine to me but probably it would be better if you add some definitions of some important concepts for the paper, starting by the one that drives mostly your concluding remarks "human ecology"

My main concern about this paper is the progressive importance that you gave in the paper to the concept "human ecology". In natural sciences, human ecology is taken to study the interactions between people and their environment. In fact since the UN Millennium Ecosystem Assessment (2005) there is a kind of social-ecological paradigm as the way humanity must think about nature "a worldview recognizing the mutual inter-association between human society and ecological processes that may be necessary for the survival of both". However, I do not think that this is the way you are talking about "human ecology". Although you make a lot of remarks to "human ecology" in the last conclusive paragraph of the paper, the first time you cite 'human ecology" in the paper is in page 5 "It is the ecological question-ranging from the preservation of the natural habitats of the different species of animals and of other forms of life to 'human ecology' properly speaking (Centesimus annus, 38)" No reference to the concept in the abstract of the paper. Please consider to describe more carefully the meaning of your concept and, if possible, include possible differences with this terminology



used by other people.

Another concept that needs to be better defined is the use of "ecological ethics" (which is in your tittle) because in the keyword you use "environmental ethics" and at the beginning of the section of introduction, you mentioned "bioethics". Not sure if all (I guess so) for you are the same but this should be more explicitly said. In addition, in natural science, the term Geoethics it is also used.

Now, I will include some other minor aspects to consider

Abstract, fifth line... use probably (for comparison between them) better air, water and soil.

Page 3 middle paragraph. When do you talk about the modern mortal sins, you referenced that; however, as a curiosity, it would be good to make the citation of these sins in the same line (between parenthesis)... the reader probably will deserve to know them, at least I was captured by the idea.

At the beginning of the section "causes of the problems..." there is some mention to anthropocentrism in relation to other religions... I know this is not the topic of your paper to make comparison; however, the social-ecological paradigm is recognized by the most important usage of the concept "ecosystem service" (the benefits, human get from nature"... some of these services are defined as "cultural" and spirituality is one of them... not sure if nature can be related to some kind of spiritual aspect in relation to our Christian religion. Maybe you could elaborate on that depending on how you consider to treat the issue about "human ecology" referred before.

In page 6 is when theological studies would be required for me to understand some phrases... In the second paragraph "the environment is an extension of human body..." probably I would have said all the contrary but... here is one of these issues I will not subscribe...

Then, the paper turns out into the concept of "human ecology" and the paragraphs above should be considering. If the final conclusion expressed by your late phrase "Every wound in human ecology causes damage to the environment" is part of your conclusion, consider to define precisely the meaning and included in the abstract.