

# ENVIRONMENTAL VIRTUE ETHICS FOR THE ANTHROPOCENE IN BARBARA KINGSOLVER'S ANIMAL DREAMS

XU, L.<sup>1</sup> – ZAINAL, Z. I.<sup>1\*</sup>

<sup>1</sup> Faculty of Modern Languages and Communication, Universiti Putra Malaysia, Selangor, Malaysia.

\*Corresponding author  
e-mail: zainor[at]upm.edu.my

(Received 29<sup>th</sup> July 2025; revised 09<sup>th</sup> October 2025; accepted 19<sup>th</sup> October 2025)

**Abstract.** Human intervention on earth's macrosystem has ushered in the age of the Anthropocene, prompting introspection among humans. This epoch demands a reawakening of human conscience and inner motivation to shape the trajectory of the Anthropocene. Environmental virtue ethics claims that the fundamental cause of environmental crisis lies in humans themselves. This study adopts a textual analysis approach to examine emotions and actions exhibited by Codi Noline, the protagonist in Barbara Kingsolver's *Animal Dreams*. These traits are constitutive of making her environmentally virtuous, reflecting Kingsolver's ethical contention as a Pulitzer Prize-winning author. This paper is informed by Ronald Sandler's responsive virtues and productive virtues, which are, specifically, openness and courage. Additionally, originated by Aristotle, practical wisdom is employed to examine how courage better functions combined with practical wisdom. As a tentative practice in applying environmental virtue ethics to examine environmental virtues for the Anthropocene, this study reveals Kingsolver's endeavor of setting environmental virtue exemplars from fictional characters to inspire humans' long-term and stable contribution to a promising future.

**Keywords:** *anthropocene, Barbara Kingsolver, environmental ethics, environmental virtues, virtue ethics*

## Introduction

Coined by Crutzen (2007) in the article "Geology of Mankind," the concept Anthropocene was originally assigned to refer to a geological epoch in which human's influence to the planet has enlarged so unprecedentedly, and now has been expanding beyond its initial roots in geological sciences to various academic fields. The Anthropocene acknowledges human's decisive influence on the earth while emphasizing the interconnectedness of human and the environment, a concept that refers to the place where people "live, work, play, worship, and go to school, as well as the physical and natural world" (Bullard, 2005). Thus, it underscores the urgency of a more profound and holistic consideration of humans' responsibility. Climate change, ozone depletion, ocean acidification, species extinction, overpopulation, freshwater shortages, and other issues are becoming increasingly severe. These irreversible environmental problems caused by human activities are gradually emerging and will ultimately pose a significant threat to human survival and the sustainable development of the environment. Consequently, nature has been swallowed by human activities and influences, which have penetrated everywhere in this planet, rendering "the great inside, jointly shaped by each one of us in environmental virtue everyday life, like global interior designers" (Schwagerl, 2014). On one hand, this "great inside" informs us that human dominant power has trespassed the boundaries of human and nature, and the infinite natural world that used to be "the great outdoors" (Schwagerl, 2014) has been

deeply entangled with human. In this context, mutual influence emerges in a dynamic process in which human activities significantly impact the environment, and in turn, the altered environment affect humans. On the other hand, this “great inside” reminds us to think about human life from a broader scale of time and space. Every human individual, as an agent, participates and contributes to the overall impact, even though the effects of each action may not produce instantaneous results. For instance, someone in a moderately cool room in New York City who still chooses to run the air conditioner all day may not instantaneously cause a temperature increase in New York the next day, nor will this action directly lead to widespread temperature abnormalities in Asia. However, it is foreseeable that worldwide climate change will become increasingly severe for future generations, and one contributing factor to this worsening climate is the accumulation of seemingly insignificant and trivial actions, such as an act of repeatedly switching on the air conditioners.

In response to this challenge, humans should reconsider their roles of planetary stewardship as a decisive entity that emerges in an altered form relative within a broader context (Raffnsøe, 2016). This decisive entity implies that human is overly responsible for choosing which Anthropocene we will enter, and it is the decisiveness that requires human to “write a better future into the permanent rock records of Earth history” (Ellis, 2018). More explicitly, humans should rectify single behaviors to shape the planet in a good way, which suggests human should shift the concern and paradigm of searching for solution from “above” to “below,” namely from presidents or government to individual, families and communities. The cumulative impact of millions of individuals that undertake small and subtle actions will lead to significant and far-reaching consequences. Therefore, the importance of individual responsibility and commitment should be articulated. To actively grapple with the challenge brought by the Anthropocene demands promptly choosing the right actions and conducting them for the environment. What can human do to make a contribution to build a better Anthropocene? And how should human live in the Anthropocene? What environmental normative rules to follow and evaluate for the flourishing of multispecies? These questions constitute primary concerns of environmental ethics. Given this situation, one attainable objective for human to achieve is pursuing the excellence of individual's character, namely cultivating virtue, which is, after all, a rather accessible territory that one individual can virtually and actively reign. Dale Jamieson holds relatively pessimistic view on human's struggle in climate change, but still, he points out that “an ethics for the Anthropocene would, in my view, rely on nourishing and cultivating particular character traits, what I shall call ‘virtues’.” (Jamieson, 2014). According to Jamieson, cultivating virtue is a way of living a meaningful life when seeking for a visible action outcome becomes difficult. Besides, if an individual starts to cultivate virtues, this action itself is already a conducive outcome in terms of both the environment and the individual. Furthermore, Ronald Sandler defends that when confronting a wide array of environmental problems, the advantage of environmental virtue ethics is evident in that environmental ethics requires a dynamic and diverse set of evaluative concepts (Frasz, 2016). The richness of virtue language will provide more effective and nuanced evaluation. Entering an age full of individual variation, agent-oriented virtue ethics, which explores human character traits from the “inside”, is the most likely to provide constructive alternatives for this epoch.

The fundamental change in the Anthropocene that challenges our consideration of human relationship with the environment has enriched and significantly inspired

literature and studies on it. In this regard, literature as a site with its rich imaginative, narrative, affective, and reflexive resources provides platforms for researches and analyses who seek to explore ethical alternatives to address challenges in this human epoch. Specifically, ethics and literature are always interrelated: literature conveys authors' values by particularizing problems and situations, engaging readers to reflect on moral considerations and evaluations. Therefore, the moral value of literature should be articulated. To further explore ethics in literature, this study endeavors to join the ethical discourse by investigating environmental virtue ethics for the Anthropocene in Barbara Kingsolver's *Animal Dreams*, with the aim of inspiring individuals to realize their seemingly negligible but significant contribution to the environment. Centering on the protagonist Codi, this study seeks to address the following questions: Firstly, how does Codi cultivate the virtue of openness through her engagement with the environment? Secondly, how does the practice of courage cultivate practical wisdom, leading to Codi's self-improvement and a fulfilling life? Thirdly, what kind of environmental virtue ethics does *Animal Dreams* advocate in response to the challenges of the Anthropocene?

### ***Literature review***

Scholars have suggested ethical approaches to address ethical challenges posed in the Anthropocene, discussing how ethical advocations are conveyed through the analysis of literature. Meanwhile, virtue ethical studies in literature specify particular virtues in literary works to highlight the significance of virtues in directing moral actions and discover dispositions that are conducive to human's well-being. However, works concentrating on environmental virtues ethics are scarce, and often based on the assumption that environmental virtues can only be found in iconic and exemplary figures, such as Henry David Thoreau, Rachel Carson and Aldo Leopold. In studies on *Animal Dreams*, ecocritical, trauma, and spatial perspectives have been used to highlight the influence of the nonhuman on humans, yet the environmental virtues of humans remain underexplored.

### ***Environmental ethics and the anthropocene in literature***

As discussed before, the relationship of human and the environment should be reconsidered to address challenges posed by environmental crisis. The crisis created by humans has been so fundamental and worldwide that it directly results the advent of the Anthropocene in which human's decisive power has been a geological force. Considering this, a certain number of ethical approaches is put forward: a minimal ethics that highlights individual's responsibility was suggested by Zylinska (2014), an ethic of repair by McLaren (2018), an effective ethics that values individual sentiments and feelings by Callicott (2018) and wilderness ethics by Liu (2023) to provide alternative for ethical challenges in the Anthropocene. In this light, ethical studies in literature expand moral concerns to nonhuman, and they call for reconsidering the positions of humans in the Anthropocene. Such works include animal and plant studies (Aquilone, 2023; Gross, 2023; Powell, 2023; Spampinato, 2023) and studies that appeal to humans' awareness and consciousness towards the environment (Baysal, 2021; Angierski, 2020; Macduffie, 2018). However, the current ethical assertions focus more on the normative of humans' actions instead of actions agents, namely humans themselves. They tend to overlook what humans used to be and currently concentrate on

what human should do. In this age of humans, humans' decisions on what kind of person they want to be and what kind of virtues they are required to cultivate are of more significance to inspire each individual's contribution to improve the current situation. Hence, this study endeavors to investigate environmental virtues for the Anthropocene as to confront ethical challenges.

### ***Virtue ethics in literature***

Turning to virtue ethics, as an ethical approach which distinctively puts humans' characters in the center position to highlight the significance of cultivating virtues for self-understanding and development, virtue ethics has become increasingly prevailing both in environmental ethics and in analyzing literary works. Different from deontology which emphasizes duties and consequentialism which highlights outcomes of a certain action, virtue ethics centers on the virtues needed for moral character development by specifying virtues and vices. Hence, virtue ethics makes it possible for us to rediscover humans' freedom of choosing what kind of person we want to be as an internal motivation to regulate and improve ourselves, and to develop a sustainable human-to-human relationship for human and other species flourishing. The investigation of virtue ethics begins with ancient Greek literature and extends to classical and contemporary literature. Virtue ethical studies specify particular virtues such as sympathy, justice, courage and temperance, and practical wisdom (Boulding, 2018; Toner, 2017; Bharadwaj and Bhuyan, 2013; Stohr, 2006; Emsley, 2005; Bennett, 1974) and emphasize exemplary functions of virtue and character development (Stackle, 2017; Wainwright, 2014). These studies highlight the significance of developing moral character through the cultivation of virtues and rediscovering moral values in literary works.

However, virtue ethics confines its horizon on human-to-human relationship, assuming that individuals can reach self-improvement through interaction with another human. Considering the age of the Anthropocene, humans and the environment have become deeply entangled; they consistently influence each other, blurring the boundary between them. As a result, reconfiguring and reestablishing the relationship of humans and the environment becomes urgent. In this regard, the moral consideration of character development should include the environment, which entails expanding the scale of virtue ethics. Confronting gradually serious environmental crisis, the internal question of "what kind of person should I become?" is not only applicable in human world but also in nonhuman environment. That is to say, the resurgence of virtue ethics will only be completely realized if we broaden our relationships to the environment. Therefore, to consider environmental virtue ethics is to complete the picture of character development not only in terms of human-to-human relationship, but also in human-to-environment relationship. In addition, except for studies by Cafaro (1997) who focus on environmental virtue ethics, few have conducted environmental virtue ethical research in literary works, which makes this study a necessity to examine environmental virtue ethics for the Anthropocene in Kingsolver's work.

### ***Past studies on animal dreams***

As Kingsolver's third novel published in 1990, *Animal Dreams* is the recipient of Edward Abbey Award for Eco-fiction. It tells a story of the protagonist, Codi Noline, who ends her life of wandering, comes back to her hometown Grace to take a position

as a biology teacher in high school and participates actively in protesting Black Mountain company who has polluted the river. By the end of the novel, Codi finds herself a part of this community and decides to settle down in Grace. This novel has been primarily studied from three perspectives: ecocriticism, trauma studies, and spatial analysis. Firstly, ecocritical researches explore how the novel weaves political and environmental issues through Codi's growth and focus on environmental injustice that is the result of anthropocentrism and racism in Anglo-American culture (Swartz, 1993). Rajalakshmi and Clement (2023) concentrate on the narratives of environmental degradation through the lens of toxic discourse to raise public awareness, and Kang (1996) criticizes anthropocentric exploitation of mining pollution of Black Mountain company and patriarchal abuse by Codi's father. Secondly, trauma-focused analyses (Zhu, 2021; Tang, 2012; Strickler, 2010) examine how place and memory facilitate identity reconstruction, particularly through Codi's and her father Doctor Homero's psychological wounds, revealing trauma as both destabilizing and generative for belonging. Thirdly, applying the notion of "space and place" and "invisible landscape", Painark (2017) regards environment as an agent in healing and community reconnection, aligning with Kang's ecofeminist claim that Codi's self-realization to resist hierarchies.

To sum up, as a novel that reflects Kingsolver's early environmental assertions, *Animal Dreams* is crucial for constructing a comprehensive map of her environmental ethics. A point worthy of note is that Codi, the protagonist, has been analyzed through the lens of her negative identity and struggles within the social community. However, her character traits toward the environment that are both directly and vividly portrayed in the novel have remained largely unnoticed. The manner in which she cultivates environmental virtues renders her interactions with the environment particularly worthy of scholarly attention. I argue that Codi's direct awareness of her feelings and instant actions marks the beginning of cultivating virtues of openness and courage, and she cultivates practical wisdom through her teaching practices as a biology teacher. Her environmental virtues empower her to attain a flourishing life, and it is these virtues that form the foundation of a pluralistic and comprehensive environmental virtue ethics.

## Materials and Methods

Contemporary environmental ethics seeks to establish the norms that should govern human interactions with the environment. Considerable emphasis is placed on external rules and principles to establish the norms of action. However, less attention is given to investigate the internal norms of an agent's character, which necessitates the emergence of environmental virtue ethics. Ronald Sandler classifies virtues of communion with nature and virtues of activism in his construction of environmental virtue ethics. As overlapping these virtues may be, virtues of communion with nature can be regarded as responsive virtues that "involves responsiveness to some environmental entities" (Sandler, 2009). Virtues of activism can be considered as productive virtues that "promotes or maintains environmental goods or values" (Sandler, 2009). As an agent-centred study, this paper analyzes Codi's psychological and ideological dimensions, including her desires, emotions, values, and moral beliefs (Hébert, 2022), to uncover how her cultivating virtues shape responses to environmental challenges. This study applies a textual analysis to identify openness and courage qualified as environmental virtues and examines how these virtues contribute to both personal flourishing and

ethical engagement with ecological crises. Firstly, it focuses on humans' responsiveness, direct emotions and feelings towards the environment, to investigate the process of Codi in cultivating the virtue of openness which establishes the foundation for connecting with the environment. Secondly, this paper examines how courage, as a productive virtue, is developed combined with practical wisdom to guarantee the actional and effective outcome of openness and to achieve Codi's self-improvement and lead to a fulfilling life. The analysis also emphasizes the role of practical wisdom (Aristotle, 1999) in bridging moral reasoning and action, demonstrating how Codi cultivates virtues through living experience rather than abstract principles. Ultimately, the combination of responsive virtue and productive virtue forms an encompassing structure of environmental virtue to explore the kind of environmental virtue ethics advocated in *Animal Dreams* for the Anthropocene.

## Results and Discussion

### *Codi's cultivation of openness*

Openness is a responsive virtue that involves emotional responsiveness to environmental entities. It is also a virtue of communion with nature that allows people to enjoy and be benefited by the natural environment (Sandler, 2009). An environmentally open person has "positive feeling, and the capacity to feel what there is to feel from another, whether person or any other entity" (Frasz, 2016). In *Animal Dreams*, Codi begins to cultivate the virtue of openness when she is directly aware of her feelings and allows the feeling to orient her attitudes toward the environment. This positive feeling includes being appreciative, respectful and receptive to the environment. More specifically, Codi is appreciative of the natural beauty of the environment, being respectful to the animals and being receptive to inspirations from the nature. She also acknowledges that the environment is influencing herself, and this mutual impact indicates the interconnectedness of human and the environment. In the beginning of the novel, Codi ends her wandering life and comes back to her hometown, Grace. As a used-to-be medical college student, she takes the position of a biology teacher in a high school in Grace and participates actively in protesting against Black Mountain company who has polluted the river. At first, Codi identifies herself as an outsider who does not belong in Grace. However, her character traits of being appreciative, acceptive and respectful to the environment have helped her to reestablish the connection of the environment and awareness of being a part of it.

Codi's old classmate Loyd takes her to Whiteriver to familiarize her with Grace. They enter an eight-hundred-year-old building whose stonework fascinates her: primarily rectangular stones of varying sizes, arranged in layers. This structure reminds her of cells under a microscope. Then, she marvels: "[i]t doesn't even look like it was built," ... it's too beautiful. It looks like something alive that just grew here" (Kingsolver, 1990). The intricate patterns of the architecture echo the organic elegance of life itself. Though buildings are quintessentially artificial human creations often considered as the most unnatural objects, Codi sees this structure differently. In her eyes, its structure that resembles organic cells transcends this dichotomy. What she finds beautiful is the same refinement found in nature's cellular patterns, now reflected in the architecture. To her, the building's design does not just mimic life; it embodies the same inherent beauty, making the distinction between natural and artificial irrelevant. Her words toward the building remind us that humans and the environment

have been interconnected and mutually influenced, if we glorify the wonders of human, we might be glorifying the myths of nature who has already completed a delicate design for every living life. Thus, the less boundaries, the greater the possibilities and tendencies for interaction and mutual influence of both sides. Codi's openness firstly indicates that her viewpoint of identifying others is appreciative, which lays a foundation of connection with the environment.

Moreover, Codi finds the structure beautiful precisely due to its lifelike appearance. She associates beauty with natural, organic forms that seem to grow and exist independently of human intervention. Its resemblance to living organisms evokes her aesthetic appreciation. In Codi's view, "too beautiful" is more an expression of admiration for the exquisite construction of the wall and a profound respect for the complexity of natural life forms. It is through this respect for life that a sense of beauty emerges. Her appreciative stance is highlighted, where Codi's awe is not merely directed at the beauty of the architecture but rather at the structural precision of the wall, which she associates with the intricacy of cellular structures. Thus, rather than marveling at the architecture itself, it would be more accurate to say that she experiences a deep admiration and reverence for the beauty inherent in the cellular organization. An aesthetic attitude towards nature is an "important component of a successful conduct of life" (Seel, 1996), it is elementary in orienting an individual to reconnect with the environment. This direct perception of environmental beauty signifies an enhanced perceptual capacity, one that fosters an openness to the influences of the environment. This openness dissolves the boundaries between the self and the environment, allowing a balance point, in Aristotle's words, between two extremes of closeness and blindly devaluing or losing oneself to both enjoy and benefit from the environment (Aristotle, 1999). By reestablishing a dynamic connection with the environment, Codi is not only open to its influence but also becomes aware that she is influencing the environment through this reciprocal interaction.

Additionally, it would appear too shallow claiming that an environmentally open person is merely able to open to appreciate his or her aesthetic experience in environment. Being open is not only concerned with character trait that is able to appreciate surrounding environment and discover its aesthetic value, but it also entails shows respect to others, regarding them as a fellow subject who has its own telos without any further reference to human utility (Frasz, 2016). In this respect, Codi's openness is further demonstrated from her response when she watches a cock fighting match. Loyd invites Codi to watch a cockfight in Whiteriver. She is informed that cockfighting is a traditional activity held during the day, which surprises her, as she has assumed that such an event would be a clandestine affair conducted after sunset. Upon entering the arena, Codi particularly notices the stark contrast in the state of the cocks before and during the fight. These birds are selectively bred for strength and specifically designed for combat with small wings and powerful legs. Their lives are dedicated solely to fighting, with functionality prioritized over individuality. However, despite being deliberately bred for aggression, these cocks remain calm before the fight, as Codi observes, "actually they looked neither pleased nor displeased, but stalked in circles, accustomed to life on one square yard of turf" (Kingsolver, 1990). She sees the origin state of these animals, imagining that if they had not been brought here to fight, they would simply be strutting through the dust in search of cracked corn.

She then observes how the handlers provoke the fighting instincts of the two cocks. As they are pushed closer together, they immediately begin biting each other's faces,

chasing and jumping at one another in the attempt to drive their spurs into their opponent's breast. Within just thirty seconds, she sees one cock lying helplessly on the ground. Believing the fight to be over, she is surprised when the handler lifts the wounded bird, compelling it to stand and continue the battle. The match will only end when one of them dies. Codi's emotions shift palpably. In the beginning, she acknowledges this cock fighting tradition when she recalls her knowledge of biology. It is the animal's natural impulse to defend its territory when being threatened, but once its territory is established, this impulse fades. This neutral feeling that she gets from the books indicates that Codi admits the intrinsic value of each creature for its own goals, concerns and needs independent of any potential utility for human. There is nothing doubtful for an animal to act just as what an animal is. However, she believes that "[n]o animal has reason to fight its own kind to the death" (Kingsolver, 1990). She respects the natural and instinctive response of the animal who has rights to protect their territory, and she interprets this action as following natural rules of living. Thereafter, her effusive feeling shifts into disappointment and anger when she sees the handler still forces the cock to fight against their natural instincts, manipulating their defensive nature to attack each other for attracting more betting and attention after first 30-second battle. The cocks are just tools for them to make money. The intentional mutilation lasts for thirty or forty minutes, which is unbearable for Codi to watch. She cannot help but says, "[t]his is making me sick", assuming that "nobody could look at this picture and fail to see cruelty" (Kingsolver, 1990).

To avoid the brutal scene and look for some comforts, she turns her view to the crowd, "whose faces betrayed neither pain nor blood thirst but passive interest" (Kingsolver, 1990). The crowd's passiveness and closeness are a sharp contrast to Codi's openness. She further says: "it could have been any show at all, not two animals obliged to kill each other; it could have been TV... What I believe is that humans should have more heart than that. I can't feel good about people making a spectator sport out of puncture wounds and internal hemorrhage" (Kingsolver, 1990). Codi respects the fighting cock as an independent fellow subject who has its own intrinsic value and unique beauty. She recognizes the inherent instinct of an animal to defend their territory. Yet, when she witnesses their natural and beautiful feather being damaged by mutual violence, a spectacle deliberately arranged by the handlers only for money, she finds it unbearable to watch: "the animals are both exhausted and near death, and they are no longer even faintly beautiful" (Kingsolver, 1990). Moreover, the crowd's apathy and indifference deepened her outrage. This time, Codi's strong feelings toward those fighting cocks has motivated her to convey disagreement and antipathy, conducting a serious conversation with Loyd. She tries to persuade him to stop engaging in this brutal and pointless game. Consequently, Loyd is convinced and gives up the business of cock fighting. The above two examples have demonstrated how Codi, as an open person, feels and responds to the environment by being appreciative and respectful. The next example will point out that being open is not only about feeling what oneself really feels, but open to be influenced by the environment and accepting new ideas.

After being invited to watch a rain dance by the folk, Codi regards this ceremony as business transaction with Gods. In return, Gods will send rain and good crops back and nothing bad will happen even if human is the cause. However, Loyd corrects her by saying "it's not making a deal, bad things can still happen, but you want to try not to cause them to happen. It has to do with keeping things in balance" (Kingsolver, 1990). He further identifies himself and his ethnicity as house guests who are on their own to

live by borrowing resources provided by God. Loyd's patience on explaining and his accurate examples enable Codi to understand that the philosophy of keeping in balance is "keeping the peace" or "remembering your place", and she begins to feel embarrassed by her utilitarian arrogance and realizes this is a new angle of religion for her. She further reflects that Loyd's full devotion to his land is not the result of his patriotism but his grief over its destruction by American industry, condemning the moral blindness of the nation who proclaim themselves as house guests so as to recklessly plunder the land while pretending it won't remember. Born and raised in America, Codi is inevitably brought up with and influenced by American utilitarianism, she is costumed to evaluate a certain phenomenon by judging its contribution to the benefit of most people. However, when she is exposed by the environment and enlightenment with local people, she is open enough to convert from her close-off arrogance to receive, update and accept new ideas that contradict her previous life philosophy. While identifying herself as a house guest living in this world, Codi manages to connect herself as a part or a member to the environment. At the same time, she acknowledges her distinctive identity of maintaining the peace of the environment, which resonates with Frasz's words, "[n]ature provides to the 'open' person an experience of distinction as well as connection" (Frasz, 2016). Codi's constant contact with the environment has imperceptibly converted her position in Grace from an "outsider" and "invisible" to a person who is able to follow her intuitive feelings and emotions when getting familiar with the environment. Codi, the protagonist of *Animal Dreams*, has cultivated openness by directly responding to her feelings, being appreciative, respectful and receptive through her environmental experience. This engagement can be regarded as a basic virtue that provides an emotional basis for an individual to eventually invest in actions to protect the environment.

### ***Codi's cultivation of courage***

However, focusing purely on feelings and attitudes, namely openness, towards the environment will not suffice to practically preserving environmental values. Actions need to be taken. Openness, as a fundamental environmental virtue, enables direct individual response and attitudinal reorientation. Courage is a virtue of activism that is conducive to achieving any worthwhile ends and necessitates this openness into action (Sandler, 2006). Sandler further pointed out that a majority of people identify themselves as being concerned with environmental problems, but fail to take actions accordingly. In this sense, he reemphasizes courage as a productive virtue that promotes or maintains environmental goods or values (Sandler, 2009). Courage is a willingness of facing up risks, "an ability to do what needs to be done despite fear" (Scarre, 2010). Frederick (2014) claims that, a courageous person is morally motivated to stand up as an agent for the sake of promoting environmental goods and values, he or she is willing to face the environmental problem and make efforts to conduct sustainable practices. In *Animal Dreams*, Codi cultivates her environmental courage by being willing to confront uncertainties or minimal consequences and taking actions instantly to be engaged in activism for environment protection.

As a biology teacher, Codi organizes a field trip to the river to engage her students in learning about diverse plants and animals. She asks them to collect some samples of the water to examine what is under the microscope. However, when they bring out the scope waiting to see the micro world, they see nothing. The river is dead with its PH even higher than the battery acid. To investigate the river's deterioration, Codi assigns

students a homework, requiring them to ask their parents for more information about the river. The results are astonishing: sulfuric acid and blue vitriol discharged by the Black Mountain Company, a mining corporation, have contaminated the river, resulting in severe ecological degradation. More alarmingly, irrigation with this tainted water exposes vegetation to conditions akin to acid rain, causing further harm. Codi becomes the first one who finds out the river has been polluted by the Black Mountain Company. Learning about this situation, Codi identifies its illegality and instantly shares the news with the local people. Strangely, this alarming reality does not seem to disturb them. One of the local people says: "What difference does it make? Nobody's interested in a dipshit little town like Grace. They could drop an atom bomb down on us here and it wouldn't make no news in the city" (Kingsolver, 1990). Codi is surprised to see the indifference. She wants to take some actions to express her environmental concerns. As a bystander who has just come back to Grace, it is unrealistic for Codi to initiate and organize a protesting demonstration to stop the company's illegal leaching. She then chooses to file an affidavit together with local authorities on the pH and biotic death of the river, using all of the scientific vocabularies to make sure it is evidential.

Under this circumstance, she does what she can do immediately and believes that scientific evidence will help the lawyer to send a lawsuit to the company, trying to save Grace from being destroyed. As a newcomer to the town, choosing not to follow the common indifference that other native people hold requires courage. She resolves to send the letter, driven by her conviction that raising awareness of the pollution is vital for environmental protection. Her courage is evident in her immediate action, despite knowing others may deem it futile and unrewarded. However, her letter cannot immediately stop the company from polluting the river. She learns that the lawsuit against the company will take ten years, by which time the entire town will have been poisoned and wiped out. Fortunately, her letter is not without any effect. The letter she wrote made her scientifically famous in Grace. Thereafter, she is invited by a local club organized by local women, "Stitch and Bitch Club", as a special guest scientist to give a speech for the local and introduce the contamination. She accepts the invitation, even though she does not know what she can say to the club member. The major obstacle that prevents people from taking actions to protect the environment is the ubiquitous belief that one's minimal action has trivial and limited impact. Thus, what makes Codi courageous is that even when there are uncertainties on the outcome of the action, she is still willing to play the role of a pollution knowledge translator and information mediator for Grace. In the age of the Anthropocene, the fear that a courageous person has to overcome is no longer the dread and direct threat of blood or sacrifice in battlefields. It is the invisible and unknowing uncertainties and the fear of being different from other's inaction, that hinders one from engaging in activism. In this sense, courage is the readiness to engage in activism as long as taking actions matters. Codi's courage is an example of what an individual can do in the age of the Anthropocene in which every single action seems inconsequential but vital.

### ***Codi's cultivation of practical wisdom***

Courage is a willingness to take risks to support environmental concerns. And as the virtue of activism, it guarantees the actional outcome of virtue of openness. However, a person who is both open and courageous may not be an environmental virtuous person if she is not able to effectively achieve environmental ends. An effective action not only relies on proper reorientation of attitude, but requires flexible judgments and strategies

to reach specific goals, which is practical wisdom. As a term first coined by Aristotle (1999), practical wisdom is “a state grasping the truth, involving reason, concerned with action about things that are good or bad for a human being”. It is a knowledge of how to act well. More specifically, “it requires both a general understanding of what is worthwhile in human life and the ability to act in ways that reflect that understanding” (Stohr, 2006). In Codi's case, the virtue of being open establishes her emotional connection with Grace and provides motivation for developing positive attitudes. The virtue of courage ensures the direction of her action and imbues her the reasons for taking actions to protect her hometown. And practical wisdom guides her how to act in the right way to achieve her environmental goals. Following this definition, we contend practical wisdom as an encompassing virtue as well as advanced virtue that includes external knowledge of particular circumstances and internal understanding of oneself for an integrated reference. Being equipped by practical wisdom, an individual can make proper moral judgments to fit into specific situations while acknowledging one's limitation and ability to make correspondingly good decision to act. As the name suggests, to acquire practical wisdom needs practices and flexible judgements to determine how to make an action meet the end.

As we have discussed before, Codi is courageous to send a letter full of scientific knowledge to the local, hoping to publicize the polluting the river. However, her letter does not make a big difference, she does not notice that too much professional language is not helpful for the locals to be aware of the problem, which ultimately remains as a pure academic issue. The lack of adequate situational information renders the action largely ineffective. Next, after having conversations with the locals of “Stitch and Bitch Club”, she develops a deep understanding of the situation: it is the lack of information that results in public indifference. This is precisely why they do not conceive the situation as hopeless. So, she starts to explain the situation in simple and everyday terms, helping the local to fully understand the seriousness of the pollution. She gradually realizes that “what they wanted was not sympathy or advice, but information” (Kingsolver, 1990). As a guest scientist and a new returnee of Grace, she can properly provide information rather than sympathy or advice. This communication helps her to recognize her position in this town. In other words, she starts to realize her part in this community, knowing what she can do as a biology teacher and a guest scientist. With information provided by her, the club decides to sanction mass demonstrations against Black Mountain's leaching. This time, her actions work out. It marks the beginning of her establishing a deeper connection with her community. Further, the club members decide to craft potteries decorated with peacock feather for fundraising And Codi is elected to write and record the struggling history of Grace against the mining company. The notes she writes are printed out to roll in each of the potteries to share the story of Grace with the public. Being respected by the locals as an expert encourages her to further engage in this protest, and Codi reflects on her role as a biology teacher educating students and gradually articulates her rational intention: “I want them to be custodians of the earth” (Kingsolver, 1990). This practical and explicit goal setting is significant for Codi, from a bystander who is not sure what she can offer to this town, to a member of this town who is able to defend her hometown and make full use of her job to educate her students to make environmental contributions. Moreover, by identifying herself and her students as custodians of the earth, Codi has conveyed her justified moral consideration towards the environment: rather than being a dominator or master,

human's role is nothing but a custodian, whose responsibility is to steward and protect the earth.

Since Codi realizes the significance of both acquiring external and internal knowledge, what matters next is how she takes actions to reflect this understanding to reach the final goal, which requires more than once practice. On the club's second fundraising trip to Tuson, Codi turned the sales event into a class project, hoping her students would learn more about their hometown's history and the severity of its pollution. To her disappointment, her students only treat the event as a funny adventure. Their reactions infuriate her: "I screamed at them because Black Mountain was poisoning their mother's milk and all they cared about was sex and a passing grade" (Kingsolver, 1990). She then delivers a lecture that introduces how rain forest and oxygen connected, but one of the students still wonders how much the lecture will be tested. Hearing this, she adopts a more warning tone, comparing their lives to the test, "if you flunk this one, you die." She likens the students' awareness of environmental pollution to a life-or-death test, if they fail to realize its seriousness or change their indifferent attitude, they will not merely fail this test but perish in it. More troubling, one of them says the trees will grow back and there will be other mountains if they are polluted. Noticing they still remain closed-off on what is happening around them, Codi has gradually grown into indignance, from "feeling that I might explode, ticking like a bomb to "I felt strangely high, furious and articulate" (Kingsolver, 1990). This strong emotion and students' numb reactions reflect the difficulty of achieving her goals only by giving lectures once. Transformation of students' environmental attitudes is a long-term process that requires sustained educational practices and deliberate connections with daily-life topics concerned by students. This necessitates Codi to observe closely in order to come up with a flexible strategy and conduct an adaptive delivery method.

She manages her temper and remains reasonable by lowering her voice to reframe her explanation. Finding a relatable analogy, she links pollution to student culture by highlighting a student's stone-washed jeans. She then explains how volcanic mountains are mined for the gravel required to produce such denim. Hearing examples that are related to their life, students are no longer nonchalant, they look stunned and their pens stop moving. Codi continues by using an urgent tone: "What you people learn for a test you forget the next day. That's bullshit. That's a waste of your brains and my time. If I can't teach you something you'll remember, then I haven't even been here this year." I crossed my arms and glared at them. "You kids think this pollution shit is not your problem, right? Somebody will clean up the mess. It's not your fault. Well, your attitude stinks. You're as guilty as anybody. Do you, or do you not, think the world was put here for you to use? (Kingsolver, 1990) The telos of teaching is to educate students, and giving lectures serves as the most common method for this goal. Hence, Codi values each of the lectures for communication, deeming that if students do not learn anything worthwhile to remember, then it is her dereliction. Hearing this, students remain silent, being ashamed of what they used to think, and rush out of the classroom after the bells ring. From then on, the students' attitudes start to change. Codi's endeavor begins to have an impact. Codi demonstrates self-reflection when confronted by her student Connie, who questions her anger. She responds with openness and sincerity, admitting: "because I'm guilty too, I guess. And now I'm trying to fix it all at once" (Kingsolver, 1990). She chooses to be honest with her students, which brings them closer to understand deeper about each other. Just as Schwartz and Sharpe (2010) point out: "A wise person knows how to make emotion an ally of reason, to rely on emotion to signal

what a situation calls for, and to inform judgment without distorting it". Codi gradually comes to understand the equal importance of emotion and reason. By authentically expressing appropriate emotions and connecting environmental knowledge to topics students care about, she wisely manages to influence and transform students' environmental attitudes.

After that, students become gradually obedient to follow Codi's instructions and willing to be exposed by more environmental information. It becomes evident that Codi's practical wisdom not only facilitates the achievement of her goals but also wins her students' respect and admiration. Consequently, Codi's contract of a temporary teacher is renewed by the school board, and she enjoys huge popularity among her students by offering innovative and enlightening classes about the environment and is awarded as "Teacher of the Year". Recognizing her job as a teacher who has duties to help to protect Grace, Codi is able to maintain her emotion in a proper state to effect students while trying to adjust lecturing strategies and relate different topics to practically make students to be aware of their environment. Codi performs her social practice well as a biology teacher: she manages to "figure out the right way to do the right thing, in a particular circumstance, with a particular person(s), at a particular time" (Schwartz and Sharpe, 2010). The way she acts reflects her good understanding of what is worthwhile and ability to reflect this understanding is practical wisdom. In *Animal Dreams*, Codi finally settles down in Grace, embarking on a flourishing life in which she can enjoy highly qualitative relationship with others and attaining a well-deserved social status being a teacher in the town. Therefore, cultivating virtue is not only conducive to the environment, but also benefits the individual. Her story indicates that only those who can respond appropriately to the environment are likely to take proactive actions to protect it. Codi cultivates openness by demonstrating appreciation, respect, and receptiveness through environmental interactions in Grace. Being open to the environment facilitates mutual interconnection. Such engagement forms a fundamental virtue that establishes the emotional foundation necessary for individuals to ultimately commit to environmental protection. Thus, openness as an environmentally responsive virtue is firstly highlighted in the framework of environmental virtue ethics. Furthermore, Codi responds well by facing her emotions directly and letting this emotion motivate her environmental action. She not only appreciates natural beauty but also courageously transforms this beauty to individual duty to drive her actions while acknowledging the uncertainties of the outcome of the action. With practical wisdom to ensure the right way of actions taken and enhance the likelihood of ultimately achieving her environmental goals, she finally establishes meaningful communication with her students, fostering positive attitudinal shifts toward the environment and nurturing their potential as future custodians of the planet.

Environmental virtue ethics cannot be a mere emphasis of one single virtue, that is why Sandler (2006) puts forwards a pluralistic account on environmental virtues because humans are complex beings when dealing with intricate environmental issues. Environmental virtue ethics is a combination of responsive virtues who give importance to emotions and productive virtues that lead to proper actions to effectively maintain environmental values. Only when environmental awareness and responsibilities transforms into concrete actions and practices can it truly protect the environment. This shift enables mutual flourishing of human and the environment. In this way, openness, courage and practical wisdom construct an encompassing framework of environmental virtue ethics through Codi's encounter with the environment in Grace. What makes

Animal Dreams an excellent environmental text is its rich and vivid description of characters' feelings and actions when confronting environmental problems and conflicts. A series of events that Codi encounters is as negligible and mundane as in every individual's daily life, yet it is so common that it can easily resonate with each one of us who read it. She sets a good example for us on what kind of person we can be so as to take proper actions to protect the environment. In the era of Anthropocene, environmental issues have become human-dominated, and it is characterized by its global scale, profound impact and irreversibility. The significance and decisiveness of each individual's actions are increasingly salient. It necessitates a revival of environmental consciousness in every citizen, an internalization of moral principles, and proactive engagement in feasible actions. And it is such an initiative and internalization that constitute the very process of cultivating virtue.

## **Conclusion**

Codi starts to cultivate openness as an environmental virtue when responding with her feelings becomes a disposition of her character. She responds through appreciating the environment, being respectful to animals and open to receive natural enlightenment and willing to consider a different viewpoint. By taking actions to engage in both individual and collective activism to prevent the Black Mountain company from polluting the river, she cultivates courage despite uncertain consequences and possible minimal impact. Together with courage, the practical wisdom she gradually acquired through her practices ensures her success in achieving the environmental goal, to educate students to be custodians of the earth. The portrayal of Codi's story accounts for a pluralistic environmental virtue ethics tailored for the Anthropocene. It integrates responsive virtues, productive virtues and practical wisdom, providing a virtue ethical answer of what kind of people we ought to become when confronting environmental problems. In this regard, environmental virtue ethics not only prompts critical reflection about what defines our humanity but also motivates us to overcome the challenges of the Anthropocene with individual engagements. The novel enlightens us that morality is neither grand, unattainable ideal nor character traits that remain unchanged. Rather, it is an essential ability that everyone can cultivate, as long as we use our brains to feel and hands to take actions. When an individual internalizes moral norms and acts out of a sense of what is good, rather than concerning or fearing of invisible outcome or potential risks, she is considered morally good. As the name of the novel, Animal Dreams, suggests, animals have dreams to survive and flourish in the environment, human share the same dream but should strive to realize the dreams in an ethical way. When we falter and fall into despair about what we can do for the Anthropocene, we might turn to Codi for inspiration, setting her as an environmental exemplary figure to learn how to be open, courageous and wise in practicing actions.

## **Acknowledgement**

This research is funded by Faculty of Modern Languages and Communication, Universiti Putra Malaysia, under Geran Penyelidikan Mikro 2025.

## Conflict of interest

The authors confirm that there is no conflict of interest involve with any parties in this research study.

## REFERENCES

- [1] Angierski, K.N. (2020): *Fictions of Empathy: Embodied Ethics in Contemporary Anthropocene Literature*. – Cornell University, New York 192p.
- [2] Aquilone, V.B. (2023): *Refoliating the Anthropocene: Plant Being and Indigenous Ecological Knowledges in 20th and 21st Century Black Women's Literature*. – University of Delaware, Newark 409p.
- [3] Aristotle, B. (1999): *Nicomachean Ethics*, (trans. Irwin, T.). – Hackett, Indianapolis 182p.
- [4] Baysal, K. (Ed.) (2021): *Apocalyptic visions in the Anthropocene and the rise of climate fiction*. – Cambridge Scholars Publishing 280p.
- [5] Bennett, J. (1974): The conscience of huckleberry Finn. – *Philosophy* 49(188): 123-134.
- [6] Bharadwaj, A., Bhuyan, N. (2013): Understanding the Character of Santiago in *The Old Man and The Sea* within the Framework of Aristotelian Virtue Ethics and its Contemporary Relevance in Ethical Management. – *Decision* 40(3): 223-233.
- [7] Boulding, L.A. (2018): *Margaret Atwood: Speculative Fiction and Virtue Ethics* University of Kent, England 382p.
- [8] Bullard, R.D. (Ed.) (2005): *The quest for environmental justice: Human rights and the politics of pollution*. – San Francisco: Sierra Club Books 19: 32-33.
- [9] Cafaro, P.J. (1997): *Thoreau's Vision of a Good Life in Nature: Towards an Environmental Virtue Ethics*. – Boston University, Boston 511p.
- [10] Callicott, J.B. (2018): *Environmental Ethics in the Anthropocene*. – *Transtext(e)s Transcultures* 20p.
- [11] Crutzen, P.J. (2007): *Geology of mankind: the anthropocene*. – *Ecologie & Politique* 34(1): 141-148.
- [12] Emsley, S. (2005): *Jane Austen's Philosophy of the Virtues*. – Palgrave Macmillan, New York 202p.
- [13] Ellis, E.C. (2018): *Anthropocene: A Very Short Introduction*. – Oxford University Press, Oxford 183p.
- [14] Frasz, G. (2016): *Environmental Character: Environmental Feelings, Sentiments and Virtues*. – *Ethics in Progress* 7(1): 32-43.
- [15] Fredericks, R. (2014): *Courage as an Environmental Virtue* – *Environmental Ethics* 36(3): 339-355.
- [16] Gross, C. (2023): *Healing, resistance, transformation: Evolving Intimacies in the Age of Climate Change*. – Iowa State University, Ames 95p.
- [17] Hébert, L. (2022): *Introduction to Literary Analysis*. – Routledge, New York 254p.
- [18] Jamieson, D. (2014): *Reason in a Dark Time: Why the Struggle Against Climate Change Failed-and What It Means for Our Future*. – Oxford University Press, Oxford 266p.
- [19] Kang, Y.K. (1996): *Poststructuralist Environmentalism and Beyond: Ecoconsciousness in Snyder, Kingsolver, and Momaday*. – Indiana University of Pennsylvania, Pennsylvania 144p.
- [20] Kingsolver, B. (1990): *Animal Dreams*. – Harper Collins e-books, New York 384p.
- [21] Liu, T.Y. (2023): *Wilderness Ethics in the Anthropocene*. – *Culture as Text* 2(1): 105-118.
- [22] Macduffie, A. (2018): *Charles Darwin and the Victorian Pre-History of Climate Denial*. – *Victorian Studies* 60(4): 543-564.
- [23] McLaren, D.P. (2018): *In a broken world: Towards an ethics of repair in the Anthropocene*. – *Anthropocene Review* 5(2): 1-19.

- [24] Painark, W. (2017): *Healing Place and Self: The Renewed Ecological Perception and the Invisible Landscape in Barbara Kingsolver's Animal Dreams*. – *Manusya: Journal of Humanities Regular* 20(1): 69-92.
- [25] Powell, K.I. (2023): *Ecology and Retribution: Blake, Tokarczuk, and Animal Rights*. – Brigham Young University, Provo 36p.
- [26] Raffnsøe, S. (2016): *Philosophy of the Anthropocene: The human turn*. – Springer 75p.
- [27] Rajalakshmi, E., Clement, S.K. (2023): *Reconceiving Barbara Kingsolver's Animal Dreams from an Ecocritical Perspective*. – *IIS University Journal of Arts* 11(3): 208-218
- [28] Sandler, R.L. (2009): *Character and environment: A virtue-oriented approach to environmental ethics*. – Columbia University Press 216p.
- [29] Sandler, R.L. (2006): *A Theory of Environmental Virtue*. – *Environmental Ethics* 28(3): 247-264.
- [30] Scarre, G. (2010): *On Courage*. – Routledge, New York 192p.
- [31] Schwagerl, C. (2014): *The Anthropocene: The human era and how it shapes our planet*. – Synergetic Press 248p.
- [32] Schwartz, B., Sharpe, K. (2010): *Practical Wisdom: The Right Way to Do the Right Thing*. – Riverhead Books the Penguin Group, New York 336p.
- [33] Seel, M. (1996): *Eine ästhetik der natur*. – Frankfurt: Suhrkamp 1231: 388p.
- [34] Spampanato, P. (2023): *The Unstoppable Anthropocene Engine: Animal Studies in Literature and the Lack of Individual Animal Study*. – St. John's university, New York 221p.
- [35] Stackle, E. (2017): *Jane Austen's Aristotelian proposal: Sometimes falling in love is better than a beating*. – *Philosophy and Literature* 41(1A): 195-212.
- [36] Strickler, B. (2010): *Hemmed In: Place, Disability, and Maternity in Animal Dreams and The Poisonwood Bible*. – In: Leder, B. (ed.) *Seeds of Change Critical Essays on Barbara Kingsolver*, The University of Tennessee Press, Knoxville 19p.
- [37] Stohr, K. (2006): *Practical Wisdom and Moral Imagination in Sense and Sensibility*. – *Philosophy and Literature* 30(2): 378-394.
- [38] Swartz, P.C. (1993): *Saving Grace: Political and Environmental Issues and the Role of Connections in Barbara Kingsolver's Animal Dreams*. – *Interdisciplinary Studies in Literature and Environment* 1(1): 65-79.
- [39] Tang, J.N. (2012): *Memory Writing and Identity Construction in Animal Dreams*. – *Contemporary Foreign Literature* 7p.
- [40] Toner, C. (2017): *Jane Austen on Practical Wisdom, Constancy, and Unreserve*. – *Philosophy and Literature* 41(1A): 178-194.
- [41] Wainwright, V. (2014): *Jane Austen's Challenges, or the Powers of Character and The Understanding*. – *Philosophy and Literature* 38(1): 58-73.
- [42] Zhu, Y.J. (2021): *The Construction of Homer's Identity in Animal Dreams from the Perspective of Trauma*. – *Literary Criticism* 3p.
- [43] Zylinska, J. (2014): *Minimal ethics for the Anthropocene*. – Open Humanities Press 157p.