

Chapter Seven

The Good and Prudent Handling of Things: The Need for an Ecological Management¹

Mark Dibben

The world we live in and on is changing rapidly as a result a thirst for growth, its narrative of growth, the economism that has dominated our thought particularly over the past three hundred years. Yet it is only a small minority who really care about growth. How much more so in the era of Coronavirus! The problem is that minority tends to rise to the top precisely because they are expansionist and aggressive and so dominate the rest of us who aren't. The minority then pretend that their own particular view of life—their desire to grow and dominate—is typical of the whole human race and, through the powers of persuasion, the rest of us who are merely trying to get on with our lives tend not to reflect seriously on what growth implies. So growth becomes the accepted mantra of the politics of the West. All mainstream political parties speak of growth as a sine qua non. The Western model of economics has an infantile infatuation with growing and success has come to mean growth. Management has been the architect of that remarkable “success.”

This deeply pernicious con trick has led to us living in a period in the Earth's life increasingly understood as the Anthropocene. In the Anthropocene, we have developed the power to change the biosphere in ways only previously available to the geological aspects of Nature, her earthquakes and her volcanoes. The difference is that, whereas the chaos they cause,

¹ This essay is founded in the thought of the American theologian, philosopher and environmentalist John B. Cobb Jr. The author is grateful to John Cobb, Kerry Higgs and Colin Tudge for their comments on previous drafts.

**The Good and Prudent Handling of Things:
The Need for an Ecological Management**

ultimately, has positive consequences for biodiversity, the sort of chaos we—Homo sapiens—are presently causing does not. It's almost all negative. The Anthropocene is a period of mass extinction brought about by Homo sapiens' own actions that have wrought fundamental change to the Earth's biosphere. The Earth is only now beginning to adjust to the changes. A pessimistic view is that the Earth is struggling to survive. An optimistic view might be that it is naturally adjusting. If we take this more optimistic view, we might say it is recalibrating. Weather patterns are already changing, and severe weather events are becoming more severe.

At present, a hundred and, perhaps, occasionally a thousand people are dying in each of these severe weather events. As the recalibration gathers pace and the weather events become yet more severe, however, thousands of people—if not hundreds of thousands—may die at a time; Homo sapiens will not escape the recalibration unscathed. As well as the complete extinction of many other species, there will be a partial extinction of Homo sapiens, for the Earth will shortly not be capable of supporting the population. This is not simply because of the fact that the population of Homo sapiens has tripled in a generation, but because the result of its managerial actions over the course of that generation has significantly degraded the planet. For example, it is obviously not possible for the planet to support animal life into the longer term if, directly as a result of the actions of one of its species, it is losing 1% of its soils every year.² One hundred years is a remarkably short time.

There are only two reasons Homo sapiens itself will survive and not become extinct. First, we have spread so successfully across the planet that groups of us, purely by default, will be living in those parts of the Earth that remain habitable. Second, as a result of the size of our brain, we seem to have a capacity to adapt that is greater than other species.

² C.D. Freudenberger, *Global Dust Bowl: Can We Stop the Destruction of the Land Before It's Too Late?* (Minneapolis, MN: Augsburg Fortress, 1990).

*Management as Inherent in Nature*³

This is not to say that we are the only species that engages in management. Most, if not all creatures engage in managing their environment, by making shelter or having special places where they rest and reproduce, finding and storing food, and even creating paths that run to and from the food and shelter. Insects, spiders, birds, fish, reptiles, and mammals all practice management to some degree. Management is inherent in Nature. Indeed, it seems to be almost naturally selected for. The Alpha pair of a Meerkat group, the dominant male and female in a chimpanzee community, the Silverback in a gorilla troop, to name just three community-dependent social animals, all have to be able to manage their respective entourages—boss them into line occasionally, yes, but also continually work to resolve disputes and thereby keep the group collective functioning effectively as a community, for the benefit of all within the community.

Yet of all the Earth's creatures, it is *Homo sapiens* who is, perhaps most unfortunately, the ultimate management practitioner. We seem to be capable of making the most decisions, we organize, manage and use the technologies of tools and vocalizations to an extent unseen elsewhere in the natural world. The same is true of the way we also seem to manage our personal behavior, others of our own kind, other species and the environment so successfully (or not, as the case now seems to be). Managing, and thus management, is by the very force of Nature itself the only means we have for coping in and with our lives.

³ A shorter version of this section was published in a chapter entitled "Management for Our Common Home," first published in J. Cobb, J. and I. Castuera, *For Our Common Home: Process-Relational Responses to Laudato Si'* (Claremont, CA: Process Century Press, 2015). The author is grateful for the copyright permissions contained therein.

The Good and Prudent Handling of Things: The Need for an Ecological Management

The difference between us and other animals is that, having invented currency to replace food, shelter, and community as the primary value, we have ever-increasingly focused our management skills to the particular purpose of making money, particularly since the Industrial Revolution. This most unnatural commodity has become our all-pervading focus, the measure of quality of life; more so even than the quality of life inherent in the Earth.

The Effects of Scientism and Human Management in the Modern Age

All animal species gather food, most make shelters of some sort, and thus most make their own routes (some very short, others longer than our own) between food and shelter. Yet we have taken these natural acts of management to extremes, so that the making of shelters is about making money, the gathering of food is about making money, the travel is about making money. No other animal manages for the sake of consumption, for the sake of obtaining more than it needs to live. Whereas other animals manage for sufficiency, we manage for excess.

This shift has separated us from the Earth, or so we have thought, in the search for growth as a proxy for (so-called “quality” of) life. To the delight of the pharmaceutical corporations who manufacture anti-depressant “happy pills”; happiness has declined while incomes have soared. As David Korten has explained,⁴ corporations now rule the world and have done so, in fact, for some time. Management, as *Homo sapiens* has practiced it in recent times, in the Modern era, is about using man to improve the wealth of corporations, which offer goods (so positively called!) for human consumption as an end in itself. Worse, this consumption is achieved by the accrual of personal and governmental debt, which is spiraling ever deeper across the so-called “developed” and “developing” worlds. Capitalism is committing suicide.

⁴ D. Korten, *When Corporations Rule the World*, 3rd Edition (San Francisco, CA: Berrett-Koehler Publishers, 2015).

It follows that we can no longer think about management in the way we did in the Modern age. That age, as John Cobb has said so profoundly,⁵ is ending. Growth is now in sharp contradiction to sustainability, where sustainability means a genuine coexistence with the rest of Nature in a way that is regenerative of Nature: as opposed to the depletive relationship that has existed hitherto. The current end-point of man's purpose, the wealth of corporations and the false belief in consumption for happiness, will not matter as the earth proceeds to recalibrate. What will matter is how we adjust our thinking and how we adjust our acting so that we can be in step with and supportive of that recalibration. We must think about management and its purpose in a new way.

Management needs recalibrating. It needs to become more Natural. This requires a mode of thought, a way of understanding, that stands in stark contradistinction from the mode of thought that has dominated the Modern Age.

The Cause and Effect of the End of Neo-Naturalism

Of course the mode of thought that has dominated the Modern Age is that of science, still underpinned by the presuppositions encouraged by mainstream understanding of Isaac Newton and Rene Descartes, namely that our minds are separate from our bodies, from "matter," and that the world is made up of passive, inert objects as opposed to active, experiencing subjects. This leads to two fundamental assumptions. First, that scientific explanations are inherently comprehensive being founded in the study of objects and, second, that the objects of scientific study are understood as being the only real things. Scientism founded a worldview that rightly places Homo sapiens in Nature, but the reductionist view of Nature as passive, material and

⁵ J. Cobb, "Series Preface: Towards Ecological Civilization," in R.B. Edwards, *An Axiological Process Ethics* (Claremont, CA: Process Century Press, 2014).

mechanistic, dominates the modern worldview. This is in no small part a result of its power as the taken-for-granted (and indeed by and large only acceptably credible) ontology within value-free science research universities. Insofar as their presuppositions are concerned, most scientists exclude subjects of any kind from playing a causal role in the world, even if their own experience of themselves and others demonstrates the opposite is the case. Our lived experience, our common sense no less, recognizes the agency of subjects.

The agency of subjects brings with it an assumption of purpose, which stands in contrast to the scientific focus on function. This focus suggests every part of a system is mechanistic in that its structure and function can be explained entirely by its role in the system, by its place in the achievement of efficient causes. If it has a seemingly purposeful role, it is not because there is a purpose but rather it is either because of pure chance or of systemic necessity. Subjectivity plays no causal role. This is by-and-large the view that has come to dominate intellectual inquiry insofar as that can be understood to take place within universities.

A second view, mentioned above, used to exist in universities. This view did not suggest we needed to rethink our understanding of *ourselves* (i.e. to focus on even ourselves as isolated objects) as a result of our inclusion in Nature. Rather, it suggested we needed to rethink our understanding of *Nature* as a result of our inclusion in Nature. The neo-naturalist approach to comprehending Nature lost out, however, due to the rise of the discipline model of research founded on the principle that Physics provides the most complete answers. This was despite the fact that Hume conceptually exposed the mechanistic view's limitations, because Kant concluded through his notion of theoretical reason that Cartesian naturalism offered the best and indeed only responsible way to think about the world.⁶ This was in contrast to philosophers such as

⁶ See A.N. Whitehead, *Process and Reality*, Corrected Edition, David Ray Griffin and Donald Sherburn (eds) (New York: The Free Press, 1978 [1929]), 144-156.

Bergson, James, Pierce, and most notably Whitehead, who argued that a more accurate and comprehensive account could be found in understanding processes of changefulness as fundamental to the universe. For Whitehead in particular, a more comprehensive appreciation of nature could be arrived at by placing the various elements of experience into consistent relation with each other. That is, at the most fundamental level, there is a dynamic connectedness among things that Newton perceived deeply in his law that “every action has an equal and opposite reaction.” However, the implication that to react to the action, that action must first be *experienced*—otherwise there is nothing to react to—has been somehow lost to the beguiling power of Kant’s understanding of Descartes. And yet, simply put, if I scratch the table hard enough to for a mark to become visible on its surface, it must have experienced my scratching it. Otherwise it would not and could not have changed.

Still, physicists as a whole did not desist in their confidence in the resulting mechanical model and, since other scientists did not seriously question that physics was foundational, so the newly-established view of how to engage in legitimate study remained. Serious reflection about alternatives was marginalized for two reasons. First, in becoming a discipline of its own to fit into the new academic model, philosophy excluded such questions from its purview by seriously limiting just precisely what philosophy was deemed to *be*. Second, it was found in the age of scientific discovery that studying human beings as objects using the scientific method revealed significant new insight. The other half of Kant’s arguments, concerning what he called practical reason was to all intents and purposes expunged from the curriculum. Of course, the result is that the dominant refrain is now “there is no alternative.” The alternative existed but has been at best simply forgotten or, at any rate, is no longer widely known, and at worst has been perhaps

intentionally written out of the academic discourse by the practices and procedures of scientific publication itself.

As the universities increasingly organized themselves around the disciplines, so they were no longer primarily interested in original thinking about human well-being and the well-being of other forms of life. They were instead increasingly interested in advancing knowledge at the frontiers of disciplinary research. They are now primarily interested in competing *inter alia* for the production of research. The inherently value-free nature of our current research-focused higher education institutions of course means that one so-called “value” supplants all others—the desires of the funder. If the funding body is a government equally bent on delivering global competitiveness, for example by driving economic growth through innovation, then the higher education institutions are bound to answer its desires *if* (perhaps even *since*) they have no coherent set of values underpinning their research.

Obviously, the pressures are likely even worse where industry is the funding provider. In such an environment, retaining a passive-object, substance ontology is still the most straightforward way of contributing to disciplinary knowledge. Yet this ontology stands in stark contrast to what recent advances in, for example, (e.g.) epigenetics and neuroscience are increasingly demonstrating, namely that changeful and relational subjective experience is a rather more universal feature of all life on earth. Since research is, (in principle, rightly) taught in the classrooms, so the problem passes from generation-to-generation.

The Abject Failure of Our Management

In the humanities and social sciences, the traditional object ontology is seen perhaps most powerfully in the discipline of economics. This should come as no surprise; Philip Mirowski has very clearly pointed out that neoclassical economics adopted Newtonian physics just before it

was supplanted by the late 19th Century relativistic thinking that saw inter-connectedness as a fundamental feature of reality,⁷ and its essence hasn't changed. One of the fundamental assumptions of our time is that economic growth is the universal panacea. Continuous economic growth is "securely entrenched as the natural objective of collective human effort," placing us on a "Collision Course"⁸ with the planet—only one of the effects of which is global warming.

Of course, it is perfectly fine for mainstream economists to come up with ideas about how the economy should theoretically and rationally/objectively work through perpetual growth,⁹ and in so doing seemingly ignore the close relation between the thought of Adam Smith and Karl Marx as *philosophers*. For example, one misses a great deal of Smith if one does not read *The Wealth of Nations* through its preceding volume, *The Theory of Moral Sentiments*. That is to say both Smith and Marx, in seeking to comprehend the realities of human experience, understood that the progressive commodification of useful things with use values detrimentally transforms them into commodities with exchange values; Smith is a good deal closer to Marx than commonly appreciated.¹⁰ It is also perfectly fine for public policy thinkers to come up with ways of turning the theoretical ideas of economics into implementable plans. So long as leaders and managers don't actually go ahead and implement them!

To extend the management consultant and philosopher Nigel Laurie's frequent observation that managed organizations are the medium in which increasing amounts of human

⁷ P. Mirowski, "Physics and the 'marginalist revolution,'" *Cambridge Journal of Economics*, 8 (1984): 361-379.

⁸ K. Higgs, *Collision Course: Endless Growth on a Finite Planet* (Cambridge, MA: MIT Press, 2015).

⁹ This is not to say that all economics does this. E.F. Schumacher's work *Small is Beautiful: A Study of Economics as if People Mattered* (London: Vintage Books, 2011) remains an outstanding example of a radical and influential alternative. It has formed the basis for a number of higher education entities that focus attention on an ecological approach to economics and management, including the Schumacher Centre for New Economics in Massachusetts and Schumacher College in Devon.

¹⁰ C. Neesham, and M. Dibben, "Class Conflict and Social Order in Smith and Marx: The Relevance of Social Philosophy to Business Management," *Philosophy of Management* 15/2 (2016): 121-133.

The Good and Prudent Handling of Things: The Need for an Ecological Management

activity are pursued, there wouldn't appear to be any likely significant alternative to the managed type of organization on the horizon. Management as a practice is, therefore, likely the only means we have at our disposal for intervening in the world to actually *make a difference*. As but one example, just as soon as an environmental scientist decides to move from describing what she sees to actually intervening for change, she is no longer doing environmental science, she is practicing environmental management.

It is possible to practice management with a different purpose than economic growth. Nonetheless, it is true to say that the predominant type of management in practice today has a Western Management focus on delivering the economic imperative of capitalism. It follows that Homo sapiens' management thinking and practice of the Twentieth and early Twenty First Centuries, geared in large part towards delivering that economic growth through industrialization, can largely be held to blame for the effects we are now witnessing. *In short, the ecological crisis is the direct result of our species' particular practice of management.*

And so, it is high time we tried to rethink and reimagine management to focus not so much on delivering economic prosperity, but rather on delivering a very different understanding of what prosperity will need to be in the future. A particular type of Management has led us into this crisis, and only a different type of management can lead us out of it. We need to work out what that "different type" might be, and how it might be.

Management vitally needs thoroughgoing, serious minded, common sense philosophical scrutiny and creative philosophical thought, simply because it is so significant a human activity (even if all its impacts were thought of as wholly benign!). New philosophies of management are urgently required; a sticking plaster will not suffice. As one suggestion, a new mode of management thought might take into consideration a more comprehensive, relational approach,

supportive of a more integral way of life and “business.” This is a radical rethinking. The ecological crisis now before us is such that nothing less will do.

This radical philosophical scrutiny, founded perhaps in neo-naturalism, is essential. While the corporations and management practices within them are directly causing the environmental crisis, as Christopher Wright and Daniel Nyberg have so powerfully and eloquently explained,¹¹ there is another primary cause that underpins their leaders and managers thought and action. Namely, the mode of thought that is taught in our universities, that encourages the Man/Nature separation as a result of value-free object focused science research in narrow disciplines. Once inculcated with this mode of thought, then graduates go into business and government and quite understandably apply it.

While corporations are a very big factor in the causes of the crisis we face, there is an even deeper underlying problem that is feeding the corporations with people trained in a way of thinking that is not capable of resisting—and is even inherently supportive of—what the corporations are doing. Until we educate people differently, until we teach them to think about management differently so that they enter the world of work with a fundamentally different set of presuppositions with which to think, the self-destructive nature of economism cannot be meaningfully addressed. Unfortunately, even management thinking that purports to be founded in process thought is inherently flawed, precisely because it too is constrained by the scientism—

¹¹ C. Wright and D. Nyberg, D., *Climate Change, Capitalism, and Corporations: Processes of Creative Self-Destruction* (Cambridge: Cambridge University Press, 2015).

the stasis axiologies—that are the unknown foundation of the management literature.¹² The result is it is shot-through with all the usual fallacies, errors and misunderstandings.¹³

Requisites for an Ecological Management

Borrowing directly from Aldo Leopold’s argument that the boundaries of what we commonly understand as “community” need to be enlarged to collectively include animals, plants, soils and waters., Dean Freudenberger,¹⁴ argues that an ecological civilization is one that recognizes our Human narrative needs just precisely not to be focused on our use of the earth for our purposes—anthropocentrism. Instead, our narrative needs to be focused on the realization that we are part of the Natural world and, to an extent unlike any other species, that what we do affects our own future just precisely because it directly affects the future of Nature—biocentrism.

From this, the focus is on not just our own well-being in the short term, but the return to a narrative that is accepting of the plain fact our well-being in the long term, trans-generationally, depends on the well-being of all species. Our future is linked to theirs, theirs to ours and, crucially, the narrative must recognize the damage we have done and that we are therefore obligated to adjust our behaviour to help the earth restore a habitable balance. This is a moral obligation. We must change the narrative from “today, not tomorrow,” to “tomorrow, not today.” To adapt the marketing slogan of a luxury watch manufacturer: we have never actually owned the earth, we are merely looking after it for future generations—of our own species and of other species as well.

¹² M.R. Dibben, “Management and Organisation Studies,” In M. Weber and W. Desmond (Eds.), *Handbook of Whiteheadian Process Thought* (Frankfurt/Lancaster Ontos-Verlag, 2008), 91-107.

¹³ C.R. Mesle and M.R. Dibben, “Whitehead’s Process Relational Philosophy,” In A. Langley H. Tsoukas, (eds), *Sage Handbook of Process Organization Studies* (London: Sage, 2017); Whitehead, *Process and Reality*.

¹⁴ Freudenberger, *Global Dust Bowl*; W. Jackson, *Nature as Measure: The Selected Essays of Wes Jackson* (Berkley, CA: Counterpoint Press, 2011); A. Leopold, *A Sand County Almanac* (Oxford: Oxford University Press, 1949).

For this to happen, we must live within the potentials and limitations of renewable resources, not exhaustible ones; sustainability requires living within the regenerative capacity of the biosphere. We must live today in such a way as we meet our needs but do not jeopardize the ability of future generations to meet their needs for food, water, soil, health, shelter, community, arts and sciences. After Aldo Leopold, we must learn to recognize that our actions and contributions are correct when they contribute to the beauty, integrity and harmony of the biotic community—the community of not just *Homo sapiens*, but all species. They are wrong if they have the opposite effect.

This is not to say that we abandon technology and—if even it were possible—abandon cities to return to a nomadic lifestyle. It is rather to say that our technological prowess, and the way we manage it and develop needs to be geared toward the maintenance and regeneration of the ecosystem's services to us. This is beyond the development of renewable energy resources such as solar, biological, wind hydroelectric and geothermal and the reduction of our reliance on depleting resources. It is rather more the development of technology and ways of using that technology, for example in agriculture, that actively supports and enhances Nature's *regenerative* capability. In this way, we might move from the 3-Ds to the 3-Rs. That is, we might move from our present *delicate, dependent, and depletive* communities toward *resilient, resourceful, and regenerative* ones.

By *delicate* I mean our communities are increasingly founded in commuter belts, disconnected from nature and even disconnected from our neighbors. By *dependent*, I mean our communities are increasingly reliant on bought-in goods and services. By *depletive* I mean that being both delicate and dependent, our communities are consuming the earth's resources in ways that are not genuinely sustainable. *Resilient* communities by contrast are well-founded in their

The Good and Prudent Handling of Things: The Need for an Ecological Management

connectedness to the land around them and the people of which they are made up. This makes them inherently appreciative of the natural and social resources of which they are made up and thus capable of surviving and thriving despite economic turmoil. They can do this by turning their focus towards contributing positively to their local social and natural environment, being keenly aware of the connection between themselves and, for example, the farms, the foods, and the soils around them.

Moving away from the 3-Ds to the 3-Rs requires the human species fully (as opposed, perhaps, to tangentially) to appreciate the fact that we are one among many species. Our lives depend upon many others, just as the many others that inhabit our bodies depend on us. All species, are interdependent and of intrinsic value in and for themselves. In turn, this requires us to re-focus our education narrative away from the inculcation of an objective, anthropocentric, value-free approach to knowledge and towards an appreciation of the fact that every individual member of every species has a subjective experience, that we are one among many inhabiting the earth each with their own right to live, their own purposes, all of which are intrinsically valuable. All education, but perhaps most importantly of all given its significance as a means for enacting change, management education should be focused on arriving at an appreciation of the ecological complexities of place, both local and global, and how we can turn our ways of being towards supporting that complexity to flourish.

In sum, an ecological civilization requires a narrative that re-calibrates our human disposition, our core values, our “use” of resources, our understanding of the nature of civilization, our ethics, our technological purposes, our psychological disposition, our education—and our management towards the original intention of prudence and goodness. None of these can *any longer* be regarded as mere rhetorical statements. If things remain as they are,

bound by economism instead of οἰκονομία, the only way in which corporations would genuinely act in the earth's interests is if unilaterally binding legislation was enacted making it such that all corporations had to act in this way.

Without it, any corporation that acts in the earth's interests places itself at an immediate disadvantage in comparison with its competitors who do not, and will thus likely incur the wrath of their major shareholders for whom they are charged with making sizeable returns on investment.¹⁵ It is highly unlikely such legislation would be forthcoming from within the current narrative. In short, therefore, there must be a new underpinning narrative, genuinely felt and subsumed into our subconsciousness just as powerfully as the Modern age economism narrative has been to date. Unlike economism, which is a narrative of our individual success at the expense of the planet, the ecological narrative of earthism, is the success of the success of the planet as a whole, from which our success—naturally—derives.¹⁶

Management has always been about delivering the human narrative, making it a reality for people. It follows that management will continue to be about delivering the human narrative, but that narrative is now intimately bound up in an ecological narrative. So, the underlying purpose of management as *Homo sapiens* practices it, must return to being Natural, in concert with the earth. Its reason for happening, the focus of its practice, the aim of its leadership, and as I have been at pains to explain first and foremost, *the mode of its thought* from which its practice springs, must be radically different to that which we still see today. After all, one opportunity to change approach, namely the restarting of economies after the initial Coronavirus crisis, has already been lost. In much the same way as ecological economics rightly places economics

¹⁵ I am grateful to Vijay Sathe of the Drucker School of Management at the Claremont Graduate University for pointing this out in conversation, July 2015.

¹⁶ J. Cobb, *The Earthist Challenge to Economism* (New York: Palgrave, 1999).

within the ecological question and thus gears it to meet the needs of the earth (c.f. environmental economics, which places the environment as but one of the elements in the mainstream economic model¹⁷), so the goal of management, therefore, must now be *not* to deliver economy—the artificial wealth of money, but instead Nature’s οἰκονομία, i.e. ecology—the Natural wealth of the Earth.

My point is we need to look to E.F. Schumacher¹⁸—an inherently process-oriented thinker—for our economics; we need economics not for a large planet, but for a small one. Management not for corporations, the corporatocracy, but for people. Management for Earthism, not Economism. This is radical—but as far as I can see, it is the only route to a future where the human population survives. On the other hand, perhaps what the rest of Nature’s οἰκονομία needs most is for the human population not to survive at all.

Keywords: Anthropocene, A.N. Whitehead, corporations, earthism, ecological civilization, economism, depletion, management, neo-naturalism, οἰκονομία, regeneration, scientism, E.F. Schumacher, sustainability

Mark Dibben is a retired academic known for his work in Applied Process Thought, the thorough-going, serious-minded, common-sense application of process metaphysics to topics in the sciences and social sciences. A Distinguished Fellow of the Schumacher Institute, he is a former Head of School & Deputy Chair of Academic Senate at the University of Tasmania. He argues only a process-relational worldview, that regards all individuals within all species as having inherent value and subjective experience, can overcome the challenges we face at the ending of the modern age. This requires localism and person-centred economy and communities, to arrive at sustainable systems that are inherently resilient, resourceful and recoverably regenerative.

¹⁷ H. Daly and J. Farleigh, *Ecological Economics: Principles and Applications*, 2nd Ed. (Washington, DC: Island Press, 2010).

¹⁸ E.F. Schumacher, *A Guide for the Perplexed* (London: Vintage Books, 1995); *This I Believe – and other essays* (Dartington: Green Books, 1997); *A Study of Economics as if People Mattered*.

Works Cited

- Cobb, J. *The Earthist Challenge to Economism*. New York: Palgrave, 1999.
- Cobb, John and Ignacio Castuera. *For Our Common Home: Process-Relational Responses to Laudato Si'*. Claremont, CA: Process Century Press, 2015.
- Creative Self-Destruction*. Cambridge: Cambridge University Press, 2015.
- Daly, H. and J. Farleigh. *Ecological Economics: Principles and Applications*, 2nd Ed. Washington, DC: Island Press, 2010.
- Dibben, M.R. "Management and Organisation Studies." In M. Weber and W. Desmond, Editors. *Handbook of Whiteheadian Process Thought*. Frankfurt/Lancaster Ontos-Verlag, 2008, 91-107.
- Edwards, R.B. *An Axiological Process Ethics*. Claremont, CA: Process Century Press, 2014.
- Freudenberger, C.D. *Global Dust Bowl: Can We Stop the Destruction of the Land Before It's Too Late?* Minneapolis, MN: Augsburg Fortress, 1990.
- Higgs, K. *Collision Course: Endless Growth on a Finite Planet*. Cambridge, MA: MIT Press, 2015.
- Jackson, W. *Nature as Measure: The Selected Essays of Wes Jackson*. Berkley, CA: Counterpoint Press, 2011.
- Korten, D. *When Corporations Rule the World*, 3rd Edition. San Francisco, CA: Berrett-Koehler
- Leopold, A. *A Sand County Almanac*. Oxford: Oxford University Press, 1949.
- Mesle, C. R. and M.R. Dibben, "Whitehead's Process Relational Philosophy." In A. Langley H. Tsouka, Editor, *Sage Handbook of Process Organization Studies*. London: Sage, 2017.
- Mirowski, P. "Physics and the 'marginalist revolution.'" *Cambridge Journal of Economics*, 8 (1984): 361-379.
- Neesham, C. and M. Dibben, "Class Conflict and Social Order in Smith and Marx: The Relevance of Social Philosophy to Business Management." *Philosophy of Management* 15/2 (2016): 121-133. Publishers, 2015.
- Schumacher, E.F. *A Guide for the Perplexed*. London: Vintage Books, 1995
- Schumacher, E.F. *Small is Beautiful: A Study of Economics as if People Mattered*. London: Vintage Books, 2011.
- Schumacher, E.F. *This I Believe – and other essays*. Dartington: Green Books, 1997.
- Whitehead, A.N. *Process and Reality*. Corrected Edition. Edited by David Ray Griffin and Donald Sherburn. New York: The Free Press, 1978 [1929].
- Wright C. and D. Nyberg, D. *Climate Change, Capitalism, and Corporations: Processes of*