

Scientific Note on Blending Leadership Theories for Global Sustainability

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ABSTRACT

This scientific note is from a capstone project for the Masters of Science in Organizational Leadership (MSOL) program at Johns Hopkins University during the Spring 2025 semester of January to May 2025. The goal was to design a holistic training program for leaders of public gardens by balancing the lessons of four MSOL classes with Eastern leadership philosophies for the purpose of meeting the goals of the 2030 Agenda for Sustainable Development. Paul Smith, Secretary General of Botanic Garden Conservation International (BGCI) stated in 2024, “Botanic gardens are complex organisations, and their leaders need to acquire a wide range of skills and experience if they are to lead gardens effectively”.¹ By embracing leadership methodologies that blend traditional leadership theories from the West with less mainstream theories from the East, this approach can offer an alternative that understands and acknowledges the lessons and limitations of both, providing garden leaders with a wide range of skills. The result is a practical, holistic, and sustainable approach that gives leaders of public gardens a versatile advantage in how to lead our world to a healthy and sustainable future.

Keywords: leadership training; holistic; public gardens; arboretums; sustainability.

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This scientific note is from a capstone project for the Masters of Science in Organizational Leadership (MSOL) program at Johns Hopkins University during the Spring 2025 semester of January to May 2025. The goal was to design a holistic training program for leaders of public gardens by balancing the lessons of four MSOL classes with Eastern leadership philosophies for the purpose of meeting the goals of the 2030 Agenda for Sustainable Development. Paul Smith, Secretary General of Botanic Garden Conservation International (BGCI) stated in 2024, “Botanic gardens are complex organisations, and their leaders need to acquire a wide range of skills and experience if they are to lead gardens effectively”.² By embracing leadership methodologies that blend traditional leadership theories from the West with less mainstream theories from the East, this approach can offer an alternative that understands and acknowledges the lessons and limitations of both, providing garden leaders with a wide range of skills. The primary goal is for consideration that global environmental challenges need a global approach to leadership. The result is a practical, holistic, and sustainable approach that gives leaders of public gardens a versatile advantage in how to lead our world to a healthy and sustainable future.

Leadership is risky; but it is worth the risk because the goals and gains extend beyond material gain or personal advancement. For the environmental sector, this is especially true. The gains of environmental sustainability are not always tangible, but we feel them in the clean air, clean water and we observe them beautiful landscapes that are home to diverse plants and wildlife. Leadership provides us with purpose. The purpose of this scientific note is to encourage garden leaders to explore more deeply their own motivations and approaches to leadership, examine new and nontraditional approaches, in hopes it will open a new way of thinking about how we lead our world to a sustainable future.

Public gardens provide an opportunity for humans to have a positive connection to the natural world. They provide spaces and opportunities for humans to connect, play, learn and trust in the natural world around them. By embracing a global, holistic approach to leadership, garden leaders show a commitment to providing those spaces

² Paul Smith. (14 February 2024). “Botanic garden leaders in the 21st Century”, <https://www.bgci.org/news-events/botanic-garden-leadership-in-the-21st-century/>

and opportunities for humans in all corners of the world, not just their own small corner. They show that they are willing to examine new ways of looking at themselves and their organizations, for the sake of preserving nature for the benefit of all.

MATERIALS AND METHODS

The research methods for this project were primarily quantitative. A combination of academic research in the form of a literature review, as well as interviews and surveys were used to gather the necessary research. A survey for existing garden leaders was designed to explore what current leaders think about leadership training, what kind of training they want or need for themselves as well as the next generation of leaders. The survey was submitted through the community forums of the American Public Garden Association (APGA) as well as emailed directly to forty-two garden leaders across the U.S. The four interviewees represent sectors, backgrounds, and relevant subject knowledge.

LITERATURE REVIEW

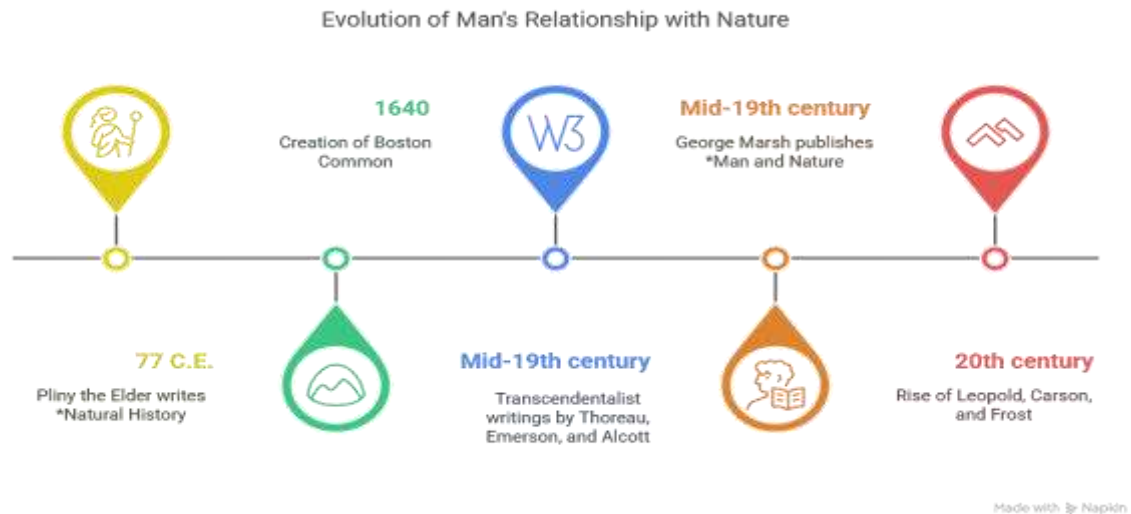
This literature review examines sources of information on two primary topics: Man's relationship with Nature and how that relationship drove the motivation to create public gardens; and an examination of leadership training characteristics from both East and West theories, their commonalities, their differences and the potential benefits of blending the styles together.

2.1 MAN'S RELATIONSHIP WITH NATURE

A study of man's relationship with nature is as old as man and the earliest texts describe nature as a divine gift from God that man must protect. As early as 77 C.E. Pliny the Elder wrote *Natural History*, a collection of thirty-seven volumes that covered topics from botany, medicine, zoology, and more. His work pre-dates any kind of scientific method and therefore has long since been proven to be an unreliable authority, but it had significant impact on later research because of his ability to compile existing texts and draw conclusions based on the similarities in those texts.³

³ Jerry Stannard, "Pliny the Elder", *Encyclopedia Britannica*, last modified May 20, 2025, <https://www.britannica.com/biography/Pliny-the-Elder>.

Figure 1. Humanity and Nature: A Timeline



Source: Napkin AI

Many of the earliest descriptions of man's relationship with nature in America are grounded in the religious freedom that America was founded on, describing man's reverence and protection of nature as a moral imperative. In *Inherit the Holy Mountain*, Mark Stoll "merges the narratives of American religious and environmental history"⁴ by examining how early Puritan settlers in Boston established Boston Common in 1640 as a both a pastoral reprieve and practical grazing space in a bustling city. They believed it was necessary to have a public garden or a park in the middle of the town because the connection with nature was morally and ethically vital.

In the mid-19th century, these Puritan ideals gave way to Transcendentalism. Writings of that time came from Henry David Thoreau, Waldo Emerson and Bronson Alcott. An examination of their writings reveals their belief that, "nature can help us improve spiritually and help us connect to the rest of the world", reinforcing the premise of man's relationship with nature as a moral imperative.⁵ Thoreau wrote in his journal that, "Each town should have a park, or rather a primitive forest, of 500 or a

⁴ Mark Stoll, *Inherit the Holy Mountain* (Oxford University Press, 2015), p. 8.

⁵ Alireza Manzari, "Nature in American Transcendentalism", *Canadian Center of Science and Education*, 2, no. 3, (2012): p. 61 <https://doi.org/10.5539/ells.v2n3p61>

thousand acres, where a stick should never be cut for fuel, a common possession forever, for instruction and recreation”.⁶

The mid-19th century also brought the beginnings of a less religious and more scientific examination of the effect of man on nature with George Marsh's *Man and Nature, or Physical Geography as Modified by Human Action*. A scientific study of the impact of humans on nature, *Man and Nature* is a warning against the unchecked greed of humans:

"The ravages committed by man subvert the relations and destroy the balance which nature had established between her organized and her inorganic creations; and she avenges herself upon the intruder by letting loose upon her defaced provinces destructive energies hitherto kept in check by organic forces destined to be his best auxiliaries, but which he has unwisely dispersed and driven from the field of action.”⁷

This warning heavily influence the motivations of Theodore Roosevelt and Gifford Pinchot by suggesting that “national governments needed to intervene to protect land, water flow, and forest cover to prevent the destruction of civilization”.⁸

It also likely influenced Frederick Law Olmsted as he came to prominence during this time. Olmsted was able to move the mix of science and religion from theory into actuality with the creation of Central Park, Biltmore Estate and other noted landscapes. He blended the two in the mind of Americans by explaining that parks should be “The lungs of the city,” as an oasis for “the sanitary advantage of breathing”.⁹

In the 20th century, Aldo Leopold's *A Sand County Almanac* and Rachel Carson's *Silent Spring* explored the ethics of human impact on the environment for the good, and detriment, of both. Leopold's description of a new land ethic in *Sand County Almanac* centers on the theme of community: “All ethics so far evolved rest upon a single premise: that the individual is a member of a community of interdependent parts. The land ethic simply enlarges the boundaries of the community to include soils,

⁶ Henry David Thoreau, (1859, October 15). “Personal Journal of Henry David Thoreau”, October 15, 1859. <https://thoreaufarm.org/2017/04/each-town-should-have-a-park-wandering-public-lands-far-and-near/>

⁷ George Marsh, *Man and Nature. Or Physical Geography as Modified by Human Action*, (London: Samson, Low, Son and Martson, 1864), p. 43

⁸ James Lewis, “Theodore Roosevelt's Cautionary Tale”, *Forest History Today*, (Spring/Fall 2005), p. 54, https://foresthstory.org/wp-content/uploads/2016/12/FHT05_TRsTale.pdf

⁹ Frederick Law Olmsted, “Trees in Streets and in Parks” *Frederick Law Olmsted Writings on Landscape, Culture and Society* (New York: Library of America, 2015), p. 590.

waters, plants, and animals or, collectively: the land”.¹⁰ Similarly, the second chapter of *Silent Spring* is entitled The Obligation to Endure. It begins with the statement that, “The history of life on earth has been a history of interaction between living things and their surroundings”.¹¹ Public gardens came to be the living embodiment and example of the communities and interactions described by Leopold and Carson.

Even poet Robert Frost used his work to evoke an emotional response to nature, inspiring a desire to live in harmony with, and protect it. Frost’s work shared an obvious love of nature with his readers, meeting them where they were, speaking of nature, earth and heaven in language that was amicable yet inspiring. While Frost was not a scientist, his writing reinforced man’s journey in and through nature in a way that inspired the common person to embrace and care about it.

LEADERSHIP TRAINING IN THE WESTERN WORLD

Peter Blunt and Merrick Jones tell us that, “Current theories of leadership, and leadership rhetoric, in the West place high value also on teamwork, empowerment, performance management, rationality, delegation, listening and learning”.¹² These theories have a solid foundation in Greek schools of thought, built on the teachings of Aristotle, Socrates and Plato. There is a reason these resources are so well published and so often used: they work. When studying organizational leadership, Peter Northouse’ *Leadership. Theory and Practice* is a crucial foundational textbook. Writings by Robert Keegan on adult development theory and Edgar Schein’s work on organizational culture and leading change are just a few of the resources used to shape our understanding of leadership. These theories focus on the leader as an individual who is expected to lead with virtue, act wisely and justly. The theories have guided western thinking for centuries due to their use in establishing political systems, major universities and global corporations.

¹⁰ Aldo Leopold, *A Sand County Almanac*, (Oxford University Press, 1946), p. 192.

¹¹ Rachel Carson, *Silent Spring*, (Infinite Reading, 2021), PDF E-Book

¹² Peter Blunt and Merrick Jones, “Exploring the Limits of Western Leadership Theory in East Asia and Africa”, *Personnel Review*, 26, 1/2 (1996), p. 11, <https://doi.org/10.1108/00483489710157760>

LEADERSHIP LESSONS FROM THE EAST

While the leadership theories from the West are undeniable in their importance, it bears recognizing that many of these ideas are not new. Eastern philosophies from Chinese doctrines, Hindu, yoga traditions and other sources describe many of these theories, in beautifully uncluttered terms, and they predate Aristotle by at least 100 years, depending on the text. Unfortunately, an approach to leadership theory that incorporates Eastern philosophies is not part of mainstream teachings. As Samuel Wilson points out, “current research on ethical leadership focuses excessively on an empirical-descriptive Anglo-American perspective and is largely silent on other cultural perspectives”.¹³

Three texts that are often heralded as prime educational resources for Eastern philosophies are:

- *The Yoga Sutras of Patanjali* describe the principles of ethical behavior and self-discipline including a description of the Eight Limbed Path, which provides emphasis on such things as the separation from ego (Ahamkara), remaining present and focused (Drishti) and recognizing the good in others (Namaste).
- Sun Tzu's *The Art of War* is considered a military manual, but its lessons on knowing yourself, creating a strategy, cultivating your team and leading by example make it the ultimate master class on how to be a successful leader.
- *The Bhagavad Gita* contributes “unique perspectives on topics ranging from integrity, to virtue, motivation, team dynamics, culture, ecology, strategy, and purpose”.¹⁴

¹³ Samuel Wilson and James McCalman, “Re-imagining Ethical Leadership as Leadership for the Greater Good”, *European Management Journal*, 35, no. 2, (April 2017), p. 151. <https://10.1016/j.emj.2016.06.001>

¹⁴ Ace Simpson and Miguel Cunha, “A Bhagavad Gita-inspired Linked Leadership Model” *Journal of Leadership Studies*, 15, no. 3 (December 2021), p. 2, <https://doi.org/10.1002/jls.21786>

There are numerous texts and resources for studying the leadership lessons from Eastern philosophy, but for the sake of brevity, these three texts serve as the basis for this scientific note.

It is likely not intentional, but in an article by Fady Girgis, et al, on adult cognitive development, he states that, “the thought processes used by adults to construct their reality change over time, and reaching higher stages of cognitive development entails becoming objectively aware of emotions and beliefs that were previously in the realm of the subconscious”.¹⁵ They are speaking from a strictly scientific perspective, but the language they use is strikingly similar to the language of the yoga sutras. Both theories are working to move humans towards a higher self-awareness, but where adult development theory uses neuroscientific tools and is looking for social adaptation, yoga is seeking liberation from earthly attachments through meditation and intentional living.

PRELIMINARY REFLECTIONS

An article by Wangmo and Samul, *Western and Eastern Approaches to Leadership* tells us that “The Chinese leadership seems to be an art and emphasizes on interdependent, humanistic and situational aspects, while Westerner leadership focus on organizational objective results and impersonal processes supported by logic and analysis. Thus, **the most significant issue is that one can learn from another**” (emphasis added).¹⁶ There are many articles in a variety of small journals on the benefits of blending the two approaches. Unfortunately, there is little evidence that their research and theories have risen to the level of being considered mainstream for leadership training.

It is the goal of this scientific note to encourage leaders of public gardens to change this norm and embrace the blending of both approaches for the sustainable future of our world. This can be achieved by identifying key leadership subjects and offering resources from both East and West to examine the subjects in an open and

¹⁵ Fady Girgis, Darrin Lee, Air Goodarzi, Jochen Ditterich, “Toward a Neuroscience of Adult Cognitive Developmental Theory” *Frontiers in Neuroscience*, 12, no. 4 (January 2018), p. 1.

¹⁶ Joanna Samul and Wangmo, “Western and Eastern Approaches to Leadership”, *Akademia Zarządzania*, 3, no.1, (March 2011) p. 127, <https://open.icm.edu.pl/handle/123456789/16517>

transparent way. For instance, when studying how to lead organizational change, Rosabeth Moss Kanter's *Ten Reasons People Resist Change* can be balanced with chapter two of the Bhagavad Gita. Kanter's approach is psychological and identifies a human's resistance to change due to factors like fear of a perceived loss of control and how to minimize resistance to the change. The Bhagavad Gita takes a transcendent approach that encourages humans to accept that our suffering is not caused by the change itself and encourages the cultivation of positive responses instead of fighting negative responses. This blended examination of leading change recognizes both the psychological and spiritual dimensions of resistance, allowing the student to cultivate empowerment, self-awareness and clear strategies for change.

SURVEY

A survey for garden leaders was designed to explore what current leaders think are the most important soft skills needed for their position, what topics they would most want to see in a training program, what sort of format and time commitment they are willing to commit to and what skills they believe are most needed in the next generation of leaders. The survey was posted for three weeks on the Executive Leaders Community Board of the online community portal of the American Public Garden Association (APGA) website. It was also emailed directly to forty-two garden leaders. Survey respondents showed a deep desire for a training that is adaptable, practical and engaging through case studies or examples of how to implement the lessons in their own organizations.

Survey responses showed less interest in exploring topics related to Ethical Leadership and soft skills, than hard skills of things that can be easily identified, examined and executed. While disappointing, this is understandable. Garden leaders are under pressure for results, so a desire for solutions often obstructs prioritization of what motivates them at their core.

Figure 2. Prioritization of Learning Objectives



Source: Survey Monkey

INTERVIEWS

In addition to surveys, four people were interviewed: Mae Lin Plummer. Director, IDEA Center for Public Gardens; Mary Pat Matheson. CEO, Atlanta Botanical Garden; Alex Gregory, Retired. Chairman and CEO, YKK Americas; Lex Fry. Retired, Corporate Leadership Trainer and Yoga Teacher. The interviews were semi-structured, containing standard interview questions as a guide for each interview. The questions were modified as necessary depending on the background of the interviewee and the

flow of the conversation. The interviewees represent sectors, backgrounds, and relevant subject matter knowledge.

FINAL REMARKS

The literature review, interviews and survey responses in this scientific note all point to a common truth: Leaders in public gardens must make a conscious commitment to rethink our approach to how we lead humans to success in sustainability. Where Marsh, Leopold and Carson were brilliant and inspirational, they spoke to a limited audience based on their topic and their place in time. Current leaders of public gardens have the opportunity to bring these topics to a broader audience of humans due to the simple fact of their existence. This broader audience of people driven by a desire to exist in a healthy environment they may not even be able to define, have as much potential to positively impact the future of the natural world as anyone else. By embracing leadership theories from around the world, garden leaders will be able to where they are this broad audience where they are, inspire them and guide them to create the sustainable future we all want, need and deserve.

A study of leadership that blends styles and theories from both East and West can offer a holistic and hopeful approach to a future that is daunting in the face of draconian weather events and an increasing disconnect between humans and the natural world. It will require leaders to confront their own motives, limits and emotions, but the result can unlock a culture of virtuous, transparent, and supportive leadership capable of transforming the world.

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Expedition to Kalunga Historical and Cultural Heritage Site: an Experience Report

RESUMEN

Esta nota científica procede de un proyecto final del programa de Máster en Liderazgo Organizacional (MSOL) de la Universidad Johns Hopkins durante el semestre de primavera de 2025, de enero a mayo de 2025. El objetivo era diseñar un programa de formación holístico para líderes de jardines públicos, equilibrando las lecciones de cuatro clases del MSOL con filosofías de liderazgo orientales con el fin de cumplir los objetivos de la Agenda 2030 para el Desarrollo Sostenible. Paul Smith, secretario general de Botanic Garden Conservation International (BGCI), declaró en 2024: «Los jardines botánicos son organizaciones complejas, y sus líderes deben adquirir una amplia gama de habilidades y experiencia para poder dirigir los jardines de manera eficaz». Al adoptar metodologías de liderazgo que combinan las teorías tradicionales occidentales con teorías menos convencionales orientales, este enfoque puede ofrecer una alternativa que comprende y reconoce las lecciones y limitaciones de ambas, proporcionando a los líderes de los jardines una amplia gama de habilidades. El resultado es un enfoque práctico, holístico y sostenible que ofrece a los líderes de los jardines públicos una ventaja versátil a la hora de guiar a nuestro mundo hacia un futuro saludable y sostenible.

Palabras clave: formación en liderazgo; holístico; jardines públicos; arboretos; sostenibilidad.

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