# Perpetual Perishing, Perpetual Renewal

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**Abstract:** Darwinian nature is in dialectic: conflict and resolution. Human life evolved out of such dialectical nature. If that began in Africa, it continues when humans migrate far North. Religious encounters with such nature, whatever their differences with Darwinism, also find that life is perpetually renewed in the midst of its perpetual perishing. Life is ever "conserved," as biologists might say; life is ever "redeemed," as theologians might say. In this generating of new life, nature is cruciform, beyond the dialectical. Such processes, set in their ecological settings, perennially transform disvalues in nature into prolific values, generating the global richness of evolutionary natural history and its exuberance of life. Such sombre beauty in life is nowhere better exemplified than in boreal and Arctic nature.

#### 1. Conflict and Resolution: Dialectical Nature

We often encounter nature with ambivalence, a seeming mix of some goods and some bads. If humans first found this out in Africa and the Middle East, the ambivalence continues in the Yukon and points North. Living more deeply into such encounter, we realize the creative character of conflict and resolution. Superficially, so far as nature is antagonistic and discomforting, it has disvalue. With deeper insight, we do not always count environmental conductance as good and environmental resistance as bad, but the currents of life flow in their interplay, or, to be more philosophical about it, in their dialectic. An environment that was entirely hostile would slay life; life could never have appeared within it. An environment that was entirely irenic would stagnate life; without struggle, neither biodiversity nor biocomplexity would have evolved.

Most of the beauty of life comes out of such conflict and resolution. The cougar's fang sharpens the deer's sight, the deer's fleet-footedness shapes a more supple lioness. The brains of lions in zoos rapidly degenerate. Chickadees living in the wild produce double the number of neurons of

chickadees in captivity. We admire this element of fight even in the maimed and blasted, as with the gnarled timberline fir.

Human life too fits into such an ambivalent nature. Without such challenge, human life would never have appeared on Earth. The human hand with opposable thumb, the human mind, the most complex object in the known universe, came out of such challenging encounter. All our culture, in which our classical humanity consists, has originated in the face of oppositional nature. The pioneer, pilgrim, hunter, explorer, and settler loved the frontier, the desert, the mountains, the wildlands, the northlands for the discipline that put fibre into the human soul. One reason we lament the passing of wilderness is that we do not want entirely to tame this archaic, foundational element in which our genius was forged.

The coming of Darwin is often thought to have ruined nature's harmonious architectures, but the struggles he posits, if sometimes overwhelming, are not always valueless. None of life's heroic quality is possible without this dialectical stress. Take away the friction and would the structures stand? Would they move?

When we recognize how we humans are placed within such ambivalent nature, do we then say that we only wrest values from valueless nature? Has this necessary dialectical context of life and mind no value? That humans should struggle against storm and winter is not here denied, nor that we may need to oppose wolves and thistles, rattlesnakes and mosquitoes. But we add that humans can respect the alien in nature not only in its autonomous otherness, but even in its stimulus, provocation, and opposition. The hardest lesson in ethics is to learn to love one's enemies.

Some will complain, perhaps fiercely, that nature only serves as an occasion for the construction of human virtues; that the natural wisdom gained shows only the virtues that develop in humans when we confront oppositional nature, and thus that there is no cause to celebrate nature, but rather to admire the human genius taking advantage of nature when it serves, resisting nature when it opposes—an opportunist surmounting of nature in which humans succeed resourcefully. But this anthropocentric account is too one-sided. Evolution and ecology have taught us that every kind of life is what it is environmentally, in its surroundings, not autonomously.

Humans too are environmental reciprocals, indebted to our environment for what we have become in ways that are as complementary as they are oppositional. Dialectically, the character is achieved within us, but the context is relational. Nature is not sufficient to produce these virtues, but it is necessary for them. Humans are realizing in the strong and good life something of the strength and goodness that nature has disciplined into

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its creatures and is bequeathing to us. "Struggle" is a familiar theme in evolutionary biology; "dialectic" is a classical philosophical idea, going back to Greek philosophy and continuing through the dialectic of thesis, antithesis, and synthesis elaborated by Georg Friedrich Hegel, on into contemporary philosophy.

## 2. Struggle and Regeneration: Cruciform Nature

"Dialectic" is a term from the philosophers. If we wish to be religious we can say that nature is "cruciform." Suffering has evolved with life; it too is among the emergents. An organism can have needs, which is not possible in inert physical nature; such needs may be satisfied by resources found in surrounding nature. But if the environment can be a good, that brings also the possibility of deprivation as a harm. To be alive is to have problems. Things can go wrong just because they can also go right. In an open, developmental, ecological system, no other way is possible. All this first takes place at insentient levels, where there is bodily duress, as when a plant needs water.

Sentience brings the capacity to move about deliberately in the world, and also to get hurt by it. We might have sense organs—sight or hearing without any capacity to be pained by them. But sentience is not invented to permit mere observation of the world. It rather evolves to awaken some concern for it. Sentience co-evolves with a capacity to separate the helps from the hurts in the world. A neural animal has the power to move through and experientially to evaluate the environment. The appearance of sentience is the appearance of caring, when the organism is united with or torn from its loves. The earthen story is not merely of "goings on," but of "going concerns." The step up that brings more drama brings suffering.

For animals in the wild, suffering, though present, has been trimmed to a level that is functional, bearable, even productive. Plants and animals are selected, the biologists insist, for their "adapted fit." Each organism must survive to reproduce. We could say that those selected, those that persist in their struggles, are those that have the most to contribute to better adapted fit in the next generation (leaving more of those genes for the future). In this conflict and resolution, survival of the fittest is survival of the senders. In their perishing, they provide for life's regeneration.

Whereas many take Darwinian nature to be ungodly, on account of these evils, I am asking here whether we cannot bridge this struggle in nature with the account of Jesus as suffering for human redemption. The element we seek at the moment is the note of redemptive suffering as a model that makes sense of nature and history. So far from making the world absurd, suffering is a key to the whole, not intrinsically, not as an end in itself, but as a transformative principle, transvalued into its opposite. The capacity to suffer through to joy is a supreme emergent and an essence of Christianity. Yet the whole evolutionary upslope is a lesser calling of this kind, in which renewed life comes by blasting the old. Life is gathered up in the midst of its throes, a blessed tragedy, lived in grace through a besetting storm. In Christianity, the enigmatic symbol of this is the cross.

So much of Earth's life seems tossed forth in waste, only now the process seems cruel, at least at its advancing levels. This torments the possibility of divine design, reducing natural history to a desolate, evil scene. The time span of ceaseless struggle is the challenge to interpret in biology. Something stirs in the cold, mathematical beauty of physics, in the heated energies supplied by matter, and there is first an assembling of living information centres, and still later suffering subjects. Energy turns into pain. Is this now destructive ugliness emergent from the first time? Or is it a more sophisticated form of creative beauty?

We are here on nonscientific ground, for bioscience as such can only amorally and nonaesthetically describe what has happened, and to assess whether this is good or bad requires valuational judgment. But struggle is integral to Darwin's description of this natural history. Experiences of the power of survival, of new life regenerated out of the old, of creative resilience in the ongoing life struggle—these are Darwinian themes but they resonate too with the religious conviction that there is something divine about the power to suffer through to something higher, about this regeneration of life in the midst of its perishing.

Nature is *cruciform*. Every life is chastened and christened, straitened and baptized in struggle. Everywhere there is vicarious suffering, one creature dying that another may live on. The global Earth is a land of promise, and yet one that has to be died for. The story is a passion play long before it reaches the Christ. Since the beginning, the myriad creatures have been giving up their lives as a ransom for many. In that sense, Jesus is not the exception to the natural order, but a chief exemplification of it. Redemptive suffering is a model that makes sense of nature and history. Darwinians see this truth: there is a struggle for survival. But so far from making the world absurd, such struggle is a key to the whole, as a transformative principle, transvalued into its opposite. Life is gathered up in the midst of its throes. When we confront death, we also think of birth, for the two are inseparable, alike in evolutionary biology and in religious faith.

The root idea in the word "nature" is "birthing," as of a woman in labour (Greek, *natans*, giving birth). Birth is a transformative experience where suffering is the prelude to, the principle of creation. The world is not a paradise of hedonistic ease, but a theatre where life is learned and earned by labour. Mothers suffer, and regenerate the human community. Death *in vivo* is death ultimately; death *in communitatis* is death penultimately but life regenerated ultimately: life, death, and regeneration. "Travail," "birthing," is a key to understanding these evils. In the Bible, the apostle Paul writes that "the whole creation has been groaning in travail together until now" (Romans 8:22). That maternal labour is archaic in the antique sense, and equally archaic in the foundational sense: a cruciform creation—perpetual perishing, perpetual regeneration.

Life is the first mystery that comes out of earthen nature, and death a secondary one. But death comes as surely as life to all higher organisms. Even the lower forms that reproduce by cell fission or by generating offshoots may and do die. So the great value, life, is countered by the great disvalue. For each organism, the last word is destruction. But we are trying to see nature systemically, where death is not the last word—at least it has never yet been across three and a half billion years. Death is the key to replacement with new life. If nothing much had ever died, nothing much could have ever lived. Remember the survival of the fittest is the survival of the senders, those living organisms that best send life into the next generation.

Just as the individual overtakes, assimilates to itself, and discards its resource materials, so the evolutionary wave is propagated onward, using and sacrificing particular individuals, who are employed in, but readily abandoned to, the larger currents of life. Thus the pro-life evolution both overleaps death and seems impossible without it. Death is part of the life cycle, not life part of the death cycle. The death of the organism feeds into the non-death of the species. Only by replacements can the species track the changing environment; only by replacements can they evolve into something else. Species sometimes do die, go extinct without issue, but they are often transformed into something else, new species; and, on average, there have been more arrivals than extinctions. The result is the increase of both diversity and complexity that is the miracle of evolutionary history.

The nature of nature is a millennia-long struggle for life, perpetually perishing, perpetually regenerated. I am trying to see into the depths of what is taking place in natural history. The view here is not Panglossian; it is a sometimes tragic view of life, but one in which tragedy is the shadow of prolific creativity. That *is* the case, and the biological sciences—evolutionary history, ecology, molecular biology—can be brought to support this view, although neither tragedy nor creativity are part of their ordinary vocabulary. Since the world we have, in its general character, is the only world logically

and empirically possible under the natural givens on Earth—so far as we can see at these native ranges that we inhabit, this world that *is*, *ought* to be.

#### 3. Disvalue Transformed: Creative Nature

The classical issue of nonmoral evil in nature needs to be reframed in the light of ecology. Wild nature can seem ugly. Wildness is a gigantic food pyramid, and this sets value in a grim, death-bound jungle. Blind and ever urgent exploitation is nature's driving theme. An ecosystem contains only the thousandth part of creatures that sought to be, but rather became seeds eaten, young fallen to prey, parasites, disease. The Darwinian revolution has revealed that the governing principle is survival in a world thrown forward in chaotic contest, with much randomness and waste besides. The wilderness teems with its kinds but is a vast graveyard with hundreds of species laid waste for one or two that survive.

But such struggle can be framed another way, with a gestalt switch: the wilderness can seem a great scene of disorder, but it is also a great scene of the pumping out of disorder. Indeed, all this resourcefulness has to be so understood. The phenomenon of life struggles on, but has achieved so much, pumped up out of the soil, persisting on by ever novel arrivals. The degradation of things in the wild is followed by nature's orderly self-assembling of new creatures amidst this perpetual perishing. Earth slays her children, a seeming great disvalue, but bears an annual crop in their stead. This pro-life, generative impulse is the most startling and valuable miracle of all.

To keep our bearings, we must locate individual lives on larger horizons, as goods of their kind, good kinds, in an ecosystem greater than they know. We can subsume struggle under the notion of a comprehensive situated fitness. Forms live on that more efficiently use food resources, take better care of their young, learn to form societies, fill niches not exploited by others. The survival of the fittest shapes the ever more fit in their habitats. Each is for itself, but none is by itself; each is tested for optimal compliance in an intricately disciplined community. Every organism is an opportunist in the system, but without opportunity except in the ongoing system.

Darwinians struggle to get the big picture in nature, and they are quite right that there is a dark side to nature. This is the classical question of theodicy, now in an evolutionary setting, now also in an ecological setting. I do not wish to cast Darwinism down, only to cast it in a different light. To put it aphoristically, most Darwinians see the dark clouds, I see the silver lining. Perspective is crucial. Ugliness is transformed in ecosystemic perspective. If we enlarge our scope in retrospect and prospect (as ecology greatly helps us do), we get further categories for interpretation. The rotting elk returns to the humus, its nutrients recycled; the maggots become flies, which become food for the birds; natural selection results in better adapted elk for the next generation. The system tracks new environments by casting forth further mutants in the struggle for survival. Every item must be seen not in framed isolation but framed by its environment, and this frame in turn becomes part of the bigger picture we have to appreciate, not a "frame" but a dramatic play. The momentary ugliness is only a still shot in an ongoing motion picture. The world is not a jolly place, not a Walt Disney world, but one of struggling, sombre beauty. The dying is the shadow side of the flourishing.

In this perennial process of nature there is "regeneration"—and now I am invoking a theological as well as a biological word. Seen another way, although the elements of suffering and struggle in these generative processes are not punishment for sin, these processes are central in biology. It is not that redemption never happens; it is always happening in the life-death-lifedeath struggle. Whatever is in travail needs redemption, whether or not there is any sin to be dealt with. If we take the moral component out of redemption (or, better, if we restrict the moral component to the redemption of humans, who are moral and immoral), and ask whether the biodiverse amoral values present in nature need to be saved, then the answer is most certainly that they do. "Conserved" is the biological word; life is the unrelenting *conservation* of biological identity above all else, an identity that is threatened every moment, every hour, every generation. But that threatened life has prevailed for several billion years. Nature is ever redeemed.

The point is to see into the depths of what is taking place, what is inspiring the course of natural history, and to demand for this an adequate explanation. The evolutionary struggle is a history of *transvaluing* disvalues into values—not simply the replacement of one by the other, seriatim, not simply both ambivalently, paradoxically present. Disvalues and values are both objectively present in nature (regardless of human evaluators), and the struggle is not a zero-sum game, nor is it null of value. Rather, the struggle is conflict and resolution, perpetual perishing and perpetual redemption, disvalues transformed into values, and this is the secret of life's prolific creativity.

#### 4. Arctic/Boreal Nature: Sombre Beauty

My themes so far have characterized life wherever it takes place on Earth. In conclusion I turn to life in the North, where these features take on distinctive

dimensions. My experiences are drawn from northern Scotland, the Orkneys and Shetlands, from northern Scandinavia, from Siberia and northeastern Russia, from Antarctica, and, more recently from the Yukon. My own home county in Colorado, Larimer County, has more alpine land than in all of Switzerland. As one gets further north (in our hemisphere), or higher in elevation, life gets more harsh. That is also demanding philosophically.

By some accounts life in the North is especially hellish. The Scandinavian father of modern biology, Carl Linnaeus, wrote in his diary: "Next began the muskegs, which almost entirely stood under water; these we had to cross for miles; think with what misery, every step up to our knees. ... The whole of this land of the Lapps was mostly muskeg, here called styx. A priest could never so describe hell, because it is no more horrible. Never have poets been able to picture the Styx so foul, since that is no fouler" (Linnaeus (1772), 1811, vol. 1, pp. 141–142). The more Nordic, the more miserable? Is that the conclusion we are to draw?

Because life gets more difficult, there is often less diversity than in warmer regimes. Do we then conclude that there is less of this conflict and resolution, less regeneration, less transvaluing? But simplicity, relatively, on a landscape is not cause to conclude that life does not flourish there. Even when there is less variety, fewer species, than found at lower latitudes, there is still exuberance, these fewer species are present in enormous numbers. The flowers may be more often wind-pollinated, less often insect-pollinated, less evident in their display. Often in northland expanses, both wetlands and grasslands, one will have to learn to appreciate flowers so inconspicuous one by one that you need a hand lens to see them.

Is this less exuberance? Not necessarily, and en masse these tiny individual flowers produce some quite aesthetically pleasing forms. Cotton grass (*Eriophorum*, a sedge), becomes spectacular when backlit by the sun, its fluffy white heads of tiny wind-borne seeds contrasting with the darker bog. One enjoys the sweep of a field of sedges (*Carex*), with their foot-high fruiting stalks. Cattails (*Typha*), even through the frosty winter days, stay prominent with their dark brown cylinders, perched on straight spears, keeping a kind of sentinel over the marshlands. Each head is composed of thousands of minute flowers, becoming tiny seeds with long hairs, which burst forth all fall and winter into fluffy masses, releasing the seeds to the winds.

One learns to enjoy alder catkins, dangling in the wind, brown but with a subtle purple hue, with something added in excitement because they unfold in early spring, when little else is going on. There are no showy petals; no one looks at the individual flowers. But the sinuous, flexible catkins of the male flowers, contrasting with the erect, stiff cones of the female flowers,

innumerable in a dense thicket of alder, have their own aesthetic appeal and forcefully recall for us the exuberance of life.

Boreal mires bring a deeper experience of time than we often experience. Rates of decomposition are slowed, especially if underwater or in permafrost. Much of the dead material is held in cold storage, so to speak. The slowed processes of decay can also keep the evidences of former life close to the surface, and regularly before our eyes. The remains are oxygen starved, compared to terrestrial sites, and decay slowly. Water-logged logs lie there decade after decade, surrounded by a soggy thatch of other dead plants. If bog waters contain sufficient tannic acid, the outer layers of an animal body can begin to be preserved by tanning. Peat bogs give us a sense of deep time. There is also a sense of transience. Wetlands teach that everything is doomed to die, and the debris so evident from past life—now fallen, black, rotting reminds us of this. Take a handful of the black ooze, a mixture of silt and partly decayed plants and animals that once lived here and have gradually piled up on the bottom. Wetlands are progressively filled in with the corpses of life. They remind us of our mortality. But life inevitably goes on. After one has become ecologically sensitive, the system is a kaleidoscope, it turns round with the accidental tumbling of bits and pieces, each with its own flash and colour, and yet the whole pattern is also of interdependent parts co-acting, patterns repeated over time and topography, endlessly variable, and yet regular, buzzing with life.

There will likely be cranberries (*Vaccinium*) in the bog. Each plant is small, but find a bell-shaped flower, as graceful as any craftsman's urn, a charming silken white, and you will admire it. When the flowers are gone, the crimson berries dot the swamps, often in sizeable patches. First you enjoy visually the red berries against the dark leathery leaves. Later you may enjoy their tart taste. If you cannot find cranberries, then find one of the heathers (*Calluna, Phyllodoce, Cassiope*), and the flowers will have the same graceful urn.

The display in sombre colours combines with a display of powers of flight. High in the sky, there is a wedge of geese flying overhead. One wonders how far they have come, and remembers the long migrations of the trumpeter and tundra swans. Again, especially on their staging grounds during migration, the numbers can be as impressive as the single individuals. Nor is it just the big wingspans that impress us. The arctic tern undertakes the longest migration of any bird species, from Arctic coasts to Antarctic pack ice; some migrate 22,000 miles annually. Over a twenty-year lifespan, that is about like flying to the moon and back. The capacities for orientation of such migrants are still not well understood, and remain one of the marvels of natural history. On northern landscapes the creatures compete with each other of course, as they do further south. But north of sixty degrees latitude, increasingly the "competition" is with the climate. Swans need to nest early, so risk a late winter extending into spring to rear their young and get them strong enough to make the flight south at the end of a short summer. The arctic fox is as adapted to the cold as any animal on Earth; it survives down to minus eighty degrees Celsius while making the most extensive movements of any terrestrial mammal other than humans, travelling at times over a thousand miles in search of food. Becoming a better adapted fit may involve getting the food first, before a competitor eats it. But survival is as likely to involve making it through the winter, efficient use of stored food, and also not freezing to death. Admire the swans, the tern, the fox, and you are celebrating dialectical nature; conflict and resolution is taken at a pitch in Arctic and boreal nature.

A plant must find nutrients and water in thin, glacially scoured soil, or, if there is more soil, finding these in permafrost. A plant needs to obtain enough light for photosynthesis, trading off leaf size (deciduous leaves) against a leaf structure (often needles) that can endure the winter. Life hunkers down; alpine wildflowers are typically low, mat-forming. Plants have to wait for the snowmelt, and then to survive the flooding that may come with the melt.

On land and in ice, life at its edges challenges the ultimate limits. Switching to the other pole, the further south one goes, the more life disappears; even lichens and algae cannot survive in much of Antarctica. But down in rocks in the Dry Valleys, there are microbial colonies 200,000 years old (a hundred times older than a redwood tree), on a landscape where no rain has fallen in two million years, and it is now too dry to retain snow. "Endolithic life," as the biologists term it, is algae, bacteria, and fungi inhabiting the spaces between grains in rocks. There are microbes at the South Pole. There is life in the deep freshwater lakes, maybe even in Lake Vostok, under two miles of ice and not exposed to the atmosphere for a million years, since before *Homo sapiens* appeared on Earth. In our hemisphere, respect for life does not diminish when life goes further north, not when life goes to extremes. Rather it intensifies.

Those who live in northlands learn to enjoy stunted and shrubby trees. A single aspen shoot in the Yukon first seems spindly and unimpressive in comparison with impressive groves of aspen further south. A white spruce there is pitiful beside a Colorado blue spruce or a Douglas fir in the Pacific Northwest. But the aspen and spruce are there in impressive profusion of numbers across vast expanses, regenerating after fires with their "dog hair" stands. Few persons bother to enjoy the single flowers of willows; but willows across flats as far as you can see bear witness to their vitality. Stunted and shrubby? Or is this not windswept life hanging tough and superabundant?

Larch, as a deciduous conifer, can tolerate unusual stress. One must remember that the larch is dealing with such stress. Extreme waterlogging in the summer causes many tall trees to lean, producing spectacular "drunken forests." One has to learn to appreciate leaning trees, or stunted trees, something like one has to learn to appreciate the contorted windswept banner trees at treeline, again life hanging tough in extremes.

This experience of life persisting in the midst of its perpetual perishing is always running subliminally when we encounter nature in the North. Think of a boreal mire in winter. Is this a still and lifeless scene? Is there nothing but frozen beauty? Consider the way in which life is locked up in the cold. Life is there in the seeds and buds, and, beneath the ground in roots and eggs, protected by the insulating layers of snow and ice. The animals may be starving, but there is beauty in their endurance before winter. The northland mires, especially in winter, can seem so indifferent to life. But we must anticipate the summer's light. Even on a winter's night there is a kind of "promise" over the mires.

The shadows linger, for throughout the summer, there are reminders of the winter. Strange bog patterns develop in regions of permafrost and frequent frost action. These include the remarkable geometries of frost wedge polygons, that of palsa bogs, and other mosaics of hills and ridges. These remind us that we are on a landscape shaped by the cold, and this is as true of the fauna and flora as of the geomorphology. In the short-range all lose, death is inevitable, and the peat is proof of that; but then again in the long-range life persists, phoenix-like, forever regenerated in the midst of its destruction. In that sense the peatlands are lands of promise; one experiences with special force the dialectics of life here.

In the fall of 1973, an October rainstorm in northern Canada created a layer of ground ice over the muskeg, which muskoxen could not break through to feed. Nearly seventy-five percent of the muskox population in the Canadian Arctic Archipelago perished that winter. Still, though stressed by the winter, the muskoxen are satisfactory fits in their ecosystems, and the muskeg ecosystem that seems so severe is also the nature that provides their life support. The muskoxen, decimated that one winter, continue on the tundra, living on for millennia, so well adapted to a polar existence that this is one of the few large animals to have survived the Ice Ages in North America.

Survival, making it through, living on and on, is the last word, life's deepest beauty. Each spring there is the spirited return of life, against the

blasts of winter. That rite is a symbol, re-enacting a perennial secret of life. With the passage of the decades, centuries, and millennia, for longer than anyone can remember, life challenged in the northland environments has proved prolific before the storm. Peoples in the North are more inclined to notice the solstice and equinox. In June, at the summer solstice, the days are long; there is hardly any night at all. But the dark is coming. And yet? And yet? At the winter solstice, one knows as surely as one knows anything else that the spring will come again, and life will be resurrected again, and again. That is what is stimulating about a mire in a snowstorm, with a vague moving whiteness, turning gray as night approaches. The scene is sombre, but never so sombre as not to veil the promise of life.

When I first come upon a pasqueflower in bloom in the still wintry Rocky Mountains, I both rejoice and become pensive. This flower is circumboreal. I have seen it in Siberia, in northern Scandinavia, in the Yukon, in Montana. It is the floral emblem of Manitoba and the state flower of South Dakota, where it may be called the prairie crocus. It was formerly the emblem of the Yukon, before the fireweed replaced it—and the fireweed too is another flower that, coming after the landscape has been blasted by fire, reminds us of the regeneration of life. The pasqueflower's distribution, size, and season suggest how widespread its symbolism may be. Finding the first one of the spring is a joy immediately in the aesthetic encounter, but beyond that, the pasqueflower is a cherished symbol of the wild for reasons that run deeper.

In its annual renewal as the first spirited flowering against the blasts of winter, it is a sign against the eternal storm. Such a brave flower can help us ponder what it means to live in and against the wild. Even its name bears witness to the "pasque," to Easter. This flower becomes a window into life's spirited inventiveness, recalling how life persists with appealing grace through the besetting storm. After the winter, this Earth will always come round again to its garden season, to bring us somehow nearer to its ultimate natural significance, even to the sacred character of life in its struggling beauty.

The seeming evils are drawn into a greater good; now the science and religion join to confirm the reverence for life. The beauties of winter are heartless, yet there is no deeper mystery than how life flowers because of the agonies that threaten it. Environmental pressures shape life—that is the premise of all biological science. Life is pressed by the storms, but it is pressed on by the storms, and environmental necessity is the mother of invention in life. The winter is a sinister maelstrom against which we fling out our curses, against which we fling up our flowers, yet is it chaos and otherness and nothing more? Or does it too belong in the seasonal economy,

as night complements day, almost a sign of the unfathomable dialectic of life with its opposite. After the winter, comes Easter. Always, there is Easter, death and resurrection.

The way of nature is, in this deep though earthen sense, the Way of the Cross. Light shines in the darkness that does not overcome it. The pasqueflower is a poignant sacrament of this, and to chance to find it in earliest spring, and to pause at that meeting, is to find a moment of truth, a moment of memory and promise. Let winters come, life will flower on as long as Earth shall last.

### Author

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# Reference

Linnaeus, Carl. (1732), 1811. *Lachesis Lapponica, or a Tour in Lapland* (1732), 2 vols., translated by J. E. Smith, 2 vols. London: White and Cochrane.