

Concepts of Social Self-Organisation

Christian Fuchs

christian@igw.tuwien.ac.at

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Abstract

This report points out that there are structuralistic as well as subjective conceptions of self-organisation. The first stress the self-reproduction of social structures, the second aspects of participation, direct democracy, co-operation, respect, solidarity, responsibility and tolerance. Arguments in favour of a dialectical conception of social self-organisation that both incorporates systemic and subjective aspects are put forward. Social systems theory is mainly focused on functionalist aspects and stands in the tradition of Niklas Luhmann. This tradition lacks aspects of the role of human actors and cannot consistently explain the relationship of social structures and actors. The report shows that social systems theory should be grounded in conceiving the relationship of system and subject dialectically as has been done in some works of modern sociology like the ones of Pierre Bourdieu and Anthony Giddens.

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0. Introduction

Sociological theories can be categorised by the way they relate structures and actions. The first refer to the system, the latter to the individual which is as a social being. Action Theory and Symbolic Interactionism (Max Weber, George Herbert Mead, Jürgen Habermas etc.) see society and social systems as social relationships driven by social actions, whereas Functionalism and Structuralism (Emile Durkheim, Robert Merton, Talcott Parsons, Niklas Luhmann etc.) stress the influence of social structures on actions and thinking. In the last two decades some sociological conceptions have been developed that do not see the relationship of structures and actions as one strictly and solely determining the other, but as a mutual relationship: e.g. Anthony Giddens (1984) stresses in this Theory of Structuration that social structures are medium and result of social actions; and Pierre Bourdieu says that social systems are structuring (producing social actions) and structured (produced by social actions) structures. So the relationship of structures and actions is no longer conceived dualistically by some modern sociologies, one rather speaks of a duality of structure.

	Actions	Structures
Structuralism, Functionalism		Determining
Action Theory	Determining	
Dialectic of Structures and Actions	mutual relationship	

Concerning the sociological application of the self-organisation concept, a similar classification of theories can be made: Structuralist and functionalist conceptions see self-organisation as the self-maintenance and self-reproduction of social structures whereas action-theoretic approaches define social self-organisation in terms of self-determination, direct democracy and participation. The first stress the self-reproduction of a social system, the latter self-determination of the subject. What is missing, is a dialectical conception that tries to combine both understandings of social self-organisation.

	Self-organisation conceived in terms of	
	Actions	Structures
Structuralism		self-reproduction of social structures
Action Theory	self-determination and participation of social actors	
Dialectic of Structures and Actions	mutual relationship	

When speaking of social self-organisation we are referring to the upper level of a hierarchy of systems. Social systems are the most complex systems we know and they differ from biological and physical systems. Self-organisation in physical and chemical systems means the spontaneous self-structuring of matter. Such systems cannot maintain themselves, their components decompose after a certain time has passed. Living systems are self-structuring as well as self-maintaining, they are autopoietic in the meaning put forward by Humberto Maturana. Social systems are more than just self-structuring and self-maintaining, they are additionally self-creative. This relates to the fact that individuals are active, self-conscious subjects that can choose to a certain extent in which

systems they want to live and how their systems are designed. And they have the ability to create new systems and structures. This freedom of conscious creation is a property that we do not find in the biological or physical world. Hence social self-organisation in a structural sense involves the permanent (re-)creation of new structures that influence individual thinking and actions. Therefore social systems can also be called re-creative systems.

It is important to distinguish different levels of organisation in order to avoid false inferences that directly transfer concepts from one science to another. Biologism and Social Darwinism as parts of fascist ideologies have shown that such false inferences can have very dangerous political consequences. A General Systems Theory should identify different hierarchical levels of organisation and try to identify common and different aspects of general concepts such as self-organisation concerning these different levels. Hence systems theory is also in need of a general systems philosophy that treats the relationships between the single sciences and different types of systems.

The arguments of Hermann Haken (1984) show that it is quite easy for self-organisation theory to slither into false inferences. Haken transfers the synergetic principle of slaving directly from physics to sociology: "I am fully aware of the fact that a number of sociologists deeply dislike the term "slaving" when applied to social context and that they are not satisfied with my explanation that slaving is a terminus technicus which has no ethical or other implication. My opinion is rather contrary and has even changed over the years. In earlier times I strictly stuck to the interpretation as a terminus technicus. I get more and more convinced that in spite of their freedom, humans are much more enslaved than they are usually aware of and that it may be-even rather healthy to get aware of that fact. Just to mention again an innocent example: Fashion acts as an order parameter under which individuals are enslaved. In all these cases individuals are sucked into a collective attitude" (Haken 1984: 37). Haken naturalises manipulation and domination as common features of society and does not see them as historical and hence temporal phenomena. Using the slaving principle as a sociological principle plays down the danger of phenomena such as slaving in a political sense, manipulation, control and domination. Haken argues that mass media enslave public opinion, the question that arises, but that is not posed by Haken is whether or not this is very dangerous.

1. Structuralist Conceptions of Social Self-Organisation

1.1. Society as a Self-Reproductive or Autopoietic System

1.1.1. Luhmanns Theory of Self-Referential Systems

Niklas Luhmann (1984) conceives society in functional terms and applies Maturana's and Varela's autopoiesis-concept sociologically. Biological systems are basal self-referential for Luhmann, in opposition to Maturana he says that social systems are not alive because one cannot induce from a collection of living systems that the collection itself is alive. Luhmann says that a system can only differentiate, if it refers to itself and its elements. It generates a description of itself and a difference of systems and environment. Self-observation means that a system/environment-difference is introduced into the system. All social systems can observe themselves.

Luhmann distinguishes three types of self-reference:

1. Basal self-reference:

The referring self is an element, there is a difference between element and relation in the system. Such a system produces the elements that constitute the system with the help of the elements. This means a self-constitution of the system and its elements, the elements refer to themselves in order to reproduce themselves.

2. Processual self-reference (reflexivity):

One can speak of such a type of self-reference, if there is a difference of before and afterwards in the system. In this case, the referring self is a process; a process is constituted by a difference between before and afterwards. Communication is a process, reflexivity is a type of meta-communication, a communication-process about communication. Reflexive processes are necessary for a differentiation of structures.

3. Reflexion:

Such a type of self-reference exists if there is a difference between system and environment, the system refers to itself. This is the type of a systemic self-reference.

Luhmann argues that individuals are (re)produced biologically, not permanently by the social systems. If one wants to consider a social system as autopoietic or self-referential, the permanent (re)production of the elements by the system is a necessary condition. Hence Luhmann says that not individuals, but communications are the elements of a social system. A communication results in a further communication, by the permanent (re)production of communications, a social systems can maintain and reproduce itself. "Social systems use communications as their particular mode of autopoietic reproduction. Their elements are communication which are recursively produced and reproduced by a network of communications and which cannot exist outside such a network" (Luhmann 1988b:174).

For Luhmann, human beings are sensors in the environment of the system. He says that the old European humanistic tradition conceives humans within and not on the outside of social systems. Systems theory would have no use for the subject and the human being

could not be the measure/standard of society. Luhmann stresses (communicative) processes instead of individuals. Luhmann's sociology tries to describe society as it is in functionalist terms, not as it could be or should be in critical terms. He says himself that he does not have an agenda of a social problems-approach and it has been criticised that he wants to deny critical and oppositional thinking their legitimacy. Berger (1991) says that Luhmann's attitude is conservative: he is not interested in the way things could function in another way, they only have to function. Luhmann sees the task of sociology in locating disfunctionalities and eliminating them. Berger says that this also is a critical theory, but critical against all possible opposition¹. Luhmann does not provide an adequate theory for analysing concrete social systems or political decisions (Beyerle 1994: 150), there is a lack of concreteness. Beyerle (1994: 156f) argues that the subject is substituted by a type of spirit (Geist) in form of self-referentiality. This results in an idealistic conception of society. Conceiving society without individuals furthermore means to abstract from motives and interests that influence social processes. Fließner (1999: 55) criticises that Luhmann does not take into account space and says that autopoiesis and self-organisation take place in space and shape spaces.

Luhmann does not explain how one communication can exactly produce other communications without individuals being part of the system: "There is no significant attempt to show how societal communication [...] emerges from the interactions of the human beings who ultimately underpin it. Without human activity there would be no communication. [...] It is one thing to say analytically that communications generate communications, but operationally they require people to undertake specific actions and make specific choices. [...] One communication may stimulate another, but surely it does not *produce* or *generate* it" (Mingers 1995: 149f). Beermann (1991: 251) says that one could think of a social system as basal self-referential if there is not a self-reference of communications, but the reference of actions to persons. An autopoietic conception of society must show consistently that and how society produces its elements itself. Beyerle (1994: 137f) criticises that Luhmann does not show how communications exactly produce other communications, he only mentions that communications *result* in further communications. Luhmann can explain that society is self-referential, but not that it is self-producing.

For Luhmann, society is a communicatively closed system, it is the largest social system that does not have an environment. Hence Luhmann says that there is only one society, the world society. Communication is seen as a three-fold selection: First, information as a difference that makes a difference: Not all is information, only that which has not been known before and which changes system-states. Second, there is a selection of what should be communicated, there is a difference between message and information. Third and last, there is the selectivity of reception, i.e. if everything that is communicated is understood by the receiver the way it is intended by the sender. Luhmann does not want to use a language-based definition of communication, but it has been criticised that the

¹ „Wir sehen Luhmanns Konservatismus [...] noch drastischer: die Idee, dass die Dinge auch ganz anders sein könnten, interessiert ihn nicht mehr; sie haben [...] nur noch zu funktionieren. Die Aufgabe der soziologischen Systemtheorie bei Luhmann ist es, Dysfunktionalitäten aufzuspüren und zu eliminieren. Insofern ist auch diese Theorie kritisch, aber sie ist kritisch gegen jede mögliche Opposition“ (Berger 1991: 372).

threefold selection of communication can only be accomplished by making use of language (Krüger 1993: 77).

Luhmann defines an organisation as a social system that is based on decisions. An organisation is a social system that consists solely of decisions and produces these decisions all by itself (Luhmann 1988a). Decisions are specific types of communications, one of several possible communications is selected in a decision-based situation. Martens (1997) criticises that in modern economic organisations one must distinguish between technological and social action, Luhmann's conception of an organisation would reduce communication to social dimensions (Martens 1997: 274). Autopoietic systems are operationally closed. Göbel (1998) mentions that modern organisations are open for information from their environment and strive towards receiving the right information from the outside. Hence one must assume a certain degree of openness and cannot say that a modern organisation is an autopoietic unit. If this were assumed, this would result in a mechanistic view of social systems (Göbel 1998: 77).

For Luhmann, modern society is a functionally differentiated one: Its subsystems are closed networks of communication, each has its own binary code that organises the communications of the specific subsystem, e.g. law: legal/illegal; economy: paid/unpaid; science: true/false; politics: holding/not holding office. In this conception, subsystems form part of each others' environment, they can influence each other in certain ways, but each subsystem is autonomous. The social subsystems are structurally coupled, i.e. one subsystem can influence or perturbate, but never determine the other. Society is centreless for Luhmann and consists of a multiplicity of autonomous subsystems. For Luhmann, each subsystem of modern society has to deal with one specific problem. Martens (1997) criticises that there is more than one binary code in a subsystem, e.g. a modern organisation such as a hospital has to deal not only with health issues, but also with technological, social, political, economical, juridical etc. questions (Martens 1997: 304). Martens says that one could at most speak of the dominance of one binary code in a specific subsystem. Luhmann says that in these subsystems, there are generalised media of communication, one for each subsystem, such as money in the economy, power in politics etc. In modern society, we have global problems that threaten humanity. These problems concern all subsystems of society, these are problems of the whole society. If one conceives society in terms of functionally autonomous subsystems, one ignores that all subsystems have contributed to the existence of these problems (e.g. the global ecological problems have to do with the economic type of capitalist production) and that a solution of these problems requires a global ethics and responsibility that goes beyond the separation of subsystems and tasks.

1.1.2. Maturana's View of Social Systems

Humberto Maturana, the father of autopoiesis, has posed himself the question if social systems are autopoietic. He sees society as a collection of living systems and groups that interact and hence constitute through interaction a network of interactions and relations that influence behaviour. He defines a social system as 'a collection of interacting living systems that, in the realisation of their autopoiesis through the actual operation of their properties as autopoietic unities, constitute a system that as a network of interactions and relations operates with respect to them as a medium in which they realise their

autopoiesis while integrating it, is indistinguishable from a natural social system and is, in fact, one such system” (Maturana 1980: 11; similar Maturana 1987: 292).

Contrary to Luhmann, Maturana considers individuals as the elements of social systems. Maturana says that love understood as experiencing something foreign as something equal and as the acceptance of someone else besides oneself (Maturana/Varela 1984: 265f), is a cohesive force in social systems, without love social systems collapse (Maturana 1987: 297). Maturana sees language as a result of love. Love is the biological foundation of society in Maturana’s theory. Beyerle (1984: 123f) says that is very questionable that love is the social bond of society and that *gemeinschaft* and social systems result solely from love. Also egoism or hate can combine humans against others. History has shown many examples. Love should be considered as one cause of society among others.

Maturana argues biologically that ecological problems and poverty result from overpopulation (Maturana 1987: 301f). In their “Tree of Knowledge” (1984), Maturana and Varela term social systems units of 3rd order that result from the structural coupling of organisms with a nervous system. Such a social coupling would include interaction and communication. In human social system, language is an important means of co-ordination.

Maturana says that social systems are rather conservative systems, they change slowly and cannot be considered autopoietic: “I consider that social systems are not autopoietic systems. Moreover, I think that even if it were adequate to talk about them as third order autopoietic systems, talking that way would obscure what is proper to them which is the dynamics of relations in coexistence of living systems. In my understanding in human social systems the realisation of human beings as languaging beings is central. We human beings may exist in social systems that arise as a result of our interactions, and we become human beings by growing in a human social domain” (<http://www.inteco.cl/biology/ask9707-1.htm>). Luhmann considers social systems as communicative autopoietic, Maturana in contrast to Luhmann considers individuals as the elements of a social system. What both have in common is that they consider society structuralistically as recursive and self-referential network of interaction. Both are interested in structural aspects of society, Maturana in networks of interactions and consensual domains, Luhmann in the functional differentiation and autonomy of subsystems. Interactions that reproduce the system are important in both concepts, the question where they differ is whether individuals are part of the system or its environment.

1.1.3. Hejl’s Concept of Syn-Referentiality

Peter M. Hejl has an independent constructivist approach on social self-organisation that differs from Luhmann and Maturana in certain ways. Hejl (1984, see also Hejl 1987, 1992) defines self-organisation as processes or systems which arise spontaneously as specific states or as sequences of states. The components of such systems decompose, this means that Hejl understands self-organisation in a physical and chemical sense because such systems are self-structuring, but not self-maintaining. He defines self-maintaining systems as cyclical concatenations of self-organising systems such that the

first system produces the conditions for the second etc. until one of the systems produces the initial conditions for the first system in the cycle. ‘Self-maintaining systems are systems in which self-organising systems ‘produce’ each other in an operationally closed way” (Hejl 1984: 63). Self-referential systems are defined as systems which organise the states of their components in an operationally closed way. Hence in this terminology, self-maintaining systems are necessarily also self-referential, but not all self-referential systems are self-maintaining. Living systems are self-referential and self-maintaining.

Hejl defines a social system as “a group of living systems which are characterised by a parallelisation of one or several of their cognitive states and which interact with respect to these cognitive states” (Hejl 1984: 70). Just like Maturana and contrary to Luhmann, he sees individuals as the elements of a social system. The important point in this definition is that one can speak of a social system when individuals interact and this interaction results in a common construction of reality, a parallelisation of cognitive states. The individual can be understood sociologically as the result of the overlapping of several social systems in the same individual. This also permits Hejl to define society as a network of interlinked social systems with the individuals as ‘nodes’. Hejl says that social systems are not self-organising because the constitution of such a system is by no means a rapid and spontaneous process. It is also not self-maintaining because this would confuse the terminology of biological and social systems and would reassert biologism in the tradition of Herbert Spencer, i.e. society would be understood as an organism. Components of a self-maintaining system are components of only one system and do not participate in other systems, but individuals do so. Unlike self-maintaining systems, social systems do not physically produce their components. In contradiction to self-referential systems, one social system does not organise all the states of their components and hence do not determine a system-related reality as the only reality which is accessible to the component.

So social systems are neither self-organising, nor self-maintaining, nor self-referential for Hejl. He sees them as syn-referential systems: ‘Syn-referential systems are constituted by components, i.e. living systems, that interact with respect to a social domain. Thus the components of a syn-referential system are necessarily individual living systems, but they are components only inasmuch as they modulate one another’s parallelised states through their interactions in an operationally closed way. In contradistinction to self-referential systems, therefore, syn-referential systems do not modulate the totality of the states of their components, but only those states which participate in the formation of the social domain”. What Hejl sees as specific for social, syn-referential systems is that individuals can construct a common view of reality and that social systems overlap. Social systems interact through the interactions of their components, the individuals. Syn-referentiality refers to common constructions of reality that are medium and result of interactions.

1.1.4. Other Systemic Concepts of Social Self-Organisation

All three discussed concepts have in common that they stress structural aspects of interaction and communication: Luhmann sees society as the result of self-reflexive communication and the structures it produces, Hejl describes syn-referentiality structurally as common constructions of reality that are interrelated with interactions and Maturana stresses structural networks of interactions and relations that select particular

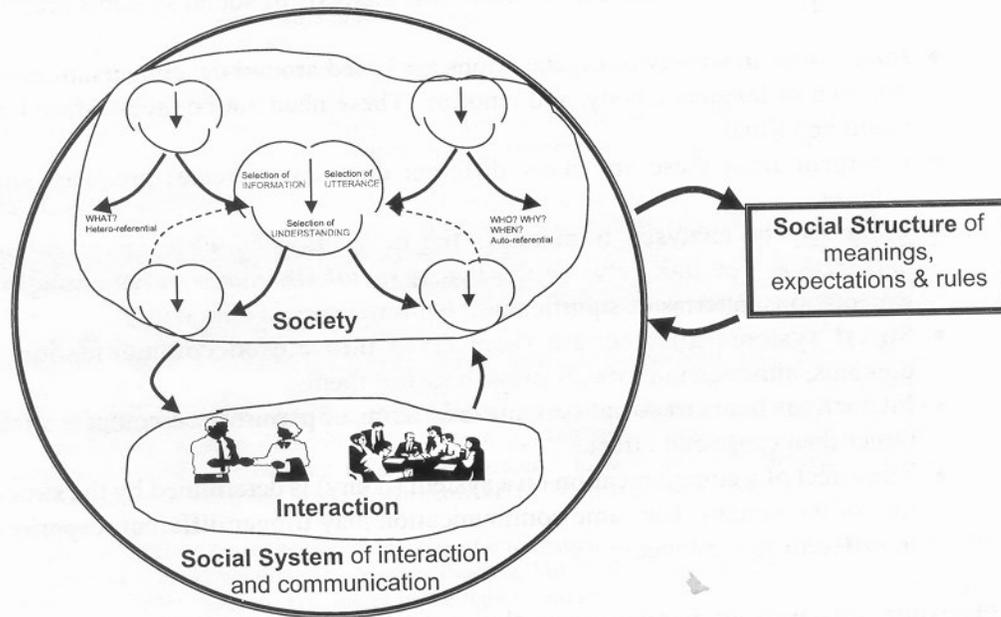
behaviours. Society is described as a self-reflexive network of interactions. The three authors differ in terminology and in the question of the role of the individual in society. Luhmann argues that the individual is only part of the environment of a social system, whereas Hejl and Maturana say that the individual belongs to the system and that hence the latter can not be seen as autopoietic in the biological meaning of the term.

Malik/Probst (1984) see social self-organisation as the idea that social systems can be organised and guided only to a limited extent through conscious, planned intervention. Self-organisation implies a polycentric system with self-coordination and reciprocal, participatory adaptation and modification of behaviour. In this concept, self-organisation is conceived as the ability of systemic self-reproduction of a system which implies that steering by a hierarchical command structure will fail or result in failures of the system.

Gilbert Probst (1987) says that social self-organisation means the self-generation of order as an emergent phenomenon in a social system. This order has a spontaneous and unintentional character and is the result of multiple experiences, interactions, expectations, actions, plans, perceptions and decisions. In this view, order emerges all by itself, it is not made or planned consciously by humans. Self-organisation deals with endogenous, unintended emergence and differentiation of order in social systems independently from interventions and steering. Self-organisation is for Probst not a good or a bad phenomenon, it is a structural principle of a social system. His view is a structuralistic/systemic and holistic one.

Similar, but in terms of Luhmann, Helmut Willke (1989) argues that society is a contextually steered system, i.e. there is a reflexive, decentralised steering of the control conditions of each subsystem of society and self-referential self-steering of each subsystem. There is a minimum degree of common orientations of the subsystems, but the common context can not be organised by a hierarchical top of society, society means a discourse of heterogeneous, autonomous parts. Willke agrees with Luhmann that social systems are self-referential communication systems and that the elements are communications, not individuals. Willke's main idea is that society is a self-steering system

Also Loet Leydesdorff (1993) argues that the substance of a society as a self-organising systems cannot be controlled by the contributors to the genesis and the maintenance of the system, although this substance is a result of their interactions. In line with Luhmann, he suggest that only communications are part of a social system. "The crucial point is that society should no longer be considered as composed of human beings, but as consisting of communications. The communication network is added to the nodes which represent the human beings who carry it. At the nodes, each human being performs its own self-referential loop; one only communicates within the network. The social communication system is reproduced by this operation". Leydesdorff says that crisis is the common state of affairs in a social system and that social systems should be analysed in terms of various subsystems which may couple in action at local nodes. In constructivist manner he does not take for granted that self-organising systems exist or endure and he wants to interpret self-organisation mathematically in a theory of communication.



Mingers' (1999) View of the Relations Between Structure/System and Interaction/Society

Like Willke and Leydesdorff, John Mingers is interested in making use of Luhmann's theory. Mingers (2001) suggests to synthesise the theories of Giddens and Luhmann because they seem quite complementary to him. Concerning structure he combines the views of Bhaskar and Giddens and defines them as an entity that consists of positions, practices (Bhaskar) and the rules and resources (Giddens) that underlie them. Mingers (1999) sees society just like Luhmann as a self-referential system with communications as components of the system. "The people will come and go, and their individual subjective motivations will disappear, but the communicative dynamic will remain" (Mingers 1999: 36). A communication is defined in this respect as a threefold selection of information, utterance and understanding. He says that Luhmann can't explain how communications are produced because the latter maintains that communications produce communications, but in reality communications are produced by human beings. To solve this problem, Mingers wants to combine Luhmann's with Giddens' theory and says that society is mutually related to the interactional domain where people interact. "Society selects interactions and interactions select society – this is their form of organizational closure. We can choose to observe society, and see networks of communications triggering further communications, and forming self-bounded subsystems that persist and reproduce ver time. Or, we can focus on particular episodes of interaction between individuals and groups" (Mingers 1999: 38). The unity of society and interaction is recursively related to social structures in Mingers' model of self-producing social systems.

I find this conception a problematic one. If one observes society or a social system, one will not find either communications or interacting individuals, but both at once. Separating communications and individuals into two separate domains results in a rather

dualistic and non-consistent conception. One has to decide if either individuals (as social beings) or communications are the elements of a social system. Mingers' fails to explain precisely what his overall model describes ontologically. In sociological theories, society is normally conceived as a totality that consists of social systems and subsystems. For Mingers it is only one domain besides interaction and structures of a totality he can't name. If society is a totality, individuals and social structures have to be considered as parts *inside* of society in order to construct a consistent theory. Communication and social interactions do not form separate domains, they are part of the structure that relates social groups and individuals. To avoid shortcomings one could conceive social structures as a unity of social relationships that take place in and through interaction and communication and social forms such as rules and resources. Defining communications as components of a social system will result in rather dualistic conceptions, it is a rather hard task to integrate the theories of Luhmann and Giddens. Mingers does not think of defining individuals as social beings and components of social systems in such a way that society produces man as a social being just like man produces society as a necessary condition for his/her social being. Man is creator and created result of society.

Francis Heylighen (2000) describes society as an organism and as an autopoietic system. "An autopoietic system consists of a network of processes that recursively produces its own components, and thus separates itself from its environment" (Heylighen 2000: 3). He says that society generally does not reproduce, but it produces its own components. "The physical components of society can be defined as all its human members together with their artefacts (buildings, cars, roads, computers, books, etc.). Each of these components is produced by a combination of other components in the system. People, with the help of artefacts, produce other people, and artefacts, with the help of people, produce other artefacts. Together, they constantly recreate the fabric of society. [...] These processes of self-production clearly exhibit the network-like, cyclical organisation that characterizes autopoiesis" (Heylighen 2000: 4). Heylighen compares society to animal bodies. Mining, harvesting and oil pumping function as ingestor (brings matter and energy into the system); refineries and processing plants as converter (transforms raw inputs into usable resources), transport networks as the distributor (transports resources to the places where they are needed), factories and builders as producer (produces components for the "organism"); sewers, waste disposal, smokestacks as extruder; warehouses and containers as storage (reserves resources and products that will help to buffer against fluctuation); buildings, bridges etc. as support (upholds, protects and separates different parts of the organism physically); engines, people, animals as motor (uses energy to generate motion for the "organism"); reporters, researchers etc. as sensor (perceives information); experts, politicians, public opinion etc. as decoder (transforms the incoming stimuli into internally meaningful information); communication media as channel and net (communication of information between the various subsystems); scientific discovery, social learning etc. as associator (creating a network of associations); libraries, schools, collective knowledge as memory (maintains information about previous interactions to support future decisions); government, market, voters etc. as decider (selects particular actions in response to the perceived state of the environment); and executives as effector (implements decisions, translates information generated by the decider into a concrete plan and executes the corresponding actions).

Heylighen is looking for direct analogies of biological concepts (autopoiesis, organism) in society. He argues biologically and does not see that there is a hierarchy in the world which results in emergent properties of upper levels. Society can not directly be compared to biological systems, there are emergent properties such as culture, language, self-consciousness, rationality, creativity, labour, art, politics etc. that allow individuals certain degrees of freedom that do not exist in biological systems. Describing society as an organism and applying biological concepts to society, contains the danger that humans are compared to animals and that selection is seen as a natural law that applies also to society. Social Darwinism has shown that such direct analogies are very dangerous. No wonder that Heylighen compares the repressive apparatus of the state uncritically to an immune system: "Society too has an immune system that will try to control both external invaders (e.g. wild animals, infectious diseases, hurricanes, foreign enemies) and internal renegades (e.g. criminals, terrorists, computer viruses). Basic components of a society's immune system are the police, justice and army" (Heylighen 2000: 6). An immune system helps the body to get rid of parasites. An association of parts or groups of society with parasites does not seem to be appropriate at all.

The individual does not play an important role in Heylighen's conception. In fascist concepts of society (such as the one of the Austrian sociologist Othmar Spann), society is conceived universalistically and holistically as a whole that is more important than individual lives, goals, ideas and needs. There is a tendency in modern, post-fascist holism to conceive nature and the world as one whole (Gaia) that encompasses equal parts that are interrelated. This concept again ignores the hierarchy (in terms of emergent properties) inherent in the world, some representatives of the Gaia-hypothesis argue in an anti-humanistic manner that all life forms are equally important and that human beings have only a value that is equal to all other forms of life. Such conceptions contain new totalitarian threats because they do not see the individual as a unique entity with unique value. Representatives of the gaia- and global brain-hypotheses (such as Heylighen) mystify nature, they equate man and nature within the framework of a holistic system or even rank nature higher than man. Such biologicistic and bio-centric arguments do not see that man is a product of evolution that differs from all other species. Although man has caused the threat of ultimate destruction, s(he) is the only being that possesses the intelligence to establish a socially and ecologically sustainable society that simplifies his/her existence and provides a solution of the global problems.

The conceptions of society presented here have in common that they describe society as an autopoietic or self-referential system and that they concentrate on structural aspects. They cannot explain how society is produced by individual actions and communications and how social structures influence the individual. There is a lack of subjectivity in these theories.

1.2. Society as a Dissipative System

1.2.1. The Systems-Philosophy of Erich Jantsch

The first scientist who considered social self-organisation was the Austrian Erich Jantsch in the mid-1970ies. He does not see society as a autopoietic system as Luhmann and others do, but as a dissipative system.

Jantsch tries to extend Prigogine's theory of dissipative (physical) systems and his principle of „order through fluctuation“ to society and speaks of society as a dissipative system. He says that this principle can be assumed to operate at all levels of reality, from inanimate matter to life and to social systems, ideas, and spiritual evolution. An evolutionary perspective emphasises process over structure, the exchange of energy over its containment, flexibility and change over stability.

Jantsch sees the task of individual and social life in finding a balance between opposing forces. He takes up the notions of the Chinese tao and yin/yang. He says that in society „there are many forces acting in the stream, pulling and pushing from all sides, sometimes mutually enhancing or cancelling out, but more often conflicting with each other in complex ways“ (Jantsch 1975: 6). These are opposing forces such as individual – system, nature – culture, body – mind, instinct – rationality, appreciation – creation, good – evil, pleasure – pain, given – to be built, amoral – moral, collective – individual, holistic – atomistic, life – death, deductive – inductive, appreciative – creative, feminine – masculine, passive – active. He says that traditional Western and Christian thought has conceived human life dualistically as a separation of such opposites, for him human life is an expression of a specific shade in between the opposites. In his view, balance may be found in the tension between both sides. Western world view would try to solve the tension between opposites one-sidedly, believing e.g. in a one-right-policy-view and the purpose of policy as directing human systems toward a prescribed endstate such as heaven or the classless society. For Jantsch evolutionary thinking must try to replace dualism by balancing (or as he says: centering) opposing forces.

Jantsch's taoistic view does not take into account that opposing forces can be antagonistic ones. An antagonism is a contradiction that can not simply be overcome or balanced, it can only be sublated (aufheben) in the threefold Hegelian sense of eliminating, preserving and lifting up. Opposites that are typical for modern capitalist society such as capital – labour, state – society, exchange value – use value, exclusion – inclusion, control – participation, wealth – poverty, private property/ownership – expropriated, exploiting – exploited, competition – co-operation can not simply be balanced, only overcome and sublated. Tao sees just like Dialectics that there are opposing forces in the world, but it wants to go a middle way between all opposites and does not see that there are antagonistic contradictions.

Jantsch says that Marxism simply wants to resolve opposites in a dualistic manner in favour of an endless state – the classless society. He thinks that in an evolutionary- or process-view there can be no division of opposites, also no dialectical synthesis. He considers the latter as the clumsy western approach to set a strict structure of concepts in motion (Jantsch 1979: 370). For Jantsch there can only be a complementary of opposites, a mutual inclusion of opposing forces.

Marxism and Dialectics do not argue dualistically, they see reality in a way that there are abstract levels of reality that can already be described adequately by contradicting dual categories and if one advances from the abstract to the concrete (such as from society and nature in general to society and nature in capitalism), one will find antagonistic

expressions of these contradictions. The Hegelian notion of sublation that has been turned materialistically by Marx avoids dualistic, reductionistic and holistic conceptions of the world that can not describe it in sufficient ways. Jantsch view is a holistic one that thinks of the world and of society not as historically developing entities which must result in changes of the opposing forces that can only be described in the way of a sublation. He thinks of the process of the world as a change of regulation between eternally opposing forces (that can be balanced as an ideal way of regulation in the view of Jantsch).

Jantsch says that social sciences have imitated the Newtonian mechanics and that this has resulted in static world views. For him Marxism is a reductionistic explanation of the world that tries to apply deterministic laws and hence should be considered as a kind of “social physics”. This view does not take into account that Marx himself can be considered as an evolutionary thinker (see Haustein 1998), suggesting that society is not static, but dynamic, in motion and process-like. Marx’ idea that social struggles influence the historical course of society does also mean that social evolution is relatively open and the results of major social uprisings are not determined at all. Only vulgar interpretations of Marx do not see that he considered social evolution as a dialectic of social structures and actions and that it was his view that active subjects transform society, although their actions are constrained by the structures of society. The dialectic that drives forward the evolution of society was summarised by Marx in the following words: “Men make their own history, but they do not make it as they please; they do not make it under self-selected circumstances, but under circumstances existing already, given and transmitted from the past” (Marx 1852: 115).

Marx criticised Proudhon for his vulgar conception of dialectics because the latter also wanted to balance opposing forces. Proudhon thought that a synthesis means the establishment of a balance of eternally existing categories such as exchange value or competition. Just like Jantsch, he did not think of such categories as historical ones, he did not understand Hegel. “For him, M. Proudhon, every economic category has two sides — one good, the other bad. He looks upon these categories as the petty bourgeois looks upon the great men of history: *Napoleon* was a great man; he did a lot of good; he also did a lot of harm. The *good side* and the *bad side*, the *advantages* and *drawbacks*, taken together form for M. Proudhon the *contradiction* in every economic category. The problem to be solved: to keep the good side, while eliminating the bad. [...] What would M. Proudhon do to save slavery? He would formulate the *problem* thus: preserve the good side of this economic category, eliminate the bad. Hegel has no problems to formulate. He has only dialectics. M. Proudhon has nothing of Hegel’ s dialectics but the language. For him the dialectic movement is the dogmatic distinction between good and bad. [...]What constitutes dialectical movement is the coexistence of two contradictory sides, their conflict and their fusion into a new category. The very setting of the problem of eliminating the bad side cuts short the dialectic movement. It is not the category which is posed and opposed to itself, by its contradictory nature, it is M. Proudhon who gets excited, perplexed and frets and fumes between the two sides of the category“ (Marx 1846/47: 131-133). Jantsch is the modern Proudhon of the philosophy of self-organisation, his theory is characteristic of the poverty of systems philosophy that could only be compensated by the sublation of the holistic mainstream of systems philosophy

by dialectical thinking. Properties to be eliminated by such a dialectical turn towards dialectical thinking should be mysticism, spiritualism and irrationalism that are largely present in systems thinking today².

For Jantsch, self-balancing is an important evolutionary mechanism. He sees temporal self-balancing (Jantsch 1975: 25) of a process as a process which is always linking itself back to its own origin, and thus becomes "aware" of its own direction and position in space and time. It proceeds by prancing back and forth in feedback loops. Spatial self-balancing (ibid: 26f) means that opposing categories, systems or parts are linking to each other, feedback loops exist between them and the interaction of the opposing sides generates structures. Jantsch says that all creation follows this pattern and is an expression of tao and yin/yang. „Each side contains the seed of the other; each side becomes real only in terms of the process linking it to its opposite“ (ibid: 27). In Jantsch's view a system evolves by attaining a balance between processes and opposites. Another important evolutionary mechanism in Jantsch's theory is self-transcendence: a system goes beyond its own boundaries of identity when organising itself and it becomes creative. Self-organisation and evolution are seen as results of self-transcendence on all levels (Jantsch 1979: 253).

1.2.2. The Constitution and Evolution of Society (Jantsch)

Jantsch sees the evolution of society as a widening of its scope, passing from individual systems to mankind at large and beyond. Each wave passes from a subconscious coordinative phase (internalised phase) through an increasingly conscious competitive phase (Darwinian or externalised phase) to a fully conscious coordinative phase (design phase). He says that at present, social organisation is moving into the design phase and approaches world unity, whereas cultural organisation enters the competitive phase, and psychic organisation is still largely subconscious. This is a deterministic conception that does not take into account that due to the importance of social actions and man's ability to consciously make choices between several possible alternatives, social evolution is a relatively open process that does not necessarily follow a strict development from individualisation to competition and finally to co-ordination. Furthermore, Jantsch ontologises competition as a necessary, not a historical pattern of society.

For Jantsch, society is a self-balancing loop that consists of three spaces: the physical, social and spiritual ones.

² Another example is the approach of F. Capra

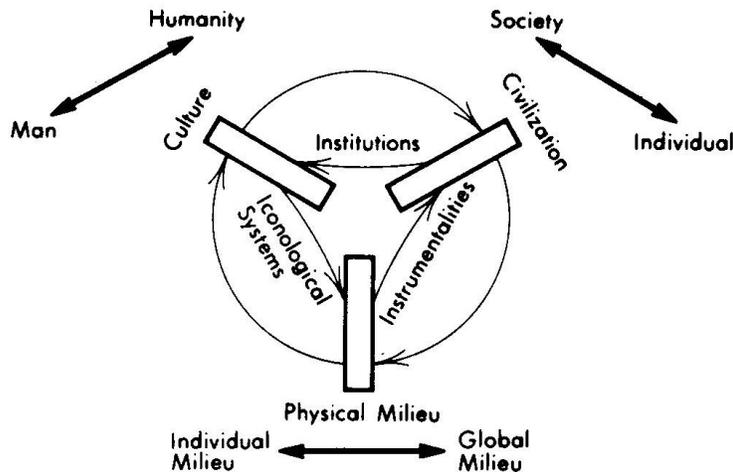


Fig. 1.: The process structure of human systems in Erich Jantsch's (1975: 52) work

The physical milieu holds the totality of physical systems in and with which man interacts, e.g. cars, road systems, railroads, natural ecological systems etc. – but also groups of people physically interacting with each other, such as work teams or military units. Civilisation is the totality of social systems with their multiplicity of interactions between their members. E.g. families and communities belong here. Culture comprises all aspects of a shared appreciative system plus a communication system through which sharing becomes possible. It is a system of shared values.

As can be seen in fig. 1., there are feedback loops between these subsystems of society. Jantsch calls these the transformer systems. There are three of them: Instrumentalities link the physical milieu with civilisation, examples are human organisations such as specific governments at all jurisdictional levels, universities, corporations, judicial courts and citizen groups. Institutions mediate between civilisation and culture and introduce values into the framework of social systems. Examples of institutions are government, business, education, churches, law, public health, consumer protection etc. He says that institutions are the general expression of values which are acted out in the particular form of various instrumentalities. But Jantsch makes a theoretical mistake here, he considers universities, governments, corporations and juridical organisations as instrumentalities as well as institutions. He does not make clear how instrumentalities differ from institutions, the term instrumentalities seems to be a little bit misleading. What Jantsch probably means are productive forces such as living labour power, technology, knowledge and science that man makes use of in order to actively reproduce society. Finally, iconological systems provide the link between culture and the physical milieu. They mediate between symbols and their interpretation, between value and physical manifestation. Examples are language, myths, systems of communication and artistic forms of expression. Physical milieu, civilisation and culture can have different ranges as is also indicated in fig. 1: the first can stretch from individuality to a global range, the second from individual to society and the third from man to humanity.

Jantsch says that individuals belong to various institutions and that it is this extension of the individual over the whole loop which gives human systems their identity and life. Although Jantsch says that the individuals impart life to human systems and the latter in turn stimulate life in individuals (1975: 57), he does not accomplish to explain how the individuals and society are related. Social relationships such as the class structure of modern society as well as political and cultural relationships, do not play an important role in Jantsch's conception of society which is a holistic and vitalistic one. Note that there is no hierarchy in Jantsch's model, this suggests that all subsystems play a comparable role in society. My own materialistic view would suggest that productive forces, economic processes and labour form an economic base of society that is dialectically related to the economy and culture. Such a view does not automatically imply that everything can be explained in economic terms and that all social phenomena have pure economic causes and can be reduced to economic logic. Rather one can assume that there is a relative autonomy of the subsystems of society, they have their own logic of functioning, their own contradictions, but they are mutually coupled with the economy, which means that economic processes influence and often dominate political and cultural phenomena, but there can never be a full determination. Man must produce his own living by actively changing his social and natural environment, and this results in use values which satisfy human needs. Politics and culture can not function and exist without a material substratum, i.e. laws, decisions, ideas, norms, values etc. are in need of the physical world. Jantsch does not take into account that there is no consciousness without being, from him spirit is some eternal principle that has always existed. This also results in a lack of hierarchy in his model of society.

Jantsch considers social systems as dissipative ones in which the interaction of strong and highly non-equilibrium flows of ideas and actions results in social organisation. He suggest that it are mainly human believes and ideas that influence the evolution of society. The human capabilities of invention, memory and imagination play an important role in Jantsch's model of social evolution. In his view, in socio-cultural system there is additionally to physical energy social and spiritual energy. This means that humans have the ability for self-reflexion (Jantsch 1979: 111, 229f). Self-reflexive spirit results in the ability of anticipation which makes the active, creative design of the future possible. Self-reflexive systems can map the outer world onto thoughts, ideas and plans which enables them to manipulate their environment. This results in the creation of technologies (Jantsch 1979: 239f). They can also map the experience they have made in the exchange with their environment to conservative structures such as art works or writings. For Jantsch it is the reflexive spirit that designs society according to specific values (Jantsch 1979: 245).

He considers social systems also as re-creative ones because they can create new reality (Jantsch 1979: 305), the socio-cultural human being has the ability to create the conditions for his further evolution all by himself (343). The self-reflexion that is characteristic for humans means to Jantsch also that they can and must take responsibility for the world they live in. For Jantsch, self-reflexive spirit is the guiding force of social evolution, its self-organisation results in socio-cultural structures. For him, history is history of the spirit and he says that the materialistic argument that humanity can be

described by material processes is reductionistic (Jantsch 1979: 252, 330, 346). History of nature is evolution of consciousness and spirit for Jantsch (1979: 411), he suggest that spirit is a god-like principle, god is considered as the evolving spirit of the universe.

Contrary to the idealistic notions of Erich Jantsch, Rainer Zimmermann (1999) argues that philosophy has to be materialistic in order that it does not violate fundamental theorems of philosophy such as Okham's razor and the theorem of foundation (Satz vom Grunde: the ground (Grund) is a category that implies other categories, the theorem holds that everything that is results or can be derived from some foundation/ground). Philosophy must start from telling the history of the universe and hence from physics, hence an idealistic conception that stresses spirit will fail to find a sufficient ground of the universe. Zimmermann's approach stands in opposition to the tradition of Platonic idealism that holds that ideas and the human soul exist eternally, that matter as such does not exist and can only become reality by ideas inherent in matter. Especially in the Anglo-American region, philosophy of science is very much grounded in these idealistic notions and it is not well founded. Jantsch's idealistic philosophy is also not well grounded, he must refer to external, eternal esoteric forces in order to explain society. If the materialistic arguments were reductionistic, one would also have to consider Jantsch's view a reductionistic one because he reduces matter to eternal mind.

Jantsch (1975) says that the Prigogine principle of order through fluctuation also governs social evolution: "A human system, stifled by high entropy, absorbs energy or information inputs (fluctuations) which cause it to fluctuate and eventually mutate to a new dynamic regime. In the new regime, entropy production is first very high due to internal co-ordination with the aim of forming a new structure corresponding to the dynamic regime, and subsequently becomes increasingly governed by economic criteria – minimum entropy production in an external, Darwinian process of competing with other systems in a shared environment" (Jantsch 1975: 62). Here social entropy means the degree to which the creativity of a social system's members can unfold. If the systems absorbs much of this creativity, entropy is high. High entropy for Jantsch is similar to rigid power structures. Such structures might lead to "mutations", which are fluctuations that can result in revolutions which decrease entropy. A mutation in a human system, Jantsch says, increases order or complexity, whereas power tends to decrease it. Jantsch's view implies that power is some quantitative category that can be measured. It does not seem reasonable why one should try to apply the concept of entropy to society, social change can be described in qualitative terms, the change of the power structure as Jantsch also suggests plays an important role, there is no need for a direct analogy to a quantitative thermodynamical concept because major social change is a qualitative phenomenon. Jantsch sees social evolution as a succession of high and low entropy, i.e. of the building up of power structures and their collapse. This is a deterministic view that suggest that all rigid power structures have to collapse because social entropy increases. Applying quantitative terms, this suggest that one could calculate when a society or a social system will collapse. But in fact, the evolution of society and social systems is relatively open because it is a qualitative process that depends on social actions. This means that it is not determined that the system will crumble at a certain moments, phases of crises may be overcome and the systems might find ways of stabilising itself or suppressing revolts by e.g. making use of violence. Modern society is characterised by

rigid power structures that result in a total lack of participation (see Fuchs 2001), but nonetheless social revolution is contained by various mechanisms of control and manipulation that result in ‘false consciousness’. So in the terms of Jantsch, we have high entropy, but almost no fluctuations or ‘mutations’. This shows that Jantsch underestimates the importance of social actions in social change, he tries to apply physical laws to social evolution in a structuralist and determinist manner although his own goal is to overcome Newtonian and mechanistic thinking in the social sciences.

Jantsch also suggest that the ‘mutations’ in society are mainly technological revolutions, implying that it is technology determines social evolution. This again shows that Jantsch’s conception is a structuralistic and even technological-deterministic one that does not keep in eye the dialectic of social structures and actions that drives social evolution. In his work ‘The Self-Organisation of the Universe’ from 1979, Jantsch seems to have discovered that his view from 1975 was not really describing the evolution of modern society, so he introduced the principle of metastability that suggest that institutions and organisations can remain stable although there are great fluctuations by dampening the latter (Jantsch 1979: 347f).

Jantsch (1979) argues that an aspect of society being a dissipative system are autocatalytic reactions such as population growth or the surplus production of money by making use of money. He says that humanity is no longer in a state of equilibrium, it strives towards a new structure that can only be reached by the way of major instabilities. He says that there are fluctuations (oil crisis and recession of the 1970ies) and autocatalytic reactions (escalation of tensions).

Volker Mueller-Benedict (2001) whose conception is in some respect comparable to the one of Jantsch because both refer to Prigogine, argues that social self-organisation should not be conceived in terms of self-determination, self-responsibility and decentralisation because this would result in a doubling of already existing sociological conceptions. E.g. he says that Herbert Hörz and Annette Schlemm who speak of social self-organisation in terms of participation and self-determination use this concept in a way that describes old sociological conceptions such as democracy, power and freedom. For Mueller-Benedict non-linear interactions of at least two system levels and multiple states of the system are necessary pre-conditions for social self-organisation and he describes self-organisation as something unplanned and spontaneous without ‘social coercive forces’ (Mueller - Benedict 2001: 117) that results in new qualities. Human intervention into systems would always imply forces from the outside of the system, but self-organisation would be something that comes completely from the inside of the system. Therefore social self-organisation would be completely opposed to conscious agency and would be a completely non-intentional process. Mueller-Benedict (2001: 120) defines social self-organisation as qualitative changes on the collective level of a social system that results from small quantitative changes of the state of the individual level. There would be two levels in such a system, the individual and the collective one. New qualities in a self-organising social system could not be deduced from the individual level even if one could observe all properties of the individuals. In this conception of social self-organisation, small fluctuations result in situations where the system can take one of two or more possible states (bifurcation or multifurcation). Mueller-Benedict stresses that this is a

non-intentional, spontaneous process and that individuals can't at all influence it. Agency in self-organising social systems would be impossible.

Like Erich Jantsch (1975) and Ervin Laszlo (1987), Mueller-Benedict conceives social self-organisation in line with Prigogine's principle of order through fluctuation. In comparison to Luhmann and others, self-organisation here is not conceived as something that takes place permanently, but as something that will only take place once in a while in a phase of instability. So self-organisation is not conceived in terms of self-reproduction, but as the emergence of order from chaos in social systems. Comparable to Friedrich August von Hayek's principle of spontaneous order, Mueller-Benedict suggest that human beings can and should not intervene in self-organising social systems. This is a structuralistic view that wants to deprive social groups and human beings of their power to consciously influence social processes to a certain extent. It is also a misconception, because all processes in social systems depend on agency; so even if one conceives social self-organisation as order through fluctuation, one has to think of the role human beings play in such processes. In contrast to theses of non-steerability and non-intervention there are concepts of social self-organisation such as my own (see Fuchs 2002a) or the one of Immanuel Wallerstein that stress that the principle of order through fluctuation can also be found in society, but that this doesn't deprive human beings of agency and intervention into social systems. Social systems permanently reproduce themselves and from time to time they enter phases of crisis which have a non-determined outcome. Due to the antagonistic structure of modern society and the complex interplay of human actions it is not determined when such phases of crisis emerge, what the exact causes and triggers will be and what will result from them, it is only determined that crises will show up again and again. Phases of instability are not separate from human actions, but result from their complex interplay. Social evolution is not determined by fortune and chance, human beings can consciously design evolution (Jantsch 1975, Banathy 1996). This means that the objective conditions of social existence condition a field of possibility that consists of several possible alternative ways of development a system can take in a phase of crisis. Human beings can't steer which alternative will be chosen, but by agency and human intervention they can try to increase the possibility that a desirable alternative will be taken and decrease the possibilities that less desirable ones will be taken. Human history is guided by dialectic relationships of chance and necessity as well as of subjectivity and objectivity. Reducing these complex, dialectical relationships to one side will result in reductionistic conceptions that see social change as either fully determined by chance or by conscious steering.

Jantsch distinguishes four types of social systems: deterministic, purposive, heuristic and purposeful ones. They vary according to the rigidity or openness of the subsystems and transformer systems. Here operational targets (which are part of the physical milieu), strategic goals (part of civilisation) and policy objectives (part of culture) are important. In deterministic systems, all of these categories are prescribed and remain fixed, a purposive system formulates and selects a target, the goal is kept fixed. A heuristic system formulates goals and targets, but still has fixed policy objectives. Purposeful systems formulate and select all of the three categories themselves. Jantsch says that these types of systems represent different types of social self-organisation, the purposeful system corresponding to a fully developed human system.

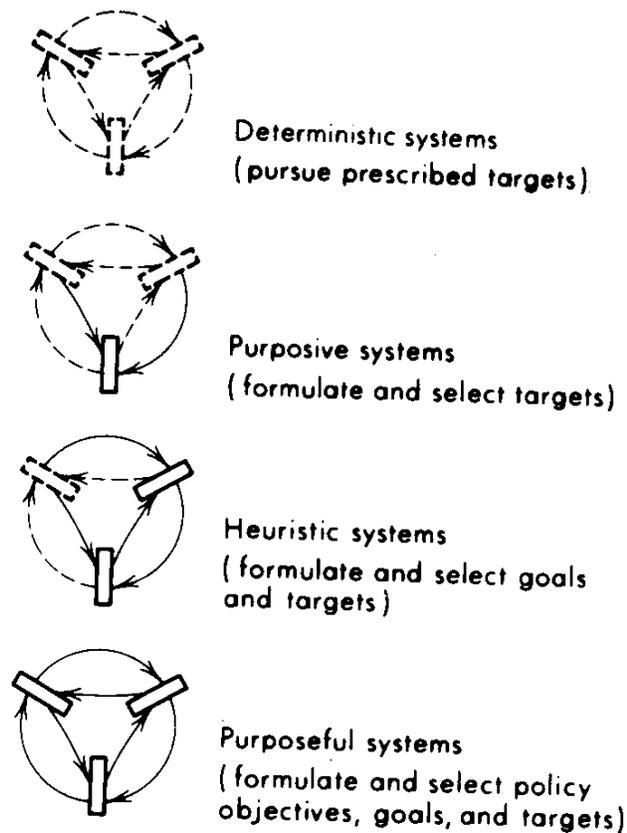


Figure 4. The external self-organizing characteristics of systems in terms of the process structure of human systems. (Dotted lines: rigidly fixed structures and processes; solid lines: alive structures and processes).

Fig. 2.: Types of self-organising system in Jantsch's work

For Jantsch, one of the major problems of society nowadays is that most of its systems are purposive or heuristic ones. 'Purposeful systems are rare in the decisive institutions of society and hardly ever underlie planning efforts. Yet, in a period of cultural transition like ours, in which new values and new norms come into play and new roles for institutions (and possibly also new institutions) are gradually emerging, it is the highest step in self-organisation which becomes of crucial importance for planning and actual change' (Jantsch 1975: 73).

Jantsch suggests that there is a hierarchy not of social subsystems, but of natural systems (Jantsch 1975: 72) which stretches from physical to biological, social and finally spiritual systems. Very similar to the world model of Karl Popper (see Eccles/Popper 1977: 38) where world three corresponds to the products of human mind, spirit seems to be some upper guiding principle of evolution for Jantsch. Hence the upper system in the hierarchy is not society – that includes material processes as well as human ideas –, but spirit. This

again outlines Jantsch's idealistic view of the world. Jantsch (1979: 243) says that it is the neural spirit that steers the evolution of the human world.

Jantsch (1975) refers positively to Henri Bergson's eschatological and metaphysical concept of *élan vital*, a life force that (as is assumed) drives evolution toward higher forms of organisation. Jantsch himself says that the formation of life should not be explained by random fluctuations, but by special, attractive, higher force toward a finality which was called *entelechy* by Hans Driesch and *élan vital* by Bergson. Self-organisation theory puts forward the idea that life has come into existence by the self-organisation of matter without an external creator (God) or a metaphysical force at work. Although Jantsch is into this theory and tries to apply it to society, he is explaining life metaphysically. For Jantsch evolution does not take place randomly, he sees some finalistic, teleological principle at work. Jantsch's view is a monistic idealism, he says that all human systems – organisations, institutions, cultures, and so forth – are alive (Jantsch 1975: 50) and that self-organisation on all evolutionary levels means the unfolding of spirit (*Geist*). Jantsch's view is that spirit is everywhere dissipative self-organisation takes place, especially in all areas of life (Jantsch 1979: 227). For Jantsch, spirit is also in society, eco-systems, the "gaia"-system or in the insect world.

There is no need to refer to mystic forces for explaining the self-organisation of the universe and society. New properties simply emerge due to the complex interactions of the parts of a system, not because there would be some external holistic force at play. Already the founders of the Philosophy of Emergentism, Conwy Llord Morgan and Samuel Alexander saw emergence as something mystically, and so they introduced spiritual forces (known as "Nisus") as the driving principle. Such forces lack an understanding of the dialectical relationship of quality and quantity and the whole and its parts. The emergence of order can't be explained metaphysically because new qualities of the whole are solely constituted by interactions of its parts. The philosophical mistake of over-specification that is grasped by Occam's razor is made by holistic thinkers such as Jantsch. This opens the way for irrationalism and esoterics, which belong to the scope of ideology rather than to science.

Jantsch later (1979) mitigated his eschatological conception of evolution by saying that there is no external telos in evolution because it is an open process that gives itself its own dynamics and direction. But what remained was spirit as an eternal and esoteric principle that governs evolution.

2. Subjective/Action-based Concepts of Social Self-Organisation

These theories concentrate on self-organisation as actions of subjects, the concepts describe social self-organisation in terms of participation, self-determination and direct democracy.

2.1. Intuitive Concepts of Subjective Social Self-Organisation in Political Philosophy

There are many movements in history that anticipated this subjective notion of self-organisation and used the term to describe their way of organising in a decentralised and

direct-democratic manner. For example classical anarchistic philosophy used the term quite a lot (see Fuchs 2001: 189-212, Böcher: 362-378).

Self-organisation is always a collective process that can not be attained individually. Hence it is not surprising that social anarchists often talk about self-organisation, self-government, self-management, self-determination, self-reliance, self-helping, self-support etc. *of society*, whereas individualistic anarchists at most stress self-determination of *the individual*. An in-depth look at anarchist writings shows that social anarchists refer rather often to aspects of social self-organisation (whereas individualistic anarchists do not). Let me give you a few examples.

"No state, however democratic," Bakunin wrote in *Statism and Anarchism*, "not even the reddest republic - can ever give the people what they really want, i.e., the free self-organisation and administration of their own affairs from the bottom upward, without any interference or violence from above, because every state, even the pseudo-People' s State concocted by Mr. Marx, is in essence only a machine ruling the masses from above, from a privileged minority of conceited intellectuals, who imagine that they know what the people need and want better than do the people themselves".

Rudolph Rocker (1938): "The organisation of Anarcho -Syndicalism is based on the principles of Federalism, on free combination from below upward, putting the right of self-determination of every member above everything else and recognising only the organic agreement of all on the basis of like interests and common convictions. [...] The workers in each locality join the unions for their respective trades, and these are subject to the veto of no Central but enjoy the entire right of self-determination".

Peter Kropotkin (1906): "The International Postal Union, the railway unions, and the learned societies give us examples of solutions based on free agreement in place and stead of law. To-day, when groups scattered far and wide wish to organise themselves for some object or other, they no longer elect an international parliament of Jacks-of-all-trades". In *Mutual Aid* (1902), Kropotkin is speaking e.g. of the "self-government of the communes".

Alexander Berkman (1929): "The social revolution in any given country must from the very first determine to make itself self-supporting. *It must help itself* [... the active interest of the masses, their autonomy and self-determination are the best guarantee of success". Murray Bookchin stresses the need for "municipalisation of the economy – and its management by the community as part of a politics of self-management" (Bookchin 1992) and he calls for "community self-management based on a fully participatory democracy – in in the highest form of direct action, the full empowerment of the people in determining the destiny of society" (Bookchin 1989).

In his Manifesto of Libertarian Communism, George Fontenis (1953) says that a libertarian vanguard "must set itself the task of developing the direct political responsibility of the masses, it must aim to increase the masses ability to organise themselves" and that anarchism includes "development of the people' s capacity for self government and revolutionary vigilance". Also Daniel Guérin (1970) stresses the necessity of self-management in a libertarian society. Nestor Makhno says in *The Anarchist Revolution* that social revolution can and should mean "self-made freedom".

This shows that the notion of self-organisation has always been very important in social movements. Let us now turn to the scientific side which also interprets the concept of self-organisation subjectively.

2.2. Scientific Concepts of Subjective Social Self-Organisation

Walter L. Bühl (1991) argues that applying autopoiesis to society puts forward the ideas of deregulation and the state having to retreat from society in order to guarantee the latter's continued functioning. Luhmann, Willke, Teubner and others who argue that functional differentiated society is becoming centreless would deny aspects of domination and preach abstention from action as well as resigning reflexion for the less-powerful. It would be the task for a theory of autopoiesis to develop suitable strategies of control and interaction for the relationships between strongly autopoietic and also between less autopoietic systems. Problems of design, control and planning would not disappear by saying that one should stress autonomy instead of control. The thesis of the non-steerability of complex systems would result in the legitimisation of inactivity and incapability to act. This thesis would be the result of scientific constructivism, but not from political or economic reality. Bühl stresses the possibility to act in and control autopoietic systems to a certain extent. Social systems would not run all by themselves, but they would be in need of organisational efforts and input of physical and mental energy. Self-steering would reach its limits if the input of energy is not sufficient. Control of complex system is not necessarily something hierarchic for Bühl, he says that there can also be decentralised forms of control and that society is in need of compensatory institutions in order to survive.

Espejo (2000) argues that self-organisation often produces undesirable properties like corruption, tensions or violence which are undesirable meanings of the system and that therefore social systems also require the participants' awareness of the processes grounding their purposes and values in social reality and the use of this awareness to steer their recurrent interactions towards the production of desirable social system. This is what he calls processes of self-construction. For Espejo roles are the components of a social system which emerges from the interactions of roles. "This kind of self-production, where the interacting roles are constituted by the social system emerging from their interactions, is a form of social autopoiesis" (Espejo 2000: 952). A social system would not depend on specific individuals and resources, but on the roles people have in the system and on resources in general. Although this view reminds one of Luhmann's theory of social systems, Espejo's emphasis is on human intervention into social systems. He says that social systems by definition are self-constructed, their meanings-in-use are created and produced by themselves, i.e. by purposeful human activities. But in the modern world it is quite common that others impose meanings on institutions. Then there is a mismatch between the self-constructed purposes and the externally imposed purposes. In modern democracy, people would often feel alienated and unable to contribute to the global processes for meaning creation, leaving them in the hands of a few. For solving such problems Espejo suggests that we "need to become conscious actors of our social construction; we need to become aware of our own organisation" (Espejo 2000: 955). Self-construction would imply the conscious participation in the creation and production of social meanings. The production of meaning, products and resources should rely on autonomous units with their own purposes. "All (primary) components in

a social system need to have capacity to create, regulate and produce their own meanings. If this were not the case the subsumed units would not be systems and therefore they would lack the learning capabilities necessary for building up an effective bodyhood. And, lack of awareness of people about the processes producing meanings increases the chances that unwittingly their contributions will be counterproductive. It is in this sense that we are arguing for self-construction rather than just self-organisation” (Espejo 2000: 961).

Herbert Hörz (1993) sees democracy as an expression of self-organisation, dictatorship as an expression of heteronomy. His hope is for an association of free individuals with social justice and ecological sustainability is grounded in the self-organisation of human behaviour. He defines self-organisation generally as structuration of systems by inner organisation of the elements, whereas the whole of outer influences on a system is heteronomy (Hörz 1993: 13). Self-organisation is an internal formation of structures determined by inner determinants (ibid.: 38), it is the universal principle of the formation of structure. Development is the emergence of other, new and higher system qualities in the process of structure-formation by self-organisation. In this process, quantitative changes of a certain fundamental quality turn into qualitative changes by the emergence, development, acumination or solving of objective dialectical contradictions (Hörz 1993: 48).

In social systems, the elements communicate and interact socially. Self-organisation takes place with reference to a field of possibilities which defines possible future states and behaviours of the system. Certain possibilities are realised by chance, but this evolution by chance is conditioned by the field of possibilities which is a result of objective conditions. For Hörz, state-law and –order restrict the self-organisation of the individuals. Due to the non-linearity of social systems, there is no predetermined development of society. The non-linearity of human behaviour is a result of conflicts of interest in the fields of the economy, politics and ideology and of the networking of decisions and actions of various social groups and of the spontaneous and conscious interactions that shape society. The present is a realised possibility of the fields of possibility constituted in the past and it is a future that can be designed in different ways according to the existing and chancing fields of possibility. “Humans are not just auxiliary persons of objective laws, but designers of their future” (Hörz 1993: 64).

Hörz says that the self-organisation of social system is oriented on making possible the effective and humanistic satisfaction of human needs (Hörz 1993: 30) and he sees man’s striving for freedom as the effort to find a humanistic structure of social systems. “Man’s striving for freedom is the search for structures of advanced self-organisation of social systems, this implicates the insurgency against heteronomy” (Hörz 1993: 112). His humanistic vision is: The conditions of living should take on forms where all can recognise themselves, determinate themselves and realise themselves. This would not be possible in societies imprinted by the dictatorship of capital or the state. Self-organisation in society is humanistic regulation and steering of human behaviour. Antihuman goals, means and measures are an expression of the heteronomy executed by individuals and groups who dominate others. A realm of freedom (in the sense put forward by Marx) serves the democratic enforcement of human interests by an organisation that is based on self-determination of individuals and groups. It is the demand for a more humanistic

society that gets rid of alienation and gains an advance of freedom. A transition from the realm of necessity into the realm of freedom is in need of the development of creatively thinking and responsibly acting personalities. Social self-organisation also puts forward the notions of responsibility, solidarity and tolerance.

Wölgang Böcher (1996) defines self-organisation generally as the spontaneous emergence of systems, system states or systemic processes due to certain initial conditions. He understands self-organisation in terms of self-determination and defines the latter as the possibility for a person to give himself/herself his/her own law and sense (Böcher 1996: 209). There are processes in society which emerge spontaneously without conscious planning and are due to the complexity of social phenomena, as for example the result/success of a demonstration. This generally plays a role in the formation of social groups. He uses the term social self-organisation for groups of individuals that have spontaneously aligned without certain directives (Böcher 1996: 302f). Examples he mentions are citizen's groups, self-help groups, smaller co-operatives, interest groups, parents-groups, flat-sharing communities, certain associations, citizen's patrols, project-initiatives.

Albert Zeyer (1997) says that due to the butterfly-effect small social changes can have large effects. He says that this gives us reason to hope for a better society. The butterfly-effect puts forward the idea that it is not decisive if certain actions are successful, it is decisive that they can be successful. Social actions are coupled and can intensify in complex manners, hence if some actions initiate major positive social changes, the initiator might even not become aware of this. For Zeyer, the butterfly is a symbol for hope. He says that the butterfly-effect is anti-hierarchic, anti-authoritarian and even almost subversive and it puts forward the notion that it are not the great leaders who are responsible for major social changes. Relying on the butterfly-effect won't bring laurels for individuals, but the gratification that their actions can have major influences. Zeyer mentions the example of Rosa Parks who sparked off major demonstrations and the formation of the American Civil Rights Movement when she refused to give her bus-seat to a white person during the time of segregation. She was the butterfly for the Civil Rights Movement, but of course the objective conditions had reached a stage where such an initiation of protest was possible. Hence social relationships and structures condition the possibilities of subjective/collective self-organisation. Zeyer mentions boycotts, grassroots-movements, non-government-organisations (NGOs) and civil disobedience as methods and examples of social self-organisation. Disobedience can intensify itself and empower people.

Annette Schlemm (1999) defines social self-organisation as the principle of bottom-up social-organisation that stimulates the capacity to act instead of the restriction of this capacity by personal or objective powers (Schlemm 1999: 34). As examples she mentions future workshops (Zukunftswerkstätten), the social self-help movement, the youth ecology movement, the Free Software-movement, alternative corporations, eco-villages, communes, the kibuzzim, participatory management strategies, semi-autonomous working groups, co-operatives, New Work and exchange rings.

All of the theories and concepts mentioned and have in common that they associate an ethical vision of a better society with the notion of social self-organisation. They are not

so much interested in a functionalist interpretation of the concept that describes how society reproduces itself and how society *is*, they are interested in visions, utopias and in how society *could be*. Social self-organisation is interpreted in terms of co-operation, participation, direct democracy, respect, solidarity, responsibility and tolerance.

3. A Dialectical Concept of Social Self-Organisation

3.1. Some Already Existing Conceptions

Beyerle (1994: 120) argues that man is a social being and that society produces man necessarily as a social being just like man produces society as a necessary condition for his/her social being. Man can only survive in society and society needs individuals in order to maintain itself. Applying the idea of self-(re)production or autopoiesis to society means that one must explain how society produces its elements permanently. By saying that the elements are communications and not individuals, one can't explain self-reproduction because not communications, but individuals produce communications. But society also does not produce individuals biologically because this is mainly a biological, not a social process of reproduction. Hence Beyerle argues that society can only be explained as self-reproducing if one argues that man is a social being. Society reproduces man as a social being and man produces society by socially co-ordinating human actions (Beyerle 1994: 139-141). Man is creator and created result of society, society and humans produce each other mutually. For Beyerle, there is a level of emergence and one of elements in a system, hence society is composed of individuals and communications. Beyerle has two concepts of self-organisation: the objective, structural one that explains the emergence of social order as a mutual relationship of structures and social actors (he also refers to this as autopoiesis). And a subjective, political concept that distinguishes between heteronomy and self-organisation in terms of self-determination.

This political concept of self-organisation refers to one of three types of organisation: the other two are hierarchy and negotiation-based organisation. Self-organisation in this sense refers to the self-regulation of subsystems of society and self-management (or self-administration) of institutions. He says that heteronomy and self-organisation are two principles that supplement each other and are necessary for the evolution and self-maintenance of society. He argues that the development of organisations and social systems at first results in an imbalance of power, "an autopoiesis of humans in groups, i.e. the emergence of society, always result in domination of humans by humans. To put it another way: Social autopoiesis results in forms of political heteronomy" (Beyerle 1994: 244). But a concentration of power is challenged which results in a long-term balance of power that is institutionalised in a certain way. In modern society, this is done by the state which creates a balance of heteronomy and self-organisation. Beyerle argues that self-organisation and heteronomy are not two alternatives, but they complement and require each other. In his view, autopoiesis can take on two different forms (self-organisation and heteronomy).

Beyerle's conception of the development of society is a deterministic one because he assumes that forms of heteronomy and domination *must* emerge in each type of society. He does not see that heteronomy is a historical phenomenon that has come into existence with the beginning of societies that are based on domination. Domination itself is not

something that is intrinsic in all societies because if this were the case, one would have to argue anthropologically that competition and domination belong to the (genetic) essence of man. Such arguments reduce complex social phenomena to biology and are an expression of genetic fetishism. Domination and heteronomy are social phenomena and hence they will cease to exist in post-domination-societies that are guided by the principles of self-determination and participation.

Elizabeth Göbel (1998) also distinguishes two types of self-organisation: autogenetic self-organisation (the spontaneous emergence of rules) and autonomous self-organisation. Göbel uses Friedrich August von Hayek's concept of the spontaneous emergence of order for the systemic/autogenetic part of self-organisation. She says that this a model opposed to the idea of consciously designing organisations. Order that emerges from itself has not been consciously created, it is unintended, unpredictable, unexpected and forms spontaneously (Göbel 1998: 97). The spontaneous emergence of rules is a slow, evolutionary process. But also whole systems or organisations can spontaneously emerge. The individual that enters such a system, adapts its goals and interests automatically and all by itself to the organisation. Many individuals pursue their goals and hence the order of the whole system emerges spontaneously. The organisations that Göbel describes clearly do not exist in modern, capitalist society (although she believes so).

Representatives of neoliberal ideologies argue that modern organisations can not be steered (by social groups or the state) and that hence one should not intervene and abstract from human intervention. But even liberalised markets and deregulated economic organisations do not function without human intervention in today's neoliberal capitalism – they depend heavily on state-subsidies and the centralised and monopolised functions of capital that are carried out by economic actors. The largest corporations (especially in the IT-sector) are in fact heavily funded by the state.

Göbel distinguishes between self-organisation as systemic autopoiesis and self-organisation as self-steering of actors. She both has the systemic and the subjective concept. Autogenetic/systemic self-organisation refers to the spontaneous emergence of rules, norms and organisations, autonomous self-organisation to a state where members of organisations can determine their own rules. She argues that there are three types of organisations: heteronomous, autonomous (self-determined) and autogenetic (self-emerging) ones. Göbel says that autonomous self-organisation can be opposed to heteronomy (autonomous complementary self-organisation) or co-evolve with heteronomy (autonomous parallel self-organisation). Göbel does not clearly point out how the systemic and the subjective type of self-organisation are related and she makes the same mistake as Beyerle by saying that heteronomy and (autonomous) self-organisation are not necessarily opposing forces. If this relationship were conceived as an opposing one, this would radicalise the concept of social self-organisation and it would theoretically withdraw legitimacy from most modern institutions because they are not at all based on self-determination, in fact heteronomy is a fundamental principle of modern, capitalist society that has penetrated all areas of life. Beyerle and Göbel want to stick to the legitimacy of these institutions, hence they argue that heteronomy and self-determination are not opposing forces, but balance and require each other within modern institutions.

I think that the term “autopoiesis” should not be used for describing the self-organisation of society, because it is a biological term that should not be directly mapped onto human/social systems which are in certain respects different. The direct transfer of concepts from one science to another does not leave room for the *differentia specifica* of the system to which the concept is applied. As was shown, taken out the individual of sociological modelling as Luhmann does, results in numerous theoretical and political problems. Two main ideas put forward by the theories of self-organisation are circular and mutual causality. Sociological theories that put forward the idea of a dialectic of society and individuals can help us in developing an understanding of social self-organisation that avoids the flaws of the functionalist Luhmann-tradition which largely dominates theories and applications of social self-organisation. Hence we suggest to ground such an understanding more in modern sociologies of authors such as Anthony Giddens and Pierre Bourdieu and classical sociologies such as the one of Marx.

One major problem of applying autopoiesis to society is that one cannot consider the individuals as components of a social system if the latter is autopoietic. “If human beings are taken as the components of social systems, then it is clear that they are not produced by such systems but by other physical, biological processes” (Mingers 1995: 124). Applying autopoiesis nonetheless to society will result in subject-less theories such as the one of Luhmann that can not explain how individuals (re)produce social structures and how their sociality is (re)produced by these structures. In our view, a concept of social self-organisation should have both subjectivity as well as objectivity and try to explain how the both are related. There have been some conceptions that tried to describe the reproduction and autopoiesis of certain social systems such as the family in biological as well as sociological terms: “The components within the family (the family boundary) are produced through the family interactions [...] Sons are transformed into fathers, fathers into grandfathers, mothers and fathers produces sons and daughters [...] To become the ‘head of the family’ is an internal social production [...] Men and women biologically produce children” (Zeleny/Hufford 1992). Here, biological and social processes are confused and biological mechanisms are interpreted as fundamental sociological concepts, the *differentia specifica* of society is lost in such theories (even more by the fact that Zeleny continues his argumentation by saying that all autopoietic systems are social systems). Attempts to describe the reproduction of society and social systems should be located within the social domain.

The theory of structuration by the British sociologist Anthony Giddens puts forward a dialectical understanding of society and does not reduce the causality of social systems to either structures (systems) or actions (individuals) as functionalism and structuralism do one the one side and action theory on the other. Giddens (1997) describes rules and resources as structures that are both medium and result of social actions (Giddens 1997, p. 77). He says that social structures are an expression of power and domination and that rules always relate to the constitution of sense and the sanctioning of social actions (p. 70). He defines the characteristics of rules as intensive VS. superficial, tacit VS. discursive, informal VS. formal, weak VS. strong sanctioning (p. 74). Giddens further distinguishes between allocative and authoritative resources. The former relate to abilities that make the domination over objects, goods and material phenomena possible. The latter concern the generation of domination over individuals and actors (p. 86).

Concerning the institutions of society, Giddens says that symbolic orders, forms of discourse, and legal institutions are concerned with the constitution of rules, political institutions deal with authoritative resources and economic institutions are concerned with allocative resources. What is important in the theory of structuration and what shows that Giddens considers society as a dialectic of social structures and social actions and of system and individuals, is that he says that social structures are medium and result of social actions. He calls this the duality of structure. Structure organises the actions and practices that constitute a social system and the structures are constituted by social interactions. Giddens says that structures enable and constrain social actions. “The structural properties of social systems are both the medium and the outcome of the practices that constitute those systems” (Giddens 1979: 69).

In the secondary literature on social self-organisation, it has been stressed that both Giddens and concepts of self-organisation ‘place the production and reproduction of systems at the center of their theories, in particular the idea that systems can be recursively self-producing’ (Mingers 1995: 136). Mingers (1999) says that the theories of Maturana and Giddens are highly compatible: ‘Maturana’s natural social systems are Giddens’ institutions within the social system, and Maturana’s social organization is Giddens’ structure. Both envisage similar closed relations between the two – for Giddens, system interaction reproduces social structure which enables interaction; for Maturana, system interaction constitutes social organization which selects interaction’ (Mingers 1996: 477).

If one compares Giddens conception of social systems to Maturana’s, one will find many advances in the first one. For Maturana, society is just a structural network of interactions that results in consensual domains, Giddens explicates what structures are (you won’t find rules and resources in Maturana’s view of social systems) and relates structures and actions dialectically in order to avoid the shortcomings of functionalism, structuralism and action theory. Besides many theoretical and political aspects in Giddens’ work that should be criticised, his achievement is the introduction of a dialectic of structures and actions into contemporary sociology. Mingers (1996) too says that Giddens gives a more detailed picture of social organisations than Maturana because there are not just networks of interactions, but also practices, rules and resources. On the other hand he suggests that Maturana’s concept of structural coupling and his explanation of the biological foundations for language and social interaction could usefully support structuration theory.

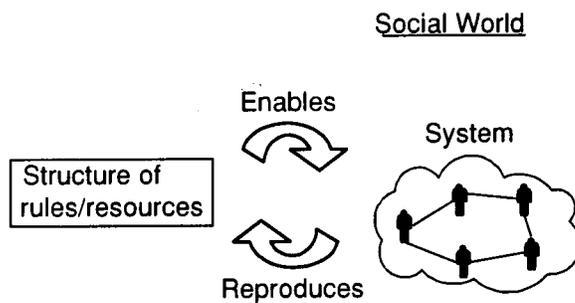


Fig. 3: Giddens’ Duality of Structure (from: Mingers (1995), p. 135)

Another sociology that sees society as a dialectic of structures and actions is the one of Pierre Bourdieu (1986) (for some implications of Bourdieu's works for a theory of social self-organisation see Fuchs 2002d). On the structural level, he distinguishes different types of capital: Economic capital in the sense of Marx (money capital, commodities), social capital (social relationships, social origin) and cultural capital (qualification, education, knowledge). These forms of capital are specifically distributed in society, this results in life styles and the class structure of society.

The social position and power of an actor depends on the volume and composition of capital (i.e. the relative relationship of the three forms of capital) that he owns and that he can mobilise as well as the temporal changing of these two factors (Bourdieu 1986: 114). The main classes of society are for Bourdieu a result of the distribution of the whole social capital. This results in a social hierarchy with those at the top who are best provided with economic and cultural capital, and those at the bottom who are most deprived. So e.g. the class fraction of the professions, who have high incomes and high qualifications, receive and consume a large quantity of both material and cultural goods. They are opposed to e.g. the office workers, who have low qualifications, often originate from the working or middle classes, who receive little and consume little; and they are even more opposed skilled or semi-skilled workers, and still more to unskilled workers or farm labourers, who have to lowest incomes, no qualifications and originate almost exclusively from the working classes.

Within the classes that get a high, medium or low share of the total volume of capital, there are again different distributions of capitals and this results in a hierarchy of class fractions. E.g., within the fraction of those who have much capital, the fractions whose reproduction depends on economic capital (industrial and commercial employers at the higher level, craftsmen and shopkeepers at the intermediate level) are opposed to the fractions which are least endowed with economic capital and whose reproduction mainly depends on cultural capital (higher-education and secondary teachers at the higher level, primary teachers at the intermediate level). The fractions richest in cultural capital tend to invest in their children's education as well as in the cultural practices likely to maintain and increase their specific rarity; the fractions richest in economic capital set aside cultural and educational investments in favour of economic investments. The members of the professions (especially doctors and lawyers), relatively well endowed with both forms of capital, but too little integrated into economic life to use their capital actively, invest in their children's education but also and especially in cultural practices which symbolise possession of the material and cultural means of maintaining a bourgeois life-style and which provide a social capital, honourability and respectability that is often essential in winning and keeping the confidence of high society and gaining opportunities for political careers (Bourdieu 1986: 120 + 122).

Such capital-structures are not fixed ones, but change dynamically. Bourdieu distinguishes two types of social mobility: vertical movements, upwards or downwards, in the same vertical sector, that is, in the same field (e.g. from schoolteacher to professor, or from small businessman to big businessman); and transverse movements, from one field to another, which may occur either horizontally (e.g. a schoolteacher or his son becomes a small shopkeeper) or between different levels (e.g. a shopkeeper or his son becomes an industrialist). Vertical movements which are more frequent only require an

increase in the volume of the type of capital already dominant in the class (or fraction) one belongs to, whereas transverse movements entail a conversion of one type of capital into another. "The probability of entering a given fraction of the dominant class from another class is, as we have seen, in inverse ratio to the position of that fraction in the hierarchy of economic capital" (Bourdieu 1986, S. 132); i.e. the larger the volume of economic capital one gets hold of, the better the possibilities for entering another class or class-fraction.

Cultural capital results in (academic) titles which represent a certain symbolic status and which increase mobility. Titles can also be seen as being part of symbolic capital (prestige, honour, appreciation). The distribution of cultural- and education-capital results in different tastes concerning different practices (food, clothing, music, art, culture, theatre, literature etc.) of classes and class-fractions. Bourdieu is especially interested in the influence of cultural capital. The culture of the higher strata and classes are not better than the one of the working class. The education system privileges better situated groups and classes. One main function of the education system is cultural reproduction – the reproduction of the relationships of power and privileges between the social classes. The more powerful ones can force their definitions of reality upon others, hence a certain cultural capital dominates. Due to the class structure of modern society, also cultural capital is unequally distributed and this results in class differences that also show up in the education system. E.g. students from better situated classes have advantages because they have been socialised within the socially dominant culture and habitus. The education system eliminates members of the working class from the access the higher education. Due to less share in cultural capital, kids from working class milieus more frequently fail in school. Social inequalities are reproduced in the education system and are legitimised by the latter. It presents itself as a neutral institution that provides all with the same possibilities, but in fact it is very effective in contributing to the prolongation of the power of the dominating classes.

So much to the structural aspect in Bourdieu's work, but there is also the practical, action-related aspect and the dialectical relationship of both: Habitus can be understood as the specific systems of dispositions (i.e. specific ways of thinking and acting) characteristic for specific classes and class-fractions. The concept of habitus is the practical side of Bourdieu's sociology. For him, structures (capital) as well as actions (habitus, life styles) are important. Social practices, i.e. the aspect of social actions, are dependent on habitus, capital and social field (Bourdieu 1986: 101). These practices do not only depend on the relationships of production, but also on secondary properties of a class or a class-fraction such as sex-ratio, distributions in geographical space, origin, age, family status, tacit knowledge etc. (102). Habitus is defined by the relationship between the capacity to produce classifiable practices and works, and the capacity to differentiate and appreciate these practices and products (taste). By being confronted with tastes and schemes of perception of other classes and class-fractions, specific life-styles of a class or class-fraction emerge (Bourdieu 1986: 170f). Habitus can be seen as a matrix of patterns of cognition, perception and action that produces in interplay with actual context conditions of the social field an actor is situated in, the praxis of this actor.

For Bourdieu, taste is not given naturally, but as all cultural practices has to do with social factors. A life-style can be seen as a system of classified and classifying practices

and distinctive signs. „Life-styles are thus the systematic products of habitus, which, perceived in their mutual relations through the schemes of the habitus, become sign systems that are socially qualified (as ‚distinguished‘, ‚vulgar‘ etc.) (Bourdieu 1986: 172). Just imagine some daily situation, you will find numerous gestures, manners, carriage and social practices. All of these entities are distinctive signs, an expression of habitus. Habitus on the one hand has to do with the social patterns of action, thinking and with social practices; but it also depends on and is influenced by social structures. Bourdieu says that various conditions of existence produce different forms of habitus. The dialectic of structures and actions in Bourdieu’s work can be found in the concept of the habitus as both a structured and structuring structure. This means that habitus is a result of social structures, i.e. of the social classes, the distribution of social capital, the secondary factors and the position in the structures of the conditions of existence. Economic, cultural and social capital as parts of the structures of society here play an important role. On the other hand, the habitus also structures, i.e. changes and influences life-styles and social practices. The life-styles are closely related to the conditions of existence. Bourdieu himself speaks of a dialectic of conditions of existence and habitus (Bourdieu 1986: 172). ‘The habitus is not only a structuring structure, which organizes practices and the perception of practices, but also a structured structure: the principle of division into logical classes which organizes the perception of the social world is itself the product of internalization of the division into social classes‘ (Bourdieu 1986: 170).

After this discussion, we now want to introduce our own concept of social self-organisation which tries to avoid the flaws of the theories already presented and is conceived as a dialectic of structures and actions and of society and individuals. We start from the essence of the human being and show how individuals constitute society and how society changes the individuals. The structural concept leads also towards a subjective understanding – a 2nd, political conception of self-organisation will be introduced.

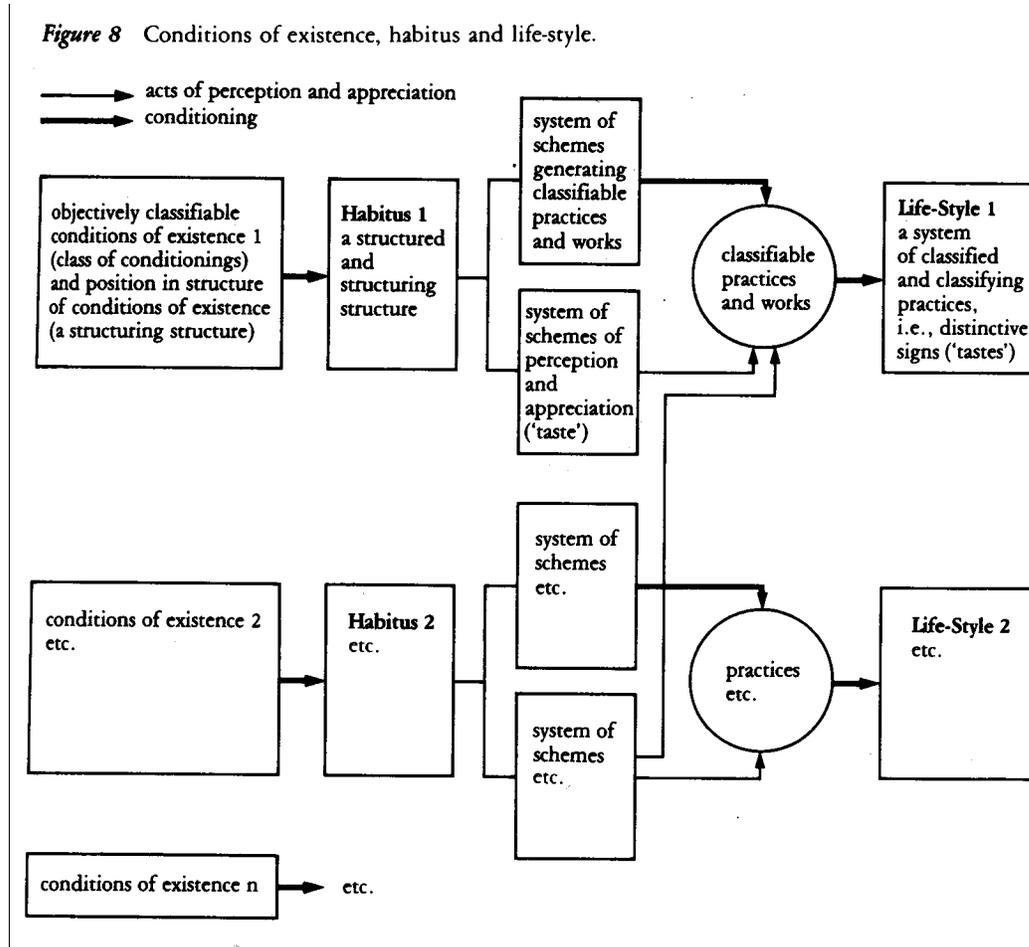


Fig. 4: The relationship of social structures and habitus (from: Bourdieu 1986: 171)

3.3. Society as a Dialectic of Structures (System) and Actions (Individual)

3.2.1. What is an Individual?

Social systems science has been massively influenced by the functionalist traditions of Talcott Parsons and Niklas Luhmann. Functionalism underestimates the role of the individual in social systems and does not take into account that society can only reproduce itself by social actions that are formed by individuals entering social relationships. Niklas Luhmann (1995) argues that social systems are self-referential ones that reproduce themselves by reflexive communication. Communications are considered as the elements of social systems, individuals are only seen as sensors on the outside of the system. This also results in the dualistic conception that psychological and social systems do not overlap.

An individual is a self-conscious and social being. It has the ability to consciously create new qualities, to reflect about its actions and to select one action from several possible ones. It can consciously repeat past actions and actively plan future situations. It can reflect its own and other actions, draw conclusions from it and apply them to future

actions. Human beings are social beings, they enter social relationships which are mutually dependent actions that make sense for the acting subjects. Individual being is only possible as social being, social being (the species-life of man) is only possible as a relationship of individual existences. This dialectic of individual and social being has been pointed out by Marx: “The individual *is the social being*. His manifestations of life — even if they may not appear in the direct form of communal manifestations of life carried out in association with others — are therefore an expression and confirmation of *social life*. Man' s individual and specieslife are not *different*, however much — and this is inevitable — the mode of existence of the individual is a more *particular* or more general mode of the life of the species, or the life of the species is a more *particular* or more general individual life“(Marx 1844: 538f). Man is the subjective existence of society and he exists as a totality of human manifestation of life.

Social systems are always human systems. Certain scientist like Maturana (1987) claim that also some animals are social beings. Maturana argues that the essence of a social being is emotional attitude towards others and mutual acceptance (“love” in Maturana’s terms). We certainly find these aspects to a certain degree also in the world of higher animals. Defining the term “social” not solely with respect to the human world results in the problem that one has to draw a border in the animal world that shows which animals are social and which are not. This might not be a very easy undertaking and in fact people like Maturana simply neglect this problem. Another problem is that the qualitative leap between humans and animals is somehow blurred, suggesting that humans are nothing else than some special animals. From an ethical point of view this can be dangerous because if the human being is not seen as a value as such and as something to a large extent entirely different from all other existence, this can result in the downgrading or biologisation of man. Biologism might enter sociology again (as the example of Maturana trying to speak of social systems shows) which is very dangerous as history and the influence of Social Darwinism on fascist ideologies has shown.

The behaviour of animals is largely based on instinct, although learning exists in a certain, limited extent. The range and complexity of learned behaviour in human beings is by far greater than in any animal. Chimpanzees have a considerable learning capacity in comparison to other animals, but as experiments show they completely lack a comparison to human learning capabilities. In contrast to all animals, the behaviour of humans is not genetically programmed and led by instincts. Humans rely much more on learned and socialised patterns of behaviour. The plurality of human culture shows that the human genetic code does not contain specific instructions to behave in certain ways. You won’t find this plurality concerning e.g. nests built by birds, dwellings built by apes etc.

Sociality does not only simply mean that some beings act together in order to achieve something. Already Max Weber pointed out in his fundamental definitions of sociological categories, that in a social system we always find the production of meaning. He argued that all human action is directed by meanings. Actions have a specific meaning for the actors, they can make sense of the world. Social actors have motives, they can identify reasons for their actions and have planned intentions in concrete situations (see Weber 1986: §1). They can choose between different alternative actions in a situation, they can consciously reflect the state of the world (and its change) and can

identify their role and position in the world. Human beings can interpret social situations in different ways, by this meaning (the definition of situations by actors) is produced. So making sense of the world involves planned actions, reflection, the identification of reasons for actions, intentions, freedom to choose between different alternative actions, identification of ones own role in the world and (different) interpretations of the world. All sociality involves the production of sense and this has to do with self-consciousness. Animals do not have self-consciousness and they cannot make sense of the world. Hence one would not describe birds building a nest, working bees or chimpanzees playing together with the terms ‘social’ or ‘sociality’. Both concepts are solely related to the human realm.

By interacting and entering social relationships, individuals frequently exchange and generate symbols. The generation of symbols which are basic representations of parts of the world, is a social process and takes place within the framework of social relationships. Symbols gain meaning by cultural signification and influence individual lifestyles, ways of life and thinking.

Human beings exchange matter and energy with their natural environment. Labour is a social process that results in the production of use-values and social resources that are useful for humans, satisfy human needs and are produced in order to simplify existence. Labour is only possible as an active shaping of nature and the world, man appropriates nature in order to produce use values. In this sense man is an active natural being. The relationship between man and nature is mediated by technologies. Humans produce technologies in order to better organise the labour process. Technology can be defined as a purposeful unity of means, methods, abilities, processes and knowledge that are necessary in order to achieve defined goals. Humans have the ability to consciously think about their environment, to set themselves self-defined goals and to find different ways to achieve these goals. Technologies mediate the reaching of human goals and the social labour process.

Humans make use of objects in the world and they actively create new objects in the labour process. Hence man is objective man (*gegenständlicher Mensch*). In this process, his living labour power is being objectified in use values which are a type of dead labour that store information about the world and society. This objectivity of human existence also finds an expression in the fact that all human organs and senses are in their *orientation to the object*, the appropriation of the object, the appropriation of human reality (Marx 1844: 539). So the objective world becomes the world of man’s essential powers for man in society and ‘all *objects* become for him the *objectification* of himself, become objects which confirm and realise his individuality, become his objects: that is, man *himself* becomes the object’ (Marx 1844: 541). Man is a *corporeal*, living, real, sensuous, objective being that has real, sensuous objects as the object of his being, he can only express his life in real, sensuous objects.

Man exists within and by the use of language and the exchange of symbols. Interacting by language is also one of the necessary conditions for man as a cultural being. Culture involves the whole ways of life, man’s ways of thinking and acting and the emergence of social norms and values. Socially accepted and established norms are guidelines which direct conduct in particular situations. Norms define acceptable and appropriate

behaviour in particular social situation. In societies which are imprinted by domination³, norms are usually enforced by positive and negative sanctions which may be formalised or not. Values are more general guidelines than norms. Socially established and accepted values are believed that something is good and desirable. They define what is considered as important and worth striving for. Human beings have the ability to create norms, values, habits, traditions and different ways of life and their behaviour is influenced and imprinted by existing cultural modes. As typical expression of cultural activities, man creates cultural manifestations such as art, literature, music, science, ideologies, world outlooks etc.

We already mentioned that creativity is a basic skill of the individual. Creativity means the ability to create something new that seems desirable and helps to achieve defined goals. Man can create images of the future and actively strive to make these images become social reality. Individuals can anticipate possible future states of the world, society as it could be or as one would like it to become; and they can act according to these anticipations. Man has ideals, visions, dreams, hopes and expectations which are based on the ability of imagination which helps him to go beyond existing society and to create alternatives for future actions. Based on creativity, man designs society (see Banathy 1996): Design is a future-creating human activity that goes beyond facticity, creates visions of a desirable future and looks for a solution to existing problems. Design creates new knowledge and findings. Man designs machines, tools, theories, social systems, physical entities, nature, organisations etc. within social processes. Such an understanding of design as a fundamental human capability takes into account man's ability to have visions and utopias and to actively shape society according to these anticipated (possible) states of the world. It is opposed to an understanding of design as a hierarchical process and as the expert-led generation of knowledge about the world and solutions to problems. As Ernst Bloch (1986) pointed out, desires, wishes, anxieties, hopes, fantasies, imaginations play an important role in society and hence one should also stress the subjective, creative dimension in the constitution of human and social experience. Bloch has shown that hopes and utopias are fundamental motives in all human actions and thinking. These are also important differences between animals and humans.

Man as creative being is also self-creative, because man has been the result of the active human transformation of society and nature, no external metaphysical forces were at play. Human beings have the ability to create their own history depending on the constrictions and influence of the existing social forces and relationships. Society is the result of human activity and is not a static being, it is dynamically becoming by the influence of the relationships humans enter and the relationships of these social relationships.

Due to man as a self-conscious, active and creative being, he can strive towards freedom and autonomy. Freedom includes the absence of dominating and controlling forces and the possibility for individuals and groups to choose and design the conditions of their

³ Domination refers to the disposition over the means of coercion required to influence others or processes and decisions. Domination always includes sanctions, repression, threats of violence and an asymmetric distribution of power. Power can be regarded as the disposition over the means required to influence processes and decisions in one's own interest.

own life all by themselves. This means freedom in terms of self-determination, a maximum of participation and man's control over himself. Freedom is always not only a individual, but also a collective category because the individual can only be free if a maximum of self-determination for all others can be achieved and collective or social freedom can only be reached when a maximum of individual autonomy (the possibility to choose one's own way of life and interests that do not conflict with other lifestyles and interests) is enforced. There is no individual without collective freedom and no collective freedom without a maximum of individual autonomy. Collective and individual freedom are not automatically given, but are something that man has the ability to desire and to achieve.

The individual as a social being must co-operate with others to a certain extent in order to exist. Co-operation can be seen as a social relationship in which the mutual references of the involved individuals (these are social interactions) enable all of them to benefit from the situation. By co-operating individuals can reach goals they would not be able to reach alone. New qualities of a social system can emerge by social co-operation. The parts/individuals of this system are conscious of these structures which can not be ascribed to single elements, but apply to the social whole which relates the individuals to each other. Such qualities are constituted in a collective process by all concerned individuals and are emergent qualities of social systems. Social competition can be seen as a social relationship in which the social interactions as well as the relationships of power and domination enable some individuals or social sub-systems to take advantage of others. The first benefit at the expense of the latter, who have to deal with the disadvantages of the situation. Co-operation is a way of designing social relationships that is necessary to a certain extent for individuals to exist, whereas competition is an artificial mode of shaping social relationships.

Summing up it can be said that the individual is a social, self-conscious, creative, reflective, cultural, symbols- and language-using, active natural, labouring, objective, corporeal, living, real, sensuous, anticipating, visionary, imaginative, designing, co-operative, wishful, hopeful being that makes its own history and can strive towards freedom and autonomy.

3.2.2. The Relationship of Actors and Social Structures

One of the basic questions of sociology is the one about the relationship between social structures and social actions. Traditionally it has been solved in a reductionist manner: Action Theory and Symbolic Interactionism (Max Weber, George Herbert Mead, Jürgen Habermas etc.) argue that society and social systems are constituted by social actions whereas Structuralism and Functionalism (Emil Durkheim, Robert Merton, Talcott Parsons, Niklas Luhmann etc.) see the basic social process as the structuring of thinking and actions by existing social structures. Action Theory underestimates the structural constraining of social actions whereas functionalist theories often do not leave enough room for a certain degree of freedom of actions and thinking.

This problem can be solved dialectically: Marx (1859: 8) wrote: "In the social production of their existence, men inevitably enter into definite relations, which are independent of their will". For economic relationships, this is surely true. But there are also social

relationships such as cultural ones where humans often can choose whether they want to enter them or not. For example I cannot choose if I want to enter a labour relationship because I have to earn a living, but I can choose which political party I want to belong to and which cultural relationships I want to enter. So one can say that concerning the totality of society, individuals enter social relationships that are mostly independent and partly dependent on their will. By social actions, social structures are constituted and differentiated. The structure of society or a social system is made up by the total of normative behaviour – it includes (as we will see) social forces and social relationships. By social interaction, new qualities and structures can emerge that cannot be reduced to the individual level. This is a process of bottom-up emergence that is called agency. Emergence in this context means the appearance of at least one new systemic quality that can not be reduced to the elements of the systems. 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 and their interactions. Social structures also influence individual actions and thinking. They constrain and enable actions. This is a process of top-down emergence where new individual and group properties can emerge. The whole cycle is the basic process of systemic social self-organisation that can also be called re-creation because by permanent processes of agency and constraining/enabling (structuring) a social system can maintain and reproduce itself (see fig. 5). It again and again creates its own unity and functioning. Social structures enable and constrain social actions and individuality and are a result of social actions (which are a correlation of mutual individuality that results in sociality).

That society and social systems are self-organising in a structural sense does not mean that they are autopoietic in the sense that individuals are reproduced biologically. Such biological processes are a foundation for social systems, but are not the core of sociality. Biologic reproduction of humans is in need of sociality and biologic reproduction is a necessary condition for the durable existence of society. But one should not reduce sociality and social re-production or re-creation to biology as is done by scientists who consider society as autopoietic in the biological sense of the term. Autopoiesis is an essentially biological concept, it should not be applied to society, but one should make clear how social reproduction differs from the autopoietic, biological reproduction of living systems: Society does not produce individuals biologically because this is mainly a biological, not a social process of reproduction. Society can only be explained as self-reproducing if one argues that man is a social being. Society reproduces man as a social being and man produces society by socially co-ordinating human actions. Man is (the self-conscious, anticipating, wishful, hopeful, imaginative, creative) creator and created result of society, society and humans produce each other mutually.

Re-creation denotes that individuals that are parts of a social system permanently change their environment. This enables the social system to change, maintain, adapt and reproduce itself. What is important is that the term re-creation also refers to the ability of all humans to consciously shape and create social systems and structures. As Erich Jantsch says social systems are re-creative ones because they can create new reality (Jantsch 1979: 305), the socio-cultural human being has the ability to create the conditions for his further evolution all by himself (343).

A dialectic of society and individuals and of structures and actions had already been anticipated by Karl Marx: ‘Men make their own history, but they do not make it as they please; they do not make it under self-selected circumstances, but under circumstances existing already, given and transmitted from the past’ (Marx 1852: 115). On the one hand he refers to structures that influence actions by saying that there are already existing and given circumstances, on the other he stresses the role of individual and group actions that create a historical development of society. At another instance Marx mentioned similarly that ‘*just as society itself produces man as man, so is society produced by him*’ (Marx 1844: 537).

So contrary to orthodox forms of Structuralist Marxism, Marx himself already stressed the dialectical relationship of being and action/consciousness. Whereas Engels rather liked to talk about objective economic laws that determine the course of history in a linear fashion, Marx often pointed out that society can and should be transformed by self-conscious and critically thinking/acting subjects. On the one hand he clearly saw that individuals are objects of the structural categories of capitalism and that their thinking is being influenced by these structures, but on the other hand, he also stressed that these structures must be changed by subjects who become self-conscious in order to transform society and transcend capitalism. In his Theses on Feuerbach, Marx outlined this dialectical relationship of being and consciousness/action: ‘The materialist doctrine concerning the changing of circumstances and upbringing forgets that circumstances are changed by men [T]he human essence ... is the ensemble of the social relations The philosophers have only interpreted the world, in various ways; the point is to change it’ (Marx 1845, *Theses on Feuerbach*).

Herbert Marcuse, just as Horkheimer and Adorno a representative of the Frankfurt School, also conceived the relationship of being and consciousness/action dialectically. Concerning the emergence of critical consciousness and self-conscious subjects that are able to radically transform society, he was much more optimistic than Adorno. Like Adorno he stressed, on the one hand, that ideological mechanisms manipulate individual consciousness (see e.g. Marcuse 1964), that control which is exercised by society is introjected into individual consciousness, and that this results in the direct identification of the individual with society as a whole (what he termed mimesis, see Marcuse 1964: 30). But on the other hand he also pointed out that society, nonetheless, can be transformed by new, i.e. self-conscious and critical individuals, in such a way that a new society emerges in which the happiness of mankind can be achieved, in which penury and famine can be overcome, and a maximum of free time realized by making use of modern technologies and by developing the forces of productivity in an ecologically and socially sustaining manner. On the one hand Marcuse stressed that the social structures of late capitalism produce false consciousness in tremendous amounts, on the other hand he also stressed the possibilities of revolutionary change. He e.g. said in the opening words of his *One Dimensional-Man*: ‘One -Dimensional Man will vacillate throughout between two contradictory hypotheses: (1) that advanced industrial society is capable of containing qualitative change for the foreseeable future; (2) that forces and tendencies exist which may break this containment and explode the society. I do not think that a clear answer can be given’ (Marcuse 1964: xlvii).

Not only structures and actions – to which emancipatory thinking and acting always has to refer – are mediated dialectically, there is also a specific dialectic of liberation as Marcuse pointed out. He says that there is no revolution without individual liberation and no liberation of the individual without the liberation of society (Marcuse 1969: 54). Marcuse differed from Horkheimer and Adorno in the respect that practical aspects of politics were always very important for him. Whereas one could get the impression from *One Dimensional Man* (which was originally published in 1964) that manipulation totally dominates society (there are only some slight comments about liberation and the possibilities of a ‘great refusal’), Marcuse seems to be very impressed by the students’ revolt and the emergence of the New Left in his *Essay on Liberation* (1969).

Jean-Paul Sartre argued in favour of full freedom of action in his early works such as ‘*Being and Nothingness*’ (Sartre 1964); and so he left out the constraining role of social structures. In his late works he spoke of a dialectic of facticity and freedom (Sartre 1976): E.g. he mentions that the revolutionary individual is a free, accidental being that is tied up in and imprinted by existing society and history (facticity) and that this individual is nonetheless able to go beyond existing society and to change it (freedom). So old Sartre also saw the dialectic of structures and actions.

In contemporary sociology a dialectical causality has become more and more important. For example, as we have already seen Anthony Giddens (1984) argues in his theory of structuration that social structures are medium as well as result of social actions. Similar arguments can be found in the works of Pierre Bourdieu. Habitus as the specific ways of thinking and acting of social groups is an aspect of social actions. Bourdieu (1986) says that habitus is a structured and structuring structure. It is being structured by the conditions of existence which can be described by the distribution of capital in society and habitus on the other hand also structures social practices, tastes and life styles. Life styles and practices are again closely related to social structures and so Bourdieu also conceives the relationship of structures and actions as a dialectical one.

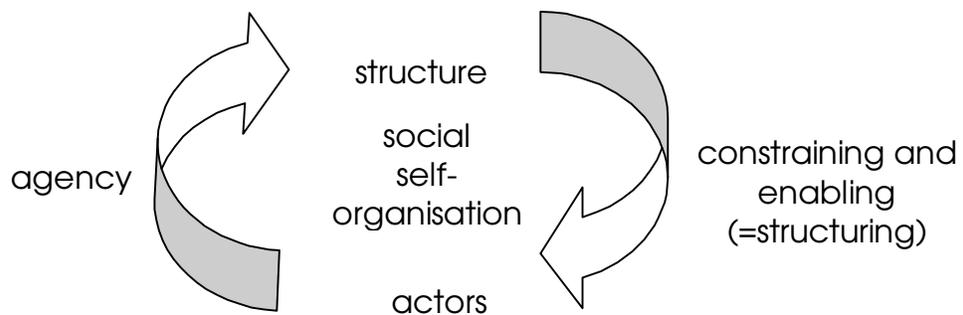


Fig. 5.: Self-organisation (I) in social systems

On the structural level of society, we find social forces and social relationships. Social forces are entities that enable social organisation and are developed by human beings entering social relationship. Social forces are modes that co-ordinate, orient, guide, enable and constrain social actions and relationships. They are medium and outcome of social actions. In society we find economic (productive), political and cultural forces.

And there are different social relationships – economical, political and cultural ones – that individuals enter which are mostly independent and partly dependent from their will. In re-creation of society and social systems, we also find a dialectic of social forces and social relationships on the structural level: Based on social forces, individuals enter social relationships which are already a structural aspect of society. Agency within these relationships results in structural forces which again influence social relationships. Within these social relationships, individual actions and thinking are imprinted, constricted and enabled by the structural forces. So the process of structuring influences social relationships in a first step and the individual in a second step. The re-creation of society involves a dialectic of structures and actions as well as a dialectic of social forces and social relationships.

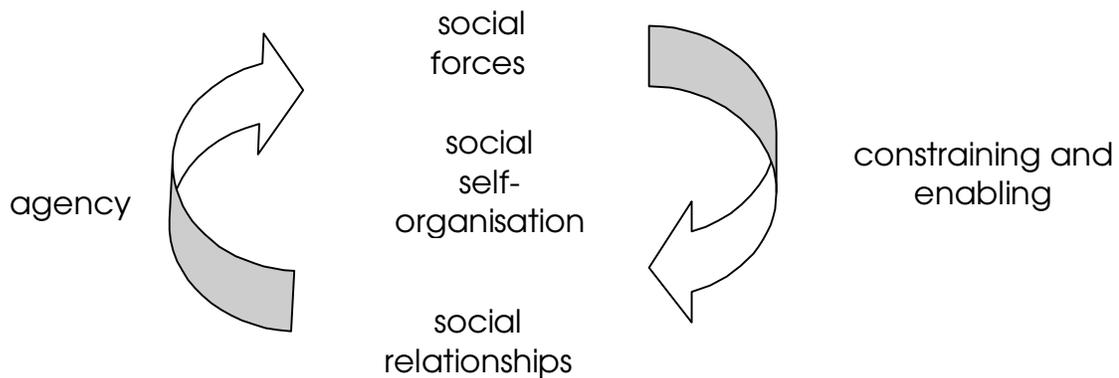


Fig. 6.: *The dialectical relationship of social relationships and social forces*

Termining the self-organisation of society re-creation acknowledges as outlined by Giddens the importance of the human being as a reasonable and knowledgeable actor in social theory. Giddens himself has stressed that the duality of structure has to do with re-creation: ‘Human social activities, like some self-reproducing items in nature, are recursive. That is to say, they are not brought into being by social actors but continually *recreated* by them via the very means whereby they express themselves as actors’ (Giddens 1984: 2). Saying that society is a re-creative or self-organising system the way we do corresponds to Giddens’ notion of the duality of structure⁴ because the structural properties of social systems are both medium and outcome of the practices they recursively organise and both enable and constrain actions. Social systems and their reproduction involve conscious, creative, intentional, planned activities as well as unconscious, unintentional and unplanned consequences of activities. Both together are aspects, conditions as well as outcomes of the overall re-creation/self-reproduction of social systems. Social structures don’t exist external to or outside of human behaviour and relationships, they are constituted within and through social actions. Social forces are themselves social relationships, but they are distinguished social relationships which form the foundation of a specific social subsystem and constitute the driving force of this subsystem. E.g. politics in modern society has to do with many aspects such as

⁴ “According to the notion of the duality of structure, the structural properties of social systems are both medium and outcome of the practices they recursively organise” (Giddens 1984: 25) and they both enable and constrain actions (26).

regulation, laws, policies, the state, non-government-organisations etc., but the driving force of politics is power which is itself a social relationship.

Economic relationships are also called relationships of production. These are economically mediated relationships that are oriented on production and reproduction. In modern society, these relationships are class and market relationships. A class relationship is a social relationship that involves the domination and exploitation of one group by another one. Exploitation can be defined as the transfer of quanta of living labour from a controlled and exploited group to a controlling and exploiting group that can make use of an asymmetrical distribution of power and means of coercion. Relationships of production are social relationships oriented on production and the coaction of labour forces and means of production. They include relationships of property, distribution and labour. In modern society, capital, wage labour, commodities, markets, classes and exchange value are basic economic relationships.

Relationships of productions are based on productive forces and as a result of them the productive forces are developed. Productive forces can be seen as a system of living labour force and factors that influence labour. Living labour and its factors form a relationship that changes historically and is dependent on a concrete formation of society (such as capitalism). The influencing factors can be – as suggested by Marx – summed up as subjective ones (physical ability, qualification, knowledge, abilities, experience), objective ones (technology, science, amount and efficacy of the means of production, co-operation, means of production, forms of the division of labour, methods of organisation) and natural ones. These forces can only be viewed in their relationship to living labour. The system of productive forces can never be reduced to these forces, the system is only possible in combination with human labour. This system is more than the sum of its parts, it is an integrated whole that lies at the foundation of economic processes. In relationships of production it is determined how productive forces such as the means of production are constituted, distributed, disposed and possessed.

Economic forces influence, constrain and enable individual actions and the relationships of production. So we find a double economic process of agency and structuring that constitutes the basic cycle of self-organisation/re-creation which is typical for the economy. Economic processes have to do with the production, distribution and consumption of use values and resources. In the process of production members of society appropriate natural products for creating articles corresponding to human requirements, in distribution the products are allocated the share the individual receives of these products is determined, in consumption the products become objects of use, they are appropriated by individuals and become the direct object and servant of an individual need, which its use satisfies (Marx 1857: 620). ‘Production, distribution, exchange and consumption thus form a proper syllogism; production represents the general, distribution and exchange the particular, and consumption the individual case which sums up the whole‘ (ibid.: 621).

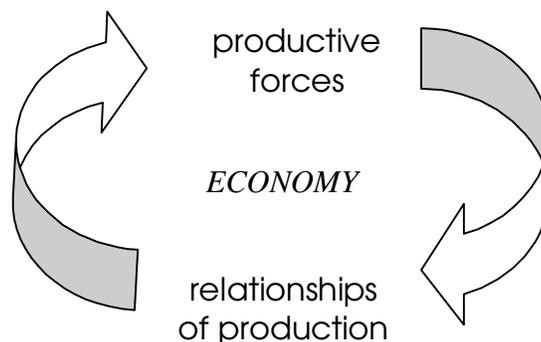
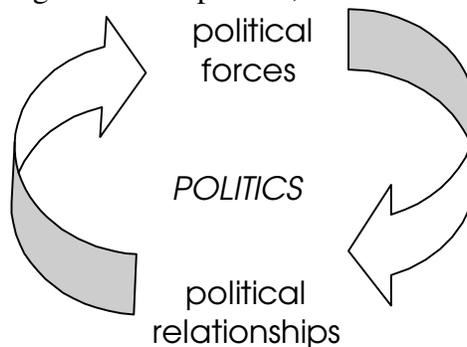


Fig. 7.: The re-creation of the economy

On the political level, we find political relationships that individuals enter based on political forces. In modern societies these are political groups (political parties and political organisations in civil society) and relationships between these groups that follow organised procedures (political discourse, elections, protests, parliamentary discussions etc.). By such relationships, a specific disposition of political power is formed and political conflicts may arise. This results in the emergence and differentiation of political forces. The important political force is power. Power can be defined as the disposition over the means required to influence processes and decisions in one's own interest, domination refers to the disposition over the means of coercion required to influence others or processes and decisions. Domination always includes sanctions, repression, threats of violence and an asymmetric distribution of power. In political relationships it is determined how power is constituted, distributed, allocated and disposed. Political forces are the foundation for political relationships and they are differentiated and developed by political relationships. In modern society, basic political relationships are laws and the state. They influence individual actions/thinking and political forces. Political re-creation is a double process of agency (decision procedures) and enabling/constraining. This is the basic cycle of political re-creation/self-organisation (fig. 8). In relation to available power resources, decisions are being reached in politics, in order to organise the functioning of society.

*Fig. 8.: The re-creation of politics*

On the cultural level, we find cultural relationships that individuals enter based on cultural forces. Cultural relationships are different life styles and interest groups and relationships between these entities. Cultural relationships result in institutions of religion, science, education, art, media, law, privacy etc. and relationships between such institutions. Institutions are modes of social existence that have common goals and rules, define membership and include practices which have a larger temporal and spatial extent. Cultural relationships are based on and result in the differentiation of cultural forces which are socially established and accepted norms and values as well as social knowledge. These cultural forces again influence (enable and constrain) individual and group actions as well as cultural relationships. So we find a double process of cultural agency and enabling/constraining which constitutes the basic cycle of cultural re-creation/self-organisation. In cultural relationships, it is determined how the cultural forces are constituted, distributed, allocated and disposed.

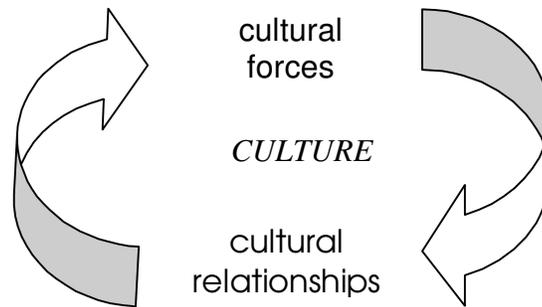


Fig. 9.: *The re-creation of culture*

3.2.3. The Total Re-Production-Process of Society and Social Systems: Social Self-Organisation (I)

An individual has a specific psychological structure of thinking which is influenced by social forces and by the social relationships it enters and by which it influences processes of agency. In social systems individual values, norms, conclusions, rules, opinions, ideas, and beliefs are also important and are related to and influenced by social structures. Why do we stress the individual although an individual is always a social being? Each individual is a unique character and human being that has a specific cognitive structure. Individual information refers to the individual as a living and psychological system. Individuals are the elements of social systems, individuality refers to the essence and facticity of the lives of human beings. This process is always influenced by society and the social relationships the individual enters, but it is never determined in a strict mechanical sense by them. So e.g. we find socially accepted norms, rules and values in society which influence individual thinking and actions to a certain degree. But it cannot be concluded that all individuals necessarily share these social norms and rules because they are creative and conscious beings that have a certain degree of freedom of action and thinking. The extent of this degree depends on the degree of participation and democracy of the existing social structures and relationships. Social and individual norms, values and rules cannot simply be mapped in a linear way, there is a complex relationship between individual thought and social conditions. This complexity also speaks in favour of using the term individual in sociology because it takes into account that individuals have unique and complex cognitive structures.

Social forces and relationships store information about society. In re-creative, i.e. social systems, self-organisation produces social structures which are constituted in the course of social relationships of several individuals. According to Max Weber a social relationship is established if an interrelated reference exists between two actors. Social acting is orientated on meaningful actions of other actors. Social actions are a necessary condition for a social relationship, but not a sufficient one because social acting doesn't necessarily require the actors to mutually refer to each others actions: One actor can refer to the actions of another without the latter referring to those of the first.

We consider the scientific-technological infrastructure, the system of life-support elements in the natural environment and all else that makes sense in a society, i.e. economic dispositions, political decision power, and the body of cultural norms,

knowledge and values, laws and rules (definitions) to be the core of the social structure of society/a social system. Within the core of a social system and of society, there are three manifestations of information: dispositions, decision-power and definitions. They store information about past social actions and simplify future social situations because by referring to them social the basics of acting socially do not have to be formed in each such situation. Social structures can be seen as a durable foundation of social actions which nonetheless changes dynamically. The structure of society is the result of the sum total of social actions, it is the durable correlate of social action.

The three basic cycles of self-organisation/re-creation we have lined out, all result in the bottom-up emergence of social structures/forms and the top-down emergence of individual ways of thinking and acting. In the economic cycle, social information emerges as economic dispositions/resources (economic information⁵), in the political cycle as decision-power (political information) and in the cultural cycle as social norms, knowledge and values (definitions, cultural information). These types of social information influence individual actions and thinking. A social system organises itself permanently in order to maintain itself and it permanently produces and changes social forces, relationships and actions. The subjects of society create and change social systems by relating their actions and hence their consciousness. New patterns emerge from this process. On the other hand we have a process of dominance: Individual thinking and action can only exist on the foundation of social processes and social structures. Social structures constrain and enable individual consciousness and action. In this dialectical relationship of individuality and sociality, we have the bottom-up-emergence of social aspects and the top-down-emergence of individual aspects. On the macroscopic level of the social system, new social forces can emerge during the permanent self-organisation/re-creation of the system. On the microscopic level, social forces and relationships make an effect in a process of domination and new individual aspects can emerge. So enabling/constraining can be seen as a type of top-down-emergence. The endless movement of individual and social aspects, i.e. the permanent emergence of new qualities in the system, is a two-fold dialectical process of self-organisation that makes it possible for a social system to maintain and reproduce itself.

The three basic cycles of social self-organisation that we have lined out can also be summed up to a general model of systemic social self-organisation (see fig. 10 as well as Fuchs 2002b, Fuchs/Hofkirchner/Klauninger 2001): The economy as the base of society makes use of productive forces in order to establish a double process of production and reproduction that results in the emergence of economic dispositions. This is the foundation for the political cycle of self-organisation that consists of a double process of deciding and executing which results in the emergence of decision-power. Decisions concern the use and distribution of social resources. Politics is the foundation for the cultural cycle of self-organisation which consists of a double process of formation and participation that results in the emergence of definitions. Such a model describes the re-creation of society or of a social system as a whole (see fig. 10, for detailed descriptions see also Fuchs 2002b). It is hierarchical and layered and involves three processes of bottom-up-emergence and three processes of top-down emergence. Society is not

⁵ We abstract in this report from the informational level of society because this will be focus of research in a later phase of the INTAS-project "Human Strategies in Complexity"

considered as mechanistic, but as a complex system by describing its reproduction with the help of cycles of self-organisation that operate by a mutual and multidimensional type of causality.

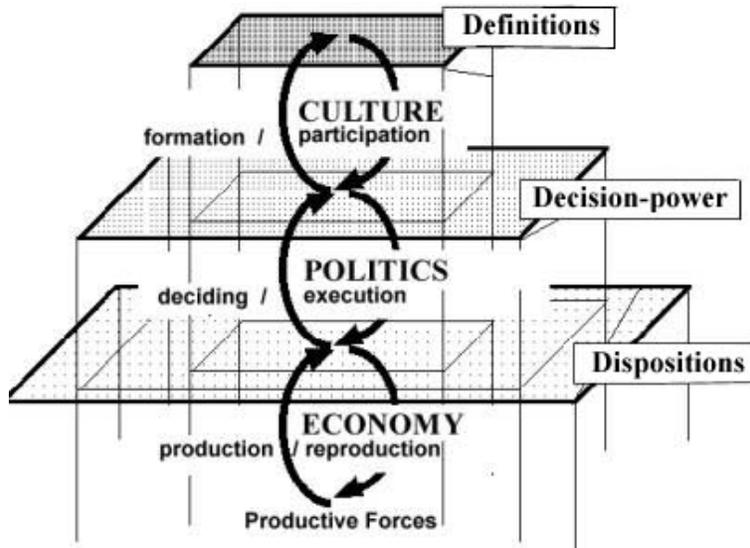


Fig. 10: The re-creation of society as a whole

Let us take a more precise look at the re-creation of society. These processes are fundamental ones that apply to all types of societies and all social systems. So what we are suggesting is that there are economical, political and cultural processes in all social systems and societies. As already mentioned, social forces can be seen as a durable foundation of social actions which nonetheless changes dynamically. It can be found in all subsystems of society – the economy, politics and culture. Economic processes have to do with the production, distribution and consumption of use values and resources. The foundation of each economic process is formed by the productive forces. The latter can be seen as a system of living labour force and factors that influence labour. Living labour and its factors form a relationship that changes historically and is dependent on a concrete formation of society (such as capitalism). The influencing factors can be – as suggested by Marx – summed up as subjective ones (physical ability, qualification, knowledge, abilities, experience), objective ones (technology, science, amount and efficacy of the means of production, co-operation, means of production, forms of the division of labour, methods of organisation) and natural ones. These forces can only be viewed in their relationship to living labour. The system of productive forces can never be reduced to these forces, the system is only possible in combination with human labour. This system is more than the sum of its parts, it is an integrated whole that lies at the foundation of economic processes.

Dispositions are social information on the economic level. The economy includes a double process of production and reproduction: Material resources that are necessary for society to exist (e.g. different products) are produced by making use of the system of productive forces on the one side. On the other hand, resources are also applied in order to reproduce the system of productive forces. Reproduction encloses e.g. the reproduction

of living labour force (consumption, spare time etc.) and scientific progress. Production and reproduction can be seen as the material basics of each type of society. Such a Materialistic view is not a reductive and vulgar one, if one considers that the political and economical superstructures depend on economic processes, but nevertheless work in relative autonomous ways and also influence economics in processes of downward causation. They are related in a dialectical way because economic influences on culture and politics can cause the emergence of new cultural and political phenomena and political and cultural influences on economics can cause the emergence of new economical phenomena.

Politics deals with decisions which refer to the way resources are being used and how they are distributed. Politics refers to decisions which influence the ways of life and the habits of the members of society. The latter always relate to material resources because culture and habitus as social phenomena always deal with the usage and distribution of material resources. The decisions which are being reached in a social and communicative way in the area of politics, are also a type of social form. Politics encloses a double process of deciding and executing: In relation to available resources, decisions are being reached in order to organise the functioning of society. These decisions either take on coded or non-coded forms. Once they are reached, the next step is executing them. And executing decisions always means that resources of society are applied in a specific form.

Culture can be seen as the subsystem of society in which ideas, views, social norms and social values are being formed within the framework of habits, ways of life, traditions and social practices. The emerging social norms and values are a type of social information that comes into existence in the area of culture. Culture encloses a double process of formation and participation. On the one hand, social norms and values are constituted and differentiated in relation to already reached decisions. On the other hand, social norms and values are a foundation for further decisions and the differentiation of already existing ones. The type of participation determines if, how and to which degree individual actors and social groups can influence decisions which effect them. Neither culture, nor politics are determined by economic processes. Each subsystem has a relative autonomy, nonetheless in modern capitalist societies economic processes have dominating effects. For the area of culture we follow views that stand in the tradition of the Cultural Materialism of Raymond Williams (1961) that has had tremendous influence on the whole area of Cultural Studies. Williams argues that culture includes the "whole way of life" (Williams 1961: 122), including collective ideas, institutions, descriptions by which society reflects experiences and makes sense of them, ways and traditions of acting and thinking and intentions that result from it. Williams further stresses that culture involves the formation of values as social categories. Edward P. Thompson (1961) took up Williams' theory of culture and added the idea that the whole way of life and experience is influenced by class struggles and social conflicts.

This shows that culture is neither independent from political and economic processes, nor can it be reduced to these areas, nor is it determined by them. Already Antonio Gramsci stressed that superstructures cannot be reduced to the economic base and that culture involves the "creation of (new) world-outlooks" and morals of life (Gramsci 1980). Materialistic theory that deals with culture has always stressed cultural forces, their

relative autonomy and relationship to socio-economic processes, only vulgar forms of Materialism reduce culture or politics to economic processes. Culture as the top level in our hierarchy depends upon economics and politics, it forms an integral whole of social life that includes the areas and ways of life we find in the areas of idealistic and material reproduction (Marcuse 1937: 62). Political and economic institutions and relationships have their own form of culture, and culture can only be thought in relationship with political and economic processes, although it has a certain degree of autonomy. The complex interplay of culture and politics is the area where hegemony – as a specific phenomenon of societies that are constituted by relationships of domination – is formed.

Figure 10 shows the total re-creation-processes of society. These processes form an integrated whole which encompasses the three subsystems of society (economy, politics and culture) and the manifestations of social forms in these areas. The whole social system encompasses three cycles of self-organisation which result in the emergence of social information on an economic, a political as well as a cultural level. On the one hand, economic processes influence the emergence of political and cultural processes and political processes influence the emergence of cultural processes by the way of bottom-up-emergence. On the other hand, cultural processes influence the emergence of political and economic entities and political processes influence the emergence of economic entities by the way of top-down-emergence. Nonetheless, the economy is at the base of each type of society. It dominates, but never determines (in a mechanical sense of the word) the various social processes and the formation and differentiation of social information.

Economy, politics and culture are interrelated and influence each other. The causality that applies to these relationships is not a mechanistic and deterministic one. An effect cannot be reduced to a single cause. In society, we find a multidimensional and complex type of causality: One cause can have many effects, and one effect an ensemble of many causes. Society is a system with a high degree of complexity, hence causes and effects cannot be related to each other linearly. One sub-system of the society does *not* determine the actions, structures and processes in other sub-systems. Society can not be reduced to simple mechanistic models of base and superstructures. But, at least in capitalist society, the economy dominates the other sub-systems; i.e., economic processes do not determine social actions and development of politics and culture, but it influences these sub-systems in such a manner that the latter are coined by the economical logic of capitalism that depends on the accumulation of capital and the production of commodities. But such influences can never be totally, as suggested by some types of Structuralist Marxism or the definition of Historical Materialism given by Frederick Engels (1884). Such arguments overestimate social structures and do not leave enough space for alternative types of actions and thinking. This results in mechanistic and static models of society. But society is a complex system, it evolves dynamically and does not depend upon mechanistic causality. Politics and culture influence economics in various types of feedback processes.

3.2.4. The Democratic Dimension of Self-Organisation: Social Self-Organisation (II)

A dialectical concept of social self-organisation on the one hand conceives the reproduction of society as a dialectic of social structures and actions and on the other hand it covers both objective, systemic as well as subjective aspects in two ways: 1. A dialectic of structures and actions contains both objective, systemic and subjective, individual aspects. 2. Social self-organisation in a broad sense covers the re-production of society in very general terms that apply to all societies and all social systems, but it does not specify how exactly this self-organisation of society takes place on a more concrete level. So ascending from the abstract to a more concrete level, one has to distinguish the different forms of how society can reproduce itself and aspects of power, domination and class will play an important role. A more thorough look reveals that both co-operation and competition are ways in which modern society reproduces itself.

As outlined in chapter 3.1., Beyerle (1994) and Göbel (1998) also distinguish between a co-operative and a competitive type of social self-organisation, but they say that the heteronomous and the democratic type always show up together, complement and require each other and cannot be separated. In our view, such a conception takes out the potentiality for a radical participatory democracy that is put forward by the concept of social self-organisation. We would in fact say that in modern society there is an antagonism between co-operation and competition that shows up in all sub-systems of society. Competition imprints all social relationships and does not leave enough room for direct democracy and immediate co-operation. Competition and co-operation are colliding, antagonistic forces that can not be balanced as in the view of the tao or modern organisation theory. This antagonistic relationship is a historical one, it can (and presumably will) change. The relationship can not be balanced, only sublated in the Hegelian sense.

All humans have to co-operate to a certain extent in order to survive. In fact, the essence of man and the definition of sociality involve co-operation in certain ways and forms. In modern society, people do not rely much on co-operation in order to achieve goals during the course of social relationships, because with the rise of capitalism, the world market, the nation state and representative democracy, competition has penetrated all aspects and spheres of human life. Competition does not show up ‘naturally’, it is an artificial way of relating human beings that serves dominating interests.

Social co-operation can be seen as a social relationship in which the mutual references of the involved individuals (these are social interactions) enable all of them to benefit from the situation. By co-operating, individuals can reach goals they would not be able to reach alone. New qualities of a social system can emerge by social co-operation. The elements, i.e. individuals of this system are conscious of these structures which can not be ascribed to single elements, but to the social whole which relates the individuals. Such qualities are constituted in a collective process by all individuals that are effected and they are emergent qualities of social systems. Social competition can be seen as a social relationship in which the social interactions as well as the existing relationships of power and domination enable some individuals or social sub-systems to take advantage of others. The first benefit at the expense of the latter who have to deal with disadvantages that arise from the situation. New qualities of a social system can emerge by social competition. The elements/individuals of this system are conscious of these structures which can not be ascribed to single elements, but to the social whole which relates the

individuals. But these qualities are not constituted collectively by all concerned individuals, they are constituted by subsystems of the relevant system that have more power than others, dominate others or can make use of advantages that derive from higher positions in existing social hierarchies. These qualities reflect relations of domination in social systems. A social hierarchy is made up by a sequence which is ordered by the priority function. Individuals who are located at upper positions of a hierarchy have more power than individuals on lower levels. Hierarchies in society are characterised by the asymmetric distribution of power. Such unequal distributions are normally protected by the use of some means of coercion. This is the specific character of relationships of domination.

Social relationships can have a co-operative or a competitive character. This depends on the way of its constitution and the structure of society. If the results of human actions are established by interrelated references of *all* individuals who are effected by its application and if each involved individual has the same possibilities and means of influencing the resulting information structures in his/her own sense and purpose, the resulting macroscopic structure is a type of co-operative social relationship. Such relationships are collectively established by co-operation of the involved actors as an emergent quality of a social system in a process of *social self-organisation (II)*. This is an inclusive type of social relationship. Here *social self-organisation (II)* denotes that the individuals effected by the emerging structures determine and design the occurrence, form, course and result of this process all by themselves. They establish macroscopic structures by microscopic interrelations.

If social relationships are not constituted in processes of co-operation by all individuals that are effected, but by a hierarchic subsystem that has more power than other subsystems, dominates others or can make use of advantages that derive from higher positions in existing social hierarchies, the resulting structures are types of qualities that result from social competition – in this case we speak of exclusive social relationships. An exclusive social relationship is a new, emergent quality of a social system. It is constituted by social competition and reflects relationships of domination and the asymmetric distribution of power in the relevant social system. We can not say that exclusive social relationships and forms are established in processes of social self-organisation (II) because not all concerned individuals can participate in this process and can influence it in the same way using equally distributed resources and means. Both types of social self-organisation, the co-operative, inclusive, democratic one and the competitive, exclusive, heteronomous one are ways of relation human beings that can be found in modern society.

Considering dissipative systems, self-organisation can be seen as the spontaneous emergence of patterns from the interactions of the system's elements if a certain threshold of relevant parameters is crossed. We argue in favour of emergent evolution which can explain new qualities of systems that emerge during the course of evolution and cannot be reduced to lower levels of organisation/systems. Hence social systems are more complex than dissipative and autopoietic ones and self-organisation can not have exactly the same meaning as in less complex systems. In the course of the evolution of systems the complexity of systems increases and new qualities of self-organisation emerge. These qualities have some similarities with the old meanings in less complex systems as well as new aspects. Hence on lower organisational levels we have a broader

meaning of self-organisation. On upper levels this meaning is getting more and more specific because complexity increases. Therefore we argue in favour of an understanding of social self-organisation that not only considers the relationships of elements, but also looks at the qualities of these relationships. Thus class relationships as well as relationships of power and domination have to be considered.

Self-organisation I or re-creation is a process that is typical for all types of societies and all social systems, whereas *self-organisation II*, in a political sense, refers to the inclusive and co-operative process of the emergence of social information. Clearly not every emergence of new social and individual information is established in a co-operative manner—especially in modern society—, hence not all social systems and not all social processes are *self-organising II*. *Self-organisation II* is a co-operative, inclusive, and participatory type of shaping social systems.

The concept of the individual as we know it today arose with the emergence of modern, i.e. capitalist society. This concept is related to ideas, such as that of free will and of subjects that act rationally and responsibly, that were developed during the course of the enlightenment. The enlightenment was an integral element of the process establishing modern society. The concept of the modern individual is also one which has been made possible by casting doubt on religious eschatologies which postulated an unalterable and god-given fate for mankind. The rise of this modern notion of the individual has also been related to the rise of the idea of free entrepreneurship in a free market society. Freedom has been conceived in this sense as an important quality and the essence of the modern individual. The idea of the modern individual can be seen as a logical consequence of liberal capitalism. According to this concept, morally responsible and autonomous personalities flourish in the economic and political freedom guaranteed by modern society. It also stresses that society guarantees individualism by removing obstacles to individual freedom, and rational and reasonable behaviour. In modern society, individualism is characterised by the pursuit of economic self-interest. Egoism and selfishness are often fetishised by assuming that they are natural characteristics of all individuals and products of rational and autonomous thinking. But it can also be argued that our modern society is not rational because it does not guarantee happiness and satisfaction to all human beings, in fact these characteristics can only be achieved by a small privileged elite.

Nowadays individuals are not only considered to possess free will, it is also generally assumed that free will can be exercised in order to gain possession of material resources and capital in order to realize individual freedom. So freedom is seen as something that can be achieved by striving for individual control of material resources. This shows that the concept of the modern individual is inseparably tied to the idea of private property. The idea of the individual as property owner has dominated the philosophical tradition from Hobbes to Hegel and still dominates philosophical thinking about the essence of mankind. But this concept could never be applied to all human beings in our society because the majority of the world population still does not participate in all these idealistic aspects of freedom and autonomy, this majority is rather confronted with the disciplinary mechanisms of compulsions, coercion and domination that have been considered typical of capitalist society by Foucault and others (see e.g. Foucault 1976). Hence the modern idea of the individual can be seen as an ideology that helps to

legitimize modern society. The idea of the individual as a naturally autonomous being may be an agreeable ideal, but today it must still be regarded as nothing more than the product of imagination, ideology and self-deception.

In our capitalist societies, scientific-technological, ecological, economical, political and cultural relationships are formed in exclusive and asymmetrical ways. The scientific-technological development embodies hegemonic interests. The degradation of the natural environment is due to the short-sightedness of not taking into account the interests of all contemporary and future generations. Resources are owned and controlled by privileged and dominating classes. Value is being produced by dependent classes and groups which have no or minimal control over the productive forces, the means of production and material resources. Capitalist societies hence must be seen as class societies which are made possible by the exclusive control of social information and the exploitation of living labour. In capitalism, social structures have an exclusive character and so we have to speak of exclusive economical, political and cultural relationships which are formed in a way that can not be considered *self-organising II*.

The distribution of power in our society is also maintained by the privileged access to and the control of knowledge and social information by the ruling classes and the exclusion of others from this access and from the chance of participating in the constitution of social information. In our western society which is politically formed by the model of representative democracy and economically by capitalism, the asymmetric distribution of power in both areas (as well as in others such as privacy) prevails. This creates various relationships between influential and less influential classes. In our current form of society, competition dominates co-operation and exclusive social information is far more important than inclusive.

3.2.5. Heteronomy: The Lack of Social Self-Organisation (II)

Capitalism is based on exclusive social relationships in all social areas. First, there are asymmetries concerning the economic resources. Private owners and capitalists exclusively control resources and the means of production. Economic relationships in capitalism are exclusive economic relationships that are made possible by the private control of the means of production and extensive landed property. The production of surplus value and other relationships of production that depend on the principles of mastery and exploitation and include a transfer of quanta of living labour from exploited groups to exploiters, are compulsory for those who are excluded from the control of economic resources.

A labourer 'is free in the double sense, that as a free man he can dispose of his labour-power as his own commodity, and that on the other hand he has no other commodity for sale, is short of everything necessary for the realisation of his labour-power' (Marx 1867). He/She does not own the means of productions and what (s)he produces and (s)he is forced to sell her/his labour power. Wage and reproductive labour are necessary for the production of surplus value and are constitutive for the formation of class relationships. Class relationships are characterised by domination and exploitation. The exploited work more than they are being paid for, they perform unpaid surplus labour or they even (have to) work for free. Concerning the distribution of the surplus products and the commodities produced, it can be said that they are not being owned by those who produce them. The immediate producers and the ones that are indirectly exploited by

capital only get a minimum share.

House and reproductive labour are necessary for the production of capital and the reproduction of labour power. This is a type of unpaid or very low paid labour; capitalism and the production of value could not exist without it. This type of labour is mostly done by women and in our patriarchal society there are essentialistic, biologicistic naturalisation that define reproductive labour as belonging to the “nature” of women. Female minds and bodies are controlled, used and exploited in capitalist patriarchy in order to maintain the dominating relationships. Today, women are often exposed to multiple types of burden within relationships of wage- and reproductive-labour. Wage labourers exploit reproductive labourers within the framework of domestic modes of production • which are still an aspect of the familial structures of society • in order to have the physical and psychological abilities to be exploited by capital. In accordance with Marxist feminism, here we can also speak of a class relationship that is being constituted by the transfer of unpaid labour from reproductive labourers to wage labourers and finally to capital.

“Domestic labor is a form of socially necessary labor that expands the goods and services available to the working class beyond what it would be possible to purchase with wages. [...] The relations of production, exchange, and distribution place those who earn wages in a position to gain access to the material conditions of reproduction and, consequently, in a position of power over those with little or no access to those conditions. [...] Sexual inequality is one among the many forms of inequality thus generated by the mode of production within the working class [...] The contradictions between capital and labor, between production and reproduction, and the protracted class struggle thereby generated are the determinants of the contradictory nature of the relations between working-class men and women” (Gimenez 1978: 77, 79, 80; see also Delphy 1975, Ehrenreich 1976, Kuhn/Wolpe 1978).

So also in the area of reproductive labour, we have a asymmetrical distribution and control of economic resources. Reproductive labourers depend on money as the general resource and commodity that must be earned by wage labour. Either they are wage labourers additionally or/and they depend upon wage labour within familial structures. They are always threatened by violence and the withdrawal of resources, e.g. also when women can not hold out manifold types of burden. Reproductive labourers often have less rights than wage labourers who are “free” in a double sense, they do not have social security, collective agreements, unions fighting for them etc. Although we are witnessing various forms of housewifization today (Mies 1984), wage labourers are still in a relatively privileged situation in comparison to reproductive and immigrant workers who are exposed to various types of super-exploitation.

So, super-exploitation also exists within the framework of racist relationships of productions. These relationships are generally very bad paid and immigrant workers only have minimal forms of social security (this is also true for peripheral labour relationships such as part time work). Racism is an ideology, wage labourers often participate in its social interspersion in order to maintain their relative privileged situation. Labourers in racist relationships of production only have minimal or no economic resources, political rights and influence on the cultural formation of norms and values. They are confronted with large exclusions concerning economical, political and cultural information. The super-exploitation of immigrant workers constitutes a class relationships, their precarious

situation is maintained by capital and by wage labourers who are taken in by racist ideologies.

Class relationships always refer to the exclusive control of resources by groups which force others to use these resources in order to accumulate further and new resources. In the case of capitalism, these resources are commodities and capital. Exclusive control also always means the use of violence or at least the threat of violence. This shows that exclusive social relationships can only operate by making use of repression. In capitalism, economical structures are exclusively controlled.

In modern society, also political structures are exclusive ones. Representative democracy only has a very low degree of social self-organisation (II) because decisions are not made by those who are effected by the resulting political decisions. Today, laws are the dominating types of political relationships. They are characteristic for societies that depend on the principle of domination. Elections are a type of competition and result in dichotomies of government/opposition and parliament/people. This means the constitution of exclusiveness and the delegation of the competence of reaching decisions to an oligarchic group. The representative model does not advance social self organisation (II), it depends on the exclusive control of political and economical resources. In the representative political system we are confronted with asymmetries and dichotomies in a double sense. First, the dichotomy of electorate and the ones elected. Secondly, the dichotomies of government/opposition and majority/minority. Hence this political system cannot be seen as being socially self-organised (II). It has been developing in parallel to the capitalist economy and in accordance to the principle of exclusivity. Exclusion and competition are basic principles of the economy and politics in modern society.

The state enforces and reinforces the exclusive control of social structures. The state fulfils several functions in the total existing system of domination:

1. Organisation of the infrastructure of capital accumulation, capitalist production and reproduction: research and development, science, education, health, transport, law, preservation of the labourers as object of exploitation, subsidies, aspects of finance and credit, taxation, urban renewal, town planning, conservation, regional planning etc. The state is the planner of capitalist society. Capital is not able to control and plan social conflicts and class struggle alone, it needs state mediation. The state is necessarily a nation state, because national control enables easier access to markets for capital and labour power. The reproduction of the existing relationships can be easier controlled on a national scale.
2. Repressive guarding of the capital-relationship by law, police, military, secret service and the state monopoly on violence. The state is necessary for the violent and repressive suppression of exploited classes that could attack the fundamentals of this situation. The existence of the state means the centralisation of the social potential for violence in an entity that has been made independent from the process of reproduction. This state entity has some degree of autonomy and is not immediately tied to the economic development. For capital, the state is the instrument for the enforcement of

its interest and also the organiser of the outer framework of the realisation of such interests.

3. Organisation of counter-tendencies in case of social crises and falling profit rates which are due to the social antagonisms of capitalism. When the mechanisms of the self-reproduction of capitalism fail, regulative instances such as the state or private initiatives try to re-establish a stabile phase of accumulation
4. Organisation of the unity of the various fractions of capital (see Poulantzas 1978). Classes are no homogenous units, they are internally fragmented. The state is a factor of cohesion, it holds the capitalist formation of society together. The state organises the block of power, i.e. the dominating classes and their fractions, and formulates general capitalist interests that unite the fragmented and competing fractions of capital.
5. Pacification of the subordinated groups: in order to avoid the maintenance of the capitalist order by making use of direct force, the state acts as a mass-integrative apparatus. Here, the regulation of the class relationships by instruments such as social partnerships, concessions to the organisations of the working class, the unions and the class-neutral appearance of the state are important. The latter refers to the fact that the state pretends to stand for the realisation of labour interests in order to avoid the appearance of the essence of the class character of the state. The state tries to produce a consent between dominators and the dominated, hence it always includes aspects of hegemony: "the State is the entire complex of practical and theoretical activities with which the ruling class not only justifies and maintains its dominance, but manages to win the active consent of those over whom it rules" (Gramsci 1971: 244).

The internal organisation of the state functions in accordance with the principle of exclusivity, the political laws that are produced are a type of exclusive social structure. And the state is a necessary entity of modern society that organises various conditions of the exclusive formation of economical, political and cultural structures in capitalism. The state is neither independent from, nor determined by the capitalist economy. Rather, it has a relative autonomy, i.e. there are also interests in the political and state structure of the existing society that are formed independent from economical interests and relate to the asymmetrical control of political power. But there are also interests and decisions in the structure of the state that are enforced by the state and that are necessary in order to establish exclusive economical structures, i.e. private property, commodity production and the accumulation of capital. So state-political structures also relate to economical structures and certain aspects of it are being influenced by economic processes and interests. Political relationships constituted by the state also transform economical structures, always have an exclusive character and result in the carrying out of relationships of domination.

In Fuchs (2001), I argued that existing political models that stress elements of direct democracy • such as the political system of Switzerland • are confronted with various types of exclusion (e.g. the dichotomies of majority/minority, dominators/dominated). Plebiscitary elements have also been used in the political systems of fascist states: There are majority-based decisions on regulative issues, but the questions that are being decided are formulated by the regime. Plebiscites have been used in order to legitimate fascist systems by arguing that these regimes have a democratic character. Such arguments hold

that all decisions are made by the people. But in reality, fascism relies on a charismatic type of domination. The will of the people is highly manipulated by hegemonic processes and mechanisms. This leads to an identity of the subjective interests of the masses and the leader, the people trusts its leader and hence decides in the way the fascist elite plans it. Additionally, representatives of the objective interests of minorities, the exploited and the working class are repressed violently or killed. Fascist plebiscites do not at all have something in common with democracy, self-organisation (II) and inclusive social structures. In fact, power is centralised and totally carried out in top-down-processes. Such social information is a totally exclusive one, there is no degree of self-organisation. Fascist plebiscites negate the true meaning of direct democracy, they do not advance participation.

Capitalist culture as the way norms and values are being constituted today, is heavily influenced by the mass media. With the transition to information-societal capitalism, these media are even becoming yet more influential by making use of modern information and communication technologies (ICT). These technologies have a dialectical character: They can be used in a way that reinforces existing relationships of domination, but also in a liberating manner. On the one hand, mass culture leads to the forestallment of social change and to stream-lined, one-dimensional mass-individuals. Hence freedom only means freedom to consume, the “free” selection from a diversified spectrum of commodities. All of this results in the manipulation of thinking, consciousness and actions, one-dimensionality appears (Marcuse 1964, Horkheimer 1946, Horkheimer/Adorno 1969), oppositional movements and goals are forestalled to a certain degree. The cultural channels and mediums are being controlled exclusively, the transmitted contents are influenced and produced by information-monopolies. So, also cultural information today is a type of exclusive social information. Monopolies heavily influence the general constitution of norms and values, whereas the scattered individuals are objects of ideologies and propaganda. They can hardly influence the formation of cultural information and the constitution of political information. Typically for capitalism today is the cyber-media-business-complex which changes the public in such a way that scandals – which are often presented in extremely sexualised and racist forms – are becoming the main contents of reporting. The result is further standardisation of consciousness, manipulation, helplessness and powerlessness.

Herbert Marcuse (1964) stresses in this context that the cultural industry presents contents that seem to be wild, obscene and unmoral – and hence they are harmless. Categories like wage labour and commodity-consumption are presented by the mass media as something obvious, but this is a type of totalitarian obviousness that naturalises social compulsions. Marcuse says that the individuals introject the speech and language of the ruling classes, they have false consciousness and false needs. Max Horkheimer (1946) stresses that all of this leads to the production of instrumental reason: Reactions are traced out exactly, no additional effort is necessary, actions seem to be automated and are no longer questioned. “Thus emerges a pattern of *one-dimensional thought and behavior* in which ideas, aspirations, and objectives that, by their content, transcend the established universe of discourse and action are either repelled or reduced to terms of this universe“ (Marcuse 1964: 12).

Marcuse (1937) lines out that individuals do not necessary have false consciousness, they can also develop critical thinking and actions. Modern culture for Marcuse is coined by domination and it manipulates, hence it is affirmative culture. People feel happy, although they are not. Manifestations of culture could also have anticipative effects, they can inspire fantasy and hence act as anticipations of a better, free world. On the one hand, certain cultural manifestations stabilise the existing order, on the other hand certain manifestations also convey the picture of a order that is better than the existing one. Considering the new ICT, this view of Marcuse is very important: Concerning the application of these media in the course of social struggle, the situation is an ambivalent one. On the one hand there is the technologically mediated production and simulation of hyper-reality that generates new meanings by putting together different, de-contextualized symbols in order to steer public opinion in a certain manner. In this context, the thesis of cultural industry formulated by Marcuse, Adorno and Horkheimer is right. It says that the cultural industry produces false consciousness and needs, one-dimensional mass-individuals (Marcuse 1964) and instrumental reason (Horkheimer 1946). The new technologies are exactly applied in this manner. But on the other hand, there is the possibility for protest movements to make use of ICT in order to reinforce the effects they have on society (see Fuchs 2001). The new technologies reflect existing relationships of domination, but nonetheless their adoption in a productive manner by protest movements is possible. Protest in the real world can be supported by a virtual culture of protest and a technologically mediated optimisation of manners and structures of political self-organisation.

Political and economical relationships have their own types of culture, culture is only possible in relationship with politics and economics, although it has a certain degree of relative autonomy. In the framework of the complex interplay of culture and politics, hegemony – as a phenomenon that is typical for societies that are based on the principle of domination – is constituted. Hegemony can be seen in accordance with Antonio Gramsci as ‘the ‘spontaneous’ consent of the masses who must ‘live’ those directives [of the state, CF], modifying their own habits, their own will, their own convictions to conform with those directives and with the objectives which they propose to achieve“ (Gramsci 1971: 266).

Gramsci stressed that the state strives to win the consent of the ones who are dominated to this process (ibid., p. 244). In this process of enforcing a consent between dominators and the dominated state-institutions such as schools and law are important, but also private institutions – which are part of the cultural system – are necessary. “The school as a positive educative function, and the courts as a repressive and negative educative function, are the most important state activities in this sense: but, in reality, a multitude of other so-called private initiatives and activities tend to the same end - initiatives and activities which form the apparatus of the political and cultural hegemony of the ruling classes. [...] The state does have and request consent, but it also ‘educates’ this consent, by means of the political and syndical associations; these, however are private organisms, left to the private initiative of the ruling class“ (Gramsci 1971: 258f). Hegemony always has political and cultural aspects, it is formed in the framework of the complex relationships between politics and culture.

Capitalist culture is affirmative culture and hence we find an exclusive control of the formation of norms and values. Cultural industry as a method of manipulation produces needs and consciousness in certain forms. The formation of cultural structures today is mainly an exclusive process. But modern media can also be used in oppositional manners. Here we again find asymmetries and limitations, because these technologies are mainly locations for capital accumulation and commodification. Nonetheless, modern media can be used as a means of producing critical and oppositional information.

The capitalist society we live in depends on exclusive social structures in the areas of economy, politics and culture. So it can be said that it has a very low degree of social self-organisation. The exclusive character of social structures is related to the general antagonisms of capitalism (see Fuchs 2002a). The fundamental antagonistic characteristics of capitalism appear as exclusive economical, political and cultural structures. There are political-economical antagonisms such as class antagonisms; an economic antagonism between wealth and poverty, one between necessary and surplus labour, one between use and exchange value, one between concrete and abstract labour, one between productive forces and relations of production, one between living and dead labour, one between the profit-based production in single corporations and the total social demand, one between production and consumption, one between the social character of production and the individual appropriation of commodities and one between the producers and the means of production (technology as an end in itself); political antagonisms such as the fractioning of classes, global conflicts caused by the capitalist world system; a cultural antagonism that holds that it is not possible for all societies to live in global peace and wealth because there are disproportional distributions of global wealth and global relationships of domination/exploitation; and finally an ecological antagonism: the ecology is being destroyed by the non-sustainable mode of production advanced by capitalism, which needs the appropriation of intact ecological resources in order to guarantee its own reproduction.

This discussion shows that the world system we live in depends on exclusive social self-organisation (II) in the areas of economy, politics and culture and it can be concluded that it has a very low degree of social self-organisation (II). The exclusive character of social structures is related to general antagonisms of society. An alternative would be a social systems-design (see Banathy 1996) that relies on co-operation instead of competition in all social areas. This would include participative structures that guarantee a high degree of autonomy for the individuals and enable them to fully participate in reaching decisions that effect them. So such a social system relies on social self-organisation (II) of all areas of society: the economy, politics, culture, the workplace, friendships, personal relationships, education etc. Such an integrative democracy as a self-organising, self-institutioning and inclusive society could maybe overcome some of the shortcomings and problems that are produced by modern society. Thus far we have not accomplished getting rid of the diverse manipulations in society that trigger the domination of social competition and exclusive social information in order to become self-determining, autonomous and altruistic individuals that can choose and differentiate their individual and social relationships all by themselves.

The discussion also shows that self-organisation (II) and heteronomy are not connected to each other and show up together, they rather are colliding, antagonistic forces. Modern society shows a lack of social self-organisation (II) and is imprinted by exclusive social structures and heteronomy in all areas of life.

3.2.6. Outlook: From Society As It Is to Society As It Could Be

Thus far we have not been able to dispose of diverse manipulations in society, which trigger the domination of social competition and exclusive social relationships, in order to become self-determining, autonomous and altruistic individuals that alone can choose and differentiate their individual and social information. As Marcuse pointed out, a society that allows individuality to flourish freely can only be established by *self-organising II* (in the political sense of self-organisation) individuals: "The individuals who shall live in the *Great Society* must be the ones who build it up—they must be free for it, before they can be free in it. No other power can impose or force their society upon them" (Marcuse 1966: 187).

A *self-organised II* society would be one in which all individuals who are concerned by a problem have the same power to determine and design the occurrence, form, course, and results of the constitution and differentiation of social relationships. A symmetric distribution of power would be necessary. It would have to be symmetrically distributed in terms of resources, access to information, and co-operation, including inclusion and solidarity instead of competition, exclusion, egoism as well as a form of socialisation that enables individuals to establish a form of compatibility and satisfaction between their own interests and collective, social ones. Compatibility of individual and social interests means that each individual does possess a maximum of freedom that interferes neither with the freedom of others nor with collective social interests. Every individual's free development is a necessary condition for the free development of all, just as everyone's freedom is a necessary condition for the freedom of the individual. Individual and collective interests could be compatible without interfering with each other. Egoism is not a "natural" pattern of behaviour given at birth or encoded in the genes; rather it is brought forth by processes of socialisation in a system dominated by competition, exclusive social relationships, and an asymmetric distribution of power. Such a society could possess the character of freedom because social forms and social relationships would emerge as a quality of social co-operation.

In another type of society, there would be another type of individuality, as had been recognized by Marx and Engels in their concept of the comprehensive and well-rounded individual (in German *allseitiges Individuum*), who is free and has enough free time in order to pursue various activities. They thought that in another society the free development of individual abilities would replace the submission of the individual to the division of labour. Thus individuals would be free to choose between different non-alienating activities. "People will no longer be, as they are today, subordinated to a single branch of production, bound to it, exploited by it; they will no longer develop one of their faculties at the expense of all others; they will no longer know only one branch, or one branch of a single branch, of production as a whole....Industry controlled by society as a whole, and operated according to a plan, presupposes well-rounded human beings, their faculties developed in balanced fashion, able to see the system of production in its

entirety. The form of the division of labour which makes one a peasant, another a cobbler, a third a factory worker, a fourth a stock-market operator, has already been undermined by machinery and will completely disappear. Education will enable young people quickly to familiarize themselves with the whole system of production and to pass from one branch of production to another in response to the needs of society or their own inclinations. It will, therefore, free them from the one-sided character which the present-day division of labor impresses upon every individual. Communist society will, in this way, make it possible for its members to put their comprehensively developed faculties to full use” (Engels 1847, *The Principles of Communism*)⁶.

The term democracy comes from the words “demos” (people) and “kratein” (to dominate, to exercise power). Hence democracy means something like rule of the people. But you always rule and dominate other groups and individuals. Hence democracy and self-organisation would be contrary terms. But if we see democracy as the power of individuals to reach all decisions by themselves, the term means something like people’s self-determination or social self-organisation in the narrower, political sense (modus II). Cornelius Castoriadis (1955, 1980, 1993) conceived the term “autonomous society” for a society without social hierarchies. Autonomous society includes autonomous individuals – and vice versa (Castoriadis 1980). For Castoriadis it is all about real social freedom and a maximum of individual possibilities for action that can be guaranteed by the institutions of society. A free society would mean execution of power by a community in which all people can participate in the same manner (ibid.). For Castoriadis equality means an equal distribution of power, i.e. equal and egalitarian possibilities to participate in society that we do not find in capitalist society. His goal was the sublation of heteronomy, the end of the domination of society by certain institutions and groups and the emergence of a new, self-institutioning society (ibid.). Result would be a collective self-management of all areas of society. For Castoriadis, self-management and self-organisation mean the self-institutioning of society. He speaks of the self-organisation of machines, tools, means of labour, conditions of work and life, education, housing and so on. The concept of self-organisation is not just used in an economic sense by Castoriadis, he applies it as an integrative and extensive concept that applies to the whole of society and all its constituting areas (ibid.). Castoriadis (1993) stresses that a self-managed society is one in which all decisions are reached by the social totality of those who are effected by the subject of decision. This is a co-operative process. Castoriadis’ concept of autonomous society is a very good example for a self-organised, participatory democracy and that such an understanding of democracy includes social self-organisation (II) of all areas of society.

The world-system we live in is in a major crisis (see Fuchs 2002a). This crisis surely has economical, political, ideological and ecological causes that can not be reduced to a single cause (ibid.). Rather the complex interplay of diverse factors of the capitalist world

⁶ Marx pointed out the same principle of the well-rounded individual. E.g. he wrote in the German Ideology: “Wir haben ferner gezeigt, daß das Privateigentum nur aufgehoben werden kann unter der Bedingung einer allseitigen Entwicklung der Individuen, weil eben der vorgefundene Verkehr und die vorgefundenen Produktivkräfte allseitig sind und nur von allseitig sich entwickelnden Individuen angeeignet, d.h. zur freien Betätigung ihres Lebens gemacht werden können” (Marx/Engels 1845/46, *The German Ideology*: 424).

system has led to a dynamic that endangers the survival of mankind. Global problems such as poverty, the ecological crisis, war, pollution, the wasting of resources, unemployment, etc. have become a major threat to humanity. 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. The infinite Golden Age that has been dreamed of during the fordist phase of capitalism has ultimately expired.

We are at a social and a historic crossroads today: The future development of society is not pre-determined, but if the path of evolution does not change fundamentally, the end of mankind and the breakdown of our world system could quite close in the decades to come. The global crisis is a major sign of the dangers we are facing today. But mankind has not been abandoned to some kind of pre-determined fate, because there are alternative evolutionary developments.

We cannot steer the evolution of social systems, but maybe we can give a certain direction to it during a phase of instability. We will not have certainty, but by gaining design competence we can increase the chance that evolution will take certain directions (such as the survival of mankind) and that it won't take others (such as the escalation of the global problems and the ultimate destruction of mankind and society). During phases of instability and crises we find points where the further development of history is not determined, but relatively open. Such points again and again show up, but it is not determined how the outcome will look like. They are an expression of antagonistic forces that lead to social crises and instabilities. Is our behaviour determined by social structures? Or can we freely decide how to change these structures? Or can both views be integrated dialectically? Possibly, in phases of instability, social chaos and crisis, social actions are very important and influence the further development greatly. In such situations, small causes can have great effects. It is rather deterministic that a system like capitalism enters crisis and phases of instability periodically. But the outcome, the concrete course and point of time is left to chance.

The principle of social self-organisation (II) can increase the possibility that we will not face ultimate destruction and that we will advance towards an inclusive, integrative society that is based on the principle of self-organisation in all social areas and makes a socially and ecologically development of society possible. The key to the solution of the global problems is the social self-organisation of those groups and individuals that are facing more and more precarious social, economical, political, cultural and ecological conditions today.

Capitalism is a historical system, this means that it has a beginning and an end. It is determined that this system will come to an end, but not when and how this will occur. I agree with Immanuel Wallerstein that the next 50 years will be a phase of instability, the global problems and the levels of national and international violence will increase. This is all due to the antagonistic social structures of capitalism. The outcome is not determined, rather relatively open. It depends upon the social struggles and resulting emancipatory social actions. We have no guarantees that a sustainable development will be the result, but the fact is that progress is possible, but certainly not inevitable. „The future [...] is open to possibility, and therefore to a better world“ (Wallerstein 1997b).

Immanuel Wallerstein also points out that this crisis can be seen as a crossroads of the historical development of society: "...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" (Wallerstein 1999b; see also Wallerstein 1997a, 1997b, 1998, 1999a, 2000; Hopkins/Wallerstein 1996).

One of the major factors responsible for the crisis of the world system is the antagonism of co-operation and competition (which is just another expression for the antagonisms between self-organisation(II) and heteronomy as well as between inclusion and exclusion), which is characteristic of modern/capitalist society. Competitive processes and the logic of commodities dominate inclusive and co-operative social relationships. Social information today is predominantly an exclusive one.

A way out of the crisis that points to a qualitatively new evolutionary path and is socially and ecologically sustainable could be established by the *self-organisation II* of the individuals that are confronted by the negative effects of global problems. The breakdown of the world system would mean the destruction of society's permanent re-creation-process. In order to maintain the *self-organisation I* re-creation of society, people who are excluded from the bottom-up-process, which establishes social information, and who are exploited in order to maintain the exclusive character of society would have to *organise themselves II*, in the political sense of the term. A change of dominance is necessary in order to solve our global problems and to save humanity from self-destruction: The dominance of co-operation by competition, of inclusion by exclusion has to be reversed. If this can be done, a fair, just and attractive society may be established that managed to disposed of its global problems. The major principles and categories of organisation and re-creation of such a society would be social *self-organisation II*.

4. Conclusion

This paper has shown that the individual plays an important role in the re-creation of society. Society can only reproduce itself when individuals enter social relationships which result in the emergence and differentiation of social relationships and social information. These structural categories influence individual actions, information and thinking. This dialectical process of actors and structures lies at the heart of social re-creation. Without the individual as a creative, social being, re-creation of society would not be possible.

The structural re-creation/self-organisation of society relies in modern society largely on exclusion, competition and heteronomy, there is a lack of self-organisation in a subjective an political sense that is based on principles such as inclusion, co-operation, participation, direct democracy and solidarity.

This has resulted in conflicting social situations on the economical, the political and the cultural level and antagonistic economic, political and cultural structures and forms.

These antagonistic social relationships result in a crisis-ridden evolution of modern society that has culminated in the emergence of global problems which threaten the existence of humankind. For solving these problems and ensuring a sustainable development, the existing antagonistic social information and relationships would have to be sublated so that a new harmonious type of systemic social re-creation/self-organisation could emerge. The way out of crisis can only be conceived in terms of gaining competence in subjective self-organisation and releasing the powers of this principle.

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