

## **The Antagonistic Self-Organisation of Modern Society**

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### **1. Introduction**

Today, we live in a postfordist, neo-liberal, information-societal type of capitalism<sup>1</sup>. A new mode of development has emerged which has new emergent qualities. It involves a post-Fordist regime of accumulation, a neo-liberal mode of development and a disciplinary regime that has been described by the term ‘society of control’. Although there is a new mode of capitalist development, we are living in a phase of social chaos, instabilities and global crisis. More and more people in the world have to live under precarious conditions, even in the western-industrialised countries. Immanuel Wallerstein argues that “this structural crisis leads us into a dark period of struggle over what kind of system will succeed the existing one. We can think of this as a bifurcation, and therefore the beginning of a chaotic period, within which no one can predict the outcome, which is inherently indeterminate. There will be a new structure, a new order, but it may be either better or worse than the existing one. It depends on what we all do in the period of acute struggle and how clearly we understand the forces at work“<sup>2</sup>.

This paper proposes that the best way to understand such phenomena is through a dialectical theory of social self-organisation. The theory of self-organisation has led to a change of scientific paradigms: from the Newtonian paradigm to the approaches of complexity. There is a shift from predictability to non-predictability, from order and stability to instability, chaos and dynamics; from certainty and determination to risk, ambiguity and uncertainty; from the control and steering to the self-organisation of systems, from linearity to complexity, circular and multidimensional causality; from reductionism to emergentism, from being to becoming and from fragmentation to interdisciplinarity. Self-organisation theories cover areas such order out of chaos in thermo-dynamical systems (Ilya Prigogine), synergetics (Hermann Haken), autopoietic living systems (Humberto Maturana, Francisco Varela), hypercycle theory (Manfred Eigen), self-referential autopoietic social systems (Niklas Luhmann), and general evolution theory (Ervin Laszlo). The philosophical implications of these approaches suggest the topicality of dialectical materialism<sup>3</sup>.

### **2. Social Self-Organisation: Self-Reproduction as the Synchronous Moment of Society**

I want to point out shortly some foundations of a dialectical theory of social self-organisation. Unfortunately, I have no space here to cover more details and the reader must be referred to other works<sup>4</sup>.

Humberto Maturana and Francisco Varela have tried to find a consistent definition of life, they say that living systems are biologically self-organising ones, i.e. the permanently produce themselves<sup>5</sup>. They call such self-producing systems autopoietic (autos=self, poiein=to make something). The main characteristics of an autopoietic system are self-maintenance, self-production and production of its own border. All social systems and societies permanently reproduce themselves, hence in some respect it can be said that on a synchronous level of description society can be seen as an autopoietic system.

Social structures don't exist externally to agency, but only in and through agency, in mutual penetration. By social interaction, new qualities and structures emerge, they cannot be reduced to the individual level. The process of bottom-up emergence is called agency, invention or creation. Emergence in this context means the appearance of at least one new systemic quality that cannot be reduced to the elements of the communication system to which the action is coupled. So this quality is irreducible and it is also to a certain extent unpredictable, i.e. time, form and result of the process of emergence cannot be fully

forecasted by taking a look at the elements, their history and their actual interactions. Social structures constrain and enable the practice of social actors, “guiding” them in this way. This is a process of top-down emergence where new properties of actors and groups can emerge. The bottom-up- and the top-down-process together form a cycle that permanently results in emergence on the level of structures and the level of actors. This is a permanent, dynamic creative process<sup>6</sup> (see fig. 1).

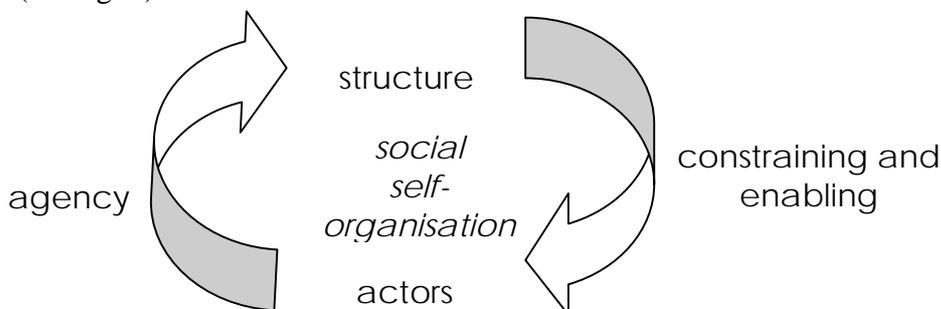


Fig. 1.: Self-organisation in social systems

The re-creation of society results in qualitative moments such as the economy, politics and culture that form subsystems that have their own relative autonomous logic and way of functioning<sup>7</sup>. Economic, political, and cultural self-organisation processes are in modern society based on accumulation and asymmetrical flows, the accumulation of capital, power and hegemony. These accumulation processes are autopoietic or self-producing in the sense that the system reproduces itself by increasing the quantitative amount of one of its elements, i.e. it transforms its elements and herewith creates its unity. In the economic cycle of self-organisation this means that from an initial quantity of capital more capital is produced. This process is a self-referential cycle that is mediated through exploitation, it can be described as a self-organising, self-valourising, self-expanding system<sup>8</sup> (see fig. 2).

The model of self-reproduction of the economy is an idealisation, capitalism doesn't have (although suggested by liberal economists) the *ability* of economic self-reproduction. The social structures of modern society are antagonistic ones, hence stable reproduction is interrupted by heavy fluctuations and phases of instability. Crisis means discontinuity and disruption of accumulation. In such a phase, the future is open. Hence there is only the *possibility* for self-reproduction, not an automatic reproduction of capitalism. So when talking about social autopoiesis or self-reproduction one can only grasp the synchronous aspect of society, crises and their results are focus of the diachronic description level of social self-organisation.

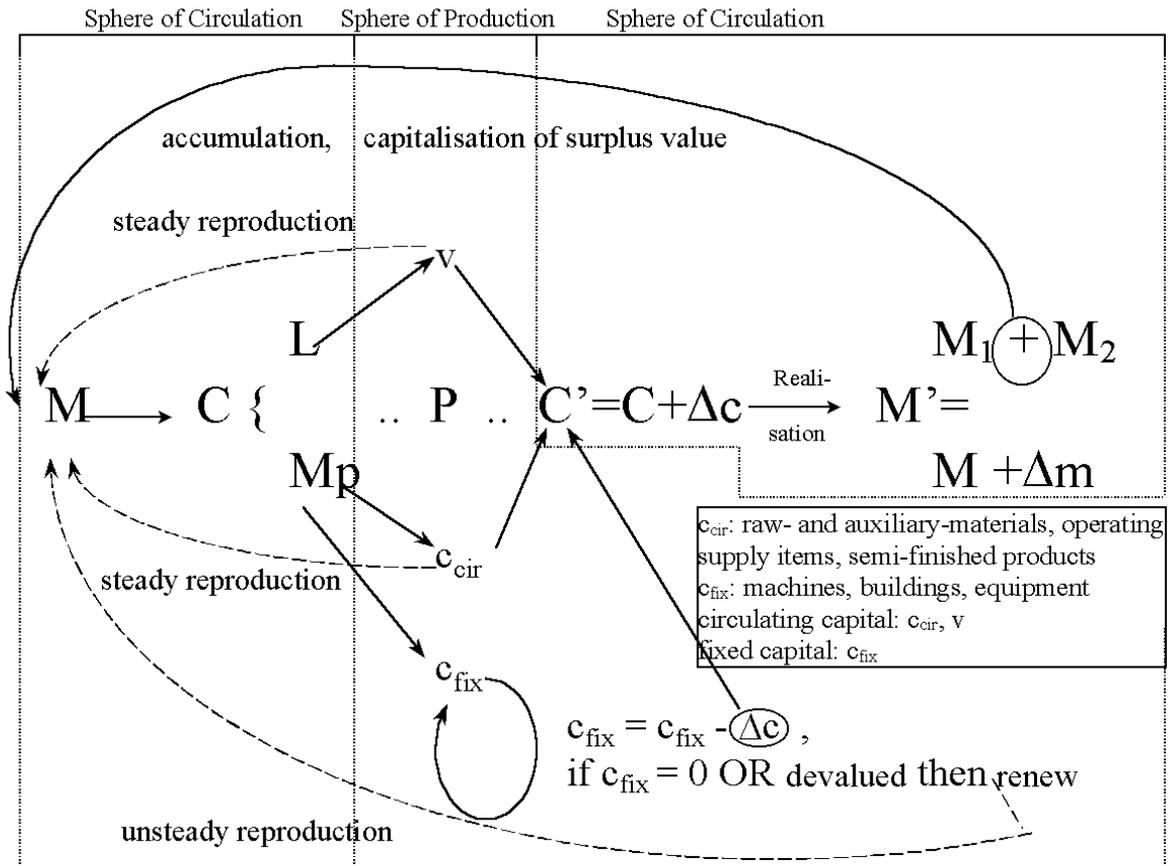


Fig. 2.: The economic self-reproduction of capital: The expanded reproduction cycle of capital

### 3. Social Self-Organisation: Order Through Fluctuation as the Diachronic Moment of Society

For Ilya Prigogine<sup>9</sup> a dissipative systems are open thermodynamic systems that are far from thermal equilibrium. In such systems local instabilities spread if the critical value of a certain control parameter is reached. This results in order through fluctuation. So-called “bifurcations“ typically occur in critical points: several possibilities for the further development of the system are possible, one of them is selected, but it is not determined in advance which one. In dissipative systems, order emerges from disorder in phases of instability.

A number of authors<sup>10</sup> has tried to conceive sociological models in analogy to Prigogine’s principle of order through fluctuation. Also for Marx and Engels the evolution of society was a discontinuous process. They anticipated the ideas of self-organising evolution that shape science today. Marx conceived capitalism as a dynamic, process-like, non-equilibrium, evolutionary system that is in constant flux<sup>11</sup>. Due to the conceptual parallels between Marxist concepts and modern science, it is consequent to try to integrate aspects from Marxist crisis-theory into a theory of social self-organisation.

The overall self-reproduction of society is not a smooth, permanently stabile process, it is in constant flux and from time to time enters phases of crisis. These are periods of instabilities where the further development of the overall system is not determined. In modern, capitalist society, periods of crisis are caused by developing structural antagonisms. The formation of society we live in is capitalism which can be described as an antagonistic formation of global scope. Contradictions between dual categories are forms of movements of matter, life and

society that drive the development of systems. Such categories are on the one hand opposed to each other, on the other hand they also require each other and they push forward towards sublation in the threefold Hegelian sense of preserving, eliminating and lifting up. The concept of contradiction is according to Hegel based on the fact that “every abstract proposition of understanding, taken precisely as it is given, naturally veers round its opposite”<sup>12</sup>. The negative constitutes the genuine dialectical moment<sup>13</sup>. Opposites contain contradiction in so far as they are, in the same respect, negatively related to one another or *sublate each other* and are *indifferent* to one another. Contradictions are constitutive for the movement of all systems, whereas an antagonism is a dialectical relationship of colliding forces that can't be sublated in a simple way. An antagonism according to Marx “emanates from the individuals' social conditions of existence”<sup>14</sup>. The sublation of antagonisms is only possible by a substantial change of the foundational structures of the system that embeds them and which is constituted by them. The principle of contradiction is a continuous one, the one of antagonism a transitory one.

Capitalism consists of antagonistic structures and relationships within the economy, politics and culture. Hence the capitalist economy is antagonistic economy, capitalist politics is antagonistic politics and capitalist culture is antagonistic culture. Capitalism is a formation of society that is also based on the accumulation of capital in the economy, politics and culture. Capital refers to those structural forms that can be accumulated and result in profits.

Economic capital refers to money and commodities, political capital is a capital of social connections, honourability and respectability<sup>15</sup>, and cultural capital has to do with qualification, education and knowledge. Processes of economic, political, and cultural accumulation result in exclusion of individuals and groups from wealth, power and participation. The main classes of society are a result of the distribution of the *whole* (i.e. economic, political and cultural) capital<sup>16</sup>.

All societies are based on a contradiction between actors and structures that drives forward the their self-organising development. In societal formations such as capitalism structures are alienated from the human beings and the latter are estranged from the societal structures because certain groups determine the constitution and development process of these structures and exploit others for facilitating these processes. Societal structures in alienated societies are an object and realm of societal struggle. Man becomes a “being alien to him and a means of his individual existence”<sup>17</sup> and a *class individual*<sup>18</sup> subsumed under exploitative and alienating forces. So in heteronomous societies like capitalism the contradiction between actors and structures becomes an antagonism. This antagonism has specific expressions within the economy, politics and culture.

The antagonisms that structure capitalism and social relationships and that evolve by agency and processes of class struggle can be summed up. This totality of antagonisms can be reconstructed from Marx's works<sup>19</sup>.

#### *Economic antagonisms:*

- Antagonistic class relationships: This refers to the fact that in class society the general mutual relationship between structures and actors is antagonistic in the sense that certain groups have much better access to and control of structures.
- Antagonism between the accumulation of wealth and relative pauperisation (general law of capitalist accumulation): Viewed as a process of accumulation of economic capital, the antagonism between alienated structures and actors results in an unequal distribution of property and wealth.
- Antagonism between necessary and surplus labour: A certain amount of labour is needed in each society for its reproduction, the alienation of labour in capitalism that is a manifestation of the antagonistic relationship of actors and structures results in the

C. FUCHS: MODERN SOCIETY – A COMPLEX, EVOLUTIONARY, SELF-ORGANISING, ANTAGONISTIC SYSTEM

antagonism that one tries to increase surplus value by methods that decrease necessary labour and herewith (at least temporarily) destroy the foundation of accumulation.

- Antagonism between use value and exchange value: Products satisfy basic needs in all societies, the alienated relationship of actors and structures typical for capitalism results in the domination of this satisfaction by the logic of commodity and exchange.
- Antagonism between productive forces and relationships of production which results in the tendency of the rates of profit to fall: The antagonistic relationship of actors and structures means that also the structural moments themselves (productive forces, relationships of production) are related antagonistically.
- Antagonism between living and dead, objectified labour: Technology is employed in capitalism in such a way that it diminishes human activities in order to maximise the efficiency of production, but this also results in the destruction of the source of surplus value and hence contributes to crises. This antagonism refers to the antagonistic relationship of agents and technology (the latter being a structure).
- Antagonism between single production and social need that can result in disproportions between branches and departments of production, *i.e.* an antagonism between the organisation of production in the individual workshop and the anarchy of production in society generally: The antagonistic relationship of actors and structures is an uncoordinated one that results in economic disproportions.
- Antagonism between production and consumption that can result in overproduction or underconsumption: The antagonism between actors and structures that is fundamental for capitalism also results due to its uncoordinatedness in tendencies of overproduction and underconsumption.
- Antagonism between socialised production and capitalistic, private appropriation: The capitalistic relationship of structures and actors is also antagonistic in the sense that production is only possible within social relationships whereas there is private ownership of the means and results of production.
- Antagonism between producers and means of production (technology as an end in itself, alienation, reversal of means and ends of technology): The antagonism between structures and actors results in the degradation of human beings to the level of an appendage of technological structures (machines).

*Political antagonisms:*

- Political fractioning of classes, political conflicts between opposing interests on a regional, local, national and global level: In the political realm the antagonistic relationship of structures and actors produces conflicts over the distribution of power structures that are largely controlled by certain groups. This fractioning also results in fragmentation within classes and produces antagonisms between class fractions (such as between finance capital and industrial capital).
- Antagonism between the asymmetrical distribution of power and participation in societies based on the principle of domination: The alienation of structures from actors results in such an asymmetrical distribution and a lack of participation.
- Antagonisms between inclusion and exclusion into processes of decision and between self-determination and heteronomy in societies based on the principle of domination: The alienation of structures from actors also results in the domination of exclusion and heteronomy.

*Cultural antagonisms:*

- Symbolic and cultural conflicts arising from the dialectic of upclassing and downclassing<sup>20</sup> and on a global scope from the unequal distribution of wealth, power and

possibilities for participation: In the cultural realm the alienation of structures from actors results in symbolic-material conflicts over cultural goods.

- Antagonism between dominating and marginalised life-styles in societies based on the principle of domination: The alienation and antagonistic structure-actor-relationship typical for capitalism also results in a competition between different life-styles.
- Antagonism between competing, irreconcilable norms, values and ideologies in societies based on the principle of domination: When the relationship of structures and actors is an antagonistic one, norms and values collide and can't be reconciled and hence certain manipulative ideologies that try to forestall social change arise.

All antagonisms listed stem from the one central antagonism between actors and structures, nonetheless each of them has a certain autonomy. In traditional Marxist theory it has been frequently assumed that crises of capitalism result from one universal antagonism. Depending on which antagonism is selected, these theories can be categorised into four groups<sup>21</sup>: theories of overaccumulation, theories of overproduction/underconsumption, theories of disproportion and profit-squeeze-theories. Social complexity results from the numerous social relationships individuals enter and which change historically. There are no good reasons to believe that capitalist crises stem from only one universal antagonism or from only one subsystem of society such as the economy because society is a complex system with multidimensional causality. In complex systems, causes and effects can't be mapped linearly: similar causes can have different effects and different causes similar effects; small changes of causes can have large effects whereas large changes can also only result in small effects (but nonetheless it can also be the case that small causes have small effects and large causes large effects). The complexity of a system depends on the number of its elements and connections between the elements. The idea of multidimensional and complex causality that is put forward by self-organisation theory shows that each crises of capitalism is due to specific causes that result from the complex and unique interactions between general antagonisms. These antagonisms are all expressions of the central antagonism of capitalism between structures and actors, the structure of antagonisms of capitalism is based on a dialectic of unity and plurality.

From time to time, a social systems enters crisis and phases of instability due to social antagonisms. The re-creation of social systems takes place permanently. This is a very general level of analysis. Phases of stable re-creation result in phases of instability where the future development of the system is highly undetermined. The objective structures condition a field of possibilities, it is not pre-determined which alternative will be taken. In such phases of crisis and bifurcation, agency, class struggles and human intervention play an important role in order to increase the possibility that a certain desirable alternative will be taken. Certainty can't be achieved, but agency also is not made impossible by the principles of self-organised social change. There is possibility, but no certainty, the sciences and hence also the social sciences are confronted with an end of certainties<sup>22</sup>. The whole movement of social self-organisation is based on a dialectic of chance and necessity.

Due to the complexity of society, capitalist crises have economic, political and cultural aspects and are not caused by one universal antagonism. Due to the material base of society, economic antagonisms play an important and dominating role, but they do not fully determine the occurrence and outcome of crises. Capitalism is itself a sequence of different phases, i.e. the structure of capitalism changes on a certain level and new qualities emerge. Such phases are also called modes of development, a term that stems from the French theory of regulation which describes a temporal coherent unity of economic, political and cultural aspects. It is a unity of an economic regime of accumulation, a political mode of regulation, and an ideological disciplinary regime<sup>23</sup>. For each mode of development, i.e. each phase of the capitalist formation of society, there is a specific structure of antagonisms which is a concrete expression of the more general antagonisms of capitalism listed above. Concerning the

evolution of a specific mode of development, we find a dialectic of chance and necessity: It is determined that the development of the mode will sooner or later result in a large societal crisis, but it is not fully determined which antagonisms will cause the crisis, when it will take place, and how the result of the crisis will look like. There could e.g. be the emergence of a new mode of development, the ultimate breakdown of society due to destructive forces or the emergence of a new formation of society caused by social agency of intervening subjects. Each historical mode of development has its own relatively autonomous antagonistic structure. Crises can be triggered by economic, political or cultural fluctuations stemming from the antagonistic social structures of a concrete mode of development or by a complex interplay and reinforcement of economic, political and cultural factors. An analysis of the causes of the crisis of Fordism shows that there wasn't one universal antagonism at play, but that there was an interplay of several concrete expressions of general economic, political and cultural antagonisms of capitalism<sup>24</sup>.

A dialectical theory of social self-organisation seems intuitively to be related in some sense to the anti-reductionistic and anti-deterministic conception of regulation theory. Hence it seems to be fruitful to discuss the conceptual relationship between self-organisation theory and the regulation approach.

#### **4. Self-organisation Theory and the Regulation Approach**

Conceptual parallels to self-organisation theory come to mind where regulation theorists discuss the open character of history and dismiss general laws of history<sup>25</sup>. Both theories oppose the view that systems evolve in a mechanistic and deterministic way. Michel Aglietta: "Class struggle [...] is itself beyond any 'law'. It can neither be assigned a limit, nor be confined by a determinism whose legitimacy could only be metaphysical. In a situation of historical crisis, all that a theory of regulation can do is note the conditions that make certain directions of evolution impossible, and detect the meaning of the actual transformation under way. Thereafter, however, the future remains open"<sup>26</sup>.

In regulation theory there is criticism of economistic theories of crises, self-organisation theory was conceived in opposition to the Newtonian worldview that stresses the possibility of fully steering and predicting the historical development of systems. Concerning causality, both theories argue against reductionism and determinism. Regulation theory opposes views that consider the economy as (the fully) determining factor of society and history (economic reductionism) and stresses the importance of political and ideological aspects of crises. The regulation approaches criticise "the vulgar Marxist tendency to overemphasise class struggles"<sup>27</sup> and the "reductionistic temptation in Marxist theorising to see the logic of the capitalist market economy as somehow determinant 'in the last instance' of an entire social formation"<sup>28</sup>. "The stabilisation of a regime of accumulation or a mode of regulation obviously cannot be analysed in terms of its economic logic alone. Such 'discoveries' are the outcome of asocial and political struggles which stabilise to form a hegemonic system"<sup>29</sup>. Bob Jessop<sup>30</sup> argues says that there can't be economic determination in the last instance because this would mean that the economy is a fully self-contained system without external causes and that the economic and the extra-economic are necessary corresponding. Economic and political regimes would be structurally coupled, they are both operationally autonomous and interdependent, but the economy would be dominating due to its ability for spontaneous self-reorganisation.

Self-organisation theory shows that complex systems have multidimensional forms of causality where one effect can have many causes and one cause many effects. Regulation theory takes this into account by stressing the importance of the mode of regulation. Applying complexity theory to an analysis of the causes of capitalistic crises, one has to assume that

crises don't have always one and the same cause, but are caused by an interplay of specific economic, political and ideological factors.

Alain Lipietz explains that Althusserianism would have also put an end to the “myth of the single contradiction [...] between the productive forces and the relations of production”<sup>31</sup>. Regulation theories stress that there is a multiplicity of contradictions and that crises can't be reduced to one single universal contradiction. E.g. Lipietz says that the crisis that emerged in the second half of the 20<sup>th</sup> century “is a crisis in profitability [due to a profit squeeze and the rise in the organic composition of capital], whereas the crisis of the 1930s was a crisis of overproduction”<sup>32</sup>. Opposing reductionism, Bob Jessop<sup>33</sup> argues that what happens in the world is not due to a single causal mechanism. “Instead the concrete actualisation of events results from the interaction of diverse causal tendencies and counter-tendencies”. It wouldn't be possible to generate explanation of complex phenomena by simple algorithms.

Lipietz mentions that the regulation approach opposes “the oversimplification, determinism and mechanism inherited from the Stalinist period”<sup>34</sup>. Althusser would have greatly helped to disengage Marxism from “a determinist vision of historical evolution which conceived of the ‘productive forces’ themselves (traditional ‘locomotives’ of history for Stalinist Marxism) as social relations born in the organisation of production” and Stalinist dogmatism<sup>35</sup>. It would be “mechanistic, economist, productivist and ultimately cynical” to see the development of the productive forces “as the index of historical progress”<sup>36</sup>. But Althusserianism reduced the human being to a “bearer of structures” that reproduces the structures, a “spectator in an authorless theater”. Capitalism would function through “processes without a subject”. Subjects, contradictions and market relations were unimportant for Althusser. Althusserianism “finds itself powerless to apprehend the new, humanity in the process of making the world [...], it fetishises, in an academic mode, the ‘conditions’ that it has analysed so well, by denying that the ‘conditions’ should themselves be the product of subjects”<sup>37</sup>. The regulation approach has been keen on “taking into consideration the conscious element”<sup>38</sup>. The term regulation was employed in order to avoid the functionalistic implications of Althusser's concept of the autonomous reproduction of a structure without a subject. Lipietz says the regulationists could be seen as “rebel sons” of Althusser.

Lipietz opposes the determinism of functionalistic arguments<sup>39</sup>: “by presenting concrete history as the inevitable unfolding of a concept such as imperialism [...], by arguing that the world is as it is because it was designed to serve ‘the interests of the powerful’ or ‘the interests of the system’ [...] [one would suggest] that there is some Great Engineer or Supreme Entrepreneur who organises labour in terms of a pre-conceived world plan”<sup>40</sup>. Such a “pessimistic functionalism” would leave out spontaneity, chance, the human subject and the complex mediations of the world. Such arguments would politically either result in pessimism (“we can't do anything”) or a new opium of the people (“it will soon collapse all by itself due to its internal contradictions”).

Like self-organisation theory the regulation approach stresses the limits of predictability. Lipietz mentions that one can't deduce the following moments from the actual moment because there could be no “general equation” that foresees the transformation of societies and “contradictions do not ‘displace themselves’; they can, as Althusser would say, ‘fuse’ into explosive conjunctures on the other side of which the complex whole is restructured in another ‘illumination’, in a radically different structure which redefines all contradictions”<sup>41</sup>. Hence one should concentrate on the analysis of contradictions of a concrete conjuncture. The regulationists see society as a complex system, hence it wouldn't be possible to fully forecast and predict its development. The same understanding can be derived from self-organisation theory. Lipietz warns against schemes that are considered to be established “by some Great Author”<sup>42</sup> and neglect concrete contradictions and analyses. It would be an error to deduce “concrete reality from immanent laws which are themselves deduced from a universal concept”<sup>43</sup>, hence one would have to study each national social formation in its own right<sup>44</sup>.

In questioning determinism one has to be careful in order to avoid the assumption that social evolution happens fully by chance. In regulation theory the mediation between general laws of capitalism and categories that are specific for a certain mode of development is unclear. It is inappropriate to assume that there are only antagonisms that are specific for one mode of development and that with a new mode a completely new logic of accumulation, regulation and discipline emerges. If one made such an assumption, this would mean arbitrariness. Self-organisation theory suggests the importance of chance, but it doesn't fetishise chance. In complex systems, we find a dialectic of chance and necessity and of generality and concreteness. For a theory of capitalistic development this means that one should assume that there are certain forms (wage labour, value, capital, competition, surplus value, exploitation, profit, the state, patriarchy, etc.) and antagonisms that are specific for capitalism in general and that there are certain expressions of these fundamental forms and of certain antagonisms for a concrete mode of development. A regime of accumulation and a mode of development both have general and concrete aspects, like all complex, self-organising systems they are subject to a dialectic of generality and concreteness. It is determined that in each new capitalistic mode of development one will find certain forms that are characteristics for the overall structure of capitalism and that this mode will have an antagonistic character. But one can't predict how exactly these forms and antagonisms will look like and how they will develop. This depends on agency and the result of class struggles. Overestimating general aspects of development as many classical theories of crises have done results in rather deterministic approaches, overestimating specific aspects means the danger of constructing theories that are based on the logic of arbitrariness.

Hegel, Marx and Engels knew that chance and necessity are dialectically coupled categories, chance is based on necessity and necessity on chance. Self-organisation theory reminds us of this and puts it into new scientific categories. Regulation theory sometimes underestimates the importance of this dialectic by overemphasising causes of crises that are specific for only one mode of development. When explaining why a regime of accumulation and a mode of regulation are established Alain Lipietz overlooks that it is a necessity for the reproduction of capitalism to establish new regimes and modes in order to temporarily stabilise accumulation and domination. The number of possible developments in a point of bifurcation is limited and depends on the material foundation of the prior structure of society, but it is undetermined which path will be chosen because this depends on the result of class struggle. New modes of development are shaped by the complex interplay of various social struggles. This interplay can't be fully forecast, but is also limited in diversity. For Lipietz these aspects of necessity happen fully by chance: "The emergence of a new regime of accumulation is not a pre-ordained part of capitalism's destiny [...] Regimes of accumulation and modes of regulation are *chance discoveries* made in the course of human struggle and if they are for a while successful, it is only because they are able to ensure a certain regularity and a certain permanence in social reproduction"<sup>45</sup>. Lipietz says e.g. that the crystallisation of the West as the centre of imperialism (that exploits the periphery) was a chance discovery: "it could have taken a different form, and it could have taken place elsewhere"<sup>46</sup>. Alfredo Robles stresses in respect to regulation theory that structures are not the result of a purely accidental political evolution<sup>47</sup>.

Lipietz says that the old international division of labour wasn't a result of a rationally planned 'world capitalism', but a "chance discovery or rather the result of attempts to resist or adopt chance discoveries"<sup>48</sup>. The hegemony of the USA after 1945 would have also been a chance discovery and hence one should speak of an "implicit hegemony"<sup>49</sup>. There surely are accidental aspects in the facts that Taylorism developed in the USA, that the allied forces defeated the Germans and Japanese and that there were no major destructions in the US during the second world war. However these facts conditioned the economic development after 1945 just like they were themselves conditioned by prior developments. These

conditionings are aspects of necessity that condition chance. Hence the hegemony of the USA or the development of the first international division of labour wasn't due to pure chance, but to relative or conditioned chance. They are an expression of the dialectic of chance and necessity, Lipietz overemphasises chance although it is certainly true that due to the complex interactions of actors events can only be forecast to a limited extent. There are indeed rationally planned actions, but due to the complexity of the world they are only sometimes successful and have unintended consequences. Actions frequently have both intended (necessity) and unintended (chance) consequences of which we sometimes are not conscious or don't know about .

Other regulationist approaches have successfully conceived the relationship of chance and necessity as dialectical one. Bob Jessop<sup>50</sup> argues that the world is governed by contingent necessity. This means that everything that happens is in some way necessary, but also contingent, because it is caused not by a single factor, but by the interaction of diverse causal tendencies and counter-tendencies. "As a feature of the real world, contingent necessity implies that world's ontological complexity. Indeed, if the development of the real world involves an infinite succession of contingently interdependent as well as contingently necessary 'contingent necessities', then it must also be infinitely complex"<sup>51</sup>. Governance mechanisms would reduce the variety of future possibilities and social complexity. Similar to Jessop Michel Aglietta<sup>52</sup> mentions that historical development "is governed neither by chance nor by a hereditary determinism. History is initiatory".

In regulation theory there is a "primacy of internal causes" of a mode of development<sup>53</sup> and in this respect it is quite similar to self-organisation theory that stresses that the change of a complex system stems from within the system although it might be perturbed by other systems in its environment. But there is also a tendency to assume functionalistically a permanent self-constitution of capitalism and modes of development that are organised within nation states. This is due to the fact that one is keen on stressing that there can be no automatic breakdown of capitalism. This surely is true, but this doesn't imply that capitalism automatically has the capability to establish a new mode of development. In a bifurcation point a full breakdown of capitalism that is due to revolutionary action is just like the establishment of a new mode of capitalistic development one of several possibilities.

Regulation theory assumes that a regime of accumulation can't permanently reproduce itself due to structural antagonisms, hence it would be in need of a mode of regulation. Some regulation theorists assume that the nationally organised unity of accumulation regime and mode of regulation can self-reproduce by establishing new modes of development when a structural crisis occurs. Regulation theory stresses a primacy of the nation state. "Regimes of accumulation which are predominantly extensive and regimes which are predominantly intensive obviously relate to the 'outside world' in different ways. We may suspect that relations with the outside world were originally very important, that they became less important as capital created its own internal market; that, at its height, Fordism marks the extent to which developed capitalism can be autocentred"<sup>54</sup>. "Initially, it [capitalism, Anm. CF] was an eddy within the great ocean of the non-capitalist economy which sustained it, but it then grew into territorialised capitalist structures which gradually became individualised and auto-centred, to use the schema popularized by Prigogine. The ratio of trade flows 'between the structure and its thermostat' to flows 'internal to the structure was initially very high (in terms of manufactured commodities, but not of course in terms of overall material output), and it fell as the home market was consolidated"<sup>55</sup>.

Lipietz opposes dependency theory and considers it "an ahistorical dogmatism"<sup>56</sup>. It would have a "tendency to lapse into functionalism and even finalism"<sup>57</sup> and there would be a "primacy of external causes"<sup>58</sup>. It would be tantamount to say that every change of capitalism is a planned one, this would have to mean that society is a "perfectly homeostatic cybernetic system"<sup>59</sup>: Imperialism would not have been created "in order to resolve" general

contradictions to the advantage of certain national capitalisms, per accident it would have been able to resolve them and hence would have survived. Only in past stages of capitalist development it would have been necessary for the Western countries to create demand in the outside world and trade with the periphery would have proved working in resolving the contradictions immanent to capitalism that couldn't be resolved within a closed national circuit. The development of the world would not as assumed by dependency theory be "determined by the movement of world capital" and by initiative for change that "comes from the centre"<sup>60</sup>. Hence one couldn't say that "developments in the periphery are simply functions of the needs of the centre"<sup>61</sup>. The discovery of Taylorism and the establishment of mass production and mass consumption in the Fordist era would have made it unnecessary to exploit the periphery. "It was the very fact that the centre had become so 'auto-centred' that had the greatest impact. The diffusion of the intensive regime of accumulation led to an increasing gap between centre and periphery in terms of competitiveness, and expelled the periphery from the international trade in manufactures"<sup>62</sup>. The thesis of "development [of the West] by underdevelopment [of the Third World]" would have been falsified by the fact that a certain degree of industrialisation occurred in Latin America and South East Asia. The ratio of trade flows between the West and the Third World fell as the home market was consolidated, the "'thermostat' gradually lost its importance as an outlet"<sup>63</sup>.

Similarly, Robert Boyer stresses that capitalism can produce its own equilibrium (self-equilibrium). Small cyclical crises would be part of this self-regulation, whereas large secular crises would destroy self-regulation and result in a new mode of development<sup>64</sup>. Boyer assumes that capitalism can temporarily autonomously constitute itself and also stresses a primacy of the nation state. This self-reproduction would be due to "political and social choices [that] have to play a role in shaping and restructuring the economy" in order to put an end to structural crisis. In a situation of crisis, the economic system wouldn't be fully deterministic because political intervention would be necessary.

The forms of dependence of the Third World on the West have changed and it is important to stress this fact. But this doesn't mean that there are only self-contained national modes of development. We are today witnessing a new phase of economic globalisation that is based on the triadisation of the world market and capital export as well as on the rise of neoliberalism<sup>65</sup>. The primacy of the nation state in regulation theory underestimates the global character of the Empire that was pointed out by Toni Negri and Michael Hardt<sup>66</sup> and the existence of a networked world system with flexible and decentralised forms of accumulation and domination.

A national mode of development is self-organising not in the sense that it fully autonomously reproduces itself, but on the one hand in the general sense that all social relationships are re-creative processes and on the other hand in the more specific sense that its development as a complex, antagonistic system is based on order through fluctuation, i.e. its antagonisms result in phases of crisis where the future development is relatively open and depends on human agency and class struggle. A national mode of development is not fully self-contained, it is structurally coupled with and depends on the capitalist world system, the world market, other nations, environments of primitive accumulation, such as patriarchal and racist modes of production, the Third World and peripheral workers. Capitalism does not automatically reproduce itself by entering crisis. Alternative paths of development are part of the field of possibilities, capitalism is a historical system that has a beginning and an end. Each crisis is an anticipation of this possible end. Other possible, post-capitalistic paths of development are taken into account insufficiently by regulation theory. Regulation theory frequently assumes that a crisis necessarily results in a new mode of development (although it is considered as undetermined how this mode will exactly look like). The possibility of revolutionary social change is not considered thoroughly enough.

Regulation theory assumes that regulation means state intervention into accumulation. Today we witness a sustained crisis of state regulation that is due to neo-liberal politics. Regulation theorists argue that capitalism is so unstable because there are no new forms of regulation. I suggest that regulation doesn't necessarily mean regulation by the nation state, the mode of regulation only describes institutional settings of accumulation. These settings can also be international or market-based ones. The Postfordist mode of regulation to a certain extent involves market-based forms of regulation. The absence of state intervention is indeed also a form of regulation. I also suggest that a new mode of development doesn't necessarily result in a stable phase of accumulation. Antagonisms can reach a phase where there is permanent crisis or instability. To a certain extent this seems to be the case today. Nonetheless we can speak of a new, Postfordist mode of development because there are new, *emergent* qualities of both the regime of accumulation and the mode of regulation. So what I am arguing is that the decisive criterion for speaking of a new mode of development is the *emergence* of new qualities of accumulation, domination and legitimisation, not the appearance of a new stable phase of accumulation.

Bob Jessop<sup>67</sup> wants to avoid economic arguments by combining Marxism and Luhmann's systems theory. Referring to Maturana and Varela Luhmann argues that autopoietic systems are autonomous units, but can be structurally coupled: This means that processes in one such system can result in internal differentiations of another system. There could be no determination from the environment of a system, but perturbations from the outside that result in structural changes within a system. Jessop argues that modes of regulation and objects of regulation are structurally coupled<sup>68</sup>.

Due to structural contradictions, strategic dilemmas, the incompleteness of capital as a purely economic relation and conflicts over governance of these contradictions self-valorisation of capital would be improbable and "cannot be explained in terms of some alleged self-correcting, self-expanding logic. This leads us to consider the mechanisms through which, despite capital's contradictions, accumulation may get regularised and reproduced"<sup>69</sup>.

It would be possible to combine Marxism and autopoiesis theory by assuming that the subsystems of society are structurally coupled and that capital accumulation dominates, but doesn't determine other systems. Jessop says that there is no hierarchic centre of society. By referring to Niklas Luhmann and Karl Polanyi, Jessop argues that capitalism is an autopoietic system because due to the repetition of circulation exchange values would be produced by the market system itself, i.e. exchange values produce more exchange values by circulation. "An autopoietic system also secures the reproduction of its own elements through the use of its own elements. This feature is well illustrated by the market economy. [...] More generally, the market economy could be seen as an autopoietic system to the extent that market forces define what will count as exchange-values, secure the exchange of the latter through market mechanisms, and also ensure the reproduction of market relations through the continuing circulation of commodities in exchange for money"<sup>70</sup>. The self-valorisation of capital would be accomplished "in and through regulation"<sup>71</sup>. Jessop<sup>72</sup> adumbrates that also the nation state could be considered as a self-reproducing system. Self-reproduction would mean that in a crisis an institution is replaced by an equivalent institution. This would suggest that a crisis of a specific form of the nation-state would result in its self-transformation or self-reproduction and hence in a new nation state. Jessop<sup>73</sup> points out that Polanyi, the regulation approach and autopoietic systems theory stress that the economy is embedded into and regulated by economic and non-economic institutions.

Arguing that capitalism is an autopoietic (or self-reproducing) system is again confronted with the danger of functionalistically synecopating the dialectical relationship of social structures and actors and hence assuming that a capitalistic crisis *must* result in a new capitalistic mode of development. In order to avoid such shortcoming I suggest to argue that in a point of bifurcation the self-reproduction of capitalism is only one *possibility* (besides

fundamental social change, the ultimate breakdown of all forms of society due to social or ecological catastrophes etc.). The market system is not ultimately self-reproducing because there can be a disturbance of circulation due to capitalism's inherent antagonism between production and consumption. In such a case, in the expanded reproduction cycle of capital the metamorphosis of capital from C' to M' can't be accomplished in an adequate degree and hence underconsumption or overproduction occurs. Capitalism can only reproduce itself when M results in M' and M' is large enough. If that's not the case, economic crisis occurs. In a phase of crisis (that can also have political or ideological causes) the further development of society is relatively open. Prigogine's concept of order from noise describes fundamental, irreversible changes in systems. This concept is suitable in order to describe the diachronic development of society, whereas the concept of self-reproduction is only suited to describe the stable reproduction of a social formation without crisis. Both concepts must be combined in order to describe modern society adequately. I wouldn't speak of the *ability* of capitalism to reproduce itself, only of the *possibility* of the self-reproduction of capitalism, i.e. the emergence of a new capitalistic mode of development in a phase of crises or the sufficient accumulation of capital, power and false consciousness during a stable phase of a mode of development. The same is true for the nation-state: It doesn't automatically reproduce itself in and through crisis, self-reproduction is only one possibility, not a necessity.

Jessop's approach surely leaves open some unanswered question such as the integration of the dialectical relationship of structures and actions, the importance of exclusive class struggle and the possibility for fundamental social change. But he stresses the relationship of self-organisation and regulation theory and hence his approach is very important in establishing a theory of social self-organisation that incorporates aspects from regulation theory. Jessop is aware of the conceptual parallels between self-organisation theory and Marxism and successfully tries to integrate both theories.

Lipietz<sup>74</sup> describes the evolution of capitalism with the help of two metaphors: warp threads and weft thread. The warp threads represent the existing conditions for economic development, i.e. the mode of regulation. The weft threads describe the economic development of a regime of accumulation. This would result in a "tissue". In a secular crisis Lipietz sees three possible results: "Three outcomes are possible: 1. The actors separate, and their trajectories thus no longer partake of the same history. It is the 'final crisis' of the relationship. 2. The form another kind of relationship: 'Let's just be friends'. 3. They renew their relationship, with another institutionalised compromise and another mode of regulation"<sup>75</sup>. Lipietz overemphasises the need for solution three in order to avoid solution one because he says that revolutionary change is not topical today. Lipietz is aware of the fact that history is relatively open in a point of bifurcation, but nonetheless he underestimates the possibilities of intensification of (revolutionary) action in such a situation (butterfly effect). Fundamental social change is always a possibility just like the self-reproduction of capitalism. Lipietz implicitly acknowledges the insights of self-organisation theory, but nonetheless seems to assume that the self-reproduction of capitalism is a necessity under today's circumstances. So on the one hand he says that history is open ("The history of capitalism is not linear. It may be viewed as a succession of models of development with points of bifurcation and regression"<sup>76</sup>) and that it is left to chance how a new mode of development will look like, but on the other hand he rules out certain possible paths of development. More realistically, the German regulationist Joachim Hirsch argues that there are several options for development in a secular crisis of capitalism: "Both the breakdown of capitalistic society and revolutionary processes, but also the emergence of a new mode of accumulation and regulation are possible"<sup>77</sup>. And Bob Jessop says that in a crisis "much is undecided and [...] decisive actions can therefore have unusually wide-ranging effects on future developments. Crises make it harder to govern and this enables forces of resistance to intensify the disorder, turbulence, and noise which is always already present in complexity"<sup>78</sup>.

## 5. Conclusion

There are conceptual affinities between the theory of regulation and self-organisation theory: Both oppose mechanistic and reductionistic views of systems, stress the discontinuous development of systems and non-linear, multidimensional and complex forms of causality. Certainly, several fundamental philosophical issues such as the relationship of generality and concreteness and of chance and necessity are still largely undiscussed in regulationist approaches. Nonetheless it seems to be fruitful to integrate the concepts of the regime of accumulation and the mode of regulation (and eventually the disciplinary regime<sup>79</sup>) into a theory of social self-organisation in order to avoid reductionism and determinism. The new social movements are a type of slight revolt, if decentralised forms of protest spread out, one will have all reason to assume that there can be change for the better. Fundamental social change for the better is neither a necessity nor impossible, the theory of self-organisation shows us that the decisive fact is that it is a possibility. The probability of realising this possibility is not determined, it depends on our responsibility.

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<sup>1</sup> C. Fuchs, *Krise und Kritik in der Informationsgesellschaft* (Norderstedt: Libri BOD, 2002).

<sup>2</sup> I. Wallerstein, “Uncertainty and Historical Progress,” Internet (1999), <http://fbc.binghamton.edu/iwposb.htm>

<sup>3</sup> For a detailed discussion cf. C. Fuchs, “Dialectical Philosophy and the Self-Organisation of Matter,” in V. Arshinov and C. Fuchs (eds.), *Emergence, Causality, Self-Organisation* (Moscow: Russian Academy of Sciences, 2003).

<sup>4</sup> C. Fuchs, *Soziale Selbstorganisation im informationsgesellschaftlichen Kapitalismus* (Norderstedt: Libri BOD, 2001).

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<sup>5</sup> H. Maturana and F. Varela, *The Tree of Knowledge* (New York: Shambhala, 1992).

<sup>6</sup> for more details cf. Fuchs, *Concepts*. Fuchs, *Implications of Anthony Giddens’ Works*. Fuchs, *Implications of Pierre Bourdieu’s Works*. Fuchs, *Role of the Individual*. Fuchs, *Co-operation and Self-Organisation*. Fuchs, *Self-Organisation of Politics*. Fuchs, *Co-operation in Complex*.

<sup>7</sup> Fuchs and Schlemm, *Self-Organisation*.

<sup>8</sup> For details cf. Fuchs and Schlemm, *Self-Organisation*. Fuchs, *Krise und Kritik*.

<sup>9</sup> G. Nicolis and I. Prigogine, *Exploring Complexity* (New York: Freeman, 1989). I. Prigogine, *From Being to Becoming* (New York: Freeman, 1980).

<sup>10</sup> T. Hopkins and I. Wallerstein (eds.), *The Age of Transition* (London/New Jersey: Zed Books, 1998). E. Jantsch, *Design for Evolution* (New York: George Braziller, 1975). E. Jantsch, *Die Selbstorganisation des Universums*. Vom Urknall zum menschlichen Geist (München/Wien: Hanser, 1992). E. Laszlo, *Evolution. The Grand Synthesis* (Boston: Shambhala, 1987). V. Müller-Benedict, *Selbstorganisation in sozialen Systemen* (Opladen: Leske + Budrich., 2001). I. Wallerstein, *Unthinking Social Science* (Polity Press, 1991). I. Wallerstein, “The End of Certainties in the Social Sciences”, Talk at the Seminar “Conceptos en Ciencias y Humanidades”. Mexico City, Oct. 16, 1998. <http://fbc.binghamton.edu/iwendcrt.htm>. I. Wallerstein, *Uncertainty and Historical Progress*. I. Wallerstein, “Uncertainty and Creativity,” Talk at Forum 2000: Concerns and Hopes on the Threshold of the New Millennium. Prague, Sept. 3-6, 1997. <http://fbc.binghamton.edu/iwuncer.htm>. I. Wallerstein, *Utopistics: or, Historical Choices for the Twenty-First Century* (New York: New Press, 1998). I. Wallerstein, “Globalization or the Age of Transition? A Long-Term View of the World-System”, <http://fbc.binghamton.edu/iwtrajws.htm>

<sup>11</sup> H.-D. Hausteil, “Karl Marx und evolutorische Ökonomik,” in: C. Warnke and G. Huber (eds.) *Die ökonomische Theorie von Marx - was bleibt?* (Marburg: Metropolis, 1998), pp. 151-178. T. Hirschl, “Structural Unemployment and the Qualitative Transformation of Capitalism,” in: J. Davis et al. (eds.) *Cutting Edge. Technology, Information, Capitalism and Social Revolution* (London/New York: Verso, 1997), p. 161f.

<sup>12</sup> G.W.F. Hegel, *The Logic of Hegel. Translated from the Encyclopaedia of the Philosophical Sciences by William Wallace* (London: Oxford University Press, 1874), Note to §81.

<sup>13</sup> *ibid.*, §68.

<sup>14</sup> K. Marx, *Zur Kritik der politischen Ökonomie* (Berlin: Dietz, 1858/59). MEW 13, p. 9.

<sup>15</sup> P. Bourdieu, *Distinction* (London: Routledge, 1986), p. 122

<sup>16</sup> Fuchs, *Some Implications of Pierre Bourdieu’s Works*. Bourdieu, *Distinction*.

<sup>17</sup> K. Marx, *Economical and Philosophical Manuscripts* (Berlin: Dietz, 1844). MEW, Ergänzungsband 1, p. 517

<sup>18</sup> K. Marx and F. Engels, *Die deutsche Ideologie* (Berlin: Dietz, 1846). MEW, Vol. 3, p. 76.

<sup>19</sup> cf. Fuchs, *Krise und Kritik*.

<sup>20</sup> People, families and groups in modern society commonly strive for upclassing and if it becomes necessary they struggle against downclassing. There are strategies of groups for distinguishing themselves from the group below and identifying with the group immediately above which they recognise as the possessor of the legitimate life-style. Groups, classes and class-fractions hence try to symbolically distinguish themselves, their tastes and life-styles from others. This results in symbolic struggles (Bourdieu, *Distinction*, pp. 244-256), the devaluation of objects and an endless drive for novelty. “Struggles over the appropriation of economic or cultural goods are, simultaneously, symbolic struggles to appropriate distinctive signs in the form of classified, classifying goods or practices, or to conserve or subvert the principles of classification of these distinctive properties” (Bourdieu, *Distinction*, p. 249). Taste and identity are at the heart of symbolic struggles and are employed by the dominating classes and class-fractions to stigmatise the dominated classes and class-fractions. Cultural conflicts are conflicts which involve opposing life-styles, norms and values.

<sup>21</sup> For details see Fuchs, *Krise und Kritik*, pp. 252ff.

<sup>22</sup> Wallerstein, *End of Certainties*.

<sup>23</sup> Fuchs, *Krise und Kritik*.

<sup>24</sup> For details cf. Fuchs, *Krise und Kritik*.

<sup>25</sup> C. Görg, “Regulation - ein neues ‘Paradigma’?,” in: J. Esser et al. (eds.), *Politik, Institutionen und Staat* (Hamburg: VSA, 1994, pp. 13-30), p. 19.

<sup>26</sup> M. Aglietta, Aglietta, Michel (1979) *A Theory of Capitalist Regulation* (London: NLB, 1979), pp. 67f

- <sup>27</sup> B. Jessop, "Regulationist and Autopoieticist Reflections on Polanyi's Account of Market Economies and the Market Society," *New Political Economy* 6/2 (2001), pp. 213-233, p. 221.
- <sup>28</sup> *ibid.*, p. 228
- <sup>29</sup> A. Lipietz, *Mirages and Miracles* (London: Verso, 1987), p. 20.
- <sup>30</sup> B. Jessop, *The Future of the Capitalist State* (Cambridge: Polity, 2002).
- <sup>31</sup> A. Lipietz, "From Althusserianism to "Regulation Theory"," in: E. Kaplan and M. Sprinker, Michael (eds.), *The Althusserian Legacy* (London/New York: Verso, pp. 99-138), p. 106.
- <sup>32</sup> Lipietz, *Mirages*, p. 43.
- <sup>33</sup> B. Jessop, "The Governance of Complexity and the Complexity of Governance: Preliminary Remarks on some Problems and Limits of Economic Guidance", published by the Department of Sociology, Lancaster University (1999) at: <http://www.comp.lancs.ac.uk/sociology/soc024rj.html>
- <sup>34</sup> Lipietz, *Althusserianism*, p. 99.
- <sup>35</sup> *ibid.*, p. 100.
- <sup>36</sup> Lipietz, *Mirages*, p. 194.
- <sup>37</sup> Lipietz, *Althusserianism*, p. 125.
- <sup>38</sup> *ibid.*, p. 101.
- <sup>39</sup> For a critique of functionalistic social theories cf. Fuchs, *Concepts*. Fuchs, *Some Implications of Anthony Giddens' Works*. Fuchs, *Structuration Theory*. Fuchs, *Some Implications of Pierre Bourdieu's Works*.
- <sup>40</sup> Lipietz, *Mirages*, p. 4.
- <sup>41</sup> Lipietz, *Althusserianism*, p. 119.
- <sup>42</sup> Lipietz, *Mirages*, p. 4.
- <sup>43</sup> *ibid.*, p. 9.
- <sup>44</sup> *ibid.*, p. 20.
- <sup>45</sup> *ibid.*, p. 15.
- <sup>46</sup> *ibid.*, p. 68.
- <sup>47</sup> A.C. Robles, *French Theories of Regulation and Conceptions of the International Division of Labour* (Hampshire/London: Macmillan, 1994), p. 78.
- <sup>48</sup> Lipietz, *Mirages*, p. 26.
- <sup>49</sup> *ibid.*, pp. 39f.
- <sup>50</sup> Jessop, *Governance of Complexity*.
- <sup>51</sup> *ibid.*
- <sup>52</sup> Aglietta, *Theory*, p. 68.
- <sup>53</sup> Lipietz, *Mirages*, p. 22.
- <sup>54</sup> *ibid.*, p. 46.
- <sup>55</sup> *ibid.*, p. 56.
- <sup>56</sup> *ibid.*, p. 3.
- <sup>57</sup> *ibid.*, p. 16.
- <sup>58</sup> *ibid.*, p. 18.
- <sup>59</sup> *ibid.*, p. 19.
- <sup>60</sup> *ibid.*, p. 51.
- <sup>61</sup> *ibid.*, p. 51.
- <sup>62</sup> *ibid.*, p. 62.
- <sup>63</sup> *ibid.*, p. 57.
- <sup>64</sup> R. Boyer, "Technical Change and the Theory of 'Régulation', " in: G. Dosi et al. (eds.), *Technical Change and Economic Theory* (London: Pinter, 1988, pp. 67-94), p. 76.
- <sup>65</sup> For some foundations of a general theory of globalisation see: C. Fuchs and W. Hofkirchner, "Theorien der Globalisierung," *Zeitschrift Marxistische Erneuerung*, 48 (2001), pp. 21-34. C. Fuchs and W. Hofkirchner, "Globalisierung: Ein allgemeiner, dialektischer Prozess der Menschheitsgeschichte," *Zeitschrift Marxistische Erneuerung* 49 (2002), pp. 89-102. C. Fuchs and W. Hofkirchner, "Postfordistische Globalisierung," *Zeitschrift Marxistische Erneuerung* 50 (2002), pp. 152-165.
- <sup>66</sup> T. Negri and M. Hardt, *Empire* (Cambridge: Harvard University Press, 2000).
- <sup>67</sup> B. Jessop, *State Theory* (University Park, Penn.: Pennsylvania State University Press, 1990). Jessop, *Governance of Complexity*. Jessop, *Regulationist and Autopoieticist Reflections*. B. Jessop, "State theory, regulation, and autopoiesis, and autopoiesis: debates and controversies," *Capital & Class*, No. 75 (2001), pp. 83-92. B. Jessop, "Globalisierung und Nationalstaat. Imperialismus und Staat bei Nicos Poulantzas – 25 Jahre später," in: J. Hirsch et al. (eds.), *Die Zukunft des Staates* (Hamburg: VSA, 2001), pp. 71-100. Jessop, *Future of the Capitalist State*.
- <sup>68</sup> Jessop, *State Theory*, p. 311.
- <sup>69</sup> Jessop, *Future of the Capitalist State*, p. 18.
- <sup>70</sup> Jessop, *Regulationist and Autopoieticist Reflections*, pp. 217f.

<sup>71</sup> Jessop, *State theory, regulation, and autopoiesis*, p. 85.

<sup>72</sup> Jessop, *Globalisierung und Nationalstaat*.

<sup>73</sup> Jessop, *Regulationist and Autopoieticist Reflections*.

<sup>74</sup> A. Lipietz, "Warp, Woof and Regulation: A Tool for Social Science," in: Benko and Strohmayr (eds.), *Space and Social Theory* (Basil Blackwell, 1998).

<sup>75</sup> *ibid.*, p. 96.

<sup>76</sup> A. Lipietz, "The Fortunes and Misfortunes of Post-Fordism," in R. Albritton et al. (eds.), *Phases Of Capitalist Development : Booms, Crises And Globalization* (Basingstoke/New York: Palgrave, 2001), p. 18.

<sup>77</sup> J. Hirsch, *Der nationale Wettbewerbsstaat* (Berlin: Edition ID Archiv, 1995), p. 63, my translation.

<sup>78</sup> Jessop, *Governance of Complexity*.

<sup>79</sup> Most regulationists are rather vague on the difference between politics and culture/ideology. I would say that as Pierre Bourdieu, Raymond Williams, Stuart Hall, John Fiske and others have shown that culture has its own relative autonomous logic that works on a material foundation. Hence distinguishing also a mode of legitimatisation and hegemony seems to be necessary. I termed this mode elsewhere disciplinary regime (Fuchs, *Krise und Kritik*. Fuchs, *Software-Engineering*)