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**1. Introduction**

Over the past five decades, neo-classical free-market capitalism with its emphasis on modernization and economic growth has been the dominant development paradigm (Lyson 2009:293). But statistical indicators expose the failures of the current economic paradigm in terms of inequality and poverty. According to World Bank statistics, in 2006 the world was so out of balance that twenty percent of the world's population consumed eighty-five percent of the goods and services, while half of the world's population lived on less than two dollars a day and approximately 1.2 billion people on less than one dollar a day, which is categorized as extreme poverty (Nieuwenhuys 2006:59).

This trend does not seem to reverse. In the report ”Outlook on the Global Agenda 2015” by the World Economic Forum, income inequality is presented as one of the key challenges of our time. The report documents the shortcomings of the current economic system:

In developed and developing countries alike, the poorest half of the population often controls less than 10% of its wealth. This is a universal challenge that the whole world must address. (WEF 2014)

In addition to that, the world is now facing new and very serious problems that will force us to rethink our strategies and goals for development: global warming and natural resource scarcity. Scientists are making it clear that climate change resulting in global warming is a serious global challenge. The current level of carbon dioxide in the atmosphere is at an alarming 398.5 ppm in conjunction with the levels for the past 650,000 years it never exceeded 300 ppm (NASA Climate – Evidence 2014). The increased concentration of carbon dioxide is resulting in a global surface-temperature rise which affects all ecosystems, weather systems, and consequently human livelihoods.

The effects of climate change in Latin America are, according to a report by the Intergovernmental Panel on Climate Change (IPCC):

Gradual replacement of tropical forest by savannah in eastern Amazonia; risk of significant biodiversity loss through species extinction in many tropical areas; significant changes in water availability for human consumption, agriculture and energy generation. (NASA Climate – Effects 2014; IPCC 2007:50)

Ergo, we are rapidly approaching the point where the environmental damages will cause human living conditions to change dramatically, unless this process is reversed now. In an article in The Guardian, Desmond Tutu calls global warming the new apartheid and says reducing the carbon-footprint of humanity is not only a technical scientific necessity, but the human rights challenge of our time (Tutu 2014). It is the responsibility of the entire human race to take action that will halt global warming and mitigate climate change. From a historical point of view, the industrial development in the countries in the global North is the main culprit, which is why one could argue that the greater responsibility lies at the shoulders of the global North. However, there is no reason why environmental and ecological considerations should not be incorporated into current development policies and strategies in the global South as well, thereby assuming common responsibility towards future generations.

Water and food insecurity is a central concern of the United Nations' Food and Agriculture Organization which stated in a report from 2013 that a total of 842 million people were estimated to be suffering from chronic hunger[[1]](#footnote-1) (FAO, IFAD & WFP 2013:2).

A recent report from the World Bank emphasizes the urgency of switching to a green and sustainable growth strategy where economic growth is not at the expense of the environment. The report proposes an inclusive growth in order to ”achieve the urgent development needs of the world's poor” (World Bank Report 2012:13). This notion of sustainability, however, remains conditioned by the overall premise of creating economic growth, and why that is a problem will be explained in the theory section and elaborated upon in the analysis.

Indeed, climate change and resource depletion are interconnected and both affect human livelihoods now and in the future. In order to mitigate the threats of climate change and address the challenge of natural resource scarcity, we must experiment and elaborate on environmentally as well as socially sustainable development models and adjust them to their socio-economic and geographical contexts. Gandhi's wise words are worth remembering:

There is enough in the world for everybody's need, but there cannot be enough for everybody's greed. (Mahatma Gandhi)

**The scope of this study and the motivation factors behind**

How to meet the needs of the poor in a sustainable way is the overarching theme for this study. Worldwide, indigenous peoples[[2]](#footnote-2) generally constitute the poorer of the societal classes (World Bank 2010). The demographic and geographic scope of this thesis is, however, narrowed down to indigenous peasants in Southern Mexico, mainly Chiapas. Mexico is interesting because it has an ancient cultural heritage, great ethnic variety of indigenous peoples, criollos[[3]](#footnote-3) and mestizos[[4]](#footnote-4), along with a rich biodiversity in natural areas covering almost everything from desert to tropical rainforest.

Examining the ethnic composition in Mexico, approximately 10.5% of the population is indigenous based on statistics from 2009 (CDI Indicadores 2009)[[5]](#footnote-5), the major concentration being situated in Chiapas and Oaxaca (INEGI 2010). According to statistics from the National Council on Political and Social Development (CONEVAL), 72% of the indigenous population (8,2 mio. people) were in conditions of poverty by the end of 2012. Out of these 72%, 26.6% were in the category of extreme poverty. Compared to the non-indigenous Mexican population, only 7% are categorized as living in extreme poverty (CONEVAL 2012).

According to the Mexican Institute for Statistics and Geography (INEGI) in 2010, six out of ten speakers of a native languages[[6]](#footnote-6) live in rural areas in which 70% of the inhabitants are subsistence peasants, the majority of whom earn less than a minimum salary per day (Fuentes 2013:2). 81% of the indigenous population lack access to social security compared to the 59% of the non-indigenous population, while 59.7% of indigenous people don't have access to basic housing services[[7]](#footnote-7) and 34.4% lack access to nutrition (CONEVAL 2012).

Clearly, there is a need for social change for the indigenous people in Mexico; the question is how to facilitate an improvement of living standards in concordance with the wishes of the indigenous peasants themselves and without causing further damage to the environment.

The aim of this thesis is to question the sustainability of the capitalist development paradigm, which is based on economic growth and further industrialization, in the context of Mexican indigenous resistance and degrading ecosystems. Much of the indigenous critique is concerned exactly with the effect of industrial modernization on the environment and their cultural heritage. Therefore, it is logical to turn to the social movements and environmental theories in the search for viable solutions.

Over the past decades, there has been an increasing global focus on ecologically sustainable development strategies such as that of agroecology, which has been advocated especially by non-governmental organizations and indigenous movements from a bottom-up perspective (Martinez-Alier 2002). Within recent years, though, the growing environmental consciousness has lead a few governments to subsidize ecological initiatives and incorporate some of the ecological principles into their policies (Garibay & Ugas 2009:184).

The contradiction between this new trend and the conventional development policies will be further examined in the course of this study, which will also engage in a discussion of different conceptions of development.

**Research question**

The indigenous populations are often referred to as ”underdeveloped” and ”retrogressive” by political elites and pronponents of mainstream development because they have managed to build a persistent movement of resistance to the growth-based development paradigm, which has for centuries imposed top-down development policies onto indigenous communities as part of a process of industrialization and a modernization (Beaucage 1998; Mukonoweshuro 1993; García 2007).

With that in mente, the rationale of this study is that of re-thinking development by incorporating elements of the indigenous vision of life along with ecologically sustainable practices.

The problem statement that serves as the basis of analysis is the following:

*Why are the indigenous peasants of Chiapas, represented mainly by the Zapatista movement and Otros Mundos Chiapas, critical of capitalist development and does the agroecological approach of community-based development adopted by the two movements show potential to be a viable alternative?*

**The issue of representation**

The interests of the indigenous peasant communities will mainly be represented through an indigenous resistance movement, the Ejercito Zapatista de Liberación Nacional[[8]](#footnote-8) (or the Zapatista Army of National Liberation) and a non-governmental organization, with members of mixed ethnicity, concerned with ecological sustainability and indigenous rights, called Otros Mundos (Friends of the Earth, Mexico). The choice of reducing the scope to indigenous peasants should be seen in the light of the focus on agroecology in terms of food sovereignty[[9]](#footnote-9) and community empowerment, but since some of the sources used in do not make this distinction, there is a slight risk of misrepresentation. Of course, precautions will be taken in order to minimize this risk.

The Zapatista movement has been chosen because of their influence on the improvement of living conditions for the indigenous peoples in the southern region since the 1990s and because of their reference to Emiliano Zapata, leader of the peasant rebellion during the Mexican Revolution 1910-20 (McLynn 2000). The EZLN is not supported by all of the other indigenous communities in Southern Mexico, but their historical achievements are widely acknowledged[[10]](#footnote-10). The choice of including Otros Mundos is based on their combined focus on the rights and living conditions of indigenous peoples as well as the ecological consequences of development projects managed by the Mexican authorities or transnational corporate enterprises (Otros Mundos 2008). This socio-ecological scope is relevant, since climate change and resource scarcity has to be considered within a development context if the current tendencies are to be reversed. Although Otros Mundos is an organization of mixed ethnicity, it is still relevant for this study because its main preoccupation is indigenous peoples' rights and welfare and it disposes of a database of first hand indigenous *‘testimonios’*. The organization sends members on workshops to indigenous communities all over Central America to teach them about legal, territorial, cultural, and political rights as well as environmental issues (Otros Mundos 2008).

The strategy of using the Zapatistas and Otros Mundos as the main voices of the indigenous communities is a deliberate choice of simplification. There are a number of small-scale, community based indigenous resistance movements in Southern Mexico, but including them all as individual communities would require more pages, time and resources than are available for this thesis. Apart from that, only a limited amount of documentation of the activities and demands of these communities has gone viral which means it would require a field study to gather enough empirical data for a thorough analysis. Of course, there is a risk that the increased degree of generalization, which is an inevitable consequence of simplification, will be at the cost of some specific cultural variations among the indigenous communities, but a focus on the general political demands for socio-ecological justice and democracy rather than a meticulous, case-specific analysis of all of the cultural varieties strengthens the level of applicability of the conclusions of this study to similar developmental conflicts in Latin America that involve indigenous people. However, this study will comprise some case-specific cultural elements in order to provide an understanding of the premises and basic philosophical assumptions behind the indigenous agenda.

The agroecological approach presents an alternative to mainstream development because it embraces both the cultural, social, and environmental aspects of a food system and draws on traditional agricultural knowledge, thus allowing for a holistic and interdisciplinary perception of development. This approach started out as, and still mainly is, a bottom-up strategy where social movements and scientists put pressure on governments in an attempt to convince them to accepting and facilitating agroecological community-led development projects, but it has gradually been expanding its capacity as a top-down strategy in which the agroecological principles are included in the legal framework of a state and implemented through societal institutions, for example in Brazil's ”National Policy for Organic Production and Agroecology”, the first in the world (Agricultures Network 2014).

**Presentation of chapters**

The following chapter addresses the methodological foundations of the theories employed in this triangular research design, those of Political Ecology, Marxism and Postmodernism. The theoretical chapter will discuss the structural relationship between society and nature, the issue of sustainability on basis of Political and Marxist Ecology, and the scientific foundations of agroecology, while critical- and post-development theory will be employed as an actor-dimension in order to address and conceptualize the criticisms of modernity and mainstream development by the indigenous movements. Inequality and injustice, both in ecological and social terms, are key concepts as the driving forces of the indigenous movements and will be addressed both in the theory section and the analysis. The analysis begins with a short history of the modernization process followed by an analysis of the Zapatistas and Otros Mundos as protagonists for social change. Their critique of capitalist development and neoliberal globalization is contextualized within their marginalized situation in Southern Mexico and analyzed in relation to their defense of habitat and livelihood. Lastly, the compatibility of agroecology with the indigenous objectives for social change is assessed as well as its potential as a sustainable and just alternative to the neoliberal development paradigm.

**2. Methodological considerations**

Any scientific investigation is based on a set of fundamental philosophical assumptions which influence the entire research process. These assumptions are characterized as ”a basic set of beliefs that guide action”,(Guba 1990 in Creswell 2009:6), also known as worldviews, or conceived research methodologies. Basically, the objective of addressing these fundamental questions is to clarify how the assumptions influence the study in order to increase the validity of the outcome.

This thesis is adopting an advocatory worldview, based on the nature of the research subject being of normative character. An advocatory worldview holds that research needs to be intertwined with politics and a political agenda, because its purpose is to draw attention to marginalized groups, oppression, domination, alienation, inequality, empowerment, etc., and it combines well with critical theories. (Ibid.)

The idea of this study on a theoretical level is to contribute to the debate on sustainable development, advocating for the combined strength of social and natural sciences in finding a viable and visionary solution to the social and environmental problems this world is facing. On a practical level the purpose is to promote and raise awareness of the importance of ecologically and socially sustainable development strategies which embrace the demands of the marginalized indigenous peasants Mexico for social change.

**Strategy of inquiry**

The research is based on a transformative strategy of inquiry, which means that a theoretical lens is forming the entire research process as an overarching perspective. Such a lens provides a framework for the choice of topic, the approach and data collection, as well as the outcome of the study. It was first mentioned by Greene and Caracelli in 1997 in their definition of ”a transformative design, that gives primacy to value-based, action oriented research” (Creswell 2009:67).

The thesis relies on a combined Marxist and Postmodernist critique of mainstream conceptions of development in which economic growth is considered to be more important than social wellbeing and ecological sustainability. It is normative and political[[11]](#footnote-11) in the sense that it aims at contributing to the reflections on how to create a better, more just world and a more harmonious relationship between humanity and nature, drawing on Marx's thoughts on the role of societal theory. Marxism, as one of the ‘grand narratives’, has a perspective of totality, in which the different components and levels of society cannot be understood or analyzed separately, but only in their interrelationship. Political theory therefore has to be part of the general theory on society. Furthermore, the general theory is political in the sense that it is meant as a contribution to the critique and process of social change in the existing capitalist system. (Kaspersen & Loftager 2009:424) The political character of Marx's theory distinguishes it from the contemporary conception of the relationship between science and politics in which the scientist is conceived as an external observer or spectator. Marx advocates a participatory perspective on theory and its function because science, too, is part of the total social process. (Kaspersen & Loftager 2009:426)

This position on the role of science adopted by this thesis is to some extent connected to the issue of subjectivity which will be discussed in the following chapter.

**Subjectivity and bias**

There is an ongoing debate within the scholarly community regarding the issue of subjectivity. Some scholars are of the opinion that science is objective, whereas others claim that there is no such thing as objectivity in science, and especially not within social science. This epistemological debate goes as far back as to the first modern philosopher, Descartes (1596-1650), who argued that cognition and true knowledge of the reality is possible through pure rational thinking and the methodological doubt. The thinking subject is defined as an observer who is unaffected by impacts from his surroundings. (Edgar & Sedgwick 2008:39) The Cartesian definition of subjectivity is criticized, among others, by German philosopher, Heidegger (1889-1976), who argues that humans as ”beings in the world” cannot view the world ”from an 'objective' perspective that is external to it, as a spectator (...). Rather, we actively relate to our world, and this relationship is constitutive of that world” (Ibid.). Thus, there is a contradiction in claiming that social science researchers can reach a pure and objective truth, when they themselves are part of the very processes they are investigating.

The participatory conception of subjectivity is adopted in this thesis, because, there is “no such thing as theory in itself, divorced from a standpoint in time and space” (Cox 1981:128). This way, a study will always to some degree be influenced by the personal experiences and attitudes of the researcher, whose task it is, however, to include relevant empirical data whether it contradicts the personal beliefs or not.

The perception of subjectivity presented by Heidegger and Cox has been taken to a new level by an interdisciplinary tendency called Science, Technology, Society (STS), which argues that creation of knowledge is always influenced by the personal worldview of the scientist and thus disagree with the conventional notion of an epistemological breach between natural and social or humanistic sciences. Randi Markussen[[12]](#footnote-12), asserts that no scientific research can be completely objective and refers to a study from the 1960s made by sociologists at the University of Edinburgh, indicating that natural scientists are just as subjective in their approach to research as are social scientists. The wording of the research questions and the perspective they use often reflect personal values, attitudes, and ethical stance. (Hildebrandt 2009:1)

Steen Brock, dr. phil in Physics-Philosophy, conducted a more recent study on the nature of the scientific methods researchers used, in order to determine whether they are general and objective or specific and subjective. He came to the conclusion that every researcher followed his own rationale and developed his own specific method and that was the case regardless of the faculty he belonged to. (Ibid:3)

Combining elements from natural, social, and cultural science, this study joins the new interdisciplinary tendency. There is no substantial epistemological breach between natural and social sciences when accepting the results of the above mentioned studies which claim that all knowledge is, to some extent, subjective. Of course, there are differences in the approaches of the respective faculties, but often these differences diminish in an interdisciplinary study because each element in the method is selected based on its interrelationship and epistemological similarities with the rest.

Having discussed different notions of subjectivity, the distinction between subjectivity and bias remains to be commented on. Kumar (2011:5-7) is very precise:

Subjectivity is an integral part of your way of thinking that is 'conditioned' by your educational background, discipline, philosophy, experience and skills. (...) Bias, on the other hand, is a deliberate attempt to either conceal or highlight something.

Since subjectivity is a natural condition of being human, it is bound to influence the conducted research, but the risk of a personal bias can be minimized by including several perspectives and being consecutively critical of the research process and the researcher's own conclusions as well. Furthermore, the more empirical data there is to corroborate the conclusion, the more the validity of the study increases.

**A triangular research design**

Due to the complexity of the research question, this study utilizes methodological and theoretical triangulation, i.e. more than one method and theory is used to interpret the collected data in order to increase the validity of the analysis and overcome the limits and biases inherent in studies that employ a single method or theory (Yeasmin and Rahman 2012:156; Ayoub et al. 2014:67). Since the main actors of this analysis are social movements, “triangulation offers an approach for enhanced theory-building and deeper understanding that allows for a more holistic picture of complex phenomena“(Ayoub et al. 2014:68). The selected theories and their methodological foundations will be presented in the following paragraphs.

**Theoretical interdisciplinarity**

The object of critique in this thesis is the neo-liberal development model which has conditioned the process of capitalist globalization of the past three decades. The epistemological basis of this worldview regards humans as autonomous, self-directed, rational actors, in liberalist terms 'homo economicus'. The idea is that humans have unlimited opportunities, and by means of free economic markets and technological innovations they will emancipate themselves from the restraints of natural resource scarcity. As Nieuwenhuys (2006:58) explains:

The expectation is that economic, political, social and cultural differences would disappear if all countries were to introduce such a free market. The world would then be populated by free individuals who would enter into transactions with each other on basis (...) their own interests. Ultimately, a peaceful, homogenous, universal democratic capitalist world order would arise, based on Anglo-American norms and values such as individual freedom and freedom of property (...)

However, this thesis is based on an entirely different worldview in which human consciousness is perceived as being conditioned, but not determined, by societal structures and the human-nature relationship is interdependent. The theoretical foundations vary from a Marxist to a post-development approach including new development models such as agroecology. Since agroeclogy is a whole-systems approach involving not only the individual communities but also affecting the entire societal structures, it challenges the hegemony[[13]](#footnote-13) of the capitalist system through insisting on the importance and value of cultural and environmental diversity as opposed to the homogenizing effects of economic growth and commodification.

The above listed issues call for an interdisciplinary theoretical approach in which concepts from the natural and social sciences are merged and their reciprocity contextualized in order to address both the socio-economic, cultural and, ecological aspects of development.

**Methodological foundations of Political Ecology**

Political Ecology is a theoretical branch under Ecological Economics[[14]](#footnote-14). This approach places economic systems and their activities inside ecological systems in insisting that the former must be limited by the latter in order to ensure ecological sustainability (Norton in deLaplante, Brown & Peacock 2011:385). In the words of Martinez-Alier, ”this was first focused on the definition of ecological limits to growth, followed by more systematic examination of the pattern of flows of energy and materials in the economy, with emphasis on the intergenerational allocation of energy and material resources and on the valuation of externalities” (Martinez-Alier 1987:viii). The aim of Ecological Economics is to draw attention to the existence of exhaustible resources and the ecological consequences of neglecting them in mainstream economic theory. Interestingly, applied energy analysis found that modern agriculture was less efficient than the traditional agriculture, which is contradictory to the judgment of conventional economics. (Martinez-Alier:2-3)

Indeed, the approach of Ecological Economics -and to an even greater extent that of Political Ecology- challenges the belief system and methodologies of conventional economics.

The overall theoretical frame of this thesis will be centered on a discussion of the human-nature nexus in which Political Ecology (PE) offers a useful terminology and relevant reflections:

Political Ecology brings a critical perspective to third world environmental studies, which emphasizes the analytical importance of justice and equity issues, but is also subject to the fiercest of debates about its origin, purpose and transformative impact. (Schmidt 2004:iv).

PE scholars criticize mainstream environmental and economic research of having reached an impassé when suggesting technical, short term policy solutions to poverty and environmental degradation without comprehending the complexities of third world environmental problems. (Ibid.) Classical and neo-classical approaches interpret the man-nature relationship as the individual rationality of decision-making over scarce resources which transforms nature into an economic entity on mainstream economics, dissolving the holistic totality of nature into individual natural resources useful to mankind and leaving the remains as useless externalities (Altvater 2004:3).

The dissolution of the entirety of nature into an agglomeration of single natural resources, and then the application of a set of analytical instruments based on methodological individualism (Schumpeter 1908) in order to rationally guide the management of resources is alien to the Marxian concept of ecological economics. (Altvater 2004:3-4)

Methodological individualism perceives society as atomic individuals (nomines oeconomici) operating in a timeless and spaceless rationality-based world. Marx claims social individuals are embedded into a historic societal system and dependent on nature and its limits. (Ibid: 4) Therefore, rationality is socially bounded in the perspective of the society-human-nature totality.

Contemporary resource wars in Asia, Africa, Latin America and the Middle East expose the inability of mainstream economics to explain the reality and the necessity of a model which encompasses all the contradictions of our times. As concludes Jean-Paul Deléage (1989):

Moving beyond the limits (...) and adopting the 'standpoint of totality' is the only methodological choice that can serve as a serious basis for an analysis of the relationship of society to nature (Altvater 2004:3).

Consequently, the Political Ecology approach encompasses both the socio-political and environmental perspective and understands them as intertwined and interrelated. Furthermore, PE

adopts a North-South perspective and suggests, that ”the colonial history of global economic integration and dependency, environmental degradation, and central political control is conditioning environmental use and conflict in postcolonial times” (Ibid.) in the South.

**The ontology of Marxism**

Since the Marxist terminology constitutes a substantial part of the theoretical framework of this thesis, its methodological foundations need to be clarified independently of those of Political Ecology. Ontologically speaking, Marxism is based on Historical Materialism. Materialists believe that there is an objective reality which is independent of mind and spirit, while idealists perceive matter as dependent on mind and spirit and that mind and spirit is capable of existing independently of matter (Britannica 2014). Thus, the materialist view holds that ideas arise as reflections of the material conditions.

In the introduction to the Communist Manifesto by Marx and Engels (1848:1), they claim that ”[T]he history of all hitherto existing society is a history of class struggles”. The Marxist notion of history as class struggles applies dialectics as a means to explain social and structural change. Originally, the idea of motion and transformation in natural as well as societal processes in the dialectical worldview was opposed to the stagnant and fixed ontologies of mainly theological approaches to natural science (Engels 1883). What Marx and Engels refer to by class struggle, is, however, a structure-actor dialectics[[15]](#footnote-15) explaining systemic transformation throughout history.

Freeman and slave, patrician and plebeian, lord and serf, guild-master and journeyman, in a word, oppressor and oppressed, stood in constant opposition to one another, carried on an uninterrupted, now hidden, now open fight, a fight that each time ended, either in a revolutionary reconstitution of society at large, or in the common ruin of the contending classes (Marx & Engels 1848).

In the words of Curt Sørensen, Marxist dialectics reflect an intermediate between Durkheim's structuralist ontology of social objectivity and Weber's actor-oriented interpretation of social change. According to Durkheim, human existence is subject to the objective reality, ergo, humanity is transformed because of a societal change, not vice versa. Weber, on the contrary, sought to explain social change as a causal effect of human actions.  
Marx sought to reconcile the two extremes through his focus on the dialectics between social actions (*gesellschaftliche Verhalten*) and societal relations (*gesellschaftliche Verhältnisse*). He did not manage to avoid some degree of inconsistency throughout his scientific works, but it was his intention to maintain the dialectics between societal relations and social actions (Sørensen 2014:1). He further explains that Marx saw structural relations as ”objective”, i.e. not merely as arbitrary ”discursive articulations” that one can change in a day, but at the same time he acknowledged the long term transformation of structural societal relations generated by the activity of previous generations.

Generation after generation, human practices produce societal relations (structures) through their economic production, which contains elements of both cooperation and conlict per se, and through their political and ideological struggles. These structures constitute the 'objective circumstances' of the new generation, but are also transformed by this, whereby new structures emerge (AT: Sørensen 2014:2).

Sørensen is convinced that Marx was not an evolutionist in spite of some evolutionary tendencies in his assertions on the self-destructive processes of capitalist production. He bases his interpretation on Marx's concept of class structures, identified through the specific relations of exploitation. This means that classes are not merely economic categories, but categories of politico-economic exploitation and power.

In spite of its potential relevance to this analysis, the current of Cultural Marxism (of the Frankfurt School: Gramsci, Lukacs, et al.) has not been given much attention in this study. According to Sørensen (2014:6), the cultural aspect is already covered by Marx's multidimensional sociological concepts of ‘relations of production’ and ‘class’ in which power relations and ideological relations are included.

Here, however, a post-modernist inspired cultural dimension will be applied along with the PE approach in order to comprehend the indigenous world view represented through the Zapatistas and Otros Mundos. Indeed, it would be possible to conduct the analysis solely by applying a Marxist conceptual framework, but the fact that the Zapatistas specifically combine Marxist and post-modern approaches (this will be documented in the analytical section of the thesis) in their analyses and discourses as well as their symbolic actions should also be acknowledged in a study of this specific form of resistance. Moreover, the relational ontology brought into the theoretical discussion by Transition Discourse is indispensable for facilitating an understanding of the indigenous perspective in the development debate.

**Postmodern methodological foundations**

Social constructivism ”brings a symbolic interactionist approach to the study of collective action by emphasizing the role of framing activities and cultural processes in social activism” (Buechler 1995:441). In the Social constructivist view, what is crucial to social movement analysis is an understanding of the variable contexts of social interaction implicit in the formation and transformation of the symbolic contents of movements and simultaneously ”articulating this dynamic process in relation to action-orienting and constraining features of the larger sociopolitical environment of institutional practices, mass media, issue arenas, and societal norms and cultural values” (Lee 2007:18).  
Postmodernism rejects the idea of objective truths, one of the basic premises of the scientific tradition of the Enlightenment. Instead it perceives the reality as socially and discursively constructed:

Searching for the meaning rather than the cause of observed or studied phenomena, poststructuralists and postmodernists in social and development theory (...) view facts as *social constructions*, mental constructs with no empirical referents and with meanings that are internal to the discourse that gave rise to them. (...) Society can be seen as 'purely a discursive phenomenon, a product of the different codes, conventins, language games or signing systems which provide the only means of interpreting experience' (Petras & Veltmeyer 2003:85).

The problem of post-modern efforts to dismantle and dissolve the entire modernization project in a fragmented way, though, is that the forces of capitalist modernization continue to resist (Petras & Veltmeyer 2003:83). Moreover, this thesis does not approve of the extreme relativism resulting in the rejection of universal ethics and truths, although universality is viewed as a problematic issue, especially in relation to culture. Yet, universal claims of e.g. human rights serve as a crucial tool in resistance movements.  
The social constructivist view is helpful in terms of accounting for the ”flows and ebbs” of environmental protests and the shift of public interest form one issue to another, but in order to explain and reveal de facto power relations a complementary theoretic tool is necessary.

[T]he relentless clash between economy and environment cannot be permanently silenced by socially-constructed hopes of angelical dematerialization. This clash goes together with the exercise of de facto property rights on the environment, with the dispossession of natural resources for other groups. All this gives rise to grievances over real issues. Hence the birth of Political Ecology. (Martinez-Alier 2002:70)

The methodological foundations of post-modernism, however, are presented in order to provide a basic understanding of the basic assumptions of post development theories such as Transition Discourse whose premises and arguments to some extent are adopted by the EZLN and Otros Mundos.

**Methodological incongruences**

Obviously, there are some methodological differences among the theoretical positions within this thesis to be aware of. The Marxist approach is adopting a materialist and systemic perspective of structure-agency dialectics in the examination of power structures relating to the production process, whereas the emerging tendency of post-modern approaches to development holds an idealist and actor-oriented perspective by including notions of identity politics, representation, and discourse in relation to environmental struggles (e.g. Neumann 2005). The force of a Marxist theoretical approach is its understanding of the dialectic dynamics of the man-nature relationship and social transformation. This focus provides the analytical instruments for revealing oppressive structures in a given society and a strong method in terms of conceptualizing the needs for social change. This explains why Marxist inspired movements prove theoretically superior to non-Marxist green movements (Burkett 2009:92).

The force of the post-modern line of thought is that it opens a space for the examination of the significance of culture and spirituality in indigenous resistance movements.

Triangulation, however, acknowledges the methodological differences as a means to gain several perspectives on the analysis. A framework of this character allows for the specific indigenous dimension, for which a classical class analysis would be inadequate, to be dealt with on its own conditions and by using indigenous terminologies. As Tucker suggests, any development process concerning indigenous peoples should originate from a respectful dialogue with these peoples, in which indigenous cosmologies are included in the reconstruction of the concept of development (Tucker 1999:20). Indigenous cosmologies (Cosmovisiones) understand the human-nature relationship as characterized by respect and humility to a greater extent than in Western views, where nature is subjected to man. In order to start a dialogue with these worldviews, ”we must transcend the dualistic forms of thinking that oppose reason and spirituality, locking them into incompatible mind-sets” (Tucker 1999:20-21) This is exactly what post-development theories such as Transition Discourse offers by providing the notion of a 'pluriverse' and the acceptance of the spiritualist ontological dimension which is why this theoretical combination provides a more nuanced and realistic interpretation of the development conflict in Southern Mexico.

In order to grasp the different perceptions of development presented here, the origins of the concept must be addressed.

**3. A short history of development as a concept and a practice**

Development as a concept and a policy-area had its origin in the post-World War II era, when president Harry S. Truman proposed a ”fair deal” to the world in 1949 (Escobar 1995:3). As a result of the rise of the USA as a superpower against the Soviet Union during the Cold War, the emerging developing world was now of interest to the US foreign policy. The prevailing assumption on development at that time was, based on the *The Stages of Economic Growth* by modernization theorist Walt Rostow, a causal chain ”from cultural modernization to economic development to democracy” (Randall and Theobald 1985 in Haynes 2008:20-21).

Perceiving developing countries as a homogenic mass with shared characteristics of poverty, technological backwardness, and a preponderance of ”tradition” over ”modernity”, the premise of Modernization Theory was a sort of assimilation of the developing countries to the liberal democracies of the West (Haynes 2008:21). What modernization theorists emphasized was that governments of developing countries were interested in increasing economic growth by enlarging their productive capacity (Ibid.). With that in mind, however, it is relevant to mention that ”90% of today's developing countries were, at one time or another, colonial possessions of a handful of Western powers, including: Belgium, Britain, France, Germany, Italy, Japan, the Netherlands, Portugal, Spain and the USA” (Haynes 2008:2). Although the process of decolonization in Latin America began in the early nineteenth century, the descendants of the Western colonists are still constituting the political and economic elite in many Latin American countries, including Mexico, and have, in many cases, more interests in common with Western countries than the poorer classes and the indigenous peoples of their own countries. Despite the support from the elites in Latin America, some scientists believe that modernity has led to social disintegration and fragmentation. According to Vincent Tucker, industrialization has converged with the erosion of democratic rights. He claims, that even the democratization process that followed the military dictatorships in Latin America ”led to a deepening of clientalism, to the privatization of public goods, and to neglect of the poorest sectors” (Tucker 1999:9).

A reaction to the modernization discourse, which in practice meant a subordination to North American imperialism, was the emergence of Dependency Theory in Latin America in the 1960s. The dependency approach had a critical, anti-imperialist vision of development, but in practice it tended to mirror the national and statist path of the modernization approach, Tucker states. With the collapse of the Communist world in the late 1980s, dependency theory suffered a setback, but out of the ashes arose critical perspectives based on ecology, feminism, and countermodernism, Tucker continues.

The 1980s also marked a shift in mainstream perception of development which occurred along with the process of globalization. The development establishment began to emphasize the interrelatedness of national economies and began measuring development in terms of the integration of development countries into the world market, which marked the beginning of the neoliberal era.

The World Bank in its 1980 *World Development Report* 'oficially' signalled the end of the long-running definition of development as nationally managed economic growth. Henceforth, 'development' would measure the extent of participation in and integration with the world market (Munck in Munck & O'Hearn 1999:199).

With the rise of neoliberalism and the accelerated globalization, mainstream development discourse saw a revival of the modernization approach, slightly modified towards issues of ecology, gender, and culture. (Munck & O'Hearn 1999:xiv)

Despite its attempt to adapt to a changing reality, mainstream development discourse maintains a linear perception of progress while failing to account for the ecological consequences of a growth based economy, just as it fails to recognize the indigenous perspective. Alternative and critical development theories such as Political Ecology, Critical and Post-Development Theory provide a much more adequate conceptual framework for this type of analysis. Their key concepts and notions will be presented in the following paragraphs.

**4. Political Ecology**

Political Ecology embraces a variety of definitions, but a common trait in all PE research is an examination of the connection between environmental change and political processes understood as relations of power (Robbins 2004:5-7). Martinez-Alier defines the scope of PE as ecological distribution conflicts, by which he refers to conflicts over the ”social, spatial, and inter-temporal patterns of access to the benefits obtainable from natural resources and from the environment as a life support system, including its 'cleaning-up' properties” (Martinez-Alier 2002:73). In other words, PE explores the connection between poverty and wealth, environmental degradation and politics and links third world problems to broader politico-economic forces linked to the global expansion of capitalism, taking into account the importance of context, space and time (Schmidt 2004:v).

The field of Political Ecology was originally created from a merge between anthropology and rural geography into what Martinez-Alier calls ”cultural ecology” (Martinez-Alier 2002:70). One of the founding fathers, according to Martinez-Alier, was Netting, a cultural ecologist who used an adaptionist approach in his work on peasantry and sustainable agriculture. Netting's work, based on field-work in a number of countries, praised the ability of peasant economies to absorb population increases by changing cultivation systems and saw peasant agriculture as more energy-efficient as industrial agriculture. An idea of limited popularity in the 1960s-70s, but which has experienced a 'revival' in the growing political movement of ”eco-agrarianism” or ”eco-Zapatism” (Martinez-Alier 2002:72), especially with the emergence of the agroecology approach which is a merge between traditional indigenous practices and new science-based knowledge. Scholars disagree on whether there is a Marxist PE or not. This study argues that Marxism, indeed, has a great deal to offer in this field.

**Marxism and Ecology**

Political ecologist, Martinez-Alier, accuses Marxist theory of neglecting the ecological limitations in terms of exhaustible resources in relation to the concept of 'production'. According to Martinez-Alier, the availability of resources, waste disposal, and intergenerational allocations, is not considered, which, he concludes, makes the concept of 'production' in Marxist economics no different from that of mainstream economics. Although Marxism provides an interdisciplinary approach to history, it does not comprise a 'natural history' (Martinez-Alier 1987:219-223).

Marxist Political Ecologists do not agree. There have been attempts to refine Political Economy in Political Ecology, e.g. at philosophical level such as John Bellamy Foster's and Altvater's contributions in which they argue for the existence and relevance of an Ecological Marxism.

In a lecture in the Monthly Review, Foster draws attention to the very ecological dimension of Marx's work in Capital I and II, where he incorporated the notion of metabolism[[16]](#footnote-16) into his analysis of the material exchange between nature and society, i.e. the labor process and production is defined as the metabolic relation between man and nature (Foster 2013:2).

Foster suggests that Marx developed a notion of sustainability around Justus von Liebig's (1862) work on soil chemistry, where he problematized the robbing of the soil's nutrients as a result of the industrialization of agriculture in a capitalist system. Marx points out the immanent destructive force of capitalist industrial rationality in agriculture in Capital I:

...all progress increasing the fertility of the soil for a given time is a progress towards ruining the more long-lasting sources of that fertility. (...) Capitalist production, therefore, develops technology, and the combining together of various processes into a social whole, only by sapping the original sources of all wealth — the soil and the labourer (Marx 1867:638).

This is a key factor for the aggravation of ecological and environmental crises.

In the words of Foster, Marx argued in Capital that ”no one owns the earth, not even all people together (...). They have to maintain and improve it for future generations” (Foster 2013:2).

The issue of responsibility to future generations is a central element within environmentalist thought and will be further elaborated on in the paragraph on sustainable development.

Furthermore, Foster identifies the Marxist inspiration within ecosystems theory by going back to Arthur Tansley, founder of the British Ecological Society. Tansley developed the concept of ecosystems, which borrowed the dialectics from Marxist systems theory as well as Darwinian ideas. Later, Howard W. Odum (1924-2002), who is considered the founder of systems ecology in the post World War II period, saw the issues of unequal ecological exchange and ecological imperialism in a similar way to Marx's notions of metabolism and use value. He used this framework in his analysis of the ecological robbery of the global South by the global North through a system of ecological imperialism, explained in terms of the imbalance in commodity prices between the countries of the South and those of the North. (Foster 2013:4)

Apparently, Marx has had a great influence on ecological thought, and an example of the far-sighted nature of Marx's thinking is his concern over the role of movements of isotherms, i.e. the temperature zones of the Earth, in the species extinction in 1878 (Foster 2013:4), which still today is a very relevant concern within environmental debates.

In the following paragraphs, the basic ideas of Marxism regarding the man-nature relationship and the issue of power relations will be explained.

The double character of labour

Altvater identifies the link between man and nature in Marx's notion of the labor process defined as a ”transformation of natural material and energy into use values, which serve the satisfaction of human needs” (Altvater 2004:6).

There is a dual-sidedness to Marx's concept of labor since it both produces use value to satisfy the needs of humans and exchange value which refers to the exchange of commodities on the market in a monetary or capitalist society. Labour, Altvater explains, is only useful and necessary insofar as it satisfies needs. ”The social character of labour, therefore, can only be conceptualized as a unity of exchange value and of use value production” (Altvater 2004:5). The value production is simultaneously shaping and being shaped by the nature-society relation, as human beings are social and natural individuals.

Marx elaborates on the concept of labor adding its ability to produce surplus value, thereby reproducing capital and exploitation of labor as a social relation, as an infinite process. The societal relation of commodity owners has nothing to do with nature. Even money represents only a societal relation which is immaterial and unnatural although the exchange of commodities has a material and energetic quality. (Altvater 2004:5)

Capitalist expansion and the valorization of nature

The transformation of natural material into value through production is explained in the physicist terminology of the laws of thermodynamics, in which the inputs and outputs in energy and matter units are quantitatively the same, but qualitatively they have changed into value and waste. Men and nature are equally important in the process from input to output, but in the process of exchange value production only labor can produce surplus value. (Altvater 2004:7)

The contradiction between limited natural resources and limited needs on one hand and the unlimited accumulation of capital is explained within the production of surplus value which is translated into capitalist accumulation and economic growth. Labor’s value production is bound to the limits that nature sets to human activity. Therefore, both labor and nature are the sources of material and use value-production. But in the labor process, nature is ”humanized” in the sense that it is tapped of its resources in the beginning of each production process and used as a waste bin in the end. (Altvater 2004:8)

Thus, capitalist mode of production influences all spheres of live, including nature. An important concept in that regard is the process of commodification or valorization of nature. Altvater explains it as the extension of markets into the natural sphere. The market is a social and economic construct in which things produced by nature (e.g. birds and trees) have to undergo a process of valorization in order to be exchanged as commodities (Altvater 2004:7). Therefore, it is ”labour power spent under the social condition of being subjugated to the capitalist process of value and surplus value-production” (Altvater 2004:7) that transforms nature into a commodity.

In other words, during the process of the capitalist expansion of market economies into nature, the logic of capitalist accumulation divides everything into either raw material for the production of use and surplus value, or useless resources without value. By separating valuable raw material from the useless, ”the integrity of nature inevitably is going to be disintegrated – and a disintegration of nature is its destruction” (Altvater 2004:18). As empirical evidence for this assertion can be mentioned the destruction of rainforests, as a consequence of the valorization of timber, happening faster than the natural reproduction of new trees which shows that the unevenness in the time regimes is one of the main reasons of irreversible ecological destruction.

This is the ecological consequence of Marx's notion of capitalist expansion, i.e. what is commonly referred to as globalization. It is a process that takes place in the coordinates of time -understood as acceleration- and space -in terms of expansion, since expansion only is possible insofar as boundaries, both natural conditions and political institutions and regulations, are removed. (Altvater 2004:19)

Reversibility and irreversibility

Capital is following the logic of reversibility since the surplus value is reinvested into the production process, thus producing more surplus value which allows for interests to be paid.

Nature, in contrast, is characterized by irreversibility. Growth processes of living beings like plants and animals are following the law of entropy.

At the end of the process there is something qualitatively new (in the rationality of reversibility, the quality remains the same, whereas the quantity of the same quality changes)

(Altvater 2004:19).

This qualitatively new product cannot be reproduced with the same energy and matter, hence there is a risk of resource depletion unless it is an open system where new energy and matter is supplied. Marx describes this double-sided tendency where the ”anthropocentric” transformation of matter and energy as a means to satisfy need (i.e. through a process of commodification) results in a deterioration and degradation of nature. The ecological reason of the globalization of environmental problems is displayed in the attempts of avoiding a decline in the value production due to increased global entropy by including new and recently virgin parts of the Earth into capitalist structures of valorization. (Altvater 2004:20-21)

Ergo, the labor process is productive and destructive at the same time, because matter and energy is transformed in the process of exchange value and surplus value production, which results in an increase of entropy. According to Altvater, Marx views the development of the productive forces as positive for mankind because it serves as basis for a communist society in which everybody lives in according to his or her needs.

The binding restriction in this society is not the self-referential valorisation of capital but the human measure in a humanised society. Since men and the needs are part of the natural reproduction cycle, the new social formation, which distributes wealth according to human needs, is also thought of as a society of reconciliation of men and nature (Altvater 2004:9).

Foster explains Marx's definition of communism in Capital III as the *rational regulation between nature and society,* which emphasizes Marx's consideration of sustainability within the notion of production as well as in his critique of the capital and the analysis of class relations (Foster 2013:2).

There are, however, recent Marxists who argue against the growth-based development of the productive forces, because economic growth has already caused too much ecological damage. In his paper on ”Ecologcial Productive Forces”, Jesper Hoffmeyer (1977) refers to a Marxist critique of the growth-based economies by Hartvig Sætra (1973), who saw the cause of ecological destruction in the underlying mechanisms in capitalist production. According to Hartvig, the transition to socialist forces of production is one condition to be met in order to solve the ecological problem, but what is essential to a viable solution is a conceptual and practical reconstruction of development which is not based on economic growth (Hoffmeyer 1977:8).

Monopoly capital and crises

According to Altvater, the direct cause of ecological destruction is the inequality created under the capitalist mode of production:

Very often ecologists say that poverty is one of the main causes of ecological destruction, and the World Bank especially follows this assumption. But this is not true. It is inequality and injustice, which is detrimental not only to social cohesion but also to nature. (Altvater 2004:11)

In a spatial context, the poor must struggle to satisfy basic needs while the rich have the resources to expand their ”environmental space” and exclude others from using it. Their practices are characterized by overconsumption and, therefore, the ecological footprint of the rich is much larger than that of the poor. The CO2-emissions of an average North American citizen in 1999 were 20,2 tons, whereas an average Brazilian polluted by 1,8 tons. And empirical studies of e.g. poor settlers in the Amazon show that they overuse their small land lots because wealthy land owners speculate in land as a means of accumulating profits. (Altvater 2004:11)

Foster (2013) goes further and introduces the concept of ”monopoly capital” in order to explain the reason for ecological as well as social crises in a capitalist system. He describes this phenomenon as a market saturation due to the monopoly tendency of capital that has gathered extreme amounts of wealth in the hands of the few at the cost of a poor majority. As an example of this inequality, 400 individuals in the United States own as much wealth as the bottom half of the population. Market saturation refers to the problem of absorbing the surplus value accumulated through a growth rate of maybe 2-3% per year for the past hundred years due to the expanding productivity, Foster explains. This raises the question of how to keep promoting continued capital formation on that basis. The solution has been to build waste into the production structure in the form of marketing, which have turned sales into the cause of production rather than the satisfaction of basic needs. So waste actually represents a destruction of use value by penetrating into the production, thus forcing people to pay for the waste along with the product. On top of that layer of waste built into the production system, the financialization system is built, Foster argues, as another layer of destruction of use value. In terms of metabolism, all the waste is threatening the environment, because the ecological systems are conditioned by our production system.

What humanity needs, Foster concludes, is a society geared to substantive equality and ecological sustainability. These elements are interdependent, since the cause of both the ecological and social damage is the same thing, namely the metabolic rift in the production system, the alienation of nature which is also the alienation of human society. In Marx's perspective, these things are a whole, and their integrity need to be restored. (Foster 2013:5-6)

So, in contrast to the critique of Marxism by Martinez-Alier, Altvater's and Foster's conclusion is that the Marxian concept of the man-nature relationship provides the better understanding of the contradictions and dynamics of the relation between economy, society and environment (Altvater 2004:21).

Property, power relations and social change

Marx perceives power relations in terms of a base – superstructure view of society in which the mode of production, determined by the ownership of the means of production, condition social consciousness and the degree of freedom of man:

In the social production of their existence, men inevitably enter into definite relations, which are independent of their will, namely relations of production appropriate to a given stage in the development of their material forces of production. The totality of these relations of production constitutes the economic structure of society, the real foundation, on which arises a legal and political superstructure and to which correspond definite forms of social consciousness .

(Marx 1859: preface)

The significance of the ownership of the means of production reveals itself in the question of power in relation to freedom. In a society built upon the existence of private property, where only a small part of the population has ownership of the means of production, competition and exploitation will hinder the exercise of equal rights as basis of human freedom.

In the Communist Manifesto Marx writes that the historical struggle over property and political power is a class struggle. He further states that class division has never been more evident than under the social form of capitalism, where the structural power is formed in such a way that the ruling class (the bourgeoisie), who owns the means of production, controls the underclass (the proletariat) by leaving them with no other option than to sell their labour power in order to survive. Thus, the instrument by which power is exercised is money. (Marx & Engels 1848:1-4)

Social transformation, according to Marx, is explained through the dialectic method as a reaction to discordances between the productive forces and the relations of production:

At a certain stage of development, the material productive forces of society come into conflict with the existing relations of production or – this merely expresses the same thing in legal terms – with the property relations within the framework of which they have operated hitherto. From forms of development of the productive forces these relations turn into their fetters. Then begins an era of social revolution. The changes in the economic foundation lead sooner or later to the transformation of the whole immense superstructure. (Marx 1859: preface)

Imperative to the revolutionary processes that alter societal structures is the formation of class consciousness and the development of the productive forces.

The role of the state in Marxist theory is, in an interpretation by Sørensen (2014), also explained within the class dimension. Throughout history, the state has supported and sustained the dominance of elite classes and assisted in the accumulation of surplus value, in other words, it is not seen as a neutral entity as in liberal theory (Lee 2007) but the state also has an autonomous dimension in the building of nations and the overall societal development.

Thus, Sørensen claims, history is not conceived as an inevitable evolution of phases, but as a series of successive forms of exploitation, and any social analysis must center on the concrete form of exploitation and the constellations of power relations in a specific space and time. At the same time, the state and the social classes must also be understood in relation to their actions within the context of the historical processes. This dissociation from a priori conclusions regarding causal chains presupposes an analysis within the context of space and time.

Chase-Dun & Hall (2006:249-250) link capitalist promotion of private property and competitiveness to environmental degradation.

Capitalism seems to contain a powerful incentive to externalize the natural costs of production and other economic activities, and individual capitalists are loathe to pay for the actual environmental costs of their activities as long as their competitors are getting free ride. This is a political issue in which core countries in the modern capitalist system have been far more successful at building institutions for protecting the national environment than non-core countries. And, indeed, there is convincing evidence that the core countries export pollution and environmental degradation to the non-core.

They argue, that neoliberal ideological hegemony will not succeed in halting socialist challenges because of the prevalence of the structural causes -being uneven development, increasing inequalities, and environmental degradation (Ibid).

Culture and ideology

For Marx and Engels, the cultural ideas of a given epoch reflect and legitimatize the interests of the dominant class by merging into ideologies. In the words of Douglas Kellner (2004:1), a 'third generation' critical theorist of the Frankfurt School, ”'[i]deology is a critical term for Marxian analysis that describes how dominant ideas of a given class promote the interests of that class and help cover over oppression, injustices, and negative aspects of a given society”. He continues explaining the Marxian critique of ideology as an attempt to reveal the systematic reproduction of the interests of the ruling class as a means to naturalize the existing societal order and the established institutions (Kellner 2004:2).

Critique

Ronaldo Munck (in Munck & O'Hearn 1999) criticizes Marxism of being in favor of the modernist development paradigm. He has a point regarding the evolutionist tendencies in Marx's acknowledgement of the development and global expansion of the capitalist system as a necessary historical stage in that it provides the economic and technological foundations of the envisioned societal end-stage, communism. But regardless of whether Marx had a positive attitude toward capitalist development or not, historical materialism and its dialectics still provides the analytical tools for a systemic critique of capitalism which is a crucial element in the perception and organization of counter systemic forces as part of a resistance movement or in the process of finding long-lasting alternatives to capitalist development. Moreover, Marx's notion of metabolism is crucial to revealing the paradox of eternal economic growth in an environment of limited resources.

Metabolism and Marxist dialectics provide a relevant basis for understanding the historical and present social transformation as well as exposing the systemic structures that impede sustainable development. In the words of Petras and Veltmeyer (2003:82):

A reconstituted class analysis, with a focus on both structural factors and forms of political struggle, still provides the most useful approach to an understanding of the dynamics of social change and development in the rural sector of Latin American society.

The strength of Marxism is that it offers a dynamic understanding of power relations and takes the historical and contextual conditions of a given society into account.

**The concept of sustainable development in Political Ecology**

The concept of sustainability entered the global political agenda with the Brundtland Report by the World Commission on Environment and Development in 1987. This report clearly states that development towards satisfying the needs of present generations must not compromise the ability of future generations to meet their own needs (WCED 1987:8).

There is an immanent conflict within the concept of sustainable development. The conflict is often presented in one of two interrelated ways; either as a conflict between the desire for economic growth translated into human welfare, or between the rights of the present and future generation to fullfil their needs. Desmond McNeil explains the methodological difference between the two perspectives:

The former should give rise to hypotheses, which are empirically testable. The latter necessarily moves into the ethical/political arena; but academic research should nevertheless be able to make some contribution here too. (McNeil 2004:32)

McNeil also mentions a clear North-South dichotomy as well as a contrast between the global and the local within the development debate with regards to the prioritizing either people (poverty alleviation) or nature (conservation). The environmental agenda of the Global North has prioritized conservation of nature over poverty alleviation. In the words of Indian environmentalist Vandana Shiva, ”...the North (as the globalized local) has all rights and no responsibility, and the South has no rights, but all responsibility” (Shiva in Sachs 1993:154). She refers to the G7 who decides upon a forest convention obligating the developing countries to plant trees, but without granting the Third World power to demand reduction of fossil energy in the industrialized countries. This raises the ethical question of whether the North has a right to impose its self-interested development visions upon the South in a self-appointed position of representing the global rather than the local. (McNeil 2004:40-41) According to Martinez-Alier (2002a:24) the global and local is linked within the international NGO environmental movement, where the relations between local and global concerns are established through single-issue networks or organizations, or through specific programs and campaigns of confederal organizations such as Friends of the Earth which Otros Mundos Chiapas is a member of.

In the view of Nicola Bullard (2011:141), the concept of sustainable development offered by the Brundtland Report still depends on growth and accumulation and does not facilitate the fundamental change necessary to restore the environment. Therefore, she calls for a revision of how development is perceived.

When we consider the state of the world and the routine failure of ‘development’ to feed, house, clothe, educate and care for the invisible majority, the word no longer has any moral or even practical content. Similarly, confronted with collapsing ecosystems, toxic environments, soil depletion, climate chaos, disappearing species and finite fossil fuels, does sustainability even make sense when there is so little left to sustain? Instead, we should be talking about regenerating and restoring what has been destroyed.

She refers to the Indigenous Peoples of the Andes who speak of the ultimate crisis as the ‘civilizational crisis’ which obliges us to reimagine what it means to‘live well’, *‘Buen Vivir’* and concludes that ”the brightest hope for system change lies with the ever-growing movement for climate and ecological justice” (Bullard 2011:142).

The issues of ecological justice and North-South inequality in terms of both resources and responsibility are to be further elaborated in the following paragraph. In order avoid confusion, the Global North may also be referred to as the West as a common designation based on world views and politico-economic structures which makes up for the geographical inaccuracy.

**Environmentalism of the poor**

Martinez-Alier identifies three currents within environmentalist thought which are concerned with sustainable development in distinct ways: The first current, which he calls ”the cult of wilderness” takes a conservationist stand in relation to the protection of pristine natural areas. The second current, the ”gospel of eco-efficiency”, centers on the effects of economic growth, urbanization, and modern agriculture on the environment. The third current which is more relevant for this thesis is the one Martinez-Alier refers to as ”environmentalism of the poor” or ”the environmental justice movement[[17]](#footnote-17)” (Martinez-Alier 2002:10). He justifies the relevance of the term by referring to the conflicts over ecological resources and livelihood:

Many social conflicts today and in history, have an ecological content, with the poor trying to retain under their control the environmental resources and services they need for livelihood, and which are threatened by state takeover or by the advance of the generalized market system. (...) Though the social groups involved in such conflicts are often quite diverse, the “environmentalism of the poor” is a convenient umbrella term for social concerns and for forms of social action based on a view of the environment as a source of livelihood.” (Martinez-Alier 2002a:40)

Contrary to the Brundtland report which emphasizes environmental damages caused by poverty, environmentalism of the poor reverses the causal chain and explain how poor people defend the environment (in rural situations, but also in cities) against the state or the market (Martinez-Alier 2002a:42). This current points out that economic growth and unequal distribution of resources causes negative environmental impacts and emphasizes the displacement of sources. At the ethical level, it prioritizes the rights of the present generations over those of the future. In the words of Martinez-Alier (2002:11), ”[i]ts ethics derive from a demand for contemporary social justice among humans”. This movement sympathizes with and comprises indigenous resistance movements by appealing to indigenous territorial rights and the sacredness of Nature in order to defend the livlihoods of these marginalized peoples (Martinez-Alier 2002:11). A central argument is that indigenous and peasant groups have often co-evolved with Nature by applying sustainable and organic farming methods. Some scholars, however, problematize the Western tendency of 'romanticizing' indigenous culture (e.g. Redclift 2002) and question whether the lack of access to chemicals due to poverty is part of reason, while others claim the practices of organic agriculture to be embedded in naturalistic epistemologies and belief systems (IUCN 1997).

The agroeclogical model with its complex farming systems and crop variations is increasingly popular in organizations representing peasant groups while the agroecological scientists such as Miguel Altieri[[18]](#footnote-18) provide academic support. This trend has been pushed forward by global NGOs such as RAFI (Rural Advancement Foundation International), GRAIN (Genetic Resources Action International) and the international peasant movement, Via Campesina, aided by the debate started by the United Nations Food and Agriculture Organization (FAO) on 'farmers' rights' and 'sustainable agriculture'.

The environmentalism of the poor is a growing global current, emphasizing ecological distribution conflicts which are conflicts over traded or untraded environmental resources or services. Martinez-Alier explains:

As the scale of the economy increases, more waste is produced, natural systems are damaged, the rights of future generations are undermined, knowledge of plant genetic resources is lost, some groups of the present generations are deprived of access to environmental resources and services, and they endure a disproportionate amount of pollution (Martinez-Alier 2002:12).

The central element in relation to the ecological distribution is social and environmental justice, which is the common objective of both most indigenous and peasant movements. The demand of justice manifests itself in territorial, political and cultural disputes with the state or corporative actors and originates from a link between ecological and economic distribution conflicts, both globally in terms of the unequal resource distribution between North and South and locally, especially in poor countries. These conflicts are not only about protecting the environment, but simultaneously struggles for improvements of living conditions for workers and peasants (Martinez-Alier 2002). Livelihood or subsistence in a modern society refers to economic security, i.e. essential goods are acquired by means of monetary exchange relations, as opposed to past societies where these goods were mainly secured outside the market (Martinez-Alier 2002a:42). In Southern Mexico, though, indigenous peasants live off their land at the edge of the traditional and the modern society which means their livelihoods are both dependent on monetary exchange relations and access to farmland for subsistence agriculture.

In line with Martinez-Alier, Nieuwenhuys contests the neoliberal concept of social justice which implies classical rights to freedom as individual rights to property, thus manifesting itself in the supremacy of private over collective property (Nieuwenhuys 2006:62). She agrees with Martinez-Alier, Foster and Altvater on the fact that mainstream economic theory does not account for externalities and brings ”human welfare” and a responsibility of private actors towards the maintenance of ”public goods” into the discussion of social justice:

[I]f the extraction of raw materials or the production of industrial goods takes place at the expense of nature and human dignity, this is a loss of a public good which needs to be compensated (Nieuwenhuys 2006:62)

She, along with Sen, Pogge and Buitenweg (2001), advocate an alternative concept of social justice ”in which material rights to freedom and the distribution of wealth exhibit a pride of place” (Ibid). By that, they refer to the obligation of a societal system to provide fundamental subsistence needs of the population, i.e. food, accommodation, education, healthcare, access to clean drinking water, etc.

This critical conception of social justice challenges the mainstream development concept and requires a contextualization of the concept in the critical tradition in which the indigenous voice is emphasized. Consequently, theoretical and practical issues of development will be discussed through a critical lens while conceptualizing its paradigmatic transition especially in Latin America.

**5. Critical development theory**

In a critical paper, Vincent Tucker deconstructs the mainstream Western concept of development, underlining negative implications such as Eurocentrist systematized control of societal and environmental development in the Third World:

The development discourse is part of an imperial process whereby other peoples are appropriated and turned into objects. It is an essential part of the process whereby the 'developed' countries manage, control and even create the Third World economically, politically, sociologically and culturally. (Tucker 1999:1)

Tucker criticizes the perception of development as a ”natural process” and refers to it as a mythology, understood as shared beliefs and symbols of the West. Thus, he emphasizes the importance of the cultural dimension of the development process in order to match the degree of importance given to the economic dimension.

Cultural homogenization has been carried out as a part of the expansion of capitalism during the past two and a half decades, according to both Marxists[[19]](#footnote-19) and critical development theorists. Also, a key notion in Zapatista thought concerns the cultural imperialism of the West in the Development Establishment[[20]](#footnote-20); an imperialism which has been thoroughly imposed on the indigenous population through neoliberal policies in Mexico during the past two decades, but whose Eurocentric[[21]](#footnote-21) roots date 500 years back to the colonial epoch (Santos 2010:11-20 and Gutiérrez 2012).

A central theme in Tucker's critical development theory is the question of unequal power, a trait it has in common with Political Ecology. But in spite of global hegemonic forces penetrating all aspects of life, resistance is always present. Tucker's assertion of how ”hegemonic situations contain the seed of its own liberation” (Tucker 1999:14) is based on the insights of social movement theorists, who emphasize the various forms of emancipatory forces. As examples are given feminist and environmentalist movements, who constitute global counter systemic forces, on one hand, and small-scale unorganized forms of resistance on the other. As for the latter, they often rely on implicit understandings and informal networks, which can constitute a culture of resistance. Tucker mentions Scott's (1985) research on peasant networks in the Third World, which concludes that they rarely ”risk outright confrontation with the authorities over taxes, cropping patterns, development policies, or onerous new laws; instead they are likely to nibble away at such policies by non-compliance, foot-dragging, deception” (Tucker 1999:14-15). Tucker interprets this tendency as a cultural struggle over meanings and symbols, not a struggle in the domain of production as would Marxist systemic theory. By exclusively focusing on the cultural dimension, however, this approach loses some of the analytical strength which is characteristic for e.g. Marxist inspired movements.

**Countermodernity and postmodernity**

Critics of development have united in a counter-modern movement which is dismissive of the attempt of the development establishment to incorporate a green perspective on growth-based development and campaign for 'anOther' development. Theorists of the Other development prioritize self-reliance, sustainability, cultural pluralism, and human needs (Munck & O'Hearn 1999:201). There are, however, points of critique as well as positive potential for the antidevelopment or alternative-development cluster. Kate Manzo (1991) has applied Derrida's concept of logocentrism[[22]](#footnote-22) to development theory demonstrating how difficult it is for alternative development conceptions to emancipate themselves from the their source of critique which is that of economic growth as the basic engine for development. She explains the limited success of counter-development with the fact that it is not taken seriously, because ”[w]ho, indeed, would reject the seemingly impeccable logic of economic growth and global interdependence to articulate stagnation and autarchy?” (Munck & O'Hearn 1999:203). Yet there are strong tendencies of alternative development in Latin America, such as the *'Buen Vivir'* which has managed to articulate a contra-capitalist notion of development that has been institutionalized into national policies in Andean countries, e.g. Ecuador and Bolivia.

A postmodern critique presented by Santos (2010:13) addresses the dualism of the modern development paradigm in its inherent distinction between the 'modern' and the 'traditional'. Furthermore, he argues, the modern world has claimed monopoly on its universal distinction between true and false in terms of scientific validity. This irreconcilable duality impedes a progressive post capitalist alternative. If this dualism is to be overcome, development theory needs to undergo an epistemological and ontological change in order to articulate an inclusive concept of development which encompasses a certain degree of relativism. Santos (2010:31) proposes a ”post-abyssal”[[23]](#footnote-23) conception of Marxism[[24]](#footnote-24) in which the struggle for emancipation of the working class is to be fought in unity with the poor classes of the Global South who are oppressed but not necessarily exploited by global capitalism.

Social movements, Munck adds in line with Santos, are indeed symptoms of a crisis of development per se, but they also articulate a 'post-development' approach in the postmodern tradition which offers a new horizon of possibilities. Although Latin American countries remain trapped in modern and even pre-modern problems, the hybrid cultures of af this region are also postmodern 'avant la lettre'. (Munck & O'Hearn 1999:206-8)

The new social movements, according to Munck, are symptomatic of the new post-modern developmental paradigm, which perceives social change as a fragmented, discontinuous process with a growing stress on identity politics and the cultural domain. Ideas of community, democracy and development are being reinvented, especially in Latin America, combining the 'old' political struggle for power or resources with a cultural struggle for identity.

New Social Movement (NSM) theory developed in continental Europe as a response to the inadequacies in terms of economic reductionism[[25]](#footnote-25) of classical Marxism for analyzing collective action (Buechler 1995:441) and for linking social change mainly to the working class. It draws on Tourain's (2002:90) definition of social movements ”as conflicts between organized actors over the social use of common cultural values”. NSM theory contains both the macrohistorical and microhistorical elements of social movements; the former concentrating on the larger economic structures and the role of culture in contemporary movements and the latter on issues of identity and personal behavior (Pichardo1997:411). Pichardo continues, ”NSM demands are believed to have moved away from instrumental issues of industrialism and economic redistribution to quality of life issues of postmaterialism” (Ibid.), a tendency that is reflected in the concept of *'Buen Vivir'*.  
According to Tourain (2002:92), the reference of the new movements is not to a certain type of civil society, but to a process of social transformation, to a process of globalization (...) demonstrating the predominance of a cultural fundamentalism against modernism and capitalism together.

Su H. Lee (2007:9) describes NSMs as a shared designation for ”non-class specific and regionally diversified contemporary collective demands and actions”. NSMs have been identified with community-based citizen demands, grassroots networks, diffused protest activities, and recognized movement organizations and they encompass environmental, identity, self-help, and voluntary local associations (Ibid.).

As agents of social transformation, NSMs constitute an important role in the creation of alternative perceptions of development and modernity. A relevant contribution to post-developmentalist theorizing in terms of overcoming the dualism[[26]](#footnote-26) of the modern development paradigm is Arturo Escobar's notion of sustainability in terms of development as a discursive process of transition.

Sustainability as transition towards a ”pluriverse”

In an effort to make the concept of sustainability in development more tangible, post-development theorist Escobar highlights current narratives on transition, referred to as Transition Discourses (TD) as a new approach to development. These involve radical proposals for moving towards what he calls ”a pluriverse” (Escobar 2011:138). This notion is based on relational ontologies or worldviews that contest the presumption of One World -a universe- in modern ontology and is best defined, in the words of the Zapatistas, as a world in which many worlds fit.

Relational ontologies are those that eschew the divisions between nature and culture, individual and community (...) At their best, it can be said that the rising concepts and struggles from and in defense of the pluriverse constitute a post-dualist theory and a practice of interbeing[[27]](#footnote-27) (Escobar 2011:139).

Some TD scholars also articulate the urgent need for post-fossil fuel economies. Vandana Shiva argues for a transition 'from oil to soil', from a mechanical-industrial paradigm centered on globalized markets to a people- and planet-centered one based on strategies of re-localization understood as:

[T]he construction of decentralized, biodiversity-based organic food and energy systems that operate on the basis of grassroots democracy, place-based knowledge, local economies, and the preservation of soils and ecological integrity (Escobar 2011:138).

This ”ecology of transformation” (Hathaway and Boff 2009) is opposing most globalization-discourses and advocate for a diverse economy with a strong base on communities. TD often focus on spirituality in contrast to the secular academies of the West and propose a biocentric turn away from the anthropocentrism of modernity. The notion of *'Buen Vivir'* is an example of this shift in that it is based on a philosophy of life that ”subordinates economic objectives to ecological criteria, human dignity and social justice” (Escobar 2011:138).

Escobar advocates for dismissing the notion of globalization because of its modernist connotations in terms of a global space that will be fully occupied by capitalist modernity. Instead, he proposes the term ”planetarization” to describe the Earth in a holistic way:

Rather than in terms of globalization, the evolving pluriverse might be described as a process of planetarization articulated around a vision of the Earth as a living whole that is always emerging out of the manifold biophysical, human, and spiritual elements and relations that make it up. (Escobar 2011:139)

This approach requires an ontological design of ”building worlds in which humans and the Earth can co-exist and flourish” (Ibid), which is precisely what the Zapatistas and Otros Mundos aim for.

**6. Agroecology**

The natural resource management approach, agroecology, emerged in the early 1980s as a response to the dominant Green Revolution[[28]](#footnote-28) regime in the global food production system and centers on the need for self-sufficiency of resource-poor peasants who live under harsh social and ecological conditions (Fülöp & Rosset 2014). On their webpage ”Agroecology in Action”, the Latin American Scientific Society of Agroecology (SOCLA) has the following definition of the concept:

Agroecology is a scientific discipline that uses ecological theory to study, design, manage and evaluate agricultural systems that are productive but also resource conserving. Agroecological research considers interactions of all important biophysical, technical and socioeconomic components of farming systems and regards these systems as the fundamental units of study, where mineral cycles, energy transformations, biological processes and socioeconomic relationships are analyzed as a whole in an interdisciplinary fashion. (SOCLA – Agroecology)

The challenges of contemporary agriculture are interconnected with cultural, social, economic, and especially environmental concerns. Since modern agricultural technologies have bypassed the socio-economic needs of subsistence farmers in developing countries, agroecology presents itself as a new development approach that meets the needs of present and future generations without causing further depletion of the natural resource base. Its strength is to be more sensitive to the complexities of local agriculture, and to have ”a broad performance criteria which includes properties of ecological sustainability, food security, economic viability, resource conservation and social equity, as well as increased production” (SOCLA – Agroecology). Agroecology in practice requires a profound understanding of ”the complex long term interactions among resources, people and their environment.” (Ibid.) To encompass this, agriculture must be perceived as an ecological system and a human dominated socio-economic system, according to SOCLA.

In order to benefit the poor more directly than did the Green Revolution, which has been criticized for favoring large-scale farmers (Shiva 1991:56), leading agroecologist Miguel A. Altieri presents a list of objectives that agroecology must tackle:

* Poverty alleviation
* Food security and self-reliance
* Ecological management of productive resources
* Empowerment of rural communities
* Establishment of supportive policies.

He continues explaining:

[A]groecology has emerged as the discipline that provides the basic ecological principles for how to study, design and manage agroecosystems that are both productive and natural resource conserving, and that are also culturally sensitive, socially just and economically viable (...).

Agroecology goes beyond a one-dimensional view of agroecosystems—their genetics, agronomy, edaphology, etc.—to embrace an understanding of ecological and social levels of co-evolution, structure and function. (Altieri 2002:7)

With the theoretical framework accounted for, the following section provides a conceptualization of the central themes in relation to the analysis.

**7. Operationalization of concepts**

The overall process in this study is an indigenous resistance to neoliberal development and the cultural imperialism of capitalist globalization based on a moral claim for social, cultural and ecological justice. In order to engage in a discussion of this process, the actors, their objectives and tactics[[29]](#footnote-29), and central theoretic assumptions for the analysis must be conceptualized in their context and interconnectedness.  
The theoretical framework consists of two structural problematiques: the human-nature relationship and the issue of inequality and injustice, as well as an actor-dimension in the focus on new social movements in the process of social transformation. A further layer that reveals a proactive character of the movements is the strategic adoption of agroecology as an alternative to capitalism.  
The actors are, as mentioned in the introduction Otros Mundos and the Zapatistas, which are categorized as new social movements since they operate outside conventional politics and are ”distinguished by their emphasis on autonomy, participatory process, and solidarity around perceived collective identities” (Stahler-Sholk 2007:49-50). An important feature in the characterization of social movements is explained by Donatella della Porta (2006:19) as their ability to ”develop a common interpretation of reality to nurture solidarity and collective identifications” as well as developing new visions of the world and alternative systems of values.  
Furthermore, the protagonists can be identified as ”non-class” specific movements in strictly economic terms who, like the Via Campesina, advocate ecological and social sustainability while defending indigenous and peasant rights and livelihoods (Martinez-Alier 2002a:42). Due to the extent of economic inequality in the Mexican society, both movements, however, *also* demand economic justice in terms of redistribution of wealth, which is why they cannot be categorized as exclusively post-modern movements.  
Otros Mundos, as a member of the international and confederal environmental organization Friends of the Earth, is a multiethnic grassroots movement for social and ecological justice in close cooperation with a variety of social and environmental movements within the region and worldwide (Otros Mundos 2008). The Zapatistas became known to the public through their uprising as an indigenous community-based resistance army[[30]](#footnote-30) against the North American Free Trade Agreement (NAFTA) on New Year's Day in 1994 (GJEP 2014:1). Since that first uprising and military conquest of various cities in Mexico, they have renounced the use of violence and claimed no interest in obtaining federal political power. Instead they have become a symbolic resistance movement fighting for indigenous autonomy within Chiapas (Fülöp & Rosset 2014).

The vision of Otros Mundos and the Zapatistas is that of ”constructing a world in which all just, diverse, inclusive worlds fit, and where the access to development, justice, human rights and peace is possible for everyone regardless of gender”(Otros Mundos 2008; EZLN 2005) and ethnicity. Otros Mundos work aims at supporting human and indigenous rights as well as economic, social, cultural, environmental rights through education, capacitation, information and they support other environmental movements in a joint search for alternatives that are socially, politically, economically, and environmentally sustainable (Ibid.).  
The Zapatista aim at constructing a network of empowered communities without power relations and to gain autonomy in order to ”create a world that is creative rather than destructive, with room for all worlds” (Fülöp & Rosset 2014). With regards to agroecology, it is mainly the young Zapatistas who engage in the implementation of agroecological principles in agricultural activities among the highlands of Chiapas. The agroecological principles adopted by Otros Mundos and the Zapatistas distinguishes them from the many reactive environmental[[31]](#footnote-31) and resistance movements. This characterization as well as the tactics and strategies will be further documented and discussed throughout the analysis.  
Although NSM theory claims to supersede the Marxian class antagonism of the 'old' social movements approach in Europe (Lee 2007:21), there can be identified traces of a Marxist conceptual framework in the literature of Otros Mundos and the Zapatistas along with postmodern notions of cultural identity and resistance. The Zapatistas, for instance, draw on a Marxist conceptual framework to explain the mechanisms of systemic oppression in Mexico and relate it to Western imperialism, and similarly, Otros Mundos' critique of the Green Economy reflects a clear Marxist inspiration.

Throughout the theory section, two main clusters of critical concepts and notions have been presented. The first cluster deals with the relationship between economy and nature from a PE perspective, whereas the second cluster concerns the post-developmentalist dimension of ecological conflicts, yet both are critical of mainstream theories on modernity and development. Thus, a central element in the analysis is the emphasis on an 'alternative'. In the very essence of the term lies a critique of the 'normal' or status quo which in this case is capitalist economic development under its current form of neoliberalism. Foster and Altvater link environmental crises to the crises of capitalism by using the notion of metabolism to reveal a destructive side of capitalist production in terms of depletion of its natural resource base and the use of nature as a waste bin in the end of the production chain. Therefore, they dismiss any notion of a green capitalism as a viable development process because of the inherent systemic paradoxes that will keep causing crises in spite of political regulation.  
Foster argues in favor of applying Marxist systems theory to the contemporary ecological problems in what he calls the ecological rift or the planetary rift. He refers to nine planetary boundaries that are crucial in order to maintain a safe place for humanity (Foster 2013:4-5). These are identified and presented in a report published in the Journal Ecology and Society by 29 scientists under the Resilience Alliance. The boundaries concern climate change, ocean acidification, ozone depletion, interference with global phosphorus and nitrogen cycles, loss of biodiversity, fresh-water use, land-system change, aerosol loading, and chemical pollution. Transgression of the boundaries may trigger ”non-linear, abrupt environmental change within continental- to planetary-scale systems” (Rockström et al. 2009:1). According to the Resilience Alliance, humanity has already transgressed at least three of the boundaries which underlines the need for urgent action

Altvater (2004:21) argues that the only way to transform an economy into being sustainable is by collective action, since the use of fossil fuels is better suited to the dynamic capitalist system due to their transportable and storable capabilities which makes the dependency of capitalist production on fossil energies difficult to reduce. According to Foster (2013:7), solutions to the environmental and social problems should be found in a change of mentality and social relations and increased conservation. In terms of agency in the Global South, Foster highlights La Via Campesina, who has used the concept of metabolic rift to explain their own situation. Via Campesina is part of the wave of social and ecological justice movements that also comprises the Zapatistas and Otros Mundos.

Another key element is the issue of property rights. Privatization of common property (territory /resources) as a means to increase economic efficiency has been a capitalist strategy for three centuries (Martinez-Alier 2002:75). Following the logic of privatization, the costs of the exploitation of this property fall on the private owner. The problem is, Martinez-Alier argues, that the revenues of excessive private exploitation of resources often are produced quickly, while the costs are due in the future, making the consideration of environmental impacts less lucrative for a private owner at a short term basis than for a community ownership which tends to prioritize long term solutions rather than short term economic gains. As a means to protect indigenous community territories, the Zapatista movement and Otros Mundos promote collective above individual rights. Nevertheless, collective rights over territories are difficult to sustain in a country governed by neoliberal policies, which is also a point of critique from the indigenous perspective. In a Marxist view, where power relations are also understood in terms of property relations, those who own the means of production, in this case technology, farmland and natural resources, control the rest. Since most indigenous people are subsistence peasants, owning their farmland is indispensable for securing their livelihood. If the collective rights to their ancestral land are not complied with by the Mexican government, the fundament for eradicating poverty and lift the indigenous peoples out of marginalization does not exist.

Martinez-Alier also highlights the element of valuation in the discussion of conflicts over environmental resources and resistance to the current economic world order:

Starting from the premise that economic growth damages the environment, we have seen ecological distribution conflicts that are not only conflicts of interest but also conflicts of values. Quite often, conflicts over the access to environmental resources and services adopt language that is not explicitly environmental. These are movements born from the resistance (expressed in many different languages) against the lopsided use of environmental resources and services by the rich and powerful.” (Martinez-Alier 2002a:41)

By values, he refers to the different systems of valuation, as for example the economic valuation of nature adopted by the promoters of carbon trade and the REDD+-initiative as opposed to e.g. the spiritual valuation adopted by proponents of the 'Sacredness of Nature' who reject the perception of nature as capital and therefore also refusing any compensation for externalities in monetary terms (Martinez-Alier 2002a:23). Transition Discourse provides the conceptual framework for analyzing the alternative vision of development as well as the language of resistance applied by the Zapatistas and Otros Mundos. In this context it should be noted that there is some difference between the two actor groups in terms of how they identify themselves. The Zapatistas emphasize their status as an indigenous resistance movement more than an ecological justice organization such as Otros Mundos. This difference will be acknowledged in the analysis, but since the object of investigation of this thesis is their common objective in terms of advocating social and ecological justice and community empowerment, it will not be treated as an element of major significance in the analysis.

In accordance with Altvater's view of collective action as the driving motor behind socio-ecological transformation, Martinez-Alier suggests that the solution to environmental problems ”is not conflict resolution, but *conflict exacerbation*” (Martinez-Alier 2002:68). By giving publicity to the struggles for environmental and social justice, others might be inspired to protest against the degradation of local and global environments, thus starting a chain reaction of collective action.

Sørensen (2014) argues that the strength and success of collective action is conditioned by a combination of mass participation *and* collective organization in terms of creating a class consciousness. Therefore, the organizational process and strategies of the Zapatistas and Otros Mundos are of importance to the assessment of the viability of their alternative conception of development and their specific valuation of nature must be addressed.

To avoid conceptual confusion, the different processes and meanings of modernity must also be clarified. Beaucage (1998:5) defines the classic values of modernity as:

a secularization of thought and science; the valorization of change and progress following a linear conception of history; an economism that aims at supplying an ever-increasing amount of commodities; and abstract concepts of power and the state, and of time and space. With modernity, the individual emerges as the subject of economic and political liberties.

During the transition from the various sociocultural particularisms of a traditional society to a form of universalism in a modern society, a shift of power and a reallocation of resources occurs at the expense of some societal groups and to the benefit of others (Beaucage 1998:5). A further elaboration of the modernization process will be presented in the analysis.  
The group or class that must pay the costs of modernization often revolts and protests, just as the Mexican history shows, in what could be defined as a dialectic process of domination and resistance manifesting itself in struggles over livelihoods. In this case, the indigenous resistance movements' critique of modernity will be addressed in relation to a broader development discussion as well as their suggested alternative based on agroecology. The agroecological approach to sustainable development based on a scientific understanding of the functioning of natural ecosystems and a ”high valorization of local-indigenous knowledge on the cycles of nature, traditional seed-saving techniques, etc., can become a vehicle by which a community may put into reality food sovereignty” (Fülöp & Rosset 2014). In this respect, agroecology can help vehicle Shiva's proposed transition 'from oil to soil' by facilitating community-based, ecologically sustainable food systems and enforcing local demands for socio-ecological justice as well as cultural and territorial rights.

**8. ANALYSIS: Resistance and Alternatives**

In the following section, the strategies and objectives of the new social movements, Otros Mundos and the Zapatistas, as well as their cultural and systemic criticisms will be analyzed in relation to their role as a vehicle of social transformation towards a more just and sustainable society and a more inclusive perception of modernity. In order to comprehend the concept of modernity, general knowledge on its origins must be provided.

**The history of the Mexican modernization process**

In an anthropological history of modernization in Mexico, Pierre Beaucage divides the process in three waves. The first one dates back to the Spanish conquest of Mexico in the 16th century. He explains the waves as ”attempts to implant different versions of modernity, and the reactions against such attempts” (Beaucage 1998:4) and emphasizes the role of the Mexican peasantry (the majority of which is indigenous) as being neither ”a docile object for state policies nor a stubborn opponent ot change” (Ibid).  
One of the first examples of modernizing or ”westernizing” indigenous societies, while keeping some of their basic features, were the 1542 New Laws[[32]](#footnote-32) that replaced earlier forms of brutal domination by the conquerors with an obligation to convert the ”idolatric Indians” to the Catholic Church and replace thousand-year-old cults and calendar cycles with the linear historicity of Christianity (Beaucage 1998:6).

Mexico's indigenous peoples were forcibly drawn into the realm of the incipient world system and history, not only technologically, but also economically, politically, and ideologically (Gibson, 1964: 136-65). At the same time, though, the New Laws established a fundamental differentiation and segregation between the natives, locked in the *repúblicas de indios [AT:Indian republics]*, and the Spaniards who lived in town and on their estates (Beaucage 1998:6).

The costs of the first attempt at modernization were almost exclusively paid by the indigenous population which decreased significantly during the 16th century due to European diseases and overexploitation in the mines, farms and cities (Cook & Borah 1977:96) and constituted the lowest class in the new feudal 'caste society' (Beaucage 1998:7).  
It is important to note, however, that the indigenous resistance to Spanish and criollo rule was not an attempt to defend pristine native ways, but rather to defend the syncretic culture that resulted from the colonial process. ”Values such as justice, respect and keeping one's word blended quite well with the new village-based, democratic Indian identity” (Ibid.)

The second wave of modernization occurred during the presidency of Lázaro Cárdenas who implemented land reforms[[33]](#footnote-33) as an attempt to even out the great divide between the landless peasants and the 1% of landowners who possessed more than 75% of arable land. He turned over to the peasants seventeen million hectares of farmland by which act he won unprecedented peasant support for the regime (Beaucage 1998:12+24). At the same time, he incorporated peasant organizations and workers unions -even co-opted leaders of protest movements- into his party (Partido de la Revolución Mexicana[[34]](#footnote-34)), thus developing a unique hegemonic, corporatist political structure with a social contract commonly referred to as Cardenismo (Ibid). Marxist scholars point to the co-opting of social resistance as an attempt of the state to protect bourgeois interests, while others, e.g. Arnaldo Córdova, interpret the Cardenismo as the ”successful culmination of the revolutionary *politica de masas*; the subordination of the popular classes to the mighty revolutionary state” (Knight 1994:75).  
In spite of the exclusion of millions of people from the social contract of the Cardenismo (Beaucage 1998:24), the second wave of modernization still is one of the reasons to explain why indigenous groups, in spite of having inhabited the tropic forests of Southern Mexico up to 3000 years (Huastecs), are not isolated societies today, but ”peasant producers who are, in general, well integrated into society at the national, and even the international, level through economic exchange, roads, technological alternatives, communication media, and national educational and cultural programs” (Toledo et al. 2003:2). Mexico experienced a period of uninterrupted economic growth from 1940 to 1969 which was complemented by political stability with the Partido Revolucionario Institutional (PRI) holding power at all levels of government and the proportion of landless peasants decreased to a historic low (Beaucage 1998:13), but the lack of consideration for demographic and environmental limits resulted in a process of dismantling the material and institutional bases of the old social contract in the 1980s without providing a new one (Beaucage 1998:24). The economy slowed down and Mexico became highly indebted to a total of $100 billion in 1986 (Hellman 1995:8).

The end of the Cardenismo sparked the third wave of modernization, the neoliberal era, commencing in the 1980s. With the further opening of the Mexican economy to international markets, Carlos Salinas[[35]](#footnote-35) caused a political and financial earthquake (e.g. an inflation of 52%) leading to the Zapatista rebellion (Beaucage 1998:3). Social policies of national development were abandoned in order to enhance North American trade connections with the result that Mexico became almost totally dependent on food imports, industrial goods and technology from the United States in return for oil exports (Almeyra 2007:52). In 1992, as a preparation for the signing of NAFTA, Salinas modified article 27 in the Mexican Constitution which was the legal foundation of the distribution of community-owned territories, the so-called *ejidos,* allowing for the eventual privatization of land reform institutions (Bobrow-Strain 2004:888). This meant that peasant rights to petition collectively for land came to an end and the existing *ejido* social-property sector would now be susceptible to individual parcelization and titling (Stahler-Sholk 2007:51) which posed an enormous risk to the indigenous communities whose collectively owned *ejidos* were no longer protected from the market. Another issue faced by the Zapatistas shortly after the uprising was related to resource allocation:

In developing an autonomy model entailing separation from government programs, the Zapatistas, in order to sustain a social movement, faced the challenge of offering resources (land, social programs) to their support-base communities. This was complicated by the fact that it was often non-Zapatistas[[36]](#footnote-36) who benefited materially from the opening created by the rebellion. (Stahler-Sholk 2007:52)

Peasants across the southern Mexican state of Chiapas invaded and seized almost 1,300 privately-owned farms and ranches covering more than 100,000 ha (Bobrow-Strain 2004:887). Attempts by government mediators to resolve the disputes culminated in 1996 in the signing of the Agrarian Accords in Mexico City that paved the way for unprecedented state-subsidized purchases and redistribution of land (Ibid). In practice, it meant that henceforth peasants would buy land through the Agrarian Accords, not the government (Bobrow-Strain 2004:888). Ironically, the constitutional modifications in 1992 also included Article 4 so that for the first time it explicitly recognized the Mexican nation as multiethnic, which, however, was equally criticized by indigenous and peasant rights organizations for being top-down initiatives (Stahler-Sholk 2007:52).

Their juxtaposition illustrates the way the neoliberal model recognizes the pluralism of indigenous identities as long as those identities do not become the basis for collective organization around substantive rights (ibid).

In the aftermath of the Zapatista uprising, a large coalition of popular forces emerged with the intention of reinventing ”an inclusive form of modernity within which the costs and benefits can be more evenly spread” (Beaucage 1998:24). Martinez-Alier reinforces Beaucage's conclusion in his interpretation of the visions and goals of new ”eco-peasant movements”[[37]](#footnote-37) as representing not a ”purely defensive attitude towards modernity and development; it is not idiosyncratic homespun oriental wisdom combating western agricultural technology” (Martinez-Alier 2002a:10). On the contrary, he argues, they must be interpreted as part of an international worldwide trend, with solid foundations in agroecology, towards an alternative modernity.

According to Beaucage (1998:4), the key dispute in the confrontation between the federal and stately governments and the Zapatista rebels is the ”meaning and content of modernity”, but the emphasis on land rights and defense of livelihoods by this and other indigenous resistance movements reveals a multifaceted struggle for palpable legal, social and economic rights simultaneously with a discursive dispute over meanings and interpretations.

**New Social Movements as protagonists of social change**

Otros Mundos and the Zapatistas can both be characterized as non-class specific justice movements, defined by their resistance to mainstream conceptions of modernity, the economic, cultural and ecological imperialism of capitalism in its neoliberal form and the derived ecological impacts, and lastly, the oppressive character of a political superstructure that has lost its democratic legitimacy. Being the Mexican branch of the international environmental justice movement, Friends of the Earth, Otros Mundos places great significance on the environmental aspects of social transformation, whereas the primary concern of the Zapatistas is politico-cultural. Yet the deep cultural connection between indigenous peoples and their land (especially the cultivation of maize) links the Zapatista struggle to the environmental context as well.

**The Zapatista movement**  
Zapatismo as a social movement consists of various layers, including the political-military structure EZLN, the “networks” of national and international supporters, and the “support-base” indigenous communities in the “conflict zones” of Chiapas (Stahler-Sholk 2007:50).  
With the ”First Declaration from the Lacandon Jungle”, the EZLN declared war against the oppressive politico-economic elite with the words Basta Ya (enough is enough), declaiming that the past 500 years of Mexican history, from Cortez’s conquest to Salinas’ land reform, ”was a story of invaders becoming rich through the displacement and exploitation of indigenous peoples” (Brandt 2014:879). Therefore, they reclaimed democracy as stated in the article 39 of the Mexican Constitution:

National Sovereignty essentially and originally resides in the people. All political power emanates from the people and its purpose is to help the people. The people have, at all times, the inalienable right to alter or modify their form of government (EZLN 1993:1).

Their aim was a free and democratic government which secured ”work, land, housing, food, health care, education, independence, freedom, democracy, justice and peace”(EZLN 1993:2), and they called on all the dispossessed, i.e. workers, students, teachers, youth, peasants, to join forces. One of the six orders by the General Command was to prevent the robbery of the natural resources in the areas controlled by the EZLN (1993:2), proving that this was also an ecological distribution conflict from the very beginning.

Critique of capitalism

The Zapatistas understand capitalism as a system in which those in power are those who obtained ownership of capital, factories, fields, in other words, the means of production, by exploiting the workers in their profit hunt (EZLN 2005:6). Therefore, they regard the distribution of wealth in a capitalist society as unjust.  
Furthermore, the Zapatistas oppose the cultural homogenization as well as the commodification of people, nature, culture, history, and conscience that occurs as a consequence of capitalist market economy and argue, in line with Marx, that capitalism masks its repressive power relations behind the marketization (EZLN 2005:6-7).

[N]eoliberal globalization, capitalism, destroys what exists in these countries, it destroys their culture, their language, their economic system, their political system, and it also destroys the ways in which those who live in that country relate to each other (EZLN 2005:7).

In line with Tucker's argument regarding the inherent forces of resistance in every hegemonic situation, the Zapatistas herald the possibility of liberation:”[A]s there is a neoliberal globalization, there is a globalization of rebellion”(Ibid). Albeit the Zapatista rebellion is both symbolic and cultural, it also is a direct confrontation with the Mexican authorities and an antisystemic struggle in the sense that the Zapatistas refuse to subordinate themselves to the capitalist mode of production. The anti-imperialist nature of their resistance displays itself in the rejection of a Mexico that is ”dominated by the United States”(EZLN 2005:8) with reference to the reforms of privatization of land[[38]](#footnote-38) and removal of obstacles to the corporate sector.

The political strategy  
The Zapatistas declared war against neoliberalism in solidarity with everyone who suffered from exploitation and thievery by the rich and their bad governments in our Mexico and in the world (EZLN 2005:1), thereby making the peasantry a political subject (Martinez-Alier 2002a:11). The Zapatista movement has undergone a process of both qualitative and quantitative change throughout the years. The development of the movement can be divided into distinct phases. The first began with the upsurge in 1994 and announcement of the organized presence of the Zapatistas in 38 proclaimed autonomous[[39]](#footnote-39) municipalities in Chiapas (Stahler-Sholk 2007:54). After the uprising, the Zapatistas briefly believed in the possibility of social change from within the political system and engaged in dialogues with the delegates and bureaucrats of the governments[[40]](#footnote-40), advisers from NGOs, anthropological specialists, lawyers, political analysts, and historians, resulting in the San Andrés Accords in 1996, outlining the establishment of a new relationship between indigenous peoples and the state, recognizing indigenous peoples as ”new legal subjects with inherent rights[[41]](#footnote-41) (...) derived from their historical origin and the nature of the Mexican nation” (Aubry 2003:226). According to Andrés Aubry (2003:221), indigenous people in Chiapas were nation-building and for the first time communicating horizontally among themselves.

Contrary to the argument of ethnic fundamentalism or cultural integrationism, the EZLN, in planning 'a world in which all worlds fit' ('for ourselves nothing, for everyone everything'), reconciles identity and universalism, tradition and modernity, territoriality and democracy (Aubry 2003:222).

The second phase, according to Burguete & Mayor (2003), was the refusal of the Zapatistas to recognize the officially elected municipal authorities, instead choosing their leaders by following indigenous *usos y costumbres* (customs and traditions) in community assemblies. This practice created a parallel structure of local indigenous governance that became institutionalized in de facto autonomous governments in the third phase after 1997, when the Zapatistas realized that the federal government was deserting the substantial rights components of the San Andrés Accords (Stahler-Sholk 2007:53-54). The reaction from the Mexican authorities to the autonomous governments was a military-raid in the Spring of 1998 targeting Zapatista villages and the creation of seven municipalities designed to undermine Zapatista autonomy claims (Stahler-Sholk 2007:55). The Zapatistas mobilized for national, regional, international, even intergalactic[[42]](#footnote-42) support and organized marches to Mexico City and the Congress of the Union in 1997, 1999, and 2001, demanding recognition of the Mexican indigenous, but the government did not pay attention (EZLN 2005:2).

In 2003 began the fourth phase when the Zapatistas established *las Juntas de Buen Gobierno* (good-government councils) based in five *caracoles[[43]](#footnote-43)* (conch shells) or community centers (Soto 2003:5).This strategic change to self-governance, based on the principle of *mandar obediciendo[[44]](#footnote-44)* (to lead by obeying), occurred simultaneously with a separation of the political-military from the autonomous and democratic aspects of organization (EZLN 2005:4).The power structure of the Zapatista movement, however, is not entirely horizontal in that the political-organizational leadership, the Clandestine Revolutionary Indigenous Committee of the General Command, continues to devise the overarching strategic plan, but concurrently they counsel and direct the younger generation in order to prepare them for taking over the leadership (EZLN 2005:5).). The aim from 2005 and onwards, the fifth phase, has been to form a united resistance against neoliberal globalization and the neoliberal state apparatus, build a political system of direct democracy and create a new Constitution for Mexico that recognizes the rights of all of its citizens (EZLN 2005:15). Realizing that a social transformation of Mexico was not around the corner, they kept improving their autonomous communities. One of the challenges for the Zapatistas, however, is to deal with issues of e.g. religious pluralism and political factionalism among the communities among which conflicts arise due to the coexistence of parallel autonomous and official government structures (Stahler-Sholk 2007:55).

In 2006, following their new strategy, the Zapatistas launched ”La Otra Campaña” (the Other Campaign), an anti-election campaign, as a reaction to election fraud by the two major parties, the PRI and the PAN, at the expense of PRD candidate Andrés Manuel López Obrador. A campaign that never obtained the massive popular support that the Zapatistas and their allies hoped for. Furthermore, they advocated abstention which, according to Guillermo Almeyra, only benefitted the PAN (Almeyra 2007:55). Almeyra is critical of the Zapatistas because he holds the Other Campaign responsible for separating the followers of the Zapatistas from the main body of the workers, which, Almeyra argues, have formed the first social movement at the national level with a political line for more than seventy years (Almeyra 2007:56). Mexican journalist, Jose G. Olmos ascribes the relative failure of the Other Campaign to the fact that the national agenda has changed with the drug war and an underperforming economy as the primary concerns of the majority of the Mexicans (Tucker 2014:2).  
In Subcomandante Marcos' valedictory speech, he admits that the EZLN has committed mistakes along the way, but as a dynamic movement and ongoing social experiment, mistakes cannot be avoided (EZLN 2014:4). Marcos is firm in his rejection of a top-down generated social change in Mexico. In the following quote, he describes the alterations within the Zapatista movement as a change

from revolutionary vanguardism to “rule by obeying;” from taking Power Above to the creation of Power Below; from professional politics to everyday politics; from the leaders to the people; from the marginalization of gender to the direct participation of women; from mocking the other to the celebration of difference (EZLN 2014:5).

The quote reveals the self-perceptive shift from a ”revolutionary vanguard” movement to ”rule by obeying” which underlines the strategic shift from an 'extrovert' movement aiming at a total societal transformation in line with the 'old social movements' to an 'introvert' movement that channels its energy into the implementation of the Zapatista utopia within the autonomous communities. Still, the symbolic significance of the Zapatistas, both nationally and internationally should not be underestimated. The feature that made the EZLN famous throughout the world was the symbolic use of ski-masks to underline the invisibility of indigenous peoples in the Mexican society along with the governments' negligence of their marginalization. Lately, the mysterious spokesperson, Marcos, was admitted to be a grand trick, a character created with the purpose of catching the eye of the politicians and the media who did not pay any attention to the indigenous people (EZLN 2014:6). The intention was to control instead of being controlled by the media, but in the end, Marcos became a distraction rather than spokesperson which was the rationale for the General Command to decide for him to cease to exist (EZLN 2014:6-9). The Zapatistas ”are often referred to as the world’s first ‘postmodern revolutionary movement’ because of their pioneering use of new media technology to create global attention for a cause not covered in conventional media outlets” (Brandt 2014:883), but despite the immense amount of research done on the Zapatistas, and especially Marcos whose symbolism has indeed caught the attention of international leftist forces, the movement finds itself in a minority position even in Chiapas, and it is not strongly supported in the rest of Mexico either (Almeyra 2007:53). Furthermore, there is an ongoing conflict between the Zapatistas and government supported peasant organizations who, according to Marcos, ”receive privileges and payment in the form of projects and monetary resources (...) in exchange for following the criminal orders that come from above” (EZLN 2014:4).  
It is safe to say that the significance of the Zapatistas to the Mexican society is more of a symbolic than a real-political character. Their disputes with government-supported indigenous groups reveals their lacking capacity of forming a united indigenous resistance movement, and because of their persistence on autonomy, even leftists criticize their withdrawal from civil society and the ideological struggle of the working class.  
In spite of this, the Zapatistas are still relevant to the global leftist forces in the opinion of Sergio Tischler[[45]](#footnote-45) who highlights the ”Escuelita” (Little School) as a showcase in ”extraordinary organizational achievements” with regards to Zapatista experiences of self-governance (Tucker 2014:2). John Holloway[[46]](#footnote-46) insists that the old 20th-century model of revolution by aiming for state power did not work and credits the Zapatistas for realizing this and acting accordingly (Ibid). The Zapatista-experiment of autonomy holds lessons for other social movements in Latin America struggling to preserve grassroots decision making in opposition to the logic of global capital (Stahler-Sholk 2007:48), such as the Occupy Wall Street in New York, the Spanish Indignados, and Greece's Direct Democracy Now; movements sparked by financial corruption, social and economic inequality, and the crisis of political representation in the wake of the financial crisis in 2008 (Tucker 2014:3).  
Internally in the movement, the construction of alternative societies based on the indigenous Cosmovision and ”good governments” indicates proactive forces within the Zapatistas, whereas their attitude externally towards the Mexican society has shifted from active participation in political processes to reactive manifestations of discontent with the political apparatus, as for instance the protest march in relation to the recent abduction and supposed killing of forty-three students in the state of Guerrero (Bellani 2014).  
Compared to the Zapatistas, the starting point of Otros Mundos is different since they are part of an international NGO-network and do not share the militant guerilla-history of the Zapatistas.

**Otros Mundos**  
The analysis of Otros Mundos will center on their systemic critique, their function as a voice for marginalized indigenous communities, and their experience in relation to agroecological projects. They collaborate with the Zapatistas in some respects and share their objectives of real democracy and social and ecological justice, but they are significantly more inclusive in their approach to collaboration and have different work methods.  
The strategy of Otros Mundos is to facilitate and promote, locally as well as nationally, regionally, and globally, indigenous rights and ecological sustainability by working together with social movements and communities from an agenda that is based on nine principles:  
Peace; an inclusive concept of development; sustainability, both for present and future generations; gender equity; democracy in a participative, transparent and tolerant version; human rights; equality between genders, races, and regardless of political or religious beliefs, social and economic position or sexual preferences; ”integralidad” (integrity), a holistic perspective on development; and dignity (Otros Mundos 2008).  
As an anti-capitalist organization, Otros Mundos is against those solutions to the crises that adhere to the logic of profit accumulation, including the so-called 'green economy'. Otros Mundos, however, can be characterized as a proactive organization in that it promotes and experiments with alternatives, such as *'Buen Vivir'* and agroecology, to the system it opposes. Being ”anti-system” underlines the emphasis on pluralism which is also evident in the symbolism of the name, Otros Mundos.

[W]hen we talk of anti-system experiences, we refer to those realities and experiences that are “opposite” or “contrary” to the capitalist system; we refer to the discourse and unified social and political practices in daily life carried out by an individual or a collective, with characteristics different from or diametrically opposed to those that feed into the present system. These experiences, to a greater or lesser extent, reflect an alter-nate meaning, they reflect distinct forms within each community of living their own lives within their own systems (Soto 2008: preface).

Otros Mundos' critique of capitalism  
In her critical systemic analysis of capitalism, Nieves Capote (2011:10) from Otros Mundos argues that the current stage is no longer neoliberalism, but what she calls the ”el modelo Corporación-Nación”[[47]](#footnote-47) (Nation-Corporation), a stage of capitalism in which the rights of corporations are considered superior to human rights. This ”ultimate model” initiated in the 1990s and consolidated during the first decade of the new millennium, but is coming to an end due to the fact that the rate of accumulation, according to Capote, has reached its climax because it is no longer environmentally sustainable (ibid). This issue has also been addressed by Noreena Hertz[[48]](#footnote-48) in her book ”The Silent Takeover – Global Capitalism and the Death of Democracy” in which she ascribes the current democratic deficit to the increasing political power of the corporatist sector (Hertz 2001). Neoliberal policy changes, especially in relation to free trade agreements, have led to the elimination of regulatory 'obstacles' to corporate profit accumulation such as government control of infrastructure, natural resources, services, and energy, which, in the Global South, has resulted in deficient forest protection and lack of protection of indigenous habitats against the interests of transnational corporations (Capote 2011:20).  
Capote (2011:21) accuses this current model of contributing to unequal economic distribution between the Global North and South as a consequence of opening the national market for foreign investments and subsidized goods from e.g. the European Union. She also criticizes the lack of freedom in a world of capitalist hegemony and refers to the historical political, economic, and military pressure -even terror- on leftist governments, especially in Latin America. (Capote 2011:23)[[49]](#footnote-49)   
Another allegation raised by Capote is pointed towards the biotechnology sector which, she asserts, appropriates biological diversity for commercialization (Capote 2011:39). Patents on plants and bacteria are detrimental to the interests of indigenous peoples who have been using plant medication for millennia (Capote 2011:42). Additionally big corporations are to blame for hunger crises in the world as a consequence of financial speculation in seeds and corporate control of transgenic seeds and production (Capote 2011:44). As a matter of fact, in 2002 five grain businesses controlled 75 % of the world market of cereals (Villa 2002:3). The world is perfectly capable of feeding the entire population, which means the problem is of a distributive character.

In today's world, 1000 of millions are suffering from chronic hunger and starvation; this occurs in a planet that produces enough food to sustain almost twice the world population (AT - Capote 2011:44).

Capote links the concentration of power in the corporate sector to the global phenomenon known as 'land grabbing'. In an editorial of the Journal of Peasant Studies, Borras Jr. et al. (2011:209) explain it as an outcome of the convergence of crises in food, energy, finance, and the environment:

Powerful transnational and national economic actors from corporations to national governments and private equity funds have searched for ‘empty’ land often in distant countries that can serve as sites for fuel and food production in the event of future price spikes (Borras Jr. et al. 2011:209).

Although land grabbing occurs globally, there is a clear North-South dynamic resembling both colonialism and imperialism, albeit an emerging South-South dynamic is exemplified in the recent involvement of powerful economies such as Brazil and Qatar (Ibid). One of the most ambitious studies of land grabbing is a World Bank (2010) report that shows how land grabs have occured in areas ”where buyers could exploit corrupt or indebted governments with little ability to regulate the transaction or prevent buyers from targeting the poorest rural communities, expelling people with non-traditional land title from their land” (Borras Jr. et al 2011:210).

As a last attack on neoliberal hegemony, Capote accuses the media of merely serving the purpose of the ruling class by reproducing the systemic domination and the ideology of consumerism (Capote 2011:54) which is detrimental to both social and ecological sustainability.

The characterization of capitalism presented by Capote (2011) resembles a Marxist critique in the way she describes class division, the naturalization of capitalist development and the corresponding form of life, as well as the system of domination which is manifested in power relations based on property relations. She exposes the democratic deficit of governmental decision making in a systemic power structure based on the dominance of capital. The role of the state apparatus is evidently to protect and legitimize the interests of capital prior to those of the poor classes. In the words of Stahler-Sholk (2007:49), ”[t]he Mexican state acts increasingly as a broker for global capital as it attempts to re-regulate the conditions for accumulation on a global scale.”

**Indigenous defense of livelihoods**  
The Mexican state has regularly mediated private capitalist development initiatives (e.g., logging operations in Chiapas) by reinventing indigenous identities and lines of authority in ways that facilitated the particular strategy of capital accumulation (De Vos, 2002). As a consequence, the indigenous resistance to neoliberalism, exemplified by social movements such as Otros Mundos and the Zapatistas, has taken the form of a movement for autonomy, ”with the protagonists struggling for the right to define themselves culturally, socially, and politically”(Stahler-Sholk 2007:49).  
A central element in the Zapatista struggle for autonomy is their education system. In contrast to government-based educational offers, the Zapatistas have organized an autonomous school based on a series of principles, including the protection of indigenous culture, their values, indigenous rights and the rural context (Shenker 2012). In a study of the Autonomous School of Morelios[[50]](#footnote-50), Shenker emphasizes the cultural education on subjects such as languages, Mayan roots, traditions, deities, rituals, clothing, etc. (Shenker 2012:435). The fundamental value of the indigenous Cosmovision is that of collectivity, which, in Zapatista communities, is reflected in the refrain: *para todos todo, nada para nosotros,* (for all of us, everything; for each of us, nothing). As a prerequisite for the democratic perception of collectivity, solidarity and equality amongst all individuals, including genders, is another pillar of the Zapatista societal fundament, as well as voluntarism[[51]](#footnote-51) (Shenker 2012:436-439). A very important pillar of the autonomous education system is the focus on indigenous rights, governing obeying, communal decision making by consensus, and a strengthening of the communities' independence of external organizations, mainly referring to government-led social projects which the Zapatistas notoriously reject, albeit they do depend on financial resources donated by NGOs to support the school system (Shenker 2012:437-440). All subjects are linked to the rural context and biocentric[[52]](#footnote-52) worldview of the indigenous peoples, since the indigenous culture is closely connected to the land and especially the cultivation of the sacred maize. Although limited economic resources affect the access to knowledge and the quality of the teaching manuals, the Zapatista home-grown education system is a vital element in the process of community empowerment in the autonomous enclaves and serves as an example for indigenous communities worldwide who seek increased self-determination and protection of their rights (Shenker 2012:440-41). Additionally, the Zapatistas have developed a variety of self-sufficient production, exchange, and social service projects such as ”collective garden patches, rabbit raising, beekeeping, candle making, agroecology experimentation, locally controlled schools, networks of health promoters trained in combinations of traditional and modern healing, etc.” since the 1990s (Stahler-Sholk 2007:56).

Another example of indigenous resistance is a declaration, published by Otros Mundos, in defense of the 'Mayan Territory' authored by the various indigenous peoples from Southern Mexico, (Chiapas and Tabasco) and Northern Guatemala (Huehuetenango, Quiché, and El Petén). The declaration condemns capitalist exploitation of nature and people and advocates a harmonious relationship between nature and its inhabitants as well as respect for the four thousand year-old history that identifies the Mayan descendants with their territory (Otros Mundos 2003:1). Among the critiques are the ”new colonization” of indigenous territories for resource extraction, the militarization in order to protect private economic interests and a corresponding criminalization of legitimate indigenous resistance, and the existence of institutional racism in Mexico and Guatemala directed at indigenous and peasants (Ibid).  
The strategy presented in the declaration is on one hand to raise popular awareness by articulating the systemic mechanisms of oppression and on the other to organize with and enhance cooperation among local, national and international movements in order to build a strong support for the declaration, thus increasing the legitimacy of their demands (Ibid). Some of the claims reflect a cultural dimension of the political struggle, e.g. the call for an improvement the quality of life by implementing the philosophy of '*Buen Vivir*' into social policies, while highlighting ”collectivity” as a social value in the decision-making (ibid). Conclusively, the indigenous peoples, inspired by the Zapatistas, claim autonomy in order to create alternative, self-sustaining communities based on the principles of the San Andrés Accords (Otros Mundos 2003:4).

Evidently, the Zapatistas as well as Otros Mundos fight against ”local and concrete manifestations of a global logic that disempowers people who lack capital and ignores their right to establish their own priorities” (Stahler-Sholk 2007:48), creating, in response, a common identity of resistance and a common perception of reality[[53]](#footnote-53) based on indigenous cosmologies and the claim for justice and self-determination. By organizing around values such as collectivity, self-sufficiency, and social end ecological justice, they seek to consolidate the autonomy of their communities, while the long-term goal is to attain democracy, freedom, and justice for the entire country (Shenker 2012:439). But the struggle for autonomy is complex. Rationalized by a discourse of protection of indigenous rights (referring to government co-opted Lacandones[[54]](#footnote-54) who had been granted settlements regardless of the prior existence of other indigenous communities) and corporate defined environmentalism, the official government and corporate funded NGOs such as Conservation International and the World Wildlife Fund have evicted several Zapatista-affiliated communities in Southern Chiapas (Stahler-Sholk 2007:59). This only underlines the importance of an organized movement as a counterbalance to the power of the political elite. In the words of Carruthers (1997:267):

Without organization, disruption, marginalization, and out-migration will prevail. The struggle we have discussed—to conserve, defend, and revalidate traditional indigenous knowledge—is thus a political struggle, inseparable from the defense and revalidation of indigenous peoples and cultures

themselves.

Such mobilization is occurring among peasants, NGOs, international institutions such as the United Nations and within the academic world, and the tendency is facilitated by the emergence of agroecology on the global development agenda.

**Agroecology**

According to Guzman & Martinez-Alier (2006:1), the mainstream (supply-demand) explanation for the disappearance of the small-scale agricultural population in the process of economic development is that, while productivity increases, the corresponding declining demand impedes an increase in production. This has been a trend in most of the developed world in the past century, but this measure of productivity does not take into account the environmental implications of chemical pollution, genetic erosion, and unsustainable use of fertilizers, not to mention the fact that the inputs are valued too cheaply because fossil energy is too cheap (Ibid).

Hilal Elver, United Nations Special Rapporteur on the Right to Food predicts, that ”if these trends continue, by 2050, 75% of the entire human population will live in urban areas” (Ahmed 2014:2).  
Elver urges the development complex to reverse these trends by providing incentives to small farmers, especially for young people in rural areas. New reports estimate that small farmers still produce 70% of the world's food, although they possess less than 25% of the world's farmland (GRAIN 2014:8-10; Altieri et al. 2011:5). The ecological criticism of the mainstream economics of agriculture opens up for peasant arguments for combined socio-cultural improvements of living conditions. Although the industrial agrifood complex has gained terrain in all agricultural spheres, Elver argues that ”modern industrial agricultural methods can no longer feed the world, due to the impacts of overlapping environmental and ecological crises linked to land, water and resource availability” (Ahmed 2014:1). Elver is backed up by major international reports (FAO 2007; IAASTD 2009; de Schutter 2010) which conclude that in order to feed nine billion people in 2050, we urgently need to adopt the most efficient farming systems. They recommend a shift towards agroecology as a way to boost food production and improve the conditions of the poor. Based on broad consultations with scientists and extensive literature reviews, The IAASTD and the de Shutter reports ”contend that small-scale farmers can double food production within 10 years in critical regions by using agroecological methods already available.” (Altieri et al. 2011:4).  
This shift increases the relevance of the struggle of indigenous peasants for recognition of their rights and a pluriversal, holistic perspective on development. Due to the opposition to the commodification and marketization of their livelihoods and cultural heritage, movements such as Otros Mundos and the Zapatistas can be seen as creators of an antagonistic rural discourse[[55]](#footnote-55) to neoliberal globalization which reflects the discontent of local and global peasant movements born out of local resistance to seed multinationals, the degradation of ecosystems and the threats to livelihoods by agricultural modernization (Guzman & Martinez-Alier 2006:1). They oppose the emphasis on export crops, transgenic crops, and the rapid expansion of biofuel crops (sugar cane, maize, soybean, oil palm, eucalyptus, etc.) of industrial agriculture which is increasingly reshaping the world's food supply with potentially grave economic, social, and ecological impacts and risks (Altieri 2009:102). Furthermore, they oppose subsidized exports of agricultural surpluses from the US and EU (Guzman & Martinez-Alier 2006:1). In the European Union approximately 80% of subsidies and 90% of research funding is channeled into conventional industrial agriculture (Ahmed 2014:2). This tendency increases the extent of uneven North-South development while making the praise of free trade of the EU and US sound hollow.  
In developing countries, peasants have found an alternative in what leading agroecologist, Altieri (2009:103) defines as ”new approaches and technologies involving application of blended modern agroecological science and indigenous knowledge systems”. For subsistence peasants, ”low-input agriculture is not just cost effective; it may be the only alternative to starvation” (Carruthers 1997:264). According to Altieri's research, agroecology has emerged as one of the most robust pathways towards designing biodiverse, productive, and resilient agroecosystems available today (Altieri et al. 2011:3).

Case studies from Cuba, Brazil, Philippines, and Africa (...) demonstrate how the

agroecological development paradigm based on the revitalization of small farms which emphasizes diversity, synergy, recycling and integration, and social processes that value community participation and empowerment, proves to be perhaps one of the only viable options to meet present and future food needs (Altieri et al. 2011:3).

It has been proved to enhance food security while conserving natural resources, biodiversity, and soil and water throughout hundreds of rural communities in several regions, based on the experience of thousands of farmers, NGOs, and some government and academic institutions (Altieri 2009:103). Guzman & Martinez-Alier (2006:1) define agroecology as ”a collective practice of agriculture which explicitly considers not only economic and social aspects (income, employment) but also environmental and ecological aspects (pollution, soil conservation, cycles of nutrients, energy flow).”  
Altieri's studies of the persistence of traditional agriculture document a successful indigenous agricultural strategy in the form of raised fields, terraces, polycultures, agroforestry systems, etc. and promise an optimization of their productivity by applying agroecological approaches which forms the basis of food sovereignty, which is defined as ”the right of everyone to have access to safe, nutritious, and culturally appropriate food in sufficient quantity and quality to sustain a healthy life with full human dignity” (Altieri et al. 2011:14).

The emerging concept of food sovereignty emphasizes farmers’ access to land, seeds and water while focusing on local autonomy, local markets, local production-consumption cycles, energy and technological sovereignty, and farmer-to-farmer network” (Altieri 2009:104).

A method of measuring the potential of agroecological approaches is by looking at the phenomenon of ”overyielding”, which is what occurs when two or more crops grown together yield more than when grown alone. Altieri's studies show an increase of overyielding when the plants are exposed to e.g. water stress (Altieri 2009:108), concluding that polycultures are more resilient than monocultures.

Equally, agroforestry designs are used by many peasants, especially in the Mexican coffee sector, since the shade of tree covers protect the plants against extremes in microclimate and soil moisture fluctuation (ibid). Such biodiverse agriculture is ”endowed with nutrient-enriching plants, insect predators, pollinators, nitrogen-fixing and nitrogen-decomposing bacteria, and a variety of other organisms that perform various beneficial ecological functions” (Altieri et al. 2011:6). Surveys conducted in Central America after the hurricane Mitch in 1998 and Stan in Mexico in 2005 show similar positive results, in that farmers using the above mentioned sustainable practices suffered less damage to their crops than conventional farmers (Altieri 2009; Philpott et al. 2009). Indigenous technologies, Altieri adds, often reflect a more realistic and sustainable worldview and understanding of the human-nature relationship than those of European heritage.

Proponents of modernization schemes such as the Green Revolution assimilate progress with the replacement of traditional crop varieties for improved, even transgenic, ones and view the economic and technological integration of traditional agro-ecosystems into the global system as a necessity for increasing production, income and well-being (Altieri et al. 2011:6).

Despite the achievements documented by Altieri and other agro-scientists, critics accuse subsistence agriculture of being unsatisfactory and proclaim the necessity of agrochemical and transgenic intensification in the transition to commercial production (Altieri 2009:109).

Yet, Altieri maintains a critical attitude to the industrial agrifood complex, arguing that polycultural smallholder farms are proven to be more productive than industrial farms when comparing total output rather than just the yield from a single crop.

Yield advantages can range from 20% to 60%, because polycultures reduce of losses due to weeds, insects, and diseases, and make a more efficient use of the available resources of water, light, and

nutrients. In Mexico, 1.73 ha plot of land has to be planted with maize monoculture to produce as much food as 1 ha planted with a mixture of maize, squash, and beans (Altieri et al. 2011:6).

Evaluations of agroecological approaches around the world show raised cereal yields from 50 to 200 percent, increased stability of production through diversification, improved diets and income, contributes to national food security, even to exports, and conservation of the natural resource base and biodiversity (ibid). Moreover, a shift towards organic production systems ”builds up levels of natural, human, social, financial, and physical capital in farming communities” (Altieri 2009:109).

A general shift to agroecology approaches would require substantial changes of development institutions as well as national and international policies. Furthermore, being an integrated eco-food system, agroecology has to tackle not only environmental but also social challenges, such as creating employment and providing access to local markets in order to be a viable alternative to the current system. In terms of how to implement agroecological principles in production systems, Altieri agitates for the involvement of the peasants in the process of technological innovation and argues in favor of Campesino-a-Campesino models which focus on sharing experiences and problem-solving capacities, emphasizing the importance of participation and enhancement of farmers' ”ecological literacy” and continuous empowerment (Altieri 2009:110). In the consolidation of this alternative food system, local markets must also be developed with a focus on fair prices and mechanisms that enhance the social cohesion thus building producer-consumer relations based on a sense of solidarity. The ultimate challenge for the success of agroecology, though, is the necessity of an increase in investments (Altieri 2009:110).  
The question is how to attract investments without renouncing the independence and self-determination of agroecological communities. In an article published by Otros Mundos, Holt-Gimenez (2011:1), argues that despite its excellent and promising results so far, agroecology was not even briefly discussed at the Cancun Climate Conference in 2010, because it is counterproductive to the logic of agroindustrial market, since the absence of chemicals and fertilizers in agroecological production leads to a reduction in sales and profits of the agroindustrial corporations. The neoliberal development path[[56]](#footnote-56) chosen by the Mexican government since the late 1980s continuously prioritizes the interests of capital over those of the indigenous peasants and the environment. Based on 2012 statistics, Mexico has a total of 12 free trade agreements involving 44 countries and its trade policy is among the most open in the world (Villarreal 2012:2). Between 1994 and 2011, Mexican exports have increased by 475%, while imports have increased by 342%, leaving the country highly dependent on international trade markets, especially that of the US which absorbes 80% of Mexican exports (ibid). According to Villarreal (2012:19) ”Mexico has made an effort to make trade agreements a tool for promoting economic development and combating poverty” by issuing cash transfers to poor families who demonstrate that they send their children to school and attend regular medical appointments, but critics argue that such programs do not provide incentives for poor workers to obtain formal sector jobs with prospects for increasing productivity. Opposing this capitalist logic, indigenous and peasant movements have to an increasing extent realized that without political organization as a means to put pressure on the politicians, the peasantry will be left unprotected against corporate interests in their territories.

Yet the pursuit of self-sufficiency remains intact within indigenous movements. Otros Mundos (2012:7), for instance, has developed a network for food sovereignty called RESISTE which organizes seminars on agroecology and exchanges experiences among peasant groups. The network has been extended to include urban areas as well and participates actively in demonstrations and happenings in defense of *la tierra y el teritorio* (land and territory). This network is a manifestation of indigenous democratic collective action, it stresses consensus in the decision making process, it is based on free knowledge sharing and collective education, and it promotes local agroecological alternatives to neoliberal agricultural policies.

The recent emergence of agroecology on the global development agenda provides a scientific basis for the indigenous struggle for cultural and territorial rights in promoting an approach based on indigenous traditional agriculture as a means to mitigate climate change and ecological destruction as well as enhance community empowerment and food security.

With the reach of transnational corporations extending into every corner of the globe, Gliessman (2010:820) emphasizes that local agroecological food system initiatives are the best hope for retaining both local food security and food sovereignty, especially for indigenous farming communities.

**Towards a world where many worlds fit**

The Zapatistas and Otros Mundos form part of a general movement towards ”an alternative development paradigm organized around local problem-solving and civic engagement is emerging in many localities to challenge the free-market/neo-classical model of global capitalism” (Lyson 2006:293). They advocate a shift away from the modern, anthropocentric worldview which has proven devastating to the equilibrium of the world's ecosystems, thereby questioning the mere foundation of modern science, the heritage of the Enlightenment, in which nature is subjugated to the rational man (with a deliberate use of masculine). Otros Mundos link global warming, the destruction of ecosystems, the cultural homogenization, and the polarization of rich and poor to this conception of reality in which humanity dominates nature through productivity (Febles 2011:2). Contrary to this worldview, Otros Mundos perceive humanity is part of natural ecosystems, paraphrasing the Catalan ecologist, Ramón Margalef (1993) who argues that nature as a system of diversity, i.e. a composition of complex, but complementary relations which, in their totality, constitute stability. In the indigenous Cosmovision, human beings, as well as any living thing, are part of this dynamic interrelation which constitutes the integrity of nature, and all living things interexist in a relationship that goes beyond interdependence (Febles 2011:3). The principles of ecological agriculture reflect this multiplicity and integrate the experiences, resources and knowledge of the social actors, and consequently, the systems of transformation and distribution of food products are inseparably linked to these ecological principles and ethics (ibid).

A recently established Alliance for Food Sovereignty for the People of Latin America and the Caribbean, built upon almost two decades of confluence of organizations and regional networks in Latin America, aims at being the instrument of unity among movements who struggle for food sovereignty as a substantial element in the construction of a new societal model based on the principles of agroecology, Buen Vivir and sovereignty of the people (Otros Mundos 2013a:1). The alliance vindicates the necessity for a territorial defense in order to strengthen the struggle against exploitation, privatization and the agroindustry fostered by the logic of the capitalist system and its commercialization of life (ibid). A transcendental transformation is heralded, justified by the exhaustion of the extractive development model, and brought about by agroecology, defined as:

a lifestyle that recuperates what has been lost, a connection with ancient knowledge. It is a force that confronts the capitalist model; rescues local markets as a fundamental part of preserving values and knowledge of the communities; questions pricesetting and fosters exchange and barter economies as a model for a socially just economy (AT- Otros Mundos 2013a:2).

Indeed, a reconciliation of society and nature, as suggested by Martinez-Alier, Foster, Altvater et al., is necessary in order to construct a more sustainable development paradigm. The close relationship of indigenous peoples with nature offers inspiration for this change and can also be entwined with anti-capitalist activism as in the following example. In an anthropologic case study of Zapatista Corn, a solidarity project between the Zapatistas and the San Diego-based non-profit organization Schools for Chiapas, Brandt (2014:877) argues that the Zapatista Corn demonstrates biocultural link between the Zapatistas' political project and their maize plants. Corn is the foundation of Mayan culture as well as basis for social structures and Mayan cosmology, in which human beings were literally formed out of corn (Brandt 2014:881). The Zapatista Corn project emerged as a reaction to findings of transgenic hybrids in ecological corn fields, which drove the Zapatistas to adopting new technology such as genetic testing and seed-conservation combined with old practices such as agroecology-based political education in order to protect the biodiversity of their corn from transgenic pollution (Brandt 2014:890). Through Schools for Chiapas and the Zapatista bases, the Zapatista Corn is distributed to e.g. solidarity networks and poor peasants worldwide. The seeds are given away free of charge, but if the recipient has the means, a donation to the cause is expected. As an attempt to politicize the corn by calling it ”corn in resistance”, the Zapatistas aim at framing genetically engineered (GE) corn as both being a health risk and causing economic damage by creating dependence on capitalist forms of commodity distribution (Brandt 2014:892). A Zapatista agroecology promoter[[57]](#footnote-57) interviewed by Brandt (2014:893) explains that, for those in need, the distribution of Zapatista Corn provides an alternative to aid from developed countries and offers a method of obtaining food sovereignty. Thus, Zapatista Corn offers ”the possibility of material participation in the enactment of a different kind of world”(Brandt 2014:894), performing a political bioculture everywhere in the world that it is grown. The Zapatista Corn project contributes to creating other conceptions of modernity in which the antagonism between the modern and the traditional is bridged through a shift from competitive, industrial agricultural production to agroecological community-based production that praises cultural heterogeneity and biodiversity.

**The transformative potential of social movements**

As mentioned above, there are many similarities between the objectives of the Zapatistas and those of Otros Mundos, among others the fierce critique of neoliberalism and the strong emphasis on finding sustainable and just alternatives. Instead of social change from above, i.e. neoliberal globalization, they propose a globalization from below based on principles of radical democracy, equality, cultural heterogeneity and ecological sustainability.  
An important difference between Marxism and postmodernism in relation to social change is that the objective of the former is to bring about fundamental change or challenge the broader system, i.e. societal transformation, whereas the latter encourages democratization in terms of enlarging the space for local, community-based and people-led development (Petras & Veltmeyer 2003:84). One postmodern strategic issue, though, is that without a fundamental or systemic change, the structural forces of capitalism, driven by the logic of capital, and the dominant classes, in order to protect their privileges, will continue to counteract and oppress the process of bottom-up development. A number of Zapatista leaders have been murdered by either paramilitaries or military forces (Morquecho 2014, EZLN 2014, Schools for Chiapas 2014) after their renunciation of violence, proving that the indigenous resistance is not merely a discursive struggle over perceptions of modernity, it also comprises very real struggles over power, territorial control, and the right to existence. The only way to match the power of the political elite is by massive and continuous mobilization. On this account, the Zapatistas have only proven successful to a limited extent. The achievement of autonomy is a victory, surely, but the failure of their attempt to unite all struggling classes and groups, in Mexico first and foremost, as stated in several Declarations from the Lacandon Jungle, exposes a weakness or more correctly and ambiguity in their objectives and strategy for social change in the sense that they express a wish to join forces with all the poor and oppressed, but the extraparliamentary and excluding nature of their political organization complicates such unity. However, the symbolic vanguardism of the Zapatistas, also adopted by Otros Mundos, has inspired a generation of new social justice movements, e.g. in relation to climate summits[[58]](#footnote-58) and as a reaction to economic crises[[59]](#footnote-59). Otros Mundos is part of the world's largest international grassroots-network and has a base of some 5.000 local activists on the Latin American continent (FOEI: About).   
Social conflicts have essentially positive functions such as debating the social use of cultural, ecological and economic resources. In resonance with the theoretical positions presented in this thesis, Tourain (2002:95) ascribes to social movements a central role in the process of social transformation:

the future of democracy, of freedom, of justice, depends on the world’s or different parts of the world’s capacity to transform at least part of the present-day anti-globalization movement, or anti-capitalist movement, into social movements.

As this study shows, the Zapatistas and Otros Mundos have created a space for local communities to experiment with the construction of new forms of development, in the hope of moving towards a pluriversal modernity. The pluralism and flexibility of autonomies helps the movements survive intense state-organized counteroffensives, but with regard to the Zapatistas, Stahler-Sholk (2007:61) cautions, their ”future depends on their ability (limited so far) to articulate this local resistance into a national movement.” As the spaces for self-sufficient development become reduced by global market forces, the microcosm of autonomous communities such as the Zapatistas' and those supported by Otros Mundos, are symbols of ”alternative and inspiring new political movements that challenge the state’s posture as broker for global capital” (Ibid).

They do indeed demand an inclusive understanding of social justice as presented by Nieuwenhuys et al. in which the government has a responsibility to provide human welfare and at least protect indigenous livelihoods, but oppose the development model proposed by the Mexican federal government in the form of trade agreements such as the Trans-Pacific Partnership (TPP) negotiated between the United States and 11 other countries including Mexico and policies based on The Green Economy[[60]](#footnote-60). Drawing on Donatella della Porta's (2006:198) understanding of social movement analysis in the age of globalization, the protagonists of this study argue that neoliberal globalization causes a shift in the power axis from politics to the market, thereby undermining the democratic legitimacy of government institutions. As an alternative, the Zapatistas have established their Good Government Councils, organized around a horizontal, democratic power structure and the principle of *mandar obediciendo* (to govern by obeying) and Otros Mundos hold seminars, educating indigenous communities about their rights, providing agroecological experiments, and mobilizing social forces regionally in Latin America, such as the Alliance for Food Sovereignty, etc.

The roots of the indigenous culture of resistance, here exemplified by the Zapatistas and Otros Mundos, date back to the ”discovery” of the Americas. Therefore, their critique of the injustice of capitalism is reinforced by the long trajectory of injustice, marginalization and negligence of cultural and territorial rights on the part of the ruling classes against the indigenous peoples. Their struggle for an Other world, an Other modernity, or a pluriverse contains an agglomeration of interrelated social, economic, cultural, territorial and ecological aspects which is why the movements are called both social, political, cultural and environmental.

Agroecology is showing promising potential as a means of indigenous movements to obtain food sovereignty as well as socio-ecological and cultural justice and autonomy, due to its compatibility with the struggle and vision of rural movements. As a science, it builds upon peasant rationale and indigenous traditions and attempts to optimize the design and uses of local farming systems by employing horizontal methods of knowledge exchange (Altieri et al. 2011:8). As a practice, it enhances social cohesion by building local food systems on values such as participation and solidarity. Furthermore, agroecological initiatives aim at transitioning food systems away from fossil fuel-based production, export of agroproducts and biofuels towards ”an alternative agricultural paradigm that encourages local/national food production by small and family farmers based on local innovation, resources, and solar energy” (Altieri et al. 2011:4).

If the agroeclogical development model is broadly adopted by social movements, it could foster the necessary reconciliation of nature and society in a biocentric world view that would heal the metabolic rift created by capitalist dynamics of commodification and alienation of both humanity and nature.

Paraphrasing FAO (2007:16) the challenge of performing a general shift to organic agriculture is neither agronomic nor economic but socio-political. In other words, it is a political decision whether to invest in agroecological sustainability or yield to the demands of capital. Since it has been established earlier in this study that the political elites and institutions lack democratic legitimacy by acting in favor of the interests of global capital, a massive and persistent social mobilization is the only way to gain the necessary influence on the development path for the future.

**9. Conclusion**

The starting point of this thesis was an indignation at the grave state of inequality and ecological degradation in this world. In order to satisfactorily answer to the research question, a triangular research design (comprising Political and Marxist Ecology; Critical- and Post-Development Theory) was adopted as to provide the study with a multifaceted approach consisting of two structural dimensions, one regarding the human-nature relationship, the other regarding inequality and justice, as well as new social movement analysis as an actor-based approach that binds the conceptual framework together.

According to Altvater, Foster, Martinez-Alier, among others, inequality, as a result of the capitalist logic of production and financialization, is the root of environmental degradation. Indigenous communities are displaced from their ancestral territory in order to make way for the “Green Economy”, i.e. mainstream development projects conducted mainly by transnational corporations.

Thus, a systemic change is necessary in order to restore the integrity of the relationship between society, economy and the environment. New formations of social organization such as the Zapatistas, who are somewhat vanguards of new social movements, and Otros Mundos articulate the need for change based on a moral claim for socio-ecological and economic justice on the grounds that the capitalist system is unjust and destructive, and the need for an alternative understanding of modernity in which indigenous cultural rights are respected. Driven by this moral compass[[61]](#footnote-61), they employ proactive strategies in their search for culturally inclusive and ecologically sustainable alternatives that will ensure the protection of indigenous territories and livelihoods. The promising, holistic agroecological approach not only ensures sustainability and food sovereignty, it also facilitates community empowerment and enhances social and ecological cohesion in and among communities. The influence of these movements in the Mexican society is limited and they find themselves in a minority position regarding support for their project for autonomy and self-determination. Their symbolic power, however, is significant, especially outside Mexico, where they have served as inspiration for other social movements demanding protection of indigenous and peasant rights, food sovereignty, and self-sufficiency as radical democratic alternatives to the loss of legitimacy of the national political establishments due to the power shift in favor of global capital. What is necessary in order to achieve a more just societal model in developing countries, based on agroecology, is political will for change. To constitute a counterpart to the power of the political establishment, acting as a broker for global capital, a massive and persistent social mobilization is required. The alternative is right in front of us, brought onto the global development agenda by poor and marginalized indigenous peasants, among others, in Southern Mexico.

APPENDIX:

”The Great Rift of Capitalism and the Metabolism of Nature and Production”

*Lecture by John Bellamy Foster.*

Monthly Review 07.08.13 - <http://mrzine.monthlyreview.org/2013/foster070813.html>

Transcript:

My talk is entitled ”The Great Rift” and the subtitle is ”Capitalism and the Metabolism of Nature and Production”. I want to talk about the marxist approach to ecology or the approach to ecology that really evolves out of Marx. But I want to start by talking about some of the difficulties that Marxism had as a field of thoguht in addressing the ecological problem. The big difficulty was that there was an epistemological break within Marxism itself that had to do a lot with the split that occurred (...) between Eastern Marxism and Western Marxism, between forms of Marxism that were geared more towards (...) mechanistic materialism, other forms of Marxism that were geared towards idealism, hegelianism and so on. There was a very severe epistemological split over the issue of the dialectics of nature in particular, which made it extremely difficult for marxism to approach the problem of ecology. The way I learned this -and many other people of course- was through Lukács and his famous footnote no. 6 in the chapter on ”What is orthodox Marxism?” in ”History and Class Consciousness”, and Lukács said that the dialectical method does not apply to nature, (...) it could only be applied to society and history.

But of course it was another tradition in Marxism that came out of Engels, who wrote the dialectics of nature, that was very materialist, very science-oriented and actually thought that you could talk about a dialectics of nature. You could apply dialectical rules on natural systems themselves (...) as a result of this you had two fractured views with respect to ecology. Marxists doing(?) mechanistic materialism were developing a relationship to the sciences (...) exploring Darwinian theories, exploring ecological thought, but (...) their understanding of dialectics was crude and mechanical. Obviously there are problems when you try to apply dialectics directly to nature and fail to recognize that it is primarily a form of an analysis (...) that characterizes human history.

On the other hand you had Western Marxism and the Frankfurt School and so on that, although they talked about nature to some extent, it was very abstract for them. They tended not to be materialists, they saw any attempt to deal with science and nature directly as raising the dreaded spectre of positivism and they tended to talk about nature -either it was human nature (...) or it was nature in very abstract terms.

And so, Marxism was divided this way and as the ecological issue developed (...) Marxism was not as prominent in developing ecological thought as it might have been because of this split.

When Marxists started to develop more ecological thinking in the 1970s-80s and early 1950s they tended to (?) craft historical material views on top of green theory rather than going back and articulate it in terms of a Marxist approach. But of course, part of my argument is that Marx actually had a very ecological consciousness -sometimes we say he was proto-ecological, but the more you look at it, the deeper it becomes. Marx actually influenced a lot of ecological thought and there was a moment where all sorts of developments in the Marxist tradition that we have forgotten about.

(...) Even in the 1930s there was a moment where Marxist concept of metabolism, offered by Lukács as a way out of the issue of the dialectic of nature, and essentially metabolism became the way in which Marx mediated between nature and society.

Lukács was already writing about that in a philosophical sense and even at the beginning of the Frankfurt School, {Eric Frohman}, 1932, in one of the primary papers where he was developing the social psychology for the Frankfurt School, said that metabolism was the key to solve this problem; that the Frankfurt School should listen to, be listening to [Pekarin? cannot hear the name] who in the Sovjet Union had been applying the concept of metabolism (...) so the question was raised, but in Western Marxism they basically abandoned any kind of approach to science in this area, they did not focus on Marx's notions around metabolism and so we arrive at this century with Marxist theory in some way undeveloped in this area. (...) I decided that it was time we went back and tried to look at what Marx had done and to reconstruct it. See if it was not true that Marxism had a stronger foundation in this area than standard ecological theory.

In my work ”Marx's Ecology” I went all the way back to his dissertation, to his work on epicur...[something I couldn't hear] ”Philosophy of Nature” in the very beginning and followed out Marx's research on science all the way through and came to an understanding of his project, where the materialist conception of history was meant to supplement (...) a materialist conception of nature and the two actually belonged together. To reduce materialism simply to economics was from Marx's perspective obviously absurd. But the analysis of what we call the metabolic rift, basically adopting Marx's own terminology, (...) was developed in Marx's ”Capital”, particularly in two places in Vol I of ”Capital” at the end of the big chapter on Machinery of Modern Industry (...) he has a small section dealing with the industrialization of agriculture. Marx was studying the industrialization of agriculture very intensively, reading a whole host of works that where coming out on that, on the application of machinery to agriculture, on the role of British high farming (...) Since the 1840s he had been studying the work of Justus von Liebig and his soil chemistry. Liebig, in the 1862 edition of his great work on agricultural chemistry, wrote a 100 pages introduction basically blasting, criticizing, a full critique of British high farming, which was in essence a critique of capitalist industrial agriculture, and Marx saw this as a clue to how to approach these issues of agriculture and what we now call ecology. (...) Liebig was talking about the robbing of the soil and how the nutrients, the nitrogen, phosphorus, potassium in the soil were being removed from the soil and shipped 1000s and 1000s of miles to the cities in the form of foods and fibres, where they ended up as pollution and not returning to the soil. (...) He saw this (importing guano? from Peru as fertilizer) as very imperialistic. (...)  
Marx used this to develop his own critique and he incorporated this (...) metabolism (...) into his notion of material exchange between nature and society, into his analysis (...) of capital. (...) He defines the labor process and production as the metabolic relation between human beings and nature. He defines production itself in terms of metabolism and Marx (...), developing on Liebig's argument, argued that there was a metabolic rift (...) and talked about an irreparable rift in the metabolism or social metabolism because production is social as well as ecological. It is the connection between humanity and nature through production. He talks about the robbing of the soil (...) and the need to restore this metabolism (...) as an absolute necessity for society and he developed a whole notion of sustainability based on this, so his definition or his discussion of sustainability are(?!) among the most radical (...). Marx argued in Capital that no one owns the earth, not even all people together (...). They have to maintain and improve it for future generations. They need define the whole problem constantly in terms of the needs of success of generations. So, this is a very powerful analysis and when Marx went on in Capital III in what is considered his most developed definition of socialism, he defines socialism as the rational regulation between nature and society by the associated producers and so, he had a definition of production and understanding of production that was geared to sustainability, that was ecological in the fullest sense, and that connected his whole theory of capital, his critique of capital, the class analysis to a more fundamental ecological critique.

You can see this running through every part of his analysis from the very beginning. So suddenly you have a kind of ecological systems theory, a focus on metabolism that connects human society to ecology, that sees this in terms of specific forms of production, ties it to class relations. There really is no other approach to these problems that is so inclusive and so systematic. I remember when I went to speak in Austria at the institute in Vienna where they examined material flows and they were looking at the relationship between humanity and nature. They asked the question we discussed, ”what mediates between humanity and nature?”, and I said, well, for Marx it is production, the metabolism -social metabolism, this metabolic relation is actually production in itself, but it is also, on one hand it is social, on the other it is ecological. They were saying that what mediates between humanity and nature is culture, which given the definitions of culture that exist today leaves you high and dry.

There is nowhere you can go with it, it is perfectly meaningless. I think that Marx's approach is extraordinarily important -in what Lukács was saying in 1925-26 which some people recognized, was that this notion of metabolism was a dialectical notion of mediation and helps deal with the dialectic of nature-problem because it is both social and ecological, it is how we approach, through production, through this notion of metabolism, the dialectic of nature and society.

You can look at the import(ance?) of this theory in terms of, I mean some people have looked at it as Marx's analysis of the metabolic rift as simply a component of agricultural history which is fine. I argued that he was addressing what has been called ”the second agricultural revolution” and a crisis over the soil that existed in the 1840s-1860s. But we can point to other similar periods in history where there were metabolic rifts (...), where humanity was destroying the soil and creating rifts and cutting itself from nature, from the reproduction of this relationship with nature which Marx insisted was absolutely essential. So we could talk about other metabolic rifts and some people like Jason Moore, who is an environmental historian, has argued that -and I have no quarrel with that, I think you can take this analysis and you can look at it in other terms as well, you can look at it as a kind of an ecological systems theory (...) that allows us to look at the relationship the social system and ecosystems, it is a way in which we can have a very systematic analysis that lets us get at the problems we have. So the ecological systems theory that comes out of this.

Incidentally, I will just jump ahead a bit (...). In the early 20th century they started to develop ecosystems analyses and ecological systems theory, metabolism is the core concept. Marx was the fist to take the concept metabolism which had been developed in the 1930s-40s, primarily in Germany, in an analysis of cell structure and so on, and it was used by Liebig as well, but he took it and used it to explain this relationship between nature and society, to talk about the social metabolism as the key that tied all of the analyses ultimately together (...). Ecological analysis ended up developing in a similar way, but without the full social component that he provided.

There have been a number of criticisms of, well, first of all beyond an ecological systems theory you can say this gives you a materialist dialectic, it allows us to extend the dialectics and its usefulness and to address other problems. There have been a number of criticisms of this approach and this is nice, the Journal of Peasant Studies and others (...) have been writing papers on the metabolic rift, asking questions about the approach. One criticism the Jason Moore, Philip McMichael, Mindi Schneider and others have had is that it is a dualistic approach because you still talk about humanity and nature, but to talk about metabolism and the metabolic rift is to talk about mediation between nature and society, it is to understand that is based on production.

To understand that, in doing that -as metabolism develops, you are changing human nature or the nature of human society, and you are changing the nature of external nature, you are changing (...) the whole process has been transformed by metabolism. In other words this is a way of looking at these things dialectically. It is not about nature versus human society, but actually to find a way to integrate these because this is what we ??most now?? [Smth missing?!!]

Ecological theory (...) social ecology and also ecological sciences based to a large extent on Malthusian perspectives that are much less sophisticated. The other criticism that is commonly addressed at the metabolic rift is that, well Marx did not know all that we know about ecological science today. You know, his ecological science was way back in the 1860s and sure he was up with what Liebig and others where saying, but this no longer very significant because his analysis is antiquated but (...) we still have the problem with the soil nutrients that is why we put so much fertilizer on the ground, but we know a lot more about the soil than they did in Marx's days so some people say this is no longer important because it is outdated(?).

It is the critical tools, it is the critical analysis, the dialectical method that is important here, not the specifics of the science which are still valid, but we know a lot more. One person that criticized Marx's ecology said, well Marx did not know about PBCs and nuclear power so he could not have anything to say to us today. I think the importance is the critical analysis and he had very deep ecological concerns, I mean, in 1878 Marx was writing about the role of isotherms. He was taking notes on isotherms, the temperatury zones of the Earth and how, when they moved, that caused species extinction. (...) He was looking at that problem in 1878 and now it is the core issue with respect to climate change and species extinction. So Marx's analysis was to some extent (...) forgotten or not fully followed up on by later Marxists. It is true that in the early part of the Russian Revolution in the 1920s they had the most developed ecology in the world and figures like Bukharin and Nikolai Sokolov/Vakolov(?) who discovered the Sokolov/Vakolov varius(?), the sources of germplasm in the world, the areas of the earliest cultivation and where we have our reservoirs of germplasm. Alexander Oparin who along with Haldane came up with the theory of the origin of life.

Vernadsky who introduced the concept of the biosphere, Boris Hessen who -and others were very developed (...). It was very much based this materialist approach, although sometimes too mechanistic, but they had not completely forgotten about what Marx was doing. (...) Most of those individuals were purched and died(????)

What I did was saying something about the rise of the ecosystems analysis. Ray Lankester who was a friend of Darwin's and Marx's and was at Marx's funeral and was a leading Darwinian biologist in the generation after Darwin. He had explored issues of degeneration in ecological systems. He was the first to really discuss and to write about in a major way human generated species extinction. He was a materialist scientist. His student (...) was Arthur Tansley, founder of the British Ecological Society and Tansley was the one who developed the concept of ecosystems. In doing so, he borrowed from Marxist systems theory (...). Tansley did it in terms of combatting the eco-fascist approach to ecology that was developed by General Smuts in South Africa, but it very much came out of – what existed at that time was a constant interface between Marxian and Darwinian ideas. And this carried it forward in the British tradition (...) [they] were bringing together Darwinian and Marxian conceptions. They needed Marxian analysis mainly for its dialectics. Haldane who wrote the foreword to the English edition of the ”Dialectics of Nature” was one of the two people to create the Neo-Darwinian synthesis where they integrated genetics and then carried it forward further in the United States in more recent times. People like (...) all built on Marxian notion of dialectics to develop biological concepts, so there has been this kind of a tradition of building on these things -if not entirely directly.

Howard Odum, who was the leading systems ecologist in the United States is considered to be founder of systems ecology in the world and he studied Marx's work constantly. It was very important to his own analysis of systems ecology and tends to bring this back into the realms of the social. One of his last papers (...) was called ”An Energy Systems View of Karl Marx's Concepts of production and Labor”. So the (...) founder of systems ecology in the post Second World War period, he (...) what drew him into Marx was was he was concerned with the issue of unequal ecological exchange, he was concerned with the issue of ecological imperialism an he saw the situation in a way similar to what Marx had with the notion of metabolism, but also with the notion of use value. Odum really saw use value as the real value, the natural material value that (...) was part of every commodity. It expressed our material relationship to nature. He was concerned (and this is what drew him into Marx, he studied the transformation problem and everything else) was to be able to explain how countries in the global South were being robbed ecologically. There was embodied energy or emergy he called it, was being transferred from the global South to the global North through a system of ecological imperialism. Basically, countries in the global South drew more on their free environment and this reflected in the prices of their goods in the system and they ended up being systematically robbed. This is very much built on a Marxian framework and it has been used to esplain issues like ecological debt(?) today. Some of us have applied Marxist systems theory to try to look at the ecological problems we have today -we call the ecological rift or the planetary rift. Scientists have looked at 9 planetary boundaries that are crucial if we want to maintain a safe place for humanity. Climate change is only one of those. They all represent real dangers in our time.

1. Climate change
2. destruction of the ozone layer
3. ozone sedification(??)
4. species extinction
5. loss of land cover
6. freshwater shortage
7. aerosol loading
8. chemical proliferation
9. ?

These planetary boundaries are being crossed we are leaving the whole scene period(???) and we are (...) creating crises. But in analyzing, in trying to bring out the social dimensions of it we are explained these crossings of the planetory boundaries as metabolic rifts and it fits with the metabolic approach of the science which uses systems ecology which has the notion of metabolism provide the fundamental model for the whole thing. So we have a way of talking about ecological systems analysis that is also very dialectical, that is very tied to Marx, that is also very tied to Marx's critique of capitalism as a social system. We can say for example as Vernadsky did that we have bio-geo-chemical cycles and this is basic to science, that the planetary system is governed by bio-geo-chemical cycles. We know with the accumulation of capital and the increase in the scale of the system that human economy is rivaling inside these bio-geo-chemical cycles. So, as that happens, the bio-geo-chemical cycles are disrupted. And the planetary systems -everywhere from the ecosystems up to climate are disrupted and this represents a threat to human existence and to life itself. So, it is interesting to me because it is so itegrated with science.

Recently I have brought in another aspect of this, I have worked for many years in political economic analysis as well. The tradition of economic theory that I come out from is Monopoly Capital Theory. It is associated most directly with the work of Paul Baran and Paul Sweezy who wrote ”Monopoly Capital” (...).

In our understanding of monopoly capital, the productivity of the system has grown and grown maybe by 2-3% per year for hundreds of years now. I mean the productivity of the system keeps on expanding. There is a tendency for the surplus to rise. The overall surplus, the generating ability of the potential of societies in the advanced capitalist world is absolutely enormous. We are faced with market saturation, we are faced with all sorts of problems due to that.

One of the responses of the system, a systematic response because as this surplus potential develops they have to find ways absorbing this surplus and they cannot in this loopsided system that they have. In the United States (...) 400 individuals own as much wealth as the bottom half of the population, 150 million people. You have got a very distorted system and that is just in the US. And so, this surplus has to be absorbed, but there are all sorts of problems in terms of absorbing it. How do you promote continued capital formation on that basis? What they have done is they have built waste into the system on a massive scale. We have studies of that, I mean waste is built into the production structure. As [cannot hear their names] said, ”the sales effort penetrated into the cause of production”. So most of what we call cause of production now have to do with sales rather than what is necessary to actually produce the good/commodity. (...) In the US we spend 1 trillion dollars a year on marketing, just getting people to buy things. So this waste actually represents a destruction of use value in various ways. The use value, what workers buy when they purchase a commodity, when you buy your wagegoods with your wages, you get all this garbage with it that you do not really want, but it comes with it and you have to pay for it. The waste in the system is absolutely massive. We call this the ”penetration effect” because sales have penetrated into production and you have what we call specifically capitalist use values now. Use values that are not in any way natural, material use values in a Marxist sense, but use values that are promoted for only one reason and that is to sell things and marketing is part of this.

We have a system of financialization now which is built on that as a further layer. So we talk about how the real economy is, I mean Marxists do not talk about the real economy being rational, but the mainstream economists talk about the real economy as they call it as a the rational economy and then we have finance and speculation on top of that. And financialization and the financial crisis has shown us how dangerous that is. But that is simply another layer of waste and destruction of use value on top of what we already have. So the argument here is that we have the potential, that there is a growing contradiction between what is actual in our society and what is possible. To understand this you have to look at the metabolism, you have to understand ecological systems as a product of our production system, you have to understant how all this damage is built into the production system, and we have to understand the waste and the fact that we are producing more and more and threatening the environment. Well, actually giving less and less to the population and this is complex and I do not have the time to develop it. (...) What is the answer to this? I do not have time to give you the answer, but (...) you have to talk about agency so to say.

The answer is fairly obvious in some ways. We need a society that is geared, as István Mészáros always tells us, to substantive equality. And no compromise on the issue of equality. Bolívar said ecuality is the law of laws. So we need substantive equality and we need ecological sustainability. And they have to go together. How do we know they have to go together? Because what is causing the ecological damage and what is causing the social damage is the same thing: it's the rift in the production system; it's the alienation of nature, which is one with the alienation of human society.

In Marx's perspective these things are actually a whole -- it's an alienated whole, and we have to restore the integrity of it. You can't have substantive equality without ecological sustainability and vice versa. In terms of agency we have real problems, but there are things that are happening -- mostly happening in the global South. I think that we underestimate how much is happening there. La Via Campesina is an international peasant movement. It has been developing, and, incidentally, they have been using the concept of metabolic rift to explain their own situation, which is exciting. Look at Bolivia. Of course there are all sorts of problems about extraction in Bolivia and so on, but the People's Agreement in Bolivia on climate change is the best that we have in the world, and it's been initiated in the global South. Why is that happening? It's because actually the ecological and social contradictions are greater in the global South than they are in the North. And I think that we are likely to see, we are already seeing, the emergence of the environmental proletariat. (...) Basically material conditions are coming together. We are accustomed to think about material conditions as just economic conditions, but increasingly they are environmental conditions too. More and more the distinctions between environmental conditions and economic conditions are going to dissolve.

We will have an environmental proletariat like they did when Engels wrote ”The Conditions of the English Working Class”. In some ways they were environmental conditions. It is going to come about that way because if people are motivated by material conditions they are going to (?) inextricable in length. We can see this in terms of the evolution of the ecological crisis. If you look at the Pearl River Delta in China, you get the sense of what could happen. As the climatologist, James Hansen, has indicated, around 250 million people in China in highly urbanized and industrialized coastal areas will be forced to move inland over time as a result of a sea-level rise of 25 meters, which will eventually occur with an increase of atmospheric carbon concentration to 400 ppm [parts per million]. A point that is fast upon us. (...) There is an enormous threat that transition, if it takes place, to the ice free stage will be chaotic and uncontrolled, he says. New coastlines will not stabilize for a considerable period. [Example from China which is not relevant]

The concept of an environmental proletariat is merged in a comlex way with a question of an ecological peasantry due to the massive migrant labor system and the relation of this to the land rights and the countryside. (...)

What region is going to be most affected by the sea level rise? China is very vulnerable in that respect. South Asia, Bangladesh, but here you have the Pearl River Delta which is the most industrialized in the world.

We have solutions to all these problems. As Marx said, humanity only raises those questions it can solve. We actually have the technologies we need, the renewable technologies. The main thing we have to do is to change our social relations. And we need conservation. But conservation isn't that tough when you are wasting 99% of everything you produce.

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1. There has been a reduction in the number of undernourished people of 17 per cent since the 1990s for good measure. [↑](#footnote-ref-1)
2. Note the difference in the use of singular or plural. The use of plural acknowledges the fact that there are several indigenous populations in the world with each their distinct language and ethnic and cultural characteristics, thus recognizing the inherent heterogeneity of the concept. [↑](#footnote-ref-2)
3. Mexican born of Spanish descent. [↑](#footnote-ref-3)
4. People of mixed ethnicity. [↑](#footnote-ref-4)
5. It was difficult to find statistics of the ethnic composition, and there are some small incongruenses related to the total size of the Mexican population when compared to other statistics, but this was the one that seemed the more reliable. [↑](#footnote-ref-5)
6. Due to the lack of a national personal registration system, the authorities often define indigenous people based on whether they speak native languages or not, knowing that this distinction might exclude Spanish-speaking indigenous people from the statistics. [↑](#footnote-ref-6)
7. Access to clean water, sewage facilities, electricity, and combustibles for the stove. (SEDESOL 2011) [↑](#footnote-ref-7)
8. In the following referred to as the EZLN or the Zapatistas. [↑](#footnote-ref-8)
9. A concept first launched by Via Campesina (1996) [↑](#footnote-ref-9)
10. According to the indigenous people I talked to during my 7 months in Mexico in 2012-2013 working as an intern in Asociación Cultural Na Bolom in Chiapas and travelling the country. [↑](#footnote-ref-10)
11. Political in a philosophical sense. [↑](#footnote-ref-11)
12. Danish historian [↑](#footnote-ref-12)
13. By the Gramscian definition by which it refers to the success of the dominant classes in presenting their world view and reality to the rest of the social classes in such a naturalised way that it is accepted as ”common sense”. (Goldberg 2004) [↑](#footnote-ref-13)
14. A scientific branch that took its start in the 1970s. [↑](#footnote-ref-14)
15. A concept adopted from Curt Sørensen's work ”Stat, Nation, Klasse” (2013). [↑](#footnote-ref-15)
16. Defined by the British Dictionary as the sum total of the chemical processes that occur in living organisms, resulting in growth, production of energy, and the elimination of waste material. But it is also used to describe the same processes and energy flows in economic systems. [↑](#footnote-ref-16)
17. The Environmental Justice movement is, however, geographically specific to the United States and operates by different theoretic and analytical languages than the Environmentalism of the Poor which is a global current. [↑](#footnote-ref-17)
18. One of the key figures in this tradition, who has produced a vast body of research in this area. [↑](#footnote-ref-18)
19. As a result of the expansion of capitalism. [↑](#footnote-ref-19)
20. Thereby referring to the body of national and international private and public institutions working with development. [↑](#footnote-ref-20)
21. Eurocentric in a cultural sense understood as the promotion of the ”civilized” as opposed to the ”barbaric” and a rejection of the spiritual element in philosophy which is significant especially in indigenous world views. [↑](#footnote-ref-21)
22. Logocentrism demonstrates how easily even a radical critical discourse slips into the form, logic and the implicit assumptions of precisely the discourse it seeks to contest (Manzo 1991: 8) [↑](#footnote-ref-22)
23. His theorization on the concept of ”post-abyssal” thinking are being published and sold in Zapatista bookshops in Chiapas and serve as basis for the Zapatista worldview. [↑](#footnote-ref-23)
24. Marxism is an excellent example of this ”abyssal thinking”, according to Santos. [↑](#footnote-ref-24)
25. An interpretation which Marxist scholars such as Sørensen dismiss as a misreading of Marx. [↑](#footnote-ref-25)
26. The dichotomy between modern and traditional, i.e. the rationality of Enlightenment philosophy and the spirituality of traditional and indigenous holistic world views. [↑](#footnote-ref-26)
27. Referring to the Buddhist idea of interbeing and dependent co-arising (Escobar 2011:138). [↑](#footnote-ref-27)
28. [↑](#footnote-ref-28)
29. Tactics mirror the ideological orientation of the movements and relates to choices of activism, anti-institutionalization, and symbolic representations (Pichardo 1997:415) [↑](#footnote-ref-29)
30. Referring to their official name, EZLN (Ejército Zapatista de Liberación Nacional). [↑](#footnote-ref-30)
31. According to Martinez-Alier (2002:62), the majority of environmental movements are reactive. [↑](#footnote-ref-31)
32. Las Nuevas Leyes de Indios [↑](#footnote-ref-32)
33. Albeit they never reached the rural periphery of Mexico. [↑](#footnote-ref-33)
34. Which was later transformed into the PRI. [↑](#footnote-ref-34)
35. President of a technocratic state 1988-1994 [↑](#footnote-ref-35)
36. Indigenous peasants who do not support the Zapatistas but who have occupied territories of private landowners ever since, sometimes aided by self-organized indigenous militias. [↑](#footnote-ref-36)
37. Such as the network ”En Defensa del Maiz”, sparked off by the alarm of transgenic maize in 2002, in which both the Zapatistas and Otros Mundos play an active part. [↑](#footnote-ref-37)
38. Referring to Salinas' constitutional changes, allowing for the privatization of *ejidos*. [↑](#footnote-ref-38)
39. A proclamation that was formalized in the Third Declaration of the Lacandon Jungle in January 1995. [↑](#footnote-ref-39)
40. At federal and state level. [↑](#footnote-ref-40)
41. Social, political, agrarian, linguistic and cultural rights. [↑](#footnote-ref-41)
42. As they ironically called their international solidarity meetings in the Lacandon Jungle. [↑](#footnote-ref-42)
43. A symbol used by ancient Mayas. It symbolizes knowledge and consensus. [↑](#footnote-ref-43)
44. As a prerequisite for real democracy, the leaders have to follow the will of the people. 'Lead by obeying' serves as a symbolic guideline for Zapatista leaders to always obey the people in stead of ruling against the interests of the people as does the ”Bad Government” according to the EZLN. [↑](#footnote-ref-44)
45. A Guatemalan sociologist and historian. [↑](#footnote-ref-45)
46. Professor of sociology at the Autonomous University of Puebla. [↑](#footnote-ref-46)
47. A Mexican equivalent of Susan Strange's concept, ”corporation empire” defined as an imperial bureaucracy headed by the U.S. Treasury Department and transnational corporations (Porta et al. 2006:8). [↑](#footnote-ref-47)
48. Professor of economics, expert on Russia, and former World Bank employee. [↑](#footnote-ref-48)
49. Chile being the most prominent example, but countries like Nicaragua, Cuba, and Venezuela have been victims of more or less covert attacks as well. [↑](#footnote-ref-49)
50. Due to the decentralist nature of the Zapatista schools, the findings are contextual and may not concur with the situation of the other Zapatista schools. [↑](#footnote-ref-50)
51. Teachers, for expample, work unpaid, driven by their dedication to the community. [↑](#footnote-ref-51)
52. In line with Altvater's epistemological conception of the need for a reconciliation between humanity and nature (especially in terms of production) built on reciprocity and non-exploitation. [↑](#footnote-ref-52)
53. In line with Porta's (2006) definition. [↑](#footnote-ref-53)
54. An indigenous tribe residing in the Lacandon jungle. [↑](#footnote-ref-54)
55. Originally, though, they sought access to modern farm equipment, such as tractors and agrochemicals, but the demands were quickly dropped when they realized that these technologies were unnecessary tools that created dependence on the agroindustrial complex and made the soil unproductive (Brandt 2014:882). [↑](#footnote-ref-55)
56. E.g. NAFTA in 1994, the Plan Puebla-Panama in2001 and the Trans-Pacific Partnership in 2012. [↑](#footnote-ref-56)
57. Promoters are part of the societal organization of the Zapatistas. Their function is educational and informational. [↑](#footnote-ref-57)
58. Climate Justice Action, Global Campaign to Demand Climate Justice, The Climate Mobilization, etc. [↑](#footnote-ref-58)
59. Occupy Wall Street, the Aganaktismeni (Indignant) in Greece which consists of both left and right-wing supporters, Los Indignados in Spain, etc. [↑](#footnote-ref-59)
60. The strategy of CO2-emission through trade with carbon quota advanced by UN Conventions and conservational environmental organizations which originated from the negotiations around the Kyoto Protocol in 1997. [↑](#footnote-ref-60)
61. Which does not differ substancially from that of old social movements (the working class) in terms of antagonizing the injustice of a capitalist system that produces inequality. [↑](#footnote-ref-61)