better ecological health. It carefully examines the historic, cultural, ecological, and human contexts that led to the stream's degradation and how their team, Plaster Creek Stewards (PCS), navigates those contexts to restore the human-nature connections to enable the stream to recover.

Key to the restoration story has been the co-founding of the PCS group by Heffner and Warners. This group is an affiliation of watershed stakeholders, students, and volunteers who provide a collective energy and (literal) muscle for the restoration work.

Reconciliation in a Michigan Watershed is well written and good to read. It has thirteen chapters organized into three thematic sections: (1) recognizing the problem, (2) acknowledging our (settlers and descendants) complicity, and (3) committing to restoration. The treatment is rigorous in an academic sense with liberal (though unobtrusive) use of footnotes that link to a reasonably extensive bibliography spanning literature and poetry, news sources, and scientific journals. There is a table of contents and an index of topics to aid in orientation.

Reconciliation … draws from scholarship in a wide variety of disciplines including geology, human history, ecology, sociology, policy, and even faith traditions. Indeed, this could have been simply a successful academic book, making all the interdisciplinary linkages by first explaining the degradation of Ken-O-Sha and then supporting its movement toward restoration within a philosophical frame of reconciliation.

The book is all that for certain, but what sets it apart is the truly tactile blending of personal stories (not only of the authors but also of volunteers and watershed residents) and a clear sense that the authors invested themselves in the restoration work and the people connected to it. There are stories of their apprehension and missteps in public engagement, of discovery or rediscovery of ecological richness and relic rare species, of a living memory of the good and bad. You read this and you know something intimate about the creek, something that can emerge only because the authors write from firsthand experience—mucking about, both literally and metaphorically, in the socio-ecological realities—and from an unspoken but clear love of the place.

I think this is a singularly important book. The term "reconciliation ecology" traces back to one of those interesting thought pieces found in academia. The sort of thing that one reads and maybe offers up as a discussion topic in a student seminar in which we sort through abstractions in a self-satisfying way. This, though, is an example of the idea put into emerging successful practice with all the granular detail about wins and losses, where the dirt under one's fingernails (again, real and metaphorical) is hard won.

Reconciliation …, the book and the idea, is a next step in the authors' scholarship in re-considering the stewardship paradigm for Christian creation-care discipleship. Both authors were contributors to *Beyond Stewardship* (Calvin University Press, 2019), in which an interdisciplinary group of Christian scholars assembled to consider moving beyond the transactional/detached nature of the common stewardship paradigm (God wants me to care for creation so I must care for it) to a paradigm of interrelationship and communion between Creator and creation. It is easy to see the intellectual and spiritual connections between both books and how the authors' experience with PCS grounded their thinking.

It is telling and a little damning that Plaster Creek became "west Michigan's most contaminated waterway" in the very backyard of Calvin University, an institution that rightfully prides itself on rigorous Christian scholarship located in a city (Grand Rapids) closely identified with robust Reformed and Calvinist traditions. It speaks to a blind spot in expression of Christian faith and, likely, a pathology in worldview. Gail Gunst Heffner and David P. Warners make a wise and accurate diagnosis and offer the most promising treatment that I am aware of: reconnection.

It is a wise book and an important book. Highly recommended.

Reviewed by Timothy R. Van Deelen, Department of Forest and Wildlife Ecology, University of Wisconsin-Madison, Madison, WI 53706.

DOI: https://doi.org/10.56315/PSCF6-25Spencer

HOPE FOR GOD'S CREATION: Stewardship in an Age of Futility by Andrew J. Spencer. B&H Academic, 2023. 240 pages including indices. Paperback; $24.99. ISBN: 9781087751474.

Andrew Spencer, who blogs at ethicsandculture.com, has a PhD in theological studies, serves as a supervisor of operations training at a nuclear power plant, and is a senior research fellow for the Institute of Faith, Work, and Economics. His 2023 book *Hope for God's Creation* takes on a difficult task: defining and expanding a Christian environmental ethic based on orthodox, theologically conservative doctrine. Creation should be stewarded with hope even though we are currently in an age when it is subject to futility (Rom. 8:19–21). Overall, Spencer offers a strong theological basis for creation care to an American evangelical readership.

The book considers four major doctrines: Revelation, Creation, Anthropology, and Eschatology. In "Part I: The Background of Creation Care," Spencer describes reasons for creation care, dangers of "environmental entanglement," and a history of humanity and the environment. Christians need to transpose doctrine to action, applying the theocentric approach of ancient Christianity to modern questions, because ethics should flow from theology rather than the other way around. Spencer repeatedly warns that it is dangerous to entangle Christian belief with environmentalism: the fusion could result in pantheism,

contentious issues, and progressive causes such as the liberal social gospel becoming our focus instead. However, Spencer concedes that other ideas, such as libertarian economics, American representative democracy, and even opposition to climate change theories, can also become ultimate values in people's minds and distract from the gospel.

In a summary of the history of environmentalism, Spencer responds to Lynn White Jr.'s famous 1967 essay, "The Historical Roots of Our Ecologic Crisis,"[1] in which White claimed that ecological problems are rooted in European medieval Christianity because it was an extremely anthropogenic religion. Spencer disagrees, explaining that environmental degradation did not begin in the Middle Ages nor is it found only in Christianized parts of the world. Elsewhere, Spencer attributes environmental degradation to a variety of problems: universal human sin, devaluation of creation, modernity, and over-prioritization of economic concerns.

"Part 2: A Theology of Creation Care" relates some classic theological doctrines to creation care. The doctrine of Revelation says that God speaks truth through the special revelation of scripture and the general revelation of the whole of creation. Scripture is true, trustworthy, and authoritative. It tells us that the path to salvation is through Jesus Christ, but it is not comprehensive. The doctrine of Creation holds that the inherent value of all creation derives from its relationship with the creator. The natural world reflects God's glory, fulfilling the purpose for which he intended it, and science allows us to study it in detail. Biblical passages suggest that the curse on the ground after the Fall is both because of human sin and for the good of humans, to draw us to the truth of Christ (e.g., Rom. 8:18–25).

Unlike other creatures, we humans sin, reflect on our lives, have a God-given role as stewards, and bear the *imago Dei*. The doctrine of Anthropology says that we are God's stewards, part of God's great plan of restoration. The goal of humanity is to glorify God as we cultivate creation and work toward shalom. Eschatology, the doctrine of the end times, completes the arc of creation—from a garden with a tree of life and a river, through sin and the wilderness, to redemption with a heavenly city with wildlife, cultivation, technology, and humans. Some people read the Bible to say that the creation will be completely destroyed and a new one made, while others view the earth's end as a fiery purging of evil and the renewal of the current creation in a glorified form. Spencer argues for creation care regardless of your beliefs about God's plan for the end times. He suggests using Francis Schaeffer's term "substantial healing" to describe the Christian task of counteracting effects of the Fall such as injustice, pollution, disease, and poverty.

Spencer lays out ways to live out the mandate for creation care in "Part 3: The Practice of Creation Care." He describes the tension between American culture's individualism and collective action, saying that, just as the Israelites cared for the city of their exile (Jer. 29:7), so Christians should pursue justice and human flourishing for all. He refers to Schaeffer's concept of the church as a "pilot plant," a scaled-down version of the world in which broken relationships are healed. We become more Christlike by doing Christlike acts; as we bring new Christians into faithful acts, we disciple them in the faith as well. Spencer suggests that readers who still are unconvinced about the science of climate change could think of Pascal's wager; we should lower our carbon footprint regardless, since the costs of being wrong are high and many solutions to climate change result in other benefits.

Christians are called to hope in a world full of despair. Spencer advocates for a local focus in which we form a love of place and connection with our neighbors. Resisting the constant pressure to purchase more will leave us more content and less harried. We can make our churches and communities more efficient and intentional in several ways. Spencer himself planted part of his church property in wildflowers to promote pollinators, and he participates in neighborhood clean-ups, working with nonbelievers on projects where his values align with theirs. Spencer resists efforts by extremists to control people's behavior by proposed legislation such as the Green New Deal, advocating instead for balanced regulation that uses incentives to motivate and to drive innovation.

Throughout the book Spencer highlights several themes. One is how Christians have related to the environment. He claims variously that theological conservatives have had an interest in creation care like that of the culture at large, but most people are too involved in their own lives to lead any movement. He accedes that care for creation is not a feature of Western, modern cultural Christianity.

Another theme is concern over the danger of becoming too focused on ideas such as the social gospel of Protestant liberalism and losing focus on the gospel and our identity as Christians. Spencer argues that the abandonment of environmentalism by Christians occurred when strident environmentalists tied care of the environment to other causes.

The nature of science is another book-wide theme. Spencer cautions against scientism, a dangerous philosophy that holds that the only truth that can be discovered is found by study of the material universe. Instead, science is limited; it cannot tell us what to value or what is right or wrong. New scientific discoveries do not threaten our faith because our faith equips us to deal with any new topic, including environmental changes. However, Spencer sometimes describes science negatively—as robbing us of wonder at nature, allowing despoiling of nature, and contributing to the environmental crisis.

Hope for God's Creation makes a compelling argument for creation care that is consistent with theologically orthodox doctrines in a way that suggests kindness, love, and hope. Nonetheless, to people who do not need to be convinced, some of the book might seem repetitive and defensive. Spencer's repeated defense of Christianity against blame for environmental problems, his description of science, and his fear of the danger of liberal values may deter people concerned about the synergistic effects of environmental degradation, poverty, displacement, and other harms to human flourishing.

Spencer does not say much about the Christian mandate to care for the poor, typically a major part of any discussion about creation care theology. He also does not mention the differential effects of environmental degradation on poor or racial minorities. Neither does he talk about evangelical brothers and sisters around the world. There is no mention of the World Evangelical Alliance, Lausanne Movement, or the many Christian organizations working globally on creation care issues.

Spencer cites Francis Schaeffer to represent Christian environmental ethics, and Katherine Hayhoe, contemporary climate scientist and Christian, to represent current Christian environmental concepts. However, he does not cite many prominent theological writers or engage with some of the doctrines one might expect in this discussion, such as the Kingdom of God or the nature of the Church. Perhaps in a follow-up book, Spencer may address how orthodox doctrines transpose into action in a world in which the majority of Christians are not American. For his target audience, evangelical Christian Americans, though, this book is a valuable contribution.

Note

[1]Lynn White Jr., "The Historical Roots of Our Ecologic Crisis," *Science* 155, no. 3767 (1967): 1203–7, https://archive.org/details/HistoricalRootsOfEcologicalCrisisV.

Reviewed by Dorothy Boorse, professor of biology, Gordon College, Wenham, MA 01984.

Evolutionary Theory

DOI: https://doi.org/10.56315/PSCF6-25Markel

ORIGIN STORY: The Trials of Charles Darwin by Howard Markel. W.W. Norton, 2024. xii + 352 pages, including endnotes and index. Hardcover; $35.00. ISBN: 9781324036746.

Howard Markel, a physician and prominent historian of medicine, has written several books about pediatrics; quarantines; epidemics; cocaine addiction; the Kellogg brothers of Battle Creek, Michigan; and the discovery of the structure of DNA. Extrapolating from that list, a book about Darwin is somewhat surprising; the only obvious connection is Darwin's generally poor health. *Origin Story* is shorter than its pagination implies, with generous margins, seventy pages of endnotes, wide spacing between lines of text, and many low resolution, black-and-white images that sometimes add nothing of value.

The narrative, however, is well written, often engaging, and heavily based on primary sources that are the raw materials from which historians create history—newspapers, magazines, published correspondence (especially from the massive modern edition of Darwin's letters[1]), and unpublished manuscripts. Markel draws effectively on contemporary descriptions of personality, appearance, and character, such as poet William Allingham's observation that Darwin was "tall, yellow, sickly, [and] very quiet" (p. 169).

What were Darwin's trials? His illnesses, concerns over how his theory would be received, and a deep anxiety to be fully credited for discovering natural selection. Markel provides a wealth of detail on each. Unsurprisingly, much attention is given to medical history, especially Darwin's famous maladies, which have inspired diverse diagnoses by qualified experts. While cautioning readers not to expect certainty, Markel favors the view that Darwin "likely suffered from systemic lactose intolerance" (p. 171), as evidenced by his constant battles with headaches, indigestion, nausea, and flatulence.

His poor health directly impinged on the legendary debate about evolution at Oxford in 1860 between Bishop Samuel Wilberforce and anatomist Thomas Henry Huxley, a close friend of Darwin whose nickname "Darwin's Bulldog" encapsulated his love of rhetorical conquest. Ironically, Darwin himself was absent. Why? "Instead of defending his controversial work to his colleagues at Oxford, the self-proclaimed invalid was at a water cure in Surrey" (p. 175). Historical literature devoted to the debate is voluminous. Markel has read everything important—one footnote by itself runs nearly two pages. His comprehensive narrative fairly presents the complexities facing historians. Which original sources are most reliable? What were the biases of their authors? Can we determine with any confidence what actually happened? Many historians have doubted the oft-repeated story that Wilberforce impugned Huxley by asking whether the ape in his family tree was his grandfather or his grandmother, inviting an equally insulting riposte from Huxley. The report in the influential literary magazine, *The Athenaeum*, did not contain this story, but in 2017, Richard England found a local newspaper account that did, effectively altering the historical landscape.[2] Markel's emphasis on this raucous exchange as an important moment in the reception of Darwin's theory is fully justified.

Equally commendable is his treatment of Darwin's dilemma, when Alfred Russel Wallace sent Darwin an essay outlining essentially the same theory of evolution by natural selection that Darwin had formulated twenty