



Recognizing Unrecognized Genius

At the July 2012 Global Round Table conducted in Split, Croatia, co-sponsored by the World Academy of Art and Science, the organizers proposed introduction of TESLA, an acronym for The Earth Supreme Level Award, for unrecognized genius. This is an important and commendable initiative by philanthropist Hares Youssef which directly ties into the Academy's exploration of mental creativity and the limits to rationality.

While the emphasis of the TESLA Awards will be on contributions to science and technology, genius has an important role to play in all fields of human activity – including original contributions to thought, social innovation, business, the humanities, arts, culture and spirituality. Awards are needed to encourage contributions in all these fields.

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We commonly identify geniuses in retrospect based on their actual achievements, as we marvel at the works of Tesla, Edison, Darwin, Einstein, Shakespeare, Beethoven and countless others. Awards will serve the greatest purpose if they help identify those who have the potential for genius, rather than waiting until their endowment is self-evident to all. This is far easier said than done, which is undoubtedly why we tend to celebrate success rather than encourage it.

This raises a fundamental question: How can we identify the potential for genius, so we can encourage it rather than waiting for it to manifest? The answer lies in understanding the most striking characteristics that distinguish the creative processes of genius.

One approach to identifying unrecognized genius would be to look for people who approach problems from a wider perspective. These are individuals with the capacity to transcend the limits of conventional thinking and the boundaries of prevailing rationality. Edward Lorenz, a mathematician disguised as a climatologist, exemplified this endowment when he became curious about the disorderly behavior of apparently simple systems and sensitive dependence on initial conditions. Lorenz discovered nonlinear patterns of order where others saw randomness, leading him to postulate the Butterfly Effect, with vast implications for our understanding of phenomenon such as weather, lava flows, and gas flows. Former WAAS President Harold Lasswell made a profound contribution to the study of law by liberating it from the narrow confines of legislatures and judiciaries and viewing it in the context

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of evolving social and political processes and the affirmation of values by individuals and institutions in society. Similar efforts are needed to comprehend the evolution of money, markets, and economy from a wider evolutionary social perspective.

Genius unifies apparently disparate and unconnected phenomenon. Thus, Newton unified motion and rest, heaven and earth – the same laws govern celestial motions and phenomena on Earth. Maxwell unified electricity, magnetism, and optics. Einstein unified acceleration and gravity, space and time. Continuing Einstein's work on unified theory, WAAS Fellow Abdus Salam unified electromagnetic and weak forces. Today, there is an urgent need to reconnect disparate fields of thought in the social sciences – economics, politics, society and psychology. Unification of the social sciences and humanities can generate precious insights into the social process, such as the study of social evolution in literature.²

The genius is one who sees the whole which is greater than the sum of the parts. Prevailing conceptions in economics have become so highly compartmentalized, quantified and abstracted, that economic science is divorced from the reality it seeks to explain. Thus, financial markets are studied as a thing in themselves, divorced from the underlying economy. Economy is viewed in isolation from the politi-

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cal system of which it is an inextricable part and the welfare of human beings it is intended to serve; and both are largely unrelated to the wider biosphere and environment which constitute our home on earth. Orio Giarini has stressed the need for a more comprehensive perspective in economics encompassing both the monetarized and non-monetarized economy, and both economic value and human utilization value in time.³

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Genius has the capacity to discover the truth in opposite viewpoints and to reconcile apparent contradictions at a higher level. The end of the Cold War marked the emphatic rejection of state communism. The recent international financial crisis is an equally emphatic indictment of market capitalism. As Nicholas Stern has emphasized, climate warming is also a proof of the failure of market capitalism, and as Ian Johnson has stressed, the very low employment rate is further proof. It is time to move beyond polarized, conventional Cold War ideologies. We need to encourage original thinkers to postulate radically new or improved social models to overcome the limitations of prevailing social, political and economic systems. In economics, we need those who can reconcile the human quest for security with the creative uncertainty of social potential.⁴

Science does not provide adequate understanding of ourselves and our world. Many very rational people reject the premise that human dignity, curiosity, love, idealism, the quest for truth and the urge for self-transcendence can be adequately explained by physical processes. Indeed, many physicists argued that there are unique laws of biology. The apparent dicho-

tomy between science and spirituality has reached a dead end calling for fresh thinking and new hypotheses to more effectively reconcile the emergence of life and consciousness with the prevailing assumptions of science.

Genius sees profundity in simple facts. According to legend, Newton discovered the invisible law of gravity watching an apple falling to earth. Archimedes discovered his famous principle of fluid mechanics observing the rising water level in his bathtub. Mahatma Gandhi converted simple sea salt into a powerful weapon for non-violent revolution, calling on the Indian people to make salt in violation of tax law. We are still awaiting the genius who can cast the simple fact that trillions of dollars evaporated into thin air during the 2008 financial debacle into a comprehensive theory of money, wealth and economy.

Genius sees universal patterns repeating across different fields and levels of existence. William Harvey drew his inspiration for his theory of blood circulation by an analogy between the heart and the sun and the way the movement of air and rain emulated the movement of heavenly bodies. It was such a capacity that enabled Benoit Mandelbrot and other complexity theorists to discover self-similarity across scale – repeating patterns hidden in other patterns. Their remarkable insights have important applications to our understanding of the earth's surface, the surface of metals, and the anatomy of our lungs, capillaries and ducts. The quest for universal patterns applicable to the social sciences is a fertile field for new discoveries. The concept of micro-law, elaborated by WAAS Fellow Michael Reisman, traces the evolution of law to small acts by individuals in society, providing an important effort to link social processes at the level of the individual and society. There is fertile ground for new thinking, which is needed to establish parallels between social processes and development at the local, national and global level.

Genius is endowed with the capacity to perceive deeper levels of causality that escape conventional thinking. In War & Peace, Leo Tolstoy describes the real determinate of victory in battle as an intangible element he termed the "spirit of the army". A literary genius, Tolstoy understood better than the military strategists the inspirational power Winston Churchill wielded to defend his nation during the Battle of Britain. When Franklin D. Roosevelt assumed the US Presidency in early 1933, he faced a financial and banking crisis of epic proportions. More than 6000 banks had failed, the public was in a panic, and citizens throughout the country were lining up to withdraw their funds before they too lost their savings. The situation defied remedy by the known conventional wisdom of economists and bankers. But FDR had a deeper insight into the social basis of economy. He perceived that the real problem was neither economic nor financial. It was a loss of confidence, fear. Quintessentially American, he was in tune with the spirit of his people and knew the answer lay with them, not with the bankers or politicians. He got on the radio and addressed the nation, telling his people that the "only thing we have to fear is fear itself." Then he called on them to go back to the banks the following Monday and redeposit their lifelong savings. The crisis subsided. The banks were saved. Fortunately, for America, the people had the foresight to choose a leader who understood them better than the experts. Building on the insights of former WAAS President Harlan Cleveland and Fellow Jasjit Singh, deeper insights are needed into the linkage between rising social aspirations, employment, social unrest and terrorism.⁶

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Genius perceives relationships between disparate, apparently unrelated facts. Sir Arthur Conan Doyle was a literary genius who portrayed with remarkable insight the working of genius through his immortal character Sherlock Holmes. Where the police placed all their confidence in the apparent evidence on the crime scene, Holmes always insisted on an explanation consis-

tent with every facet of the people, circumstances and social context, human nature and the character of life itself. His perspective was all-inclusive. In one instance, he identified the criminal based on something that did not even occur – the fact that the dog did not bark signified to him that the criminal must have been known to the animal. Genius sees the whole picture.

Genius perceives universal truths of life and human nature. At the age of 21, Jane Austen whimsically began her great novel *Pride and Prejudice* with a profound insight: "It is a truth universally acknowledged, that a single man in possession of a good fortune, must be in want of a wife." Shakespeare captured immortal truth in the lines "Whoever loved that

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loved not at first sight?" He understood that what is eternally valuable occurs instantaneously. "All the world's a stage." His perspective was universal. Genius sees life in its profundity and totality.

Differences exist between the expression of genius in thought and in action, so the criteria we develop for recognizing these varied expressions are likely to differ at least in some respects. Genius sees immense opportunity where others see problems or nothing at all. In the late 1920s, a Czechoslovakian shoe manufacturer named Tomas Bata dispatched agents to Africa and Asia in a quest for raw materials and markets for his products. His African agent cabled home reporting there was no market potential since few people wore shoes. Bata responded that his report has revealed there is infinite potential. Within a few years, Bata was running the largest shoe company in the world. A Bangladeshi college lecturer saw unlimited potential where commercial bankers feared to tread. Muhammad Yunus established Grameen Bank, establishing the prototype for the micro credit and micro finance industry, which now services tens of millions of people globally and is a powerful instrument for eradicating poverty.

Genius discovers the value of the opposite points of view and sees a relationship between opposites – competition and cooperation, love and hate, crisis and opportunity. At a time when rapacious, competitive capitalism was at its peak, Julius Rosenwald assumed the helm of a fledgling Chicago mail-order company in 1900 and built Sears into the largest retailer in the world by putting the satisfaction of his customers before the profitability of his business. He introduced the famed policy, "Satisfaction guaranteed or your money back," which has now become a global standard in retailing. Human beings have always feared the machines they create, plagued by the recurring nightmare that their creations will eventually overtake and replace them. At a time when computerization was indeed taking over business and making people a dispensable resource, one young entrepreneur launched a revolution to make computers serve human beings. The famed, user-friendly Macintosh personal computer with mouse and graphic user interface was only the first step in the remarkable career

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of Steve Jobs, who eventually built Apple into the most valuable company in the history of the world.

Genius discovers the untapped potential of linking and coordinating two or more fields of activity. The phenomenal achievements resulting from the advent of computers and the internet combine the power of technology with the power of social organization in many original, creative ways. The remarkable achievements of visionary individu-

als who founded new web-based social organizations such as e-Bay, Wikipedia, Facebook and Twitter offer additional clues to the principles governing genius.

These are just a few indices by which unrecognized potential genius may be discoverable at the formative stage when encouragement can help it blossom forth in rich creative profusion. A thorough study may identify a hundred such principles to serve as guidelines for identifying original genius.

Every sphere of human existence has progressed dramatically over the last 200 years — freedom, education, information, communication, technology, knowledge, and measurement have all increased exponentially. Then, is there any reason why the phenomenon of genius cannot similarly multiply? In the last ten centuries, the world may have discovered a hundred or more geniuses.

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By systematic effort to identify and encourage unrecognized genius, we may be able to discover a hundred or more potential geniuses every year. As an Academy representing highest achievement in all fields of knowledge, the World Academy of Art and Science is eminently qualified to lead the way both in identifying the common criteria for genius in different fields of knowledge and walks of life and in identifying unrecognized individuals with high potential for augmenting human achievements.

We invite Fellows to help us expand the list of criteria for recognizing potential genius. Send ideas to genius@worldacademy.org.

Ivo Šlaus and Garry Jacobs

Notes

- 1. Winston Nagan & Garry Jacobs, "New Paradigm for Global Rule of Law," Cadmus 1, no. 4 (2012): 130-146.
- 2. Janani Harish, "Study of Individuality & Social Evolution in Literature," Eruditio 1, no.1 (2012): 44-52.
- 3. Garry Jacobs & Ivo Šlaus, "From Limits to Growth to Limitless Growth," Cadmus 1, no. 4 (2012): 59-76.
- 4. Orio Giarini, "Science and Economics: The Case for Uncertainty and Disequilibrium," Cadmus 1, no. 2 (2011): 25-34.
- 5. Nagan & Jacobs, "New Paradigm for Global Rule of Law," 139.
- 6. Jasjit Singh, "Revolution in Human Affairs: The Root of Societal Violence," Cadmus 1, no. 2 (2011): 114-120.