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# The Paradox of System Differentiation and the Evolution of Society

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Ever since there has been sociological theory it has been concerned with social differentiation (Luhmann 1985b). In fact, all of the criticism that has been aimed at this concept and its application in different social theories has been unable to eliminate it completely, no matter how justified the individual arguments may have been. The concept of (social) differentiation simply proved irreplaceable. So the question must be asked: why?

If sociology intends to maintain itself within the context of the sciences as one discipline among others then it has to present an object of research of its own. Its unity as a separate domain of research can be justified only by means of the unity of its own object of research.[1] This is accomplished by the introduction of the concept of society which, accordingly, has to be construed in a new way, i.e., no longer identified with the traditional concepts of *societas, communitas perfecta,* or the ideological concepts of the nineteenth century. Something like an all-encompassing concept of society is required—but one established in a theoretically fruitful way. It must contain directions for analysis in order to stimulate both theory and research; and the concept of social differentiation was the first to do so.

As paradoxical as it may sound (even though this has been known for a long time), *society* is accurately characterized as a *differentiated unity.* This concept implies a difference of logical levels (or "types" in

the sense of Russell and Whitehead) which allows it to participate in its own unity. Consequently, the level of differentiated unity (society) has to be distinguished from that of its parts, which are differentiated with respect to one another. Both levels reciprocally presuppose each other, and this constitutes the paradox. They mirror each other without being reduced to each other. The totality of the differentiated relationships is (and yet is not) the unity of the system. The unity of the system itself finds no place within the system. It is not a part of it. And so the parts of the system cannot be the unity of the system, neither individually nor taken together. Nor is system unity "more" than the sum of its parts. For where is this "more" to be found, inside or outside the system?

The distinction of levels is only one of the many possibilities of the logical treatment and refinement of the basic paradox of a *unitas multiplex*. Another possibility reintroduces the unity within itself as a part. This solution has been connected for a long time with the concept of "representation," either through the assumption of a behavioral "representation" of the unity by means of distinctive organs designed for this purpose or through the idea of a conceptually distinguished *representatio identitatis*.[2] In the first case, the distinction of levels helps in the observation and description of the differentiated system, while the representation solution establishes a capacity to decide and act. Nevertheless, both forms of resolving the paradox conceal problems of their own. The distinction of levels leaves unclear just how the unity of this difference is to be conceived and how the one level is to be made accessible to the other. The representation of the system within itself must specify both its necessary position in it and its types of operations and, at the same time, make clear that it is not identical with what it represents. Thus, on the level of system parts, it has to distinguish itself from the other parts. The introduction of the unity of the system within itself *is therefore a differentiation itself*. It produces difference because it desires unity. (This is made very clear in Gauchet 1976.)

Just because of this paradox of a "tangled" (Hofstadter 1979) hierarchy the concept of differentiated unity tries to present itself as conceptual unity—simply to provoke theoretical attempts at undoing the conceptual paradox. The trick in the theory's design resides in concealing this problem—perhaps in saying that the only solution to the problem is the one presented by the theory or by saying that this corresponds to the unity of the differentiated unity without admitting any other possibilities. So, the paradox has continued throughout the history of sociological theory—e.g., in interpreting society either as a

unity or as the totality of its parts, either as system or collective, either in respect to the conditions of the possibility of its conception or as the web (i.e., as formed by the web) of social relations. These opposed interpretations remain necessarily distinct. But any theoretical achievement resides precisely in denying this. The basic paradox of a unity decomposed into parts (but which arises out of them and, at the same time, is something other than them) has to be reworked if the paradoxical unity of the concept of society is to attain theoretical practicality. This problem presents every attempt at a solution with other functionally equivalent possibilities.

The hypothesis that the whole is more than the sum of its parts had been discussed extensively by the time liberal thought used it for the purpose of concealing a paradox of its own. An essential part of this was the discovery of a difference between individual and social rationality that was closely connected with the development of trade and industry and "political economy." Not the first but perhaps the most famous interpretation was that of Bernard Mandeville (1728). According to him, certain vices of the wealthy (luxurious needs, envy, unrestrained drive for acquisition) are the indispensable stimuli of business and, at the same time, beneficial to the whole of society. Thus the argument presupposes modern society and, at the same time, emphasizes a new basic differentiation vis-à-vis established ones: the rich and the poor. Only the wealthy can cultivate their vices for the good of the whole of society. The poor would ruin their labor capacity by doing so. For the latter, morality counts at face value, and they cannot be counted on to replace religion with enlightened reason. It is evident, then, how a new formula for difference mediated previous ones by offering a new reconstruction of the old paradox that the whole is more than the sum of its parts.

I will leave open at present the question of whether the self-reference of a differentiated society can be construed as the relation of a whole to its parts. If such is the case, then certain ways of eliminating its paradox are already indicated. Mandeville's text proceeds along one of these paths when it facetiously exposes the paradox as a moral one (private vices, public virtues) and reveals it as an illusion. In the way it is *formulated* the paradox is still shocking but basically harmless. It does not proclaim the impossiblity of social life (nor its possibility through grace alone) but rather, conversely, *how it is possible as order.*

As the reflection of the paradox of differentiated unity Mandeville's text cannot approximate this paradox. Its achievement is not its paradoxical truth but the elimination of the paradox. And this requires

the removal of certain problems.[3] In the moral paradox of wealth, political economy itself is represented. The actions of the wealthy represent society as a functional paradox. But the question of how it happens that a part of the whole comes to represent the whole as such is never raised. Only later, especially for political representation, does this question become topical. "In France, the king calls himself the state, parliament calls itself the state, the aristocracy calls itself the state. But none of them can say what this is nor if it is" (Linguet 1778:13). And the superformula of a *volonte generale* only remystifies the problem.

The eighteenth century sought a very similarly structured solution in the distinction between private and public. But it concealed the paradox of differentiation. The distinction that once expressed the difference between domestic and political matters (Spontone 1599:181ff) now confronts system differentiation directly and intercepts the collapse of the old order and the uncertainty about the new through a semantic overburdening of the public domain (Holmes 1984:241ff). The whole is represented by what is public. But the latter fulfills this function only if it restricts itself to reason. This restriction is attained through the liberated expression of private opinion, i.e., through freedom. Freedom of the autonomous private person becomes the highest goal of the politicosocial order because this is the only way to secure the effectiveness of reason. What is private is necessary to constitute what is public. The more private an individual becomes, the greater the chance that the possible consensus is rational and can realize the interests of all—a remarkable construction capable of convincing only in an historical situation that sought to solve the paradox of differentiation in a way other than stratification (Habermas 1962). The whole is therefore expressed *within* the private/public distinction as the public, while the distinction itself is applied to the ideal relation of freedom and reason and thereby legitimated.

Only because the private domain is free can the public domain represent the whole within the whole. Therefore, if the conditions of a representative public domain are pursued, the result is unexpectedly the opposite: the private domain. In this case, a distinction supplants the paradox of the differentiated unity. The public domain is not the unity of the many private ones. Nor is it a (public) whole that is the sum of its (private) parts. The substitution of private/public for part/whole merely pushes the paradox into another formulation and lets it appear here under different conditions of plausibility. One may assume then that this maneuver of liberal theory (and I have provided just a few examples for many similar cases) accompanied and helped

complete the transition from a stratified to a functional differentiation of the social system. But the basic problem of the *unitas multiplex* was not formulated as such in the completion of the transformation. So, the concept of hierarchy or rank order had to be abandoned as the solution to the paradox of a differentiated unity. But at the same time there was nothing to put in its place.

The nineteenth century was not able to solve this problem any better. Although here utopian formulas of unity make a virtue out of necessity: the "aesthetic state" of tasteful communication (Schiller), social "solidarity" (Fourier), and the "classless society" (Marx). Such formulas take time. They projectd the problem into the future after the French Revolution had shown that it could not be solved at one stroke. In view of existing differences the unity was transferred into the future and the behavioral directives for the present were drawn from there—whether in the form of education, moral-literary publicity, or another revolution at some future time. Only in the second half of the nineteenth century did the belief in time as the medium of problem solving collapse. Only then did a "sociology" arise that could discover its own unity as a differentiated one.

After the collapse of the utopian beliefs in the future that guided Comte, Marx, and Spencer (even if their differences lay only in the scope of the social changes they deemed necessary to reach a better future), classical sociology consolidated itself by means of a structural description of society. Differentiation was interpreted by Simmel and Durkheim and indirectly by Weber as the *result* of social development, and thus became a central theme of social theory. On the one hand this resulted in the interpretation of evolution as increasing differentiation, and thereby social Darwinism could be separated from formulas of selection such as the "survival of the fittest" and "struggle for existence." On the other hand interest in the future was characterized by the investigation of the consequences of social differentiation and, consequently, utopian belief in the future could be abandoned. Henceforth the *structural* theme of differentiation determined the view of *history*. Yet structure did not take the place of process, as misleading polemics often assume, nor did it produce a static point of view that ignored dynamics and history. Rather, the description of contemporary society as highly differentiated forms was the hinge that mediated past and future. The result was that the modern period became an object simultaneously of admiration and criticism. It was interpreted as the irreversible result of history, while its future was viewed with complete skepticism. For Simmel as well as for Weber highly

developed *form* is one of the correlates of differentiation. The prominence of individuality is another. But at the same time form cannot be purchased without a considerable loss of meaning. It always presents itself as restriction and renunciation at the same time. And individuality does *not* confer on the individual what it would like to be but produces a sense of alienation instead. With distinctive individuality the awareness of what is *not* given to the individual increased and, since the end of the nineteenth century, the result has taken the form of different theories: of the plural self, of a conflict between social and personal identity, of conflicting socialization or individual self-programming.

A theory that brought so many different types of things together and, in its descriptions, provided so many plausible points of connection found it easy to occupy the then open field now called sociology. But its conceptual and theoretical efforts were limited and hardly even noticed at first. Talcott Parsons was the first to address the problems that appear when an attempt is made to formulate the *unity* of this theory. And through him the endeavor acquired a form to which much of sociology reacted with disbelief and misunderstanding. For Parsons the assumption of social differentiation remains the starting point for theory formation. The concern of presenting the unity of classical theory leads to questions about the object of this differentiation. Formerly, differentiation had been applied explicitly or implicitly—at any rate without considering other possibilities—to society. Parsons applies differentiation to actions.[4] Action is analyzed as the emergent product of a plurality of components,[5] while the evolution of action is interpreted as the history of this emergence. The evolution of action is the unfolding of the structural differentiation of the action system. Differentiation leads to this system's greater complexity in such a way that the necessary action components are differentiated as relatively independent reference points (functions) for the establishment of the subsystems of the encompassing action system. And these subsystems themselves are guided primarily by their respective functions. Ultimately every subsystem makes a contribution to the emergence of action. For the unity of the theory's object as well as the theory itself the emergence of action requires more than just one such contribution and, in the case of all functional specification, it becomes increasingly dependent on the use of the other necessary functions. The alternative is not the collapse of highly developed society; it is much more radical: the disappearance of action. It works only in conjunction with the organism capable of behavior (A), the personal system (G), the social system (I), and culture (L). So the

evolution of differentiation means that each of the subsystems is guided primarily by its own function and is thereby more clearly distinguished from the others. No further functions can be added because the emergence of action requires no more and no less. All further differentiation has to be achieved within the subsystems through repetition of the same pattern. In the final analysis, nothing else can bring and hold the necessary components of action together. As in the case of the general theory of evolution, the complexity that results from this is the epigenetic product of evolution. It is not an intended goal in itself. So without knowing and wanting to, Parsons carries with him the inheritance of classical sociology: the ability to treat differentiation only as fatality. This means that it presents itself as an historical result. If emergent action appears in the process of general evolution, then it is its result. Differentiation is the *fait sociale* simpliciter, the *fait accompli* of modern society. Only the results of this structure can be judged and eventually disposed of—perhaps for the sake of more solidarity or rationality. A society without differentiation would be a society without facticity, a utopia (although one not even worth pursuing).

Although Parsons often expressed himself as if he viewed modern society (particularly in its American variant) as an historical result and as superior to all others, his own theory actually prevents him from doing this. According to this theory, goals and values, goal attainment and latent pattern maintenance, are particular functions among others. They are nothing more than contributions to the emergence of action. Action sets its own goals and evaluates itself. It would be impossible for it to be any other way. The fact that immense complexity and functionally structural differentiation results from this in the process of evolution and that, in this way, typical traits of modern society are realized, therefore, cannot be viewed and evaluated as goal attainment. After all, which action could be a constitutive part of this goal attainment or valuation: the observation and description of society? an action outside the system? Every application of goal concepts and value judgments—which Parsons designates as subsystems—to the *unitas multiplex*, to the totality of differentiation, involves this theory in the above-mentioned paradox of differentiation. Every value judgment about the end result of previous evolution, immense complexity, or functional differentiation, indeed about the emergence of the action simpliciter becomes, for this theory, one of those "stange loops" that, according to Douglas Hofstadter (1979), betrays a "tangled hierarchy." The presentation of the differentiated system's unity employs semantic forms that are permissible only as

components of differentiation and are, so to say, consumed in this way. Every judgment about action becomes a factor in the constitution of action and every judgment about society becomes a judgment in the society.

Of course, one can say that there is no way out of this paradox and that it ought to be treated as a theoretical mistake. But this only brings us back to the theory: how it becomes aware of the paradox, how it handles it, how it aspires to eliminate the paradox, and how it can control what it does in this regard. In this respect, Parsons' contribution enjoys classical status. It structures the theory as the "cybernetic hierarchy" of the self-control of its object. Therefore the unity of the differentiated system takes the form of a hierarchy for which every level makes its own contribution to emergence and conditioning when it behaves in accordance with its position. But the paradox that results when level concepts like goals and values are applied to the hierarchy as a whole becomes unmanageable. In effect, the theory is forced to do what it cannot allow itself to do. Parsons never dealt with this side of the self-reflection of his theory. A theoretical discussion of this framework would have to be conducted as one that connects what is known to it, viz., the AGIL hierarchy, with what has to remain unknown.

We could also ask why we have to enter upon such an artificial reflection as such. It is evident that every assumption of a hierarchical order has this effect. It is also evident that the assumption of a *unitas multiplex* requires an observer and creates a paradox for him that can be localized precisely. The question is then whether this insight can be used to rethink the entire theory design anew.

In the following discussion the concept of differentiation will be restricted to *system differentiation.** By the latter I do not mean the

TRANSLATOR'S NOTE: Luhmann uses the word "differentiation" in three different connnotations. He talks about "differentiation" *[Differenzierung* of *Systemdifferenzierung]* simpliciter. This refers to differentiation in general. But he also uses the terms *"Ausdifferenzierung"* and *"Innendifferenzierung."* I have translated these terms as "differentiation" when any further explanation of them was unnecessary and the sense of the translation was not distorted in any way. This could be done because, although the original German terms are different, they really in effect refer to the same process viewed from two different perspectives. *"Ausdifferenzierung"* refers to the process by which a function system (law, religion, politics, education, etc.) separates itself from other function systems through the development of its own (binary) code and programs for the use of this code. *"Innendifferenzierung"* is this same process but viewed from the perspective of the entire system of society. So *"Ausdifferenzierung"* and *"Innendifferenzierung"* are the same

variety of persons or tastes, the multiplicity and distinctiveness of technical processes, or role differentiations. I do not even mean structural differentiation as such. All of this will come under consideration at the appropriate time, but only as a dependent variable, i.e., only to the extent that it depends on the kind and extent of system differentiation. This method enjoys the advantage of restriction, enriching, and revaluing the concept of differentiation with the findings of systems research. It presupposes that the evolution of system differentiation is of decisive importance for the constitution of complexity and for everything that depends on it (see also Luhmann 1980a:9ff, 1982).

The most important theoretical innovations in systems analysis have an implicit connection with the whole/parts paradox. They do not dismiss the paradox but reinterpret it in a way that is more favorable to research and permits more complexity to accrue than the does model of a whole comprised of its parts. Summarized briefly,[6] four viewpoints can be distinguished:

(1) The *unity* of the whole, as the main theoretical issue, is replaced by the *difference* between system and environment. For all observation (including self-observation and scientific analysis), the distinction between system and environment is taken as basic; statements about systems have meaning only when systems distinguish themselves from their environment and attempt to reproduce themselves under the condition of the exclusion of their environment.

(2) Self-reference must be the starting point in the analysis of systems that produce themselves under these conditions. Among other things this means that systems can steer themselves within their own boundaries according to the difference between system and environment. Self-referential systems *are* not only something different from their environment. The performance of their own operations not only differentiates them in the actual carrying out of these operations, but the difference between system and environment can also, *as a premise*, form the basis of the *selection of operations* so that the system itself determines its relation to the environment, i.e., regulates and improves itself. In this sense the system enjoys not only factual (autopoietic) but also regulative autonomy.

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process: *"Ausdifferenzierung"* for the separate function systems and *"Innendifferenzierung"* for society as a whole.

Corresponding to this is the distinction between external and internal boundaries. The external boundary refers to the difference between society as a whole and its environment (whatever is not social). Internal boundaries occur within society as the difference between function systems.—JOHN BEDNARZ

(3) Correspondingly, every systems-theoretical statement presupposes the *choice of a system reference.* But this does not mean that something in the world becomes an object of interest (like apples can be a focus of interest rather than potatoes). The choice of a system reference only determines the system from whose point of view everything else is environment. Thus, the choice of a system reference only determines a boundary line that reflects or transforms all designations: determines the distinction by which the world observes itself (Günther 1976:249–328; Brown 1972:105). So the choice of a system reference excludes no objects, only other distinctions, as the presupposition of determinability.[7] The paradox of the *unitas multiplex* is reinterpreted to mean that all determination presupposes a previous distinction and cannot be derived from a previous unity—either emanatively or deductively. In this way, the unregulatable choice of a system reference becomes the application of a form of paradox elimination. With it, the world is transformed from an implex (see Valéry 1960:195–275) to a complex one.

(4) As the difference between system and environment, every system reference is arranged *asymmetrically.* It is impossible for it to be symmetrical and reversible because this is the way it distinguishes itself from system-to-system relations. The environment is not a system for it, nor even an encompassing whole. It is the open complexity of everything else that results from distinguishing the system and that can be viewed only from the latter. Only through a bifurcation in its environment can a subsystem realize that it belongs to another encompassing system and coordinate its own system reference to it. Then it has to distinguish the internal environment of the encompassing system—in our case, society—from its external environment, e.g., as politics are distinguished from, say, iron and blood. Despite all of the possibilities for gradated differentiations, the environment remains an open complexity. It contains not only countless other possibilities but also their overlapping environments. In addition, their endless iteration is a quasi-endless internal multiplication. Therefore, the only point of departure for an observation and for the reduction of complexity is the system of its own system reference.

These basic points also apply to the formation of systems within systems, i.e., to (internal) system differentiation.

The operation of fixing a system reference is repeatable and forms the basis of connections. Although constantly new and different system references cannot be chosen, a choice can be held constant and further system references can be determined within a presupposed distinction between system and environment. This can occur when,

within the environment of a system, systems are constituted that refer to environments to which the initial system belongs. Or it can occur when a system is identified within the initial system/environment distinction and is used as the unity of a system/environment difference within the system (like a world that determines itself through an internal difference between system and environment). This last case is that of system differentiation.

Accordingly, system differentiation is nothing more than the reapplication of system formation to itself, as the repetition of system formation within itself. In this way system formation means the establishment, at any time, of a difference between system and environment. The formation of subsystems reconstructs the whole system within systems—in part as subsystem and in part as the internal environment of the system, seen from the subsystem. Thus, every subsystem of society, together with its internal social environment, is the whole society. And, together with its (socially internal and socially external) environment it is also the world, viewed and treated from a differentiated perspective.

This explains why for all differentiation the reference to the whole is retained and why not only more things *(res)* develop but also why the *unity* of the whole becomes more complex. It is precisely through differentiation that the *unitas multiplex* results—whether as the world or as a differentiated system (but not one without the other). In this sense, complexity does not merely mean that a multitude of things coexist and entertain certain relations among themselves. The multiplication refers to system/environment differences. Above all, this means that the ability to observe grows correspondingly. The unity of every subsystem/environment difference is, at any time, the whole system. But the environment of every subsystem/environment difference always contains other subsystems with corresponding environments—as in the case of other tribes in the environment of the tribes of tribal societies, or the peasantry in the environment of the nobility, or the economy, science, and the education system with their system-specific, particular environments in the environment of the political system of modern society. Therefore, in an exploration of their specific environments, subsystems encounter themselves as determinate parts of the environments of the other subsystems of their own environment. They experience themselves not only in the operations of observing and acting but also as observed, acted on. And this only increases as the system differentiation increases. The system is, so to say, forced into reflection. But in this case reflection occurs only on the level of subsystems because only subsystems are observed and

acted on in the environment of other subsystems. The unity of the entire society as the unity of the totality of all system-environment differences within the system slips from view. Its reflection becomes more difficult with an increasing complexity of system differentiation. And its presentation becomes theoretical, i.e., contingent and disputable. Society itself can be brought to reflection only through its environment. And perhaps, at present, we are experiencing the beginnings of this process.

In any event, the plurality of subsystem perspectives that reconstruct the unity of society through an internal system/environment difference does not question the unity of the system of society itself. This would be the case if the reconstruction stopped at the boundaries of the social system and left its environment unconsidered.[8] But this is by no means the case. However inadequate their theory, all subsystems can distinguish between men and animals or between chemical and communicative processes. Society's descriptions of itself from the viewpoint of its respective subsystems may diverge, but this does not affect its unity, which resides in the distinction of its own system from its environment.

Not only the preconditions of society's descriptions of itself but also the preconditions of its evolution are connected with system differentiation. On the one hand, system differentiation is employed in evolution as the form of stabilization of evolutionary achievements. It orders and preserves the complexity that has been attained. On the other hand, it is easy to achieve almost by chance. It *presupposes no total plan*—unlike the one that the theory of the whole and its parts, with its ideas about *divisio* and *partitio*, had suggested. It can begin almost anywhere in the system and then reinforce the deviation that occurs. The deviation itself then becomes a factor that, as positive feedback, develops the resulting difference and makes it irreversible (see Maruyama 1963:233–41). Among many settlements a prominent, preferred location develops which provides the mutual advantages of centralization in such a way that a new difference between city and country results. Only then do the remaining settlements become "villages" in distinction to the city and adapt to the idea that a city presents them with the possibility of a different life than the one led in the village and that, as the environment of the village, the city influences its possibilities.

To the extent that social differentiation occurs the mere coming into being of subsystems sets in motion a self-perpetuating development. Every new formation of and every change in a subsystem is, at the same time, a change in the environment of other subsystems.

Whatever happens happens doubly or multiply, viz., in a system and in the environment of other systems. Therefore every structurally relevant event triggers different causal processes depending on whether the events that are connected with it are organized as the reaction of a system to itself or as the reaction of many different systems to a change in their environment. Thus a rapid decrease in the need for labor power in the economy, for cyclical or technological reasons, may signify an increase in rationality or profitability. But as an environmental change for other systems it may have quite different effects on, e.g., the political system, the affected families, the education system, or the new research theme of science. In this sense, differentiation multiplies the causal effect of individual events and creates a self-effecting causal dynamics that cannot be conceived according to the traditional model of a causal law, whether this is a necessary or a statistical-probable model. At best one may raise the question of whether and how in such turbulent and explosive causal relations the structures of the entire system of society still hold and continue, and finally whether society exists only as a collection of self-effecting subsystems in which basic functional domains can break down at any time.

If the entire society is viewed as a differentiated system then what must be explained are the special conditions under which subsystems within the social system not only come into being and die out, but also restructure their environment and, with this, create the conditions under which the new and more rigorously differentiated system can continue.

The exceptional system—e.g., a particularly wealthy family, a group of religious fanatics—may and will normally remain without extensive consequences and thereby constitute an evolutionary variation that is neither selected nor stabilized, i.e., a variation that has no structural effects that change society and that is quickly eliminated. If this is the normal case, what makes exceptions possible? And what explains the fact that systems in the system's environment adjust themselves to the existence of the differentiated unity and thereby transform themselves?[9] In somewhat different words we can ask: under what conditions does society accept a difference as the reconstruction of its own unity? A theoretically rigorous, i.e., deductive answer to this question is not in sight. I suspect that a complexity has to be found to compensate for the increase of complexity that accompanies increased differentiation.

Increasing differentiation changes the conditions under which society as the unity of the internal system/environment differences can be

realized. Subsystems continually effect society with their own operations and refer to an environment that, likewise, is society for them. Thus, the difference cannot be expanded to an absolute indifference. "Some relations of derivation," to follow Durkheim (1973:xx), result from the fact that this is a matter of social differentiation. Once again we encounter the paradox of the differentiated unity, but now with the question: how can the unity reappear within the difference? This requires relatively simple forms that abstract from details and reduce the complexity accompanying differentiation.

Until recently, i.e., until the sociology of a Durkheim or a Parsons and the discussion about "civil religion" or basic values, a normative answer to this question was sought—as if participation in society led to the assumption of a minimum of obligation. At the same time the argument that increasing differentiation leads to an increasing generalization of these "shared symbolic patterns," norms, and values gained acceptance. As a consequence their directive value decreases when the complexity of society increases. This argument is not necessarily false, only insufficient. The bourgeois theory of the eighteenth century had already argued that the idea of an integration of society through natural law, social contract, or morality extends the boundaries of a rational politics much too far, and that the rational treatment of property together with the consequences of a sharp difference between the rich and the poor entails much sharper limitations. Quite rightfully one might raise the question today whether the idea of a normative integration of society—an idea that is unable to find general recognition, no less realization—is strong and determinate enough to formulate the real conditions that a highly differentiated society puts upon all social communication.

Besides, we know that the communication of a norm permits both the negation of and deviation from the norm—so that this form of integration constantly undermines itself. In this way the call for the rejection of the society in which we live is placative. It is pronounced with an appeal to the values and norms of humanity that is the same as the appeal to affirmation and conformity. Neither is capable of performing a "critique" in the sense of a diagnosis. Neither produces prognostically or strategically useful distinctions that would even to a small degree approximate the complexity of the real relations. The more aggressively progressive and conservative ideologies turn against each other, the more obvious the insufficiency of the common basis of their opposition becomes for the observer: the assumption that normative claims can be addressed to the unity of society.

I will therefore replace the assumption of a normative integration

of society with the argument that the unity of society is expressed by the *forms of system differentiation.* Society by no means exists as a unity in the weak form of counterfactual expectations that are maintained even when they are disappointed. It exists as the form that solves the paradox and complexity of a *unitas multiplex.* Society exists as the form through which subsystems can recognize and handle their difference from the socially internal environment as society. The (evolutionary) selection of such a form has consequences that reach all the way into the details of structures and processes. What kinds of morality, values, law, and normative culture are possible depends to a great extent upon the respective form of differentiation. The argument for a normative integration of society therefore does not necessarily lead to the very structure that actually determines a type of society. It adheres only to a dependent variable.

Only a few forms of differentiation have revealed and proved themselves so far in evolution. So, in this case, there is also a "law of limited possibilities." Four of these different possibilities have attained prominence:

(1) *Segmentary differentiation,* understood as the equality of every social subsystem with every other subsystem in its internal social environment.

(2) *Differentiation,* understood as center and periphery. In this instance *one* case of inequality is permitted—the central location, the city, the palace, the temple, the fortress—that orders all other subsystems in relation to one another as equal in relation to the other.

(3) *Stratificatory differentiation,* understood as the inequality of rank of all subsystems. The unity of society appears in this case as inequality, i.e., as rank. This requires at least a threefold hierarchy to document the universality of the principle and to avoid the reversibility of precedence within any relation of two members of this order. Equality is possible only within one level. But because of this, stratification organizes equality as the principle of the formation of subsystems in distinction to their social environment.

(4) *Functional differentiation,* likewise understood as inequality, but rejecting the unity of society as a relation of rank. Society itself is realized now only through the nonarbitrariness of the selection of functions that are important for the formation of subsystems and in the institution of the primacy of a single function for any specific subsystem. The relation among the subsystems are given over to evolution.

In all four cases the social typology of internal system-environment

relations is defined by the typology of *relations among subsystems.* System-environment relations are too open, too indeterminate, too dependent on the reduction of a gradient of complexity to be able to have model effect. The form in which unity appears as differentiation can be attained by means of a further reduction. In this case, other systems in the environment of the subsystem take the place of its environment.[10] This is a requirement of the acquisition of form. System and environment can never be "equal." They can never enter into a relationship of rank and can never specialize in different functions. All of these form-concepts require a comparison of different systems. Every subsystem is forced to determine its relation to the internal social environment according to its relation to the other subsystems in the environment—a highly successful simplification where, e.g., the increasingly important problem of the interdependencies among these subsystems is overlooked. A self-differentiating society, however, depends on such a simplification and, with it, loses control over itself.[11]

The different forms of system differentiation are not necessarily mutually exclusive.[12] Whether and to what extent they all can be combined and actualized depends on the complexity of the social system, which in turn depends on the primary form of differentiation and the evolutionary exhaustion of its possibilities. Nevertheless, a form of differentiation can characterize a type of social system: it can do so precisely when the primary division of society—the primary level of the formation of subsystems—clearly follows one of these forms of differentiation and excludes others on this level (which, as I said earlier, does not have to mean that they cannot occur in society). There is no logical or empirical compulsion for every social system to decide for one and only one of these possibilities of primary differentiation. Even the empirical plurality of phenomena (viz., in tribal, late archaic, peasant societies and then particularly in late medieval Europe) speaks against such an argument. But clear advantages are connected with the univocality of such a structural decision because the problems that would result from the other possibilities of order (e.g., the impossibility of binding decisions concerning disputes in purely segmentary societies) can be shelved. I will therefore begin from the position that society's production of clearly distinguishable social formations is connected with an acceptance of the primacy of a determinate form of differentiation (in which case the acceptance is to be explained evolutionarily).

This leads us to a further consideration. If decisions of this type about primacy are made, history can be observed as the transforma-

tion of one social type into another. A general progression from segmentary to stratified to functionally differentiated systems is recognizable in which an ordering on the model of center and periphery—especially in the formation of cities—enables the transition to advanced civilization and, consequently, stratification, and then shapes the reality of these stratified societies into the modern period.[13] The sequence is constructed like a Guttman scale (it can occur only in this way). And the actualization of any type of system differentiation presupposes the actualization of all of those that came before it. With almost demographic inevitability, segmentary differentiation is possible only on the basis of settlement or familial relationships. Levels develop only when existing segments (families) distinguish themselves as unequal to others. Functional differentiation develops only when functional systems separate themselves from identification with determinate levels (castes, classes: e.g., priests, soldiers, merchants, peasants, and servants) and establish themselves autonomously as a kind of counterdifferentiation vis-à-vis all relationships of rank. Instead, they bind themselves to the primacy of their own function. The one order outgrows the other. And there are precisely specifiable, already prepared breaks that make the transition possible. If the old order did not have unsolvable problems, new orders would not arise. This transition, too, is possible only because of a law of restricted possibilities. If an unmanageable form of inequality arises, it is either eliminated or it becomes the starting point of a differentiation of its own.

Therefore, in such a development the representation of the unity of society within the system is shifted from equality to inequality. The difference that achieves the unity of the system as system differentiation is, so to speak, more different. It becomes less probable, less intuitive—it increasingly depends on a supporting semantics, i.e., on a theory of the system within the system. Equality provides more information more quickly about the society than does inequality, for one needs only to consider one's own house in order to know how things are elsewhere. And then everything not corresponding to this can be rejected simply as hostile. But if the internal difference follows a principle of inequality this possibility has to be rejected and one has to explore the environment before one can know how to handle it.

Since the system's range of combinations can be increased by means of inequality, the structure is opened for greater complexity, and evolution gradually fills out this range of possibilities. A new beginning under another form of differentiation may appear as the reversal of differentiation *(Entdifferenzierung)*—as the reduction of old, unnec-

essary complexities. The second half of the eighteenth century is full of ideas about simplification, especially in law, the economy, and politics. The physiocrats are a good example of this. But the new order is superior precisely because it relaxes structural restrictions in order to acquire greater complexity. This cannot happen in any way whatever; for example, it cannot happen through a return to an origin or through making the system chaotic. A new form of differentiation must already stand ready, must have proved itself, if the change is to succeed. The transition to functional differentiation within the most important functional domains had already been in preparation for centuries, if not completed, when the second half of the eighteenth century recognized and rejected the traditional class system as dead wood.

The reversal of the internal differentiation (and with it of the operative unity) of the system from equality to inequality is connected with the rejection of classes. It risks greater uncertainties on the basis of already managed, standardized uncertainties. Precisely because of this, neither a planning of the succeeding state nor of the transition is possible. The orientation remains historical. Its certainty is that things are no longer as they were before. The opposing differentiations say almost nothing about the form of differentiation that now occurs. This is true for the distinction of *oikos* and *polis* in the structural differentiation of the Greek state. It is even true for the opposing differentiations of the eighteenth century: nature/civilization, morality/legality, private/public, or economy/society. No transformation of the social system's form of differentiation had been capable of observing itself because this required the replacement of the basic distinctions.

One of the most important hypotheses that can be reached with the help of the distinction between different forms of differentiation concerns the relation between external differentiation *(Ausdifferenzierung)* and the internal differentiation of society. An "in itself" undifferentiated unity cannot distinguish itself from its environment because this operation would already introduce a system differentiation. Only an observer with a figure/ground pattern can perceive such a system. But internal differentiation also creates the possibility of disagreement with the environment for the system itself. The relation of internally differentiated situations, operations, roles, and inevitably subsystems no longer corresponds to the environment—even if an attempt had been made to construct such a correspondence, e.g., to present the struggles of men as the struggle of the gods.

The form of internal differentiation and what is at the same time

triggered by it differentiates society from its external environment. And the evolutionary change of the forms of differentiation reinforces this process of separation. To the extent that internal differentiation switches from equality to inequality, the burdens of control and consequences increase and society distinguishes itself ever more sharply from its environment. Segmentary societies live in an anthropomorphically understood environment that exists without a clear delimitation of its own domains. Stratified societies celebrate their particularity vis-à-vis the domain of the animals or savages as developmental progress. They recognize their distinctiveness. But they still base this distinction upon a cosmologically/religiously founded continuum of meaning. They find the meaning of the world in their perfection and from this position they can judge, exploit, and proselytize their environment without being plagued by doubt. Only for a functionally differentiated society does this cosmological continuum of meaning break down. Religion is reduced to one social function among others and condemned to a kind of faithless belief. Only then can society understand itself in a theoretically reformed sense as the self-referentially closed communication system that is still only "ecologically" embedded in its environment and that operates its own autopoiesis in a necessarily autonomous way. The maximum level of internal inequality and autonomy of the subsystems, at the same time, conditions a maximum of difference between society and the environment. But in terms of external differentiation this does not mean a maximum of independence. Instead it means an increase of dependence and independence together. More than ever before the relations between society and its environment are in need of order. And through this they become the object of social reflection.

The result of all of this is a framework for conceptual premises and empirical hypotheses. As can readily be seen, empirical verification or a correction resulting from research would require an immense amount of work. In the following I can undertake only a few steps in this direction. I will, therefore, distinguish segmentary, stratified, and functionally differentiated societies as the empirical types of social evolution and attempt to discover how far the attainable state of knowledge is able to support the argument of the decisive significance of system differentiation. This procedure involves a very selective treatment of the existing literature, and in this regard exposes itself to criticism.

These system-theoretical analyses by themselves do not explain how the evolution of the forms of social differentiation takes place. It is

not enough to conceive of evolution as a goal-directed development (progress) or as the mere sequence of types or phases of social development. At present the concept of evolution is used in the same sense as the one conferred on it by Darwin. Just like systems theory, evolution theory is a theory that begins from *difference* and not from *unity*. Evolution results from the differentiation between variation, selection, and restabilization. According to this theory, differentiation means the dependence of transitions upon chance. In other words, variation is not directed toward selection, and selection is not directed toward restabilization. The connection is produced neither by planning nor by means of a coordination performed by an encompassing system—i.e., not by an "invisible hand." "Chance" means the "absence of system coordination." It also means that the evolution that begins from any system-state is improbable. What evolution theory ultimately tries to explain is the becoming probable of what is improbable.

In biology as well as sociology such a task means that evolution theory and systems theory have to work together.[14] The improbable result of evolution is nothing more than the external differentiation *(Ausdifferenzierung)* of systems. And the same is true for the condition of the possibility of evolution, i.e., for the condition of the possibility of differentiating variation, selection, and restabilization. Accordingly, systems theory has to explain how and under what conditions territorial are transformed into larger units (lineages, clans, villages), and these again into still larger ones (tribes). In this case the social bond, dependence, and "controllability" decrease with the increasing size of the unit. Inclusive hierarchies are, as it were, natural forms of system formation. They are cybernetically favorable forms of the reduction of complexity and are also widespread in other domains (Bronson 1995:7–25; Simon 1969; Mesarovic 1969; White, Wilson, and Wilson 1969; Pattee 1973; Pollatschek 1977:147–51). Therefore it is not surprising that human societies developed first in this direction.

The transition from segmentary to stratificatory differentiation requires a *reversal of this principle into its opposite.* Symmetry must produce asymmetry. Inclusive must produce exclusive hierarchies, i.e., orders of rank among the mutually exclusive subsystems (figure 12.1 produces figure 12.2). How is this possible, and how can evolution theory explain such an upheaval (if it is already an evident fact that it was possible)?

First to be noted is that a latent possibility for asymmetry, whether of performances or levels, is present but not used in segmentary societies. Indeed, it is resisted and continually releveled.[18] The possi-

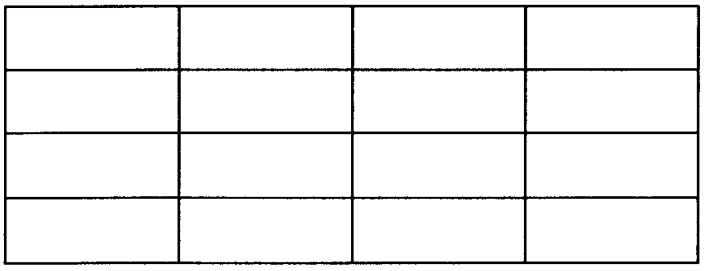

**Figure 12.1**

bility of asymmetry is reproduced together with its inhibition. It signifies that performances cannot be resisted indefinitely and that they therefore lead to a statuslike indebtedness. Surpluses that are collected in individual households due to favorable circumstances have to be spent or even squandered. And within the semantics of these societies, giving and helping are not stylized as "voluntary," as kindnesses that demand thanks even if they were intended and received in this manner, but as social duties. They cannot be presented as instruments of indebtedness, but only as expressions of social solidarity (see the pertinent remarks of Service 1966:16f). Every tendency toward asymmetrization is treated and suppressed as a deviation from the valid order and the typology of correct behavior. Precisely because segmentation, reciprocity, and inclusive hierarchies are already evolutionary achievements every effort is made to preserve them. The system does not look for development; instead it stabilizes its form of differentiation.

The evolution of another social formation based on asymmetry is therefore a mistake to begin with. Whatever is normally improbable and impeded may, nevertheless, occur in exceptional cases. Latently present but inhibited possibilities are disinhibited and set free. And then, suddenly, it may become clear that possibilities for order reside

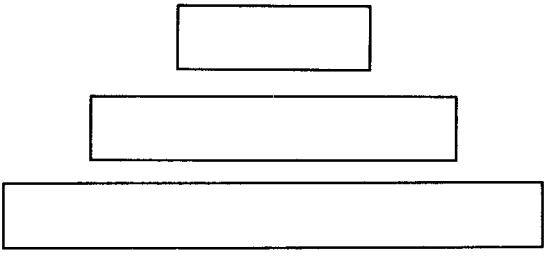

**Figure 12.2**

even in structural asymmetries, e.g., in the structure of a stratified system. An upper stratum differentiates itself through the centralization of resources and endogamy. It can then employ performances that were impossible in the previous order. The old order of segmentation, reciprocity, and even the morality of generosity and obliging beneficence is retained within the stratum.[19] The stratum does not concern persons but households, i.e., segments. The old order is incorporated, but no longer serves as the structural law of society. The unity of society is now expressed by a difference of rank and/or a center/periphery difference. Both of these mutually support each other. The unity of society can then be represented within the society—either by a position of supreme authority, the upper stratum, or the center (city) (see Spahn 1980:529–64).

For this type of evolution theory the investigation of "decisive causes" is meaningless, even if it occurs, successfully or unsuccessfully, in the literature concerned with the "origin of the state" or the origin of "class societies" (see also Flannery 1972:399–426). It is also not enough to introduce additional causes to construct more complex models or to relativize their validity. What is needed is a theory that can explain under what specific conditions accidents acquire the quality of structure-changing causes.

The case of the infrequent, occasional transition from segmentary to stratified societies discussed above suggests the following contributions:

(1) Change must begin with *distinctive structures.* It cannot simply transform something indeterminate into something determinate or something diffuse into something specific. In the present case, the starting point is the emphasis of reciprocity and hierarchical inclusion.

(2) In the transition, change must not present itself as a "better possibility." An evolutionary transition cannot depend on an insight into the superiority of new solutions to problems. It rests on the possibility of *putting up with mistakes and deviations.*

(3) The change must comprehend the already present possibilities. It must be able to *disinhibit what is inhibited.* It cannot create something new out of nothing. New possibilities are discovered and exploited only secondarily in the already practiced structures. Only selection can make stabilization possible through the enrichment of meaning, semantic decoration, and the assumption of new functions.

(4) Separate developments triggered by chance lead to a *bifurcation:* in addition to the old social orders new types develop. The occurrence of the bifurcation is insignificant and hardly noticeable

and can be left to chance. A bifurcation can establish a starting point for a differential history, which becomes irreversible.

(5) The explanation for this lies in possibilities for the *reinforcement of deviation* (see Maruyama 1963:233–41). In other words, evolution presupposes a kind of deviation that can become a codeterminant of its own continuation and of an increase in bifurcation.

If these considerations are accepted, evolution is neither a structural determination (law) nor a purely chance accumulation of accidents. Instead it selects systems that are structured so that they can change themselves in a way conditioned by chance. In this connection, a cooperation between order and disorder, information and noise, and closure and pertubation has already been indicated (see van Foerster 1960:31–48; Atlan 1979:39 ff; Wilden 1980:395 ff; Varela 1983:147–64). Without chance there is no evolution. But a second condition is also necessary: the system's structure must be in a position to derandomize chance and exploit it for morphogenesis.

The same theoretical concept can be used to explain the transition from the traditional stratified society to the modern one. Of course, we have to assume that modern society cannot be characterized by individual traits such as the capitalistic mode of production or the form of social rationality. Instead it distinguishes itself from all previous societies through the form of its differentiation. Its distinguishing mark is the form that triggers the paradox of differentiated unity and nevertheless makes it possible to act socially within society by means of subsystems. Modern society is characterized by differentiating its primary subsystems according to specific functions and by attributing primacy to these functions (e.g., to politics or to science, to law or to health care, to the economy or to art) vis-à-vis all other functions, even if society is not able to bring these functions or the functional systems into a universal, transitive order of rank. Every subsystem is the society for itself because it fulfills a specific function under the condition of immense sensitivity to changes in the internal social environment. To the extent that functional systems (e.g., as market or as democracy) produce immense sensitivity to their environment they can persuade themselves that, as this difference between system and environment, they are society itself and bring society to reflection along their boundaries. Nevertheless this remains only one reconstruction of society among others. No subsystem can take the place of another because no subsystem can be a functional equivalent for any other. It is impossible to order all of them together from a central position or a position of supreme authority. There is no

other guarantee of the unity of society than the combination of functional closure and sensible openness to the environment on the level of the individual functional systems. This is the order that reproduces the ever-increasing complexity and lability of modern society.

Viewed retrospectively, in the high Middle Ages the beginnings of the transformation are already discernible: the removal of ecclesiastical organization from the domestic economy of the aristocracy through celibacy, the beginning differentiation of territorial dominions, the rapidly increasing money economy, and the economic-legal-political independence of cities. But within the context of a primarily religiomoral cosmology this increasing structural complexity can only be experienced as an explosion of sin (see Delumeau 1983). In this way religion itself comes under the pressure to adapt. Theology reacts in part through the internalization of the demands of morality and through the reinforcement of controls, i.e., through the institutionalization of penance (Hahn 1982:408–34), and in part through greater abstraction (i.e., nominalism, contingency-philosophy, and a theology of the will—Duns Scotus, Ockham). In the domain of popular piety, belief in miracles increases and with it belief in the cult of the saints, the Blessed Virgin, relics, exorcisms, and other theologically semilegitimate practices (see Spangenberg 1984). Obviously the need for relief from sins must be met, particularly when the possibility that sinfulness is no longer an article of faith has to be suppressed or self-certain religious minorities split off. The guiding semantics becomes ambivalent. The devil as the defense attorney in the litigation for the just punishment of sins vies with the Blessed Virgin for souls. A lack of merit can be compensated for with piety or through spontaneous prayer in times of peril. The need grows for the explanation of exceptions in terms of miracles. And the byways to eternal life become the highways. Salvation becomes purchasable. The system oscillates between justice and grace. The overburdening and "involutive" (in the sense of Geertz 1963) development of religion is noticeable in countless places. Only the Reformation introduces a clear counterdifferentiation that is directed specifically against religious commercialization that finally ends in religion's retreat to its specific function and in a release of its social environment for "secularization." (For the connection between functional differentiation and secularization see Luhmann 1977:225ff.) It is not exalted moral scrupulousness and anxiety over salvation, as Weber thought, that clear the way for a new economic rationality. Instead it is the clearer differentiation of religious and economic interests that relieves religion from thinking about the economy. In comparison with the Middle Ages, when almost

everything was for sale, modern society is distinguished by a more severely restricted possibility of spending money. And this is the only reason that internal economic "constraints" can regulate the economy.[20]

In a parallel fashion politics was also gradually withdrawn from religious control. Before the sixteenth and seventeenth centuries religion had to cope with an almost necessary amorality; the justification of the murder of John Huss by the Council of Constance is an example. In this respect Machiavelli introduces nothing new (see Mattei 1969). The only innovation is that moral indignation regarding Machiavelli makes it possible to reduce the necessary offenses against law and religion to a privilege of political authority and to justify them as *jus eminens* instead of theologically.[21]

In summary it can be said that religiomoral cosmology tries to avoid the perception of new kinds of structural complexity or tries to direct it back into the system. In this case theoretical radicalizations, religious radicalizations, and semantic ambivalences result. But at the same time these also clarify points at which the autonomy requirements of the functional systems diverge and introduce a bifurcation. For a long time the theory of the "just price" had merely been a moral garb for the market price (see de Roover 1958:418–34; Grice-Hutchinson 1978). It was abandoned as soon as it was discovered that (and how) price is determined within the economy. Early natural science was aware of its points of interference with the religiously clad cosmology; and depending on temperament—i.e., depending on chance—it chose avoidance, appeasement, or conflict. And this was not just a history of famous names such as Copernicus and Galileo but a history of the daily practice of theory formation, metaphors, and the choice of words and concepts.[22] In particular arguments against a theologically oriented cosmology were accompanied by an awareness that this tentative model of explanation all too often was directed at theological needs.[23]

But these phenomena of bending and breaking are revealed not only in the religiomoral cosmology. The presentation of the social corpus and its stratification bears the same pressure.[24] The late Middle Ages invented the theory of the three estates in order to hold onto something that no longer corresponded to reality.[25] In the theory of the social corpus or of the *communitas perfecta* the prince was often described as the soul of the body (with the peculiarity that this soul could be killed and that precautions for the sake of the state had to be taken against it). The problem is expressed more clearly if the prince is related to the social corpus as a physician whose task it is to

promote the health of the latter (see Archambault 1967:21–53, esp. 38 ff).

These few remarks have to suffice to indicate that even in the transition from stratification to functional differentiation involution and evolution intertwine (for a further example see Luhmann 1980b:72–161). The dynamics of already differentiated functional domains, especially of the money economy of the cities and territorial political dominion, made their presence felt. Distant trade increased. The complicated dual system of currency (foreign currency/domestic currency) of the Middle Ages encountered difficulties and demanded new financial solutions. The political bureaucracy separated itself from the household of the prince and recruited less and less with regard to class. Nevertheless, well into the seventeenth century the problems of complexity resulting from all of this were still directed back into the old forms. Increasing uncertainty and awareness of failure were the consequences.[26] But this is exactly where the signals for the accompanying new formation of modern consciousness are to be found: for an anthropology that develops out of the negation of negativity (see Luhmann 1980a:162–234) and for a cosmology that grounds the hopes of stability and change in transitoriness and technical controllability of the elements (while for the former way of thinking, control of the elements was a privilege of God or the gods). These new ideas about order were not initially formulated for a functionally differentiated society. But they were clearly "preadaptive advances" insofar as the requirements of the negation of the negative and of the exploitation of the ephemeral and transient already implicitly referred to functional systems.

Even in the case of this transition, it is a question of an evolution that is blind to the future. Here too bifurcations and deviation reinforcements occur at prominent points of the existing social order. And transformation is propelled by concerns about their prevention. The old order: the continuum of rationality combining being, thought, and action; the unity of a religiously grounded morality; and the unity of the hierarchical order of social positions becomes of increasing, almost desperate concern. But now all of this promotes the *dissolution* of the old order because the relationships are much more complex and flexible than in the case of the origin of urban and stratified societies. The history of ideas and the semantic presentation of the world and society also assumed a greater role, which the invention of printing further reinforced. In the eighteenth century theories of reflection within the individual functional systems assumed the task of defining modern society. Epistemology did this for the sciences and

their theoretical programs, while the theory of the division of labor and the formation of capital, the market, and finally state intervention did so for the economy. And the theory of the state and constitution, leading all the way to the crisis theories of the welfare state, did so for politics. The unity of the social system was still brought to reflection only at the boundaries of the functional systems, and thereby appeared unavoidably as crisis.

The paradox of a differentiated unity receded behind the impenetrable veil of complexity. The functional systems satisfied themselves with surveying the unity of society as the unintelligible complexity of their environmental relations and adapting themselves structurally to a turbulent environment. The reduction rather than the unity of complexity became their problem. The most important functional systems are codified under this premise and in this way attain a performative capacity that is historically without parallel. Admittedly, religion was to a certain extent left behind by all of this—as if to help to remind us that complexity is not the only formulation of paradox and that the reduction of complexity itself can, once again, become a problem (see Luhmann 1985a).

## Notes

1. That the question immediately arises of an adequate method and its relation theory can be detected from the disputes over method at the beginnings of sociology. But this concerns only the internal reconstruction of sociology—a secondary problem vis-à-vis the principal question of the unity of the object.

2. The origin of this concept seems to be the conciliar movement of the fifteenth century directed against the Pope's claim to be sole representative. Thus it arose out of a conflict over the Church's legitimate representation within the Church.

3. See the somewhat larger scale reconstruction of the "texte de la tradition liberale," in Dumouchel (1979:211ff). The task of such a test is to intermix knowledge with what is unknowable and irreducible to it. For Dumouchel, of course, the paradox does not lie in the differentiated unity but in a conflict à la René Girard: in the conflict with the model of one's own needs that one imitates.

4. As in The Structure of Social Action (Parsons 1937). This basic decision has never been revised despite all the further development of action theory in terms of systems theory in the later work of Parsons. Parsons had received the stimulus for this from his reading of Max Weber. This concealed for Parsons, at the same time, the full dimension of differentiation. Parsons viewed his work within the continuity of classical theory and as the further development of its internal unity, while in reality it refers to an object formulated entirely differently.

5. In The Structure of Social Action (Parsons 1937), actor, end, situation, and normative orientation are still named relatively traditionally (pp. 44ff). They are later developed into the functional schema of adaption, goal attainment, and latent pattern maintenance that Parsons holds as his genuine theoretical discovery.

6. This is amplified in Luhmann (1984), especially pp. 33ff.

7. This determinability is usually simply presupposed as a property of the world. As when, e.g., phenomenology maintains that "indeterminacy means necessarily a determinacy of a rigidly prescribed style" (Husserl 1950:100). With this, at the same time, the possibility is ignored that the world as a differentiated unity could itself be paradoxical and that every operation of determination could be blocked by this.

8. Pierre Livet supports his objection to this interpretation of a self-referentially closed social system: this would lead to the theory of a system without unity (unicite).

9. Perhaps the first classical example of such a process is found in the preface to the second edition of Emile Durkheim, de la division du travail social. Before the rise of associations there are only families. Through the development of associations the families did not remain what they had been previously. They adapted themselves to the difference between family and association. Oikos and polis were reciprocally determined by this difference. See also a theoretically abstract argument that does not consider the system/environment problem. Parsons (1971:100ff). Differentiation is described here as the "basic unifier of evolutionary and comparative aspects. Since these differences are conceived to have emerged by a process of change in a system which I interpret to mean in some dense within the framework of the system, the presumption is that the differentiated parts are comparable in the sense of being systematically related to each other, both because they still belong within the same system and, through their interrelations, to their antecedents." As is well known, Durkheim had also considered differentiation to be the basis of "certain relations of antecedence" of what is differentiated (Durkheim 1973:xx) and thereby of solidarity too. To this interpretation I add the thesis of evolutionary improbability and selection, i.e., I combined these with the previously discussed theory of evolution and investigate the particular conditions of a differentiation that successfully transforms the whole society.

10. As can be seen, the practically simpler solution requires a theoretically more complex formulation.

11. This is just another formulation of the above statement that differentiation cannot succeed as the standard of a plan for the whole.

12. This counts even more when the differentiation between situations, roles, terminologies, etc. is brought into consideration over and beyond the analysis of system differentiation. It then becomes evident that even the simplest segmentary societies can already specify and distinguish situations and roles.

13. Insofar as the designation "stratified society," in keeping with the trend, adopts the upper-class ideas of order. While the lower classes, above all the mass of farmers and peasants, live precisely in a "one-class society" (according to Laslett 1971) and are guided by the difference between centery and periphery.

14. In biological research this has long since been observed and now is formulated as a research program. See, e.g., Verela (1982).

15. See, for an early society not yet ordered primarily according to segmentation, Barth (1975).

16. This is often described. See, e.g., Sahlins (1968:14ff).

17. This concept is found in Southall (1956).

18. This could be described via the concept of "potentialization." The possibilities are kept in the state of mere possibilities and their actualization is prevented. See Barel (1979:185).

19. For the Japanese institution of giri see Shiro (1974). In the European tradition a clearly anti-economic way of thinking can be demonstrated as the norm for the aristocracy, which naturally did not exclude an interest in possession. At the end of the eighteenth century a surprising presence of discussions of monetary matters could still be heard in the salons. It was experienced as the "decline" that already belonged to a different order of social differentiation. See, e.g., de Meilhan (1787:323).

20. The beginning of a corresponding theoretical development in the sixteenth and seventeenth centuries at the same time make clear which "accidental" events—an abundance of precious metals in America, problems of British foreign trade, the spectacular and unexplainable economic success of the Dutch—gave impetus to this. And the theory also showed that it was not a matter of good will, ambition, or qualitatively superior production but of the balance of trade and the laws of economics. See, for this, Appleby (1978).

21. See, for much of this, Spontone (1599:17ff). "Il pefido Nicolo Machiavelli," on the one hand, and "La ragione di Stato e un certo privilegio che lo Scetto concede a i Principi" on the other.

22. E.g., one may speak of the "circulation" of the blood (Harvey) where hitherto the circle as the perfect figure was reserved for the heavens and, besides, does not really correspond to the system of the blood vessels? Here is a provocation indeed!

23. This, of course, did not have to be said. It is self-evident. See, e.g., the (quite shocking at its time) "Discours anatomiques" of Guillaume Lamy (Lamy 1679).

24. See, specifically, from the viewpoint of differentiation of the system of law, Little (1969). See Luhmann (1984).

25. See, explicitly, Heers (1974:11). For more detail on the theory of the estates see Mohl (1978).

26. See, perhaps, Norden (1577) (with a remarkably optimistic undercurrent, e.g., fol. 113: "nothing has come into being or gone out at all, but through the passing of time increases and amends or becomes more complex." Secondary analyses include: Williamson (1935) or Harris (1949).

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