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When aesthetics does not lead to an act of environmental conservation



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Abstract

This paper examines the relationship between the environmental aesthetics approach backed by knowledge (ecological aesthetics) and the possibility of doing an action in favor of environmental conservation. It seems that even having such an approach towards the environment fails to sufficiently motivate people to protect the environment and nature, since there is a tension between the course of daily life and scientifically supported environmental aesthetics. In order to explain such tension, we tend to examine and critique ecological aesthetics (which is in some respects overlapped with environmental ethics) from the viewpoint of the philosophy of Wittgenstein, particularly with reference to his later work including the concept of formal life. Based on this concept, ecological aesthetics can be criticized and examined on three grounds: First, aesthetics is not able to create understanding or appreciation that leads to action. Second, the ecological concept added to reinforce the aesthetics, cannot support aesthetics in this regard and can even make things worse; ecological aesthetics, in fact, diverts aesthetics from its purpose (the purpose with regards to the environment, which is to motivate people to preserve nature) by trying to give it a strong objectivity. Third, the role of ethics in its current form in environmental conservation cannot be an active role.

Keywords: Aesthetic and ecological knowledge, ethics, environmental conservation, form of life, Wittgenstein, action

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Introduction

our activities as human beings have caused significant and undeniable environmental degradation. If we are to avoid the incessant disruption of the stability of the environment, action is required. However, appropriate action will only be taken if humans are sufficiently motivated to do it. Hence, a deeper and comprehensive understanding of how we are motivated to take action in the face of environmental disruption plays a central role to meet the challenges at the heart of environmental sustainability.

Although “environmental aesthetics” today may not be considered as a new field, applying this approach with the aim of “preserving” the environment is a relatively new concept as a result of the current environmental crisis, which gets help from “scientific knowledge”. In fact, in the past, it was meaningless if thinkers felt concern about the environment (quite apart from whether their work can be deployed in the contemporary approach) and it was not until the late 1960s that this field became predominant in reaction to the environmental destruction. However, we argue that if these two have been employed to draw people's attention to environmental conservation and to the necessity of this conservation, it is expected that they should be able to produce action in favor of nature, however they have borne little relationship to action in this regard. To put it simply, we all may have highly educated friends and relatives, who have a taste for the aesthetic value of nature and have much knowledge of ecology and moral standards. Nevertheless, they find it difficult to sort household waste, use less plastic and buy less clothing, to just name a few.

Little attention has been paid to the central issue of this paper: the relationship between “forms of life” and doing a particular action; here nature or environmental conservation is considered as the particular action. To this end, this article is divided into four main sections based on the early and later Wittgenstein aphorisms. Our argument will proceed as follows. Firstly, the relationship between aesthetics (which is even reinforced by science) and the act of “protection” as a particular action. Secondly, given the same consideration of aesthetics and ethics in terms of transcendence in our article, we examine whether aesthetics can be appropriate to motivate people to any particular action. Thirdly, explain the gap between aesthetics and doing an action. Finally, by considering education as a potential catalyst for changing lifestyles, we examined the inefficiency of the current education system. In fact, we believe that there are more effective items than the education system that are forming people's actions and perspectives. In other words, economic, political and social power are the driving forces behind our motives and behavior which are closely intertwined with each other. For example, the current economic climate pushes people to consume and buy in a vicious circle which is totally against the environment and nature, even if the education system at best leads students to nature conservation theoretically.

- I. *“Even the most refined taste has nothing to do with creative power. Taste is refinement of sensitivity; but sensitivity does not do anything, it is purely receptive.”* (Wittgenstein, 1980:60)

Generally speaking, environmental aesthetics (non-scientific and scientific) is supposed to appreciate the natural environment (Carlson,2007), by emphasizing visual, auditory, olfactory, palate features or biological, historical and ecological facts for the purpose of understanding the beauty or benefits of the environment. In other words, “appreciation” through “defining” with the help of scientific facts, a poem or by making an implicit reference to scriptures, to name but a few (Wittgenstein,1980:70). For example, undergoing the process of defining, in a moment of “appreciation” of a piece of music, we may say “wow, I now understand how beautiful x is.” (Wittgenstein,1980:69) and from then on, when I listen to that piece of music, I may show my appreciation by swaying my head. If one has a sense of appreciation of a piece of music and expresses his or her appreciation with an expressive move, we can conclude that the process of defining was successful in some senses; whether the expression was honest or not is a matter of indifference here, since we do not wait for the next action. In other words, we do not seriously expect a person to take a concrete action in his or her life after understanding the piece of music.

However, this is not the case for the aesthetic explanation of nature. In fact there should be something more than "appreciation" or even “understanding”. The processes of “understanding” of a piece of music and nature are quite different in some respects since people, who are living in all corners of the world, are expected to act ethically when they express their understanding about nature; whether this act is based on moral duty, civil duty or anything else. We argue that, if the primary objective of the explanation of nature is “preservation” of it, there is a need for understanding or appreciation that leads to action. There is a need for action, because here it is not the matter of just seeing and understanding the beauty of nature as an end in itself, but it is the matter of seeing and understanding the beauty of nature and then make an attempt to protect it. Why do we think that the beauty (regardless of our different account of beauty, since it even includes scientific approach, if the purpose is to provide a convincing explanation or facts) of the environment provides significant motivation for protecting it? How do we discover even a loose connection between the understanding of beauty and the sense of duty? Let me emphasize that these kinds of questions are meaningful just when we intend to adopt an aesthetics or scientific approach with the aim of protecting nature. Otherwise they are totally irrelevant. For example, Brady distinguishes between aesthetic features of natural environment and the moral concerns (2006:551-570). Therefore, from such a point of view, our discussion is irrelevant.

II. “Ethics and aesthetics are one” (Wittgenstein,1922: §6.421)

According to Wittgenstein, it is the totality of facts that determines what is the case in the world (Wittgenstein,1922: §1.12). That is, ethics and aesthetics as the sense of the world must lie out of the world (Wittgenstein,1922: §6.41) since they carry value. In other words, it is nonsense to say that for some aesthetic or scientific reasons, the protection of nature is good and necessary, because saying “good” or “bad”, we go beyond the world. “This does not, however, mean that we should deny anything that is not inside the world. This means “they do not belong to the world but are boundaries of the world” (Wittgenstein,1922: p.16). Ethics and aesthetics belong to

the boundaries of our world. Sense of the world is not part of the world but part of “my world”, “world is my world” (Wittgenstein,1922: §5.641). How can we use the aesthetic value which is outside the world as a starting point to reach the moral value that is also out of the world as a destination? This question is also true for explaining based on knowledge; we, in fact, make a connection between facts as what is in the world and ethics as what is not.

Nevertheless, the realm of ethics or aesthetic should not be consigned to oblivion. They have their own language games which can be different from that of our will to do an action. That is to say, what can cause many philosophical errors, according to Wittgenstein, is carrying over a meaning of a word into the other language game (Kreisel, 1958:135-158). Taking the word of “beauty” from art and using it wherever it seems possible, for example. In other words, the connection between either aesthetics or science and our will to act cannot be sought in their contents, but they can be found in the language game located in a particular “stream of life”. In fact, the key to finding a connection is to examine what and how differences they have made throughout life, not in a vacuum. The language game of “beauty” is intertwined with the context in which it is used. Considering the word of “beauty” in the Consumer societies as the most prevalent stream of life in the world, which forms our choices based on beauty criteria with the aim of consuming them; immediate consumption. Our widespread assumption of the untouched countryside and large mansions in it can be the best examples in this regard, which also holds true for our scientific standards. If they are supposed to lead us to an action, they should also have got to do with the existing stream of life, otherwise they will fail. For example, even if scientists give the promise of having better life in the future on condition that we should use less non- biodegradable plastics, it cannot convince us to consume less.

Utilizing ethics, aesthetic and science for clarification in favor of each other not only leaves former convoluted issues such as definition of “beauty” or “ethics” with no solution, but also complicates them more. Although Intervention through design and knowledge can improve our aesthetic preferences at best so that we can accept aesthetic shortcomings in favor of ecological benefits, it has nothing to do with actions; we accept the shortcomings and all scientific-aesthetic explanations only because saying “no” to them may be considered as an indiscretion. Science as well as aesthetics, of course could be the first stage for having a pro-environmental attitude but it stops at this point. Aesthetic principles which act as a network with a definite net, are placed on the image of nature, so to speak, click on it. It is, in fact, described by the definite net. There is, therefore, no difference between the scientific and sensory descriptions in the concept that we argue, because both descriptions exist as the same definite net, once cognitive and once sensory (Wittgenstein,1922: §6.342). Accepting the explanation, people apprehend that this tree, that kind of bird or even wetlands is an inseparable part of our life and essential for ecology. However, it just leads us to the emotional involvement not active participation in protecting nature since “protection” is not linked to aesthetical explanation but to our other motivations and desires. That is, there is not any hypothetical imperative that makes us rationally obligated to perform an act in this regard.

III. “Experience, thoughts, -- life can force this concept on us”
(Wittgenstein,1980: 86)

To perform an act, we require either passionate and internal beliefs (experiences) or external forces (laws). This could be, in some senses, the polar opposite of what Kant considered as hypothetical, conditional imperative resulting from transcendental freedom that eventually led to unconditional, categorical imperative with the form of universality irrespective of inclinations, particular way of life etc. (Pinkard, 2002:49-50). It is virtually still a controversial topic that we should protect nature at least for having a better life. This means we even cannot formulate a hypothetical, conditional imperative in this regard since we are not able to provide a link between protecting nature as something that is necessarily required to have a better life, and better life as the purpose itself yet, let alone unconditional, categorical imperative and universality. In fact, philosophers keep on utilizing either aesthetic or scientific explanation in a vain attempt to encourage people to preserve nature. However, this is the very particular ways of life, according to Wittgenstein, that leads us to do this-and-that and creates belief. "Believing" means submitting to an authority (Wittgenstein, 1980:45) which is not an external, abrupt authority but it emerges from the form of life and it is not transferable or imitative easily, since it commences in childhood. The form of life includes religion, economic factors, geographical position, cultural milieu, and codes of conduct etc. "This is characteristics of our language that the foundation on which it grows consists in steady ways of living, regular ways of acting. Its function is determined above all by action, which it accompanies" (Wittgenstein 1976: 404). In fact our language (language games) are intertwined with non-linguistic activities, and such activities are the same as life. How can we, therefore, tell adults with the accumulated loads of actions, context and explanations "you must preserve the environment"? Even though this "must" is hedged in by aesthetics, it does not work since our personal previous experiences cannot be neither ignored nor circumvented. Such circumvention can be seen in religious explanations which tend to emphasize the conservancy by making (implicit) references to religions and scriptures so that religious people are expected to act differently based on new moral precepts discovered by experts. However, in practice it has no place in particular forms of life. It is, in fact, the "mechanisms" of religion and aesthetic that can put the changes into effect. That is the whole point. Consider Muslims who believe in ablution which has been learned in childhood and internalized it along with other religious beliefs; they believe that if they do not perform it once, the god will punish them in the hereafter. Their earnest attempt to pursue such a precept has stemmed from the constant repetition, practice and being in a particular milieu; this is the "submitting to an authority" "hence, although it is belief, it is really a way of living" (Wittgenstein, 1980:64). Being in a particular environment sometimes even does not require any special effort or moral action, but it is reminded to the person in a different way on a daily basis. Going to mosques and listening to preachers, reading and interpreting the Quran as usual which help to jog their childhood memories in favor of corroborating their ideas, even when they do not seem right. The common denominator of all of them is "continuity" and "practice" that acts as a mechanism for taking an action.

Now, it may seem that the power of education to change behavioral patterns is ignored in the above-mentioned definition of "form of life". Although both aesthetic and scientific explanation of nature can be construed as an educational process which can play a decisive role in "form of life", I will argue that education is not a viable solution neither for children nor adults.

IV. The cold wisdom: late and inconsistent training

“While strolling at school our children get thought that water consists of the gases hydrogen and oxygen, or sugar of carbon, hydrogen and oxygen. Anyone who does not understand is stupid. The most important questions are concealed”. (Wittgenstein, 1980:71)

If “training” is not to be irrelevant to the specific topic of “nature protection”, it must lead to an action. In the same vein, Explaining and defining are a kind of training and giving to understand, but the both aesthetic and scientific explanations are irrelevant in this regard since they are in direct contradiction to quotidian routine. Consumerism is so inextricably intertwined with our life that has led to our most honest aesthetic experience being cosmetics advertising that promises to give us the unmatched softness of nature in the form of soap or cream. Hence explaining the function and beauty of nature from the outside of the existing aesthetic experience is something superfluous and pointless; something that remained aloof from the real world. The same is true for children. The education that children receive from school is very different from the world they live in. Not only are they different but in conflict with each other as well. Over the years, pupils have been driven to appreciate and conserve nature by acquiring knowledge about it and understanding its necessity. However, over those very same years, other things such as the animated shows, video games and their form of family life create new needs and concepts, which are not compatible with the children’s accumulated knowledge. The pervasive influence of television and cartoons overshadows the constant coexistence of children with nature and the active engagement with it which consequently lead to having no first-hand experience of nature, even if we consider that these cartoons take a step to introduce children to nature, which is often not the case. Hence, the interaction between children who devote most of their free time to watching cartoons with nature will become annual trips to the heart of nature in which they learn to make the most of it by having secure Accommodation in luxurious hotels in the middle of nature with the stunning scenery as exquisite photos. Although these framed photos, engraved in our minds, are beautiful and impeccable, they are also too feeble and static to act as a catalyst for conservation. Therefore, accumulated cold knowledge provided just by the school curriculum, experts, and academic articles and so on act as the frosty ground on which nothing grows, since it is not aligned with the current form of life. We do not mean by this that the education system should confirm and follow hegemony and the status quo. I mean raising people’s awareness in a very broad sense, from the formal education system to NGOs should be accompanied by taking a concrete step to be contributing to any alteration and nudge people towards action, since it is people who have the real power to force governments to get their priorities right. Of course it is not a spontaneous power, but resulting from some “disruption” in the form of life or every day experience. In other words, people try to change their ideology when their experiences are not compatible with their ideology and in practice develop a new set of rationalities. (DC North, 1981: chapter5) In this regard, the related laws and paying tax or heavy fine can immediately spring to mind as a catalyst for nature conservation. Suppose that a country passes a sudden law that strictly forbids citizens to purchase clothing more than twice a year (because of the environmental cost of it), and impose a heavy financial penalty for violating the law.

Will these people follow the same procedure if they change their place of residence? Even a simple rule that is almost universally accepted, such as not polluting the sea, may be violated when the ban on it is lifted, let alone something imaginary such as a heavy fine on buying clothes, which is unconceivable in capitalist societies due to its negative impact on the fashion industry. But even if it does, it cannot be an effective solution because such laws do not guarantee that people will still behave as they did before where there are not those laws. That is where the debate about priorities is provoked. Utilizing aesthetic or scientific approach and tightening restrictions on the public cannot fill the vacuums left by dominant political, economic and cultural narratives. It is not the matter of knowing or not knowing that the scientific point of view can be effective as a guide, it is the matter of will. "What makes a object hard to understand—if it's something significant and important—is not that before you can understand it you need to be specially trained in abstruse matters, but the contrast between understanding the subject and what most people want to see. Because of this the very things which are most obvious may become the hardest of all to understand. What has to be overcome is a difficulty having to do with the will, rather than with the intellect." (quoted from Tolstoy Wittgenstein, 1980:17). Science could deepen our understanding, but cannot act as a stimulus to action; all of us are aware of the dangers of smoking, but this awareness does not prevent us from smoking. Science can develop and modify aesthetic views. For example, it is often much easier for people to understand the importance of a green and pristine forest than wetlands so for understanding the latter, ecological approach should come into play, but how close it brings us to action is questionable. Of course, science is not supposed to revolutionize everything we do, but when we do not feel that we reach a crisis point on one hand, and when the economic cycle overshadows other criteria on the other, scientists for having even a small impact on the public will inevitably devolve responsibilities for improving people's environmental knowledge to other things such as advertising which is intertwined to our everyday life. Green advertising can be a good example in this regard. Whether they have any successes in increasing environmental awareness or they are just registered diverging (Horkheimer, M., Adorno, 2002:104) from the status quo is beyond the scope of this article.

What we claimed so far does not mean that aesthetics and science are not effective at all, but we mean that when it comes to persuading the public into caring about the environment, there is too much emphasis on aesthetics and science. However, they should inextricably link to and enter into our life if they are considered as something that should be able to impact concretely and positively on people and not just in their minds. Of course, this "entry into life" is not a personal matter. Let us explain it more by providing some examples. These days, we have almost no control over the existence of machines and technology in our life. They have a continued existence in day-to-day life; the car we drive, the cellphone we use, the TV we watch and the like. Consider even a simpler and more basic example; we are not being reminded of using soap every day by emphasizing on its chemical compounds, which is needed for health. We use it unconsciously and on a regular basis. We internalized the use of it. Moreover, from an aesthetic point of view, we can talk about the sort of clothes we wear nowadays. No one now wears the clothes of the Elizabethan period. In fact, this is not something we even think about. We prefer (at least we think we do) to wear clothing that is widely accepted. What makes them necessary and inevitable? The

agreement among people. Where does this agreement come from? This is not in "opinions", but rather is in the "form of life. It is not far-fetched if we say that this agreement stems from economic and political climate, which in turn are derived from the same agreements and all of them shape the form of life. Now consider the application of these statements in environmental protection; there is not any real and practical agreement on the importance of environmental conservation. This means that even if there is agreement in our statements, there is no agreement in the form/s life of life. In other words, environmental protection has not become a necessity around the world, especially in developing countries (However, there are many exceptions, such as Bhutan). Using cellphones and cars is not alongside life, it is in life. Although talking about melting glaciers in several seminars or TV documentaries has a positive influence on people, it does not exert a powerful influence on their behavior. In fact, the amount of knowledge received from these kinds of documentaries or seminars is not on a par with the minor alterations made in our behavior. We always forget the importance of the ground and context in the education system. That is to say, although the trump card of education can be the characteristics such as "practice" and "continuity" (two characteristics that we mentioned in the previous section as mechanisms for action), but as long as we do not have the ground for concretizing what is taught, we only take one step forward and two steps back.

What connects us to praxis is neither aesthetic approach nor scientific one and they even invite us to take a very passive role; the mere viewers. The free play of imagination and understanding, in fact, is so passive and slow that it cannot play an effective role in protecting nature, and the importance of them are overemphasized. Our will cannot be shaped by them. "That wisdom is all cold; and that you can no more use it for setting your life to rights than you can forge iron when it is cold" (Wittgenstein,1980:53)"

Conclusion

If we agree that "environmental conservation" is" the overriding priority in "environmental aesthetic", we cannot easily count on "aesthetics" as something that leads us to the act of "conservation"; because generally in "aesthetics" there is no concern for doing an action, even if aesthetics is reinforced by science; what in fact creates an action is "belief" or "law". The former emerges from "form of life", so we cannot change it overnight to create belief. And the latter cannot be enforced suddenly, if we expect it to be effective. Of course, the role of education has not been ignored in this regard. However, the underlying issue related to this is apparent contradictions between the acquired knowledge and the way students live in the "real world" which makes them unable to find a connection between them, let alone educating people in adulthood. In this article, we do not attempt to put forward a new hypothesis about environmental aesthetics or to present a new theory in the field of education, but rather we try to show that there is nothing in aesthetics, science or even religion itself that can persuade people to do something such as "protect the environment". It is "always-living- in/with-them" that causes action. It is unreasonable that the public are expected to take an action because of the provided knowledge or aesthetic point of view, since the concept of "forms of life" is ignored.

Notes

1. The most important old account of aesthetics of nature belongs to Kant (1790), who can be the representative of eighteenth-century philosophy. The next predominant era in this regard commenced in 1966 with Ronald Hepburn (1966) which is followed by Allen Carlson (1979, 1995, 2007) who emphasized on the cognitive-scientific approach. Arnold Berleant (1992) shifted the focus onto the sensory experience of the object and lifted the barriers between subjects and objects and Aldo Leopold (1970) drew attention to the holistic environmental ethics. Knowing that there are many other professionals in this major, we just named these three philosophers as the quintessential thinkers in this regard.
2. In this article when we talk about “aesthetics”, we consider it as “aesthetics reinforced by science”. Hence, in many cases we just say aesthetics.
3. Here we mean the education system in general and almost everywhere, but there are some exceptions, for example in Nordic countries such as Finland or Norway, whose education system systematically and practically engages them to care about environmental issues and according to RobecoSAM, they become the most sustainable country in the world.
4. Based on Rick E. Borchelt, “communicating the future,” 194-211 there is a difference between “understanding” and “appreciation,” which the article emphasizes the importance of the latter. However, in our article such a difference does not matter
5. In our article we leave aside some intellectual traditions or religions such as Buddhism, in which peaceful coexistence is something that is intertwined with their daily life and may not be considered as a moral action separated from life, like what is seen in other religion
6. this motivation is addressed in this paper: “Nature, aesthetics, and environmentalism” (2008)
7. “The world is totality of facts” and “everything that is case” are Wittgenstein’s account of the world in *Tractatus* which means everything that is logically possible. For example, although it is not true that tigers can fly, it is not illogical to suppose them to do so. That is, the relationship between flying and tigers is possible because both of them exist in the world. However, it is not the case for the relation between “good” or “bad” and “murder” since good or bad are not objects in the world.
8. This term will be described later in section III.
9. See PH Gobster, JI Nassauer, TC Daniel, G Fry, “Shared landscape: what does aesthetics have to do with ecology?” This article clearly describes the positive impacts of scientific and aesthetic intervention on people's views about the environment.
10. Here I need to mention some organizations in developing countries such as “Tehran beautification organization” and “forest, range and watershed management organization” as the worst but the most pervasive cases regarding “beauty”, “production” and “conservation”. The former organization only designs for the purpose of beautification without considering environmental issues and the latter just emphasizes production to such an extent that conservation or even sustainable development seems nonsense to them.
11. In “culture and value” “this concept” means “believing in god”. However, here I mean “taking an action” that comes from belief, following Wittgenstein's thought.
12. See “Mary Evelyn Tucker and John Grim.” *Religions of the world and ecology series*. This series can be an excellent example in this regard.
13. See Hansen, A, & Cox, R. (2015) “The Routledge handbook of environment and communication”. Routledge

References:

- Berleant, Arnold. (2010) *The aesthetics of environment*, Temple University Press,
- Borchelt, R. E. (2001). “Communicating the future: report of the research roadmap panel for public communication of science and technology in the twenty-first century”. *Science Communication*, 23(2), 194-211.
- Brady, Emily. (2014). “Aesthetic value, ethics and climate change”. *Environmental Values*, 23(5), 551-570.
- Carlson, Allen, & Lintott, S. (Eds.). (2008). *Nature, aesthetics, and environmentalism: From beauty to duty*. Columbia University Press.

- Carlson, Allen. (1979). "Appreciation and the natural environment." *The Journal of Aesthetics and Art Criticism* 37, no. 3. 267-275.
- Carlson, Allen. (2007). "Environmental aesthetics".
- Carlson, Allen. (1995). "Nature, aesthetic appreciation, and knowledge". *The Journal of Aesthetics and Art Criticism*, 53(4), 393-400.- Hansen, Anders. & Cox, R. (2015). In *The Routledge handbook of environment and communication* (pp. 21-30). Routledge.
- Carlson, Allen. (1979) "Appreciation and the natural environment." *The Journal of Aesthetics and Art Criticism*" 37, no. 3 267-275.
- Hansen, Anders., & Cox, R. (Eds.). (2015). *The Routledge handbook of environment and communication*. Routledge.
- Hepburn, Ronald. (1966). "Contemporary aesthetics and the neglect of natural beauty". *British analytical philosophy*, 285-310.- Horkheimer, M., Adorno, T. W., & Noeri, G. (2002). *Dialectic of enlightenment*. Stanford University Press. Horkheimer, M., Adorno, T. W., & Noeri, G. (2002). *Dialectic of enlightenment*: Stanford University Press.
- Kant, Immanuel. (1914). *Kant's Critique of judgement*. Createspace Independent Publishing Platform. Createspace Independent Publishing Platform.
- Kreisel, Georg. (1958). *Wittgenstein's Remarks on the Foundations of Mathematics*.
- Leopold, Aldo. (1970). *A Sand County almanac*: With other essays on conservation from Round River. Outdoor Essays & Reflections. - North, D. C. (1981). *Structure and change in economic history*. Norton.
- North, Douglass Cecil. (1981). *Structure and change in economic history*. Norton.
- Pinkard, T. (2002). *German Philosophy 1760-1860: the legacy of idealism*. Cambridge University Press.
- Jenkins, W. J., Tucker, M. E., & Grim, J. (Eds.). (2016). *Routledge handbook of religion and ecology*. Routledge.
- Wittgenstein, Ludwig. (1992). *Logico-Philosophicus*, T. (1922). translated by CK Ogden. *Major Works: Selected*. Project Gutenberg
- Wittgenstein, L. (1980) von Wright, G. H., Nyman, H., & Winch, P. *Culture and value: Ludwig Wittgenstein*. Blackwell.