RETHINKING INTELLIGENCE
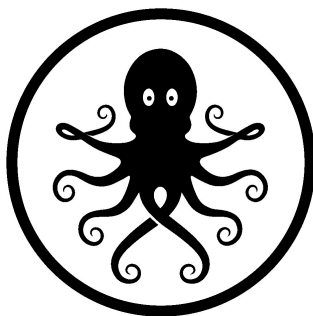
BY THE OCTOPUS MOVEMENT

NONLINEAR THINKING

RETHINKING INTELLIGENCE

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Our cultural and global view of the word "intelligence" has undergone a lot of changes over the last few centuries.

When the concept of intelligence was first defined in psychology and psychometrics, it was defined as the speed and facility of mental processing and memory, a concrete attribute that felt measurable. Later, researchers discovered that trying to measure this ephemeral quality was anything but concrete; as psychometrics (the science of measuring mental capacities and processes) and testing evolved, we learned that <u>measuring intelligence</u> in this way has as much to do with language and exposure to concepts as it does with cognition.

the Octopus Movement Foundation
www.theoctopusmovement.org

Nonlinear thinkers work differently and capably. We are **uniquely** interested and able to focus on and acquire expertise in, many areas. We are multi-specialists who sometimes defy the norms of a nine-to-five world.

WHO ARE WE?

The Octopus Movement is a **global** coalition of nonlinear thinkers united by a desire to create positive change in the world.

We are here to drive acceptance and **awareness** of the awesome abilities of atypical thinkers and embed our diverse experience, expertise, and polymathic skills inside institutions ready and willing to tackle the trickiest challenges of today and tomorrow.

1.
STATEMENT

That desire made manifest to quantify and define intelligence not only illustrated that <u>deeper factors</u> could play roles in our perception of intelligence, but using it as a descriptive characteristic could also be a new source of <u>potential prejudice</u>. Exposure to education, information, and culture play a definite part in the results.

Researchers also discovered that defining the intelligence quotient was at best based on limited forms of measure. It reflects an inauthentic approach to diversity of thought in that we are really measuring the degree of familiarity with a cognitive process when we present a test of mental ability using that process. Those that use a process that we use to solve problems might do the same process more quickly than us and be quantified as more intelligent, and do it less efficiently and be labeled as less intelligent. It's all in how you measure.

The person evaluated might never have studied language structure, had formal education, or might have low social exposure, <u>due to neurodivergence</u>. Another individual might have difficulty processing the kind of information on your intelligence test due to a neurological condition like dyscalculia or dyslexia or <u>convergence insufficiency</u>, which impairs reading by doubling, blurring and moving words.

A life led not looking at human faces from being on the autism spectrum or related conditions that share alexithymia with regard to identifying emotions might leave a person confused by the description of an emotional narrative you unconsciously put as backstory in your word problem. A test subject with cPTSD might be having an anxiety response to a familiar number you put in the numbers in the reasoning part of your test. A person with sensory processing disorder might even be having a reaction to the pink paper you used to record extra copies of the form at the top of your exam.

Until you understand every factor of a measurement, an assessment on that information should always be suspect. Without healthy skepticism of data, conclusions will be reached using that very same untested conditional data. The evolution of the narrative of science has created a personal value and culture in scientists with regard to evaluating the way we measure, the significance of the terms of what we measure, and the validation of multiple approaches to ferret out extraneous data that invalidates conclusions, or in some cases, disproves them. Measurement is a kind of bias, and that means even an intelligence quotient is inherently biased.

In "Slumdog Millionaire", which won eight Academy Awards, the protagonist stars on a game show, where his exposure to the individual threads of that particular perceived test of intelligence were the threads of his life. He didn't have to think of the answers. He lived the answers. If they had asked him different questions of the same perceived difficulty, his chances of winning would have been greatly changed. It's all in how you measure.

"Everybody is a genius. But if you judge a fish by its ability to climb a tree, it will live its whole life believing that it's stupid."

Albert Einstein is often credited with this quote, but it's quite fitting that many voices in the world have often mirrored this

same sentiment, and possibly before him. It provokes this very necessary conversation and instigates the collective task of deciding if measuring an abstract human dynamic like intellect is even a worthwhile goal, or if the real task at hand is finding how to best use the asset of cognitive diversity and facility in our organizations, approaches to solving problems, and how to leave the world in better shape than we found it.

After all, a measurable manifestation of traits is only that individual circumstance. An IQ test may actually tell us very little about the person we're measuring. It doesn't tell us how that individual's facility with processes developed, their exposure to information or opportunity, and it fails to open dialogue about the play and practice of acquiring skills and abilities in the first place.

A genius you've never met with twice your brainpower might score half as well as you on a test where that individual measurement of what the brain is doing when it's directed at one activity is different or takes longer. When our society started investing more and more social value into certain kinds of intelligence, what we really did is negatively evaluate many for their different ways of thinking; we don't consider their linear or nonlinear approaches to problem solving or which of those approaches the brain prefers to consider first when approaching a problem. It's a bias of small sample size for so complex a system, and one which cannot incorporate the few remaining mysteries of the human brain.

The person who has a mind that starts approaching the problem differently than you do might get to the finish line ahead of or behind you, because you're running different distances in that race. It's the process you try first that dictates how long it takes to answer a question, and that factor has made this way of understanding intelligence very misleading.

Linear, direct processes already established in subjects like mathematics or physics are often the most efficient processes by way of time, because the shortest distance to the problem has been established through millions of iterations of use. We force these processes in education, repeating the mantra of 'show your work'. Linear problem solving. Linear Intelligence.

Non-linear problem-solving, the kind of creativity and approach possessed by those who prefer novel approaches to the known, mentally compare unrelated systems to learn from them, or simply think differently sometimes take longer to solve a problem because their mind plays with unique solutions first, by default. Non-linear problem solving. Nonlinear Intelligence.

Measuring this way is not without irony. Our society is built on innovations and dreamers, people who saw opportunity in a unique way or felt the need to explore the unknown through a kind of hyper-focused special interest. Our global culture of sharing and innovating might look very different without nonlinear approaches. Without great nonlinear problem solvers like Nikola Tesla, we'd all be doing something else right now with our day. Much of the technology we use every day might not exist. We might not even have power where we live. Yet, our society creates a condition where a man like him can die alone, in obscurity, and in obvious neurodivergence.

Alan Turing's contributions to ending the global conflict of World War II through nonlinear problem-solving literally saved millions of lives, but how society treated him for what made him different needs to open a conversation about how we treat people who think, act, and live differently.
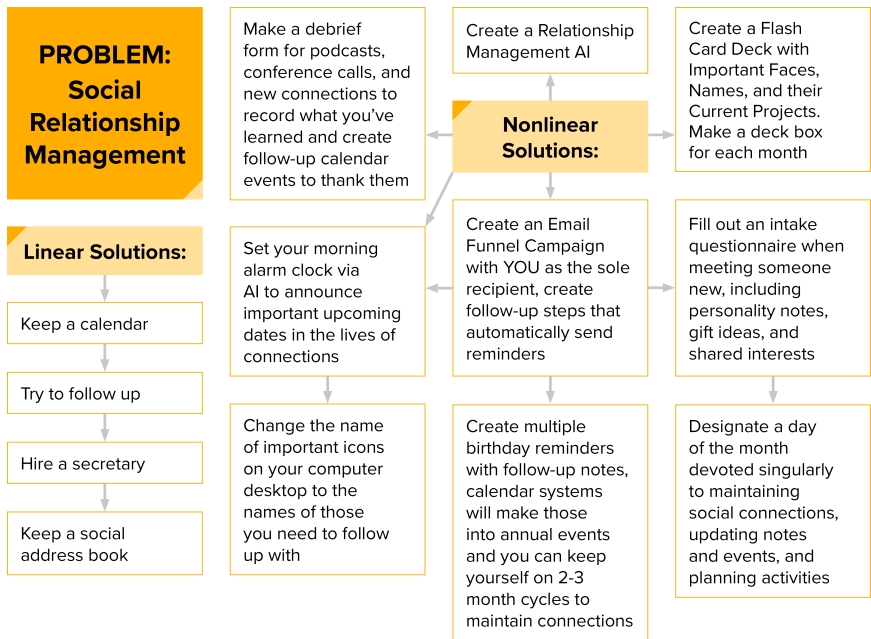
For a global culture that puts the effort into redefining how we value the different ways that people think to succeed, many of the necessary systemic changes needed to enforce that new social value and safely promote its importance simply don't exist in approaches we've clung to, as our

understanding of the world and ourselves has evolved. Changes in culture can be difficult, and underlined organizational psychology has developed as a discipline to tackle this very problem.

The specialty of industrial-organizational psychology (also called I/O psychology) is characterized by the scientific study of human behavior in organizations and the workplace. The specialty focuses on deriving principles of individual, group and organizational behavior and applying this knowledge to the solution of problems at work.

Novel approaches are sometimes the best way to solve a problem, because a familiar linear system is inefficient for the circumstances around that problem. Consider the task of managing social responsibilities, for example. In a busy and more disconnected world, sending a thank you gift or card, congratulating someone on a milestone, and remembering to periodically make contact is a huge part of keeping the lines of communication open to benefit from someone's presence in our lives.

Successful people surround themselves with other people who are different versions of the people they want to become. Surrounding yourself with success, new ideas, and hearing about the experiences of others is of constant benefit to anyone looking to be better at what they do. That presents a problem in today's world, and it's a poignant one.

PROBLEM: Social Relationship Management

Make a debrief form for podcasts, conference calls, and new connections to record what you've learned and create follow-up calendar events to thank them

Create a Relationship Management AI

Create a Flash Card Deck with Important Faces, Names, and their Current Projects. Make a deck box for each month

Nonlinear Solutions:

Linear Solutions:

Set your morning alarm clock via AI to announce important upcoming dates in the lives of connections

Create an Email Funnel Campaign with YOU as the sole recipient, create follow-up steps that automatically send reminders

Fill out an intake questionnaire when meeting someone new, including personality notes, gift ideas, and shared interests

Keep a calendar

Try to follow up

Hire a secretary

Keep a social address book

Change the name of important icons on your computer desktop to the names of those you need to follow up with

Create multiple birthday reminders with follow-up notes, calendar systems will make those into annual events and you can keep yourself on 2-3 month cycles to maintain connections

Designate a day of the month devoted singularly to maintaining social connections, updating notes and events, and planning activities

Effectively designing solutions to important challenges like relationship management depends on unique factors. Is your calendar too full? Are you forgetful? How do you best remind yourself of what needs to be done? Linear processes can make sense of problems, but nonlinear processes benefit from the individual nature of each problem. Some solutions benefit most from traditional methods, and some won't.

Cultivating natural skills is as much a factor of social contract as it is a social value. When we shackle creativity and dictate how everyone must approach problems, all we are able to see is a single dimension of learned skills, namely how an individual copes and thrives with the limitation of forced approaches and limited outcomes.

The human mind develops by <u>playing with what it loves</u>. Connecting your personal passion to what you do is just one aspect of not only redefining your understanding of intelligence, but also defining what really resonates with your personal definition of success. Multipotentialites, <u>those with skill and abilities in many different areas</u>, will often connect experiences and systems in a very nonlinear way and learn a whole new method or understanding that connects to a challenge.

If the task at hand is competing at the *Great British Bake Off*, baking a cake, your understanding of how taste functions in the body from working in the medical field, your study of the olfactory part of the brain as a neuroscientist, your passion for the engineering of industrial heating elements as a technologist, or even your passion for low temperature sugar reactions in the laboratory as a chemist could help you make the <u>best cake</u> anyone has ever eaten. The integration of novel ideas from unrelated disciplines and the ease with which a person does so is yet <u>another kind of intelligence</u>. This can be one of many reasons the concept itself needs new cultural understanding.

Reimagining "intelligence", more clearly defined in this context as all the unique ways the brain can process challenges, problems and solutions, requires a more inclusive approach that values and motivates individuals to pursue their passions and interests; it takes exposure and intention. It also means reshaping education to teach individuals to find what they love and are good at, instead of learning that success or failure is decided by the <u>numerator on a test score</u>, a measure of their ability to meet linear expectations, or assumed milestones in a socially-dictated process.

Our <u>Nonlinear Thinktank</u> has identified there is a clear need for a change in our cultural approach to cognitive diversity, and it's a problem we all can share in solving, linear and nonlinear alike.

To fully embrace the diversity of human intelligence, it's necessary to acknowledge that intelligence is transferable by way of exposure and <u>not limited to a single domain</u>. Sharing new ideas and processes needs its own room to breathe. Transferability means creating spaces and opening dialogue about what we have to teach one another with a shared value of continuous improvement in pursuit of our mutual goals, but it also means placing value on failure.

No person ever achieved any success without a willingness to fail. As toddlers, adults often watch us stumble and smile as we learn to hold ourselves upright and walk. After we cross some invisible boundary of adulthood, we are taught to regard failure not as <u>the necessary process of self-improvement and success that it absolutely is</u>, but instead as a negative state we should do everything to avoid.

There is a present need to open ourselves to the narrative of failure and learn how to instead connect with what drives us most and what we've learned from that failure and have decided to do differently. We need to fail at our goals as often as we need to, until we connect with our passions.

Fail upward. Fail often.

Willingness to fail, practice, and grow are stepping stones to the understanding and skill we all develop as individuals. It's what allows us to contribute to the successes of others. This is a human lesson of not humility but truth that needs to be taught alongside every subject, a cultural value that our new society of social elevation and egocentrism in the online sphere has <u>learned to disavow</u>.

However, a lifetime of repeating mistakes only comes from the mistake of not recognizing that the way that others do things may never work for us as individuals, and that our own way will sometimes be better. Success is about redefining the objective, the approach, and our attitude in confronting what

is keeping us from understanding the problem. Living in a linear society that teaches us from an early age that success is defined by only certain key performance indicators does not help us escape this cognitive trap. It's a journey each of us must take to define what success looks and feels like for each of us. Without it, we can identify as impostors, feeling as if what we bring to the collective is without value. If what we excel at doesn't happen to be regarded positively by society, what matters to us might feel worthless to others, and that can make us hesitant to be ourselves.

Respecting our value of individual worth isn't a marginal problem, it's a worldwide one. In a <u>recent study</u>, published via the National Library of Medicine under the auspices of the National Institute of Health in the United States, incorporating 62 other studies with over 14,000 participants, Imposter Syndrome was found to affect **up to 82% of those interviewed**.

Imposter Syndrome is the persistent inability to believe that one's success is deserved or has been legitimately achieved as a result of one's own efforts or skills.

This cultural experience of <u>Imposter Syndrome</u> leaves us living quiet lives of desperation and keeps us from a simple truth; success is what is important to you as a person, and no matter how many 'successes' you manage to acquire in view of others to have their impression of you elevated, they all become meaningless without your own happiness and confidence.

If we don't create our own definitions of success, success becomes an unachievable quanta of our lives, and we will define ourselves as what we are and aren't to other people instead of understanding how we are unique and what makes us happy can work together in the equation of personal wisdom that we can share with others. This requires positive debate with a shared objective of exposure to new creative

ideas.

This already complex topic can affect our willingness to involve ourselves and changes how we value seemingly subjective disciplines, like the arts. Despite the challenges posed by subjectivity in artistic expression, it is and always has been a powerful tool for emotional expression, self-expression, and conveying messages through different mediums. Part of our shared ancestral history and culture is the value of human storytelling, and it's an art we no longer lift up and respect as we once did with elders of the human tribe.

There is a need to consider what creating a culture that values expressive creativity really involves. The subjective nature of artistic expression may challenge traditional notions of intelligence, but it highlights the importance of individuality and gives us pause to consider how creativity, too, can be a form of intelligence. It takes consensus on what that change should look like; organizations have the power to easily encourage their members to express themselves artistically through creative outlets such as painting, drawing, or creative writing, but the lack of social awareness over why this is so important in the first place has allowed us to forget how important inspiration is to the human process of self-development.

Without inspiration, individuals cannot tap into their creative potential, explore new ideas, and develop new skills that can help everyone define success and lead to a more creative and innovative shared space. We've learned to close the conversation and assume that creative enterprise is somehow less productive, even though the evidence in human history could hardly agree. There is a wrong way to implement creativity, and it's a willingness to make mistakes and improve upon that process that can make fostering the right environment a success.

Ultimately, rethinking "intelligence" should be viewed as an opportunity to build better, diverse teams that can help the world effectively confront the problems of the future. By embracing the diversity of the human experience, we can create a more equitable and inclusive society that benefits from the unique strengths and perspectives granted by that willingness to consider new and different ideas. Our social views of intelligence and success have evinced a clear need to include diverse perspectives, include neurodivergent and nonlinear individuals in our conversations to challenge our assumptions, and have shown us the gap in our approach of informing the newest members of our society that their contributions matter.

Due to our shared vision of the power of creative thought, the Octopus Movement has partnered with the CEO and co-founder of Pick My Brain, Maxine Cunningham, to create Pick My Neurodiverse Brain, which will launch not long after the publication of this paper. The intention of this database of creative thinkers, neurodivergent insights, and nonlinear problem-solvers is to demonstrate the power of new perspectives and inspire you to create your very own brainstorming groups in order to help you reach your goals.

The best way to show you the dynamism of new ideas is to make what you're passionate about into our passion and show you how nonlinear approaches to problem solving can create explosive results. If you're unsure of what new ideas might bring to your business or organization, let us show you. You'll see how excited members of our Nonlinear Thinktank get over having new systems to play with, and much like an octopus trapped in a jar, we'll find out what we need to about everything you do until you see the lid of your limitations float away.

To fully embrace the concept of rethinking intelligence, our Nonlinear Thinktank proposed a new interpretation and definition of intelligence, nonlinear intelligence, a perspective

on intelligence that recognizes the unknown and unpredictable variation of human approach, and cannot be measured by traditional intelligence tests.

Sharing this value, however, requires acknowledging that intelligence is not a fixed trait, but rather a dynamic and continuous journey that expands as we grow, learn, and integrate new experiences into our lives within an ever-changing world. Nonlinear intelligence is about your openness to ideas, not about a test score.

For the business world and established organizations, implementing these ideas involves a shift in perspective and a willingness to embrace more inclusive and diverse views of intelligence. It can mean re-evaluating hiring and promotion practices to identify and cultivate individuals with different kinds of intelligence.

Incorporating creative and non-traditional methods of problem-solving that value different perspectives and ways of thinking just means creating a space for it to happen. This may involve implementing team-building exercises that encourage collaboration and creativity or it could manifest as incorporating artistic expression into workplace culture. What this looks like in each public sphere isn't something to be dictated, but explored. It just requires a willingness to change.

The world has learned to recognize that organizations should promote diversity and inclusion by actively seeking out and hiring individuals from diverse backgrounds and experiences, but pursue it to raise their awareness of its importance, not their hiring statistics. Diversity and inclusion training should be a part of every employee development program to help all team members understand the importance of diversity, equity, and inclusion in the workplace, but it should also embrace the importance of new ideas and remind individuals that our natural response to change and challenging ideas can be negative without the right framework. Instilling these values

early and often is a necessary part of making this change happen not just from the bottom up, but from the top down.

Creating a culture that values and respects all forms of cognitive diversity and the unique approaches that come from them is a social value, and it doesn't come without a change in perspective. Too often diversity is about treating everyone the same and not instead giving everyone their own space to be themselves. Carefully and thoughtfully implementing a new value on those unique perspectives will require failure. Fear of that failure itself rather than valuing the lessons it will teach us is a change in mindset that has to happen at the highest level of educational programs, organizations, and companies for this change to last and be pursued long enough to show its inherent value.

Taking this approach will allow individuals from diverse backgrounds to feel more included, valued, and empowered to share their unique perspectives and contribute to everyone's success. In turn, this can lead to improved problem-solving, innovation, and a competitive advantage in today's rapidly changing business and social landscape. It's an undervalued truth.

A study published in the Harvard Business Review in 2016, "Why Diverse Teams Are Smarter," found that diverse teams make better decisions and are more innovative than homogenous teams. The study was conducted by researchers from Harvard, MIT, and the University of Illinois, and analyzed data from 1,000 teams.

Another study published in the Journal of Experimental Social Psychology in 2006, "Diversity and Creativity in Work Groups: A Dynamic Perspective," found that diverse groups were better at solving complex problems and generated more creative solutions than homogeneous groups. The study was conducted by researchers from the University of Illinois and the University of Texas.

In business, we often worry about the bottom line. Stakeholders may worry if derailing your current approaches and questioning them with new ideas is really going to positively affect your stakeholders. It's a valid concern, but not an unexplored one. The research on diversity is very clear, provided, like any new system, you learn what to value and avoid.

A report by McKinsey & Company, <u>"Diversity Wins: How Inclusion Matters</u>," analyzed data from more than 1,000 companies across 12 countries and found that companies with more diverse workforces were more likely to have above-average financial returns than companies with less diverse workforces.

Identifying the barrier lies in our own evolutionarily-favored psychological <u>resistance to change</u>. If something is working, we don't always take the time to further deconstruct our successes and often assume our reason for thriving and being successful has to do with our collective approach and not how the individuals trying to reach for success are allowed to creatively change the endeavor. Administrators of groups and businesses often find themselves worrying about the unknown and not knowing the potential benefits and consequences of change can keep them from encouraging these efforts. If they don't create the space to fail, simply because they don't know what they don't know, they're missing a huge opportunity.

Recognizing and utilizing different forms of intelligence can have a positive impact on <u>workplace culture</u>. By creating an inclusive environment that values diverse perspectives and strengths, individuals are more likely to feel valued and empowered to try new ideas. This can lead to increased job satisfaction, improved productivity, and decreased turnover. When an individual's unique idea is incorporated into a group success, the psychological buy-in of that person is exponentially increased. Imagine a collective where new

ideas are tried and examined enthusiastically in your own group endeavor, and you'll see what we love most about The Octopus Movement. A culture of enthusiasm and success is contagious when you take the time to let it grow and give it the space and patience it needs.

If the world can finally agree to the value of these new ideas, then that means deciding together what that change looks like. By bringing together a cognitively-diverse team of thoughtful individuals who share their goals and valuing new ideas, organizations, governments, and businesses can learn to openly value innovation, creating a culture that fosters innovation and creativity, and will be stronger for it.

The Octopus Movement.org

Global Think Tank

ABOUT THE AUTHORS

As part of the global mycelium of amazing out-of-the-box thinkers, we embody the spirit of the octopus - a symbol of adaptability, creativity, and resilience. We are a dynamic network of individuals from different cultures, religions,

genders, and educational backgrounds, who have come together to form a united force of change. Our writing and artistic creations serve as a reflection of our unique perspectives, exploring the challenges faced by our world with a fresh lens. Whether it be through poetry, prose, visual art, or musical expression, we seek to communicate the complexities of our global challenges in a way that is both thought-provoking and accessible.

In our work, we celebrate the beauty of diversity and seek to bridge the gaps between cultures and communities. We believe that by collaborating across boundaries, we can arrive at solutions that are more innovative, equitable, and sustainable. Together, we are pushing the boundaries of conventional thinking and creating new narratives for a better world. So, let us continue to explore, create, and engage in meaningful discourse, as we strive towards a brighter future for all.

With boundless creativity and a commitment to positive change, thank you for reading.

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