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Leadership for Sustainability and Peace: Responding to the Wicked Challenges of the Future

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Leadership for sustainability and peace: Emergent themes for leadership education and development

> *"The separateness we thought we were creating melts into the unending dance of coadaptation and change as we become ever more aware of those from whom we cannot be separate."* (Wheatley & Kellner-Rogers, 1996, p. 52)

In the past century our understanding of leadership has changed as the contexts in which leadership occurs evolve. Today, constructs of leadership that do not incorporate emergent concepts such as systems thinking no longer match the realities of the world in which it is exercised and the challenges it seeks to address. The challenges we face as a global community have increased in complexity, size, scope, and consequence. As a result of this contextual evolution, our definition of effective leadership is evolving as well.

These global challenges can be categorized as complex adaptive challenges, or wicked problems; those which, while familiar, are in some way new and have no prescribed solutions. Defined further, they may be seen as complex challenges where "facts are uncertain, values in conflict, stakes are high and decisions are urgent, and an extended peer community is required for the resolution of the relevant issues" (Gough, Castells, & Funtowicz, 1998, p. 19-20). Additionally, Grint (2010) argues that "wicked problems require the transfer of authority from individual to collective because only collective engagement can hope to address the problem" and that leadership is then "the art of engaging a community in facing up to complex collective problems" (p. 18). Effectively responding to wicked problems requires that we must learn our way through them together.

Two of the most pressing wicked problems impacting current and future generations are the issues of sustainability and peace. This chapter will outline the interconnectedness of these two challenges, discuss how emerging leadership theories are contributing to the understanding of these wicked problems, and imagine how leadership theory, practice, education and development will evolve in the next 35 years in order to meet these and other such challenges.

Sustainability

In order to effectively make the case that sustainability and peace represent the two most significant leadership challenges in the next 35 years, we must proceed with a set of assumptions, evidenced by the research of countless others. These basic assumptions in terms of sustainability are that (1) anthropogenic climate change is real; our industry, transportation, consumption habits - and to a mixed degree our population growth (Satterwhite, 2012) - are the primary generators of artificially high greenhouse gas concentrations in the atmosphere and oceans; (2) Climate change is happening now and is not some hypothetical future state; (3) we are precipitating the 6th major global extinction; (4) in our ingenuity, love, and greed we have created a new geological epoch, the Anthropocene, where a majority of the earth's ecological systems are directly impacted by one species; and (5) we do not know as much as we would like, but we know enough to make informed predictions about future states of the global climate that are sufficiently strange and disruptive so as to inspire both fear and action. Let us together help ensure that action prevails.

The concept of sustainability often summons to mind visions of protecting the Amazon rainforest, or of preserving aesthetically pleasing natural areas. In fact, it refers in a holistic manner to two perspective shifts in how we understand the world: (1) timescales ranging from

multiple generations to much longer - sometimes called deep time - while ensuring that our actions are consistent with the priorities of such timelines, and (2) challenging ourselves to think eco-centrically; that is, to operate from eco-centric rather than anthropocentric value systems. Ecology - coined by German biologist Ernst Haeckel in 1866 from the Greek word *oikos* ("household") - is perhaps best described as the study of biological systems and their relationships. What has become increasingly clear is that we require an ecologically literate perspective to thrive in this time of the Anthropocene.

Natural systems surround and define our lives. We are active participants in them. Indeed, any sense of separation from them is false; we *are* them and they *are* us. Changing watersheds and precipitation patterns, ocean acidification, desertification, the decline of pollinators, dramatic loss in biodiversity, the increase in extreme weather events, declining fishery yields - these are all issues that should cause existential concern in and of themselves, but they also directly impact jobs, the cost of items in the grocery store, where we will choose to live and travel, the welfare of our children, and countless other daily considerations. This is our new lived experience. We must become more literate in understanding complex adaptive systems, and our role as active participants in them, if we wish to ensure that our grandchildren's grandchildren are able to thrive in the world that they inherit. What we seek in effective leadership, and how we craft leadership education and development experiences, must now reflect this goal.

An emerging and powerful message in the sustainability literature is that in order to effectively address environmental challenges you must simultaneously pursue economic, social, and educational justice. One of the most hopeful books in recent memory, Paul Hawken's *Blessed*

Unrest (2008), brings to the fore the as of yet under recognized groundswell of global energy that is organically weaving these elements together through civil, economic, and political initiatives. The clear lesson is that ecological and social justice are both necessary to advance the other. Yet there has been a temptation to compete for priority amongst all of these urgent issues, which masks the truly interconnected nature of the challenge. For years, an artificial divide existed between activists in environmental justice and ecological justice communities. These areas have at times been antagonistic in that the former pursues justice in the human, or anthropocentric, domain (i.e., the disproportionate burden of environmental degradation and pollution that communities of color and low socioeconomic status typically bear) and the latter pursues justice in the biological, or eco-centric, domain (i.e., the preservation of natural ecosystems and endangered species). Both are essential, but bridging them conceptually as well as in practice has been a challenge, creating an artificial competition over prioritization.

Schlosberg and Carruthers (2010) bring the theory of environmental justice in line with its multidimensional practice by introducing a "pluralistic discourse of justice" utilizing the capabilities theory approach of Amartya Sen, advancing Schlosberg's claim (2007) that "we can draw parallels between the application of notions of justice as distribution, recognition, capability, and participation in both the human and non-human realms" (p. 6). By introducing a more nuanced and less rigid conception of environmental justice as a practice concerned with multiple discourses of justice, Schlosberg and Carruthers (2010) provide a dynamic framework within which to work and collaborate across the anthropocentric and eco-centric domains.

Constructing additional bridges between the artificially divided eco- and anthropocentric worlds, Edwards (2005) succinctly expands the discourse of sustainability to include the 'four Es': environment, equity, education, and economy. In doing so, he links together many complex global challenges and helps us better understand them as facets of a broader movement. We will make a similar case in this chapter, arguing that 1) sustainability and peace represent two sides of the same coin, a currency of global wicked problems, 2) that they each offer important insights into how we will define leadership in the future, and 3) that when taken together they have the potential to alter leadership theory, practice, education and development in the coming decades.

Peace

Our ability to see the interconnected nature of social and environmental justice offers an important entree into discussing peace. Indeed, sustainability and peace may be seen as intrinsically linked, as issues of sustainability may result in challenges to peace, and vice versa. Despite difficulties in establishing causal relationships between environment and conflict, researchers are trying to fully understand the potential role environmental challenges have on challenges to peace (Libiszewski, 1991; Gleditsch, 1998; Deligiannis, 2012). Libiszewski (1991) quotes the Environment and Conflicts Project defining environmental conflicts as those that "'… manifest themselves as political, social, economic, ethnic, religious, or territorial conflicts, or conflicts over resources or national interests, or any other type of conflict. They are traditional conflicts induced by an environmental degradation'" (p. 14).

Some research has documented the role that conflict - frequently resulting in population migration - has on the environment, particularly in Western Africa (Aning & Atta-Asamoah, 2011). Amster (2014), however, presents a more positive view, believing that as more

adaptations are needed to survive climate change, societies may find new and more horizontal ways to work together in order to build both peaceful and sustainable communities. He charges us to "collectively articulate and implement a way of being in the world that does not make us the enemies of each other and the balance of life on the planet" (p. 478). Perhaps Amster's (2014) hope is reflected in the global movement, documented by Hawken (2008), discussed above.

Amster (2014) and Hawken (2008) are not alone in calling attention to the positive movement afoot. The world has gotten increasingly more peaceful, particularly since the two World Wars, with a 40% decrease in armed conflict since 1992 (Institute of Economics and Peace, 2014). This does not mean the world is lessening in violence, however. There has been a sharp rise in terrorist attacks around the world, and many countries have an increasing homicide rate (Institute of Economics and Peace, 2014). These statistics might encourage us to question whether we are any closer to achieving peace if the violence may not be decreasing, only shifting. Despite society's historical and modern predilection for violence and conflict, however, there is convincing evidence that humanity is actually better constructed for peace than violence (Chappell, 2013). In fact, Chenoweth and Stephan (2011) find that nonviolent resistance movements are over twice as effective as violent movements in enacting social change. Discussions of future leadership education and development must move away from a tradition of focusing solely on managing conflict to include an understanding and appreciation of the creation of peace.

There are numerous definitions and understandings of peace both in academic literature and in practice. One of the most meaningful and clear definitions of peace comes from Galtung (1996), who discusses two types of peace- positive and negative. It is these distinctions between positive and negative peace that are currently shaping and informing the field of peace studies. Positive peace is that which is built upon positive relationships and interactions of all human society. These are structural conditions that serve to develop the world as a place built on positive interactions and engagements. Negative peace, on the other hand, is the focus on the reduction of violence, or efforts to solve current problems of conflict and discord. In many ways it is essential to focus both on building the structures and practices that instill a positive peace in our society while also focusing on solving the problems that lead to violence and conflict, as they exist today. This duality in timescales seen within the peace arena may very well exist in most wicked problems; it certainly does with sustainability. Complex challenges demand both immediate responses and longer-term systemic change, and successful leaders must have the nurtured capacity to operate in both simultaneously.

It stands to reason, then, that as we develop the leaders of the future we must focus on this duality and determine how we might both resolve existing problems of violence while simultaneously creating space for current and future peaceful societal and institutional relationships. In the past 20 years, researchers have begun to study the efforts of leaders engaged in the work of both positive and negative peace. Those who have studied the phenomenon to date have tended to focus on individual leaders and their roles in developing peaceful organizations, nations, and societies. However, some are now making broader arguments about the concepts of peace leadership rather than individual leaders of peace.

The most common examples in the literature are those who discuss the work of negative peace- or leaders who are working to challenge violence and conflict. Much of this literature points to characteristics and practices embodied by leaders who work to minimize violence and conflict (Boyer, 1986; Ganz, 2010; Hermann and Gerard, 2009; Lieberfeld, 2009; 2011; Reychler and Stellamans, 2005). Several authors, however, discuss positive aspects of peace leadership. Global PeaceWorks (n.d.) are leader-focused as well, but center their leadership model on looking within, building trust, serving others, creating the future, and modeling peace. Other authors writing on positive peace leadership discuss a shift from an individual leader focus to a broader more inclusive focus on leadership for the building of peaceful communities, which includes utilizing dialogue, participatory leadership, empowerment, and the inclusion of women (Adler, 1998; Ledbetter, 2012; Spreitzer, 2007).

There is a need now, however, to think about peace leadership that bridges the gap between negative and positive peace, as for the foreseeable future, leadership will need to incorporate work for both forms of peace. Sarsar (2008) begins this work by suggesting that leaders tend to favor working in one domain over the other, and true peace movements would take leaders from both segments working together. Perhaps the goal is not to take leaders from each movement and put them together, but to develop peace leadership that embraces the work in both positive and negative peace as a way to manage the duality inherent in these wicked problems. In order to create these complex and multifaceted systems of leadership, we must understand, respond to and indeed actively shape the emerging notions of leadership to embrace new possibilities of creating peace in both forms.

Effective leadership in the next few decades must simultaneously work towards sustainability and peace. Sustainability allows us to adopt long time perspectives and recognize the role that we play within broader natural systems. Peace allows us to bridge cultural and societal divides while addressing issues of justice and equity. Both require systems literacy and an authentic life-long learning orientation at both the individual and collectives levels. Nurtured by effective leadership education and development, these new ways of knowing position us to effectively shape the world that we want to create.

Emerging Leadership Discourse

> *"Our wounds are deep, like old bad habits. There is much we need to forget. There is also much we need to remember. Above all, we need to remember the future."* (Ausubel, 2012, p. 147)

Moving away from the command and control and hero-leader models of the past, newer ways of conceptualizing leadership - such as those presented by Wilber (2000), Drath (2001), Heifetz (2006), Wheatley (2006), Senge (2006; 2008), Western (2008), Scharmer (2009; 2013), and Satterwhite (2010) - emphasize the importance of interconnectedness, broadening our spheres of concern, building systemic capacity, and seeing our communities and the organizations in which we function as living, dynamic systems. These themes are not altogether new in the leadership literature; indeed they have informed the work of scholars for several decades, articulated perhaps most notably in Peter Senge's *The Fifth Discipline* (1990) as the model for organizations of the future. Yet their influence in shaping our approach to leadership education and preparation for the future is still unfolding. These emerging leadership discourses reframe the way we think about leadership in order to address the wicked problems now so embedded in our daily lives.

Ronald Heifetz (2006) describes leadership as generating "new cultural norms that enable people to meet an ongoing stream of adaptive challenges, realities, and pressures," while going on to say that "… leadership develops an organization or community's adaptive capacity" (p. 76). Heifetz (2006) suggests that leadership is a property of social systems that draws in increasingly more participants and addresses collective challenges. Drath (2001) argues that "leadership effectiveness is related more to the sharing of meaning in a community than it is to any particular style or approach to leadership" (p. 28). Thus, we argue that effective leadership is that which helps communities and organizations make meaning of and effectively adapt to complex adaptive challenges, or wicked problems, such as sustainability and peace.

Senge (2006a, 2006b, 2008) integrates systems thinking and embraces the web of relationships present within an organization and its surrounding environment, while also introducing the concept of systems citizenship characterized by three learning capabilities for systemic change: seeing systems, collaborating across boundaries, and creating desired futures. Wheatley (2006) embraces systems thinking while learning the lessons of chaos and complexity through examining the natural world. She asserts that it is important for us to embrace the natural flow that exists within our organizations and to look beyond ourselves to understand that we are parts of a larger system in which we must participate to be successful.

Western (2008) observes the emergence of a new eco-leader paradigm, which focuses on distributed leaders working within networks of organizations and larger systems. As we emerge from the 'heroic' leadership age, we find that leadership no longer belongs to one person or one entity. Satterwhite (2010) offers an emergent model of leadership that draws from certain

biological principles, deep ecology, and a complexity leadership perspective. He suggests that we are all inextricably linked to and embedded within larger natural systems, necessarily broadening the 'circle of care' that leaders must develop and highlighting a capacity for systems intelligence that must be nurtured. Satterwhite (2010) wrote that, "Leaders help make meaning of adaptive challenges" (p. 241); in other words, leaders help us understand and respond to wicked problems while calling attention to our role within a multitude of complex systems. Perhaps no emerging theory tries better to link all of these pieces than Wilber's (2000) integral theory. Combining work in the interior and exterior with work in the individual and collective spheres, Wilber (2000) outlines a framework for us to fully embrace the complexities of our time.

Taken together, these authors may inform the applied efforts in sustainability and peace leadership. Essential to this work is shared meaning-making around complex problems, embracing distributed leadership throughout organizational levels, and understanding interactions among and between anthropocentric and ecocentric philosophies. From this, we grow to accept that the complexity in the work we do to address these wicked problems requires us to develop innovative, emergent, and boundary-spanning approaches.

Scharmer (2009) offers some guidance we might utilize in order to determine how best to move forward in the next 35 years as we strive to better understand the leadership that helps meet the world's complex challenges, particularly sustainability and peace. Scharmer (2009) believes that we exist at the precipice of individual and collective transformational change and we must break the patterns of the past in order to tune in to our highest potential. Furthermore, Scharmer (2013) suggests that the major fault lines that define the geography of human relationships, the

"collective socioeconomic body," can be understood in terms of three primary relationships: "(1) our relationship with nature and our planet; (2) our relationship with one another; and (3) our relationship with ourselves" (p. 36). If one of leadership's primary challenges may be defined as healing these three relationships, we believe that the lenses of peace and sustainability – and the lessons that they teach us – will be central to this work.

These emerging leadership discourses have started us down this path of moving beyond our leadership theories (i.e., patterns) of the past. In the remainder of this chapter, we will dream about the future of leadership education and development, using the lens of the dual wicked problems of sustainability and peace.

A paradigm shift in leadership education and development

> *"We need to be prepared to question every single aspect of the old paradigm. Eventually, we will not need to abandon all our old concepts and ideas, but before we know that, we need to be willing to question everything."* (Capra & Luisi, 2014, p. 13)

We believe that emergent leadership discourses, responding to global challenges such as sustainability and peace, will redefine how we think about, teach, and practice leadership in the future. Shriberg (2012) makes a convincing case that "leadership skills required for sustainability closely mirror the skills needed to address other major challenges of the 21st century" (p. 469). He continues, arguing that "this shift is necessary not only because it would be good for the planet and, therefore, for the natural capital that underlies all wealth but also because this form of leadership would create fundamentally different and higher functioning organizations" (p. 477). Indeed, we suggest that the currency of wicked problems (sustainability and peace, together) will not only come to be central in leadership education and development, but that they are already

birthing fundamentally different ways of conceiving what successful leadership is and that this will have a transformative impact in the conception, structure, and function of human organizations.

As we enter into an unfolding future that requires new forms of leadership, the perspectives discussed in this chapter may inform our approach to leadership preparation and education, just as previous theories have informed the leadership preparation of their time. These emerging constructs of leadership implore us to operate from a level of consciousness that sees the world as a dynamic and interdependent system of communities and organizations on which we will all have an impact, yet the prevailing message in leadership education and development is still one of skill development, structure, and positional influence (Wheatley, 2006). We build organizations to defend against chaos and change, yet it is our ability to cope with and exist within these uncertainties that will make us resilient and able to respond to the wicked problems we face.

Prevailing concepts of leadership rely on the leader "… to create stability and control, [for fear that] without human intervention there is not hope for order… [but] as we cling ever more desperately to these false beliefs, we destroy our ability to respond to the major challenges of these times" (Wheatley 2006, p. 171). We must therefore move beyond old notions of leadership education and development to an approach that emphasizes worldview shaping, greater self and systems consciousness, and the cultivation of a deep respect for all life. As Scharmer (2009) advises, we must release previous ways of thinking in order to find new theories and practices from the future as it emerges. It is vital that leadership education and development continue to

evolve in concert with the wicked problems shaping our common future. While the scope of these problems is global, our ability to confront and address them begins with individuals and invested communities.

As we postulate how to educate and equip leadership for the future, it is worth considering two notable questions regarding leadership and adaptive learning in our world today: "What will it be important to know for citizenship in the twenty-first century? [And] are we preparing people for a world that isn't going to be there?" (Parks, 2011, p. 142). The answer to these questions begins with the meaning-making process, an endeavor that Drath (2001) maintained is inextricably linked to the practice and understanding of effective leadership. "There is an enormous need," Parks (2011) asserts, "for an understanding and practice of human development that prepares people to become citizen-leaders… to participate in discovering and creating responses to challenges both new and ancient" (p. 15).

In our shared future, new models of leadership education and development will be necessary to prepare our future citizen-leaders to begin addressing the types of problems Parks (2011) identified, and those that we have deemed wicked problems. The objective of leadership education is to "expand a person's capacity to be effective in leadership roles and processes" (Riggio et al, 2003, p. 227), and should be grounded in the mental models that characterize the emerging leadership zeitgeist. Industrial notions of leadership were concerned primarily with task or relational orientation within an organization and thus, developing tangible skills that promoted task efficiency and relational effectiveness was tantamount to effective leadership (Yukl, 2008). As the context of leadership changes, leadership education and development must

continue to evolve to fit the dynamic demands of leadership and its intended outcomes (Heifetz & Linsky, 2002; Komives, Dugan, Owen, Slack, & Wagner, 2011).

In a future defined by the fundamental issues of sustainability and peace, effectiveness in leadership must include the ability to perceive and adhere to long timelines, challenge ourselves to think ecocentrically, cope with difficult dualities, and co-create the future. Leadership as defined by the emerging theories in this chapter belongs not to one person or position but to a social system or organization (Wheatley, 2006; Heifetz, 2006; Western, 2008; Satterwhite, 2010); therefore, leadership education and development are not relevant simply for a select few, but rather critical to any individual or group who seeks to contribute to a shared objective or strives for a better future as an active member in a community. When leadership communities engage in creating meaning it creates ownership for those who must adapt and respond to complex problems (Drath, 2001). As Senge (2005) and Wheatley (2006) urge, seeing systems, collaborating across boundaries, and examining the natural world for inspiration will all be critical components of the future of leadership education and development.

Formal leadership education seeks to cultivate individuals with a capacity for engaged and informed systems citizenship, while placing important but limited emphasis on the development of a specific set of skills (Komives, Dugan, Owen, Slack, & Wagner, 2011). Opportunities for cognitive, affective, and behavioral development collectively build an individual's leadership capacity, which includes the potential to purposefully apply skills, but perhaps more importantly refers to the expansion of one's sense of self through a more holistic, encompassing definition that includes context and connection to community (Komives, et. al., 2011). Pedagogies that

challenge participants to develop new ways of understanding leadership will be at the forefront of developing the capacity of individuals to address the issues of sustainability and peace. Pedagogical practices such as experiential learning, team-based learning, peer education, sociocultural discussions, service-learning, and contemplative practice, create powerful learning environments and transform outdated notions of leadership that no longer serve us (Komives, et. al., 2011).

Opportunities for dialogue and group interactions that expose participants to different perspectives and lived realities can provide a deeper understanding of the complexity of our world and the nature of living and working in organizations. The challenges of sustainability and peace require an understanding of leadership that acknowledges such complexity and tolerates cognitive dissonance. Many leadership education programs in higher education encourage or require study abroad or community service experiences aimed at providing a broadened perspective, greater empathy, and an appreciation for difference, but more can still be done. Maintaining that difference and "otherness" found in external experiences allows for an illusion of distance; dialogue and perspective-sharing in organizations and communities is essential for uncovering the complexity of lived experiences that is all around us (Komives, et. al., 2011).

Leadership in this new arena will also require engagement with, and an understanding of, the emerging theories discussed in this chapter: those that implore us to operate from a level of consciousness that sees the world as a dynamic and interdependent system for which we are all responsible. In fact, we believe that by 2050 many of the paradigms of modern life will have more fully completed the dramatic shifts that have already begun, further contributing to this

new context for leadership. These paradigm shifts - this shift in collective consciousness - will further shape all aspects of our lives. In the chart below (Figure 1), we have contemplated the potential trajectories for many of these paradigm shifts. Although exploring each shift is beyond the scope of this chapter, many excellent scholars and practitioners driven by the commitment to shape a more sustainable and peaceful world are advancing these transformations. We believe that examining leadership theory and practice using the lenses of sustainability and peace will provide insight into and feed the paradigm shifts listed below.

Figure 1.

Contextual Paradigm Shifts		
Orientation	Established/Predominant paradigms	Emerging (or re-emerging) paradigms
Business	Profit	Triple bottom line; B-corp
Causality	Linearity	Nonlinearity
Civic power	Government	Community, government, NGO, & business collaboration
Conception of life	Life as a human-dominated heirarchy	Web of life is interdependent (life creates conditions for life)
Design	Mechanistic	Biomimicry; cradle to cradle
Economy	Growth	Stability & equity
Education	Knowledge retention	Systems & emotional intelligence
Energy sources	Fossil fuels	Renewables (solar and wind)
Food production	Monocropping	Organic
Leadership	Characteristic(s) of the individual	Capacity of the system
Peace	Negative peace	Positive and negative peace
Problem solving	Reactive problem solving/risk avoidance	Creating desired futures
Relationship with nature	We stand apart from nature	We stand as part of nature
Time	Today, tomorrow, and the quarter	Multi-generational & deep time
Values focus	What needs to change	What we choose to conserve (allowing all else to shift)
Worldview - collective	Anthropocentric	Integrating anthropocentric and ecocentric perspectives
Worldview - individual	Egocentric	Allocentric

The next 35 years require us to embrace the flow and emergent characteristics of the work in both sustainability and peace, and acknowledge the interconnectedness of each, in order to provide the space for collective work and groundbreaking problem solving. To do this, we must let go of old notions of leadership and organizational structure and focus on the future as it emerges after great reflection, sensing (Scharmer, 2009), and true understanding of the human and natural systems that surround us. While approaches to leadership education and development

have developed in this direction in recent years, a deeper shift that provides greater reflections of our interconnected systems is essential in order to meet the wicked problems of sustainability and peace and the other challenges that will shape our world in the future.

Kenny Ausubel (2012), referencing David Orr's work around ecological literacy, writes, "What all education is finally about is how we are to live in this interdependent world" (p. 189). It will be the role of leadership scholars and practitioners to further reflect on these notions of emergent leadership for sustainability and peace, and to find unique ways to ensure that leadership education and development effectively meets the needs, goals, and expectations of the future as it emerges.

> *"The future appears alien to us. It differs from the past most notably in that the Earth itself is the relevant unit with which to frame and measure that future. Discriminating issues that shape the future are all fundamentally global. We belong to one inescapable network of mutuality: mutuality of ecosystems; mutuality of freer movement of information, ideas, people, capital, goods and services; and mutuality of peace and security. We are tied, indeed, in a single fabric of destiny on Planet Earth."* - Mieko Nishimizu, 2004.

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