



Humberto Maturana: The first scientific theory that unifies mind, matter, and life.

Carlos A González-Carrasco

2021, To the Memory of a Brilliant Mind: Humberto Maturana

97 Views 6 Pages 1 File

Collaboration, Multidisciplinary Research, Living systems theory

Show more

To the Memory of Humberto Maturana, Maturana and Varela created the first scientific theory that unifies mind, matter, and life. Maturana defined "autopoiesis" a living system that happens, emerges and it is a flow process that occurs by itself, it is fluid, plastic, there is no intentional directionality of the evolutionary process as emerges ...read more

Download PDF

Download Full PDF Package

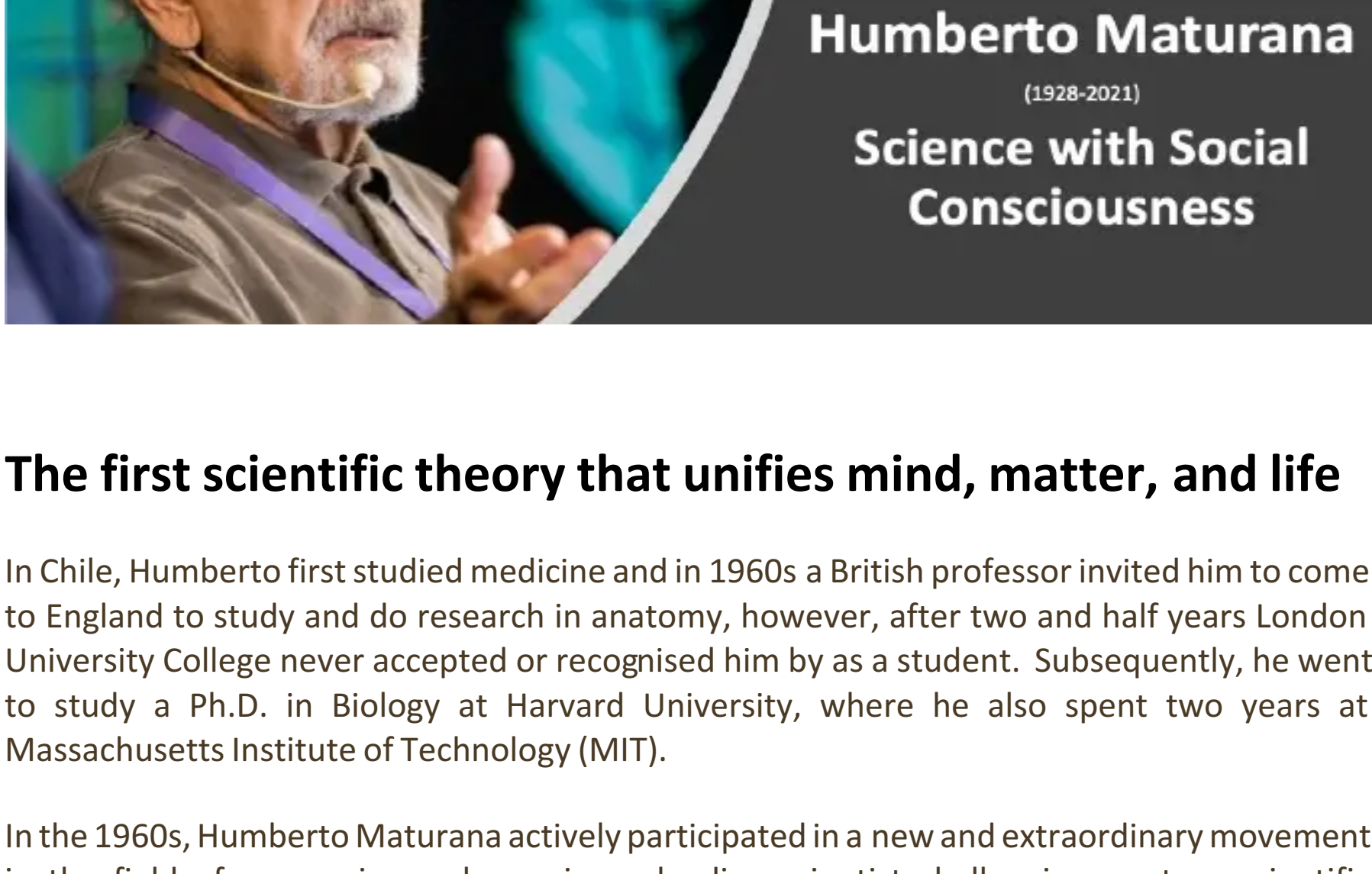
Translate PDF



Original PDF

Summary

Related



The first scientific theory that unifies mind, matter, and life

In Chile, Humberto first studied medicine and in 1960s a British professor invited him to come to England to study and do research in anatomy, however, after two and half years London University College never accepted or recognised him by as a student. Subsequently, he went to study a Ph.D. in Biology at Harvard University, where he also spent two years at Massachusetts Institute of Technology (MIT).

In the 1960s, Humberto Maturana actively participated in a new and extraordinary movement in the field of neuroscience, becoming a leading scientist challenging western scientific dogmas. He worked at MIT with Jeremy Lettvin, Warren McCulloch and Walter Pitts, Maturana practiced himself over most of the experiments, he discovered that the retina is part of a system, a lacrimal system, a visual living system, breaking from the existing paradigms and scientific orthodoxy on the human and animal eye. There Maturana worked with la crème de la crème of USA emerging new neuroscientists and had the full financial support of MIT. He developed the concept of multiple sensorial activity and multiple perceptions in human emotions.

However, he did not stay in USA as he was strongly committed to return to Chile, and he went back to the Faculty of Medicine at Chile's University with little backing and with scare recourses he built a modest laboratory. He wanted to do his work in Chile, he wanted to study the anatomy of the sensorial systems. How the nervous system works in the perception system. Back in Chile he developed and established the Faculty of Science, to train "scientists" as he put it with "social consciousness". This was Humberto main purpose in life and his best legacy to humanity.

© Carlos A. González-Carrasco: To Memory of a Brilliant Mind – Humberto Maturana R.I.P

Reframing Questions, Reframing Conversations

Why are we humans? What is to be human?

As a scientist he realized that in order to experience the phenomenon, the reality, the stimulus in observation, Maturana need to change his methodology, by transforming the system of questioning, introducing a new process to reformulate and reframe questions.

The most common question was "what is life"? but he realized you cannot answer that question, for him the questions was "What is a living being"? and he answered that a living being is about the dynamic of being alive, leading Maturana to enunciate his acclaimed contribution, in his notion and work of "Molecular Autopoiesis". "Molecular Autopoiesis" is the organization of living systems, the organisation of the history of knowledge in human beings. Maturana contributed with his new work titled the neurophysiology of human knowledge leading to define "Autopoiesis" = self-organised, self-production as a discrete molecular system.

Humberto had to work in a difficult local environment, against the background of a Chilean class system and culture full of biases and prejudices, an educational community incapable of understanding that science as such does not necessarily bring immediate, and tangible economic rewards and financial benefits.

Chilean educational authorities abandoned Maturana and his work, leaving him in a very precarious academic and personal financial situation, his laboratory was a shack. In 1976 he was arrested and spent time during the military dictatorship of General Augusto Pinochet in the infamous Tres Alamos prison camp he was accused of being a political leader at the university. In mid and late 1970's many academics and students as myself left the country as exiles to live and study abroad. Sadly, Maturana was unable to continue his work and be at the level of the world class neuroscience laboratories based in USA or Europe. The technological differences between the world class and his precarious laboratory were abysmal.

The first scientific theory that unifies mind, matter, and life

Maturana and Varela "created the first scientific theory that unifies mind, matter, and life." Maturana advocated science, medicine and biology as part of a holistic system, as part of personal and social responsibility in society. Maturana opened new intellectual horizons which in my personal evolution as a scientist has led me to conceptualized, define and describe the anatomy of "New Science" as dynamic, open, fluid, emerging, spontaneous, unlimited and ever evolving. As a scientist my work follows the concepts and words of Maturana as my work in New Science can be located as Maturana did in reference to my advocacy of XXI Human and Planetary Consciousness.

Similarly, I followed Maturana's work, my research led me to the definition of New Science as Maturana did, by rejecting western scientific hegemony based on eternal and sacred truism, fossil paradigms, fixed, reductionist, fragmented and deterministic view of nature and humanity. His curiosity was to ask questions about living organisms and their cycle of life, for Maturana a living organism lives in the present from what it emerges as a self-organised entity, deploying all its sensors and dimensionality.

© Carlos A. González-Carrasco: To Memory of a Brilliant Mind – Humberto Maturana R.I.P

I studied cycles (economic) as part of my studies on beliefs systems and economic doctrines and ideologies, thus applying cycle and systemic theories to human history. I studied how a cycle emerges, ascend, develop, reach its peak (become a fanatical dogma), descend, decline, collapse and self-destroy as has been the historical case of "empires".

His vision revolutionised human evolution and departed from Darwinian competition, "dog eat dog" and Richard Dawkins "selfish genes", Maturana greatest contribution was move science as a human evolution of living systems accumulate by humans throughout history.

Awakening the Human Spirit

In the XXI Maturana's outstanding contribution allows us to deploy his vision, as for humanity to awake from the XVIII fanatical narcissism of excessive addiction to individualism, which in his view lead to obsession with abusive power, obscene greed and the monopoly of violence, thus Maturana rejected "dog eat dog" male power human practice.

For Maturana the issue of power (exclusion, discrimination, humiliation, violence, destruction) is conceptualised as the denial of the other. Power is a male addiction and as an addiction generate blindness, this blind power stops powerful seeing the other, it generates trauma and pain thus perpetuating and preserving the trauma as to disempower human beings. In this binary power relationship (winner takes all) both the winner and the loser both live in fear, the powerful lives in fear of losing their "legal and institutional democratic" privileges and benefits from the majority of have not, who also live-in fear of being arrested, being put in prison, tortured or murder by the monopoly of violence exercised by nation-state while protecting the 1%.

Maturana said the pain derived from people self-devaluing their own lives, and as such the lives of others, debased and devalued human life and this is transmitted from generation to generation, in a cultural hegemonic environment that accept and deny the trauma and the pain.

To address this trauma and pain Maturana said that in each epoch, each generation have to awake time and time again to overcome the trauma and the pain. If not resolved the pain cumulate, resentment, anger, rage, fury, and ultimate violence taking the solution in their own hands. However, anger, frustration and violence will not be resolved anything. Advocation that both parties need to address the issue of poverty, inequalities, discrimination, abuses, impunity, corruption. He believed the hegemonic power found itself in a cul de sac, exhausted, corrosive, declining and collapsing.

For Maturana it is about self and collective transformation and human understanding, awakening from of its own self-imposed barriers and self-censorship. It is for the individual and society to address the denial of the trauma and of the pain, is about exposing and responding to the process of self-devaluing and disempowerment of human being who as a victim believes "I am not worth it of anything", "I am valueless" a process of self-victimization, "I have no dignity".

© Carlos A. González-Carrasco: To Memory of a Brilliant Mind – Humberto Maturana R.I.P

more

PAPERS 16 FOLLOWERS 23

Follow

15 MORE BY CARLOS A GONZALEZ-CARRASCO

View All

The De-Humanizing Binary Machina

Carlos A González-Carrasco

Download More Options



Humberto Maturana: Interview (1997)

Adam R Lucas

Download More Options

Damiano L. and Luisi P. L. [2010], "Towards an autopoietic redefinition of life", in Origin of Life and Evolution of Biospheres, Volume 40, Issue 2, p. 145

Luisa Damiano Download More Options



The philosophical implications of Maturana's cognitive theories

John Mingers

Download More Options



Autopoiesis and knowing: Reflections on Maturana's biogenic explanation of cognition

Pamela Lyon

Download More Options



Life, origin of - Routledge Encyclopedia of Philosophy

Leventy Moss

Download More Options



From the Philosophical Remarks to the Unity of Science.

David Stern

Download More Options



Theoretical and artificial construction of the living: redefining the approach from an autopoietic point of view

Luisa Damiano and Leonardo Bich

Download More Options



THE WORLD PROCESS OR THE ORIGIN AND EVOLUTION OF LIFE: MIND, THOUGHT AND LANGUAGE -OUT OF THE ONE ELEMENT OF EXISTENCE

Retinna Morello

Download More Options



On the first principle of biology and the foundation of the universal science

Attila Grandpierre

Download More Options



INTERLUDE — Time, Dynamics, Life, and the Emergence of Complexity

William Hall

Download More Options



Order in the nothing: Autopoiesis and the organizational characterization of the living

Luisa Damiano and Leonardo Bich

Download More Options



The Biological Principle of Natural Sciences and the Logos of Life of Natural Philosophy: a Comparison and the Perspectives of Unifying the Science and Philosophy of Life

Attila Grandpierre

Download More Options



Bich L. and Damiano L. [2008], "Order in the nothing: Autopoiesis and the Organizational Characterization of the Living", in Electronic Journal of Theoretical Physics, 4, 16 (1), pp. 343-373

Luisa Damiano

Download More Options



Physical Basis for the Emergence of Autopoiesis, Cognition and Knowledge

William P. Hall

Download More Options



Automated Machines, Organic Souls: Maturana and Aristotle on the Nature of Life

Javier Y. Álvarez-Vázquez

Download More Options



Life as concept and as science

Charles Wolfe

Download More Options



UNDERSTANDING BATESON AND MATURANA: TOWARD A BIOLOGICAL FOUNDATION FOR THE SOCIAL SCIENCES*

Paul Dell

Download More Options



Barbieri M (2008) Biosemiotics. A new understanding of life

Marcello Barbieri

Download More Options



The cognitive theories of Maturana and Varela

John Mingers

Download More Options



Society of Mind

Romas Capkiovskij

Download More Options



Reflections on the Unity of Science

Gerald J Massey

Download More Options



Autopoiesis, Life, Mind and Cognition: Bases for a Proper Naturalistic Continuity

Mario Villalobos Kirmayr

Download More Options



The Emergence of Mind in a Physical World

Juan Diego Morales

Download More Options



A COMPREHENSIVE NEW PARADIGM FOR THE HISTORY OF HUMANITY AND SCIENCE

James (Jim) E Beichler

Download More Options



Summing up the universal. Alexander of Aphrodisias, Themistius, and Simplicius on the formation of universal concepts 1 . Aristotle, Physics 7.3 on alteration

Michael Chase

Download More Options

