

**TRANSCOMPLEX ECONOMISTS: STRATEGIES WITH ECOSOPHIC AND
ANTROPOETIC PRINCIPLES**

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ABSTRACT: The modernist practices of the Economists are classified as anti-human, in most cases, predatory of the environment and unethical towards human rights and life. Under the transmodernist and transcomplex project of transparadigms, transmethodical research was carried out with comprehensive, ecosophical and diatopic hermeneutics, with the aim of analyzing the ecosophical and anthropoetic principles of the new Economist strategists. In the propositional rhizomes it is stated that under a new training they can contribute to the salvation of life on the planet, new knowledge of doing economics, the complexity of work groups and the confluence of responsible contributions, with the wisdom of living together with the other.

KEYWORDS: Atropoetic. Ecosophy. Beginning. Economists.

RESUMO: *As práticas modernistas dos economistas são classificadas como anti-humanas, na maioria dos casos, predatórias do meio ambiente e antiéticas quando se respeita os direitos humanos e a vida. No projeto transmodernista e transcomplexo de transparadigmas, a pesquisa transmetódica foi realizada com hermenêutica abrangente, ecossófica e diatópica, com o objetivo de analisar os princípios ecossóficos e antropoéticos dos novos estrategistas economistas. Nos rizomas proposicionais, afirma-se que, sob um novo treinamento, eles podem contribuir para a salvação da vida no planeta, novos conhecimentos sobre como fazer economia, complexidade dos grupos de trabalho e confluência de contribuições responsáveis, com a sabedoria de viver juntos, com o outro.*

PALABRAS CLAVE: *Atropoético. Ecosophy. Começando. Economistas.*

RESUMEN: *Las prácticas modernistas de los Economistas se clasifican como antihumanas, en la mayoría de los casos, depredadoras del medio ambiente y antiéticas ante el respeto de los derechos humanos y de la vida. Bajo el proyecto transmodernista y transparadigma transcomplejo se realizó la investigación transmétodica con la hermenéutica comprensiva, ecossófica y diatópica, con el objetivo de analizar los principios ecosoficos y antropoeticos de los nuevos estrategas Economistas. En los rizomas propositivos se asevera que bajo una nueva con-formación se pueden aportar a la salvación de la vida en el planeta, nuevo conocimiento*

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de hacer economía, la complejización en grupos de trabajo y la confluencia de aportes responsables, con la sabiduría de convivir con el otro.

PALABRAS-CLAVE: *Atropoética. Ecosofía. Principios. Economistas.*

Introitus rhizome. Preamble, state of the art and transmethodology

Among the latent problems that cause human beings, countries and the land to bleed with its consequences is undoubtedly the crisis of the world economy, the paradox of living in full development in appearance, in the technological age, in full globalization and that many die for the lack of such elementary services as food, water, and housing is the irony in the face of the expired policies of those who have power and have subverted it into authoritarianism. Of these evils:

The unleashing of ethno-religious conflicts, the degradation of the biosphere, the ambivalent course of an uncontrolled world economy, the tyranny of money, the conjunction of a barbarism originating from the night of the times with glacial barbarism (HESSEL; MORÍN, 2012, p. 10, our translation).

While the Economists and all those who apparently dominate the economic system continue with their old motto of advancement and civilization. Undoubtedly, the crisis of civilization continues in the inhuman actions of the humans, regardless of innovation as a vital issue and flag of competitive development; that causes economic and social imbalances:

In an indiscriminate and disorderly use of natural resources, which is why it is questioned that it is not used for social benefit but mainly for the production of economic gains [...] an ethical sense shows the need to interact responsibly (RAMÍREZ, 2017a, p. 14).

In this state of the art that borders the economic system and with it the modernist formation of Economists, the world of finance wants to protect its systems under the erection of technology; What happens when the systems that are created to protect come hand in hand with perpetrators who can violate them? “Under its aegis, globalization, development, westernization, three faces of the same phenomenon, have shown themselves incapable of dealing with the vital problems of humanity” (MORÍN, 2012, p. 78, our translation).

It is not a lighthearted accusation that the complex called firefly, Edgar Morín erects. It is the reality that we tortuously witness or live in the world and, affected by the system, we find ourselves with tied hands to contribute to the world's solutions. In return, the fragmented

formation of professionals, of Economists, in their blind discipline continues to penetrate into most universities; ignoring developments in science.

Hence, the awareness that economic and financial systems are not governed by established linearity; but its behavior is fractal with the mathematics of complexity, it is of urgent attention. The father of this theory is Benoit Mandelbrot, in his book *Fractals and Finance*, where he studies the relationship between complex mathematics and the financial world, Mandelbrot and Hudson (2006) is the one who gives contributions to begin to study economic systems and financial as a cycle and a sequence where sooner or later everything repeats itself.

It is there where one of the shortcomings of the formation of Economists comes into play, their scarce awareness and formation in systemic and complexity theory; in criticizing their own praxis. Affirms, Quezada (2006), it can be affirmed that when starting to work with complexity theory, the ideas were met with great resistance to change, by the most conservative sectors of science and even today there are still some researchers who show opposition and skepticism to the great presence of non-linearity in behaviors in nature and to chaos as a generic consequence of it. The clamor for the relational, for the dialogic, for the transdisciplinary collaborative science that goes to the fact that the disciplines alone cannot, in the formation of the citizen, provide, in these times, serious solutions, they are not a panacea.

This is how the complexity theory is:

A non-reductionist stance, which does not separate the facts or the interweaving that surrounds the economy and finance. [...], The economy is studied as an open system that does not necessarily achieve equilibrium, it can show chaos, catastrophe and, of course, complexity (GÓMEZ, 2017, p. 33, our translation).

It is that together with transdisciplinarity, complexity combines a transparadigm, beyond paradigms, transcomplexity, which opens the not closed apertures of ways of solving the ills of humanity. The position of this inquiry that involves all the categories to be treated then appears on the scene: transcomplexity.

From this transcomplex transparadigm, *this inquiry is fulfilled with the complex objective of analyzing the ecosophic and anthropoetic principles of the new Economist strategists from the transcomplexity*. Regarding the traditional ethics execrated from the modernist paradigm, the formation and actions of the economist, among other professionals; In the rescue of an ethics of complexity, according to Morín (1999), the significance of anthropoetics is the ethics of the human being, comprising a more real style and dynamism,

close to the true identity of man in society; intertwining the individual, society and the species, and it is the column from which the conscience and the properly human spirit arise.

It is important to point out that transcomplexity recognizes the universality of knowledge of the economy, but assuming its deficit and linking it in complementarity with the local and the singular; it re-inserts irreversible time into the phenomena of nature and the universe; it matches with a complex language where the complementary and the contradictory inhabit and integrates the blur in the intelligibility of the phenomena.

All this, within the framework of a dialectical logic, in which the different actors of the investigative task are capable of exchanging visions, perceptions and talents in the domain of specific study areas, with the aim, not of achieving interdisciplinary collaboration, but rather the generation of a new vision encompasses all, which allows the advance of research towards new forms of interpretation and intervention of reality. This is what this inquiry is about, outside the paradigms and tradition of investigating.

From this investigative vision, dynamic and significant networks are generated, which strengthen the indissoluble theory-praxis relationship in an environment full of synergy; that is, in the sum of individual energies of the significant actors, which become common reasons. In other words, the identification of common purposes lays the foundations for the construction of a shared vision, which generates a sense of trust by sharing the aspirations of the members. From the foregoing it can be deduced that the transcomplex investigative approach has a common point, the encounter of visions, paradigms, positions, and dialectical consensus.

While, the category par excellence, ecosophy, following the integrating, cultural and complex character that characterizes it, can contribute much to the constructive and transforming interpretation of a morality, based on the common good, justice, freedom and the virtue of the human being, “the ecosophy, is committed to the destiny of our planet and the life that inhabits it, [...], capable of fostering communication and understanding of human beings about new cosmo-vision bases” (PUPO, 2017, p. 20, our translation). Such a realization requires, of course, the transmodern project that in full consideration supports the ecosophic character of transcomplex investigations. Pupo (2014) speaks of the ecosophic character in the reflection on our customs, the care of the earth as the largest natural heritage, also the relationship between science and humanity, economic development in line with the development and care of the earth; among other missions.

In contrast to outdated modernity that seek ways out of the problem of the panacea of economic development, and with them anthropoetic and ecosophic principles of the transcomplex Economists, it is necessary to place ourselves in transmodernity, as a civilization

that is adopted in the process of decolonization where what is forgotten or buried in modernity is rescued, from, for example, the misunderstanding that in order to develop a nation economically it is necessary to destroy the environment, that development steams over humanity itself. “Transmodernity is a new project of liberation for the victims of Modernity, the hidden and denied “other-face”” (DUSSEL, 1992, p. 62, our translation). With a transmodern project, we leave out the rigidity and reductionism of modernist research and without excluding them it goes away as a complex and transdisciplinary process of construction and reconstruction of knowledge.

On the other hand, note that this inquiry goes outside the rigidity of the cataloged inquiries of: introduction, development and conclusions; For this reason, the rhizome denomination is observed in the structure of the investigation; it is an anti-genealogy that breaks with the static dividing structures of presenting the inquiries in which the parts are indissolubly divided into a going if there is a coming. The opening of the readers to another thought and ways of investigating outside the epistemological locks is desirable. Here the organization does not respond to any structural or generative model. *The rhizome* is a:

Accentuated, non-hierarchical and non-significant system [...] ri-zoma is made up of plateaus [...] a continuous region of intensities, which vibrates on itself, and which develops avoiding any orientation towards a culminating point or towards an exterior end (DELEUZE; GUATTARI, 2004, p. 26).

The rhizomatic division is used for the first time, instead of capitular, in Rodríguez (2017). The break with the modernist traditionality of the inquiries denoted in the traditionalist structures of qualitative or quantitative research or the so-called mixed. Delueze and Guattari (2004) have dedicated a whole name of rhizome to the prologue of their text *Mil Mesetas. Capitalismo y esquizofrenia*. The rhizome name is well arranged and in perfect similarity with fractals. Here in the present investigation there is the possibility of connections between any two points, forming with them the totality of a plateau, "all multiplicity connectable with others by superficial subterranean stems, in order to form and extend a rhizome" (DELUEZE; GUATTARI, 2004, p. 26). For this reason, it will seem at some point that you go back to the beginning or reach the end of the inquiry.

In keeping with the trans-paradigm, research is transmethod, outside of the traditional research methods, therefore a research transmethod is used. These are essences of cross-complex research,

Transmethodic, a concept that involves the metamethodic; constitutes and postulates an ascent in thought [...] there is an overcoming of the traditional

paradigmatic backgrounds [...] it is an exercise in reflection where the status quo of science is permanently rethought (ZAÁ, 2017, p. 91, our translation).

Of course, the latter cease to establish themselves as scholars of knowledge to open to what is forgotten and demystified, what is not taken into account in the traditional formation of Economists and the development of economic systems.

The comprehensive, ecosophical and diatopic hermeneutics is then used in the transmethod. International articles and researches developed with it have been published in: Rodríguez (2018a), Rodríguez (2018b) and Rodríguez (2018c); being transmethod unprecedented in Rodríguez (2017) and Rodríguez (2020). Of the hermeneutics in question as a transmethod, its diatopic character consists of “raising the consciousness of incompleteness to its maximum possible by participating in the dialogue, as if one were standing in one culture and the other in the rest. Herein lies its diatopic character” (SANTOS, 2002, p. 70). This is how, from this character, nature is respected, which is in line with true economic development, and wherever scientific and underground knowledge should be discussed; diatopic hermeneutics not only requires, a

Different kind of knowledge, but also a different process of knowledge creation. It requires the creation of a collective and participatory knowledge based on equal cognitive and emotional exchanges, knowledge as emancipation, rather than knowledge as regulation (SANTOS, 1988, p. 30, our translation).

Of course, developing the diatopic character is not at odds with the ecosophic; On the contrary, one explains and supports the other and it is of high importance in the consideration of the complexity of world crises to deploy an ecosophic hermeneutic, an ecological consciousness that fosters the occurrence and assertion of an ecosophic culture, where the human being sees nature as an integrated part of his body and his spirit.

In general, in order to carry out comprehensive, diatopic and ecosophical hermeneutical inquiry, we go through levels that are deeply related, these are: those proposed by Santos (2003) analytical, empirical and proactive. According to Santos (2003) *in the first moment the evolution of the problem under study will be interpreted and theorized*, extracting the main ideas from the works of the different authors of the investigation and intervening categories; even more so by reviewing the epistemology of this problem.

The second moment: the empirical one, will be focused on interpreting the complexity of the categories and its evolution and its epistemology, in its way of conceiving itself, and especially how it has been put into practice. The researcher will emphasize the thinking of

several authors, comparing their thinking with that of the different authors reviewed. *The third moment will be channeled to the prefiguration of the object of study*, for the strengthening of this it is clear from the authors and goes to the anthropoetic and ecosophic principles of the transcomplex Economists.

The transmethod in its essence, plus the anthropoetic, ecosophy, transcomplexity categories, together with the transmodern project, favor the principles of the new Economists that are consistent, for example, in caring for nature; life on the planet; the equitable distribution of wealth; the development of:

"Green economy" will not only involve the substitution of polluting energies for healthy energies, [...] policy of great works of humanization and urban decontamination, and it will manage to reduce subsidies to industrialized agriculture in order to redistribute them to farm or organic agriculture (HESSEL; MORÍN, 2012, p. 85, our translation).

Empirical and purposeful rhizome of the inquiry. The traditional economist: A way of seeing the state of the art of the problem

In this way of viewing the state of the art of the problem, a journey will not be made, but rather will go through the axes that define the problem, the neuralgic points of action of the Economist and in general of the economy. Ramírez (2012b) affirms the economy has been in crisis, as well as the actions of the Economists, in each of their theories, such as the: classical model, Marxist, Keynesian thought, ECLAC school, neoclassical; among other; the neoclassical school, "it is true that the dominant school of thought has variations within itself, but it is still a unique way of doing economics and of looking at the world" (ISIPE, 2014, p. 340, our translation). As we can see in many years the renewal of the economy, despite the advancement of other sciences such as mathematics to fractal mathematics and its relationship directly, the economy has remained under its old precepts.

In line with the actions under these old precepts, the consequences are extremely serious worldwide, the uncontrolled development of the manipulative and destructive powers of science and technology, as well as the dissemination at all levels of the profit economy, have engendered the

Proliferation of weapons of mass destruction and the degradation of the biosphere, [...] xenophobic, racial, ethnic and territorial closure. The combined ravages of financial speculation and blind fanaticism and Manichaeism broaden and accelerate the processes of announcing catastrophe (HESSEL; MORÍN, 2012, p. 19, our translation).

All this in the communities, in the population in general, it brought poverty and indignities “which are widely known, a deep environmental crisis has been added. Thus, it is still curious, if not ironic, that neoliberal economists consider themselves the cultivators of “good economic science”. The efficient one, the benign one, the liberating one, the one that ensures a golden future” (MONARES, 2012, p. 72). That from the old practice, under the same baton of the owners of the factories, of the expired economic policies it will continue being thus.

For this reason, and in opposition to this disastrous action and serious consequences on the economy and populations,

We must reduce industrialized agriculture, fossil energy, the parasitism of intermediaries, the war industry, consumer intoxication, the economy of the superfluous and the superficial, our wasteful way of life (HESSEL; MORÍN, 2012, p. 24, our translation).

It is commendable to consider these issues that in the human being and the Economist's actions would be an anthropoetic exercise of true human action. It is also notable the lack of ethics in each action, the lack in the ethical formation of the economist and his practice is scarce or null, social ethics

It is out of the question, as it has been impossible to determine either the distributive justice associated with these behaviors or, either, to evaluate the nature or motivations of the individual behaviors that are expressed in the market [...] the excesses of a consumer psychology (DI FILIPPO, 2012, p. 109, our translation).

In that case, anthropoetics as the ethics of the human race is fully justified, as a category that rescues and regulates the Economist's action in a human action that puts life first, the safeguarding of culture and environment, the benefit of all before great profits in companies leaving aside the dire consequences, in a crisis of ecosophy that suffocates us; the urgency of the art of living on the planet in each place,

Likewise, authoritarianism that is far from power in doing, in economic policies leaves much to be desired and is far from democracy, the elite of a few who make decisions while others starve to the side, close-in their belts of misery, in countries that are touched and torn by natural events, but also disrespect for their most elementary human rights; serious consequences of capitalism and globalization

The globalized capitalist market economy, far from being the culmination of a necessary human evolution, [...] is in part a particular political construction

of global reach; be it power-as-domination or power-as-hegemony, [...] undemocratic (CORAGGIO, 2012, p. 348, our translation).

On the other hand, in supposedly developing countries, the reverse side of the crisis is permeated by very weak, complex economies, and the inflationary process eats away at the economic system of countries, such as Venezuela, in a complex unethical process of bad economic policies, anti-human policies while a nation immense in natural resources is subsumed in a crisis of values, of low politics of consumption and trafficking of food products and the controls became uncontrollable

Unlike what happens in advanced countries, developing economies exhibit an extremely complex inflationary process in a context of segmented financial markets and fragile intermediaries, to which the monetary policy should not subordinate itself (NUDELSMAN, 2017, p. 47).

It is that the Economist, with all his system must be seen and conformed in a complexity of confluences of sciences and contributions, in social responsibilities that under the execution of the ethics of the process is impossible to achieve; even more so under the expired exercise of a single discipline such as economics, if we reflect on the notion of development from an ethical point of view, we should know that the concept of development has as its core an unethical and economic notion, as well as concepts of utilitarianism and quality. "What does this mean? That if we limit ourselves to this type of vision, we will consequently fall into ignorance of the non-utilitarian features of human life: love, passion, honor, playfulness, and all its qualities" (MORÍN, 2002, p. 1, our translation). Answering these questions would be a serious exercise for the old castrating policies of the rights of human beings to live with dignity on a beautiful land that has been harassed by the inhuman actions of the human being.

On the other hand, from the epistemology and the way of knowing and making the Economist blind to his errors, the traditionality that encompasses them in a greed for money for the owners of the companies encompasses them in a failure that has dragged everyone down, with exceptions, of course, such as small economies that arise in some countries tending to care for the environment, for life on the planet. "Homo economicus, [...] is a kind of anthropological monster: that practical man with the head of a theorist embodies the form par excellence of the scholastic fallacy, an intellectualist or intellectual-centric error" (BOURDIEU, 2003, p. 236, our translation).

The change that is taking place is a radical change of course, consistent with life, responsibly before the human being "the planet must change course, it must change direction. And this is an exceedingly difficult but very necessary task for salvation against the threat of

disaster, for the salvation of humanity” (MORÍN, 2002, p. 6, our translation). And in this sense the formation of a new economist with anthropoetic and ecosophical principles can contribute.

On the other hand, the issue of currency, exchange rates, the bleeding of currencies from underdeveloped countries compared to the dollar, all this is an attack on the life and economies of the family, on the possibility that the new generations will form, it is an attack on survival itself; Nudelsman (2017) in a globalized world, the exchange rate acquires complexity in the dynamics of developing economies that are stagnant both to the challenges of their internal variables and to those of external financing cycles and fluctuations in the prices of the basic products, the misalignments developed in the exchange rates have been inscribed to rigid financial crises, this has impacted the prices in these economies. *How to control speculation, in general?* In response to this:

Financial speculation will be controlled through strict control of banks, careful supervision of rating agencies, a tax on immediate transactions, the prohibition of betting on price fluctuations (HESSEL; MORÍN, 2012, p. 93, our translation).

To reconstruct and search for exit lines to the problem or state of the art in question, the need for complex theories of construction and formation of Economists is endorsed.

In this gloomy panorama, it is necessary a serious reconsideration of heterodox theories that are possibly more appropriate to elaborate less limited descriptions of observable economic phenomena. (CONTRERAS; MENDIETA; HUERTA, 2012, p. 104, our translation).

As can be seen, from this analysis in empirical and purposeful moments of the transmethod, traditional economists and the economic system in general must be deconstructed in its essence, formation and actions; the consequences are disastrous in that fragmented formation, to which finally in the beginning,

The formation of integral economists requires, first of all, a reassessment of economic science in general, which of course cannot come from a better place than from the classrooms and research centers of the universities (RAMÍREZ, 2017b, p. 62, our translation).

It should be noted that this in no way implies leaving behind the approaches of the neoclassical school, but rather complicating them with other ideas and theories that can enrich the scientific and social work of economists. It is important to consider that an epistemological reflection of the crossroads of economic science within the universe of social sciences is

inescapable, to which it is recommended that they should converge in a complex and transdisciplinary way, considering the anthropoetic and ecosophy categories.

Empirical and purposeful rhizome of the inquiry. Transcomplex Economists: The New Generation of Strategic Economists with Anthropoetic and Ecosophical Principles

In the formation of the economist formed in transcomplexity, it is essential to develop in the student an anthropoetic ethics of the human being, which imprints a deep and significant responsibility for their individual actions in relation to the anthropoetic, conscious, planned community of citizen responsibility, “The conscious, organized and systematized educational action aimed at the formation of subjects from the recognition and appropriation of their cultural, historical, political and ethical-spiritual sustenance” (MORENO, 2016, p. 66, our translation). This vision makes human actions more legitimate and conscious, since they do not depend on the collective, but instead become a lifestyle that results from intrapersonal regulation that seeks the common good. Therefore, consider:

Solidarity and social responsibility thought in complexity and immersed in the exercise of citizenship, anthropoetics and human beings [...] it is said that solidarity and responsibility are the first two sources of ethics, the other is understanding from one to the other (MORÍN, 2002, p. 4, our translation).

Such ideas are endorsed by Rodríguez and Caraballo (2018) about education - citizenship - complexity in the anthropoetics of the social complex. It is not a list of moralistic actions to be injected into the minds of Economists; It is the certainty of a citizen of the world to which it is owed, for this reason, Colorado (2015) says that anthropoetics in complex thought becomes a highly significant investigative topic in contrast, as already said, with the conception of traditionalist ethics that does not think of the human race and that it has not even been taken into account in the project of modernity; rather, it is deeply reductionist and moralistic.

Of course, this economist citizen formed in anthropoetics, will deepen the ecosophic knowledge in the search for economic development of excellence. Ecosophy

It proposes to work on a planetary scale; propagating dissident orientations that create significant ruptures in today's life; [...] Integrate anthropocentrism and nature; practice actions that include social, mental and environmental ecology; fight hunger; curb deforestation (PUPO, 2013, p. 3, our translation).

Ecosophy reaches the imaginary in human beings, foreseeing a way of being in the world, of perceiving it from their country and sense of relevance, with a change in actions and a consciousness that favors unity in life; For this, love and sensitivity must be the center of

action, in favor of the preservation of unity, valuing the environment, deepening ecosophical knowledge in the search for excellence.

From ecosophy the search for a planetary consciousness is part of the formation of the economist, it is important to remember, the search for consciousness to

yes and for others, it has become a prevailing need of education. The search for this consciousness deepens even more the needs of both individual and planetary identity to know how to live and coexist (MOLANO, 2012, p. 7, our translation).

This network of responsibilities and aspirations is urgent, as Economists must be a citizen of the world. It is necessary, on the other hand, that the new economist promotes the development of the communities, the cultivation of the land, as he affirms, "the development of a plural economy that favors small and medium-sized enterprises and promotes a new consumption model" (HESSEL; MORÍN, 2012, p. 3, our translation). This consumption model must be based on the common good coupled with the benefit of preserving the environment, and that everyone can function in community; return to the field and to the creation of God in nature and love for their fellow human beings; caring for the maximum house, the planet. The economist must then develop not only cognitive intelligence; but affective and spiritual.

Thus, *the transcomplex economist must go to conceive a politics of the human being on the planet, a politics of land-homeland responsibility*, "'multidimensional politics, but not totalitarian. The development of human beings, of their mutual relationships, of the societal being, constitutes the very purpose of man's politics in the world, which aims at the persecution of hominization" (MORÍN, 1993, p. 166, our translation).

The development of other economies, those that promote the use of recycled materials, small artisan companies that promote their products, for example in food and medicine, can collaborate in the care of life, not only of the human being, but of all the life affected on the planet by the waste of factories that are predatory to the environment. All this is considerable under an anthropoetic responsibility with life on the planet.

In the sequence, the non-linear results emitted by the complexity theory are considered in the economic system, where finance, stock markets, financial crime, among others are included, and if one of the parties is affected, affects the whole, by showing that financial markets behave fractally, then the economic system must also remember that "a fractal is a special kind of invariance or symmetry that relates a whole to its parts: the whole can be composed into parts that evoke to the whole" (MANDELBROT; HUDSON, 2006, p. 26, our translation).

Considering that the economic system is governed by fractals, and meets "the properties of self-similarity, self-affinity, multifractality and fractal dimension" (PRIETO, 2016, p. 76, our translation). Self-similarity repeats the same design throughout the entire scale, if the fractal object is the economic system, financial crime, which is a scale of this, its form and behavior will be the same; self-affinity the initial geometric shape allows the creation of larger figures by expanding an interaction of the model in a random way, that is, this is reflected in the general economic system.

Similarly, the multifractality of economic systems indicates that they may have different behaviors at some time and at another there may be a dizzying composition, a question supported by Mandelbrot and Hudson (2006), and finally the fractal dimension says that accepting that the Euclidean mathematics is not enough to explain economic systems, since they themselves have been deconstructed by a scale of complexity that does not have a defined structure. This reflection must be done in the universities where the new Economists are being trained and a reprimand to those who train them.

In line with the above, studies such as those by Batlle and Grébol (2009) who carried out a work on Fractals in Financial Markets where they compile a series of works by characters such as Mandelbrot and Hudson (2006) and Elliot (1939) and explain their contribution to the different branches of knowledge, such as music, biology, computer science, in particular, they describe the wave-shaped behavior that is formed by the different movements created by investments and contributions from the stock market.

We speak, *then, of the non-linear characteristics of the stock market.* This behavior made explicit by Elliot (1939) and has been studied and applied since then to the study of financial systems in general, and it has been concluded, since Mandelbrot and Hudson (2006), that activities within the world of finance has fractal behavior. This suggests that the activities of the economic system also comply.

All this consideration makes the so-called Economic Theories of complexity a special study in new economies, González (2009) affirms that it is maintained that the economy experiences complex properties, as has been said, where large irregular, non-periodic changes occur, which incites the acceptance of chaos. The economics of complexity departs from the traditionality of finance theory, and for this reason transdisciplinary contributions of economics, ecology, sociology, physics, chemistry, biology must be recognized, which is where the basic elements of the complexity in the formation of Economists.

It recognizes the economy of complexity, the butterfly effect, the domino effect, where the equations of the numerical systems lose periodicity, accepting the changing conditions of

chaos. Fractals come into play then. In this case, the transcomplex transparadigmatic vision is reaffirmed, that the economic system is fractal and that its non-reduced process can be repeated in a self-similarity without being able to define all the causes that constitute it.

It should be noted that the economy of complexity is a motivational part for various disciplines that had been vaguely considering finance in their contributions but with eventualities in a linear way. Here, *non-linearity is manifested in financial systems, suggesting that traditional theories of finance*, in this type of study, do not constitute theoretical bases, due to the impossibility of connecting uncertainty, complementarity, non-regularization and definitive outputs. to the problem presented.

The economics of complexity in financial systems, endorsing transdisciplinary studies and enlarging the economy and finance, which is the object of study of fractals in: Mandelbrot (1963), Mandelbrot (1997), Mandelbrot and Hudson (2006), Prieto (2016) and Cootner (1964), especially “it is worth knowing the theory of Brownian motion to understand the economy” (MANDELROT, 1997, p. 548, our translation). The necessary deconstruction to be carried out in economic systems is remarkable to accept the fractal theory that with advanced results of mathematics, which are not the object of study of this research, but which are relevant to understand and accept that it opens to a complex spectrum of research lines in the world of complexity science, such as catastrophe theory, where other stages of analysis can be reached under mental openings, such as fractal theory, essential to understand the economy from the theory of complexity.

Finally, from the economy of complexity, other formations are opened for Economists with autopoiesis in the economic system, Rodríguez (2017b) has been studying and affirms that the experiences of the organization should propose policies framed in the trends of the markets where ethical - moral - legal - technological - sociocultural exaltations are considered to break with traditionalism, in the formation of specialists in economics. For this, ecosophy implies an intrasubjective vision that starts from the intrinsic individual conception of the individual that is fed back with the collective action of society as a whole that seeks the development of an ecosophic and anthropoetic economy for future generations.

Next, *the con-formation of the economist is endorsed once again*, con-formation is a category of Rodríguez (2013) as formation of the citizen and professional should go hand in hand, where according to Morín (2002) it is reflect on the condition of citizen of the human being, explaining that a citizen, in most cases, or is what is expected, be supportive, responsible and rooted in their homeland, this is what the author calls belonging to a place that gave him shelter, where he is born and struggles, for this reason studies from complexity in economics

must contribute to the self-formation of the person in his human condition, his life and his citizenship.

Recognizing therefore, the false modernist formation of the economist, insofar as economic development is a panacea behind human development, the postulate of the

Integral human development must be rooted in visible practices, where solidarity is present in the broad field of the popular economy. We understand by this the set of economic activities carried out by impoverished and excluded inhabitants (ORTIZ, 2012, p. 369, our translation).

In addition, try to include specific communities and sectors such as peasants, fishermen, indigenous people, among others who want the cultural-ancestral-spiritual contribution of their context to be recognized, as well as labor practices that have been a productive tradition in the community, considering them as content essential for their training; This is expressed by Rodríguez (2018d).

It should "integrate the best features of the concept of development for an ethical generation but integrate it with a broader, more critical, more generous concept that we could call a civilization policy" (MORÍN, 2002, p. 6, our translation). It is about the complex and transdisciplinary formation of the economist, in all consciousness and anthropoetic it is the ecosophic practice towards the maximum realization on earth. The formation of teachers beyond individualism, cognitivism and utilitarianism of unidisciplinary knowledge, promote transdisciplinary as a means that transcends knowledge where before in traditional formation it was not allowed. Part of the respect for nature and the earth as its highest natural heritage, taking respect for its species and the other existing species and transcending sensitive reality, promotes cooperation and collaborative environments in the face of its cultural diversity, creates flourishing means of respect for the human, nature, the impoverished; those buried and devoid of the most elemental, those buried and concealed by modernity.

For its part, on this side of the world we bear the worst part, as technological advances and the particular interests of the world's authoritarians make a dent in poverty, in respect for the fundamental rights of the human being, while destroying their environment. environment and vacating their own lands. The right to them, to their cultivation, to the solidarity economy, to rationalized technological advances and supervised by true State policies, "something to highlight is that in current times various forms of popular economy are being configured in Latin America (from work) and solidarity economy, as a response from the initiatives of impoverished and excluded populations" (ORTIZ, 2012, p. 371, our translation). They are needs for a new deeply complex economic, anthropoetic and ecosophic rationality, that of

satisfying the basic needs of individuals and their families, of countries and of cooperation between economic mechanisms and with the local community.

The transmodern project in the proposal of Ecosophic and Anthropoetic Economists is perfectly justified and urgently needed. It can be said that for a country to really develop its maximum potential it is absolutely necessary that it is not a colony of another country; that can under its precepts form high-level professionals and have its resources for their development. With regard to colonization, the first thing that comes to mind is an economic, political and military dependency. The reality is that these edges of colonization are based on a base of soft power, that is, of soft power composed of a foreign media - cinematographic and cultural deluge of Western modernism.

Likewise, the economy needs transcomplexity, since traditional thought and its traditionalist epistemology have prevented the economic system from transforming and nourishing itself transdisciplinary from the other sciences. If we compare this reductionist reality, the difference between the brain of a genius and an average person is not that the brain of the genius has a larger brain mass but that its synoptic density is greater. Brain synapses are the connections between brain cells. The more connections there are between brain cells, the more that brain will perform. In the same way, the more connections exist between elements of a scientific and transdisciplinary nature within the economy of a country in the most varied fields, the more effective its performance will be at the societal level. This is the dimension of depth.

It is quite a challenge to form economists with a transcomplex, ecosophic and anthropoetic vision when the entire traditional educational system is saturated with colonized thought. It is necessary to make a pre-selection based on the commitment and intellectual capacity of future teachers before forming them. Obviously, it is necessary to establish formation centers for economists that have a new transcomplex vision and have a wide repertoire of formative materials available on the networks: videos, books, questionnaires, among others.

In this part, it is conclusive that when we place ourselves in a transcomplex, multidimensional and uncertain world, whose historicity is changing in its plot and in its phenomenal manifestations, where most of the problems that are linked to everyday life have entered a level of complexity, interactivity and globality, which cannot be treated reductively with research models of economists that respond to the characteristics and corresponding consequences of previous times, makes the paradigms open or think differently.

Conclusive rhizome. By way of openings

In the present trans-methodical investigation, where the reader is asked to leave the old paradigms that defend the indefensible, and the specialists in Economics to abandon the justification of the objectionable in a world economic crisis, and the old capitalist, globalized and modernist formations still present, It would be good to be clear in an anthropoetic and ecosophical exercise that "everyone can act today for the good of humanity, and contribute to the awareness of the community" (MORÍN, 2011, p. 263, our translation). For it, *the new consumer policies must change in favor of products that do not harm the earth, but improve the lives of human beings, the conscience of the factory owners, of the economic policies*, thus "the new economic policy will translate into a new consumer policy" (HESSEL; MORÍN, 2012, p. 93, our translation).

The new economic policy thus shows the need to assume a new investigative worldview of the economic system, which must face the growing complexity of ontological references. The ideal is then, to use new visions of intertwining, new concepts and intellectual tools, a new language that allows giving answers to the new questions that arise in today's world and that undoubtedly disturb human development and impede the happiness of human beings.

A novel analysis scheme, capable of accounting for this complexity, requires looking at other possibilities closer to an intersubjectivity enriched by the dialogue between economics and other sciences. *Thus, when modifying and changing the way of knowing reality, the effort should be oriented to unlearning the traditional way of questioning oneself in the economy and the formation of professionals, it is to conform solid principles*; In other words, asking different questions about the same problems, since each question implies a certain vision of the world and, consequently, the limits of those infinite answers that constitute knowledge of the economy. To transform is to prevent perishing in the obsolete oblivion of back to the problems of the world economy, in the same way it happens with the form of research, desirably now under other epistemologies of what it means to be an economist.

Of course, you can continue to deepen the line of research and open spaces from transcomplexity, one of the reasons for using this research option has to do with its greater flexibility to adapt to the demands of understanding and explanation of a reality, such as the current, characterized by its multidimensionality and complexity, all of which allows us to go further in the knowledge of the object referring to the economy than what each one could contribute independently.

Likewise, it can be affirmed that transcomplex research is assumed as an investigative worldview of complementarity that is resized and becomes a totalizing and multidimensional axis that is strengthened in the interrelation of its human component and in the approach of a conception of integrality and procedurality, which promotes the common and synergistic work of a team of researchers.

This new research worldview leads to teamwork, more importantly, the production of knowledge of economy in this research area is that it must be teamwork. This must be *a sine qua non* condition for research into economics from transcomplexity, where the group, through its practice and experience, influences its own construction. This allows the interrelation of the knowledge of the different disciplines, but being structured around the research topic of economics, where the team members gradually begin to merge and try to learn from each other, integrating as a transdisciplinary, integrative team and complementary.

Now, assuming an intuitive, creative and interactive vision in changing scenarios leads to the development and implementation of actions built from dialogic relationships that are established between the multiple actors of reality. In correspondence with which, it is worth mentioning that a process of epistemic transformation is paradigmatically gestating, which fosters a new research approach, located in the light of current trends: complexity and transdisciplinarity.

To conclude, it is asserted that from the transcomplex transparadigm, it has been accomplished the analysis of the ecosophic and anthropoetic principles of the new Economist strategists; as the objective of the inquiry. All this under the construction of comprehensive, ecosophical and diatopic hermeneutics, as transmethod, unpublished by Rodríguez (2017) and Rodríguez (2020). Thus, from the essence of the transmethod, it can be concluded on the object of study that, in the *first place*, it is only possible to fully obtain and use it outside the paradigms, under the transcomplex transparadigm and in a transmodernist space; it refers to the ecosophical and anthropoetic principles of the new economist strategists; in that they go without ties and in the rescue of the forgotten the diatopic and ecosophical.

Second, the closure in this inquiry is an opening to continue in the investigative walk of the object of study; therefore, only some principles have been analyzed, not all. *Third*, the researcher in his transcomplex character leaves the authoritarian ties of researchers, to exercise the power of an unfinished knowledge, where said object of study is present. *Fourth*, transmodernity in particular, as a project for the realization of the object of study, goes beyond epistemes of modernity, reconstructs them and goes to a never definitive transespisteme;

Beyond traditional knowledge and in *fifth place*, the line of research where the object of study is located is entitled: *economy-administration-management- and transcomplex finance*.

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