

Article

Environmental Aesthetics in the Age of Climate Change

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Abstract: As climate change alters the environment, people’s associations with and appreciations of the environment change too. Environmental aesthetics, an area of knowledge informed by philosophy and ethics, offers an important vantage point on human wellbeing in the age of climate change. Contributors to the literature have attempted to imagine how changing environmental conditions might change aesthetic encounters with nature. Some have contemplated the prospect of aesthetic enjoyment becoming tainted by knowledge of the societal forces and human folly that have damaged nature. One strain of argument rests on the view that aesthetic value in nature is an inherent property of the natural entity itself, and thus independent of moral considerations and other interests, which are viewed as external. The irrelevance of moral consideration to estimations of aesthetic value is the crux of the “autonomist” understanding of environmental aesthetics. From this perspective, condemnation of peoples’ enjoyment of climate-altered nature is beside the point, since moral concerns have no bearing on the intrinsic, aesthetic qualities of the observed entity. This paper argues that the autonomist perspective is challenged in a world of increasingly pervasive and negative encounters with climate-altered nature. Expectations for more frequent, widespread, and severe impacts from climate change suggest a rethinking of salient questions bearing on aesthetic experience. This article raises the prospect of pleasurable aesthetic experiences becoming increasingly rare in a climate-changed world and the prospect of moral pressures becoming more immediate and personal. Also challenged is the thesis that people will ably adjust to climate change and thereby secure aesthetic comfort.

Keywords: environmental aesthetics; everyday aesthetics; climate change; value-neutrality; moderate autonomism; moral standpoint; IPCC

1. Introduction

On its website, under the heading “Climate Change Impacts,” the National Oceanic and Atmospheric Administration [1] declares, plainly, “Impacts from climate change are happening now.” The catalogue of impacts—water stress, weather extremes, heat stress, to name a few—are familiar to anyone who has even a passing awareness of global climate change [2]. Much research, including the comprehensive assessment reports of the United Nation’s Intergovernmental Panel on Climate Change (IPCC), has considered how societies will need to adjust to climate change in order to adapt to new conditions, and even to survive. One of the three main working groups of the IPCC is dedicated to examining impacts and adaptation strategies.

Some environmental aestheticians explore climate change from a humanistic standpoint, posing questions and offering insights not typically encountered in IPCC reports. Blanc writes [3], “Here, the use of aesthetics requires a shift in the way we write about environmental issues in order to place them in a poetic register rather than mathematical problem/solution-type of register.” In fact, poetic and scientific-technological insights on environmental values are neither incompatible nor mutually

exclusive modes of inquiry. Both allow for critical appraisal of the environment. However, as Berleant argues, aesthetic *experience* offers insights that are frequently outside the scope of typical scientific inquiry. He writes,

aesthetic description exemplifies the concentration of critical attention, not only on an object or a place, but on the course of experience of which these are but constituent parts. If, like much science, criticism confines itself to an object, then, also like science, its results will suffer the distortions of fragmentation and partiality [4] (p. 38).

As we consider life in a climate-changed world, environmental aesthetics might provide predictive insights on direct experiences with the natural, built, and everyday environments that are beyond the reach of the dominant scientific-technological framing [5]. We might reasonably expect principles of environmental aesthetics to illuminate how people will view and relate to the environment as global climate change takes hold. Specifically, we might ponder how people will adjust to climate change and how those adjustments will affect their aesthetic encounters with nature. We might also query whether moral considerations, including human responsibility for climate change, will affect future aesthetic experiences. Indeed, it has been argued that as the climate changes, people's practices will change, providing some compensation for loss of aesthetic pleasure [6]. As nature responds to the pressures of climate change, it has been proposed that aesthetic value will be unaffected by moral considerations [7]. This article considers and critiques both of these arguments. It also calls for a significant rethinking of normative questions bearing on aesthetic appreciation as the impacts from climate change become increasingly widespread and severe.

2. Structure of This Article

Appreciation of nature as a distinct form of aesthetic experience has been a subject of interest to philosophers since at least the 18th century [8]. Philosophical inquiries on aesthetic experience in the age of climate change are relatively few, though interest in the subject is likely to grow as climate change affects more peoples' associations with nature and with places and spaces people inhabit. In the sections to follow, some central tenets of environmental aesthetics are applied to the problem of climate change, with attention to some of the most recent and fully developed treatments. From there, insights from the climate change science literature are arrayed against forecasts made by environmental aestheticians about aesthetic experiences in a world altered by global warming. Drawing on projections for future climate change impacts (including from recent IPCC special reports [9,10]), recent arguments positing the isolation of aesthetic values from moral considerations, specifically in the age of climate change, are challenged. This is the subject of the discussion section.

3. Aesthetic Value, Moral Standpoint, and Climate Change

Arguments for intrinsic and universal qualities of taste, and more specifically, beauty, can be traced to the ancients [11,12], through the surge of breakthroughs in the philosophical aesthetics of nature date to the Enlightenment [8,13]. Prominently, in the 18th century, and under the influence of Kant, the concept of "disinterestedness" as a defining feature of aesthetic experience was developed. Carlson writes [8] that disinterestedness "... disassociated the aesthetic appreciation of nature from the appreciator's particular personal, religious, economic, or utilitarian interests, any of which could impede aesthetic experience." That aesthetic experience is disinterested remains an important proposition in contemporary philosophical aesthetics and its subfield of environmental aesthetics.

Some adherents argue for scientific knowledge (or "scientific cognitive" knowledge) and cultural knowledge as bases for a disinterested, aesthetic appreciation of nature [14–16]. The scientific cognitive perspective holds that serious aesthetic appreciation of nature requires historical and scientific knowledge of the objects of study [8,17]. This perspective has implications for management of natural systems—for example of protected areas. It informs the view that sustainable management of public lands, such as the National Forest System in the United States, requires not simply public support for

beautiful landscapes, but public understanding of ecological principles. Gobster [18], for example, advocates for Aldo Leopold's "ecological aesthetic" in place of "the scenic ideal" as the guiding principle for conserving forest land in the public interest.

Scientific cognitive approaches have been challenged by alternative understandings of ways people associate and appreciate nature. Multi-sensory experiences, metaphor, and imagination are substrates for non-cognitive environmental aesthetics [4,19,20]. So is the thesis that humans are inseparable from the natural, built, and everyday environments that they inhabit. The seamless unity of people and their environments challenges the subject (observer)—object (environment) dichotomy which, itself, is a descendent of earlier writings likening aesthetics of the environment to appreciation of beauty in art [4,21–24].

Both cognitive and noncognitive worldviews offer insights for environmental aesthetics in a climate-changed world. Carlson's approach [25] (p. 273) proposes that pleasurable experiences in nature depend on our ability to recognize characteristic features of particular environments. We might easily conjecture that cognition will continue to be a vital pathway for aesthetic experience in a climate-changed world. For example, our awareness of prolonged droughts may inform our aesthetic encounters with future, drier, terrestrial ecosystems. Non-cognitive pathways to aesthetic experience should also prove important as climate change takes hold. Indeed, emotional arousal and stimulation of imagination may even be intensified in a setting where indicators of climate change are pronounced. Both cognitive and non-cognitive orientations can help scientists and philosophers understand people's aesthetic experiences with climate change. In contrast, whether or not aesthetic values are affected by moral concerns—and more specifically, whether peoples' culpability for climate change taints aesthetic pleasure—is a contested area and of primary interest in the present study.

A related debate considers whether aesthetic experiences, including environmental aesthetic experiences, are by and large positive and pleasurable [26], or are "value-neutral" [27,28]. Answers to that question have important implications for aesthetics in the age of climate change if we assume, on the whole, that human-driven global warming is an undesirable development. Both Emily Brady [7] and Ariane Nomikos [6], authors of applications of environmental aesthetics to climate change, adopt a "value-neutral" orientation. Each of their treatments deserves special attention, beginning with Brady.

3.1. Moderate Autonomism and Aesthetic Value

Brady draws a sharp distinction between the inherent aesthetic qualities of natural environments and the normative factors that affect environmental conditions and end states. She writes [7] (p. 560) that there are more and there are less "radical" variants of this "autonomist" perspective that separates aesthetic values from moral considerations [29]. In the context of art appreciation and criticism, she observes [7] (p. 560) that the moderate perspectives, "... recognise the importance of appreciating aesthetic qualities for their own sake, and do not reject ethical assessment of artworks; however, this assessment is always irrelevant to their aesthetic value." The same holds true, she contends, for aesthetic encounters with a climate-changed environment, illustrating her argument with hypothetical "standard" and "pervasive" examples of climate change.

In the standard case, a diver, who is ignorant of the visual qualities of a healthy coral ecosystem, encounters a reef damaged by warm waters acidified by climate change. The coral is "interestingly-shaped" from this diver's perspective. In contrast, a more experienced diver and amateur naturalist encounters the same reef, viewing coral with "the same" aesthetic qualities but the experience, is "set within some knowledge of context—the states of healthy coral reefs, teeming with life, movement, variety and vibrant colours." Still, Brady argues [7] (pp. 562–563),

The ground of the diver's judgment is not moral concern ... even if there is awareness of the harmful causes of the bleaching. Rather, the grounds of the judgment are the perceptual features of the reef supplemented by previous experience of other reefs. Moral considerations, while relevant to the ecological state of the reef, do not affect its aesthetic value, even if they might appear to, phenomenologically-speaking.

The essential thesis is that the “aesthetic qualities are the same” for both divers, even if the second, more knowledgeable diver’s experience is affected by sadness, regret, or anxiety about the unhealthy state of the reef and the causal processes at play. The moral considerations, Brady contends, do not affect the aesthetic values.

In another variant of the standard case, a beautiful bird is the beneficiary of a climate-changed region. Brady observes that, from the perspective of the “moderate moralist,”

... aesthetic value is subject to ethical appraisal ... So, finding beauty in the bird either condones climate change and the human actions underlying it, or the bird and its species represent life-denying qualities because its very beauty is linked, if indirectly, to harm ... For the moralist then, the bird’s beauty is potentially diminished, and we will be under moral pressure to cease appreciating it [7] (p. 563).

As a self-declared “moderate autonomist,” Brady rejects the moralist perspective:

... the autonomist’s conceptual distinction makes more sense Though harm may form part of an explanation of its arrival in a new place, the aesthetic qualities—the lovely harmony of its song or its light, floating movement—are not themselves diminished by recognition of that harm Moderate autonomism doesn’t deny that moral concerns arise, but it does hold that they remain external to aesthetic value [7] (p. 564) [30].

In contrast to standard cases of climate change, the “pervasive” case is one “where everything aesthetically appreciated in nature somehow involves harm caused by climate change” [7] (p. 565). “Things in this world are the result of processes linked to climate change either directly or indirectly.” The mark of climate change is everywhere, and hence, any possible enjoyment of nature is morally tainted. “This seems to me to be a very odd world; on an extreme interpretation it could be a place where no one can bear to enjoy nature’s beauty, finding it just too painful to do so” [7] (pp. 565–566). Brady predicts that people living with pervasive climate change are more likely to adapt to the changed environment and to enjoy its pleasures rather than let moral concerns preclude positive encounters with nature.

The majesty of the polar bear won’t be affected. Rather, it will just exist within a new context, in which everything has been impacted on one way or another If we have to choose between one world and the other, I’d much rather live in the autonomist’s version. And on the moderate view I take, this is not a morally insensitive world, where aesthetic value trumps all other values [7] (p. 566).

The aesthetic values that people enjoy in nature will not really change in a climate-changed world, Brady contends. Rather, those values will be embedded in climate-altered contexts. The aesthetics stay the same, as people adjust to new conditions.

3.2. *Adjusting to Climate Change “in Place”*

Other commentators consider environmental aesthetics with either direct or indirect reference to climate change, but the focus shifts from the context of nature to that of ordinary life and the every day. The aesthetics of everyday experience is a well-developed theme in the environmental aesthetics literature, with John Dewey among the first to specify conditions whereby everyday experience forms aesthetic experience [31,32]. Tuan argues that everyday places we care about are places with aesthetic value [33]. The spaces where we eat, sleep, and work are imbued with meaning because they are familiar to us, and over time, we endow them with value [34]. Relatively recently, experts have explored how the aesthetics of everyday experiences might change as the climate changes [3,35,36]. Perhaps the best developed perspective on the aesthetics of place in a climate-changed world is that of Nomikos [6].

Nomikos argues that “our everyday living environments have a *familiar* aesthetic character” [italics in the original] [6] (p. 456), and the familiar qualities of places we know and live in evoke feelings of predictability but also, of pleasure and safety. The argument extends to the routines that we perform in these familiar places. Drawing on Melchionne [37], she observes on an “everyday aesthetic” defined by “aspects of our lives marked by widely shared, daily routines or patterns to which we tend to impart an aesthetic character” [6] (p. 456). There is also a prescriptive dimension to the everyday aesthetic whereby, “The best way to sustain subjective well-being . . . is to engage in everyday activities that promote positive emotions.” According to Nomikos, regular routines will prove salutary as places we once recognized are transformed by global warming. Climate change increases the probability of disturbance to the places we consider safe, familiar, and that generate positive emotions. Nomikos illustrates how climate change has altered the livelihoods and physical and emotional wellbeing of members of Rigolet, Nunatsiavut—an Inuit community, highlighting these people’s “material loss”. Rigolet interviewees likened ice to land; when the ice melts, land disappears. The Rigolet also experienced “non-material loss of the meanings, histories, and identities embodied within that place . . . ” [6] (p. 459).

As the climate changes, Nomikos argues, a practicable way to preserve the positive emotions of the everyday aesthetic will be the adaptation of daily engagements and routines. Important to this argument is the comparatively diminished role that physical, environmental surroundings—the “material”—will play in the formation of aesthetic experience. More salient, according to Nomikos, are the practices and routines we develop in relation to those objects and to the physical world. Relying, again, on Melchionne’s [37] conceptualization of the everyday aesthetic, she writes,

. . . it is not the content or product of everyday activities, but rather *ongoing, routine* nature—the familiar role they occupy in the routine character of everyday life—that matters and makes them conducive to subjective well-being [6] (pp. 459–460).

Aesthetic experiences are preserved in a climate-changed world provided that the subject adjusts to those changes with modified practices, and at some level, gains personal control over external forces that are at once powerful and impersonal. Nomikos notes that these adjustments and the aesthetic comforts they provide have value irrespective of any moral qualms about climate change—and about the human folly that force people to adopt new routines. Like Brady, she embraces autonomism, conceptualizing aesthetic value in isolation from moral consideration. She writes, “It is entirely consistent to take comfort in (and even aesthetically appreciate) the familiar structure of your everyday routine while simultaneously condemning the newfound unfamiliarity of your everyday surroundings” [6] (p. 461).

4. Climate Change Science Meets Environmental Aesthetics

For Nomikos and Brady, a core concern is how inhabitants of a warming planet simultaneously adjust to climate change while continuing to derive pleasure, comfort, or security from encounters with the environment, and in the case of Nomikos, with the everyday. Nomikos observes the compensatory value of adaptable, everyday routines; Brady forecasts the durability of aesthetic values, doubting that people’s future encounters with the environment will be tainted by moral considerations. Both agree that there may be plenty to condemn or regret about climate change, but aesthetic values are impervious to these concerns. Increasingly reliable climate change science helps contextualize conjectures about life in a climate-changed world, sharpening our understanding of who will be (and is already) affected by climate change, with implications for our understanding of aesthetic experience. Recent scientific forecasts of impacts from climate change by the IPCC, and studies of communities that are grappling with climate change, now, help animate, and pressure-test, suppositions about daily routines in a climate-changed world and opportunities for aesthetic appreciation in places affected by climate change.

Among the cruelest aspects of climate change is the selective pressure it exerts on people who are least able to cope and adjust to the changing conditions. The IPCC and other experts forecast

profound, negative impacts on people in poor countries. According to the IPCC's Fifth Assessment Report, as the global climate warms to approximately 1.5 °C above pre-industrial levels (which could take place as early as 2030), the effects of climate change could force as many as 16 million people into extreme poverty, mostly through impacts on agriculture and food prices [38,39]. The IPCC predicts that the global mean monthly number of people exposed to extreme drought before mid-century could approach 114 million, compared to around 190 million at 2 °C in the 2041–2060 time period [9]. At 1.5 °C of warming, twice as many megacities could become heat stressed, exposing more than 350 million people to deadly heat by 2050, assuming midrange population growth (Ibid., p. 262).

As people develop new routines to adjust to these conditions, the frequency and quality of aesthetic encounters with the environment will be profoundly altered. Impacts will cascade through livelihoods and subsistence practices, leading to changing associations—and affinity for—the environment. Indicators of these changes are already apparent in agrarian communities in different regions of the world. Leduc [40], for example, found that decreasing snowfall in the early 2000s in Nepal contributed to longer dry seasons, decreased crop production, and increased food insecurity. These cascading problems prompted income-driven deforestation by the community, severely reducing the availability of trees for fuelwood, forcing women to walk much farther to gather wood. Scavenging for fuelwood is a dangerous task in the region's steeply sloped countryside. The search for scarce fuel consumed about six hours every third day (Ibid). Kakota et al. [41] observed comparable challenges for female smallholder agrarians in southern and central Malawi. Household surveys revealed a shift in subsistence-oriented natural resource management roles (e.g., fetching water and fuelwood) from men to women, and greater hardships on women, as the climate became drier and hotter.

... Culturally, most of these routine activities are carried out by women and girls and they suffer greatly when the resources are scarce. Even though some men's roles may have similar effects, their roles are not regular and pertinent to the daily demands of the household. Reduction of natural resources results in more demand for labour and time from women, hence, reducing the quality and quantity of time and labour which is required for farm activities, income-generating activities, food preparation and other resources such as education. Consequently, food availability, access and nutrition are compromised (Ibid, p. 301).

In this climate-altered world, women adjust not simply to new environmental conditions, but to the knock-on effects of these changes, including an intensification of gendered, domestic responsibilities at the expense of other activities, including leisure time. Agrarian women may spend more time engaged in outdoor activities in a climate-changed world, but the increasing burden, drudgery, and danger of this work will likely spoil or simply preclude aesthetic encounters with nature.

The contexts described in Nepal and Malawi present a formidable test for Nomikos' thesis. The crux of her argument is that, as people alter their daily routines, they will find comfort, security, and compensation for aesthetic losses caused by climate change. Personal control of these routines, she notes, is part of the successful adaptation process. In the Malawian case, control *is* asserted as women in drought-stricken regions adjust their regular routines—for example, leaving more time to fetch increasingly scarce wood or water. Indeed, they *must* assert control over their daily lives so as to keep family members fed, clean, and sheltered. Losing control of the situation poses survival risks and is a non-option.

Daily routines in advanced industrial societies will need to radically change, too. So as to develop a "bottom-up" understanding of the impacts of climate change on daily living conditions, Toole et al. [42] calls for "a household focus, that foregrounds everyday life." The authors forecast that "non-climatic effects" that are second-order problems caused by climate change will be many, varied, and inter-connected.

Toole et al. write (Ibid, p. 205),

Beyond direct impacts (personal property damage and injury), extreme weather events will necessitate adapting to: impacts on public infrastructure and services that households rely upon . . . rising insurance premiums; as well as psychological stress, and changing place and community identities. How households may adapt to such pervasive ‘more-than-climate’ challenges in their daily lives—keeping their houses comfortable; communicating when telecommunications networks fail; commuting when transport infrastructure is damaged or fuel becomes unaffordable/unavailable; or cooking meals when costs or availabilities of foods at the supermarket have changed—remains largely unknown. At the same time, households will also need to adapt to broader scale, more-than-climate stimuli: political discourse, media debates, legislation, financial instruments, market conditions, planning regulations, conflict, fear, migration.

Toole et al.’s bottom-up inventory of the interlinked challenges posed by climate change challenges a literature on climate change impacts that more often simply tallies predicted losses and gains in different societal sectors or in particular regions. Their approach is helpful for forecasting future aesthetic experiences in a climate-changed world, advocating for a more nuanced understanding of the full sweep of household-, neighborhood-, and local-level resiliencies of various interdependent systems. Routines will need to adjust, but more radically, people may need to prepare for a perpetual state of complex problem-solving. As climate change intensifies and becomes more pervasive, one might expect time-saving practices to be replaced by the time-intensive work of continually altering and adapting those practices, thereby reducing opportunities for aesthetic engagement with the environment.

5. Discussion

In the previous section, the rigors of adapting to climate change are presented in the form of present-day experiences of vulnerable populations, particularly women in poor agrarian contexts, and from a hypothetical, household-level perspective in an advanced industrial setting. How might our understanding of the lived experiences of people grappling with hotter, drier environments challenge the moderate autonomist and “aesthetic consolation” arguments presented in prior sections? Does the case material affirm that people find comfort through new practices as they adjust to climate change? As climate change bears down, can we expect people to experience aesthetic pleasure unaffected by moral concerns?

We begin with Brady’s framing, and her claim that the contamination of aesthetic experiences by moralism could lead to a “condemnation” of beauty in a climate-changed world. Recall that the moderate autonomist perspective she adopts eschews moral considerations, rejecting the possibility that pleasurable encounters with a climate-changed world are necessarily tainted by normative judgements about the human actions underlying climate change. The moralist, in Brady’s portrayal, is essentially a scold:

... do I want to be the kind of person who appreciates aesthetic value in things that have morally suspect, even heinous, origins? Doesn’t such appreciation amount to assenting to actions, beliefs or attitudes we find reprehensible? Wouldn’t it be better to condemn that beauty as superficial in some sense ([7], p. 566)?

The moralist is also a killjoy—spoiling people’s potential enjoyment of the environment. Yet, climate change and its likely promise of misery for the many would seem to provide a more fleshed-out set of moral concerns. Among them is the moral quandary of whether we should alter our climate-forcing behavior today, knowing that business as usual augers: (1) Fewer opportunities for positive environmental experiences and an overall increase in ugly environmental conditions; (2) increasing instances of climate change “winners” and “losers” and zero sum outcomes; and (3) the increasing obscurity of the moderate autonomist orientation, particularly as the consequences of climate change—and the ugliness it generates—intensifies. Each of these challenges is considered below.

5.1. Fewer Opportunities for Positive Aesthetics and an Overall Increase in Ugliness

As the impacts of global warming become more widespread and severe, and with the worst impacts affecting regions with the poorest and most vulnerable populations, opportunities to enjoy the environment will be limited as increased demands for life-sustaining “adjustments” steal time away from other pursuits. In the Nepali and Malawian cases, women are adapting to the increasingly drought-stricken environments they live in, asserting control, and developing new routines so as to keep their households as secure and their families as healthy as possible. However, the new routines do not afford pleasure and they do not compensate for aesthetic losses. In the Malawian case, adjustments to harsher conditions require women to spend more time performing chores that men are excused from. Daily practices take the form of unpleasant and backbreaking chores. The “household-level” perspective offered by Toole et al. highlights another problem for the thesis that adjusted routines will afford comfort. Climate change is, after all, about *change*, and if the world is continually changing, then there will be pressure to change daily routines, too. The aesthetic pleasure of falling into a new routine may prove fleeting in a climate-changed world. Moreover, under the various greenhouse gas emissions scenarios documented by the IPCC, climate change impacts become more intense, over time. If daily routines entail increasingly undesirable compromises and even desperate choices, these new practices are unlikely to afford comfort.

Climate change also promises, in aggregate, uglier, less pleasing environs and less tolerable environmental conditions, concentrated in places where people are especially poor and at-risk. This “more ugliness” assertion is likely to be challenged from “value neutral” or “moderate autonomist” perspectives. The value-neutral approach rejects the notion that aesthetic experience is necessarily pleasurable; rather, it could be positive or negative, or somewhere in between. The moderate autonomist perspective conceives of moral standpoint and aesthetic qualities as distinct. Aesthetic qualities are appreciated or are impressionable on their own terms, separate from moral considerations.

In a world of expansive ugliness, however, it may be increasingly difficult to wall-off moral considerations. The pleadings of the moralist, in Brady’s illustration, is comparatively easy to dismiss because that person is a finger-wagging scold who condemns beauty. In contrast, in a climate change-ravaged world, where peoples’ environmental aesthetic encounters are primarily negative, Brady’s moralist may find a sympathetic ear. On a planet with a wrecked life support system, the moralist is condemning the forces that created misery and decay.

5.2. Fickle Fortune in a Climate-Changed World

A related problem for the moderate autonomist is the moral quandary of who benefits from positive aesthetic experiences, and at whose expense. Position and proximity in the causal chain of climate change is relevant here, and the normative stakes are higher than in the “condemnation of beauty” dilemma presented in Brady’s formulation. There will be occasions when the prospective enjoyment of a climate-altered environment is all but precluded by the weight of moral urgency.

A brief hypothetical case illustrates this dilemma: Assume homeowner A’s waterfront property succumbs to sea level rise, suddenly creating an unobstructed view for homeowner B. Homeowner B’s contentment is likely to be tempered by feelings of regret or sorrow. Homeowner B is a proximate player in the zero sum context of the waterfront view case, whereas the divers in the “standard” case, and the observers of the climate-changed world in the “pervasive” case are essentially bystanders with diffuse culpability for the degraded nature they are viewing. The latter are more likely to condemn the collective guilt of society than to self-implicate. In comparison, homeowner B’s fickle fortune will affect her ability to enjoy the new view. The moderate autonomist will argue that the intrinsic, aesthetic values of the view, itself, are insulated from moral taint. But if proximity issues and zero-sum outcomes become constant companions of aesthetic experience, the doctrine of autonomism becomes increasingly abstract.

5.3. Moderate Autonomism and Climate Change Dystopia

The self-reproaching observer of nature is only one source of risk to the moderate autonomist. Even if we accept that moral considerations generally do not impinge on aesthetic values, philosophers who value plain evidence may cease defending moderate autonomism, as a practical matter, because there are fewer opportunities for aesthetic contemplation, period, in a world severely damaged by climate change. As climate change imprints ugliness on the world and limits people's opportunities for pleasurable environmental experiences, the separation of moral considerations from aesthetic values becomes a subject primarily of theoretical interest.

In the next century, if the more severe forecasts for climate change are realized, a great many destinations and everyday places that were once deemed beautiful may cease to exist or may afford only a negative aesthetic. Pervasive ugliness will limit opportunities for pleasurable experiences, but so may the constant stress of having to satisfy physiological needs—a reality that may affect tens of or even hundreds of millions of people by as early as 2050 [10] (pp. 16–17).

In areas severely damaged by climate change, one might imagine experts in *climate change aesthetics* helping people to adjust to the harsh realities of their transformed and disfigured environments. These skilled individuals might be able to identify and make others aware of beauty not simply in the midst of poverty, but as a defining feature of poverty—intrinsic to places and to objects that would otherwise be regarded as ugly. Grossly deformed nature may be considered beautiful simply because it is still recognized as somehow natural. Our wonderment in observing dying animals feeding their offspring may be inspired by our own desperate plight to keep our families fed. As we consider the common plight of people and other sentient creatures struggling to survive, we gain aesthetic insight. But those insights will be tainted—perhaps, profoundly—by regret. In these snapshots of a climate change-ravaged world, aesthetic values are more difficult to isolate from moral consideration. The proficient climate change aesthetician will have a deep appreciation for context and nuance when estimating whether and to what extent moral pressures bear on aesthetic experience.

6. Conclusions

This article explores recent philosophical insights on environmental aesthetics in a world altered by global warming, paying special attention to associations between moral standpoint and aesthetic value. Based on scenarios for 1.5–2.0 °C of warming, widespread impacts are projected, with particularly grave consequences for poor and vulnerable communities. The struggle to adapt is likely to severely limit opportunities for pleasurable aesthetic experience. A household-level perspective helps inventory the many, varied, ever-changing, and inter-dependent adjustments that individuals and families will need to make, including people in comparatively well-off circumstances [42]. Expectations that our adjusted routines will afford comfort and aesthetic opportunity will be tested by weak points of connection among transportation networks, public utilities, and IT infrastructure, with second-order effects on food security, habitability of homes and workplaces, hygiene, and household economics. Greater anxiety and stress will accompany the increased time allocated to adjust to climate change, competing for aesthetic opportunity. The short years ahead should reveal whether there are thresholds for aesthetic pleasure amidst the adjustments to climate change. Opportunities for otherwise positive aesthetic experiences are at risk if they are in close proximity to other peoples' loss and misfortune.

In a world severely altered by climate change, aesthetic encounters of the positive variety will be increasingly rare, and for a great many people will not be offset by adapting to climate change, including through adjusted routines and practices. For students of environmental aesthetics, the field may need to make its own adjustments, including developing a richer understanding of the aesthetics of ugliness and of a world where aesthetic opportunities are rare because people are alternately too focused on survival or environmental conditions are so badly damaged that aesthetic encounters are primarily negative. Environmental aesthetics already make room for melancholy and longing as valid categories of aesthetic experience; but is the field ready for anguish to be the dominant aesthetic form? Instead of debating whether we should appreciate or condemn beauty in a climate-changed

world, we might consider how many moments of serenity will be afforded by climate change, who will be best-positioned to enjoy those moments, and at whose expense. If climate change decreases opportunities for positive aesthetics, it necessarily changes how we study and verify environmental aesthetic claims. If the present direction continues, aesthetic inquiry on climate change risks being dominated by abstraction. Moving forward, the urgency of climate change will demand a reappraisal of the relationship between aesthetic value and moral standpoint, because aesthetic experiences will become increasingly rare and predominantly negative for millions of people, worldwide.

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16. Some Doubt the Proposition That Disinterestedness and Scientific Cognitivism Are Compatible Since Disinterestedness Calls for Appreciating Nature “on Its Own Terms” While Scientific Cognitivism Presupposes Intellectual Commitments to the Principles and Tools of Science (See, for Example, Dow, J. Problems for Disinterestedness in Scientific Cognitivism. James M Dow (Blog). Available online: <https://jamesmdow.com/blog/2019/01/03/01-03-2019-problems-for-disinterestedness-in-scientific-cognitivism/> (accessed on 24 August 2019). Allen Carlson summarizes the debate and alternative perspectives in section 5.1 of Carlson, A. Environmental aesthetics. In *The Stanford Encyclopedia of Philosophy*; Zalta, E.N., Ed.; 2019. Available online: <https://plato.stanford.edu/archives/sum2019/entries/environmental-aesthetics> (accessed on 24 August 2019)).
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22. The inseparability of humans and nature is a subject or rich study not only in environmental aesthetics, but also, phenomenology, Dewey’s pragmatic philosophy, Eastern philosophical and religious traditions, and environmental psychology. The author is indebted to an anonymous referee for this observation.
23. Berleant doubts the tenet of disinterestedness, considering that it relies fundamentally on the subject-object conceptualization of how people associate with nature. Berleant, A. What is aesthetic engagement? *Contemp. Aesthet.* **2013**, *11*, 5.
24. Similar to Berleant’s “seamless unity of people and their environments” is Dewey’s “dissolving of self into world” (Crippen, M. Group cognition in pragmatism, development psychology and aesthetics. *Pragmatism Today* **2017**, *8*, 185–197). Crippen, channeling Dewey, identifies signal features of aesthetic experience: Such experiences stand out from the general stream of ordinary experiences; they fully engage the faculties; and they are comprised of highlights that, together, form a dramatic whole.
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27. Saito, Y. *Aesthetics of the Familiar: Everyday Life and World-Making*; Oxford University Press: Oxford, UK, 2017.
28. Brady, E. SAITO, YURIKO. *Aesthetics of the Familiar: Everyday Life and World—Making*. Oxford University Press, 2017, 240 pp., 24 b&w illus., \$55.00 cloth. *J. Aesthet. Art Crit.* **2019**, *77*, 87–90.
29. Brady declares that the moderate autonomist perspective “... tends to be a less popular position in current debates in the philosophy of art, where moralism and moral content, arguably, carry more weight” particularly as realized through literature and cinema, but she also observes “there has been little discussion of these positions in natural aesthetics” Brady, E. Aesthetic value, ethics and climate change. *Environ. Values* **2006**, *23*, 551–570 (p. 560). Commentaries most relevant to natural aesthetics, according to Brady, are moralistic claims that “... ‘wild’ nature is only ever beautiful or aesthetically good, and can never be ugly” (Ibid). This latter contention could be challenged by the view that “wild nature” is a cultural invention rather than real in any historical or empirical sense (see, Cronon, W. The trouble with wilderness; or getting back to the wrong nature. In *Uncommon Ground: Rethinking the Human Place in Nature*; Cronon, W., Ed.; W.W. Norton & Company: New York, NY, USA; London, UK, 1996; pp. 69–90.)

30. Brady also presents a “narrative” case which has less to do with climate change than with ordinary ecological transition—for example, a marsh drying out and becoming a woodland. Brady notes that while there are aesthetic losses associated with the passing of the marsh, new aesthetic qualities emerge with the sights, sounds, and smells of the woodland ecosystem. There are no moral pressures on aesthetic judgment in this illustration, though again, according to Brady, moral considerations do not matter at any level from the perspective of the moderate autonomist.
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