THE AESTHETICS OF THE BUILT ENVIRONMENT: A POST-KANTIAN LOOK AT BIOREGIONALISM AND ECOMIMICRY APPROACH IN ENVIRONMENTAL DESIGN

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Abstrak: Kant memandang tinggi keindahan lingkungan alam dan menobatkannya sebagai derajat keindahan tertinggi bila dibandingkan dengan objek estetis lainnya seperti lukisan, patung, gedung, serta-dapat kita inferensikan-lingkungan buatan manusia. Argumen Kant terjangkar pada pemikiran transendentalnya, di mana keindahan murni hanya dapat didapatkan melalui penilaian imparsial, tanpa konsep, dan lain-lain. Walaupun pernyataannya tentang lingkungan alam valid, kita tidak dapat menggunakannya untuk menjustifikasi derajat keindahan lingkungan buatan manusia. Sebuah modifikasi atas pemikiran Kant diperlukan untuk dapat menilai lingkungan buatan manusia. Penelitian ini menggunakan teori estetika Kant untuk menjustifikasi derajat keindahan lingkungan buatan. Tesis yang hendak diajukan ialah bahwa lingkungan buatan manusia memiliki derajat keindahan yang sangat mendekati, bahkan sama, dengan lingkungan alami jika, dan hanya jika, lingkungan buatan tersebut mengadopsi konsep bioregionalisme dan ecomimicry, di mana totalitas dari lingkungan buatan manusia mengakomodasi hukum alam yang terdapat di lokasi setempat, sehingga derajat keindahan lingkungan buatan tersebut setara dengan keindahan lingkungan alami.

Kata-kata Kunci: bioregionalisme, *ecomimicry*, lingkungan buatan manusia, lingkungan alam, derajat keindahan

Abstract: Kant regards the ecosphere as having the highest degree of beauty, as opposed to other aesthetical objects such as painting, sculpture, buildings, and we could infer, the built environment. His

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arguments hinge heavily on his transcendental philosophy, where he stresses that pure beauty could only be achieved through disinterested judgement, without concept, and others. Though his proposition for the ecosphere is valid, it could not be used to justify other cases, such as determining the degree of beauty of the built environment. Thus, a modified version of Kant's aesthetics needs to be adopted, as it opens space for the built environment. This research uses Kant's overarching aesthetical arguments to justify the degree of beauty of the built environment. It is argued that the built environment could have similar—if not same—degree of beauty of the ecosphere by way of bioregionalism and ecomimicry, where the totality of the built environment encompasses the natural law of local environment, making its degree of beauty as high as the ecosphere.

Keywords: bioregionalism, ecomimicry, the built environment, ecosphere, degree of beauty

INTRODUCTION

It is undeniable that humans occupy a certain spacetime in the world. Humans' existence in the world or in nature ought not to be seen just as a dichotomy between subject (human) and object (environment) that is constantly affecting each other, instead, this phenomenon must also be seen as it is. From this fact, we, as humans, are not in the best position to just accept reality as it is, in the sense, that we are *thrown* into this world, while at the same time, humans are constantly thrown towards death or moving towards it. With that, humans need to survive by way of building, where building itself is the core of human existence. The existence of this fundamental need, therefore, forces humans to adapt towards, and manage over, their environment.

¹ M. Heidegger, Being and Time (Oxford: Blackwell Publishers Ltd, 1962), pp. 33 and 149.

² M. Heidegger, Being and Time, p. 466.

³ M. Heidegger, Being and Time, p. 330.

⁴ From Heidegger's essay titled *Building Dwelling Thinking*, which is compiled by D.F. Krell, *Martin Heidegger Basic Writing* (California: HarperSanFrancisco, 1993), p. 347.

⁵ D.F. Krell, Martin Heidegger Basic Writing, p. 350.

However, it is apparent that our attempt to alter nature has resulted in mixed outcomes. On one side, we could see beautiful places (e.g., cities and villages), where life is vibrant, visible, teeming with flora and fauna. Meanwhile, on the other side, there are environments built for specific, ego-centrist, and utility-based purposes (e.g., prison to contain humans that do not oblige to a certain social contract, factories that solely exist just to maximise production, etc.). It is safe to say that these pale and bland built environments are plain ugly. It is then important to consider and be critical of the degree of beauty of the things we build, especially our environment. As the title suggests, in this essay I explore the degree of beauty of the built environment in which I will argue that its beauty is on par, or at least close to the natural environment. This could only be achieved if, and only if, I argue, that what we build uses a bioregionalism and ecomimicry approach in our design. It is worth mentioning that I am only defending ecomimicry-and-bioregionalism-based environmental design and not any other orientation.⁶ This research does not have any universal nor normative claim about the aesthetics of the built environment that is timeless, although it is my conviction that the above-mentioned approach is currently the best solution in increasing the degree of beauty of the built environment that is in close proximity with the natural environment.

This last decade has shown a movement to formalise nature-based design. This attempt promotes a shift in terms of definition, from bionics to biomimetics, until eventually it arrived at biomimicry and eventually ecomimicry. The term ecomimicry, in the context of this research, could be understood as a socially responsive and environmentally responsible design principal, which, in certain cases, is local-centrist, much like bioregionalism that I shall discuss shortly. Looking ecomimicry from a human-environment relational standpoint, it could be understood that ecomimicry is an ecosystem-based management, that is long-term oriented

⁶ As it requires strict demarcation between each orientation, which this research is unable to elaborate fully.

⁷ A. Marshal, The Theory and Practice of Ecomimicry (Perth: Sustaining Gondawa, 2007), p. 1.

⁸ A. Marshal, The Theory and Practice of Ecomimicry, p. 1.

⁹ A. Marshal, The Theory and Practice of Ecomimicry, p. 2.

and integrated as a whole, that also accepts that humans are vital to, and highly affecting towards, the environment. Nonetheless, ecomimicry concept could be expanded from a socio-ecological approach towards design to agriculture and even culture-oriented design. Meanwhile, bio-regionalism could be understood as a derivative of deep ecology, specifically, it embodies the social philosophy factor of its host. Deep ecology believes that we as a sentient being have the responsibility in preserving all forms of life (viz. human and non-human animal). Stems from the thinking of Arne Næss, deep ecology has undergone several revisions, but its core and fundamental values still hold. With regards to bioregionalism, this school of thought focuses on observing and assessing the disconnectedness between human and their place of living.

First, it is worth mentioning the difference between what is considered things that are built by humans and what is already, naturally "built" by the environment. We could understand this demarcation with terms for the human-designed environment as the *built environment* and nature-designed environment as the *ecosphere*. In differentiating these terms, it is empirical to also make a point of the relation between the two. Both the built environment and ecosphere are to be seen as a complex, dynamic, and self-producing system.¹⁷ Adding to that, the built environment needs to be understood as a subsystem to the ecosphere, just like the ecosphere is a subsystem to larger host systems (e.g., the solar system).¹⁸

¹⁰ K.B. Winter et al., *Ecomimicry in Indigenous resource management: optimizing ecosystem services to achieve resource abundance, with examples from Hawai'i* (Nova Scotia: Resilience Alliance, 2020), p. 1.

¹¹ K.B. Winter et al., Ecomimicry in Indigenous, p. 4.

¹² K.B. Winter et al., Ecomimicry in Indigenous, p. 12.

¹³ S. Davidson, *The Troubled Marriage of Deep Ecology and Bioregionalism* (Cambridge: White Horse Press, 2007), p. 314.

¹⁴ Or could be understood as a more egalitarian approach to all living things. S. Davidson, *The Troubled Marriage of Deep Ecology*, pp. 315-318.

¹⁵ S. Davidson, The Troubled Marriage of Deep Ecology, pp. 315-318.

¹⁶ S. Davidson, The Troubled Marriage of Deep Ecology, pp. 318-319.

¹⁷ S. Moffatt & N. Kohler, *Conceptualizing the built environment as a social–ecological system* (Oxfordshire: Taylor and Francis Ltd., 2008), pp. 249.

¹⁸ W.E. Rees, Globalization and Sustainability: Conflict or Convergence? (California: SAGE

We then could also extrapolate to assume that the solar system is only a subsystem to, let's say, the milky way galaxy, and so on and so forth. Seeing it in a holistic manner, therefore, in accordance with the rule of thermodynamics, what is produced by the built environment will require energy from the ecosphere to allow them to operate, hence, a subsystem will undeniably produce by-products as waste¹⁹ that is returned to its host (viz. ecosphere).²⁰

This natural system of producing waste is often used as a premise to criticise the built environment (e.g., a non-efficient waste management system in cities), where landfills are designed on the basis on utility and functionality, leaving aesthetics consideration to the side.²¹ Thus, it is a general consensus that mountains of waste (e.g., the Bantar Gebang landfill) to be judged as displeasing in an aesthetical context, specifically in the city region.²² According to my estimation, this type of criticism is valid only for the things we could observe and feel, in some sense, empirically, where the aesthetic value of this particular built environment could safely fall into the ugliness category. Nonetheless, we need to be critical of, or meta-criticise to, these criticisms, as it may sway our understanding on what we consider aesthetic, and ultimately, beautiful. When judging the environment, especially the built environment, we ought not to assume the sameness of both the built and natural environment, as it has been established that the build environment is a subsystem to its host, ecosphere.²³ Additionally, we must acknowledge that judgement over the built environment is very limited to our capabilities and understand-

Publication Inc., 2002), p. 13.

¹⁹ Calling it "waste" is dangerous. It presupposes a negative connotation out of this natural process.

²⁰ W.E. Rees, Globalization and Sustainability, p. 14.

²¹ Y. Ariyanto and I.G.N. Antaryama, *Fungsional Versus Estetika: Inkubasi dalam Rancangan TPA* (Surabaya: Institut Teknologi 10 Nopember, 2012), pp. 28 and 29.

²² Loc. cit. and Priatna et al., Pengelolaan Sampah di Tempat Pembuangan Akhir (TPA) Gunung Tugel, Desa Kedungrandu, Kecamatan Patikraja, Kabupaten Banyumas (Purwokerto: Lembaga Penelitian dan Pengabdian kepada Masyarakat Universitas Jenderal Soedirman, 2019), p. 496.

²³ W.E. Rees, Globalization and Sustainability, p. 14.

ing as an observer and also the boundaries of concepts which confine the built environment itself, as I will elaborate in the later section. Entailed from this, we should not simply judge waste production as a deficiency of beauty due to its determinant, natural mechanism.

I then propose the following argument as my main thesis:

An ecomimicry-and-bioregionalism-based built environment has a closeness in terms of degree of beauty due to its earring similarity with ecosphere.

This research is split into 3 main parts. The first part focuses on the degree of beauty of the ecosphere, where I will use Kant's argument to justify its ontological status. I am using Kant's conception of beauty strictly to explain descriptively about how ecosphere could be regarded as the highest object of beauty.²⁴ The next section deals with criticism towards Kant criterion, as it seems that Kant negates or downplay human-made art and built environment.25 From that, the next section is dedicated to elaborating more on the concepts of bioregionalism and ecomimicry and how to apply it in a practical and pragmatic manner. I close the section with my propositions on how the built environment could have the same degree of beauty as the ecosphere, anchoring back to bioregionalism and ecomimicry, using a modified approach of Kant's aesthetics. Finally, I conclude my whole thesis in the conclusion section, where I present my overall arguments. In this final section, I also lay out the limitations of this research as well as pose questions that might be useful for further research. By and large, this research focuses on elaborating and analysing text through logical testing of existing literature.²⁶ I refrain this research

²⁴ Or even yet, the Beautiful with the capital B.

²⁵ Kant makes a very strong claim here, where he mentioned that even the greatest architect of nature that could create an environment which imitates ecosphere to the fullest would not further our understanding about nature itself, hence, we need to think of nature only as a purposive one or as a natural purpose. This is troublesome, as it assumes that knowledge stops when we try to understand the very nature of its existence, which I touch on the later section. Meanwhile, also read: I. Kant, *Critique of Judgment* (Indianapolis: Hackett Publishing Company, 1987), pp. 295-296.

²⁶ I am afraid that it is hard to find the novelty of this work, as I am not proposing any radical proposition. But it is worth exploring the degree of beauty of the built environment, as it is a newer form of discourse in this contemporary era.

from being a comparative study, especially pitting Kant's theory against a more modern conception, as I think it is not appropriate to wholly disregard Kant's criticism towards aesthetic judgement. But it is also important to give room for improvement, maybe even revisions toward our ideal concept of beauty.

THE DEGREE OF BEAUTY OF THE ECOSPHERE

Kant's explanation, or rather critique of judgement is laid out in his book of the same title. In it, he offers several theses on how ecosphere is regarded as the purest form of beauty through its disinterestedness, without-concept, purposiveness, and teleological aspects in accordance with nature.²⁷ But, it is of course impossible to quote Kant in its entirety and unfortunately, illogical, as I will expand more on the next section. To understand Kant concepts of aesthetic judgement, therefore, we need to understand the overarching arguments used by Kant in order to justify his position. It is commonly known that Kant holds ecospheres to the highest regard. He argued that:

[...] nature shows in all of its free formations a great mechanical tendency to produce forms that seem made, as it were, for the aesthetic employment of our power of judgement; and nature gives us no grounds whatever for supposing that [...]²⁸

We could understand this statement as an opening to Kant's attitude towards the environment. At a glance, if we read Kant's critique blindly, we may stumble on the conclusion that Kant regarded the environment lower than humans due its inability to be a moral being or sentient,²⁹ when in fact, Kant claims that ultimately, any judgement is connected to moral cause³⁰ and even saying that the beautiful is the symbol of the

²⁷ I. Kant, *Critique of Judgment*, p. 52. There are three kinds of liking according to Kant; agreeable (which gratifies us), beautiful (what we just like), and good (what we esteem). Lastly, there is also the sublime.

²⁸ I. Kant, Critique of Judgment, p. 222.

²⁹ M. Lucht, Does Kant Have Anything to Teach Us about Environmental Ethics? (New Jersey: Wiley-Blackwell, 2007), p. 128.

³⁰ M. Lucht, Does Kant Have Anything to Teach Us, p. 128.

morally good.³¹ It is a misconception, therefore, to say that the ecosphere is lower in terms of aesthetic values as compared to art. Kant's aesthetics revolves around a conceptless, universal liking.³² This holistic liking eventually orients to the harmonisation with morality, which finally ends in happiness.³³ Seeing it in this manner, we could safely conclude that judgement towards beauty (and the sublime) will constitute moral reasoning, hence morality becomes a possibility for humans.³⁴ Hence it could be said, through Kant's concepts of beauty and its connectedness to morality, that the ecosphere is considered to have the highest degree of beauty due to its ability that enables humans to have moral conscience and reasoning. I will call this the *morality thesis*.³⁵

But morality alone is too universal. It assumes that in order for humans to have morality, it needs the environment to be present in which an observer lives inside its boundaries, harmonising between humans and nature. Thus, we need more than morality, perhaps a more straightforward argument. Another compelling thesis that Kant gave is the judgement of

³¹ I. Kant, *Critique of Judgment*, pp. 225-230. Kant explained that there is a harmony between the possibility within a person and the environment, making judgement referred to the subject of oneself and what is outside of him.

³² I. Kant, *Critique of Judgment*, pp. 53-54. Much like his theory of morality, the maxim of universality is common in Kant philosophy.

³³ I. Kant, Critique of Judgment, pp. 319 and 324.

³⁴ H. Ginsborg, (2013), *Kant's Aesthetics and Teleology*. Retrieved on November 24, 2020, from https://plato.stanford.edu/entries/kant-aesthetics/

³⁵ I acknowledge that this is a reduced version as opposed to the more complex arguments provided by Kant, but it should serve the purpose for this research. It is empirical to also assess his other critiques, namely *Critique of Practical Reason* and *Critique of Pure Reason*, as well as *Groundwork of the Metaphysic of Morals*, to fully grasp his conception of morality and how it connects with judgement of taste and beauty.

³⁶ This is extremely hard to understand, as Kant explained that the line between natural (actual) purpose and what we perceive to be a natural purpose is extremely vague. We could attempt to understand this, for example, by the use of bio-indicators used to determine the effects of climate change. Scientists use the movement of birds and fish to different regions to explain the warmer climate and water, forcing them, in some way, to migrate sooner than their natural cycle. Now we could not clearly say that the ecosphere forces animals to migrate as their natural purpose nor could we say that it is not natural, as we do not know whether it is their final purpose or not. Read again I. Kant, *Critique of Judgment*. §67 and Parmar et al., *Bioindicators: The Natural Indicator of Environmental Pollution* (Abingdon: Taylor and Francis Ltd, 2016).

beauty and the sublime. According to Johann Gottfried Herder, one of the students of Kant, the sublime is a perfection that is distinguished from the beautiful, but both could move us morally or non-morally.³⁷ Meanwhile, in a psychological context, judgement of beauty is based on internal motivation, while judgement of the sublime is based on external motivation.³⁸ Sublimity per se could be (loosely) categorised into two parts: mathematical and dynamical.³⁹ Each sublime has their own definition, but one red lining between the two concepts is that it deals with the feeling of awe towards nature and how our mind could (or could not) comprehend the insignificance of our existence in midst of being in nature.⁴⁰ The feeling received from both the sublime and beauty is different, but Kant stresses that both are concurrently given by nature.⁴¹ It is my contention to claim that due to the fact that the ecosphere encompasses all types of aesthetic judgement available to humans, the ecosphere should be regarded as the highest form of beauty.⁴² I will then call this the *beauty-sublime thesis*.

³⁷ In Herder's note on Kant's lecture about ethics, I. Kant et al. *Observations on the Feeling of the Beautiful and Sublime and Other Writings* (Cambridge: Cambridge University Press, 2011), p. 277.

³⁸ T. Gorichanaz, *Beautiful and sublime: The aesthetics of running in a commodified world* [Abstract] (Buckinghamshire: Acumen Press, 2016), p. 365.

³⁹ H. Ginsborg (2013), op. cit.

⁴⁰ H. Ginsborg (2013), op. cit.

⁴¹ Again, Kant made a strict distinction between the sublime and beauty, but nonetheless hard to comprehend. Kant (1987) explained that the sublime is essentially the great, either mathematically or dynamically, but at the same time, presents some vague examples. Kant (2011) mentioned that the night is sublime, while the day is beautiful. He continued by stating that the sublime touches the beautiful charms. The sublime must always be large, the beautiful could also be small. The sublime must be simple, the beautiful could be decorated and ornamented. There are overlapping examples here, as night and day are not as distinct. Stating that the beautiful could be small implies that it could also be big. The term *touches* and *charms* also have an overlapping meaning. Hence, I should stress that the arguments I presented are very shallow, in a sense that it is only representative and not to elaborate Kant's arguments in a critical manner.

⁴² My statement is highly correlated with my epistemological position of naturalised epistemology. Nature is, in some sense, the source of our reality. There is, however, a limit to our understanding about reality and a limit to our environment itself, making it impossible to comprehend knowledge in its fullest. Read again G. Maxton & O. Ksenzhek, *Limits to Nature* (Minneapolis: World Academy, 2014)

When we think of a physical form in the world, it is strongly argued that the environment is dictated by a perfect law, where the environment is the manifestation of maximal order. 43 In some contexts, the concept of perfection intersects strongly with fittedness.44 Humans tend to suffer from this concept, as we push ourselves to be perfect both in life and in living our daily lives. When we dwell in perfectness, we unknowingly limit our judgement to the extreme (perfect) end. To avoid this, contemporary philosophy has open space for judgement of the imperfect. 45 Saito explained that have an empirical, negative impact, where we sacrifice intrinsic value just for the sake of perfectionism itself.46 In the context of arguing for the degree of beauty of the ecosphere, perfectionism should be understood more than the concept of human perfection, in the sense that perfectionism should encompass the whole spectrum of perfection, which obviously includes imperfectionism. We could attempt to solve this conundrum by using Kant's concept of perfection in correlation with his theory of judgement. According to him, perfection per se is an objective intrinsic purposiveness, which eventually the closest estimation to the Beautiful.⁴⁷ Kant also explained that there are two types of perfection:

⁴³ L. Rudrauf, *Perfection* (New Jersey: Wiley, 1964), p. 123. This argument is rather strong. We need to also consider that the concept of perfection (if there were any) has a possibility of not being so perfect, as Nancy Cartwright proposes in her book *How the Law of Physics Lie*. In it, Cartwright argues that, in a reductive manner, scientist uses of models are the natural laws we know today and not reality itself. In this paradigm, therefore, we are not even close in grasping reality. But to make my point in this research, we need to at least assume that there are Laws (with the capital L) in nature if we want to move forward in the discussion. Also read in N. Cartwright How the Laws of Physics Lie (Oxford: Oxford University Press, 1984).

⁴⁴ Answered by C. Graham, in the conference of The Royal Society of Edinburgh, M. Ati-yah & S. Zeki, *The Science of Beauty* (Edinburgh: The Royal Society of Edinburgh, 2015), p. 5. Following from the previous note, fittedness also assumes that there are natural laws in play in the environment.

⁴⁵ Y. Saito, *The Role of Imperfection in Everyday Aesthetics* (Maine: Contemporary Aesthetics Inc., 2017).

⁴⁶ We could call this *human perfectionism*. Saito gave an example of goods being sold in the grocery store, where certain goods are not selected due to its appearance. A tomato that is not red and fresh enough, even though their nutritional essence still exists, are thrown away due to its "lack of beauty". Our obsession with human perfection, which is a subjective form of perfectionism, does real harm, both for us as humans and to the environment as a whole.

⁴⁷ With the capital B, I. Kant, Critique of Judgment, p. 73.

quantitative and qualitative.⁴⁸ Quantitative perfection is the accumulation and totality that constitute a thing, meanwhile qualitative perfection puts heavy emphasis on the probability of a thing to become that Thing, as well as how the physical objects harmonise with its concept.⁴⁹ From this, it is then available to both perfectionism and imperfectionism, as Perfect *per se* is seen as a horizon with both extremes.⁵⁰ Kant even went far in claiming that ecosphere is the perfect source of knowledge.⁵¹ We could then infer from this statement that, just like it provides all aesthetics experience (i.e., beauty and the sublime), ecosphere is also a manifestation of the Perfect,⁵² as it represents both perfection and imperfection. I will call this the *perfectionism thesis*.

From these 3 premises, it then could be arranged in a syllogistic manner in which Kant's arguments could be used to justify the degree of beauty of the ecosphere. The syllogism is as follows.

- 1. The aesthetics judgement and taste that is experienced by humans with ecosphere allows morality to exist in humans, in which to be morally good is the ultimate end goal.(morality thesis)
- 3. Following all types of taste, this experience could only be achieved because the ecosphere is in the world of perfection, which includes both the perfect and imperfect.(perfectionism thesis)
- 4. Therefore, ecosphere could be deemed as the highest degree of beau-

⁴⁸ I. Kant, Critique of Judgment, p. 74.

⁴⁹ I. Kant, *Critique of Judgment*, p. 74. This concept is similar to Plato's rationalism, in the sense, it assumes that there is an ideal concept of a thing or being in the world of ideas.

⁵⁰ Also read the footnote in I. Kant, *Critique of Judgment*, p. 326, no. 33, about the inferencing of perfectionism from nature.

⁵¹ I. Kant, Critique of Judgment, p. 330.

⁵² Perfect with the capital P.

ty due to its ability to enable morality for humans through aesthetics experience, which encompasses both the beauty and the sublime, and these experiences could only be achieved due to its *nature* of the ecosphere that is in the world of perfection......(*Conclusion*).

A SHORT CRITICISM TOWARDS KANT'S AESTHETICS

Through the thinking of Kant, it is apparent now that the ecosphere is vital to his theory of aesthetic judgement. This is common in the works of eighteenth and nineteenth century philosophers (e.g., Hegel) that puts heavy emphasis on ecosphere.⁵³ Hegel tried to systemise his thinking of beauty through art and its connection to our souls. He explained, with regards to ecosphere, that one of the forms of arts that have direct relationship with nature (and the Gods) is via architecture, where humans tried to protect themselves from heavy storms, rains, wild animals, and more, hence, it provided a place for the spirits to dwell.⁵⁴ Nature is constituted not only from natural processes, but also from cultural and sociological factors affecting them.⁵⁵ Hegel thought that these were the evidence that humans could not be disconnected from nature, while at the same time, anticipated to what is now commonly known as bioregionalism. 56 The concept of bioregionalism per se does not differentiate itself from ecomimicry, but it emphasises more on a holistic, eco-philosophical position that includes politics, culture, and ecology.⁵⁷

⁵³ Hegel focuses more on human-made art but does not disregard the ecosphere. According to Hegel, the highest form of beauty is expressed, or channel through, art. In the Hegelian term, art gives expression to the spirit's understanding of oneself. Art's purpose, therefore, is not to imitate nature, but to enable us to enjoy freedom. Hegel indebted his thinking to Kant's concepts of aesthetics, although he opposes Kant's idea by stating that beauty is to be a property of an object. Also read in S. Houlgate (2020), Hegel's Aesthetics. Retrieved on 23 November 2020, from https://plato.stanford.edu/entries/hegel-aesthetics/

⁵⁴ G.W.F. Hegel, Aesthetics: Lectures on Fine Art (Oxford: Clarendon Press, 1975), p. 84.

⁵⁵ N. Mowad, *The Natural World of Spirit: Hegel on the Value of Nature* (Virginia: Philosophy Documentation Center, 2012), p. 47.

⁵⁶ Mowad explained that Hegel had anticipated bioregionalism, but is also critical towards it. *Loc. cit.*

⁵⁷ D.A.W. Kingma, A Local Approach to holistic Environmentalism: Bioregionalism, Cultural Identity and Environmental Ethics (Melbourne: Melbourne University Publishing, 2017), p. 21.

From this perspective, it is important to see natural phenomena, including its perceived problems, from a local and not global lens.⁵⁸ This information further strengthens the argument that the relationship between humans and the environment is not strictly dichotomic (subject-object), and also to consider anthropological as well as cultural aspects of an environment when we want to do aesthetical judgement. It solidifies the idea that specific parts of the environment are ultimately infused with the culture in that region. From this explanation, it could be inferred that the built environment has the same degree of beauty, if not, close to, the ecosphere. But this is wrong. There is, of course, a built environment where it seems that beauty is not present, both from the environment itself and human experience, at least, to my estimation.

From this assumption, it is then worth asking the degree of beauty of the built environment. Questions such as: How to justify the degree of a subsystem of the ecosphere? In what condition does the built environment have the same or similar degree of beauty to the ecosphere? As my thesis has stated, the built environment could have the same or similar degree of beauty to the ecosphere if, and only if, it uses the concept of bioregionalism and ecomimicry. In the next section, I will expand more on my thesis.

Before elaborating on the degree of beauty of the built environment, I will first explain Kant's objection, or critics, toward human-made creation, which include art, architecture, and eventually the built environment. It has been established by using Kant's argument, that we could justify the ecosphere as having the highest degree of beauty, which implies that other objects, for example art or the built environment, could not reach that status.⁵⁹ Kant justify this by claiming that there is the presence of condition that determines a concept, downgrading human crea tion as an *adherent beauty*.⁶⁰ In contrast to that, there is *free beauty* that does

⁵⁸ D.A.W. Kingma, A Local Approach to holistic Environmentalism, p. 22.

⁵⁹ Because we assume that there could only be one victor.

⁶⁰ I. Kant, *Critique of Judgment*, p. 76. Kant also explains this by using the term "accessory beauty" (*pulchritudo adhaerens*).

not need condition that presupposes a judgment.⁶¹ Kant further elaborate that if our judgement of an object is without bringing any concept and we do not understand the purpose of that object, then out judgement will be a pure one.⁶² Human creation does not fall into a pure judgement because a built object must carry a certain concept with a particular and/or specific purpose that is determined by their creator(s). In summary, judgement of built objects becomes impure.⁶³ With this in mind, our previous question transforms into: How to justify the degree of beauty of the built environment that is inherently bringing presupposing concepts and specific purpose(s)? The answer, according to this research, is building with bioregionalism and ecomimicry approach.⁶⁴

Kant's position of beauty on human-made creation, according to my knowledge, is to narrow, in the sense, there is an obsession with his concept of the things-in-themselves.⁶⁵ Without going too deep into the subject, his transcendental philosophy has somewhat clouded Kant criterion of the beautiful, as Kant somewhat failed to clearly define the nature of things-in-themselves.⁶⁶ Kant's emphasis on this transcendental aspect of things, perhaps, limits his 'standards' of aesthetics judgement to something unworldly. Nonetheless, it does present us with a stepping ground,

⁶¹ I. Kant, Critique of Judgment, p. 76.

⁶² I. Kant, Critique of Judgment, p. 78.

⁶³ Kant stresses this in his critique with the concept of perfectionism, where we could not reach beauty through perfection and vice versa. Hence, beauty could only be achieved through harmonising between the representation of what we could perceive and what is out there. I. Kant, *Critique of Judgment*, p. 78.

⁶⁴ I need to restate that I am not trying to make a universal and normative claim in this research, but to my estimation, this approach is the best solution we have today.

⁶⁵ Here we need to consider Kant's *Critique of Pure Reason*, especially his concept of thing in itself (*das ding an sich*). Kant describes his transcendental logic and idealism extensively, though it of course also attracts heavy criticism. In short, Kant argue that transcendental realism, which accounts for transcendental aesthetics, that objects of an experience possible for us are nothing but appearances (i.e., mere representations, which, as they are represented, as extended beings or series of alterations, have outside our thoughts no existence grounded in itself). Also read in N.F. Stang (2016), *Kant's Transcendental Idealism*. Retrieved 9 January, 2020, from https://plato.stanford.edu/entries/kant-transcendental-idealism/index.html#AppeThinThem also Kant, I. *Immanuel Kant Critique of Pure Reason* (Cambridge: Cambridge University Press, 1998).

⁶⁶ N.F. Stang (2016), op. cit.

an axiom to work with, as Kant's argument in defending the ecosphere could help us set newer criteria in judging the built environment. If we accept new positions, such as cognitive and non-cognitive aesthetics toward the built environment, it is apparent that humans could receive the same, if not close to, aesthetical pleasure given by ecosphere.⁶⁷ Let us consider the cognitive and non-cognitive position. The cognitive position stresses the historical and epistemological aspect of an individual, where aesthetic judgment of that person is determined by the totality of their knowledge, which of course include social, cultural, and other factors affecting the person.⁶⁸ The non-cognitive position on the other hand, argue that aesthetic judgement is both phenomenological and analytical experience between the observer and the object. 69 Adding to that, non-cognitive position also contributed to aesthetic experience that is not limited to nature or art, including other particular dimensions (e.g., cities, museums, gardens, and even humans' relationship). To Even though these positions are touted as a newer set of ideas, it could not be denied that it entails from Kant, and even Hegel.71 And with that, the built environment is now open to aesthetic judgement that could be appreciated as highly as the ecosphere.

THE DEGREE OF BEAUTY OF THE BUILT ENVIRONMENT

As I briefly mentioned in the introduction, we need to have a clear definition as to what the built environment is, as opposed to its coun terpart (ecosphere).⁷² It has been established that the built environment

⁶⁷ A. Carlson (2019), *Environmental Aesthetics*. Retrieved 1 January, 2020, from https://plato.stanford.edu/entries/environmental-aesthetics/#EnviAestBeyoNatuEnvi.

⁶⁸ A. Carlson (2019), op. cit.

⁶⁹ A. Carlson (2019), op. cit.

⁷⁰ A. Carlson (2019), op. cit.

⁷¹ There is a neglect of nature in aesthetical philosophy in the first half of the twentieth century. Not until the last third of the twentieth century did environmental aesthetics come to rise, as concern towards environmental problems and degradation seems to be more present. One of the common criticisms towards regional development at that time is that planners only thought of efficiency, functionality, and utility, and not sustainability or even aesthetics, for that matter. *Loc. cit*.

⁷² When we think both as an extreme, it seems that the demarcation between the built and natural environment could be clearly stated, but in fact, the line is not that visible. What boundaries does the built environment have? Is it physical or metaphysical? Is

ultimately is a part of the ecosphere, but what is it exactly? In general, the built environment could be defined as a human-made space where humans live, work, and be creative on a daily basis, which includes buildings as well as space modified by us.⁷³ In a more conceptualise sense, the built environment could be understood as the focal point of a networks of commitment and opportunities.⁷⁴ If we look it from a lexical perspective, one of the definitions is very shallow, as it said that the built environment is an area where there are lot of buildings.⁷⁵ There is, however, a red lining, where it could be safely claimed that the built environment is a space where humans have knowingly and/or unknowingly altered the nature of the ecosphere to suit humans' needs. Answering the question of why we should consider the degree of beauty of the built environment is, therefore, rather simple: Humans exist in its everydayness, ⁷⁶ and due to the fact that (most of us) spend (most of) our time in the built environment, its visual77 character becomes a vital part in determining our aesthetic judgement.⁷⁸

it administrative or based on their natural characteristics? I touch on this briefly in the last section.

⁷³ K. Roof & N. Oleru, *Public Health: Seattle and King County's Pus for the Built Environment* (Denver: Denver Co., 2008), p. 24.

⁷⁴ R.J.H. King, *Environmental Ethics and the Built Environment* (Charlottesville: Philosophy Documentation Center, 2000), p. 125.

⁷⁵ Taken from the online Cambridge Dictionary. Keyword: *Built Environment* [Def. 1]. Retrieved on 9 January, 2020, from https://dictionary.cambridge.org/dictionary/english/built-environment. This definition is mildly correct, as association of the built environment and places like cities are very common. However, it is worth pointing out that even farmland, plantation, animal husbandry, and others are also considered to be part of the built environment, at least in my estimation. By using this definition, therefore, the above-mentioned examples could not be put in the same categorisation.

⁷⁶ M. Heidegger, Being and Time (1962), p. 253.

⁷⁷ The term visual could also be understood as beauty in this context. I need to make a note here because just connecting aesthetics with visual experience is misleading. Classical aesthetic theory, such as the one developed by Alexander Gottlieb Baumgarten, explained that aesthetics is a science of how things are to be known by means of the senses. Hence, it would be wrong to assume that aesthetic experience is only constituted through visual senses. Also read in P. Guyer, *The Origins of Modern Aesthetics:* 1711-35 (Malden: Blackwell Publishing Ltd., 2004), pp. 15-44.

⁷⁸ G. Parsons, *Beauty and Public Policy* (Sheffield, Commission for Architecture and the Built Environment, 2010), p. 18.

In a practical sense, aesthetics of the built environment tends to be used as a mere tool, where too much beauty in a certain space might incite negative reactions (e.g., too much beauty in the courtroom might be a nuisance). Even more troubling, contemporary society has reduced aesthetics to be a female-centrist industry, as societies pushes a certain standard of beauty to sell products. Although it is not the main aim of this research, it serves a good example to make us realise that contemporary problems regarding aesthetics falls into descriptive aesthetics, where it sways away from a normative discourse. This presents us with a problem in terms of environmental design, as the moving away from normative debates regarding beauty about and in the environment has resulted in mixed results, as I mentioned in my introduction. Thus, it is important for us to jump back to a more normative discussion regarding beauty, especially in the built environment context, to ensure the degree of beauty of our built environment is close, if not on par to, the ecosphere.

My thesis from the start has been to argue that a design based on bioregionalism and ecomimicry is our current solution. I will elaborate on these ideas now. The application of bioregionalism and ecomimicry is, in some cases, a choice.⁸² An inspiration for a design will ultimately subject to the artist's taste,⁸³ but what are these terms exactly? We could think of ecomimicry as a design principle that recognises the role of nature in shaping human design. Just like we could use nature as bio-indicators,

⁷⁹ G. Parsons, Beauty and Public Policy, p. 19.

⁸⁰ This is troublesome, as the consumption-focus-beauty industry is on the rise, it has proven to surge objectification, body-shaming, even obsession to plastic surgery. Also read S. Madan et al., "Impact of Culture on the Pursuit of Beauty". *Journal of International Marketing*, 26/2 (2018): 1-52.

⁸¹ The use of practical aesthetics sometimes is not as complex as normative aesthetics, where people just follow the trends that are monopolising the term beauty.

⁸² This could happen because the built environment might have the same form as ecosphere while at the same time unknowingly used bioregionalism and ecomimicry approach in their design.

⁸³ Which include architects, planners, and other stakeholders. The term "artists" should not be constrained to people making conventional arts (e.g., sculpture, poetry, and paintings).

ecosphere could also be used as bio-motivator.⁸⁴ There are things, presumably, that ecosphere could teach us in terms of design⁸⁵ that we ought to use in order to make a replica of the ecosphere in its entirety. Now, how does bioregionalism fall into the equation? Ecomimicry *per se* could be regarded as a philosophical, if not an eco-philosophical position, so how does bioregionalism add to the discourse? It could be understood that ecomimicry only focuses on the things nature could explain in term of creative design, meanwhile bioregionalism, to my estimation, is the complete package, where not only it accounts for the social (and cultural) aspect of things, it also focuses on regional-locality, in a sense, that it factors in local natural environment in the formula.⁸⁶ Hence, bioregionalism could be thought of as the end goal or the overarching eco-philosophical paradigm, while ecomimicry is part of that overall ideal.

Firstly, I would also like to point out some of the misconceptions regarding environmental design. It could not be denied that my first encounter with these concepts has led me to believe that what we ought to do is simply to increase the green space in our surroundings. I justify this by claiming that, for example, gardens are a place filled with life, especially with the flora and fauna (or general biodiversity) that flourishes in these environments. But my claims were rather naive. In a micro scale, gardening is more effective as opposed to larger scale farms due to higher efficient soil management.⁸⁷ Additionally, ideal domestic gardens in

⁸⁴ A. Marshal, *The Theory and Practice of Ecomimicry*, p. 7. Biomimicry, at first, is contended among philosophers by the positivist and feminist school of thought. It assumes, in general, that the wisdom given by the ecosphere is value free and, as I mentioned about the perfect law governing nature, that these laws are merely a social construct to help humans understand reality. With the emergence of ecomimicry, which encapsulates the social, moral, and technology aspect of biomimicry, then it could be argued that it is a more suitable philosophical position. As I have also stated that my current epistemological position of naturalised epistemology, the point here is to claim that there is such a thing we call natural laws, but philosophical discussion about the nature of these natural laws should never stop.

⁸⁵ A. Marshal, The Theory and Practice of Ecomimicry, p. 10.

⁸⁶ S.P. Church, Exploring Urban Bioregionalism: a synthesis of literature on urban nature and sustainable patterns of urban living (Cléo: Centre for Open Electronic Publishing, 2015), p. 3.

⁸⁷ G.A. Langellotto, What Are the Economic Costs and Benefits of Home Vegetable Gardens?

the United States of America have a tendency to overemphasise human perfection in terms of aesthetics, which cause real harm than good (e.g., using too much water, chemical pesticide, and the use of oil-based grasscutter). From these cases, it should serve as a reminder that in a claim that an environment uses bioregionalism and ecomimicry approach does not equate adding green aspects to it, which entails the notion that if the built environment is developed with short-term pleasures (where in the aesthetical context could mean human perfectionism), its degree of beauty is relatively low. 99

With that, what exactly is bioregionalism, especially how does it help us in designing our environment? Bioregionalism *per se* has 5 main components: *physiographic, biotic, cultural, spiritual*, and *artistic.*90 What is novel about bioregionalism, and what could be understood as the differentiator between it and ecomimicry, is its openness to local wisdom in solving social and environmental challenges.91 Bioregionalism also stresses the importance of resource management and local knowledge that is passed down through tradition, strengthening a sustainability mechanism in general.92 The unity between human and its environment93 that is represented by bioregionalism is a clear showing of the unity between the built environment and ecosphere, where in certain borders,94 all environments

(Extension Journal, Inc., 2014), p. 5.

⁸⁸ Y. Saito (2017), The Role of Imperfection in Everyday Aesthetics.

⁸⁹ To understand more about the problems regarding human perfectionism, also read Y. Saito (2017), where she explained aesthetic judgement of imperfectionism, what if we extrapolate could wind up in natural perfectionism. It could be concluded that when we talk about natural perfection, we could not equate them to human perfection because our judgement is not bound by natural law that is objective. Read also S.P. Church (2015), *Exploring Urban Bioregionalism*, pp. 1 and 8.

⁹⁰ Cited by D. Waissbluth, (2016) from R.I Thayer, *Life-Place: Bioregional Thought and Practice* (Berkley: University of California Press, 2003), pp. 15, 33, 59, 71, and 94 in order.

⁹¹ D. Waissbluth, *Bioregionalism, Community and Environmental Ethics: An Approach to Geographical Borderline* (Viña del Mar: Universidad Adolfo Ibáñez, 2016), p. 18.

⁹² D. Waissbluth, Bioregionalism, Community, p. 18.

⁹³ The environment in the sense of the totality of the external world outside of humans.

⁹⁴ Waissbluth explains that the demarcation between regions vary, but in order to get a visualisation of these borders, it is important to categorise them, at least into 3 types; ecoregion, georegion, and morphoregion. Also read in D. Waissbluth (2016), *Bioregion*-

eventually are united. If we accept these propositions, we could then proceed in depth to ecomimicry as a basis for environmental design to reach a degree of beauty close, if not on par, with the ecosphere. But then ultimately, the main questions that this information needs to address is how could a bioregionalism-based built environment could have similar, if not the same, degree of beauty as ecosphere? It's not enough to just say that bioregionalism accounts for the totality of the ecosphere and implement or integrate them in the built environment, as it would be counter intuitive, or even useless then, to differentiate the built and natural environment. It has been contextualised that the built environment is a subsystem to the ecosphere, and that the built environment will ultimately not encompass the totality of the ecosphere. So how does a bioregionalism-based built environment have a high degree of beauty?

Seeing it from what we refer to a post-Kantian perspective, with relevance to my previous theses I presented on the degree of beauty of the ecosphere section, it is apparent that bioregionalism-based built environment have similar characteristics in terms of ecosphere, in the sense that it is not the same as ecosphere on all level, but it promotes the justification of beauty for ecosphere, or at least, a modified version of it. Through the morality, beauty-sublime, and perfection thesis, much of bioregionalism principles accounts to all these criteria. Looking a place as a specific bioregion, when we are immersed in the local culture and ecosphere itself, humans are bounded by a connection that somewhat transcends them, making that place their home, inciting moral actions. As with all human-made creation, it would not be perfect, in the sense, it does not conform with the perfectionism that is inherently part of the ecosphere, as I have explained previously. But it nonetheless gives both aesthetic experi-

alism, Community, p. 16.

⁹⁵ The term *post-Kantian* here is used to specify the moving forward from Kant's aesthetics, although I use this term to specify a modified version of Kant's aesthetics theory. It does not mean that I am seeing this through the lens of Hegel, Adorno, and others, I am simply making a distinction of how I am using Kant's concept in this research in a contemporary context.

⁹⁶ J.C. Ryan, Humanity's Bioregional Places: Linking Space, Aesthetics, and the Ethics of Reinhabitation (MDPI: Basel, 2012).

ence (of the sublime and beauty). Hence, the built environment should not be regarded as an *adherent beauty*, as Kant would put it, as its scale and form, even though with concept and specific purposes, has its own unknown concept and purpose playing in its being. When we build a city, for example, despite having a thorough plan, it would inherently have the possibilities of having its own ununderstandable nature. This will become the universal premise for my overall argument, where the idealised concept of bioregionalism of the built environment has the highest degree of beauty in terms of being an *ontological environment*. Will call this the *bioregionalism thesis*.

To further strengthen my point, let's consider a morphological example of urban area or cities. ¹⁰⁰ In my introduction, I touch on the subject of waste problems surrounding cities. This particular comment is actually a part of a more holistic criticism toward cities. From an aesthetical point of view, cities have been subjected to comments such as being grey, lifeless, filled with concrete streets, a major source of pollution, and others. ¹⁰¹ I would argue that this is the byproduct of a pragmatic-only approach in environmental design, which in terms of aesthetics, have the lowest degree of beauty¹⁰², and at the same time, more importantly, disconnect hu

⁹⁷ J.C. Ryan, Humanity's Bioregional Places.

⁹⁸ These criteria could not be applied to smaller objects of beauty. For example, through Kantian lens, a building could not be judged purely, as the building serves a particular purpose (e.g., for work if it is an office). But when we expand it, let's say, a building in a city, now that building becomes part of a particular bioregion and its purpose changes, or at the very least, becomes integrated into the city system. But beyond that, we could not clearly identify the purpose of that building, as it is now put through the new built environment context.

⁹⁹ By ontological environment I mean the thing constituting that environment. I use this term as a reminder that we could not really demarcate between the types of environments, but for the sake of this research, it is assumed that the built environment does exist, following the definitions I presented earlier on in this section.

¹⁰⁰ As I mentioned in footnote 94, this categorisation is not an absolute one. It only serves the purpose for this particular example, where the urban area has been a subject to numerous criticisms in our contemporary society.

¹⁰¹ S.P. Church, Exploring Urban Bioregionalism, p. 2.

¹⁰² Because it orients itself towards utility and function (or human perfectionism).

mans from the ecosphere¹⁰³. This amplification of the social environment, where humans are placed in proximity with other humans without meaningful interaction with the ecosphere, further distances humanity from its surroundings. This is dangerous, as empirically speaking, humans' connection with ecosphere proves to have positive reaction for them.¹⁰⁴ The concept of ecomimicry, therefore, becomes central in design, as its fundamental principle to ensure the connection between humans and its environment helps elevate the status of the built environment to the bioregionalism ideal, hence securing the relationship between humans and their environment.¹⁰⁵ It could also be concluded that, in order for a built environment to reach bioregionalism ideals, an ecomimicry design approach should be adopted. I will call this the *ecomimicry thesis*.

From my explanations, it could then be concluded into several premises as follows.

- 1. The built environment that only focuses on short-term purposes and human perfectionism degrades its degree of beauty as a whole.
- 2. The bioregionalism thesis explained that the built environment is the closest humans could get in terms of degree of beauty to the ecosphere, as bioregionalism-based environmental design accounts for the totality of an environment including the humans living in it.
- The ecomimicry thesis states that in order to reach the bioregionalism ideal in designing environment, we need ecomimical as a principal of design.

These premises are going to be used as a whole in the following, closing section.

¹⁰³ This strictly opposes the bioregionalism position, especially the "connectedness" aspect between humans and its environment. S.P. Church, *Exploring Urban Bioregionalism*.

¹⁰⁴ M. Richardson, & K. McEwan, 30 Days Wild and the Relationships Between Engagement With Nature's Beauty, Nature Connectedness and Well-Being (Lausanne: Frontiers Media, 2018)

¹⁰⁵ K.B. Winter et al., Ecomimicry in Indigenous (2020).

CONCLUSION AND REFLECTION

This research has established how the built environment could have similar, if not close to, degree of beauty as opposed to ecosphere in the post-Kantian lens. This is achieved through a design based on bioregionalism, that is also based on ecomimicry. From the research, Kant's justification on the ecosphere as having the highest degree of beauty could be syllogised through the following form.

- 1. The aesthetics judgement and taste that is experienced by humans with the ecosphere allows morality to exist in humans, in which to be morally good is the ultimate end goal.(morality thesis)
- 3. Following all types of taste, this experience could only be achieved because the ecosphere is in the world of perfection, which includes both the perfect and imperfect.(perfectionism thesis)
- 4. Therefore, the ecosphere could be deemed as the highest degree of beauty due to its ability to enable morality for humans through aesthetics experience, which encompasses both the beauty and the sublime, and these experiences could only be achieved due to its nature of the ecosphere that is in the world of perfection......(conclusion 1).

The conclusion from our first conclusion is then used as the major premise in the following syllogism.

- 2. The built environment that only focuses on short-term purposes and

From this line of thought, it has been proven how it is possible that the built environment could have similar—if not same—degree of beauty of the ecosphere. This could only be achieved if, and only if, the environmental design is based on bioregionalism, which is also based on ecomimicry.

But, as with any other research, this one is not without its limitations. I would always carry my own personal biases, as I have stated in some of the notes regarding the epistemological status of the natural law and how it might teach us about design. Even though I also claimed that this research is not trying to give universal answers to aesthetical problems regarding the built environment, it does serve as a steppingstone on how we could analyse the nature of the built environment from a post-Kantian perspective, which in itself dwells in normative discourse. As for further research, some things need to be cleared. First, I attempt to demarcate the built environment and ecosphere, but only in the extreme. As I have also mentioned, we could not clearly identify the "environments" in between both extremes. It is also important to clearly define the nature of the ecosphere to understand fully what we actually meant by the eco-

sphere. When we fantasise about nature in general, it is safe to assume that the lot of us imagine an Edenic garden, filled with beautiful objects and give phenomenal experience. Unfortunately, the environment is also full of deadly animals, dangerous living conditions, and others. It is also worth noting that nature is dynamic, which, in its dynamicity *per se*, is also dynamic. The point of all of these is to truly understand what the ecosphere is. As mentioned regarding the natural laws of the environment, some philosophers of science have argued, such as Cartwright, that the fundamental laws of physics that we know today have some underlying assumption, probabing them not be as objective as we might have thought of.

There is also the problem of if there are even parts of nature that humans have not explored. For the most part, humans have travelled to, or at least observe all of the land masses on earth. Also, we have a clearer visual imaging of the moon as compared to our blue ecosphere, the ocean With the possibility of living underwater is not so unrealistic 109 how then could it be opened to aesthetical judgement? If we ever conquer the pressure of the deep sea and possibly colonise it, how is it beneficial, in terms of beauty, for us? To my current estimation, every built environment history has happened on land, and also for this research, where ecological considerations as well as eco-philosophical positions have been discussed is primarily in a land-centrist manner. If we want to go to a more extreme, how about an off-earth environment, such as the Moon or Mars? If we were ever to be a multi-planet civilisation, how does ethics and aesthetics transform? Would it ever be the same experience as the ones we are experiencing right now? I would leave that to you, aspiring readers.

¹⁰⁶ J. Peterson, 12 Rules for Life: An Antidote to Chaos (Random House: Toronto, 2018), p. 11.

¹⁰⁷ J. Peterson, 12 Rules for Life: An Antidote to Chaos, p. 11.

¹⁰⁸ J. Peterson, 12 Rules for Life: An Antidote to Chaos, p. 11.

¹⁰⁹ Singapore is moving towards that direction. See more S. Amir, *Manufacturing space: Hypergrowth and the Underwater City in Singapore* (Amsterdam: Elsevier, 2015).

¹¹⁰ An introduction to this question could be read from G.S. Robinson, *Space Philosophy: Conflict, Migration, Mutation, Adaptation, Evolution, and Circumventing Armageddon* (Tallahassee: Kepler Space Institute, 2012).

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