

# Deconstructing the neoliberal "Entrepreneurial Self": A critical perspective derived from a global "biophilic consciousness"

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#### **Abstract**

Purpose — This text aims to shed light on the background of neoliberalism and the basic characteristics that underlie its approach to the "Entrepreneurial Self." The neoliberal economy, and the concept of entrepreneurship which is driven by it, is defined by a range of perspectives which build its epistemology and explain its current development. It is important to make a critical deconstruction in order to offer an alternative to the neoliberal entrepreneurial self. This alternative involves a new identity. It is reconstructed as a revolutionary, empathic, and global communication technology from the "Internet of Things", and is consistent with a worldview that makes sense of it. As a result of this review, we propose to reconceive the "Entrepreneurial Self" as a new critical reconstruction of our identity, which empathetically reconnects us with nature, as well as with the whole community of life. This stems from an ethics of care, the value of sharing, and the development of those interdependent networks which constitute our global "biophilic consciousness." Each of these elements is far removed from the predatory culture of the neoliberal model.

### **Keywords**

Entrepreneurial Self, neoliberalism, sustainability, Internet of Things, global biophilic consciousness, critical pedagogy

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# The construction of the "Entrepreneurial Self" as new identity from a neoliberal view of education

Since the 1980s, university education has suffered from the influence of neoliberalism, which perceives higher education as a business, operating from within the new knowledge economy (Commisso, 2013; Goodman, 2012; Uzuner-Smith and Englander, 2015). According to Olssen and Peters (2005: 315) "in neoliberalism the state seeks to create an individual that is an enterprising and competitive entrepreneur." This is why university education is being rebuilt in accordance with this view. Now the State, receiving a positive role by those who share the neoliberal ideology, is serving economic interests and market forces, enacting laws, rules, and institutions, so that it can set new values, which regard the individual as a consumer. As a result, this encourages competition coupled with individual initiative, and it perceives personal interests as more important than collective interest. This neoliberal view is powerfully enforced and, as a result, it constructs a subjectivity on the basis of a socializing "common sense," which finds its new raison d'etre in controlling education (Keller and Keller, 2014). McKenzie (2012: 167), quoting Massey, states that "one of the critical maneuvers at work in the globalizing practices of neoliberalism involves convincing us of its inevitability."

For all these reasons, universities, and educational institutions in general, become the new reference point of neoliberal strategy (Darder, 2012). In the words of Olssen and Peters (2005: 324), in the universities:

New public management in applying quasi market or private sector microtechniques to the management of public sector organizations has replaced the "public service ethic" whereby organizations were governed according to norms and values derived from assumptions about the "common good" or "public interest" with a new set of contractualist norms and rules.

In this context, the State is used as an instrument for the control of knowledge in order to serve neoliberal values. According to Canaan (2013: 18):

The cutting of state funded public higher education is not being done in isolation; it is part of a wider government programme of funding cuts across the public sector, and is mirrored by similar, so-called "austerity cuts" in countries around the world.

This author stresses that they are producing what he calls a "deep neoliberalization." In short, neoliberal policies are using different supranational bodies, such as the European Union, as instruments. They are also dismantling the welfare state, deepening economic and social crisis, and commercializing public institutions, such as universities.

From the neoliberal perspective, the State must assume, in the new context of economic globalization, a purely instrumental role, serving the interests of big business. Beyond looking after the rights of citizens and their general welfare, the current neoconservative optic assumes that: "The state's role is merely to ensure and maximise opportunities for entrepreneurship, competition, and profit in the economic and public sectors" (Loh and Hu, 2014: 14). Applying this maxim to the field of education, we find that the objective pursued by these neoliberal ideologies is to shape a prototype of highly competitive "human capital" at the service of a globalized economy (Furlong, 2013). "To shape" has a deeper meaning here since it is obvious that neoliberalism is proposing a new identity: the "Entrepreneurial Self," as a business model through which individuals must conduct themselves throughout their lifetime.

According to Du Gay (1996), globalization has, in recent decades, been in the process of constructing a new identity by changing the living conditions of individuals and organizations. These changes are creating massive uncertainty, impelling organizations and individuals to adapt quickly to market requirements, forcing them to become more flexible and entrepreneurial. As a result, bureaucracy, understood as an institution which is adapted to conditions of relative stability and predictability, becomes the first victim of this environment of uncertainty created by globalization. Concepts such as incentive, quality, yield, non-standardized services, persuasion, etc., define more entrepreneurial and less mechanistic organizational forms. In this respect, according to this author, the concept of enterprise is essential in the current discourse on organizational reform. In addition to raising a critique on bureaucratic culture, this concept is offered as the solution to the problems caused by globalization, in that it proposes a new way of building organizational and individual behaviour. This involves reconstructing identities from a neoliberal perspective in addition to changing the conditions of their existence due to the changes promoted by globalization.

What neoliberalism proposes is a generalization of the model of "commercial enterprise" to any form of organization or individuals. This means that the subject has to be remodelled within the context of a new culture – the entrepreneurial culture. This is defined by the following characteristics: initiative, adaptability, acceptance of risk, selfconfidence, focus on results, competitiveness, and organizational skills, among others. This governmental rationality, regardless of the area in which it is carried out, shares a consistency and style. An example of this is the role assigned to contract in redefining social relationships. Contractualization gives entrepreneurial values to individuals and groups because it represents a reinvention of the social environment as a form of economic environment. This makes economics a form of approach which embraces all human behaviour and builds a purely economical method of governmental action. The innovation behind this new governmentality is that the subject is seen as an inherently manageable creation and, therefore, permanently receptive to changes in his/her This is behaviourism that is the implemented by governmentality. "In other words, entrepreneurial government 'makes up' the individual as a particular sort of person – as an 'entrepreneur of the self'" (Du Gay, 1996: 156). Thus, the identity assumed by subjects is that, regardless of their personal circumstances, life, understood as a business, is devoted to a single enterprise: to take measures to preserve, reconstruct, and reproduce their own human capital. This summarizes a concept of the individual as "entrepreneur of self." Du Gay returns, therefore, to the idea of Foucault (2008) which is that the "homo oeconomicus" is an entrepreneur of himself.

Individuals are made to see and believe that they are responsible for their success or failure in the "business of life." It is an alternative identity born in the neoliberal womb, which is imposed against the scarce critical resources which can be handled by those young people who are at risk of social exclusion. This is a situation caused by the very nature of this model, especially in this new crisis, which has existed since 2008. To quote Kelly (2006: 18):

(Neo)Liberalism emerges, not only as a means of governing the State, the economy, and civil society, but also as a means of governing in these domains via the rational, autonomous, responsible behaviours and dispositions of a free, prudent, active Subject: a Subject we can identify as the entrepreneurial self.

# A new communication technology and a meaning-bearer worldview in the construction of an alternative personal and collective identity

Within the neoliberal identity of entrepreneurial self, we find, among other features, a strong sense of individualism, a self driven by profit, a way of life defined by conquest, control, and utilitarian view, a concept of nature – from which one is disconnected – as a store of resources. In addition, it has a notion of time which relates to the service of material necessities. This is embodied in production, money, and consumption, and, at its best, confirms the idea that everything has a price, but nothing has value. In response to this one-dimensional and alienated form of consciousness, we propose a new vision of the entrepreneurial self; a personal and collective self, which is based on a global "biophilic consciousness." This consciousness would lie within the context of a new worldview, one which would give sense to that alternative entrepreneurial self as a basis for its reconstruction.

The "Internet of Things" and the beginnings of a global "biophilic consciousness." The neoliberal, mechanistic view of governmentality, of controlling behaviour through changes in the environment and, therefore, reconstructing institutional and personal identities, does not take into account those emergences that occur in social systems. Peters and Reveley (2015: 2) argue that: "the social substrate can no longer be thought of as a mere support system for the operation of markets and hierarchies; it is the seedbed for new forms of value-generating productive activity." Social networks based on the Internet offer innovative ways of social production which are focused on cooperation and collaboration. These authors endorse Keith Sawyer's idea which postulates that there is a shift in the western cultural model of creativity, which has been focused so far on individualism. The Internet is revolutionizing creative work by emerging forms of collective intelligence. In fact, we can regard the Internet as an expression of the noosphere: an emergence of the global human thought. This emerging supra-individual collective form of intelligence has a creative function.

Rifkin (2014), together with Peters and Reveley (2015), views the Internet as a tool that is used to channel creative work, but in the form of a collective intelligence. This has the potential to promote the breakdown of institutions, thus generating a new collective identity caused by the "Internet of Things" (Rifkin, 2014). Social media, as a communication channel for consensualization, encourages community activism, the development of empathy and the articulation of multiple wills into a coherent social unit. An example is, among others, Avaaz.org. This organization regards itself as an online global community for the mobilization of political action from grassroots citizenship, in order to address global issues. This is a clear example of the construction of a new global identity. It is also, as these authors state, an instrument for the reconstruction of coexistence, since consensualization, as the coordination of wills, is a basic condition for further coordination of activities. This is where a new system of reconstruction of identity is defined.

By considering creativity as an emergence of a neural network, which is generated using the Internet and social networks, it is clear that it must be regarded as a social production of knowledge, strategies, lifestyles and so on. This represents a shift from vertical, hierarchical structures to horizontal, lateral, and, therefore, more democratic structures. It is not only about sharing knowledge, as far as a new form of sociability is generated, but a way of reconstructing our social relationships and our identity, both personally and collectively.

This new scenario is part of an emerging economic system that Rifkin (2014) calls "collaborative commons." It is transforming economy, democratizing it, goes beyond traditional markets and is generating new forms of coexistence. This is done by replacing the "exchange value" of the conventional market with the "sharing value" of this increasingly interdependent collaborative commons.

According to Rifkin, there is a contradiction within capitalism which may endanger its own model. Companies search for new technologies in order to increase productivity, which reduces marginal costs, allowing for lower product prices, to the point that "the cost of actually producing each additional unit – if fixed costs are not counted – becomes essentially zero, making the product nearly free. If that were to happen, profit, the lifeblood of capitalism, would dry up" (2014: 9). Examples of this can be found in publishing, in the media, entertainment, transport, renewable energy production or Massive Open Online Courses (MOOC) in higher education. This revolution is defining a networked world, characterized by collaboration through the "Internet of Things." This network connects all things to all people by integrating the artificial with the natural environment.

What makes the IoT [Internet of Things] a disruptive technology in the way we organize economic life is that it helps humanity reintegrate itself into the complex choreography of the biosphere, and by doing so, dramatically increases productivity without compromising the ecological relationships that govern the planet. Using less of the Earth's resources more efficiently and productively in a circular economy and making the transition from carbon-based fuels to renewable energies are defining features of the emerging economic paradigm. In the new era, we each become a node in the nervous system of the biosphere. (Rifkin, 2014: 17)

It is significant that the "Internet of Things" is consistent with the emerging collaborative commons, given its horizontal nature which facilitates cooperation, social capital, synergies, and distributed production. In addition, it is emerging as a perfect way of developing alternative economies such as social economy or the Economy for the Common Good. Major changes of every kind (cultural, economic, social, political, psychological, etc.), which are emerging through the birth of the "Internet of Things," are producing a reconstruction of identity that is not only individual but, especially, collective. This identity is far removed from the capitalist worldview and is now establishing emerging entrepreneurial visions which feed on the values and forms of collaborative commons. Indeed, as Rifkin argues,

... while the capitalist market is based on self-interest and driven by material gain, the social Commons is motivated by collaborative interests and driven by a deep desire to connect with others and share. If the former promotes property rights, caveat emptor, and the search for autonomy, the latter advances open-source innovation, transparency, and the search for community. (Rifkin, 2014: 20–21)

It is in this context that the proposal of Felber (2012) becomes meaningful, given that it relates the economic dimension with the social and ecological dimensions. The "common good" is based on the same values that govern everyday relationships such as cooperation, solidarity, trust, or our need to share. Therefore, it assumes a positive view of human nature. All these values allow more humane relations by changing the struggle and selfishness of neoliberal capitalism for the cooperation and mutual assistance in which this new perspective is based on. We find that that financial benefit stays in the background here, being overtaken by some ethical values that go beyond the mere accumulation of material wealth. This model

has already many energy fields (comprising employers, local public administrations, researchers, teachers, and other social agents) in several European and American countries, including Austria, Germany, Italy, Spain, Argentina, and Honduras.

From a mechanistic view of nature, as a mere store of resources at the service of man (colonial vision), to Gaia Hypothesis/Theory. Before 1500, an organic and spiritual worldview prevailed. People lived in small communities and felt nature in terms of organic relationships. However, between 1500 and 1700, the medieval concepts underwent a radical change. The world began to be conceived as something like a machine. Copernicus, Galileo, Bacon, Kepler, Descartes, and Newton were the main drivers of this change. The empirical approach and the mathematical description of nature were introduced. This dramatic shift in the consideration of nature – from organism to machine – profoundly affected the attitude of people towards their natural environment.

The Cartesian mechanistic approach provided the "scientific authorization" to exploit, and currently to plunder, that ancient mother, which today is prostituted and turned into a mere dump or a source of resources to exploit. Facing this mechanistic and colonial view of nature, which split the self from the rest of the world, a split deepened during Modernity and a fresh theory has now arisen globally. It was initially formulated by a British atmospheric chemist, Lovelock, in 1979, and then completed by Margulis, an American microbiologist. It was called the Gaia Hypothesis. This theory holds that life does not find the right conditions for its evolution on Earth, as claimed by the classical theory of evolution (Neo-Darwinism). It is life itself that creates these favourable conditions for its existence, *making* the environment, generating it, *keeping it, shaping it and changing it*. This in turn feeds back new life, which evolves and changes in that environment.

Lovelock and Margulis presented a complex network of feedback loops, which are responsible for the self-regulation of our planet and whose main characteristic is to link living systems with non-living systems (through complex networks). There is an *indivisible interrelation* among micro-organisms, plants, and animals (living things) with soil/land, oceans, and atmosphere (non-living things), connecting microbiology, geology, atmospheric chemistry, and biology. Consequently, life is not adapted to a *passive* environment. Actually, there is no dead and passive environment of life, on the one hand, and life on the other (classical theory of evolution). This is because *the environment is part of life* (Lovelock, 1987). Lovelock defined Gaia as:

...a complex entity involving the Earth's biosphere, atmosphere, oceans, and soil; the totality constituting a feedback or cybernetic system which seeks an optimal physical and chemical environment for life on this planet. (Lovelock, 2000: 10)

From the traditional scientific viewpoint, nature is a primitive force to subdue and conquer, a machine made up of separate elements. In contrast to this, Lovelock has shown that the biosphere works as a very complex global macro-system. From this network of interdependencies a global operating unit emerges: Gaia, which forms a self-regulated and self-regulating living whole and behaves like a single organism in order to sustain life (Lovelock, 1987; Margulis, 1998; Margulis and Sagan, 1997).

The Gaia Hypothesis has already earned the respect of the scientific community. For our purposes, what is remarkable about the Gaia Theory is the fact that its basic idea is one of cooperation. In the design of an enormously complex interactive macro-system, the remarkable thing is that its parts work together and collaborate in order to self-regulate

the system itself. Margulis (1998) argues that the evolutionary process is guided by symbiosis rather than random mutation, and states that cooperation between organisms and their environment is the driving force of natural selection, rather than competition. Therefore, she postulates a cooperative evolution. According to Margulis, Darwin's vision is not inaccurate, but incomplete. For her, our planet is a "super-organic system," and evolution is the result of a collaborative, not a competitive, process. The question for us is how we should view the role of humanity on this planet. Working in a friendly and cooperatively way within this global macro-system, respecting and caring for human and non-human life, is not exactly what we are doing. We are going against the grain of all the complex and sensitive fabric of life. We are a cancer existing within the fabric of Gaia, instead of being the alleged ethical fibre which cares for life.

The Gaia Theory is a scientific reference which is perfectly consistent with the planetary "biophilic consciousness," and thus receives invaluable support from outside the field of both human and social sciences. From this consciousness, we are able to overcome the split in modern consciousness, thus enabling a holistic, organicist, empathetic, and collaborative encounter with nature and, therefore, an ethical perspective. The Gaia Theory takes into account all living beings and integrates them into a self-regulating network consisting of cooperative interinfluences.

From a negative image of human nature to the "discovery of empathy." We need to start to think and behave as a part of this shared biosphere, and this affects how we see ourselves as human beings. The old image of human nature was highlighted by several authors. Thus, Hobbes believed that human nature was aggressive and selfish ("homo homini lupus"), that we are born to fight and compete, to dominate others, and secure our material welfare at all costs. Locke said that man is greedy by nature, and we seek to appropriate the material world to turn it into productive property. Bentham and other utilitarians agreed with Locke in that we are materialistic in nature and, therefore, we try to maximize pleasure and ease pain. Adam Smith thought that we are all born with the sole aim of satisfying our economic interest. Freud made a devastating description of human nature, causing a great impact on the human and social sciences.

However, by far the most important scientific discovery, which showed that humans and other mammals, including primates and social songbirds, are biologically "wired" for empathy, was made by Rizzolatti (1996) in the 1990s through the so-called "mirror neurons." Biologists and cognitive neuroscientists are discovering that mirror neurons, called neurons of empathy, allow humans to feel and experience other people's situations as if they were their own. We seem to be the most social animals and we seek intimate and friendly interaction with our fellows. Today we know that mammals feel, play, teach their offspring, and show affection, and that a number of species have a rudimentary culture and express a primitive empathy.

Here is further scientific support for the concept of the "biophilic consciousness," because we are neurobiologically "wired" for empathy. Hopefully, this could arouse a new sense of communion and responsibility for other living beings and bring us closer to being the custodians and caretakers of the community of life in which we live. This is a key factor of "biophilic consciousness."

From an economy that makes nature invisible and fosters deep social inequalities to a truly sustainable economy based on the ethics of care (Earth Charter). The economists of the Enlightenment saw

economy and nature from the mechanistic perspective of Newton's laws of physics. This mechanical and utilitarian view of the old science and economics about nature was imposed with renewed strength at the beginning of the industrial revolution.

Most classical economists thought that human labour could create a material utopian paradise on Earth, based on unlimited material advancement, which is impossible on a finite planet. As a result, this has caused a severe depletion of every type of natural resources provided by our planet. We must necessarily rethink what is meant by productivity (Kalantzis and Cope, 2012), as this will have to be measured by adding efficiencies in energy exchanges with nature and the entropic consequences.

The reason most economists just don't get it is that they fail to understand that all economic activity is borrowing against nature's energy and material reserves. If that borrowing draws down nature's bounty faster than the biosphere can recycle the waste and replenish the stock, the accumulation of entropic debt will eventually collapse whatever economic regime is harnessing the resources. (Rifkin, 2011: 208)

Economists say that they recognize the entropic invoice as "negative externalities"; that is, as the adverse effects of market activity on third parties, which are not directly involved in the process of trade. However, the problem is that no one has ever taken into account the total cost of such third parties over the passage of time, society, the biosphere, and future generations.

The first consequence of all this is the invisibility of the "biophysical costs of production." That is, the invisibility of the biosphere, which has finally become so present because it is one of our major global problems today. This has resulted in the widespread damage of the natural environment, the breaking of the subtle balances which exist within the web of life, in addition to global warming and climate change.

The second consequence of this is the dramatic increase in social inequality. Global sectoral reports (education, the status of women and children, on hunger and poverty in the world, plus the distribution of wealth, access to health care, and so on), carried out by a wide variety of institutions, indicate a steady increase in inequality. This is affecting the basic needs of the population, as can be seen in the successive annual reports of the United Nations Development Programme (Human Development Report). The latest report from Oxfam (2014), "Governing for the elites: Kidnapping democratic and economic inequality," states that seven out of 10 people live in countries where inequality has grown in the last 30 years. Half of the world's income is in the hands of the richest 1% of the population, and the other half is divided among the remaining 99%. Inequality is growing rapidly in most countries, representing a major threat to democracies. Stiglitz (2012), Nobel laureate in economics, in his book *The Price of Inequality: How Today's Divided Society Endangers our Future*, argues that this concentration of power into the hands of a privileged few is weakening democracy and the rule of law, making the State a puppet in their hands.

As a declaration of fundamental ethical principles and as a universal code of behaviour for building a just, sustainable, and peaceful global society, the Earth Charter was conceived in line with structuring sustainable development around the ethics of care, justice, and peace. The official launch of the Earth Charter was held in the Peace Palace in The Hague on 29 June 2000. "It is an unusual document since it reflects a new, universally-shared level of understanding of the interdependence between humans and nature" (Gorbachev, 2005: 9–10). The core values of the Earth Charter are: "we are one human family and one Earth community": the "community of life." We have "a common destiny" on "Earth,

our home." "We must join together to bring forth a sustainable global society" founded on "respect and care for the community of life," a central concept in the charter, "with understanding, compassion, and love": ethics of care. "We must realize that when basic needs have been met, human development is primarily about being more, not having more." This implies interdependence, global responsibility, global citizenship, and precedence of the common good. The original purpose of the Earth Charter Initiative (2000) was to create a "soft law" document (Rockefeller, 1996) to collect four of the fundamental principles of the new emerging ethics concerning human rights, peace, economic equity, environmental protection, and sustainable living. "A [...] important factor that underpins the Earth Charter's authority is the fact that it is grounded in established international law" (Bernstein, 2007: 6), which does not exempt it from being a "soft law." It is an ethical call to action, thus becoming a unifying platform for change.

Here there is another expression based on international law and on the values of "biophilic consciousness." It has special value because it has been created by massive civic participation in many sectors and areas of our world.

# The role of critical pedagogy

Nikolakaki (2012) wonders how we can, from critical pedagogy, contribute to building social bonds and collective learning that allows us to fight against this dehumanization in progress, knowing that from this pedagogy we can contribute to the formation of citizens who advocate community ethics.

As critical educators, we should aim to deconstruct conventional education as, increasingly, it seems radically inadequate to everyone. Authors such as Hargreaves (1997), Fullan (1997), Naranjo (2004), Goleman (1995, 2006, 2009), and Gardner (2011), among others, have insisted that the comprehensive nature of education is non-existent. Hargreaves (1997), for example, speaks of the need to stimulate educational change and denounces the fact that education has focused on the cognitive level, forgetting other forms of intelligence. (Gardner speaks of multiple intelligences, and Goleman talks about emotional, social, and ecological intelligence.) Hargreaves (1997) also points to another parameter, which is related to the previous one: the enlargement – that is, the need for schools to be open to establishing a closer relationship with community and nature.

We recognize that education, along with other public goods such as health and pensions, is seriously threatened by the globalizing influence of neoliberalism (Maisuria, 2014). This logic seeks to establish the commercialization and privatization of education (Ball, 2007), a public good traditionally managed by the state. The crisis in education is closely related to the crisis of democracy. You cannot understand the one without the other, as both are targeted by the logic of the market. In this respect, the battle for public education focuses on preventing it from becoming a consumer product (Natale and Doran, 2012). This is characteristic of the growing culture of corporatism raised by big business and run by politicians working under neoliberal orthodoxy. In addition, it is amplified by their kindred media, controlled and paid for by the same promoters who defend the corporatization of public education, especially at university level (Darder, 2012). Educators have a responsibility to encourage social commitment in order to revitalize democracy as a form of political action for the construction of an active citizenship.

However, beyond its deconstructive role, critical pedagogy needs to work on building a new type of education. Our proposal believes that we must transform the curricula in order

to develop global "biophilic consciousness." We need to turn towards distributive and participatory learning models where all intelligences could also be developed, particularly the emotional, social, and ecological intelligences, which are those proposed by Goleman (1995, 2006, 2009). We could start by rethinking education as a way of life, based on cooperation rather than individual adventure, with a hierarchical and usually receptive learning model. Distributive networks of communication give us a lateral and participatory experience within a learning process which is superior to the individual one when it is based on group cooperation. This demonstrates its social nature. People learn and share by being immersed in shared relations networks, open spaces, and increasingly inclusive communities, which end up spreading to the entire biosphere within global learning environments into cyberspace (Rifkin, 2011). It would be convenient to create truly cooperative and empathic learning and working environments, similar to those existing on the Internet's communication networks. The teacher is the person who must facilitate these environments in which the process is just as educational as the final results (Rifkin, 2009).

All this would be much easier if, as Hargreaves (1997) says, education opens up to the community and natural environment and if we truly want future generations to develop this biophilic and empathic connection. There are educators who are undertaking many projects in this respect. They are packed with experiential learning, the development of other intelligences, and are immersed in community and natural environments, resulting in direct action. In many cases, these experiences are included in the school curriculum. We think this is a good way to go.

The continuing loss of biophilic connection is cause for concern. We increasingly live in artificial environments, isolated from nature and community. As educators, we have to participate in the organization and management of urban public spaces, so that nature becomes increasingly present in our environment. We should also make our schools greener, something that some educators are doing now. There is the "forestry schools" movement, among others. We must engage in experiential educational practices if we want to prepare children to feel, think, and act as extended ecological selves (Macy and Young, 1998); that is, with an expanded sense of identity which progressively includes the entire living world. This should be the ultimate meaning of education, rather than retaining the objective of economic productivity. The biosphere must become the new learning environment. We know that interaction with nature, a source of wonder and amazement, is crucial for the development of critical thinking.

# Final thoughts

There is a deep complementarity and coherence among the factors which constitute the emerging worldview, and between this and the new communication technologies. These networks of new technologies are generating a social, cultural, and economic revolution which involves a reconstruction of identity – one which goes beyond the neoliberal model. Other social movements are contributing to all these changes, for example the Indignados-Occupy movement, which is a critical response to the neoliberal model aimed at overcoming the current economic crisis. Social networks have played a decisive role in these social movements. There are also a number of innovative projects in the educational, social, and cultural fields.

The interesting thing about all this is that the values promoted through the new communication technologies are similar, if not the same, to those which support this

emerging worldview. That is: cooperation, collaboration, the feeling of being a node within a network of interinfluence; the appreciation of lateral aspects and the distribution among all the people; and the construction of community and its importance beyond individual interests. In addition, the feeling of belonging to the community of life in order to reach the entire planet and its living things, including the human species. Other such values include the perception of those emerging collaborative social processes and practices, which are consistent with how life works, and the knowledge that nature has caused us develop our empathic connectivity neurobiologically. All this is precisely at the core of our new-emerging personal and collective identity. This is a global "biophilic consciousness," reconstructed from innovative social practices such as those carried out by the new communication technologies and other innovative social movements, which meet with changes in our perception of reality and ourselves. All of this constitutes a new worldview which carries a renewed civilizing meaning.

As critical educators, we must be sensitive to and, moreover, participate in these cognitive, spiritual, and perceptual revolutions which are going on around us. This is in order to understand them from the "inside." They will probably end up producing a profound global cultural and civilizational change beyond neoliberalism.

Opposing the neoliberal "Entrepreneurial Self," we propose the "Entrepreneurial Self" of the "biophilic consciousness," understood as empathic universal connectivity, inspired by the ethics of care, which means an ecological and social self which extends to the entire community of life. This involves a new identity that must be built as co-participation in and integration of the networks of life. It does not ignore the biophysical costs by minimizing them, or by reducing them to a monetary value. It subordinates the having to the being, and frames development into the maximum value of social and economic justice, and the values of empathy and the common good. This is consistent with the community of life and culture of care, interdependence, global responsibility, and planetary citizenship.

On a global level, we need to move from conventional geopolitics, typical of neoliberal paradigm and based on predation, to a biosphere politics. In this, survival is not so much competition as cooperation. Furthermore it has less to do with an isolated pursuit of autonomy and more to do with rooting and integration. Such a policy encourages us to think of ourselves as global citizens and to care for a shared biosphere, seen from systemic and holistic perspectives.

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#### References

Ball S (2007) Education Plc: Understanding Private Sector Participation in Public Sector Education. London: Routledge.

- Bernstein J (2007) The Policy Relevance of the Earth Charter for Europa. Stockholm: Earth Charter International.
- Canaan JE (2013) Resisting the English neoliberalising university: What critical pedagogy can offer. *Journal for Critical Education Policy Studies* 11(2): 16–56.
- Commisso G (2013) Governance and conflict in the university: The mobilization of Italian researchers against neoliberal reform. *Journal of Education Policy* 28(2): 157–177.
- Darder A (2012) Neoliberalism in the academic borderlands: An on-going struggle for equality and human rights. *Educational Studies* 48(5): 412–426.
- Du Gay P (1996) Organizing identity: Entrepreneurial governance and public management. In: Hall S and Du Gay P (eds) *Questions of Cultural Identity*. London: SAGE Publications, pp. 151–169.
- Earth Charter Initiative (2000) The Earth Charter. Available at http://earthcharter.org/invent/images/uploads/echarter\_english.pdf (accessed 6 February 2016).
- Felber C (2012) La Economía del Bien Común. Barcelona: Deusto.
- Foucault M (2008) *The Birth of Biopolitics: Lectures at the Collège de France, 1978–1979.* Houndmills, UK: Palgrave Macmillan.
- Fullan M (1997) Emotion and hope: Constructive concepts for complex times. In: Hargreaves A (ed.) *Rethinking Educational Change with Heart and Mind. The 1997 ASCD Yearbook.* Alexandria, VA: Association for Supervision and Curriculum Development, pp. 216–233.
- Furlong J (2013) Globalisation, neoliberalism, and the reform of teacher education in England. *The Educational Forum* 77: 28–50.
- Gardner H (2011) Frames of Mind: The Theory of Multiple Intelligences. New York: Basic Books.
- Goleman D (1995) *Emotional Intelligence: Why it Can Matter More Than IQ.* New York: Bantam Books.
- Goleman D (2006) Social Intelligence: The Revolutionary New Science of Human Relationships. New York: Bantam Books.
- Goleman D (2009) Ecological Intelligence: How Knowing the Hidden Impacts of What We Buy Can Change Everything. New York: Broadway Books.
- Goodman RT (2012) The new Taylorism: Hacking at the philosophy of the university's end. *Policy Futures in Education* 10(6): 665–673.
- Gorbachev MS (2005) Preface: The third pillar of sustainable development. In: Corcoran PB, Vilela M and Roerink A (eds) *The Earth Charter in Action: Toward a Sustainable World.* Amsterdam: Royal Tropical Institute (KIT) Publishers, pp. 9–10.
- Hargreaves A (1997) Rethinking educational change: Going deeper and wider in the quest for success. In: Hargreaves A (ed.) *Rethinking Educational Change with Heart and Mind. The 1997 ASCD Yearbook.* Alexandria, VA: Association for Supervision and Curriculum Development, pp. 1–26.
- Kalantzis M and Cope B (2012) New learning: A charter for change in education. *Critical Studies in Education* 53(1): 83–94.
- Keller DB and Keller G (2014) Politics and transformation: Critical approaches toward political aspects of education. *Policy Futures in Education* 12(3): 359–369.
- Kelly P (2006) The entrepreneurial self and 'youth at-risk': Exploring the horizons of identity in the twenty-first century. *Journal of Youth Studies* 9(1): 17–32.
- Loh J and Hu G (2014) Subdued by the system: Neoliberalism and the beginning teacher. *Teaching and Teacher Education* 41: 13–21.
- Lovelock J (1987) GAIA: A model for planetary and cellular dynamics. In: Thompson WI (ed.) GAIA, a Way of Knowing: Political Implications of the New Biology. Great Barrington, MA: Lindisfarne Press, pp. 83–97.
- Lovelock J (2000) GAIA: A New Look at Life on Earth. Oxford: Oxford University Press.
- McKenzie M (2012) Education for Yáll: Global neoliberalism and the case for a politics of scale in sustainability education policy. *Policy Futures in Education* 10(2): 165–177.
- Macy JR and Young MB (1998) Coming Back to Life. Gabriola Island, BC: New Society Publishers.

- Maisuria A (2014) The neo-liberalisation Policy agenda and its consequences for education in England: A focus on resistance now and possibilities for the future. *Policy Futures in Education* 12(2): 286–296.
- Margulis L (1998) Symbiotic Planet: A New Look at Evolution. New York: Basic Books.
- Margulis L and Sagan D (1997) *Microcosmos: Four Billion Years of Microbial Evolution*. CA, Berkeley: University of California Press.
- Naranjo C (2004) Cambiar la Educación para Cambiar el Mundo. Vitoria-Gasteiz, Spain: Ediciones La Llave.
- Natale SM and Doran C (2012) Marketization of education: An ethical dilemma. *Journal of Business Ethics* 105(2): 187–196.
- Nikolakaki M (2012) Building a society of solidarity through critical pedagogy: Group teaching as a social and democratic tool. *Journal for Critical Education Policy Studies* 10(2): 392–417.
- Olssen M and Peters MA (2005) Neoliberalism, higher education and the knowledge economy: From the free market to knowledge capitalism. *Journal of Education Policy* 20(3): 313–345.
- Oxfam (2014) Working for the few: Political capture and economic inequality. Oxfam International. Available at: https://www.oxfam.org/sites/www.oxfam.org/files/bp-working-for-few-political-capture-economic-inequality-200114-summ-en.pdf (accessed 6 February 2016).
- Peters MA and Reveley J (2015) Noosphere rising Internet-based collective intelligence, creative labour, and social production. *Thesis Eleven* 130(1): 3–21.
- Rifkin J (2009) The Empathic Civilization: The Race to Global Consciousness in a World in Crisis. New York: JP Tarcher/Penguin.
- Rifkin J (2011) The Third Industrial Revolution. New York: Palgrave Macmillan.
- Rifkin J (2014) The Zero Marginal Cost Society: The Internet of Things, the Collaborative Commons, and the Eclipse of Capitalism. New York: Palgrave Macmillan.
- Rizzolatti G (1996) Premotor cortex and the recognition of motor actions. *Cognitive Brain Research* 3: 131–141.
- Rockefeller S (1996) Global ethics, international law, and the Earth Charter. Earth Ethics 7: 1-7.
- Stiglitz JE (2012) The Price of Inequality: How Today's Divided Society Endangers Our Future. New York/London: WW Norton & Company.
- Uzuner-Smith S and Englander K (2015) Exposing ideology within university policies: A critical discourse analysis of faculty hiring, promotion and remuneration practices. *Journal of Education Policy* 30(1): 62–85.

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