

# **Wisdom in the Twenty-First Century: A Theory of Psycho-Social Evolution**

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*“At times of challenge and uncertainty,  
nothing seems more important than wisdom.”*

*Stephen Hall*

## **Introduction**

The venerated virtue of wisdom, revitalized and informed by contemporary research and theory, provides an inspiring central ideal for both higher education and futurist visions of a collective “New Enlightenment.” Further, a modern conception of wisdom captures the essence of both heightened future consciousness and an ethically informed perspective on future psycho-social evolution. With an eye on the future—an ideal future—we should pursue wisdom.

In this article, I present a theory of wisdom—global in scope—that is based on both historical traditions and recent psychological research and philosophical thinking. I explore a variety of important trends and futurist themes, such as globalization, technological evolution, the world-wide need for relevant, high quality education, and the challenge of environmental-ecological management, and explain the connection between wisdom and each of these critical trends and challenges in our modern world. I demonstrate why the cultivation of wisdom as a guiding light in our future psycho-social evolution will empower humanity to constructively, intelligently, and ethically address such contemporary challenges as well as to realize the best within ourselves. Wisdom provides an enlightened, future-focused, and highly efficacious practical ideal for our evolution in the twenty-first century.

## **The Nature of Wisdom**

Drawing upon both classical sources and the contemporary renaissance of thinking and research in wisdom<sup>1</sup>, I define wisdom as “the highest expression of self-development and future consciousness. It is the continually evolving understanding of and fascination with the big picture of life, of what is important, ethical, and meaningful, and the desire and ability to apply this understanding to enhance the well being of life, both for oneself and others.”<sup>2</sup>

I will elaborate on the themes of self-development and future consciousness later in this paper, but regarding the rest of my opening definition of wisdom, I will start by highlighting some important points.

First, wisdom is dynamic, open-ended, and growing; it is not some completed and static state of knowledge. In fact, as many contemporary wisdom writers would argue, there is a necessary contingency to wisdom. Conceit and

dogmatic belief are not wisdom. Wisdom is a synthesis of both belief and doubt; it is humble and receptive to transformation and further enlightenment.<sup>3</sup>

Second, wisdom is both a cognitive state and an emotional-motivational state. It involves understanding but also a desire to seek out and know, a curiosity, a sense of wonder and “fascination” in the face of existence. Further, wisdom involves a dimension of compassion--of emotional resonance with others and their well being as well as suffering.<sup>4</sup> Wisdom unites heart and mind. Moreover, regarding the term “understanding,” it is intended in the broadest sense to include multiple modes of knowledge and experience, from the logical to the intuitive and the scientific to the mystical.<sup>5</sup>

Third, wisdom is expansive and integrative. Wisdom reaches out toward a global, ecological, and cosmic perspective on reality. It is expansive in space and time. This “big picture” nature of wisdom informs judgment and action.

Fourth, wisdom identifies value and meaning in the world; it is not simply factual or theoretical knowledge.

Fifth, wisdom is practical knowledge; it is not enough simply to know. Wisdom is the capacity to apply knowledge to concrete and personal challenges and problems of human life. Wisdom is knowledge in action.<sup>6</sup>

Sixth, as a universally acknowledged and essential dimension of wisdom, this application of knowledge is directed toward the “good” both for oneself and others (including the world at large). Wisdom is founded upon ethical judgment, decision making, and action. And, as Aristotle noted long ago regarding key character virtues such as wisdom, it is not enough to simply know what is good and have the capacity to act on it; there needs to be a desire (or motivation) to realize the good in life. Hence, wisdom not only sees what is of value and good in life, but strives toward the realization of value, human well-being, and the good in both practical judgments and actions.

Finally, the desire and capacity to realize what is good applies not only to oneself but others; wise people want to help others. Wisdom is not selfish or self-centered. As noted above, it is frequently argued that wisdom brings with it empathy and compassion for others, and these emotional capacities serve as the motivational impetus to bring the good to others.

In summary, wisdom is a holistic capacity. There are cognitive, motivational-emotional, and ethical dimensions to it. It is both a dynamical state of mind and a pattern of behavior. It structures both thought and perception. As I have argued, wisdom is a complex and broad character trait--in fact, a highly esteemed character virtue.<sup>7</sup>

Copthorne Macdonald has proposed that wisdom should reflect contemporary knowledge and understanding of the world and the cosmos.<sup>8</sup> Though I would add that wisdom should also be grounded in the accumulated learning of the past, I would support Macdonald’s main point: wisdom can not simply derive off of classical and ancient insights, but must incorporate the best that we know in the present.

In reviewing major themes in modern science, philosophy, and social thought, I find that three key principles have emerged that capture our contemporary understanding of human knowledge and nature. These three

principles are evolution, reciprocity (interdependency and holism), and possibility.

As regards the first principle, both reality and knowledge are dynamic or transformative. All of the accumulated historical and scientific discoveries of the last few centuries point toward an evolutionary model of the cosmos and human development.<sup>9</sup>

Second, reality is interdependencies, reciprocities, mutual exchanges--things are not absolutely distinct or separate; everything needs everything else. This principle clearly shows up in our growing understanding of the environment, ecological systems, the relationship of humanity with the world, and our social relationships with each other.<sup>10</sup>

Third, our knowledge of the world is always contingent and subject to error and modification. Nothing is certain, and this is just as well, for the conviction of certainty cuts off any further enlightenment, learning, or growth. Furthermore, through contemporary science we have learned that reality unfolds in a probabilistic manner, with elements of novelty and surprise.<sup>11</sup> There are elements of chaos, creativity, and possibility in the evolutionary process--in the transformation of reality. The future is possibilities.<sup>12</sup>

Many of the above points regarding evolution, reciprocity, and possibility are embodied in the opening definition I provided on wisdom. The key point to distill from the above is that through the eyes of wisdom (informed by contemporary scientific thought) the world is seen as transforming, interactive/holistic, and adventurous/uncertain. From a cross-cultural perspective, it is illuminating to note that such a vision of reality and knowledge resonates closely with Buddhist and other Eastern philosophical visions.<sup>13</sup>

Any viable conception of wisdom that could be applied at a global level needs to reflect the important insights of multitudinous cultures around the world; one can not offer a model of wisdom for the future that is ethno-centric. In this regard, Richard Nisbett's intensive and extensive survey of Eastern and Western modes of understanding highlights as one key dimension of global variability "seeing the world as a circle versus seeing the world as a line."<sup>14</sup> The West sees the world as a line; the East sees it as a circle. Evolution, as a linear or directional model of reality emerges in the modern West; reciprocity and interdependency is clearly a central theme in classical Chinese thought within the model of the *Yin-Yang*. Hence, by bringing together these two themes in the epistemic foundations of a modern theory of wisdom, we move in the direction of a globally balanced perspective on reality and modes of thinking.

In fact, one can make a strong argument that evolution and progress, at both the social-economic and biological-ecological levels, is actually facilitated and driven by reciprocity (interdependency and mutual exchange and benefit). It is through the circle that the line moves forward. Though cultures that emphasize balance and interdependency often also emphasize stability over change, reciprocity may, in fact, be the engine that propels growth and development.<sup>15</sup> A globally expansive, scientifically informed wisdom mindset embraces and synthesizes the circle and the line, interdependency and evolution.

There are numerous alternative theories or definitions of wisdom, both classical and contemporary; there is controversy over whether wisdom can even

be clearly defined; and there are a variety of other personal characteristics often associated with it. Macdonald lists forty-eight on his website. Deep learning and understanding; exceptional self-awareness and self-reflection; the capacity to see the long term consequences of actions; temperance, integrity, patience, and courage; engagement with life; and a deep love toward the pursuit of enhancing wisdom are some of the other common features frequently listed. The reader is referred to the writings of Macdonald, Sternberg, Trowbridge, Targowski, and Hall<sup>16</sup>, among others, for more detailed, varied, and extensive lists of common features of wisdom. These contributions notwithstanding, I do believe that my definition of wisdom captures much of the fundamental core of our contemporary understanding of wisdom and it will serve well as a sufficiently solid and robust foundation for the arguments to follow.

### **Wisdom and Future Consciousness**

Heightened future consciousness and wisdom go hand-in-hand. It is wise to be conscious of the future. And reciprocally, if one wishes to enhance one's future consciousness, one should pursue the development of wisdom.

A unique perspective I take on wisdom is that it is the highest expression of future consciousness. I define future consciousness "as the total integrative set of psychological abilities, processes, and experiences humans use in understanding and dealing with the future. It includes the normal human capacities to anticipate, predict, and imagine the future, to have hopes and dreams about the future, and to set future goals and plans for the future. Future consciousness includes thinking about the future, evaluating different possibilities and choices, and having feelings, motives, and attitudes about tomorrow."<sup>17</sup>

This description is psychologically holistic, encompassing all major psychological dimensions of the human mind, and--as should be noted--future consciousness is a normal human capacity. Yet, future consciousness can be heightened and enhanced along many different parameters, and a description of heightened future consciousness aligns very well with a description of wisdom. This is a highly desirable ideal to work toward since heightened future consciousness--and therefore, as I argue, wisdom as well--contributes significantly to mental well-being, functionality, self-fulfillment, and happiness in life.<sup>18</sup> Heightened future consciousness is an absolutely necessary quality for thriving and flourishing in the future.

I have described heightened future consciousness as involving "an expansive sense of time, of past and future linked together; a progressive optimism about the future; an expansive and informed sense of contemporary trends and challenges; creativity, imagination, and curiosity regarding future possibilities; courage and enthusiasm facing the adventure and uncertainty of the future; a strong sense of ongoing personal growth and purpose involving long-term goal-directed thinking and behavior and a future-oriented self-narrative; and a strong element of self-efficacy and self-responsibility in determining one's future."<sup>19</sup> All these qualities align with features of wisdom.

What I would add to this description of heightened future consciousness to clearly bring it into alignment with wisdom is the ethical dimension. The ideal expression of future consciousness involves judgments, plans, and decision making about the future that is based on strong ethical considerations of what is best for the future, both for oneself and others. Further, just as wisdom is connected with other character virtues such as honesty, integrity, and courage, I have described heightened future consciousness as supported by a key set of ethical character virtues including self-responsibility, optimism, and courage.

Though wisdom could be stereotypically seen as grounded in the accumulated lessons and learning of the past, whereas future consciousness, by definition, points toward the future, this presumed difference in temporal orientation is more apparent than real. Wisdom involves taking the past into account, and making informed and ethical decisions about the future; and enhanced future consciousness involves grounding one's understanding of the future in terms of a broad and deep understanding of the past, of trends and patterns in time. Hence both wisdom and future consciousness are grounded in an understanding of the past that serves as a foundation for efficaciously and ethically dealing with the future.

As a critical point in my argument in this paper, it is essential that our capacity to flourish in the twenty-first century involves a strong dimension of enhanced future consciousness, including the ethical as well as the cognitive and motivational aspects of this holistic capacity. Many of our present global challenges and problems are due to a lack of sufficient future consciousness--for example, global warming, mass species extinction, and environmental deterioration due to industrial and urban growth--both in the sense of not adequately appreciating the long term consequences of our actions and not sufficiently considering the ethical ramifications of our decisions. Within a time of rapid and complex change, heightened future consciousness--that is, wisdom--is critical to thriving and surviving in the years ahead. Not only are we in a period of accelerative change, but this heightened change brings with it increasing uncertainty, something that we, as a species, need to understand and constructively adapt to.<sup>20</sup> Both enhanced future consciousness and wisdom acknowledge change and uncertainty and find constructive ways to handle it.

## **Wisdom and Psychological Evolution**

The one remaining element in my opening definition of wisdom yet to be explained is the statement that wisdom is the highest expression of self-development. Historically it is frequently identified as the highest of human virtues. Many researchers would argue that wisdom is the highest possible level of development in the human mind.<sup>21</sup>

In this section, I will extend this thesis even further, and argue that the development of wisdom should serve as the ideal trajectory for our further psychological evolution in the future. It is our ideal of character and human psychology now and should be our guiding ideal into tomorrow.

Humans engage in purposeful evolution. As self-conscious and self-evaluative beings with ideals, we think about and evaluate ourselves relative to our values. We attempt to direct both our own continued evolution and, in accordance with our values, the evolution of the environment. Barbara Marx Hubbard speaks of “conscious evolution”—to consciously direct our evolutionary future.<sup>22</sup> Humans have been attempting to do this all through our history, in accordance with our evolving values and capacities. We are going to purposefully direct our evolution in the future as we have done in the past.<sup>23</sup>

If we are going to continue to engage in purposeful evolution, then I would propose that wisdom be the central ideal we should strive toward further enhancing in the future. Perhaps most importantly, identifying wisdom as the ideal of future human psychology highlights the dimension of ethical development in the future. If we are considering the preferable future direction for human psychology, we need to go beyond commonly cited cognitive-intellectual (we will be smarter) and even personal-emotional advancements (we will be healthier and happier)<sup>24</sup> and consider how humans can progress ethically. We want to include in our futurist self-images those virtues and ethical qualities that will guide us toward creating a “better human being,” and a better society. This has always been the ideal image of religious and spiritual traditions in the past, as well as secular utopian thought.

Moreover, since wisdom is holistic, it also embodies cognitive, motivational, behavioral, and experiential dimensions that make it an appropriate and comprehensive ideal in our purposeful evolution. It is not one-sided or limiting in scope. Wisdom is an evolutionary-transformative state (it is the nature of wisdom to keep growing, and according to various psychological theorists it is imperative that our vision of a future self be more fluid and flexible in resonance with the ubiquity of change around us)<sup>25</sup>; it is a mode of expanding and expansive consciousness (it is consciousness raising); it is integrative (it is global and cosmic in perspective); it stimulates the growth of mental health, being coupled with self-efficacy, optimism, self-awareness, and purpose in life<sup>26</sup>; and it is a pragmatic mode of consciousness, synthesizing the intellect with heart and practicality.

This last point is of special significance since humans are beings-in-the-world and our livelihood and evolution is ecologically coupled with successfully dealing with our environment (social, technological, and natural) and its challenges. Clearly, our psychological evolution will be propelled by realizing practical and ethical solutions to problems regarding our environment, society, and world; psychological evolution is ecologically motivated. Hence, wisdom is not an “ivory tower” or “solipsistic” ideal; it is an ideal of functionality embedded in the world.

## **The New Enlightenment**

Humanity clearly faces a number of significant challenges in this time of great transformational change—challenges that need to be addressed in the century ahead and will define the great dramas, victories, and tragedies of the

twenty-first century.<sup>27</sup> Many observers and analysts of our contemporary world, such as Walter Truett Anderson, Rick Smyre, Ken Wilber, and the great Hindu evolutionist, Sri Arubindo, believe that a new way of thinking is necessary to successfully meet these challenges and rise to a new level of psycho-social development. Some foresee the emergence of a new enlightenment.<sup>28</sup> This new enlightenment should be a collective reality, involving humanity as a whole. As a species--as a global society--we need to evolve; we are being provoked into a psycho-social evolution in order to rise to the problems of our times. Anderson and Smyre identify various features of this new enlightenment, and in particular, highlight the themes of holism/connectivity and dynamism/evolution, themes similar to what Csikszentmihalyi identifies as key qualities in the future "evolving self."<sup>29</sup> I have suggested that the development of wisdom, as a pivotal character virtue, should serve as the center of gravity of this new enlightenment.<sup>30</sup>

A central point in the argument for a new enlightenment is that a "new way of thinking" is needed to successfully address our modern challenges and problems. It is our old ways of thinking and behaving that have created our problems; hence, we will never solve our difficulties by staying locked in old paradigms of thought. These ways of thinking and behaving are, in fact, the cause of the problems. One could ask if wisdom, as I have described it above, satisfies the criteria of being a new way of thinking, for isn't wisdom something associated with tradition and past modes of thinking and behavior?

To begin with, I would argue that our past modes of thinking and behavior have been anything but wise. Our collective thinking and behavior has tended to be short-sighted and self-centered. We have not looked out far enough into the future (staying locked in the relative present) and we have tended to be concerned much more about our local space rather than our global reality. Our consciousness has been narrow in both space and time. This is one limitation that the cultivation of wisdom would counter-act. Ego-centricity and ego defensiveness, in particular, have been cited as key factors behind many of our difficulties,<sup>31</sup> but I would add that losing sight of or being oblivious to both the past and the future is just as big a limitation and problem in our adaptive capacities and sphere of consciousness.<sup>32</sup>

Connected to the above points is the question of to what degree our behavior, individually and collectively, has been impulsive versus thoughtful and considered. Wisdom entails the latter, though sadly I would suggest that the former exemplifies a great deal of past human behavior.

Further, our collective thinking and behavior, especially in modernized countries, takes too narrow a perspective on value, quality of life, and the nature of progress.<sup>33</sup> Wisdom is guided by what is moral and ethical; the modern world is disproportionately guided and motivated by economic gain and technological advancement. Not that economic gain and technological advancement are not of value--both in fact are critical to happiness and well-being<sup>34</sup>--but we rarely consider (or are afraid to consider) if we are making progress ethically as a species and a globalizing civilization. Focusing on the evolution of ethics as a key indicator of progress and quality of life would unquestionably be a significant shift

in our thinking and the values that propel us. The cultivation and practice of wisdom point in that direction.

Moreover, the contemporary vision of wisdom presented highlights dynamism, transformation, possibility, and adventure. To a great degree we have tried to preserve the status quo, defended stability, and searched for certainty in our beliefs and practices.<sup>35</sup> Embracing the evolutionary dynamism of nature, self, society, and the cosmos and cultivating greater openness and humility toward the mysteries of life would be a fundamental change in our attitudes and thinking.

In a true Taoist fashion, I would not suggest that we abandon the need for stability or certainty (at least in a relative as opposed to absolute sense). Humans need structure, order, and principles, and through science, philosophy, and spirituality we have searched for knowledge and insight into the big picture of things. One needs to balance stability and change, security and adventure, and certainty and doubt. This is one of the deep insights of wisdom, an insight that both the skeptics, postmodernists, and relativists and the dogmatists, traditionalists, and fundamentalists miss. The same point can be made regarding the clash of materialism versus spiritualism; we are material beings and we are also psychological, ethical, and spiritual beings. Our values need to encompass both sides of the equation; frequently they have not. Wisdom seeks balance and wholeness.

The principle of balance, in fact, cuts both ways. A common criticism of the West is that its primary mode of thinking is either/or in structure and dynamics. As Nisbet notes, in the East, the primary logic is both/and. Nisbet--quite correctly, I believe--sees both forms of thinking as limiting. A truly global and balanced consciousness--a truly wise and enlightened vision of reality--would integrate both forms of logic and understanding, and this holistic mindset and mode of thinking would be a dramatic change for many people across the globe.<sup>36</sup>

## **Wisdom and Education in the Future**

If the new enlightenment is to begin anywhere it should be within education. The human mind takes form within education and hence if one wishes to provoke a significant shift in modes of thinking and understanding--in fundamental attitudes--then it should begin in school. It could be argued that our present educational systems suffer in perpetuating old and counter-productive modes of thinking and understanding, thus perpetuating our social problems. To what degree do we teach the new ways of thinking in science and the humanities, global perspectives on modes of understanding, and higher cognitive abilities and personal qualities, and attempt to connect these capacities and principles with the challenges and fundamental issues of life?<sup>37</sup> Do we simply teach memory without thinking, or knowledge without values? Do we simply teach to the acquisition of knowledge without wisdom? Do we simply teach to economic and financial success without ethics and social conscience? To what degree do we teach ethics at all? And to what degree do we teach self-understanding, psychological insight, and mental well being as essential

ingredients to helping students find happiness, self-fulfillment, enlightenment, and wisdom in life?

As a starting point, I would propose that the development of character virtues, such as honesty, self-responsibility, discipline, optimism, courage, and most notably wisdom, is the key to academic and personal success. These character virtues, above all else, serve as the foundation for creating knowledgeable, thoughtful, motivated, positive, efficacious, and happy individuals in life. These virtues are what we should be teaching and modeling in the educational setting.<sup>38</sup> This conclusion aligns with educators Howard Gardner's and B. Van Weigel's arguments that the development of virtues and ethical values, rather than simply the accumulation of knowledge and skills, should be at the core of education and academic inquiry.<sup>39</sup>

But among all these virtues, the central one within the arena of education is wisdom. As an educational foundation for facilitating a new enlightenment and bringing character development center stage into education, the teaching, modeling, and practice of wisdom need to become the pivotal goals of education.<sup>40</sup> Wisdom synthesizes the highest ideals of knowledge, consciousness, ethics, social conscience, self-awareness, and emotional-motivational development. It is the foundation upon which to build valuable citizens and contributors to human society. As various wisdom writers would argue, from a pragmatic point of view, the teaching and cultivation of wisdom would greatly benefit both the ongoing development of modern society and the life significance of our educational practices.<sup>41</sup> If the virtue of wisdom were more deeply engrained and valued in individuals (through education) it would more strongly influence problem solving and decision making in our modern world and we would make significant progress in solving the social and environmental problems of today and creating a better world for tomorrow. Wisdom should be the central character trait we practice and model as educators, and the central virtue we attempt to instill and develop in our students.

## **Wisdom and Technological Evolution – The Wise Cyborg**

To recall, wisdom is deeply connected with heightened future consciousness. And also, as stated earlier, wisdom requires a penetrating understanding of the contemporary world, regarding both new emerging knowledge and present problems, challenges, and opportunities facing humanity as a whole. When I consider what significant trends and consequent future possibilities loom large in the human condition, rapid and ubiquitous technological evolution is one of the most striking and portentous phenomenon in the last century. As a student of wisdom, I have had to ask myself, what would a technologically enhanced wise person be like? And how can we guide our technologies to support and facilitate as a human ideal wise people in the future? The first question acknowledges the fundamental contemporary trend toward the increasing integration of human kind with technology. I do not believe that one can be a wise person in the future divorced from technological enhancement.

The second question pertains to our purposeful evolution in the future, an evolution that I think should be guided by high human ideals, such as the growth of wisdom.

Let us consider the deep significance of technology within the human condition. We are “natural born cyborgs”; our technologies are both extensions of our bodies and minds and enhancements and modifications of the environment.<sup>42</sup> Technologies are a significant evolutionary advance over being locked into genetically determined anatomical structures and associated capacities. This fluidity and flexibility in our somatic reality and psychological capacities goes back to our beginnings and is one of the distinguishing qualities of our species. Technologies become part of us and we live in a technologically constructed reality. Our biological cores are interdependent with our technological skins and shells. We are naked and relatively helpless--unformed--without technology. Technology is one of the most dramatic demonstrations of our ecological nature; our bodies and minds have been interwoven together in highly complex arrangements with a technologically enhanced environment. As a general direction for the future, we should anticipate the continuation and further evolution of this techno-bio mode of existence. This trend goes back a million years and is accelerating into the future.

There are two, relatively distinct arenas in which technology will impact humanity in the future, both of which pertain to the issue of wisdom. First, information technology as a whole is enriching the environment in which we live and work, providing an ever increasing wealth of information and knowledge available to us. Hardware and software facilitates our informed and guided access and use of this information and knowledge, and offers greater opportunities for communication and social interaction with others. The second arena of technology relevant to wisdom is technological enhancement, either through the infusion of technologies into our bodies or the transformation of our bodies through technologies, such as in biotechnology and genetic engineering.

Regarding the first point, the wise individual (or social organization) of the future (in fact, of the present) will need to be able to access and utilize this great repository of knowledge and knowledge skills provided through information technology. The wise person of the future should be able to thoughtfully guide her education, her research, and her utilization of knowledge embodied in the ever growing global information system through an understanding of what is centrally meaningful, important, and ethically significant. The wise person of the future should be attuned and receptive to the cascading flow of new ideas and principles, using them to support further creativity, as well as being able to thoughtfully separate the junk and the trivial from the intelligent and the important. The wise person of the future should be able to live and thrive within an ever shifting, ever evolving, and to some degree, uncertain reality of the information sphere and the techno-enhanced noosphere. The wise person of the future, in fact, should take as a central responsibility teasing or constructing out of the phantasmagoria of data, deep integrative principles of understanding and ethics. Wise people, in fact, may spend increasing amounts of time within virtual

reality, as a facilitative medium to create, experiment, and expand their consciousness.

But we will also use technologies to evolve our bodies and minds. We will use technology not only to correct psychological dysfunctions but to introduce design improvements. We will not simply fix what is wrong; we will attempt to improve upon what is now considered normal or acceptable.<sup>43</sup> Through history, humans not only try to fix problems, but also strive toward increasing excellence. Through advancing technologies, we will engage in purposeful evolution with more power than ever before. In fact, as an environmental driver, with the expanding arena of the information sphere, noosphere, and communications sphere facilitated by advancing technologies, we may be pushed into having to enhance our mental capabilities to handle it all and thrive within the vast informational richness of the future. But again, not to minimize the importance of character virtues, ethics, and wisdom, it is not enough (by far) that we try to make ourselves smarter; we need to use technologies whenever possible to facilitate the development of better human beings. Recent advances in brain physiology point toward the beginnings of a biological understanding of the foundations of qualities of wisdom, morals, and virtues. From that knowledge we should move toward working out how to evolve the human brain to support higher levels of the esteemed character virtues and expanded modes and levels of consciousness.<sup>44</sup>

Those who are wise in the future will be “wise cyborgs.” They will be empowered with the intellectual, informational, and communicational capacities of computer technologies and the somatic-psychological enhancements of biotechnology and brain physiology.

## **Wisdom and Ecological Awareness**

One of the key dimensions of wisdom is a holistic and integrative understanding of reality--to see the whole and how the whole fits together and not just see the parts. Another related capacity of wisdom is expansive consciousness, both in space and time. Wise people go beyond the immediate here and now and the egocentric and self-serving, and can look outward into the grand panorama of things.

The next two sections deal with important features of these holistic, expansive mental capacities as they pertain to the next century and into the future. First I will consider ecological awareness and how it connects with wisdom and then consider globalization and its relation to wisdom. Environmental-ecological issues and globalization are two of the biggest concerns for humanity in the coming century, and it is vitally important that we approach these concerns with as much wisdom as we can muster. But further, in both cases, besides the holistic dimension of each, there are clear ethical concerns to be addressed and again wisdom comes into play as critical to understanding and acting on the ethical dimensions of ecological-environmental and global issues.

Thinking ecologically means thinking holistically; we are part of nature, in a dynamic state of reciprocal interdependency. Everything in nature is

interdependent and interwoven together in modes of cooperation, symbiosis, and even competition. It is one of the great insights of the last century that we must learn to think in terms of the whole world as one huge and complex ecological system--perhaps even as Gaia, a single living organism--and whether we like it or not, given our growing awareness of the whole and our technological capacities to monitor, assess, and affect the whole, we are increasingly responsible for managing the planet.<sup>45</sup>

One big piece of our ecological understanding is the realization that human civilization clearly depends upon the natural environment for a multitude of resources and fundamental conditions of life support. Our economy derives off of our ecology. A second big piece of our ecological understanding is that civilization and human population, industry and technology, and all the diverse ways of life that make up the human condition impact the environment in multitudinous ways. These two points together constitute the circular interactivity of humanity and the environment.<sup>46</sup> Part of ecological wisdom is to understand the holistic and complex dependencies humans have with respect to the environment and ensure for their preservation (sustainability) if not further development, whereas a second big part is to appreciate the global and complex impact human society has on the environment and to ensure that we do not negatively affect or destroy the world of nature.

But there is also an ethical dimension to such considerations. The emergence of environmental ethics as an academic area of study reflects the growing world-wide concern that we behave ethically toward nature and life. Ethical principles, such as respect for nature, the rights of animals (if not all of life), and equality and justice for all of life, inform and guide the study and application of environmental ethics. It is not enough to simply understand the complexities of nature and our interdependencies with it and act with such knowledge in mind; it is equally important to act ethically with respect to nature and life.<sup>47</sup>

Environmental ethics looks at consequences, how our actions will either benefit or harm life and the earth. That is, environmental ethics is ethically informed future consciousness. In general, when we consider our varied relationships with nature and natural resources, as the foundation for human civilization, or our varied effects on the environment, we also move into thinking about the future. Will the resources persist or run out? Will we damage or transform nature in ways that can not be fixed? Will we leave a ruined earth and a depleted repository of resources for future generations? These are all futurist questions pertaining to our interactions with the environment. In the coming century, just as we will be obligated to think holistically, we will be obligated to think futuristically. In fact, we will need to combine the two perspectives, thinking about the future of the whole and then placing this expansive consciousness in an ethical context.

Given my opening definition of wisdom, it is clear that this complex capacity is exactly what we need in addressing the environment and our relationship with it. In that we need to integrate holistic, futurist, and ethical considerations, wisdom is the foundation for ecological awareness. Wisdom is

expansive consciousness: it considers the whole and it considers the future. Wisdom is ethical consciousness: in thinking about our ecology we need to incorporate environmental ethics. Wisdom is practical knowledge: in addressing environmental issues we need to come up with practical solutions to problems. Ecological wisdom is at the core of efficacious and ethical ecological awareness.

## **Wisdom and Globalization**

Globalization is a pervasive and powerful trend in our contemporary world and, in all probability, will continue to impact human life in numerous ways in the coming century.<sup>48</sup> In fact, given that globalization is such a deep and long term trend, stretching back thousands of years in human history, and is presently being amplified through the accelerative growth of information and communication technologies, we should realistically expect that in the twenty-first century we will far surpass our present level in the globalization of human life.<sup>49</sup>

For a variety of reasons, globalization in the twenty-first century needs to be guided by wisdom. First, globalization is a holistic phenomenon involving the total social network of humanity across the world. Hence, it needs to be understood within a holistic perspective, which is part of the nature of wisdom--to see the whole. Second, going back to the previous section, part of our global awareness needs to take into account ecological awareness and ecological wisdom: How does human society as a whole depend upon and impact nature as a whole? Third, we need to view globalization from a futurist perspective: Where is it leading? What are the long term consequences? How should the process be guided? This futures component to our thinking about globalization is also part of wisdom. Fourth and connected to the last point, we should be guiding the process of globalization from an ethical point of view, and this again, is part of wisdom. Of course, a big part of the debate over the process of globalization has to do with the world economy--how to insure for maximum growth and equal opportunities among all people and all nations. But many of our global and futurist concerns pertain to ethics. Can we realize a just world for all? Can we realize and enforce equality and human rights for all? And connecting economy, ecology, and ethics, how can we effectively address all the social ills that beset large portions of the human species--ills such as poverty, hunger, unsanitary living conditions, and poor education and health care--through our economic and technological systems without destroying the environment? In answering such questions, we have to holistically pull together fact and value, economic values and ethical considerations, and the potentials of technology, and place it all in the context of our relationship with the earth and its resources. This is big picture thinking. This is wisdom.

One special concern regarding the ongoing process of globalization is the preservation of human cultural diversity amidst the integrative and potentially homogenizing effects of the world's progressive integration into an economic and technological whole.<sup>50</sup> Our distinctive identities, our distinctive futures, our individual freedoms, may be wiped out and swallowed by a global mono-culture that is perhaps too westernized, if not Americanized, in its values and ways of

life. As Ziauddin Sardar has stated, we need to “rescue all our futures” against the colonization of the Western vision of the ideal tomorrow.<sup>51</sup> Wisdom clearly comes into play in addressing this issue.

To recall, I proposed that a viable global conception of wisdom needs to incorporate and integrate both Eastern and Western modes of thinking and understanding as described by Nisbett.<sup>52</sup> As one important criteria regarding how we guide the process of globalization through wisdom in the twenty-first century, we should strive toward a culturally broad and encompassing conception of wisdom that incorporates multiple modes of understanding derived from various cultures worldwide. This is not to say though that we will not find commonalities across diverse cultures; there is significant evidence that humanity shares many values and esteems similar virtues, such as evidenced in *The Earth Charter* and *The Universal Declaration of Human Rights*.<sup>53</sup> Part of the challenge of wisdom in the twenty-first century will be to identify, embrace, and act upon common ideals regarding the betterment of human society without negating cultural and individual diversity.

Also in line with the principle of balance, Sternberg has proposed that a key dimension of wisdom is to find a balance between individual and collective concerns and well being<sup>54</sup> and similarly, in my opening definition of wisdom I included both a concern for individual well being and the well being of others. At a global level, this principle translates into finding a balance between individual cultures and their values and collective concerns and values for all humanity. The principle of interdependency, clearly revealed within the workings of nature and the complex interactions between humanity and the environment, applies at the social and global level as well. Postmodern relativism<sup>55</sup> will not work as a viable philosophical framework for humanity as a whole, since no individual, no culture, no nation is an island in and of itself, and whatever each of us does impacts the whole. We need to protect our individual rights and ways of life, as best as we can, but we are also responsible to each other, for we are all in this together. The Taoist principle of complementarity between the whole and the parts, which clearly manifests itself in the workings of nature, also needs to be applied to the workings of society: individuality and diversity coupled together with collectivity and unity hold each other up or fall together.<sup>56</sup>

## **Conclusion**

The development of wisdom, both individually and collectively, involves the integration of knowledge and value (which includes ethics). The twenty-first century needs to be guided by such a synthetic and integrative capacity.

Wisdom involves an understanding of modern developments in knowledge and a strong sense of future consciousness; human life in the 21<sup>st</sup> Century needs to be guided by the best, most advanced knowledge we have with a clear eye on the future. We can not live in the past; we can not live in the narrow present; we need to live for the future. This is part of wisdom.

Wisdom is broad and encompassing understanding, which includes social conscience and empathy for others around the globe. In the twenty-first century

we need to increasingly move beyond the here and the now and move beyond our egocentric perspectives on life and embrace the whole, the whole of nature, the whole of humanity, and the whole of the human-environmental interface.

With the empowerment of accelerative technologies, we need to bring such technological capacities to bear upon solving our most pressing ethical and social problems and realizing our highest humanistic values and ideals. Wisdom, in the twenty-first century, will be technologically facilitated both individually and collectively.

All of these developments, pivoting on the evolution of wisdom within humanity, will contribute to the future social and psychological evolution of humanity and will serve as the foundation for a new enlightenment.

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