Birth of an Alternative Development Paradigm

Unfolding of Transformative Mode of Production

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Part I*

Introduction

The 21st century made its beginning with a shift of geographies of reasons for reorganizing the principles of the economic and social life of humanity in the world. It is a new site in the making, unparallel in the history of the contemporary world, in the wake of the social movements against globalization that have been shaking several parts of the world for the past two decades or so. While epistemic disobedience (Mignolo, 2011: 44) is built into these movements, most of which are anti-systemic,\(^1\) they take us to a different beginning with a different cosmic vision, ‘it is delinking from the modern, political episteme articulated as right, left or center, it is an opening towards another thing... searching for itself in the difference’ (ibid.: 50). It is no less than Polanyi’s double movement that resonates to trigger the process of self-protection of the communities against the onslaught of the single globalized model of development rooted in the capital system (Polanyi, 1944: 76). The unbridled capital system that separates humans from nature based on its instrumental rationality and self-regulating market doctrine is now faltered with its inherent fallacious logic of expansion. Its falling tendency, which is inevitable and was not as imminent earlier as it is today, is reinforced by its sharp internal contradictions. The pathological symptoms of the capital system that designs devastating acts against humanity and nature indicate an entropic disorderly stalemated post-capitalist interregnum society (Streeck, 2017: 35).

The crisis of the capital system is deepening, as it is being entrapped by its own logic and is unable to find any escape route except the one shown
by Keynes in the wake of the Great Depression in the 1930s. However, its repetitious application to get the economy out of the ‘Great Recession’ has proved futile in the present context of the global economy. It is deluding, for it has failed to recognize the distinct contextual difference between the two periods, both in terms of quantitative and qualitative changes that the global economy witnessed for the past several decades. Of course, the logic of capital has not changed. But the expansionary move of the capital to produce itself at a higher level has turned out to be self-defeating over the years. None other than the vast shrinkage of the real economy testifies it.

It has pushed the capital system to a crisis, leaving no scope for it to be resilient, especially in the present context when both centralization and concentration of capital have crossed all limits at the cost of dispossession and deprivation of the vast majority of people around the world.

The incessant commodification of nature is another source of the crisis, making the production conditions so feeble so as to respond to the expansionary move of the capital system. It is but the fallout of its growing contradiction between the mainstream development paradigm and the production conditions that nature creates. Apart from the metabolic rift that commodification has caused, a deep planetary ecological crisis has ravaged the safe operating space for humanity to disappear. Its adverse impact on the capital system to reproduce even at a lower limit is discernible, let alone the rising cost of commodity production causing dysfunctionality of the system to accumulate. Consequently, the social cost of human misery that surfaces in the form of inequality, deprivation, loss of employment and income, loss of control over assets and resources, and, more importantly, loss of social cohesion is surging disproportionately at a
high rate. It is aggravated further by nature’s misery that manifests in the form of its ceaseless degradation.

The social cost of inequality, which is now at an all-time high level, and an unprecedented rise in joblessness has surpassed the mark of social tolerance. The only way to extricate humanity from such entanglement is to look for substitution of the capital system by alternative organizing principles of economy and society.

Methodological individualism, private property and representative democracy that lend credibility to the theoretical legitimacy of the mainstream development paradigm rooted in the same capital system are increasingly proved to be the enemies of the civilization. Having unmasked these theoretical moorings, resistance movements (anti-systemic movements) have embraced an epistemological battle against the old one such that humanity can escape from the catastrophic end through the creation of another world.

In this paper, I make a modest attempt to examine how the alternative development paradigm unfolds with a new epistemological base because of the resistance movements and other radical transformative initiatives against globalization and the socio-economic system and institutions that create and reproduce an unequal distribution of power, perpetuate discrimination and domination by humans over other humans and nature. Insightful lessons from the experiences of these movements are drawn and, based on them, this paper attempts to construct a theoretical edifice of the alternative development framework that shows how the rise of another world from within the metabolism of the capital system is a historical inevitability.
The paper is divided into six parts. Part II learns lessons from the anti-systemic social movements witnessed by some Latin American countries and several radical transformative initiatives around the globe to construct an alternative development framework. The fundamental premises of the alternative development framework, what I call ‘Cohesive Development’, as opposed to that of the mainstream is spelt out in Part III. Part IV of the paper briefly explains the criticality of the principles of sufficiency and reciprocal altruism, while Part V shows how transformative mode of production, which is solidaristic, is forming and gradually emerging based on the forces of cohesive development beyond Marxian analytics in the post-development (post-capitalist) stage of social evolution. The paper ends in Part VI with the presentation of a few remarks in place of the conclusion.

Part II

Lessons from Social Movements

‘Interregnum’ Gramsci’s disquiet almost a century ago, ‘The old is dying and the new cannot be born’ (Gramsci, 1971: 276), does not hold anymore. The contemporary counter-narratives of social disobedience against the dominant development paradigm testifies it. The old is indeed dying, but the new is also born now, maturing and expanding the horizon of its mass acceptability. Its passage for expansion is gradually widened by the radical alternatives, as demonstrated by the resistance movements, most of which are anti-systemic. These movements have devitalized the reasons for the old to stay and decide the fate of humanity. A new society
is germinating from these movements as an outcome of the inexorable forces of history.

Several such movements took place in the recent past, both at the national and international level. While most of them were directed against globalization, environmental degradation and racial and gender discrimination, etc., they all opposed the exploitative system. They were anti-systemic. Of course, several resistance movements were organized in different parts of the world that went against global capitalism, while some others not. The anti-globalization movement organized by the Association for the Taxation of Financial Transactions and Aid to Citizens (ATTAC) that initiated the first world social forum in the Porto Alegre in 2001 suggests how solidarity of the losers, the deprived, around the world, from North to South can create another world (with the slogan ‘Another world is possible’). The global justice movement is another such movement that counterposes an alternative conception of welfare and development to the ones advanced by the International Monetary Fund (IMF), World Trade Organization (WTO), etc. (Barker & Lavallètte, 2015).

Similarly, an immense variety of radical alternatives to the mainstream development regime emerged during the past two decades around the globe. Kothari et al. (2019: 339) show that they range from sector-specific such as sustainable and holistic agriculture, community-led water/energy/ food sovereignty to more holistic or rounded transformation attempted by Zapatistas in Chiapas in Mexico.

The Zapatista movement in Mexico and the new political processes that were set in motion in Ecuador and Bolivia, inspired by the philosophy of ‘Buen Vivir’ (meaning good life) against neoliberal market reforms,
may be cited as historic. They are not only resistance movements against globalization and the exploitative systemic order, but they also have a different cosmic vision that provides alternative development epistemology (Gudynas, 2011; Burbach et al., 2013). They are unique in several ways and, hence, it is rewarding for one to draw lessons from its cosmovision that echoes other anti-systemic movements.

The Zapatista movement by Chiapas in Mexico during the early 1990s showed how a new world could be born. This was another anti-systemic movement after 1840 when the Zapatista Army of National Liberation (EZLN) rose in Chiapas, proclaimed the autonomy of the indigenous people and went much beyond the reformist movements. This was followed by the new political processes in Ecuador and Bolivia under the influence of the philosophy of Buen Vivir (Gudynas, 2011: 442). Subsequently, several other Latin American countries joined to bring about social upheaval to challenge the capitalist system and its neoliberal order. The hegemonic impact of the mainstream development paradigm on developmentalism was thus crushed by the pragmatic understanding of the Zapatistas with holistic ‘cosmovision’ that had transcended modernist meta-narratives of both capitalism and socialism (Burbach et al., 2013: 18). The foundational feature of the cosmovision as quoted below from the declaration of the EZLN in the Intercontinental Encounter for Humanity and Against Neoliberalism shows how they differ from others. In particular, it displays a remarkable epistemological shift from the world of artificial perfection of the dominant development paradigm.

The universal need for a more just and inclusive world, in opposition to the commodified and exclusionary world of neo-liberalism, is the great event
of our country; it opens the possibility of joining together local, national, sectoral and class struggles, in one single struggle for the formation of a planetary community, the self-realization of civil society and the construction of a world where many worlds fit (EZLN, 1996: 151, in Stahler-Sholk, 2000).

Not only it debunks commodification as an enemy of civilizational progress, but, more importantly, it also completely rejects the homogenization principle of mainstream economics based on which market-oriented model of globalization is built. While its cosmovision is devoid of any sort of delusion, according to it the diversity that exists in the planetary community needs to be recognized to construct a more just and inclusive world. Diversity exists in any form in which people may define their relationship with the state. The construction of hypothesis for development and change without taking cognizance of the real-life situation in which diversity rests is an anarchic theoretical position that the mainstream paradigm has been maintaining for the past two centuries or so. ‘The construction of a world where many worlds fit’ is a powerful theoretical abstraction founded on existentialism. It combats the principle of homogenization that presumes a flat world economy under globalization (Friedman, 2005).

The epistemological shift is also discernible in the vision of autonomy of the movement’s proponents in what they call ‘horizontal autonomy’ or communal self-rule. They rejected representative democracy of the liberal paradigm, which was consolidated during the 18th century in Europe along with the concept of private property, individual rights and the market economy as the organizing principles of economy and social life (Stahler-Sholk, 2010; Solano, 2019), and replaced it with participatory democracy, whose essence is local autonomy with communal self-rule.
According to them, representative democracy is ‘democratic despotism’ in reality (Esteva, 2019). Hence, participatory democracy is the construction of democracy from the root in which common people can assume the power to act upon which they think necessary for their own development. The striking aspect of this autonomy movement is not to seize the state power but to dismantle it and rebuild it where the practice of commanding by obeying thrives (Solano, 2019).

This is contrary to what the first anti-systemic movement that took place in 1848 aimed at: capturing the state power. And it did so. But it did not want to dismantle it. It was made instrumental in promoting the interest of capital rather than that of labour, the people. It was essentially a bourgeoisie revolution that overthrew feudalism. Although it began in France, it turned out as an upheaval of the European people to remove the old monarchical structure and create independent nation-states (Fotopoulos, 2010: 29). It must be seen as a triumph of capitalism as a means of organizing the economy and society. It gave birth to the logic of capital for its proliferation through surplus generation. Then the ownership of capital and its accumulation became the law of social change. Although the movement began with the objective of achieving true democracy, the solution to human misery and social problems was nowhere in sight. The spontaneous uprising failed to bring about social transformation. Capital accumulation and maximization of private interest remained the organizing principles of the economy and society (Wallerstein, 2014).

After this historic movement, the global society witnessed several social and national movements. Many of them were anti-systemic. Some such as the Russian Revolution and the uprising in 1968 in Europe or what
Wallerstein calls the ‘world revolution of 1968’ were strong. Others such as the women’s movement and ethno/racial/religious movement were, however, less strong (ibid.). Many of them stood to capture the state power and fundamentally transform social relations by removing the inegalitarian system and introducing democracy. While they succeeded in achieving the first goal, they were far from achieving the second one. Hence, these movements can hardly be characterized as anti-systemic. Although they struggled against the established power structure to replace it with a more democratic and egalitarian system, they were in fact colluding with the same system in practice (ibid.: 164).

The philosophy of Buen Vivir or *Sumak Qawsay* (meaning living well) reinforced the political process of Ecuador that was already under the influence of Zapatistas. Ecuadorians also challenged the neoliberal market reforms. However, its cosmovision is primarily made up of the ethical principles of the Andean culture of harmony and balance. It is ‘living well’, not ‘living better’ that invites competition, not cooperation, disintegration, not integration, and deprivation, not equity. In contrast to the hegemonic anthropocentrism of western capitalist modernity (Jiménez, 2011), human beings are seen here as equivalent to other parts of the cosmic whole. One is related to the other part, and each exists based on reciprocal relations. The profound impact of the ethical principle of Buen Vivir is discernible when it is seen as a remedy to the civilizational crisis under a hegemonic development paradigm that disintegrates humans on the one hand and humans and nature on the other. While the horizontal coexistence with nature dissolves the society-nature dualism (Gudynas, 2011: 445), it upholds the radical notion that ecosystems have the legal right ‘to exist, flourish and regenerate their natural capacities’ (Kawano,
2018: 8). In view of this, the rights of Mother Earth (nature) have been enshrined in the new constitution of Ecuador in 2008 and Bolivia in 2009 (ibid.: 9). It not only mirrors perceptual validity and the reasoning in favour of solidarity between humans and nature but also exemplifies cultural conditioning for the survival and development of all living species.

The transformative narratives explicitly or implicitly recognize different principles to organize the economy and society that are antithetical to the dominant development paradigm. Central to all is breaking off from dualism between human and nature. The accordance of legal right to nature exemplifies its uncontested solidarity that must be rebuilt with the people of multicultural origin within the relational context of reciprocity. Legalizing such an intrinsic bond, done nowhere else so far, is a unique attempt to stop its destruction that threatens the coevolution of human and nature. It contributes to the formation of an alternative development paradigm by being based on nature-centric development epistemology. Equally important is its radical understanding of well-being that never considers economic growth as the means of development (Villalba, 2013; Walsh, 2010). It then naturally restricts unlimited production and irresponsible waste. It is an epistemic change from where the ‘principle of sufficiency’ emerges as its basic tenet that contributes to the formation of the alternative development paradigm. It works as a building block to counter the global ecological crisis by rejecting the commodification of nature. The transcendental influence of this paradigmatic shift of development on several other countries, including Bolivia and Brazil, has turned Latin America into an epicentre for deconstructing the dominant notion of development.
Lessons that one learns from several other transformative initiatives worldwide against the dominant regime rooted in capitalism, patriarchy, racism, statism and anthropocentrism during the past two decades or so are equally robust. These initiatives found their expressions either through social movements, like the ones discussed here, or ideological reconstruction or new experiment with a fresh idea of development. Each attempt, in whichever direction, is geared to replace the dominant regime with the new one. These initiatives unmask the false epistemological base that has pushed humanity to its catastrophic end. The lessons that one learns from these experiences break new grounds for designing new organizing principles for the society and economy.

The emergence of self-organizations, for example, as niche institutions in several parts of the world, demonstrates it sufficiently well. The new practices and behaviour of these organizations illustrate how significant have been the new grounds they break for creating a ‘fitness landscape’ in the competitive environment for the survival and development of the people (Kauffaman, 1995). The reinvention of workers’ co-operatives, as an independent creation of the workers, not as protégé’s of either the government or the large capital (Marcuse, 2015: 34) or of producers or community-based organizations in India (Kumbamu, 2009), Kurdistan (Akbulut & Aslan, 2019) or Bangladesh (Mazhar, 2019) and in many other countries except Brazil, Argentina and other Latin American countries, are some examples that one can cite to show how new organizing principles that are antithetical to the dominant regime have grown in the intestine of the capital system detrimental to the interest of the latter.
As I have argued elsewhere, this suggests that the coordinates of transformation must change from the parts to the whole (Ray et al., 2020). Unlike the dominant paradigm that explains the dynamics of the system based on the properties of the parts, it is now between the parts on the one hand and between parts and whole on the other (Capra, 1996). It also suggests a radically different social metabolic order that corresponds to the reproductive order of the society which is sustainable and based on the principle of substantive equality and freedom (Mészáros, 2017: 8). The process of substantive freedom finds its expression only when the development paradigm rests on cooperation and solidarity between humans and humans and nature (Honneth, 2015; Ray, 2012). The coordinates of transformation must arise from cooperation, not competition. The dialectics of progress of human society are then governed by the law of reciprocal altruism, not methodological individualism. Cohesive development arises as an alternative development paradigm based on these new coordinates of transformation.

Part III

Cohesive Development

The primary condition for cohesive development is social cohesion among the individuals with a sense of community and commitment to the common objective based on collective understanding and shared consciousness. It is this common objective that binds individuals together despite differences that might exist between them. However, this can happen only
if the common objective never falls in line with the existing power structure which is undemocratic and exploitative, and yields powerlessness and deprivation of the majority. In other words, no social cohesion can ensure cohesive development as an alternative development paradigm if it fails to recognize the debilitating impact of the existing power structure on it. It is not that powerlessness is confined to the economic aspect of human life alone and hence the talk about monolithic class division. It is equally important to recognize how in other aspects of life, including social, cultural, political, environmental, etc., subordinate groups are excluded from various forms of power. The unifying element of all subordinate groups who develop a shared consciousness is exclusion from the various forms of power (Fotopoulos, 2010: 62). The task of the subordinate groups, therefore, is to overcome the cultural hegemony of the dominant groups, preserve cultural diversity and ensure all social groups have a voice through democratic means such as participation, dialogue, etc., as ruling by obeying comes into play.

Hence, cohesive development, in the present context, is conceived as an alternative development paradigm that replaces the logic of capital as it works in the capital system with the new one that seeks to establish radically different social metabolic order based on the principle of solidarity between humans on the one hand and humans and nature on the other. Reciprocal altruism, contrary to the methodological individualism of the mainstream development paradigm, directs here to shape the development paradigm. While holding the people, the deprived, together based on reciprocal altruism, it seeks to achieve a common objective, a common world view, based on their collective understanding with substantive
freedom or actual freedom whose key resides in the ‘apolitical’ network of social relations from market to family (Žižek, 2017: 29).

This holds good equally at all levels, including local, national and international. Besides, it institutionalizes fulfilment of all necessities of life and creates equal space of all aspects of life for everyone to harness their full potential and live with dignity. A new development paradigm is thus conceived, suggesting a deep structural change from the grassroots to bring about equity and justice while maintaining relational totality. Besides, it does not allow natural resources, the very base of the productive forces of the economy, to be exhausted beyond the limit where coevolution of both human and nature stops. It is only within this framework that one may have reasons to argue why sustainable development is realizable. Further, no economic development is sustainable if it is understood based only on the notion of unlimited quantitative growth. It is more than a purely economic process in that it is associated with qualitative growth that includes social, ecological and spiritual dimensions (Capra & Henderson, 2009: 41).

Hence, the fundamental tenets of the epistemological base of cohesive development as emerging from radical movements and transformative initiatives are (1) holistic cosmovision with diversity; (2) solidarity between humans and humans and nature; (3) equity and justice for harmony; (3) principle of sufficiency; (4) new logic of capital; (5) participatory democracy and communal self-management; (6) reciprocal altruism; (7) expansion of commons; and (8) qualitative metamorphosis. It is needless to mention that each of these tenets is interdependent as a relational totality and reinforce one another for constructing an alternative paradigm. The emerging
transformative mode of production, as discussed in Part V, grows out of the close interaction between these tenets. While the instrumental role of all these tenets is explained in this section, Part IV examines the criticality of the principle of sufficiency and reciprocal altruism against the backdrop of their glaring differences with the competing theoretical strands. It is worthwhile to underline their theoretical prowess in a comparative framework to explain why it is inevitable for the post-capitalist era to witness the emergence of the transformative mode of production.

Part IV

Criticality of the Principle of Sufficiency and Reciprocal Altruism

Principle of sufficiency

The principle of sufficiency never separates means from the end. It is born out of the epistemological shift towards solidarity between humans and nature and breaks new ground for the formation of the transformative mode of production. It produces alternative development narratives without being a fetish for economic growth (Martínez-Alier et al., 2010: 1745). It envisages a perfect correlation between the means and the end in that means are designed to eradicate the misery of both humans and nature. It is contrary to the dominant development regime in which means are designed to generate more economic growth for profit. The development narratives of this regime naturally become a fetish for growth that has finally resulted in sharp economic disparity propelled by
the market forces throughout the globe. The majority, as a result, is left with no choice but to proceed towards the point of no return. While one may have reasons to argue why it finally works against the capital system, the latter cannot escape from its eventual collapse unless development ceases to be a fetish for growth. This provides sufficient ground to testify theoretical validity of the principle of sufficiency.

Growth is not sustainable ad infinitum in a resource-constrained planet. Besides, what is distressing is that, as Hansen, a leading climate scientist points out, the global economy has grown to a scale that it has crossed the planetary boundaries that mark the safe operating space of the planet and is tearing apart the biogeological cycle of the planet, resulting in a planetary rift (Foster, 2011: 24). In other words, material and energy consumption has exceeded the allowable ecological footprints (Martínez-Alier et al., 2010: 1743). Its consequences are disastrous and are leading to a planetary ecological emergency. It is threatening the human race to be imperilled.

It is true that scholars from several quarters around the world have opposed uninterrupted extraction of natural resources for human consumption, but one wonders how their opposition takes one to its logical end without contesting the fundamentals of the capital system responsible for creating such a catastrophe. One may quote two strands of thought in this regard that originate from (1) the degrowth movement and (2) the steady-state economy (SSE). Seemingly, both have some areas of convergence with the principle of sufficiency. But the principle of sufficiency differs fundamentally from both for being evolutionary in its operational approach and revolutionary as it seeks reversal of the logic of capital of the capital system.
The degrowth movement advocates contraction of the economy by downscaling both production and consumption. Of course, the celebrated publication of the Club of Rome titled *The Limits to Growth* (Meadows et al., 1972) did explicitly recognize economic growth as the factor responsible for environmental problems much earlier. It does not necessarily imply that economic growth per se is problematic. However, it may only be so when it is seen as the source of development without decoupling it from the material needs. Therefore, the question is how to decouple it without a decline in the well-being of the people. The advocates of the degrowth movement suggest that the route to maximize the well-being of the people is by enhancing qualitative growth based on consumption of non-material goods, not by enhancing quantitative growth beyond a point in terms of material production and its consumption.

It is here that some have suggested green technology can decouple growth from the material needs (Burton & Somerville, 2019). Assuming that green technology works at a higher level of efficiency with cost-effectiveness in the use of energy resources, how could it reduce increased pressure on the finite stock of resources and the overall environment to the detriment of the functioning of the capital system? It is quite likely that resource consumption would increase in response to higher energy-efficient technology. It exemplifies what is known as ‘Jevons paradox’, which could further deepen the environmental crisis. But it does not reduce the significance of green technology for decoupling. The latter can reposition itself outside the capital system based on the principle of sufficiency for the same purpose and escape from Jevons paradox. Besides, resource use efficiency being even less than 100 per cent (as per the second law
of thermodynamics), it will never lead the economy to collapse in such a situation.

Having traced the perspective of his analysis to the ‘stationary state’ of the classical political economy, Daly suggests contraction (or reduction) of the economy. However, according to him, it has to be maintained perpetually at a steady state. It means that the SSE will continue to replace investment but will not encourage new net investment (Foster, 2011: 25). While SSE may have some points of convergence with the principle of sufficiency, the latter fundamentally differs from the former, which offers no less than a reformist framework of the capital system. The major offensive against Daly’s prescription of SSE comes from Georgescu-Roegen, who argues that ecological salvation does not lie in the stationary state that still sees positive growth, although at a lower rate. According to him, the most desirable state is not stationary, but a declining one (Wikipedia on Degrowth).

The reformist proposal of SSE for the capital system is rejected by both the mainstream and Keynesian schools, for economic growth is an inherent necessity for the capitalism of any configuration (Smith, 2010: 255). Instead of contraction on the pretext of depletion of natural resources, Solow, as one of the proponents of mainstream economics, argues that higher growth is attainable with less use of resources within the same capital system through substitution by improved technology that works with a higher level of efficiency (Solow, 1974). However, it does not resolve the resource-efficiency issue either, since as per the law of thermodynamics, any technological system has a maximum efficiency of energy flow and limited capacity to convert one type of energy into another. Hence,
substitution by improved technology is of no help to overcome the problem of energy-efficiency (Kolasi, 2019: 36).

Hence, nothing can be more suggestive than decoupling economic growth from the material needs to avert the planetary crisis. It insinuates qualitative expansion of human activities alongside a limited quantitative expansion to enhance people’s well-being. The material needs for quantitative expansion can be met within the ecological limit. While there may be no qualms about the limit to the material needs, the scenario as painted by the protagonists of degrowth and the SSE may not be much engaging, notwithstanding the robustness of their logic. The theoretical edifice of their constructions is bound to get entangled and conflict with the extant logic of capital. It implies that unless the logic of capital is substituted by a new one, no reform of the capital system, whatever be its extent, can respond positively to the question of resolving the planetary crisis. The new logic of capital suggests that restructuring the organizing principles of economy and society based on the principle of sufficiency can decouple growth from material needs.

**Reciprocal altruism**

The radical alternatives of all sources, irrespective of their place and context, unequivocally reject self-interest maximizing the principle of methodological individualism as the only axiomatic truth of human behaviour. Instead, reciprocal altruism, they reveal, is the trait that influences individual behaviour. The epistemic influence of methodological individualism on designing the mainstream economics and, therefore, the mainstream development paradigm that shapes the development regime is phenomenal. It has been teaching the world for about past two centuries
that ‘self-goal choice’ is the only trait that guides the economic activities of the people. Arrow (1951) explains it aptly:

Each individual is conceived of as acting in the way determined partly by his psychology and his physical surroundings and partly by the actions of others.... Therefore, given the reaction of each individual to his total (social and other) environment... and given the nonsocial environmental factors, which we may term exogeneous, we can determine the behavior of any individual in society.

A religious sermon, as it were, is continuously given to the world community to display its instrumental rationality as the norm of reasoning for the individuals to achieve their economic ends. Hence, the development of the economy, accordingly, is derivative of the aggregate individual-centric growth. This is what was discovered by the Enlightenment in 17th-century England. Individualism, which was later termed methodological individualism, was conceived as a method of examining any socio-economic phenomenon based on the action and motivation of the individual and the individual alone. However, social movements and all other radical alternatives exposed its illusory effect on development, dumped it as false construction and revealed how it has been misleading human progress and refusing to accept the evolution of human society.

Historically, the growth of ‘individualism’ was central to the emergence of the philosophy of liberalism during the mid-17th century in England. It marked its beginning with the collapse of the feudal system, as Enlightenment stressed that the progress of the society was achievable only through individual initiatives. It ruled out outside interference. In other words, individuals must be given maximum freedom to operate to
maximize their self-interest with the establishment of the market economy. They are rational because they are selfish and seek to maximize only their self-interest. The truth is that such an individual-centric liberal philosophy accorded social legitimacy to promote the interest of the emerging capitalist class under the veil of democracy and progress after the collapse of feudalism (Peet & Hartwick, 2010: 26–30).

Hence, liberalism on which freedom, progress and democracy are pillared was the British Enlightenment philosophy, which was born to serve the interest of the early capitalist. Its early class commitments under the rubric of ‘scientific neutrality’ were eternalized and got entry as the founding principles of economics being laid by Adam Smith (Peet & Hartwick, 2010: 42). The mainstream development paradigm is but the descendent of the same in which individualism continues to be the central source through which economic progress is sought. The only difference is that it is called methodological individualism.

The centrality of the perspective of Schumpeter, who is known to have invented the term ‘methodological individualism’ (Schumpeter, 1909), or Menger, who is considered to be its proponent, is a lineage of the philosophy of liberalism (Menger, 1883). For Schumpeter, economics as a science is a pure theory of production and exchange as the individuals’ desire is based on their own interest. Hence, outside interference is outside the scope of the pure theory. Similarly, for Menger, it is a spontaneous order of the society as an outcome of the interaction of the atomistic rational self-interested behaviour on the part of the individual (Basu, 2008: 587). In both cases, one-sided assumption about the individual and his/her self-interest maximization goal as the sole criteria for being rational
is maintained. Of course, no interference of outside forces is entertained. Although varieties of protagonists of mainstream economics have surfaced over the years, the same assumption continues to remain central to the development epistemology of the dominant regime.

What can be more delusory in the study of human behaviour than reducing the human beings to be inhabited only by the virtues of selfishness? It is an intellectual mishap which the sociologists also ignored as a factor to count in the landscape of social progress. However, they have chosen to debate with mainstream economics on the issue of outside influence on the behaviour of the individual. Their basic question is whether the socio-economic explanation must move from the agency to the structure or from the structure to the agency. While mainstream economists advocate the imposition of strict separation of structure from agency axiomatically, sociologists do not accept it. What it means for the mainstream economists is that any socio-economic explanation at any point in time must move from agency to structure (Arnsperger & Varoufakis, 2018: 1). Although there are several areas of conflict among the sociologists while conceptualizing methodological individuals, they suggest that socio-economic explanation must be sought from both, since the social structure is a set of interactive relations between individuals. In other words, sociologists suggest a synthesis of individualistic and holistic elements while seeking socio-economic explanation (Udehen, 2002: 502).

In any case, methodological individualism of any version focuses only on the one-sided assumption of human behaviour and does not critique the rationality assumption that motivates the individual to act. However, resistance movements reveal why this is a false construction and
how following such development epistemology has led to the horrific debasement of human beings and nature never witnessed since the Industrial Revolution. These movements have also revealed that the altruistic trait of human beings can be equally strong to influence their rational behaviour that evolves in an associational framework. In an associational framework, ‘reciprocal altruism’ of the individual can give birth to a new development epistemology to fight against the degeneration of both humans and nature. This ‘reciprocal altruism’ is much closer to what Polanyi observes as the norms of living in the pre-capitalist society (Polanyi, 1944: 47–55). Trivers (1971: 46), who originally developed the theory of reciprocal altruism in evolutionary biology, extended the theories of the evolution of biological altruism to humans. He observes:

There is no direct evidence regarding the degree of reciprocal altruism practiced during human evolution nor its genetic basis today, but given the universal and nearly daily practice of reciprocal altruism among human today, it is reasonable to assume that it has been an important factor in recent human evolution and that the underlying emotional dispositions affecting altruistic behavior have important genetic components.

On the question of whether ideas about the evolution of animal behaviour can be extrapolated to humans, all biologists accept that Homo sapiens is an evolved species, and, thus, general evolutionary principles apply to it as well (Stanford Encyclopedia, 2013: 15). It is not necessary in the case of the human species that individuals are to be relatives or members of the same species. Even if they do not interact with each other more than once, one cannot dismiss the influence of culture, conscious belief and desire of humans. This is far greater than that of the other animals
(ibid.: 5). Hence, behaviours that benefit both self and others can evolve much more easily than even altruistic behaviour.9

Genetically, altruism originates as a form of fellow feeling from the very womb of the instinct of self-preservation (self-interest). Fellow feeling and ethics are outcomes of ‘symbiosis’ and ‘cooperation’, which are biologically true as self-preservation.10 This natural, axiomatic truth was completely ignored by the liberal philosophy of the English Enlightenment as well as by Adam Smith who founded the principles of economics based on self-preservation as the only motivating force for exchange and gains. This stems from the one-sided assumption about an individual based on the recognition of only one instinct. It is Homo economicus, a self-serving individual (self-interest), that has been ruling the dominant development regime for the past two centuries.

However, several biological studies show that human nature has both self-servicing and solidaristic tendencies (Roughgarden 2009; Rilling et al., 2002). Humans are Homo solidaricus, not Homo economicus. This means that they are both self-serving and solidaristic, and hence, altruistic, which is genetically antithetical to self-interest and never claims to be ethically neutral. No one has any reason to diminish its conceptual prowess by misusing it as a ‘cover’ to be ethically neutral as it is done in the mainstream development paradigm. Its ethical predilections are clear – to be seen as being favourable towards the deprived and, at the same time, against the logic of capital. The anti-systemic movements reveal that the infallible truth of human survival is the preferences that do not inhabit a well-defined space within the wall separating one ‘self’ from the ‘other’. These preferences cannot be explained by rational choice theory either
(Ray, 2012: 43). The reciprocal altruism as the founding principle of this new paradigm brings integration between humans on the one hand and humans and nature on the other, based on the principle of solidarity while recognizing the importance of coevolution of human and nature. As one of the epistemological tenets, it opens the possibility for the new development footprint to reign in humanity through a transformative mode of production.

Part V

Transformative Mode of Production

The transformative mode of production, which is solidaristic, grows out of a close interaction between the fundamental tenets of the new epistemological base of development that have emerged from the radical alternatives to the dominant regime. These fundamental tenets, as observed earlier, grow outside the capital system and create an alternative development paradigm with an alternative cosmovision. It is neither a capitalistic mode of production, primarily driven by profit and capital accumulation, nor a socialistic mode of production as envisaged by the traditional Marxists. While unfolding from within the metabolism of the capital system, it never overshadows Marxian materialist conception of history that stems from the principle of production and exchange. But, I argue, it certainly goes beyond it. It is not the social ability to transform nature into production of commodities alone. It is equally or more important to underline the ability of nature to withstand the social pressure on it for its transformation into commodities. Its fall out is discernible with growing
commodification at the present stage of the development of capitalism. This phenomenon seems to have been downplayed by the traditional Marxist account of historical change and development until, of course, its retrogressive impact on human existence is accounted for in recent years in view of the growing metabolic rift between humans and nature as nature is used beyond the point of its resilience for commodity production (O’Connor, 1988: 38; Foster, 2013: 4).

Within the Marxian analytics of epochal change of mode of production, social relations come in conflict with the forces of production. For social relations that organize and direct the forces of production in the transformation of nature face the adverse consequences of metabolic rift or environmental disaster. However, it happens not necessarily because of the incompatibility of the old social structure (social relations) with the improved technology. The argument is that once technology, which is one of the productive forces, improves, obsolete social arrangements of the old social structure (social relations) fail to rearrange themselves to appropriately respond to its increasing requirement of a higher level of internal efficiencies. It is then left with no choice but to prevent further social progress. It leads to developing contradiction to the point that social revolution takes place to allow the emergence of new forms of social relations that are compatible with the improved level of technology (Wikipedia, mode of production: 7, 92–93). It gives birth to a new mode of production.

The transition, however, to the post-capitalist mode of production through technological development to a higher level, as explained above, finds limited justification in view of the depleting production condition caused by environmental degeneration. In other words, a technology-centric
explanation of the forces of production is theoretically handicapped to define the transition of the mode of production from capitalistic to post-capitalistic (post-development) unless other productive forces are considered. The significant one is the environment and its resources that have limited production possibilities through their conversion. To clarify this point further, let us assume that there is no technological improvement. Does it imply that production possibilities will not be exhausted? Or can one rule out the retrogressive effect of conversion of nature into commodity production beyond a limit? The answer is negative.

Profit-making is the primary goal of capitalism, one that determines its expansionary moves. Hence, with the same level of technology and at the same level of efficiency, the hunt for profit continues through the conversion of nature into commodity production. Natural resources like productive forces come under severe pressure even in such a situation, leading to a conflict with the social relations of production. Hence, once the limit of its exploitation exceeds, a contradiction between the forces and relations of production develops not because of technological incompatibility with old social order, as has been the traditional Marxist account of historical change, but through nature. The social struggle may be an outcome of the contradiction in this case also. However, it is beyond being endemic to class societies.

*How principle of sufficiency works*

It is here that the principle of sufficiency that never separates means (technology) from the end (meeting basic needs of the people), as explained earlier, as one of the basic tenets of the new epistemological
base of development comes out as a means to resolve such contradiction. It fairly indicates compatibility between all productive forces, including technology, human skill, knowledge, organizational forms and cooperation under the influence of new logic of capital with nature’s response for its conversion into commodity production. The compatibility issue is complex since cooperation, specifically the mode of cooperation, is culture-centric that sets in new metabolic order and goes beyond ‘technological determinism’ or cooperation for technical necessity as a tendency within Marxism (O’Connor, 1988: 38).

It is a conflict between the development of the productive forces and its fettering nature of the current production relations with the growing aspiration for its rational use to meet the basic needs of the people, the deprived (Wright, 2019: 6). The principle of sufficiency unfetters the productive forces that struggle against the economic relations or irrational mode of production. The rational allocation of resources for the transformation of nature into commodities and their mode of exchange are then determined by other factors than profitability. This gives rise to the emergence of the transformative mode of production that determines what Engel writes ‘what is to be produced, how it is to be produced and finally how it is exchanged’ (Engels, 1880: 1).

The transformative mode of production that has been developing in the interstices of capitalist society has enormous potential to grow and reject the dysfunctional dominant mode of production (Wright, 2019: 5). While the dysfunctionality is visibly large against the backdrop of limits to the conversion of nature into commodity production, it is reinforced further by the growing contradiction between the logic of capital and the interest
of the majority of the people (Linden, 2017: 184). It has yielded economic stagnation to an unbelievable proportion and severe crisis that the capital system has ever faced after the Great Depression. The transformative mode of production could resolve the crisis only if the principle of sufficiency is complemented by four other constituents.

These constituents are (1) new logic of capital; (2) the culture of cooperation, new organizational form and expansion of common; (3) reciprocal altruism; and (4) qualitative metamorphosis. While the first indicates a new role being assigned to capital within the framework of cohesive development, the second defies the control of production relations over the forces of production. The third seeks to shift to an alternative mode of transaction of goods and services based on the principles of solidarity. And the fourth stresses the importance of qualitative aspects of human life and shows how it can harmonize material with the spiritual domain of human survival. It is within the framework of comprehensive cooperation that stems from solidarity that these constituent elements of the transformative mode of production set civilizational progress in motion without being detrimental to the coevolution of both humans and nature.

New logic of capital

While the post-capitalist new logic of capital originates outside the capital system, its operational moorings are determined by several factors that reinforce together to bring about cohesive development. The principle of sufficiency is one of those that gives new logic to capital, which is decommodification or a shift from commodification, the logic of capital of the capital system. The new logic also advocates a shift from alienation to
integration that facilitates social metabolic exchange between labour and nature and between labour (or deprived sections of all social groups) that underscores achieving real solidarity (Ray, 2012: 45).

The new logic of capital will not valorise capital but recognize the ‘self-valorisation’ of the workers. One can see then, as Negri (1984) argues, the theoretical possibility of proletarian independence within capital. Self-valorisation subordinates the power of capital of the capital system to give precedence to use value over the creation of exchange value. It defies the capitalist mechanisms of accumulation and development (Negri, 2005).

However, one may ask how ‘capital’ in-its-being for-itself could allow such integration to take place? (Mészáros, 2008: 43). It is a theoretical puzzle that may be resolved by assigning it a different role in the changed relational context as the framework of cohesive development suggests. For example, once it is seen as being separate from the capitalist mode of production that controls labour, it fosters cohesion between the deprived, including humans and nature, and contributes to the emergence of the transformative mode of production.

*Culture of cooperation, new organizational form and expansion of common*

It is inconceivable why the concept of culture, which is downplayed by the traditional Marxist account of historical change and development (O’Connor, 1988: 38), should not be weaved into the discussion on the growth of post-capitalist mode of production that reifies ‘cooperation’. Essentially, it is a culture of cooperation or comprehensive cooperation which is the cornerstone of the post-development mode of production
for new organizing principles of society and economy. The new logic of capital originates from this ontological basis of the real-world experience. The dialectics of progress of human society is then governed by the law of reciprocal altruism, not methodological individualism. Under the vision of economic democracy and with the emergence of a culture of shared identity, production relations lose their control over the productive forces in the transformative mode of production.

Production relations are three-sided in capitalist formation: first between the exploited and exploiting classes; second within the exploiting classes and third within the exploited classes. The first pertains to extraction of surplus-labour, the second to distribution and utilization of surplus product within the exploiters and the third to the mode of cooperation within the exploited classes in production (O'Connor, 1988: 7, 40, 105). The mode of cooperation is never derived from technical necessity in production, but it springs from the culture of shared identity (Johnson, 2013: 1). This is what promotes different production relations or social relations with a definite mode of cooperation. It is here that one must recognize that this definite mode of cooperation is itself a productive force (Korsch, 1938: 146).

It is different from cooperation arising from the technological determinism of Marx, as mentioned earlier, or Smithian division of labour that gives us the concept of 'social' productive forces (Korsch, 1938: 146). Here also, it is a social productive force, but the difference is that it is created by cooperation based on the culture of shared identity. While the former category of social productive force represents the technologically determined mode of cooperation that aims at maximizing profit, the latter aims at setting up a process of collective production and culture based on
value practices that are participatory and democratic and whose horizons are the welfare of the commoners and environmental sustainability. Actually, it is the difference between the logic of capital of two different modes of production. The emerging transformative mode of production captures the essentiality of the social organization with a definite mode of cooperation and culture of shared identity and counts it as a productive force in addition to science and technology.

In other words, new productive forces based on shared identity aim to expand the commons that benefits everyone at nobody’s cost. This is, of course, different from state-controlled commons that are far from being democratic and provide no scope for the accumulation of social capital that plays a crucial role as assigned by the transformative mode of production. One can cite worker-run cooperatives that have emerged in several parts of the world with the new logic of capital as commons that formulates new relations and extends the principles of conviviality. It is regenerative solidarity economics based on sharing that makes them possible not only to produce commodities but also ‘reverse social disintegration, environmental devastation as well as working on a new model of expropriation and appropriation’ (Barkin, 2019: 137).

It is a ‘new kind of interdependence and group mindedness, Tomasello argues, that went well beyond the joint intentionality of small-scale co-operation to a kind of collective intentionality at the level of entire society’ (Johnson, 2013: 2). It indicates new organizational forms of production as the constituent of the productive force of the post-capitalist mode of production. It is promoted by way of, for example, reinventing workers’ cooperatives, as indicated earlier, producers’ group or community-
based organization engaged in the production of goods and services and their exchange. The mode of ownership, if at all is granted, is determined by the cohesive forces of the workers and remains an independent creation of the workers. In any case, what is non-negotiable is that the enterprise/organization remains fully under the control of the workers in the transformative mode of production. The new form of organization as a productive force promotes the culture of integration, not alienation. It is, in other words, the emergence of self-organization with new cultural practices that require the creation of a niche structure as part of the structural transformation. There may, however, be serious challenges of restructuration of the organizational forms in the early stage of evolution of the transformative mode of production. For example, the tendency to move towards the growth of more material production than what the principle sufficiency allows may pervade these organizations. Such kind of deviation may be tackled by new institutions and social organizations that develop based on new productive forces and production relations and their complementarity. The state as an institution, as the outgrowth of the latter, can provide a regulatory mechanism or some policy of restraint to be followed by such organizational forms (Blauwhof, 2012: 260).

While these new productive forces seek to enhance the economic standing of their individual members, they are not profit-orientated. All their earning is used for the advancement of the common interests of the members rather than for distribution as profit. It hardly matters if these types of organizational form are branded as third sector organizations (TSOs) that can grow in response to ‘market failure’, especially in the low-income countries with a high transaction cost economy (Valentinov, 2008: 482). It may be one
of the ways that can be conceived as a new trajectory of change through the restructuration of the organizational forms. Their goal is to maximize utility by attaining self-sufficiency of all group members, although they may partially depend on market exchange (Valentinov, 2008: 479). Be that as it may. It all depends upon whether these types of organizational forms are able to meet the basic consumption needs of the people.

Reciprocal altruism

Exchange relations are primarily governed by reciprocal altruism in the transformative mode of production. The new logic of capital that originates from the principle of solidarity never allows the sphere of exchange to be the source of accumulation of profit at the cost of misery of both humans and nature. It serves the interest of the majority, the deprived, contrary to what it does for capitalists. It promotes exchange only to facilitate the interest of both the parties engaged in it such that no loss is inflicted on the other. And exchange benefits both self and others. In other words, the exchange is simultaneously both self-serving and solidaristic. Here self-interest is never allowed to be maximized at the cost of equity (Ray, 2012: 45). It is not necessarily true that profit-making at the cost of others is the only source of motivation and the individual needs to excel accordingly.

The new forms of organizations that grow based on economics of solidarity may open up the space for innovating other means than profit and design incentive structures to motivate the individual or the community to excel. It promotes a culture of mutual insurance for any transaction to materialize. If the non-price component of any transaction ranges from 5% to 95% in the market economy that functions at the dictate of the logic
of capital (Ekins, 1986: 275), one can comprehend how large could be the space for mutual insurance if the logic of capital changes based on the principles of solidarity. Reciprocal altruism then determines the mode of exchange in that the transformative mode of production gives rise to a system of production, consumption and transaction that, in turn, allows mutual growth of X and Y at no cost to Z (nature) or anyone else (Ray, 2012: 45). Since capital owes a different logic here and has allegiance to reciprocal altruism, it may not be detrimental to the operation of the system of transaction, production and consumption as desired by the transformative mode of production. These tenets are complementary to each other in this mode of production. This is unlikely in the capitalist mode of production, where relations of production are determined by capital or what capital desires by virtue of having its control over the production relations. However, since no such control is exercised by capital and a complementary relationship exists between the forces and relations of production, emergent transformative mode of production ensures mutual growth with a new rationale of investment, production and consumption. It opens up the possibility for thwarting a civilizational crisis and stopping the coevolution of humans and nature. The deprived could then discover the route for their emancipation.

**Qualitative metamorphosis**

The emerging transformative mode of production sees no reason why the role of qualitative growth in explaining the evolution of the society and economy is downplayed. It is the growth of the non-materialist aspect of human life that originates from human instinct and influences human activity. While analysing Marx's key link to human potential and
productivity, it is called the human product or social product (Lebowitz, 2017: 43). According to Marx, the human product is ‘rich human beings’ expressed in terms of the enlargement of human capacity. If enlargement of human capacity represents the richness of human beings, there are other forms too through which the latter can manifest. It can do so in the form of altruism (Trivers, 1971), empathy (Jahanbegloo, 2017: xxxi), compassion and consciousness of oneness with nature and other humans, both in the practices of Buddhism and Buen Vivir (Prayukvong, 2005: 1174; Chuji et al., 2019: 113) and communitarianism of Marx (Chakrabarti et al., 2016). All these forms reflect deeper tenets of the human species that foregrounds the interconnectedness and interdependence of all other species. Discounting the impact of these forms that originate in the spiritual domain of human beings on the evolution of the society and economy is tantamount to underestimating the evolutionary processes. Hence, the transition to the post-capitalist mode of production accounts for these non-material aspects of social life too.

It is here that one must go beyond Marxian thought and praxis that have chosen to side with ‘materialism’ alone to explain the transition to take place. One might assess the decisive impact of the non-material forces on the qualitative metamorphosis of the mode of production in the light of the lessons that one learns from the anti-systemic movements around the world. While in Marxian scheme of things, ‘spirit’ is completely separated from ‘matter’ as against their overdetermination, having had its tilt towards materialism, the essentiality of their mutual constitutivity in instituting social transformation is relegated to the background (Chakrabarti et al., 2016).”
Buen Vivir, the ontology of the indigenous people, however, brings mutual constitutivity back (Villalba, 2013: 1434) to the centre of the emergent mode of production and shows how it can explain alternative organizing principles of economy and society. The qualitative growth that may not differ from the ‘social humanity’ of Marx (Chakrabarti et al., 2016) stems, I argue, from mutual constitutivity that conceives material progress of the society towards being more humanistic, focusing on the individual and enhancement of quality of life (Walsh, 2010: 16). The ‘this-worldly’ spirituality of Dalai Lama echoes the same and explains how Marxian materialism and praxis of equal distribution and social transformation are not totally stripped off compassion, empathy and love (Chakrabarti et al., 2016: 6, 223). It demands reworking on the notion of economic progress based on the ineluctable fact of its alliance with all other spheres of life, including social, political and environmental. Hence, it suggests going beyond the technology-centric explanation of social transition and accepting the importance of emotions and their relational nature that creates room for a variety of sensitivities to co-exist.

The quality of life, as Buen Vivir asserts, must be defined within these spiritual parameters that go beyond satisfying the basic needs of life and fix an individual’s well-being in the total relational context between humans on the one hand and humans and nature on the other. Capra argues that a new science of qualities is slowly emerging in that creativity and the constant emergence of novelty are the driving forces for human evolution, which is no longer seen as a competitive struggle but as a product of cooperation (Capra & Henderson, 2009: 39). Hence, it is mutual constitutivity, a new productive force of the emergent transformative mode
of production that draws on both qualitative growth that resides in the spiritual domain of human action and quantitative growth that embodies material production being guided by the principle of sufficiency.

The decline in well-being because of the decline of employment opportunities within the value creation of limited material production, as apprehended, is countered here by way of calibrating utilization of materials and job creation (Weiss & Cattaneo, 2017: 227). For instance, ‘good’ growth can be promoted against ‘bad’ growth. In other words, such production processes and services are encouraged to grow that ‘fully internalize costs, involve renewable energies, zero emission, continued recycling of natural resources and restoration of the Earth’s ecosystem’ (Capra & Henderson, 2009: 42). The society and economy could benefit from it in two ways. On the one hand, they are small-scale projects but energy-efficient, non-polluting and community-oriented; on the other, they have the potential to create local jobs through investment in green technologies that decouples growth from the material need. The best way to achieve it is to follow the principle of utilizing human capabilities to meet human needs (Burton & Somerville, 2019: 103).

The alignment of this new praxis reifies improvement in the quality of life that promotes happiness in which wealth acquisition has no role to play (Easterlin et al., 2010). Its implication for reorganizing the economy and society is immense. Since the emerging mode of production is not driven by capital accumulation and profitability, its values and institutions and productive forces can be reorganized to scale up the quality of life and bring happiness to all, especially the deprived ones from all wakes of life based on the principles of cohesive development.
Part VI

In Place of Conclusion

The questions that the human race encounters today are: why have the vast majority of the people on Earth been disenfranchised? What evolutionary transformative process society and economy must choose that leads them towards enfranchisement? While no evolutionary process is independent of the course through which it chooses to evolve, the paper argues against the course that architected the organizing principles of the economy and society in 16th-century Europe for the advancement of the capitalist world economy. The calamitous impact of its organizing principles manifesting in the form of vast disenfranchisement of humanity, the paper argues, can be fought back only by changing the course of evolution. This is a powerful assertion and is not merely notional lacking empirical support. The paper counts the dialectical process of change that suggests an infusion of a new course of evolution based on social movements and radical transformative initiatives taken around the globe for the past few decades or so.

The characteristic features of the new course of evolution described in this paper can be explicated by the phenomenon called ‘Quantum entanglement’ discovered by physicists. According to this theory, in an entangled system, two or more objects have to be described with reference to each other. They behave as an inseparable whole even though they are spatially separated. Theoretically, if one separates the two entangled objects (particles), one would find that their velocity of spin is identical but in opposite directions. In other words, they are non-separable halves of the same entangled
entity (Sanghi, 2020). Reciprocal altruism, which says humans are both self-serving and solidaristic, may be understood as a manifestation of such entanglement. This is what represents human behaviour as an axiomatic truth, which is fundamentally against methodological individualism. The significant aspect is that it is in no way different from what evolutionary biology understands about human behaviour.

Similarly, one has reasons to admit how quantitative growth is entangled with qualitative growth and how together they could be the source of development. Further, one does not see hostility between spirit and matter, provided that their relations are viewed within the same quantum perspective. The mutual constitutivity between them demonstrates their entanglement, an intersection where mind, matter and love in the form of compassion, empathy and consciousness collude. It is this point of intersection that conceives transformative mode of production in the post-capitalist era. It is here that holistic and non-dualistic worldviews exist as quantum social theory suggests while emphasizing non-local entanglements. Consciousness and free will would then influence structure and systems and ‘reconﬁgure the world in its becoming’ with alternative social order (O’Brien, 2016; Barad, 2007)

Now humanity is left with no choice but to accept it to replace the old one and reconstruct the development paradigm with alternative organizing principles of society and economy. It is this that the paper ﬁnds its engagement to respond to meet this incontestable need. The inexorable forces of history stand to witness how the incongruous evolutionary process is corrected by cohesive development as the alternative development paradigm in the 21st century.
Notes

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1. Anti-systemic movement is a struggle against established power structure in an effort to bring into existence a more democratic and more egalitarian system than the existing one. ‘It explicitly or implicitly challenges legitimacy of a socio-economic system both in the sense of its institutions which create and reproduce the unequal distribution of power and also in the sense of its values which legitimizes domination of a human being over other human beings or society over nature’ (Fotopoulos, 2010: 4). Resistance movement can be interchangeably used as an anti-systemic movement if it is an integral part of the latter. However, if it is not so, it is a reformist movement that fails to challenge the socio-economic system that reproduces unequal power relations (Fotopoulos, 2010: 59).

2. For instance, at the national level, precise and analytically insightful documentation by Nilsen gives an account of several movements. These include the National Alliance of People’s Movement (NAPM) in India as a struggle against global capitalism and to seek a just and sustainable alternative model of development, movements by the
marginalized communities for empowerment from within, Narmada Bachao Andolan, etc. (Nilson, 2007: 271–92). In addition, there have been agrarian movements, movements against special economic zones (SEZ) (Ray, 2012). Several resistance movements organized at the international level can be said to have gone against global capitalism while some others not. For example, protest movements in France, Italy, Argentina, Brazil, Paraguay, El Salvador, Mexico, Guatemala and Colombia were essentially resistance movements against the loss of employment, cuts in social security, etc. However, movements such as the peasant movements in Mexico, the Brazilian landless workers movement, the FARC movement in Colombia, social movements in Argentina, Brazil, Bolivia and Ecuador are all against global capitalism (Petras & Veltmeyer, 2005). The new social movements that are manifestations of the new social conflict over autonomy, quality of life, human rights, political participation, environmental degradation, etc. are, needless to mention, shaped by the global capital system (Císar, 2015). The massive resistance movements organized by the peasants and Adivasis (tribal) in India in the recent past gives testimony to how solidarity between people from varying social, religious and economic backgrounds can develop collective understanding to achieve common objectives (Dhawale, 2018). Kothari et al. (2019) have documented several such social movements and radical transformative initiatives taken around the globe.

3. It all began with the basic assumption of mainstream economics. Following the footstep of Newtonian physics, it assumes that individuals are atoms. Human behaviour is, therefore, governed equally by the same laws of gravitation that govern the cosmos. It means that each one has the same gravitational pull. They are assumed to be unconnected from each other who interact by exchanging goods and services in the market. This is, however, antithetical to existentialism that allows variability between individuals who are not atoms but differ from place to place and change their opinion and behaviour. To assume that no variability exists between individuals, Jevons ‘single average individual’ as the unit of which population is made up is postulated as a proven analytical mode in mainstream economics (Orrell, 2010: 15).

4. As pointed out by Fotopoulos (2010: 29), the problem was that there was no counter organization at both the political and cultural levels, and the movement was organized on a bureaucratic basis. This gave enough leverage to the state that could foil the movement with the help of the powerful elites that controlled the state.
5. It is downsizing of economic throughput as measured by the material and energy flow. It is estimated that the collective material footprint of humankind is 1.7 times the available biocapacity. The available biocapacity is determined by the global ecological footprint. The global ecological footprint is measured in terms of the area of the biologically productive land, water required to produce goods consumed and to assimilate the wastage generated (Burton & Somerville, 2019: 100).

6. In 1865, Stanley Jevons observed that efficiency of coal use increased due to an improvement in technology, but it, in turn, led to an increase in consumption of coal in a wide range of industries.

7. According to Daly, ‘Steady state economy is an economy with constant stocks of people and artifacts maintained at some desired, sufficient level by low rates of maintenance “Throughput” by the lowest feasible flows of matter and energy’ (Daly, 1991). Daly also talks about constant stock of physical wealth that J. S. Mill discussed in his book, Principles of Political Economy, while defining what he means by ‘stationary state’. Mill argues that if the economic expansion is to stabilize or reach a steady state, economic goal of the society could then shift to the qualitative aspect of existence rather than mere quantitative expansion.

8. For instance, it is methodological structuralism or methodological institutionalism to Hodgson (2007: 9); for Watkins (1952) it is methodological holism at one end while individualism at another end. Having recognized the tension between methodological individualism and methodological holism, Prechter offers his concept of social mood in his socio-economic theory to bring about integration between them (Prechter & Robert, 2003). According to Pepper (1942), it is a synthesis of contextualist and organicist worldviews. For, it is socio-economic context that creates social mood which may be encouraging or discouraging for all to behave accordingly. The perception arising out of social mood context may have some reason to integrate methodological individualism with methodological holism. For depending upon the socio-economic context, social mood coordinates all individual, instinct, habit and creativity together on the one hand, and social institutions on the other (Parker, 2006). It is a kind of integration between the individual and institution outside of individual that may provide some scope for treating self-centeredness as not the only determinant of individual rationality.
9. ‘In evolutionary biology, an organism is said to behave altruistically when its behaviour benefits other organisms, at a cost to itself.’ Altruism is advantageous at the group or association level, especially from the point of view of survival of all members of the group. A group containing many altruists may have a survival advantage over a group composed only or mainly of selfish organisms, which go extinct. However, the behavioural pattern relevant to the present purpose is the one that benefits both the self and others. It can evolve much more easily than altruistic behaviours in that it goes beyond kinship. This is precisely the advantage of reciprocal altruism in that individuals may not be members of the same species. See Stanford Encyclopedia of Philosophy, 2008, ‘Biological Altruism’, https://plato.stanford.edu/entries/altruism-biological/. (It was first published in June 2003. However, it underwent substantive revision in July 2013.)

10. Self-preservation or self-interest is generated through the biological processes of living beings, including genes, cells, nerves, and the brain. The same biological processes that are antithetical to self-preservation also work to produce symbiosis and cooperation Engels, The origin of the family, private property and the state (1972) and L. H. Morgan, Ancient society (1980), as cited in Basu (2000).

11. Here, we do not see any reason to enter the debate whether human consciousness and, therefore, material progress is the gift of the Hegelian ‘world spirit’ or the same is the product of matter, as the materialism of Marx and Engels stresses. We would not even debate the ‘modern reason’ as many idealists stress as the source of material progress. It may be the human reason, in the form of simple logical thinking or transcendental reason, in the form of a spiritual director or a combination of the two (Peet & Hartwick, 2010: 144).

12. Alexander Wendt argues that this truth is discovered in the field of quantum mechanics that shows how the assumptions of classical physics (Newtonian) break down at the subatomic level. According to classical physics, human beings are atomistic and, therefore, separate. The mainstream development paradigm draws inspiration from it. But the subatomic systems can be entangled, which means that they can’t be defined as being separate from each other. This is the quantum perspective that suggests we are holistic and we are entangled. Cooperation is much easier to achieve in this situation. However, if we start with the premise that social life is atomistic, Wendt argues further, then every organism is out for itself, we
are all selfish, and it’s all about survival of the fittest. Cooperation is very difficult to achieve in such a situation, for we all are separate and trying to survive in our own way (Wendt, 2014–15).

References


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