

## **An IQ for Moral Evolution**

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## **Abstract**

Much of what there is of peace on earth for everyone on this planet is guided by the results of local, national, and global agreements on what constitutes standards of measurement. Throughout this governing maze runs the measurement of intelligence as defined by a variety of names for what as a whole we generally wind up calling IQ. Yet ultimately embracing all of life is the over-riding governance in reality of a process of evolution that we stab at but fail to grasp and effectively guide for lack of an adequate measure. Drawing on work in a majority of the primary fields of science over many years, in this article I have brought together what much research indicates are the likely ingredients for what is needed. This article explores the potential for use by teachers and students of this new measure and a companion moral code for moral education.

## An IQ for Moral Evolution`

Nuclear overkill . . . Global warming . . . Environmental devastation . . . Escalation for hate rather than love thy neighbor . . . Race to the finish for greed, selfishness, and survival of the fittest astride the galloping gap between rich and poor—to what extent is the increasing threat to the future for our children, species and planet driven by measurable policies and actions of governments, corporations, religions, political parties, the media *and* schools that drive us ahead, check us in place, or drive us backward in evolution?

In other words what constitutes measurable *global intelligence* in this pivotal turning point 21<sup>st</sup> century?

All the way up through school and on into our working lives we're repeatedly tested for our level of intelligence. The popular name for a wide variety of scores is IQ. Given our global situation, isn't it about time we had an IQ for global intelligence versus blindness and madness for group policies and actions?

What if we had a bona fide Global IQ to help advance good policy and block bad policy? A Global IQ to guide the funding of good and check the funding of bad action? A Global IQ to help diagnose and heal what cumulatively, worldwide, is becoming a life-threatening sickness for our species?

Out of many years devoted to social science, measurement studies, methods for predicting the future, and the study of evolution,<sup>1</sup> what I believe fulfills the requirements for what is needed has been developed. The present name, The Global Sounding, comes from Darwin's famous voyage. For the voyage of the Beagle was originally commissioned not primarily for scientific discovery, as we think of it today. The funded purpose for the Beagle was to circle the turbulent and risky seas of the world to obtain *soundings* indicating peaceful harbors and safe channels. But the name also derives from a unique and powerfully motivated venture for 20<sup>th</sup> century science. Under the

escalating threat of nuclear annihilation during the Cold War I was among a group of scientists from both sides of the Iron Curtain who met secretly in Budapest to see if an update for the theory of evolution might help head off global disaster.<sup>2</sup> The goal was to expand beyond the ruinously entrenched emphasis on “survival of the fittest” to a theory embodying mounting social and scientific evidence of the over-riding evolutionary requirement of peaceful cooperation among peoples and nations—or “mutual aid,” as Darwin originally emphasized.<sup>3</sup>

To this end, working with other scientists similarly motivated,<sup>4</sup> I identified a logical structure for 15 ascending levels and activities of evolution studied by the major fields of science and religion.<sup>5</sup>

As can be seen in Figure 1, they range from cosmic evolution (the focus for the field of physics), chemical evolution (focus for chemistry), and biological evolution (focus for biology), up through the key transformational point of the evolution of the brain (neuroscience) into the levels and activities probed by the social sciences (psychology, sociology, anthropology, economics, political science), into the impact of technology (physics, etc) and education (incorporating the vital spread of the *humanities*).

— **Figure 1 goes about here** —

While so many levels and fields might at first seem unnecessarily complex, actually our present world situation rather horribly indicates how far short of what’s still required has been covered so far. As Figure 1 indicates, to this evolutionary “tree” for science must be added the emerging concern in tandem for science and religion with moral and spiritual evolution, the evolution of consciousness, and—above all in importance today—evolutionary action.

That is, to the list must be added the crucial drive to put our all too often fenced in and bottled up brain to work to better rather than worsen the situation for all life on this planet.

Here, in Figure 1, we see the 15 level by level unfolding of the “tree” from its “roots” in cosmic, chemical, and biological evolution up through its “branching” beyond the brain into all levels and activities characterizing the marvelous range of *human evolution*—with the *action* of each one of us vital in determining whether we move forward, are checked in place, or are driven backward.

To flesh out this schema for evolution, for each level and activity I identified what insightful studies from both past and present suggest are positive and negative indicators for the kind of core beliefs, policies and actions that advance, check in place, or drive us backward in evolution.<sup>6</sup> Out of this work I then developed the Global Sounding to serve as a measure of the kind of global or evolutionary intelligence we so urgently need to shape the better and head off the worse future . But still, I found, more was needed to define global intelligence. To fill the glaring gap between our dreams and all too often now the nightmare reality, I developed a companion Global Sounding Moral Code.<sup>7</sup>

In short, this new measure and moral code reflects at least thirty years of work by the new field of evolutionary systems science,<sup>8</sup> more than a half century of measurement science,<sup>9</sup> and a study of the amazing proliferation of new measures of global personal, social, and environmental health and well-being that in their various ways are expressions of global or evolutionary intelligence already at work to change our world for the better.<sup>10</sup>

As the Global Sounding Moral Code most quickly conveys the ultimate spirit and goal for this approach, we’ll look at it first. Then we’ll consider the potential for wide-ranging use of the Global Sounding measure to help advance educational and moral evolution and the relation of educational intervention to other levels and activities of this multi-leveled trajectory toward the better, the check-mated, or the worse future.

— **The Global Sounding Moral Code goes about here** —

## **The Global Sounding**

After all these years only one other measure seems to have been developed specifically for assessing the march through space and time for evolution. Invented by biologist J.B.S. Haldane in 1949, in tribute to the most logical of pioneers, Haldane named it the Darwin. In contrast to how fast evolution can actually move on most levels, however, the Darwin—reflecting the overwhelming focus on the past for traditional evolution science—only clocks paleolithic change in units of one million years.<sup>11</sup>

What a glaring gap emerges here between need and fulfillment. Repeatedly within human experience and all fields of science the need arises for an ultimate single, overriding, central standard for measurement of change and consequences. Repeatedly one runs into the fact that the obvious standard—central to life itself, with us and for better or worse shaping us at every moment—is evolution; or more specifically, the degree to which at the particular level of our concern we are driven ahead, checked in place, or driven backward in evolution. Yet because of the way the unity of life has been chopped apart into the separate sciences with differing languages, and our minds entrenched in a gulf between science and religion, we flounder on doggedly seeking fulfillment but falling short.

To focus on the level of our concern in this article—moral evolution and moral education—I suggest those familiar with a wide range of works will find consonance as well as scientific confirmation for the Global Sounding's progressive and regressive indicators. I originally and continue to find it in the classic moral psychology of Kant, Piaget, Kohlberg, Gilligan;<sup>12</sup> in the current work of Narvaez, [[[DARCIA: who else should be added?]]], and many others; Marcus Aurelius, Kant, Hutcheson for philosophy; countless works of many faiths for progressive religion; and for education more generally, progressive works all the way from Pestalozzi to Montessori, Dewey, and Nel Noddings in our time.<sup>13</sup>

Underlining all of this is the long ignored confirmation of the Charles Darwin who, in *The Descent of Man*, wrote 95 times of love and 92 times of moral sensitivity, versus

only twice of “survival of the fittest” and only twelve times of selfishness—which he called “a base principle” accounting for the “low morality of savages.”<sup>14</sup>

Evident from this glimpse is the fact these two paragraphs could be expanded into many pages with hundreds of references. Here, however, we must focus on explaining the nature of this new measure and moral code, then move on to consider some of the ways it can be used for teaching via classroom, online instruction, essay assignments, journal and popular articles, symposia, books, and the variety of other new ways ingenious teachers and students will discover.

Along the first left hand column, under **Levels of Evolution**, are the fifteen basic levels and activities for measuring the impact of policies and action on human and planetary evolution.

The second column, under **Indicators of progression**, shows what the progressive science of many fields indicates are descriptors of positive (+) impact on evolution.

The third column, under **Indicators of regression**, shows what the progressive science of many fields indicates are descriptors of negative (–) impact on evolution.

The last column, under **Regressive policies**, provides examples from recent and current experience of the kind of pathological American and global policies that drive both ourselves and our planet toward sickness and destruction.

— **The Global Sounding Matrix goes about here** —

To most quickly and effectively gain a sense of this new measure and its potential uses, one should first track the connections across the evolutionary level of one’s primary interest. How well do the progressive and regressive indicators express one’s own experience and perceptions? Not necessarily in wording, for here opinions will vary, but in essential meaning. Same for regressive policies. Then allow your mind to roam freely across the tracks for other levels. Do you glimpse possible interconnections here and there?

At first glance, to many this multi-level matrix may seem confusing and

questionable. To others it may be immediately clear and inviting. In either case, through persistence four primary purposes and advantages should become evident.

First, underlining the need and potential for a new measure of evolution that fits the human reality, the Global Sounding offers a way of tracking change across a reasonably full range for levels and activities of evolution as they affect the lives of all of us living today.

Secondly, it offers a way to project and evaluate alternative futures—that is, the potential trajectory for the lives of our children, their children, and so on and on into the now obviously endangered future.

This advance is vital as at the core the historical function for much of the field of measurement has been to identify and quantify evidence of intelligence versus ignorance or health versus pathology, to thereby provide guidance for bettering what in our time has become a globally worsening situation.

Third, as earlier emphasized, by its multi-level measuring of evolution, this new measure answers the core need for an unquestionably central standard for measurement of change and consequences.

Fourth, in contrast to the conscribed purposes of most measures, the Global Sounding has by serendipity been constructed to serve as not only a measurement but also as both a teaching tool and call to action.

For the move on from teaching and learning to effective moral action in business, government, politics, economics, philanthropy, the media, and religion as well as in science and education, vital steps in this direction are explored in my book *Measuring Evolution*.

### **How to Put the Global Sounding to Use in Moral Education**

Being new, the Global Sounding offers a wide open field for the exploration of uses by the aroused and venturesome teacher and students. Venues, as indicated earlier,

range from teaching via classroom and online instruction to essay assignments, journal and popular articles, symposia, books, and the variety of other ways the ingenious student and teacher will discover.

Here is a brief initial list of ways to get underway in the classroom or online exploration of this new measure to evaluate the impact of policy and action on moral evolution.

### ***1. Discussion of the Global Sounding Moral Code.***

Two points about this Code are perhaps most notable. In contrast to the customary tendency for moral codes to be too bland and soporific to engage most students, this Code has been written with the kind of bite the aroused, fed up, and engagement-readied younger—or older—mind is looking for these days.

Scanning down from tenet to tenet, one can see how by tapping deep driving environmental, social, cultural, economic, political, educational, technological, and moral and spiritual concerns, these tenets move swiftly to the heart of the great issues engaging the minds of everyone yearning for a better world today.

Keying to the ascending relevant levels for evolution, this combination offers considerable range for a heated and memorable discussion. For example, in the case of technological evolution, do ever bigger and better weapons advance or drive us backward in evolution?

What personal experiences confirm or contradict other tenets? One asks of the class or online, for example, how many tenets ring the bell in some special way within your own life?

Out of exploring the relevance of this Code to personal hopes and fears across the range of current challenge will emerge a productive variety of other ways of reaching the hearts and minds of those the teacher seeks to move .

### ***2. Discussion of the Global Sounding in terms of positive impacts and progressive***

*indicators.*

An extremely useful point for activating moral mind and action can emerge through consideration of the relation between cosmic, chemical, and biological evolution, and the environmental issue and personal action.

On one side is the picture still fixed in the minds of most of us that evolution is a matter of change over an immensely long span of time solely within the bailiwick of the first three levels of evolution—that is, measurable only in terms of physics, chemistry, or biology. Thus the assumption widely prevails that the immensity of evolution pro or con is far beyond any way of being touched or affected by thought or action by “little old me.” On the other side, however, is the clear message of history and thousands of studies of psychology, sociology, and all succeeding fields and levels of cultural evolution. By exploring the huge arena for potentially rapid change through personal and group action, one can open—and, most importantly, *empower*—the minds we seek to reach in all fields of science and education.

Note how this link of learning to action is underlined in the Progressive Indicators for all three basic levels. It is important also to know that this thrust for science and the theory of evolution is now deeply and widely grounded in the scientific leading edge for cybernetics, chaos, complexity, and self-organizing theory.<sup>15</sup>

Next up in this action “tree” for evolution is the pivotal emergence of the brain as the turning point for all that constitutes life. Here an increasing number of studies hammer across one haunting finding in common. It is of how, for a majority of us, caring or lack of caring for the child shapes the brain, which in turn powerfully determines whether one’s life thereafter is to help advance, check in place, or drive us backward. Discussion and prospective essays ideally should draw upon key confirming studies.<sup>16</sup> No single level is more important to explore.

Thereafter ranging, as we’ve indicated, from the psychology of personal intervention and the sociology of group intervention up through the rest, each succeeding level or activity opens a world for the instructive and motivating exploration

of the action alternative.

For example, in the case of moral education and moral action it can be seen how the potential positive impact for this concern comes to new life in viewing and discussing it within the context of all these other levels of evolutionary advance. One glimpses the power of the ripple effect.

In other words, we can see how educational intervention—or positive activation at any other level—can act in effect as the pebble tossed into the global evolutionary pond to reach out and potentially animate action at all other levels.<sup>17</sup>

After preliminary exploration, a question for initiating classroom or online discussion: Do you feel any of these positive indicators might be changed for the better in wording or concept?

### ***3. Discussion of the Global Sounding in terms of negative impacts and regressive indicators.***

After exploring the positive impacts of progressive indicators in the above and other ways, one turns to the crucial territory of negative impacts and regressive indicators. Here one can find an increasing body of students and others concerned about the consequences of the grim adult world realities that around the clock now flood the news. Most arresting and thought-provoking is the evidence of arousal of this level of concern as early as among pre-schoolers and in kindergarden.<sup>18</sup> More generally familiar is the rise among students at the high school and college level of fear of the future. Increasingly aghast at the size of what they face in the way of finding jobs, and the whole grim spectra of future responsibilities, the pressure mounts to explore what's gone wrong and what can be done about it.

Moving down the column for regressive policies offers a way to open discussion of the impact of specific past regressive local, national, or international policies and actions. Once this is done, one may tackle the ticklish challenge of doing the same for current policies and actions.

Out of these explorations conflict over explosive core issues of ideology and politics and economics will inevitably arise. By facing and bringing the “hot” issues to life, this tack for discussion offers the chance for great gains in readying youngsters for the kind of increasingly difficult future they face. But with institutional as well as other inhibitions in mind, here caution as well as an adroit handling of conflict is called for.

After preliminary exploration, a question for initiating classroom or online discussion: Do you feel any of these negative indicators might be changed for the better in wording or concept?

### **Using Conflict to Advance Moral Understanding and Healing**

Discussions that fixate, get ugly, out of hand, and “run out of time” can crowd out the need to dig deeper into underlying basic relationships and dynamics. At the same time, as a wealth of experience indicates, conflict can be used to dissolve barriers and win through to common ground. For example, take the question of bias for this measure and moral code. Are they biased in favor of liberals versus conservatives, or Democrats versus Republicans?

In terms of stereotypical behavioral *tendencies*, the answer of many studies would be yes. But the vital question is is this really bias? Or is it simply what both thousands of years of the experience of our species on this planet and thousands of scientific studies tell us is a straightforward statement of the prevailing determinants of local, national, and global intelligence versus ignorance, blindness, insensitivity, or how ever else you may prefer to define the reverse? To the vital companion point for education and therapy, it is the question of psychosocial health and well-being versus personal, social, moral, and spiritual pathology.

After a suitable time of warm up for the arenas for discussion, a way to defuse contention and advance understanding in classroom or online is to go down the line examining all fifteen indicators of progression. Do this and bit and bit this productive surprise unfolds. For gradually what becomes apparent is a surprising degree of

agreement between liberal and conservative, and between what were once known as Democrats and Republicans.

The question becomes what happens in terms of child raising, schooling, and leadership that drives majorities—or disastrously effective minorities—from intelligence to insensitivity, or from health to pathology.

Here, I suggest, embedded in this new measure, is what happens if we move beyond the old liberal versus conservative, or Democrat versus Republican mindset, to the globally transcendent psychosocial perspective of the *progressive* versus *regressive* individual, group, nation, and world.<sup>19</sup>

As can be found throughout scores of studies of moral philosophy, moral psychology, and just plain raw open-minded feeling and thought, here lie the foundations for moral as well as all other levels of evolution.

Here, further to the point for this new measure, is this productive avenue for discussion. Take one more look down the column for Progressive Indicators. From beginning to end, for each level, is not the message here that *all* are morally weighted?

Consider whether this bears out the firm conclusion of the greatest name for the study of evolution—that is, Charles Darwin’s insistence in *The Descent of Man* that moral sensitivity, not selfishness or survival of the fittest, is the primary drive shaping human *evolution*.<sup>20</sup>

Consider further whether this is not the cumulative finding for progressive science, progressive religion, progressive education, and indeed all of human experience.

### **Adding the Quotient to the Global Sounding or MLG-IQ (i.e., Multi-Level Global IQ)**

As can be seen, to this point the Global Sounding is a matrix for using planetary and human evolution as the central standard for an exploration of what is, could be, or should be considered global intelligence versus the reverse. The vital next step is to

give this matrix the numbers impact of scientific measurement..

As well known by now, IQ stands for intelligence quotient. The word quotient is defined as the degree or amount of the quality or characteristic of one's concern. In this case global intelligence is what we seek to measure—i.e., to put into numbers.

By providing a simple grid for rating events, policies, and actions in terms of positive (+) or negative (–) impacts along all 15 levels and activities for evolution, an experimental user form has been designed to explore quantity as well as quality for the vital quotient—or IQ end numbers—for this first simple, “user-friendly” measure of evolution.

With this self or multiple-self-quantified measure of global intelligence or the reverse as a basic reference point, one may explore current events and even aspiring leaders and others in the public eye to rate them in terms of potential positive, negative—or unknown, or no discernible—impact on evolution.

Beyond this possibilities proliferate. For example, use of this expanded IQ as a guide to the investment of time and money by decision-makers in a wide variety of situations that call for the *right* decision in our all too often precarious lives have been explored. How to use the Global Sounding matrix in the context of pivotal decision-making in business, government, politics, science, education, by writers, the media, nonprofit and religious organizations, and philanthropists and foundations has been explored with dramatic results in my book *Measuring Evolution*.

This takes us to a key question at this point in the development of this new measure. This is the matter of the right name. However the connection to Darwin's voyage of the Beagle for the name Global Sounding may appeal, it just does not fit the prevailing expectation for names for measures (e.g., MMPI for Minnesota Multiphasic Personality Inventory, WAIS for Wechsler Adult Intelligence Scale, etc.). After consideration of many possibilities, the chief current contender is MLG-IQ—to highlight the global relevance and multi-level evolutionary measurement structure for Multi-Level Global IQ.

After preliminary exploration, a question for initiating classroom or online

discussion: Do you think this is the best possible name for this new measure?

## **Conclusion**

Building on a past going back to earliest times our lives have been stabilized and endless conflicts resolved through harnessing the power of measurement.

Much of what there is of peace on earth for everyone on this planet is guided by the results of local, national, and global agreements on what constitutes standards of measurement. Measurement in physics is standardized (i.e., based on) the speed of light. Globally our measurement of time is standardized on the wave frequency of atomic clocks. The prevailing standard for the wealth of nations, increasingly obviously inadequate, is the Gross Domestic Product, or GDP. We are politically and economically motivated by the results of opinion polling.

Throughout this self and societal governing maze runs the measurement of intelligence as defined by a variety of names for what as a whole we generally wind up calling IQ. Yet ultimately embracing all of this—indeed at every moment and in every aspect of our lives, at all levels—is the over-riding governance in reality of a process of evolution that we stab at but fail to grasp and effectively guide for lack of an adequate measure.

Drawing on work in a majority of the primary fields of science over many years, in this article I have brought together what much research indicates are the ingredients for what is needed.

I have further, for the first time I know of, through applying the perspective of evolutionary systems science, shaped these ingredients into a viable exploratory measure of the struggle of global intelligence against all that seeks to drive us backward in evolution.

Having taken this project as far as I can go in this lifetime, being 86, convinced of its importance by much favorable feedback and haunted by the responsibility, I deeply feel it is high time for others to carry it on. Thus I write to invite interested teachers and

students to comment on this vital matter of the right name, and to explore use of the matrix, the moral code, and the new form for quantifying global IQ within the contexts of their particular interests.

In short, this is still very much a work in progress, to which the potential for contribution is wide open.

To comment on the name, for copies of the form and instructions for this new multi-level and multi-purpose experimental IQ, or to report on new explorations, write to [globalsounding@gmail.com](mailto:globalsounding@gmail.com).

## Notes

1. For my credentials as a psychologist and evolutionary systems scientist, see [www.davidloye.com](http://www.davidloye.com).
2. See A Brief History of the General Evolution Research Group in Loye, D., Ed., *The Evolutionary Outrider: Impact of the Human Agent on Evolution.*, and in Loye, D., Ed., *The Great Adventure: Toward a Fully Human Theory of Evolution*, with contributions by Mihaly Cszenzmihaly, Ervin Laszlo, Stanley Salthe, Raymond Bradley, Riane Eisler, Sally Goerner, Aleco Christakis, Ken Bausch, Allan Combs, Alfonso Montuori, and Ruth Richards.
3. See Richards, *Darwin and the Emergence of Evolutionary Theories of Mind and Behavior*; Loye, *Darwin's Lost Theory: Bridge to a Better World*.
4. See A Brief History of the General Evolution Research Group in Loye, D., Ed., *The Great Adventure: Toward a Fully Human Theory of Evolution*.
5. See chapter eight, Foundations and Guidelines for Developing the Fully Human Theory, in Loye, D., Ed., *The Great Adventure: Toward a Fully Human Theory of Evolution*.
6. See Loye, D., *Measuring Evolution*, for a summary of work to this end.
7. Important moves in this direction are development of a Global Ethic by theologian Hans Kung and the World Parliament of Religions and by former Christian Science Monitor reporter Rushworth Kidder..
8. Jantsch, *The Self-Organizing Universe*; Kauffman, *At Home in the Universe*; Loye, A Brief History of the General Evolution Research Group.
9. Murphy, Geilsinger, Carlson, and Spies, *Tests in Print VIII*; Lopez and Snyder, *Handbook of Positive Psychology*; Peterson and Seligman, *Character Strengths and Virtues*..
10. Loye, A Brief, Informal History of Measures of Global Well-Being, in Loye, *Measuring Evolution*.
11. Haldane, Suggestions as to Quantitative Measurement of Rates of Evolution.

12. Loye, *The River and the Star: The Lost Story of the Great Explorers of the Better World*.

13. As sources here are familiar to most readers for this journal, to flesh out references would be overload for this short article.

14. For the full picture, see Loye, *Darwin's Lost Theory* and *Darwin's Second Revolution*. See Darwin, *The Descent of Man* (second edition), page 102 for quote.

15. Jantsch, *The Self-Organizing Universe*; Kauffman, *At Home in the Universe*; Loye, A Brief History of the General Evolution Research Group.

16. Narvaez, The emotional foundations of high moral intelligence; Schore, *Affect Regulation and the Origin of the Self*; Perry and Szalavitz, *Born for Love: Why Empathy is Essential—and Endangered*; Eisler, *The Wealth of Nations*.

17. For explanation and references for chaos and complexity theory, see references for Jantsch, Kauffman, and Loye, A Brief History of the General Evolution Research Group.

18. Silverman, The Moral Sensitivity of Gifted Children and the Evolution of Society.

19. Loye, *The Healing of a Nation, Bankrolling Evolution*, as well as Eisler, *Tomorrow's Children*, for partnership versus domination ethos, model, and system.

20. See Loye, *Darwin's Lost Theory* and *Darwin's Second Revolution* for the data behind the fact that Darwin in his drive to establish the ultimate primacy of the “moral sense” in *The Descent of Man* wrote 92 times of moral sensitivity and only twice of “survival of the fittest.”

## References

Darwin, C. (2004). *The Descent of Man* (second edition). (New York, Penguin).

Eisler, R. (2001). *Tomorrow's Children: A Blueprint for Partnership Education in the 21<sup>st</sup> Century*. New York, Basic Books).

Eisler, R. (2008). *The Real Wealth of Nations: Creating a Caring Economics*. San Francisco, Berrett-Koehler).

Haldane, J.B.S. (1949). Suggestions as to Quantitative Measurement of Rates of Evolution. (*Evolution* 3:51–56).

Jantsch, E. (1980). *The Self-Organizing Universe*. (New York, Pergamon Press).

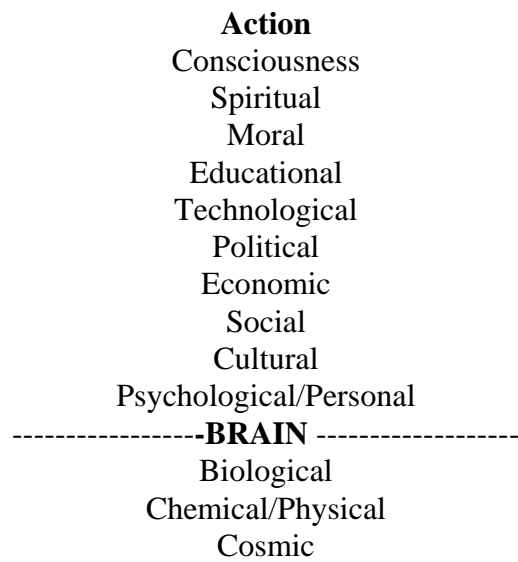
- Kauffman, S.A. (1996). *At Home in the Universe*. (New York, Oxford University Press).
- Kung, H. (1997). *A Global Ethic for Global Politics and Economics*. (London, SCM Press).
- Lopez, S.J. and Snyder, C.R. (2009). *Handbook of Positive Psychology*. (New York, Oxford University Press).
- Loye, D. (1971). *The Healing of a Nation*. (New York, Norton).
- Loye, D. (Ed.) (1998). *The Evolutionary Outrider: Impact of the Human Agent on Evolution*. (Westport, Praeger).
- Loye, D. (Ed.) (2004). *The Great Adventure: Toward a Fully Human Theory of Evolution*. (Albany, SUNY Press).
- Loye, D. (2004) A Brief History of the General Evolution Research Group in Loye, D., (Ed). *The Great Adventure: Toward a Fully Human Theory of Evolution*. (Albany, SUNY Press).
- Loye, D. (2007). A Brief, Informal History of Measures of Global Well-Being, in Loye, D., *Measuring Evolution*. (Carmel, Benjamin Franklin Press).
- Loye, D. (2007) *Measuring Evolution*. (Carmel, Benjamin Franklin Press).
- Loye, D. (2007). *The River and the Star: The Lost Story of the Great Explorers of the Better World*. (Carmel, Benjamin Franklin Press).
- Loye, D. (2010). *Darwin's Lost Theory (second edition)*. (Carmel, Benjamin Franklin Press).
- Loye, D. (2010). *Darwin's Second Revolution*. (Carmel, Benjamin Franklin Press).
- Murphy, L.L., Geisinger, K.F., Carlson, J.F., and Spies, R.A. (Eds.) (2011) *Tests in Print VIII*. (Lincoln, Buros Institute of Mental Measurements).
- Narvaez, D. (2010). The emotional foundations of high moral intelligence. In B. Latzko & T. Malti (Eds). *Children's Moral Emotions and Moral Cognition*. (San Francisco: Jossey-Bass).
- Perry, B. and Szalavitz, M. (2011). *Born for Love: Why Empathy is Essential—and Endangered*. (New York, Harper).

Peterson, C. and Seligman, M. (2009). *Character Strengths and Virtues: A Handbook and Classification*. (New York, Oxford University Press).

Richards, R.J. (1987). *Darwin and the Emergence of Evolutionary Theories of Mind and Behavior*. (Chicago, University of Chicago Press).

Schore, A. (1994). *Affect Regulation and the Origin of the Self*. (Hillsdale, Erlbaum).

Silverman, L. (1994). The Moral Sensitivity of Gifted Children and the Evolution of Society, *Roeper Review*, 17, 2, December, 110-116.



**Figure 1. The Action “Tree” of Evolution**

**The Global Sounding Code**  
**A translation of fifteen scientific and spiritual guidelines for**  
**evolution into tenets for a progressive Global Ethic**  
**for our species**

**1**

Honor and respect rather than plunder and rape our  
living environment.  
[cosmic evolution]

**2**

Honor and respect Earth as the Mother of us all  
rather than sell her into slavery.  
[chemical evolution]

**3**

100 years of science tells us Earth can still provide the  
resources for health for all of us if given a fair  
and practical human distribution system.  
Establishing health systems for the many rather than  
the chosen few is the moral requirement,  
and must be our goal.  
[biological evolution]

**4**

100 years of science tells us that a healthy brain and  
healthy mind depends on adequate food  
and love in childhood.  
Thus nurturing and expanding, rather than  
starving and blighting, is the moral requirement  
for the feeding of brain and mind,  
which must be our goal.  
[evolution of the brain]

**5**

Mind is the precious gift of life to be nurtured, enlightened,  
and celebrated, rather than orphaned at birth and  
thereafter degraded and exploited.  
[psychological evolution]

**6**

Culture is *the most precious gift of evolution*,  
to be cherished and nurtured in the wonder of its diversity,  
rather than seized, shucked and twisted to serve low ends.  
[cultural evolution]

**7**

Over thousands of years freedom and equality have been  
and will remain the most precious goals for evolution,  
rather than just words to be used by power-mad  
deceivers to sell control and inequality.  
[social evolution]

**8**

The failure of three hundred years of capitalism and two hundred  
years of communism starkly reveal the challenge.  
Moving beyond them, the economics of caring and fair  
sharing with others we know in our hearts could  
end the breeding of corruption, misery,  
and war, is the moral requirement,  
which must be our goal.  
[economic evolution]

**9**

Democracy,  
rather than the sham of the oligarchy of  
wealth, the creep by stealth toward  
fascism, or the prison of  
any other form of tyranny, is a moral requirement,  
and must be our goal.  
[political evolution]

Education for all,  
rather than the fact of good schools for some  
and bad schools or no schools for all  
others, is a moral requirement,  
which must be our goal.  
[educational evolution]

**11**

Develop technologies to strengthen and expand the voices  
of caring and reason and the abundance of life,  
rather than technologies that ever more  
powerfully threaten to, and indeed then  
are driven to, launch and kill life.  
[technological evolution]

**12**

Differently stated but the same for all, the message  
of thousands of studies of progressive science is exactly  
the same as for thousands of years for progressive religion:  
Do unto others as ye would have them do unto you—rather than  
do it unto others before they can do it unto you.  
[moral evolution]

**13**

Affirm our identity but also our responsibility in tandem  
with a greater being, a greater reality, or a greater  
mission, rather than fool yourself by claiming  
some one and only holy being, idea, or cause  
for your own low ends.  
[spiritual evolution]

**14**

The most precious gift of evolution is consciousness.  
Love, nurture, and expand it, rather than  
automatically seek to narrow, blunt,  
or otherwise slap it into shape  
and seize the pitiful remnant  
for your own low ends.  
[evolution of consciousness]

For over 100,000 years the choice before our species  
has been unchanging. Either join those who take action  
on behalf of the better world, or fall back in shame or ignorance  
with those willing to sell out to the highest bidder and  
join the march to extinction.  
[evolution of action]

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## The Global Sounding

<b>Levels of evolution</b>	<b>Indicators of progression</b>	<b>Indicators of regression</b>	<b>Regressive policies</b>
<b>Cosmic</b>	Sustainability of complex life forms	Environmental devastation	Opposition to environmental action and global concern
<b>Chemical</b>	Gaia Hypothesis/ symbiosis	Environmental devastation	Opposition to environmental action and global concern
<b>Biological</b>	Health and Longevity	Environmental devastation	Opposition to environmental action and global concern
<b>BRAIN</b>	<b>Parental love and nutrition</b>	<b>Lack of love and nutrition</b>	<b>Minimize governmental support</b>
<b>Psychological</b>	Self-actualizing	Lack of fulfillment	Maximize defense, minimize growth
<b>[Cultural]</b>	High priority for arts	Low priority for arts	Minimize support for arts
<b>Social</b>	Freedom and equality	Control and inequality	Maximize control and inequality

(continued)

<b>Levels of evolution</b>	<b>Indicators of progression</b>	<b>Indicators of regression</b>	<b>Regressive policies</b>
<b>Economic</b>	Caring and fair	Uncaring and unfair	Maximize gains for the few, minimize gains for the many
<b>Political</b>	Democracy	Authoritarianism	Oligarchic probe toward authoritarianism
<b>Educational</b>	Capacity for learning and independent thinking	Curtailing of facilities for learning and independent thinking	Radical de-escalation for progressive education
<b>Technological</b>	Emphasis on technologies of actualization	Emphasis on technologies of destruction	Radical escalation for the military
<b>Moral</b>	Living by the Golden Rule	Power of greed and corruption	Living by the Brass Rule
<b>Spiritual</b>	Sense of identity with humanity and greater being	Slavery to materiality	Celebration of absolute power of wealth
<b>Consciousness</b>	Cognitive, affective, and conative scope	Curtailing of scope of mind	Devaluing scope of mind
<b>ACTION</b>	Encouragement of progressive social action	Repression of progressive social action	Encouragement of <i>regressive</i> social action

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