

The Present State of Sociological Systems Theory

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The tradition of sociological systems theory has been established in the last fifty years by the extensive writings of Talcott Parsons and Niklas Luhmann. If one looks for one characteristic most distinguishing of sociological systems theory in comparison to other sociological theories one will probably not find it in a substantive sociological insight not shared with any other sociological tradition. It is more to be seen in interdisciplinary theory building as the most prominent way of doing conceptual work in sociology. Other sociological traditions often entertain close relationships with one privileged neighbour discipline – mostly economics or social psychology – on which their cognitive individuality is somehow based. Systems theory is not in this sense founded in neighbourhood relations with a specific related discipline. It is more a child of the intensification of interdisciplinary relations born from the growth and internal differentiation of the system of the sciences.

If one looks at it from this vantage point systems theory does not arise with Talcott Parsons “The Structure

of Social Action” from 1937 which is more a traditional synthesis of different but converging intellectual traditions and which once more had its central reference point in economics as a neighbourhood discipline. But this orientation changed in the late forties and early fifties when Talcott Parsons participated in some early congresses on self-organization theory and cybernetics and became a member and initiator of many other interdisciplinary ventures¹. Then arose a style of theory building which does not privilege a specific neighbouring scientific discipline in processes of interdisciplinary learning but which looks for conceptual innovations in numerous and diverse scientific fields and tries to build sociological theory in respecifying interesting concepts in terms of problems germane to sociology as a discipline. Whereas in Talcott Parsons this style of work is more a side effect of his embeddedness into the intellectual environment at Harvard and of his expanding network of scientific contacts, in Niklas Luhmann the interdisciplinarity of theory building became programmatic and was obviously related to a sceptical evaluation of the cognitive merits of the sociological tradition.

Luhmann complemented this argument for interdisciplinarity by an intensified interest for the history of ideas and especially the philosophical tradition since Greek antiquity as an inventory of intellectual experiments to be made use of in constructing a scientific discipline². Luhmann’s trust in the productivity of conceptual work guided by interdisciplinary concepts and concepts from

¹ Cf. Steve Joshua Heims, *The Cybernetics Group*, Cambridge, Mass., MIT Press, 1991.

² Cf. Rudolf Stichweh, “Niklas Luhmann - Theoretiker und Soziologe”, in IDEM (ed.), *Niklas Luhmann. Wirkungen eines Theoretikers*, Bielefeld, Transcript, 1999, pp. 61-69.

the history of philosophy was obviously supported by his legal education and his familiarity with legal dogmatics as a tradition basing the autonomy of jurisprudence towards the influences from many nonlegal interests on conceptual work done in legal dogmatics.

There is a second characteristic of systems theory closely related to the prevalence of interdisciplinary work and the interests in the history of ideas. If theory building is such a diverse undertaking looking in many directions it is more easily to be seen as a cognitive autonomy of its own. And it is significantly to be observed in Talcott Parsons as well as in Niklas Luhmann that they establish sociological theory as an autonomous cognitive domain and therefore as a meaningful specialization in a professional sociological life. This upgrading of the social and intellectual status of theorizing again is not to be seen in other sociological schools. The emergence of the social and intellectual role of the sociological theorist is closely related to the genesis of systems theory³.

I want to point to a third feature of sociological systems theory distinguishing it from other paradigms. This third one is nearer to the intellectual conception of the domain of sociology. The distinction of *micro* and *macro*, so important for sociology in many respects, does not matter very much in systems theory. It seems to be substituted for by another prominent distinction, not very usual in other theories. In systems theory, since Parsons, there is on the one hand social theory which theorizes on a very general level elementary building blocks or constituents of social systems, on the other hand there is a theory of the most extensive social system. Perhaps this is a much

³ See the famous self-description of Talcott Parsons in the dedication of *The Social System* as an “incurable theorist”, Talcott Parsons, *The Social System*, New York, Free Press, 1951, p. V.

more fruitful distinction than the standard one of micro and macro. In Parsons we firstly have action theory or the general action frame of reference and on the other hand *the social system* which is the system which subsumes all other functional references (economic, political) as subsystems and is in this sense the most extensive social system⁴. In Niklas Luhmann's writings the theory of social systems is that part of the theory that deals with elementary and constitutive phenomena. Therefore you always make use of the plural *social systems*. The most elementary phenomenon in social systems is no longer conceived to be *the unit act* as it is in Parsons but *communication*. And the most extensive social system is again described as *society* in a tradition which goes back to Aristotle where society was already characterized by self-sufficiency and completeness of structures and processes⁵.

This decomposition of sociology into the theory of social systems (or the action frame of reference) and the theory of society (or the theory of *the social system*) in my view contributes much to the originality of systems theory. In the following in looking at the present state of sociological systems theory I will evaluate some of the substantive issues on both sides of this distinction.

The most important change in the theory of social systems is the switch from action theory to communication theory⁶. There are two main implications to it. First,

⁴ Cf. IDEM, *Social Systems and the Evolution of Action Theory*, New York, Free Press, 1977.

⁵ Cf. Niklas Luhmann, *Soziale Systeme: Grundriß einer allgemeinen Theorie*, Frankfurt a.M., Suhrkamp, 1984 (on social systems) and IDEM, *Die Gesellschaft der Gesellschaft*, Frankfurt a.M., Suhrkamp, 1997 (on society).

⁶ Cf. Rudolf Stichweh, "Systems Theory as an Alternative to Action Theory? The Rise of 'Communication' as a Theoretical Option", in *Acta Sociologica* 43 (1) (2000), pp. 5-13.

communication theory in contrast to action theory is very much an interdisciplinary venture. Whereas the concept of action is mainly of interest to sociologists and jurists, the prominence of the concept of communication arises from information theory which was an undertaking of mathematicians and engineers first of all and then inspired many communication concepts, since Gregory Bateson and Juergen Ruesch introduced the insights of information theory into psychiatry and social theory⁷. Since then many disciplines from mass communication research to animal ethology have made a productive use of the concept of communication as a conceptual key to the social structure of heterogeneous social systems⁸. The second advantage of the concept of communication consists in it being clearly related to the distinction of local contexts and global systems, differences between the local and the global being able to be analyzed as different forms and effects of communication. Therefore, the most eminent change in contemporary society, the penetration of world society into the most distant regions and most local contexts in the world, can be well articulated and understood in terms of communication theory.

Luhmann's central decision in explicating communication theory was the threefold distinction of components constitutive of any single communicative act: *information*, *conveyance* and *understanding*. This distinction of components opens the possibility of detailed processual analyses of communication and of interrelating systems theory and the practices of conversation analysis

⁷ Cf. as a recent overview Sascha Ott, *Information. Zur Genese und Anwendung eines Begriffs*, Konstanz, UVK, 2004.

⁸ Cf. for monkeys Dorothy L. Cheney and Robert M. Seyfarth, *How Monkeys see the World. Inside the Mind of Another Species*, Chicago, University of Chicago Press, 1990.

which is easily to be identified as a methodological approach which is not necessarily tied to Garfinkel's ethnomethodology but which can be connected to problems of systems theory, too. Already in Harvey Sacks' lectures from the early seventies one finds remarks which look at conversational units as *self-organizing systems*⁹. Regarding the processual sequences in communication it is interesting to analyse fourth and fifth components which in every occurrence of communication or at least sometimes come about. As Luhmann always said, understanding as the third component does not imply acceptance or rejection of the intended meaning of a communication. This alternative of acceptance and rejection then represents the fourth part in every sequence of communications and, of course, it is already part of the next communicational event. From this theorizing about the fourth part in any communicational sequence Luhmann developed a very simple and original theory of social conflict as something which always happens when rejection is chosen as the answer to something said. It is an open question if this is already an adequate interpretation of conflict. There is some interesting research by Heinz Messmer and Wolfgang Ludwig Schneider which points to the possibility that one more rejection – the rejection of the first rejection by another participant – has to come about to start a conflict system¹⁰. These discussions offer an interesting illustration

⁹ Harvey Sacks, *Lectures on Conversation. 2 Bde.*, Oxford, Blackwell, 1992.

¹⁰ Heinz Messmer, "Form und Codierung des sozialen Konflikts", in *Soziale Systeme* 9 (2) (2003), pp. 335-369; IDEM, "Konflikt und Konfliktepisode. Prozesse, Strukturen und Funktionen einer sozialen Form", in *ZfS* 32 (2) (2003), pp. 98-122; Wolfgang L. Schneider, *Die Beobachtung von Kommunikation: Zur kommunikativen Konstruktion sozialen Handelns*, Opladen, Westdeutscher Verlag, 2003.

of the potential instructiveness of conversation analysis for systems theory.

Another central piece of communication theory is Luhmann's theory of generalized symbolic media of communication¹¹. This is a very elegant piece of theory, again related to the alternative of acceptance vs. rejection of a communicative offer. Luhmann postulates that there exists a class of mechanisms consisting from generalized communicative symbols (such as money, love or power) which are specialized on increasing the probability that a communicative offer is rather accepted than rejected. The background to this is ongoing societal differentiation which makes it ever more improbable that someone shares my interests and accepts my offers. Generalized symbols and the media into which they are embedded are *inventions* of societal evolution which potentially succeed to counteract this unhappy and dissociating consequence of societal differentiation. The theory of generalized symbolic media of communication demonstrates another of the strengths of systems theory. What makes it interesting as an instrument of research is that it offers a very general functional perspective – Which symbols are able to motivate others to accept improbable communicative offers? – which allows to compare such heterogeneous things as money, love, power and values from a functional point of view. The comparison of incongruous mechanisms made possible by abstractions was always one of the programmatic intentions of systems theory. Luhmann very often affirmatively referred to Kenneth Burke's guiding formula

¹¹ Niklas Luhmann, "Generalized Media and the Problem of Contingency", in *Explorations in General Theory in Social Science. Essays in Honor of Talcott Parsons*, edited by Jan J. Loubser, Rainer C. Baum, Andrew Effrat, and Victor M. Lidz, New York, Free Press, 1976, pp. 507-532; IDEM, *Die Gesellschaft der Gesellschaft*, Ch. 2.

“perspective by incongruity” – and Burke had been a close personal friend of Talcott Parsons. If one looks at the present situation of systems theory it has to be taken account of that not much work on this part of systems theory has been done besides and since Luhmann and Parsons. There is, of course, the very interesting media theory of Talcott Parsons¹² on which Luhmann based his alternative formulations; there are the suggestive essays of Rainer C. Baum published in 1976 which focus on the fascinating and still not sufficiently investigated problem of inflation and deflation in media codes¹³. And there is the only competing theory by James S. Coleman who from the standpoint of rational choice theory, too, identified the problem of motivating the transfer of my rights over my own actions as a basis for the comparison of different mechanisms which motivate such an improbable transfer of rights towards others¹⁴. In an early essay from 1963, which was a comment on Parsons “On the Concept of Influence”, Coleman rightly noted that a theory of influence should be conceived from the point of view of the person to be influenced¹⁵. In general, here – in the theory of symbolically generalized media of communication – is a

¹² The most important essays are printed in Talcott Parsons, *Sociological Theory and Modern Society*, New York, Free Press, 1967 and IDEM, *Politics and Social Structure*, New York, Free Press, 1969.

¹³ Rainer C. Baum, “Communication and Media”, in *Explorations in General Theory in Social Science. Essays in Honor of Talcott Parsons*, edited by Jan J. Loubser, Rainer C. Baum, Andrew Effrat, and Victor M. Lidz, New York, Free Press, 1976, pp. 533-556; IDEM, “On Societal Media Dynamics”, in *op. cit.*, pp. 579-608.

¹⁴ James S. Coleman, *Foundations of Social Theory*, Cambridge, Mass., Harvard University Press, 1990.

¹⁵ IDEM, “Comment on “On the Concept of Influence””, in *Public Opinion Quarterly*, 27 (1) (1963), pp. 63-82. Coleman’s views relate to Adam Smith’s *The Theory of Moral Sentiments*, Indianapolis, Ind., Liberty Fund, 1984.

lacuna in the continuous updating of systems theory and much further work could and should be done about it.

In changing the reference point of my remarks from the concept of communication to the theory of generalized symbolic media of communication I already switched from the theory of social systems to the theory of society. This theory of society consists – in the version of Niklas Luhmann – from three or in the later versions from four main parts of which the theory of generalized media is only one. I will look to the other two or other three parts, too. The second main part is sociological differentiation theory which could be called the core of the theoretical tradition of classical sociology. Already in Durkheim and Simmel differentiation theory was somehow identical with sociological theory. The mature version of differentiation theory in Talcott Parsons and Niklas Luhmann is a synthesis of a tradition now a hundred years old¹⁶. In Luhmann there are two main points which characterize his version of differentiation theory. The first one is original to Luhmann. Differentiation theory is reformulated as a general theory of system formation¹⁷. It no longer looks only at cases in which a systemic identity separates into two new systems; instead it postulates a more general process of the formation of systems in systems. You only need systems

¹⁶ Cf. for recent overviews Hartmann Tyrell, “Zur Diversität der Differenzierungstheorie. Soziologehistorische Anmerkungen”, in *Soziale Systeme* 4 (1) (1998), pp. 119-149, IDEM, “Gesellschaftstypologie und Differenzierungsformen. Segmentierung und Stratifikation”, in *Sinngeneratoren. Fremd- und Selbstthematisierung in soziologisch-historischer Perspektive*, edited by Cornelia Bohn and Herbert Willems, Konstanz, UVK, 2001, pp. 511-534.

¹⁷ Cf. Niklas Luhmann, “The Differentiation of Society (1977)”, in *The Differentiation of Society*, New York, Columbia University Press, 1982, pp. 229-254.

and environments and new systems forming in systems by generating an environment of their own. This paradigm change has a certain liberating effect as one is no longer fixed on the binary paradigm which always expects the decomposition of an antecedent system in two new systems. The other main point is Luhmann's classification of principles of system formation or forms of system differentiation¹⁸. At first Luhmann operated with three such forms: segmentary differentiation, stratification or hierarchical differentiation, and thirdly functional differentiation as the structural form of modern society. Then the distinction of centre and periphery was added as a fourth form of system differentiation¹⁹. This theoretical work on forms of differentiation is obviously synthetic. For all these forms of differentiation one finds influential theorists who have concentrated their analytical work on one of these. But it is slightly different for functional differentiation. Never before a sociological theorist had postulated and described the modern primacy of big function systems in society with such a precision and decidedness as Luhmann consistently did since the 1970s. Functional differentiation can be called the main empirical diagnosis of systems theory, and it is not surprising that much work in systems theory in the last ten years has been done in this problem domain. Writings look for function systems which have not yet been defined and described; they postulate the rise of new function complexes such as *social work* which react on the consequences of

¹⁸ IDEM, *Die Gesellschaft der Gesellschaft*, Ch. 4.

¹⁹ Cf. Edward Shils, "Center and Periphery: An Idea and Its Career, 1935-1987", in *Center. Ideas and Institutions*, edited by Liah Greenfeld and Michael Martin, Chicago/London, University of Chicago Press, 1998, pp. 250-282.

the establishment of functional differentiation²⁰; and they look for societal problems – for example ecological problems or problems of dealing with risks – for which it seems improbable that they are differentiated in the form of a function system of their own. Of course, there is the major question: What kind of social structure might arise after functional differentiation? But until now there is not even a hypothetical answer and something can be said for the argument that it cannot be otherwise.

Further progress and innovation in differentiation theory seems to be slow, as it may always be the case with a theoretical tradition having been established a long time ago. But there is one significant new subject in differentiation theory which has still been introduced by Niklas Luhmann in his later years. This is the debate on *inclusion* and *exclusion*, prominent since the early nineties and a prominent subject not only in systems theory. The concept of inclusion always was an important part of the systems theory of functional differentiation, as the differentiation processes of function systems were thought to be based on the inclusion of everyone into possibilities of participation in each of the function systems of modern society²¹. This goes back to an argument made by the British social anthropologist Siegfried Nadel in the fifties²²: Differentiation does not only need a structure of specialized roles but it also presupposes a *public* which is specified along the lines of relevance constitutive for the

²⁰ Cf. Roland Merten (Hg.), *Systemtheorie Sozialer Arbeit. Neue Ansätze und veränderte Perspektiven*, Opladen, Leske/Budrich, 2000.

²¹ Cf. Rudolf Stichweh, “Inklusion in Funktionssysteme der modernen Gesellschaft”, in *Differenzierung und Verselbständigung. Zur Entwicklung gesellschaftlicher Teilsysteme*, edited by Renate Mayntz, Frankfurt a.M., Campus, 1988, pp. 261-293.

²² Siegfried F. Nadel, *The Theory of Social Structure*, London, Cohen & West, 1957.

differentiated systems. And only with regard to such roles of being a member of a public of the system the inclusion of everyone into each of the function systems can be meaningfully postulated. But what about exclusion? The other side of the distinction inclusion/exclusion was only rarely mentioned until the late eighties although the possibility of exclusion is logically entailed in processes of social inclusion which always can fail or in which a rejection of a social object may occur. In presentations and papers since the late eighties Luhmann focussed on exclusion processes due to the operations of function systems and he pointed to exclusion zones such as *favelas* which one can observe in many regions in the world. Exclusion zones result from people being excluded from a plurality of the function systems of society and therefore living their existence in a plurality of unofficial statuses²³. Luhmann even postulated that the distinction inclusion/exclusion is somehow prior to functional differentiation and therefore defines a basic line of differentiation of world society. This is not a very plausible claim as it conflicts with an analysis which interprets exclusion as resulting from the communication processes of the function systems which can only be the case if functional differentiation is prior to inclusion/exclusion.

This distinction of inclusion and exclusion is at the moment one of the liveliest places of research and debate in systems theory²⁴. There are arguments looking for the

²³ See esp. Niklas Luhmann, "Inklusion und Exklusion", in *Soziologische Aufklärung, Bd. 6*, Opladen, Westdeutscher Verlag, 1995, pp. 237-264.

²⁴ Urs Stäheli and Rudolf Stichweh (Hg.), "Inclusion/Exclusion - Systems Theoretical and Poststructuralist Perspectives", in *Soziale Systeme* 8 (1) (1995); Thomas Schwinn (Hg.), *Differenzierung und soziale Ungleichheit*, Frankfurt a.M., Humanities Online, 2004.

system level at which inclusions and exclusions operate (organizations and function systems); one important research question regards the interrelations of inequality and exclusion; and probably the most interesting research problems have to do with the dynamics internal to the distinction inclusion/exclusion and with its interrelations with world society²⁵. One argument, which one can derive from Foucault and Luhmann among other authors, says that one specificity of modern society consists in the exclusions it effects nearly always being transformed into inclusions of another kind. Prisons and corrective educational institutions, psychiatric wards and old people's homes are examples for institutions which are specialized on institutionalising exclusions in ways which intend to effect new inclusions. This hypothesis can be combined with the migrational and communicational dynamics of world society in which people, symbols and events which are excluded somewhere, often become included in a material or symbolic way elsewhere in the world. There seems to be nearly no way to escape the inclusive grip of world society and this may be responsible for the reversibility of all exclusions as well as inclusions to be observed in this system which has no social environment anymore.

The third core part of the theory of society is the theory of sociocultural evolution. Again its scientific background is a completely different one. It was neither a constitutive part of classical sociology as is the case with differentiation theory, nor is it a recent invention of speculative sociologists who cultivate an interest in comparing incongruous realities as is the case with

²⁵ Cf. Rudolf Stichweh, *Inklusion und Exklusion*, Bielefeld, Transcript, 2005 (to be published).

symbolically generalized media of exchange (or: media of communication). Instead, sociocultural evolution is one of the oldest and most persistent cases of interdisciplinary theory building. It was discredited by Spencerian ideas about the progress of humanity and afterwards by the social Darwinism of the first half of the 20th century, and it had no influence in sociology when Niklas Luhmann decided to connect to it again in the sixties. He was mainly inspired by an American psychologist, Donald T. Campbell, who single-handedly had worked through the multiple traditions of evolutionary thinking and created from it the model of sociocultural evolution which meanwhile has become dominant in circles interested in evolutionary thinking²⁶. This proposal by Campbell is based on distinguishing three evolutionary mechanisms which are called variation, selection and retention and it is based on the strong hypothesis that these mechanisms operate independently from one another so that social innovations or variations can be conceived to be random events as they can not calculate or predict the probability of their selective survival. Luhmann connected to this methodological or epistemological accent of the Campbellian programme. Mainly two usages come to the foreground in Luhmann's evolutionary theorizing²⁷. He makes use of evolutionary arguments to support the plausibility of the genesis of social structures on the basis of accidents or random events. Social systems are characterized by their ability to build their structures on the basis of nearly arbitrary preconditions. They can "wait" until circumstances arise from which they can build convenient structures. This is a convincing

²⁶ Cf. for some important essays Donald T. Campbell, *Methodology and Epistemology for Social Science*, Chicago, University of Chicago Press, 1988.

²⁷ Cf. Niklas Luhmann, *Die Gesellschaft der Gesellschaft*, Ch. 3.

argument against any determinism which causally relates the path of a system to external determining circumstances. The other usage of evolutionary thinking focuses on the theorem of *evolution of evolution*. Luhmann describes sociocultural evolution as ongoing differentiation of the three evolutionary mechanisms. Variation, selection and retention/stabilization become ever more independent or ever more distant from one another, and this is a consequence of globalization: local contexts in which variations arise and global systems in which the selective fate of these variations is finally decided becoming progressively separated from one another. Therefore, the autonomy of structure formation in social systems is not only considerable; it is even increasing in evolutionary terms.

In my view this is not only a very original and valid interpretation of evolutionary theory, it is at the same time a rather specific and selective grasp of its cognitive potentials. For example, it is remarkable that the extensive historical analyses Niklas Luhmann worked on for many years are nearly always theorized in terms of differentiation theory and that there is only a sparse usage of evolution. At the same time in the nineteen-eighties and nineteen-nineties there was to be observed in fields such as cultural anthropology, evolutionary economics, epistemology, archaeology, psychology and other disciplines an unsuspected conjuncture of new evolutionary approaches which perhaps made evolution the most interesting growth industry in interdisciplinary science. Systems theory will have to reconnect to this literature and its debates. I cannot give an extensive overview of relevant problems here and will restrict myself to a few keywords.

One problem in many evolutionary theories is that the interrelation of culture and social structure has not

been determined with sufficient precision. Sometimes researchers are modelling cultural evolution, sometimes they only look to the evolution of social structures. But how one is going to decide such an alternative and how one is going to relate to the other side of the option one prefers remains rather unclear. This is even true for Niklas Luhmann who in a first approximation evades this problem by refusing to the concept of culture the status of a systematical term in social science. *Culture* is supposed to be only a historical concept, a self-description of eighteenth-century European society and its arising knowledge of the contingency of all social norms and practices²⁸. But then the problem of differentiating *culture* and *social structure* reappears, as Luhmann distinguishes *historical semantics* from *social structures* and allows the possibility of independent evolutionary theories for both of them²⁹. But the interrelations of historical semantics and social structures are only thematized in terms of differentiation theory. Differentiation theory tries to demonstrate how far-reaching semantical changes are dependent on structural shifts in the forms of differentiation of society³⁰. By this no answer is given to the question if and how sociocultural evolution should be theorized twice – in terms of culture and in terms of social structure.

²⁸ IDEM, “Kultur als historischer Begriff”, in *Gesellschaftsstruktur und Semantik. Studien zur Wissenssoziologie der modernen Gesellschaft, Band 4*, Frankfurt a.M., Suhrkamp, 1995, pp. 31-54.

²⁹ Cf. Rudolf Stichweh, “Semantik und Sozialstruktur. Zur Logik einer systemtheoretischen Unterscheidung”, in *Soziale Systeme* 6 (2) (2000), pp. 1-14.

³⁰ Niklas Luhmann, *Gesellschaftsstruktur und Semantik. Studien zur Wissenssoziologie der modernen Gesellschaft*, Bd. 1-4, Frankfurt a.M., Suhrkamp, 1980-1995.

Another critical question regards what in Darwinian theories normally is called the unit of selection (for example: the gene or Dawkins' candidate the meme³¹). Most theories operate very carefully in explicating their candidate which is supposed to function as the unit of selection in a specific domain. If one looks at Niklas Luhmann's writings critically one will not be able to find a clear-cut answer. Luhmann gives precise identifications for the three evolutionary mechanisms: variation by conflict communications, selection by communication processes steered by the codes of the function systems, and stabilization via the differentiation of new systems. But what functions as the unit of selection? There are candidates such as the *symbol* (probably the Parsonian option) or the *expectation* (the Luhmannian version I presume). But the final argument has still to be established. And then numerous further questions fall into line. Is there any such thing as an analogy to the distinction of *genotype* and *phenotype*, so important for the Weissmannian fundamentals of theories of biological evolution?³² And furthermore: Is the *unit of selection* one is going to identify or nominate that kind of entity which evolutionary theories call a *replicator*, that is a dynamical unit which realizes a mechanism by which it incessantly produces copies of itself. This is a very interesting problem for communication theory, and there is a long tradition of potential answers

³¹ Cf. Richard Dawkins, "Foreword", in *The Meme Machine*, edited by Susan Blackmore, Oxford, Oxford University Press, 1999, pp. VII-XVII.

³² Cf. Rudolf Stichweh, "Neutrality as a Paradigm of Change. Comment on Walter Fontana "The Topology of the Possible"", in *Understanding Change. Models, Methodologies and Metaphors*, edited by Andreas Wimmer and Reinhart Kössler, Basingstoke, Palgrave Macmillan, 2004 (to be published).

in social theory, going back at least to Gabriel Tarde's theories of imitation.

I will finish this shortlist of open questions which only intends to illustrate lines of contemporary theorizing and directions of future work for systems theory. Besides the three theories analyzed in this brief survey there is a fourth main part to the theory of society. This regards what can be called the self-thematization, or self-reflection or self-description of society. In "Die Gesellschaft der Gesellschaft"³³ this fourth part is more a collection of essays which discloses the somehow unfinished character of this book. But it is here that the unsolved problems of the distinction of semantics and social structure come into focus again. Semantics has always been described as a higher level generalization of social meaning. Social structures obviously consist from expectations. There is no other plausible candidate in systems theory. And expectations will have to be defined – and be distinguished from the fleetingness of individual communications— by characterizing them as generalizations of social meaning transcending a certain span of time and a certain diversity of individual perspectives. But this definition – in slightly different words – already functioned as the definition of semantics – and this points to the fact that we have here more a problem than a solution³⁴.

I will finish my very selective overview with a remark on *society*. This obviously is besides *system* the most

³³ Niklas Luhmann, *Die Gesellschaft der Gesellschaft*, Ch. 5.

³⁴ Urs Stäheli, "Die Nachträglichkeit der Semantik. Zum Verhältnis von Sozialstruktur und Semantik", in *Soziale Systeme* 4 (1998), pp. 315-339; IDEM, *Sinnzusammenbrüche. Eine dekonstruktive Lektüre von Niklas Luhmanns Systemtheorie*, Weilerswist, Velbrück Wissenschaft, 2000; Rudolf Stichweh, "Semantik und Sozialstruktur. Zur Logik einer systemtheoretischen Unterscheidung", in *Soziale Systeme* 6 (2) (2000), pp. 1-14.

important word and concept in systems theory. And society can only be thought of in contemporary terms as *world society*. Then there is only one societal system on earth with all the risks this implies. Luhmann made this very clear at the beginnings of his career in *Die Weltgesellschaft* from 1971 and even in earlier programmes and writings³⁵. But there arises again a slight irritation. If one reads the many books by Luhmann attentively one can not overlook that in many of his substantial analyses of function systems there is an implicit horizon in illustrating his theory (if not in analytical decisions) which limits social systems to national contexts. This is unintentional, and in my view can only be explained by the fact that from the sixties to the eighties a perspective really presupposing world systems and presupposing one world society was a rare position in social science so that one had to do all the work oneself, and of course even the most creative scientist is dependent on the literature of his time³⁶. When the globalization conjuncture finally arose in the nineties Luhmann's theory was more or less complete. From this comes a further task for research in systems theory. All descriptions of social reality have to be redescribed, in checking if they really take into account the global condition of communications in each

³⁵ Niklas Luhmann, "Die Weltgesellschaft", in *Soziologische Aufklärung 2. Aufsätze zur Theorie der Gesellschaft*, Opladen: Westdeutscher Verlag, 1971, pp. 51-71; IDEM, *Rechtssoziologie*, Reinbek b. Hamburg, Rowohlt, 1972, pp. 333-343.

³⁶ One of the most interesting ways Luhmann held to the diagnosis of world society was that he mostly ignored in writings and seminars the socialist world of Eastern Europe and Asia. This already stunned us as students and looked as if he had known that they had no future in world society. Cf. Nicolas Hayoz, *L'étreinte soviétique. Aspects sociologiques de l'effondrement programmé de l'URSS*, Genève, Librairie Droz, 1997 and the preface by Luhmann.

and every function system³⁷. The aim could be a kind of new version of “Die Gesellschaft der Gesellschaft” in which the concept of world society would no longer strangely figure as a kind of special subject in two short subchapters³⁸ but would naturally function as the background of whatever comes into view.

³⁷ Cf. Rudolf Stichweh, “Systems Theory as an Alternative to Action Theory? The Rise of ‘Communication’ as a Theoretical Option”, in *Acta Sociologica* 43 (1) (2000), pp. 5-13.

³⁸ Niklas Luhmann, *Die Gesellschaft der Gesellschaft*, Ch.1, p. X; Ch. 4, p. XII.

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