

Pines, E. M.

From Chaos to Collaborative Harmony
- *A Path for Humanity's Unified Development*

Preface:

Do not go gentle into that good night.

Rage, rage against the dying of the light.

-- Dylan Thomas, 1947, 1951: Do Not Go Gentle Into That Good Night

The single-layer perceptron, a first model developed by Frank Rosenblatt in 1957, was a hopeful electronic element. It permitted simple neural networks that could do some basic pattern recognition tasks. It was seen as the dawn of an entirely new computing capability--a trainable one that could blossom into more complex tasks--perhaps the dream of a true artificial intelligence. Then came a mathematical analysis by Marvin Minsky and Seymour Papert--seemingly airtight, that proved draconian limits to what the perceptron could ever become (Minsky & Papert, 1969, 1972). There were better things to invest research and development money into than an inevitably dead-end technology; money dried up overnight.

Various workers began to try to think out of that mathematical box constituting the first of two "AI winters." They worked for a decade with the insight that the research killing analysis involved too narrow a definition of the perceptron. Particularly crucial was the work of hardy researchers such as David Rumelhart, John Hopfield and Geoffrey Hinton, particularly the latter two - who in 2024 were awarded Nobel prizes in physics. Their breakthroughs in multi-layer perceptrons and the back propagation concept, with

the rapid scale-down and processing speed acceleration of very large-scale integrated circuit technology, helped to see AI through its second winter in the 1990s. [This latter, through competition of the ultimately painted-into-a-corner work on LISP-based expert systems.]

Can you put a round peg into a square hole? If the diameter of the peg is made smaller than the side of the square, most certainly you can. That multilayer perceptron “peg” and with its backpropagation unifying connectivity, set the stage for the universe of AI research and application restructuring our entire world even as you read this. If we truly connect, we can see more deeply and broadly as well.

Dear Reader, no one has to tell you that humanity is facing an ever-growing complex of interrelated problems that threaten our very existence. Unfortunately that very AI revolution may be proving more a part of the problem than any sort of partial solution. Doubtless too, you know that sooner or later – if not already, this network of problems will impact you and those who you care about. Doubtless too, you really don’t want to hear about it again.

No one can blame you either, as there seems to be nothing that can be done about it – much less so, anything that you as an individual could seriously contribute to such an effort, or even just make your personal fate a little better. Without a reasonable plan of action, it would just be plain cruelty to make you dwell on it again.

However, what if there was such a solution – as unexpected as that multilayer perceptron and backpropagation, not only clearly taking us from a darkening dusk--but also taking us straight into a new dawn?

Well, if there were any hope for a solution to at least the dusk, it would have to be for all those interconnected problems at once--just as successfully curing a cancer means to cure it completely. If there is a practical answer, then unlike the network of problems that resulted, the root cause itself must be simple and operable. Further, if a dawn were to result, our operation would not be removal – but rather, turning a worthy adversary into an ally. In any case, first we need to find that “adversary”.

Facetious as this may sound, the Walt Kelly comic strip character Pogo may have done that initial tracking work for us already in 1970, summarized in an aphorism setting the theme for the first Earth Day that April: “We have met the enemy, and he is us. (National Air and Space Museum, n.d.)” Yes, Pogo might be on to something, but the problems are of course a lot broader and deeper than litter and pollution. More to our point, the root cause goes a lot deeper than “us”. The “enemy” is rather in us – human ego.

We can skip Pogo’s useless moralizing, because it’s not our fault either; self-castigation has never gotten us anywhere on this issue, and never will. As the famous team inspirational poster says, “The solution begins when the finger pointing ends.” This is true even when we point the finger at ourselves.

We of the Institute for Humanity’s Unified Development, IHUD, feel strongly that human ego is not only the root cause of all our problems, but it’s all that stands in the way of a particularly happy future within grasp – or at least it can be described as the lynch pin to such a universal solution and betterment. What we need to do is properly understand and use it.

It is exactly to research this, develop its theory as a new form of multidisciplinary science and from it developing among other societal implementations, novel educational programs that not only teach the theory, but utilize the theory in the instructional method itself. Among other things, this theory must accomplish these milestones:

1. Prove the hypothesis that ego is actually a fundamental principle of Nature, and yet human ego is the only variant of it that is problematic.
2. Demonstrate that human ego really is THE issue.
3. How in the past, and even more so today, it undermines – nay, actually manipulates, every ideology, even – and especially, world-reform movements that on the surface appear exceedingly reasonable and well-meaning.
4. Provide a feasible plan of action, and explain why some of the greatest minds of the past, who did have an excellent intuitive grasp of the problem if limited to only anecdotal evidence, had already pronounced the matter hopeless. Why were they so certain such a plan was impossible? Why were they wrong?
5. What goal for humanity, free from its destructive, particularly self-centered nature, would then be the natural and good path to follow.

From that theory, areas of application must be determined, and guidance for practice must be provided. Specifically, practical social and educational implementations for working with the ego properly towards that goal must be developed for a world diverse in cultural, socio-economic and political frameworks.

Before going any further, you should not just “let us get away” with the statement of number 3 above. Perhaps IHUD itself is such an “undermined world-reform movement?!” Three points on that: The fact that we ourselves broach the question

instead of evading it, denying it, shouting it down, or pointing the finger elsewhere, should already tell you something about us. Further, our own science already says that we can't trust our own egos, so our entire work is based on the fact that we can't trust ourselves save through hard objective data--we are self and mutually introspective and wary. Finally consider that we are here to benefit you (and ourselves – we are all in the same ship and there are no life boats to even squabble over; we at IHUD at least, certainly believe that), who we are, and the logic and empirical support of our arguments along with what we have already produced and will produce. Per Aristotle, this pathos, ethos and logos should reassure you. [Really, though, if we were not in a world run by human ego, logos, ethos and pathos should be the proper order of importance; it's worth thinking about.]

Much has already been done during these first few years prior to and since establishing the first branch of our nonprofit organization in Switzerland, though far more needs to be done and planning continues. Our presently all-volunteer international team represents diverse cultures, secular and religious views (all we ask is an open mind and to not deny our common existential, scientific perception of reality, whatever one's personal perspective), socioeconomic backgrounds, and goodness knows – personality. We are university professors and industry-careered PhD's, MD's, psychologists, economists, secondary and elementary school educators, language translators and other professionals in the natural and social sciences, humanities and the arts, health sciences, engineering, technology and business infrastructure – and others of various talents who just wish to help. All that we have in common is a perception of what the struggles humanity is going through are all about, and how to possibly, realistically, turn the tide. We do not have all the answers, certainly not yet, but have every reason to believe that we are following the most hopeful path--for us, those we love – and you, our fellow

humanity captains of the good ship Earth. Human ego has long been in mutiny, and we must – together, retake the ship.

From the introduction coming next, we'll begin to look more deeply at these five areas of the theory, and the crucial practical applications of these, though still in a general way--hopefully into as much technical depth or qualitative description as you feel comfortable with. We wish you to be satisfied with the scientific and academic legitimacy of our approach as it is admittedly avant garde, while at the same time not overwhelming you. We will continue this approach into specifics, proceeding forward into the book.

However, one more thing must be addressed here, dear Reader--and that is the general findings that IHUD has already realized regarding that goal expressed in item 5 of the theory milestones list. It has been made crystal clear to us in IHUD in our research into the inroads made by the scientific community on natural integral systems made in this first quarter of the 21st century, as well as the AI so rapidly developing just within the past several years. In particular, as well, there are the findings of network science regarding human social structures and dynamics.

There is a term for this, “superorganism”--one well-understood and accepted in science although we are speaking about it in a directed psychosocial manner, not in terms of genetics or some such. To those outside the scientific community, the term--the concept itself to be more frank--may reasonably appear ominous for both natural world and social history considerations.

If items 1 through 4 are not properly addressed, and they never have been in the past, those fears would be well-founded. There can be no blame for actual idealists, those

who at least rationalized that they were, or even those of a fatalist go-with-the-flow attitude, who set in motion the modern world with its present catastrophic heading. There was no clear way to address those items before this century nor were the ever-blossoming connected perils due to this so clear as it is today.

The natural world concern is aptly described as “red tooth and claw.” No further description should be necessary.

The social history concerns are not as simple due to the subtle cleverness of the human ego--but these can't hide from historic aftereffects. These are combinations of physical, political, economic or psychological manipulation of the masses of people for the immediate interests of a hierarchical oligarchy--blatant or subliminal. The inevitability of every new ruling ideological group resulting in such an hierarchy is well-described by the century-old “iron law of oligarchy” by Robert Michels (Michels, 1911). While criticized for exaggeration of inevitability and denial of the possibility for natural democratic evolution, in its essence it still stands. We would further say with good cause, as will hopefully be understood as you proceed further into this book, that without properly addressing human ego--the law continues to be “iron”. A particular fooler is the intentional misdirection of real oligarchic concerns into a mindlessly emotional witch hunt against an internal minority or outside entity--an age-old practice of real oligarchies. What really muddies the water is that sometimes, such accusations might be at least partially true; there is nothing like a little truth to beef up a lie. As well, there's plenty of raw ego to go around. A tell-tale sign of such misdirection by empowered oligarchies or ideological groups whose leadership seeks such power, is an “us versus them” approach and various layers of propaganda to support the narrative over truth. When useful, the innocent are shamelessly condemned, and the guilty

exonerated, regarding present and past perceived negative events or negatives in the status quo.

The natural-world concern is not a problem because natural ego, as will be discussed later in this book, is out of necessity--not desire to harm. The evolution of the superorganism at our level of consciousness, will never allow that brutality as we don't need it and wouldn't allow it--as long as we tame (not suppress) the ego to deal with the entire human family as an actual family. This is the equivalent of natural ego at a human level. Specifically, such is due to the far higher proportion of individual intelligence to instinct among humanity versus any other species.

The social history concerns melt away when we melt away the iron law by taming the human ego. With no oligarchy, unbiased democratic circles will naturally arise. Best choices for positions or specific decisions will be made on a voluntary consent-and-meritocracy basis. That basis is either known skill-set/education/experience, or collective-wisdom based identification. [The concepts and details here will be expanded upon later in the book.] The select ones of each circle will be gathered into a smaller group of circles, and so forth till candidates are pared down to the number required.

However, what happens if the effort to tame the ego itself fails? Even so, the superorganism would still impose no new danger.

Competing human egoism cancers that even rot whatever organizations have been established into their power, will certainly not allow a master cancer to swallow them up. We have already reached a multipole point from international relations down the

fractal to personal relations--where technology and terrorism can kick over the apple cart, corresponding to a mathematical model known as a “fractal basin of attraction” -- as exemplified by the chaotic pendulum (Fractal Foundation, n.d.). Without at least fairly universal unanimity about entering the superorganism state, even momentarily establishing one, much less one a stable one, will be impossible. Such unanimity will be impossible without taming the human ego.

The introduction will go deeper into all this, as well as open into the full spectrum of IHUD vision and work.

REFERENCES

- Fractal Foundation. (n.d.). What are fractals?
<https://fractalfoundation.org/OFC/OFC-7-2.html>
- Michels, R. (1911). *Political parties: A sociological study of the oligarchical tendencies of modern democracy*. Werner Klinkhardt.
<https://web.archive.org/web/20220220205411/http://www.beoworks.com/political-parties.pdf>
- Minsky, M., & Papert, S. (1972). *Perceptrons: An introduction to computational geometry* (2nd ed.). MIT Press. (Original work published 1969)
- National Air and Space Museum. (n.d.). 14 Pogo Earth Day 1970 A [Photograph]. Smithsonian Institution.
<https://airandspace.si.edu/multimedia-gallery/14-pogo-earth-day-1970-ajpeg>