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Why Does Society Describe Itself as Postmodern?

Niklas Luhmann

Ι

The discussion about modern or postmodern society operates on the semantic level. In it, we find many references to itself, many descriptions of descriptions, but hardly any attempt to take realities into account on the operational and structural level of social communications. Were we to care for realities, we would not see any sharp break between a modern and a postmodern society. For centuries we have had a monetary economy, and we still have it. Perhaps there are signs that indicate a new centrality of financial markets, of banks and of portfolio strategies, that marginalize money spent for investment and consumption. We certainly can observe worldwide dissolution of the family economies of the past in agriculture and handicraft production. But it is and remains an economic system differentiated by transactions that use money. We have also had, for centuries now, a state-oriented political system, and we still have it. We face undeniable difficulties in establishing a state everywhere as a local address for political communications, but there is no alternative visible. We have positivistic legal systems,

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unified by constitutions. There are in many countries many doubts whether or not the law will be applied. We find many cases in which the distinction between legally right and legally wrong is disregarded and does not matter at all. But there is no other type of law in view. We do scientific research as before, although now we are more conscious of risks or other unpleasant consequences. And we send, wherever possible, our children to schools, using up the best years of their lives to prepare them for an unknown future. Our whole life depends upon technologies, today more so than ever, and again, we see more problems, but no clear break with the past, no transition from a modern to a postmodern society.

Hence, the first question may be: Why do we indulge in a semantic discussion that does not burden itself with realities?

My answer to this question (there may be others) requires some knowledge about complex self-referential systems. Such systems make and continue to make a difference between the system and its environment. Every single operation that contributes to the self-reproduction of the system—that is, in the case of society, every single communication—reproduces this difference. In this sense, societies are operationally closed systems. They cannot operate outside their own boundaries.

Nevertheless, the system can use its own operations to distinguish itself from its environment. It can communicate about itself (about communication) and/or about its environment. It can distinguish between self-reference and hetero-reference, but this has to be done by an internal operation.

Operational closure is a necessary condition for observations, descriptions, and cognitions, because observing requires making a distinction and indicating one side of the distinction and not the other. The other side, the unmarked side, can be anything that is, for the time being, of no concern. Such distinctions have to be made by the system within the system. For we cannot suppose an environment (or a world) where everything is multiplied by anything, a world where every observable item includes the exclusion of everything else, or a world in which everything has the properties of the absolute spirit in Hegel's sense.

Paying attention to this condition of the capacity of observing, we can see that the system *makes* the *difference* between system and environment and *copies* that difference in the system to be able to

use it as a distinction. This operation of re-inventing the difference as a distinction can be conceived as a re-entry of a form into the form, or the distinction into the distinguished (Spencer Brown 56 f., 69 ff.).

Such a re-entry has remarkable consequences. The form of a re-entry is a paradoxical form, because the re-entering form is the same and is not the same. To describe re-entries we need a distinction, but the distinguished is the same. In mathematical terms it is an equation, and equation means something like "to be confused with" (Spencer Brown 69). For real systems making the difference and observing it by distinguishing self-reference and heteroreference, the re-entry appears as ambivalence. So, psychiatrists say about themselves and their clients: "We can never be quite clear whether we are referring to the world as it is or to the world as we see it" (Ruesch and Bateson 238). There are self-correcting mechanisms available, but these always presuppose a "reality" with an ambiguous status. The question whether it is the world as it is or the world as observed by the system remains for the system itself undecidable. Reality, then, may be an illusion, but the illusion itself is real.

Now, what is true for the environment is also true for the other side of the distinction, i.e., for the observing system itself. The re-entry produces an "unresolvable indeterminacy" (Spencer Brown 57) of the system for itself. The system remains intransparent to itself. It can observe and describe itself, and it can switch from one observation to another and can use many incompatible self-descriptions (Löfgren). Hence, such self-referential systems are hypercomplex systems because they may use a variety of very different distinctions to indicate the unity of their complexity.

These results become even more irritating when we remember that the system is an operationally closed system and therefore its own product. Because its operations depend on structures that are themselves the product of its operations, we can, following Maturana, describe such systems as structurally determined systems. The state of the system is always the result of its own operations. Cyberneticians would say that the system uses its own output as input. This, however, means that it becomes too complex to calculate itself. It creates in itself an enormous amount of combinatorial possibilities. It operates for simple mathematical reasons as a "non-

trivial machine" in Heinz von Foerster's sense (see "Principles of Self-Organization" and "Wie rekursiv"). And the remarkable insight is that it becomes intransparent, incalculable, unreliable, and at the same time resilient, because it produces itself and, thereby, determines its own state. It cannot know, it cannot compute itself—not because its states depend upon events in its environment but because it arranges for self-created uncertainty.

To cope with these consequences of a re-entry of the internal/external difference in itself, the system needs and constructs time. It needs a memory function to discriminate forgetting and remembering. Its past is given as a highly selected present and, in this sense, as reality. And it needs an oscillator function to be able to switch from marked to unmarked states in all kinds of distinctions, in particular to switch from hetero-reference to self-reference and vice versa. The system will not have an unselected past, nor will it be able to follow a linear prospect into the future. Its future will never become present; it cannot be marked by true statements. The relevant distinction, therefore, will not be true/false but something like flip/flop.

All these considerations apply to the societal system. The system is a non-trivial machine. It is an autopoietic system that produces and reproduces itself. It is a historical machine that has to start all its operations from a self-produced present state. It cannot calculate itself, but it can recursively connect memory and oscillation. It constructs distinguishable identities to re-impregnate its memory and to limit the range of possible futures. But it operates always in the present, never in its past and never in its future and always in the system and never in its environment.

This theory explains that we have to distinguish an operational level and a semantic level. The system is completely unable to calculate its operations in view of some representation of its own unity, or its end, or its complexity. But it *can* distinguish itself and describe itself, using a few of its operations to produce self-descriptions. For instance, it can say "we." It can refer to itself by a name. And it can use all kinds of complexity descriptions, e.g., differentiation. The self-designation of "modern" or "postmodern" society belongs to this category, and we understand now that this cannot be a representation, not even a map of the territory of its

ongoing operations. It is just a way to organize or disorganize expectations.

But then, what can it possibly mean when Habermas says that society needs a "reasonable collective identity"? An identity—distinguished from what?

For Habermas the answer seems to be clear—and simple: To distinguish itself from itself. This requires a normative concept of identity. Society is supposed to project a normative concept of rationality in order to compare itself with itself. The reasons for maintaining this split identity are—in spite of Habermas's attempt to relate them to linguistic authorities—historical, as was also the case in the famous Viennese lectures of Husserl. European Mankind or, in Habermas's case, the 18th century, invented the idea of self-critical reflection, and we are not supposed to drop this idea only because times are becoming rough and difficult. "Ideen sind Stärker als alle empirischen Mächte" ("Ideas are stronger than empirical powers"), in Husserl's words (335).

The norm of reasonable consensus or reasonable collective identity may be projected as unconditionally valid. It remains, however, distinguished from, and therefore conditioned by, what it rejects as an unsatisfactory state of present society, by what it characterizes as "crisis". Like all identities it is a double-sided form—it indicates the preferred state and thereby presupposes an undesirable state. The motive for choosing this and no other type of distinction is clearly stated: "But if modern societies have no possibility whatsoever of shaping a rational identity, then we are without any point of reference for a critique of modernity" (Habermas, Discourse 374). This claim, of course, is not true. We may critique modern society with regard to its probable consequences, its ecological consequences, its individual dissatisfactions, and still not need a "reasonable collective identity" to see the point. But Habermas does touch on the problematic identity of his guiding distinction—i.e., the identity of the difference between the norm and the deviant state of the system. This identity is the self-assured will to critique. Confronted with the necessity to found his own descriptions on the identity of his preferred distinction, he is forced to make a Gödelian jump and to make himself appear and disappear as an external observer.

II

We can neglect the theoretical differences between Husserl and Habermas, between the transcendental and the linguistic argument. The form of the projected identity is the same. It is a normative distinction, and it can have only a historical and not a transcendental or a linguistic justification.² The identity of society distinguishes itself by pretending to be a norm. Society, then, is supposed to have a divided self—one acceptable and the other unacceptable.

The concept of "postmodernity" proposes a different solution for the same problem. It rejects any binding force of history—be it the European idea of self-critical philosophy or the liberation (emancipation) of the individual as conceived in the 18th century. But then, what is this "postmodern" identity and what is excluded from it by distinction?

The term "postmodern" can accept many possible meanings. In one sense, introduced by Lyotard, the postmodern condition means the lack of a central unifying symbolization of the societal system, that is, the impossibility of a métarécit describing the unity of the system. In systems terminology, this is nothing but "hypercomplexity," that is, the availability in the system of a plurality of descriptions of the system (Löfgren). This is, of course, neither new nor surprising. Ever since the French Revolution we have had this condition in Europe. Societal descriptions could focus on liberty or on equality, on institution or on organization, with good arguments for both sides, and for this very reason Max Weber refused to propose a concept of society.

Another meaning of postmodernity signifies the loss of the binding force of tradition. This, too, is so old that it has itself become a tradition (Winograd and Flores). The 17th century already rejected the idea that the validity of the law could be derived from a founding act, whether it be the justified Norman conquest for the common law (see Hale), or a statute of the Emperor Lothar introducing the Roman civil law and canceling all other laws in the Holy Roman empire.³ The "origin" was going to be replaced by history itself. Indicating the origin (arché, origo, Ursprung) had been an easy answer to the "What is . . . ?" question, i.e.: What is Being?; What is a nobleman?; What is the law? But if this was its function,

it cannot be replaced with history. History grows older and older. It disappears in its past. It consumes itself. It accelerates to such a degree that there is not even time to ask the question "What is history?" and to look for an answer. History may have determined the present state of the system, but the result is typically dissatisfaction, need for revolution (either backwards or forwards) or at least reform, and in any case, a preference for difference.

How long then will Husserl and Habermas be able to maintain their old or modern idea of critical reasons without becoming conservatives who stick to a tradition that cannot maintain its identity but fades away. Has Plato ever been in Sicily? Has Habermas ever been in Bonn?

Postmodernity can also mean preference for inconsistency, that is, the praise of folly. But Erasmus remarked at the end of his *moriae encomium* that the praise of folly is itself foolish. It includes, as we would say, a performative contradiction, and Erasmus's conclusion is: An audience should be able to forget.

It may be a good advice to forget postmodernity—but not before knowing what it has been. What, when, is the identity of the postmodern condition, which is to say: What is its specific difference?

Obviously, it has nothing to do with the structural drift or the evolution of modern society. Moreover, its description remains ambiguous. Perhaps it is an autological description, that is, a description that applies to itself. The description of postmodern society is itself a postmodern description, a description that includes its own performative "speech activity." If this is meant by "postmodernity," the term cannot say what it means, because this would lead to a confusion of constative and performative components of communication, and in consequence to its deconstruction.

Hence, we are again in a situation in which we have to cross the boundary of the form and to look at the other side. What is (or was) modernity so that postmodernity can be something else?

Ш

A sociological description of modern society will not start from the "project modernity" nor from the "postmodern condition." These are self-descriptions of our object, more or less convincing, two among many others (such as capitalist society, risk society, information society). Our object includes its own self-descriptions (including this one); for observations and descriptions exist only within the recursive context of communication that *is* and *reproduces* the societal system. But sociology can talk with its own voice.

The distinguishing (again: distinguishing!) characteristic of a sociological contribution to a self-description of society seems to be that it cannot neglect the operational and the structural level of societal reproduction. In other, more familiar words, sociology has to be an empirical science. The classical "sociology of knowledge" asked: What are the relations between the structural characteristics of a society (be it "capitalistic" stratification or division of labor in Durkheim's sense) on the one hand and forms of its knowledge on the other? Then, the truth value of statements relating to these relations could no longer be integrated with first-level knowledge, on which society bases its own communications. We therefore replace this relational phrasing by the distinction between operations and observations. Identity constructions meant to organize observations are always semantical artifacts. In hypercomplex systems, they tend to become phantom identities. The interesting question then becomes: To be distinguished from what? And the answer will be: To be distinguished from difference and, in particular, from internal differentiation, produced and structured by the operations of the system.

To elaborate on this point, I have to distinguish different forms of differentiation, namely, stratification and functional differentiation. The history of societal self-descriptions shows very different constructions depending on whether the main form of differentiation is taken to be stratification or functional differentiation. But in both cases, the semantic artifact of system identity gets into trouble at the end of this century. Increasingly it becomes difficult to accept any description of identity when we have at the same time to accept the reality of differentiation and its consequences. And this may be the reason why the idea of "postmodernity" attracts applause.

The reaction to stratification began already in the 17th century, when the order of estates lost its assumed foundation in na-

ture and became an establishment created by the state and by law. Then, only the individual remained a natural entity and social order was thought to be an outcome of a contract, be it an undated one, a tacit one, or simply something that has to be assumed.⁴ For more than a century, the individual was thought to have an inborn capacity to be happy, regardless of his social status. Happiness for all became the remedy for the unjust distribution of wealth and power, but the condition was that the individual accept his social position and not aspire to more, as in Moliére's "bourgeois gentilhomme."

That Western society could not solve its problems as a community of happy individuals became evident during the second half of the 18th century, partly as a result of industrialization, but more as the consequence of the inclusion of agriculture into the monetary economy, the devastation of Scotland, the new poverty, and, finally, the French Revolution. The new identity symbol was "solidarity"—from Fourier to Durkheim. It replaced nature with moral claims. This again did not prove to be very helpful. How could one expect to control rapid social change by appeals to solidarity? Durkheim could only say that the modern division of labor would require a new type of solidarity, but his dissertation ends with the injunction: "En un mot, notre premier devoir actuellement est de nous faire une morale" (406). And "solidarity" has simply become a word justifying tax increases (Germany) or demonstrating public spending in rural districts (Mexico).

If morality does not do its job, we need politics as a supplement. The watchword slogan of the 20th century—always aimed at stratification, unfair distribution, exploitation, and suppression—became the equalization of living conditions of the whole population by political means, in particular by democratization of the political system itself and by a politically guided economic development. This too did not succeed, either in Manhattan or anywhere else. It seems, therefore, that we have to prepare ourselves to live with a society that does not provide for happiness, nor for solidarity, nor for a desirable equalization of living conditions. There may be occasions where people can meet and critique society, but to call this "civil society" is pure hypocrisy given the facts we have to endure.

However, we may have chosen the wrong distinction, that is,

the wrong form of differentiation. The present state of world society can hardly be explained as a consequence of stratification. The dominant type of system-building within contemporary society relates to functions, not to social status, rank, and hierarchical order. The so-called "class society" was already a consequence of functional differentiation, resulting, in particular, from the differentiation of the economic and the educational subsystems of society. This completely changes the semantical possibilities of constructing the unity of the system as distinguished identity. In view of unjust stratification, one could find comfort in humanistic terms, focusing on the life humans can lead in society. Under the regime of functional differentiation, we can maintain similar ideas, but now it becomes a question of social policy and social work as one of the many subsystems of society (Baecker). Foucault already saw the close relation between humanistic concerns and tightly regulated and controlled policies of inclusion (Foucault; see also Bender). When the focus shifts from stratification to functional differentiation, the symbolic representation of the identity of the societal system can no longer refer to human nature.5 In fact, the new mythology has tried to justify differentiation as such.6

Looking at attempts to define the meaning of (functional) differentiation and thereby the unity of the differentiated system, we find the same trend toward increasing skepticism. The first idea was, of course, that "division of labour" would increase welfare and produce a surplus available for new investment and/or for distribution. When this idea was transferred from organizations to society and from roles to societal subsystems, it became the "project modernization" after World War II. The basic idea now was coherent modernization. If only society could succeed to modernize each of its function systems—to arrange for a market economy, for democracy, for universal literacy, for free "public opinion," and for research oriented by theory and method only (and not by social convenience)—then the hidden logic of functional differentiation (or invisible hand?) would grant success, i.e., an improved society. This project (or projection) depended upon specific subdistinctions for each function system such as market economy versus planned economy, or democracy versus dictatorial regimes, but the preoccupation with these distinctions prevented the discussion of the question of why one could expect "modernized" function systems

to support one another and to cooperate toward a better future. Nor did the neomarxist critique of modernization understand the problem, but rather turned back to a neohumanistic critique of class structures. But if system rationality depends upon a high degree of specialization and indifference, then how could one expect and even take for granted that "system integration" comes about? Would it not be more probable that developing systems would create difficulties, if not unsolvable problems, for each other—such as the internationalization of financial markets for any kind of socialist policy, or the welfare state for the rule of law supervised by a constitutional court (see Grimm), or microphysics (atomic energy) or biochemistry (genetic technology) for a political or legal handling of risks?

Given such problems, the recent discussion replaces "integration" with "guidance" or "steering capacity" and refuses to give up the hope that such instruments would—more or less—work (see Willke). Or it simply prefers the soft language of undefined terms like "institutions," "culture," and "ethics" to maintain hope. The question, of course, is not to choose between dogmatic optimism and dogmatic pessimism. The problem rather is how to construct the semantical artefact, the symbolic identity of society under the given conditions we have to face at the end of this century. And if we have to do it in a "dogmatic," that is, unjustifiable way, why is the option that of optimism versus pessimism?

IV

We are now prepared to come back to our question: Why does society describe itself as postmodern?

There are several easy but superficial explanations.

- 1. Intellectuals, in particular postneomarxist intellectuals, who have lost confidence in their own theories and want to talk about that loss, tend to generalize their fate and tend to think that everybody finds himself in the same situation.
- 2. Origin has been replaced with history plus reform (Conring). However, by what are we going to replace reform if we can look back at so many unsuccessful attempts (Brunsson and Olsen)? The political system seems to substitute scandals for reforms, or at

least we can observe a negative correlation between less reform and more scandals.⁷ In business, the incentive for innovation seems to shift from improvement in terms of accepted objectives to crisis management, to attempts to avoid the worst.⁸ However, reforms relate only to organizations, whereas the discourse about postmodernity relates to much broader concerns. It may overgeneralize disappointments with organizational reforms (for instance in schools and universities), but then we need an explanation for this overgeneralization.

- 3. In recent years, society has produced more and more communication about its environment. This refers primarily to the ecological environment, but also bodies and minds of individuals belong to the environment because they are not produced and reproduced by communication but by their own biochemical, neurophysiological, or psychical operations. There are increasing doubts whether society (that is, self-reproducing social operations) can "control" its environment changed by its own output (see Luhmann)—again, the ecological conditions and 5 or 6 billion human individuals. Demographic changes (population increase), migrations, but also the increasing tendency to immediate violence become problems of social concern. But how could we describe society when the description has to admit (or to prove the contrary) that the system cannot, in spite of tight causal couplings, adapt to its environment? Or could we handle this problem by reformulating the identity of the system?
- 4. The main preoccupation of intellectuals is no longer wisdom, nor prudence, nor reason, but second-order descriptions. They describe *how* others describe what others describe. This may amount to the loose talk of French writers or to the dreadful rigor of analytic philosophers. Second-order description, however, seems to be a general characteristic of a specialization concerned with the interpretation of texts. This form of communication seems to have difficulties in producing stable "eigenvalues," as Heinz von Foerster would predict (*Observing Systems*), and "postmodernity" may offer itself as an appropriate conclusion.

Our analysis of the historical semantics of modern society adds a further and more convincing argument. Whether we have to justify differentiation or to compensate for it and whether the dominant type is stratification or functional differentiation, we find a remarkable loss of confidence in symbolic presentations of the essence, or meaning, or unity of the system. The trend begins in the 17th century, when the "in spite of . . ." justifications were displaced from the past to the (always uncertain) future. (The corresponding change of the meaning of "revolution" is a good indicator.) It then moves from nature (happiness) to morality (solidarity). This requires political supplements and makes visible that these did not and probably cannot succeed. And if stratification or class society is no longer the main problem, the discussion about the advantages of functional differentiation only repeats the same experience. It also moves from progressivist hopes to increasing doubts. At the end of this development, we find the phantom center "civil society," that is, free associations of individuals who can talk about complaints and improvements. And this is "práxis" as self-satisfying activity, whereas poiesis or reproduction has to be done by the function systems and their organizations that cause all the trouble.

We may call this modern or postmodern society. The question is rather whether it makes any sense to use a historical distinction to mark the problem. The distinction of before and after will not prove to be very helpful. Like the rhetorical scheme of <code>antiqui/moderni</code> in the Middle Ages and the Renaissance, it is a scheme to organize second-order descriptions (see Buck; Goesmann; Black). It shares the weakness of all indications and distinctions discussed so far. Society can describe itself as modern or as postmodern, but if it does so, what is the information? What is the difference that makes a difference?

This question leads to some concluding remarks. In the course of our discussion, we have met several distinctions such as reason and reality, or modern and postmodern, or differentiation and the unity of the differentiated system. Such distinctions allow for crossing their internal boundaries. They are "frames" for observing and describing identities. But then, we will need a theory of frames, including, as Derrida would say, a frame for the theory of frames (50). Can a distinction frame itself? But then, how to move to another distinction, how to make, in Gotthard Günther's terms, a transjunctional move? Or are we forced, by using a distinction, to forget the unity of the distinction, to leave its frame unattended?

On a very abstract level, systems theory may offer a frame for a discussion of framing (see Roberts).

For systems theory, the answer to this question is not difficult. (But then, why use systems theory as a frame? Only because it can give an answer to the question and apply it autologically to itself?) The frame is the self-produced and reproduced difference of the system and its environment. This production produces operational closure and thereby a form. At the inner side of the form (and only there), the system can make distinctions and thereby frame its own (but only its own!) observations. Now, the system can distinguish itself with all the consequences of a re-entry of the form in the form that we have outlined at the beginning. The totality of its operations become unobservable, and if the system tries nevertheless to observe this totality, it becomes the victim of a totalitarian logic. The self-description of the self-intransparent system has to use the form of a paradox, a form with infinite burdens of information, and it has to look for one or more distinguishable identities that "unfold" the paradox, reduce the amount of needed information, construct redundancies, and transform unconditioned into conditioned knowledge (see Krippendorff). All elaborated cognition will reduce self-created uncertainty and will only lead to contingent results. Such results may seem useful to some—and detestable to others. But this remains acceptable, because the question of the unity of the distinction always leads back to the paradox and one can show this to others and accept it for oneself. In view of all the fine prospects offered to Dr. Johnson in Scotland, there may be only one that is really attractive—the way back to England, the way back to the origin, the way back to the paradox.

Is this, after all, a postmodern theory? Maybe, but then the adherents of postmodern conceptions will finally know what they are talking about.

Notes

- 1. See Habermas, "Können" and *Discourse*, chapter XII: "The Normative Content of Modernity."
- 2. In systems terms, transcendental refers to consciousness and linguistic to communication, and these are but different operations to produce different types of systems.

- 3. See Conring. The treatise ends with proposals for improving the law (ch. XXXV) that could not be derived from the "origin" of the law but from the accidents of its history.
- 4. The doctrine of the social contract (Hobbes, Pufendorf, and others) seems to function as a substitute for the lost belief in the presence of "origins." Formally, it is a very similar construct; the irrevocable contract is the new origin of the validity of the law. But it has this position due to a legal fiction and a hidden paradox. For a contract presupposes already the binding force of the law.
- 5. The point needs more argument, of course. But the argument would require a previous clarification of functional systems differentiation.
- 6. The famous distinction of social integration and system integration came very close to this point, but it did not see the real problem and treated it as if it were a theory mistake (see Lockwood). Moreover, if there are two forms of integration, one would like to hear something about the integration of integrations, and this would require a definition of the concept of integration. If it is to include system integration, it can no longer be defined as consensus.
- 7. The explanation may well be that the system needs a non-natural way to create free positions.
 - 8. Or, in Odo Marquard's terms: "Zielstreber" become "Defektflüchter."

Works Cited

Baecker, Dirk. "Soziale Hilfe als Funktionssystem der Gesellschaft." Zeitschrift für Soziologie 23 (1994): 93–110.

Bender, John. Imagining the Penitentiary: Fiction and the Architecture of Mind in Eighteenth-Century England. Chicago: Chicago UP, 1987.

Black, Robert. "Ancients and Moderns in the Renaissance: Rhetoric and History in Accolti's Dialogue on the Preeminence of Men of His Own Time." Journal of the History of Ideas 43 (1982): 3–32.

Brunsson, Nils, and Johan P. Olsen. The Reforming Organization? London: Routledge, 1993.

Buck, August. Die "querelle des anciens et modernes" im italienischen Selbstverständnis der Renaissance und des Barocks. Wiesbaden: Steiner, 1973.

Conring, Hermann. De origine iuris germanici: Commentarius Historicus. Helmstedt: Henning Myller, 1643.

Derrida, Jacques. La vérité en peinture. Paris: Flammarion, 1978.

Durkheim, Emile. De la division du travail social. 1893. Paris: PUF, 1973.

Foucault, Michel. Surveiller et punir, Naissance de la prison. Paris: Gallimard, 1975.

Goesmann, Elisabeth. Antiqui und Moderni im Mittelalter: Eine geschichtliche Standorthestimmung. München: Schöningh, 1974.

Grimm, Dieter. Die Zukunft der Vergassung. Frankfurt: Suhrkamp, 1991.

Günther, Gotthard. "Cybernetic Ontology and Transjunctional Operations." Vol. 2 of Beiträge zur Grundlegung einer operationsfähigen Dialektik. 3 vols. Hamburg: Meiner, 1976–80. 313–28.

Habermas, Jürgen. "Können komplexe Gesellschaften eine vernünftige Identität ausbilden?" Zwei Reden aus Anlaβ der Verleihung des Hegel-Preises 1973 der Stadt Stuttgart an Jürgen Habermas am 19. Januar 1974. Jürgen Habermas and Dieter Henrich. Frankfurt: Suhrkamp, 1974.

- ——. The Philosophical Discourse of Modernity: Twelve Lectures. Trans. Frederick G. Lawrence. Cambridge: MIT P, 1987.
- Hale, Sir Matthew. *The History of the Common Law of England*. Ed. Charles M. Gray. 1713. Chicago: Chicago UP, 1971.
- Husserl, Edmund. "Die Krisis des europäischen Menschentums und die Philosophie." Die Krisis der europäischen Wissenschaften und die Transzendentale Phänomenologie. Husserliana. Vol. 6. The Hague: Nijhoff, 1954. 314–48.
- Krippendorff, Klaus. "Paradox and Information." Progress in Communication Sciences 5. Ed. Brenda Dervin and Melvin J. Voigt. Norwood: ABLEX, 1984. 45–71.
- Lockwood, David. "Social Integration and System Integration." Social Change: Explorations, Diagnoses, and Conjectures. Ed. George K. Zollschan and Walter Hirsch. New York: Wiley, 1976. 370–83.
- Löfgren, Lars. "Complexity Descriptions of Systems: A Foundational Study." International Journal of General Systems 3 (1977): 227–32.
- Luhmann, Niklas. Ecological Communication. Trans. John Bednarz, Jr. Chicago: Chicago UP, 1989.
- Lyotard, Jean-François. The Postmodern Condition: A Report on Knowledge. Trans. Geoff Bennington and Brian Massumi. Minneapolis: Minnesota UP, 1984.
- Marquard, Odo. "Kompensation—Überlegungen zu einer Verlaufsfigur geschichtlicher Prozeese." Aesthetica und Anaesthetica: Philosophische Überlegungen. Paderborn: Schöningh, 1989.
- Roberts, David. "Die Paradoxie der Form in der Literatur." *Probleme der Form.* Ed. Dirk Baecker. Frankfurt: Suhrkamp, 1993.
- Ruesch, Jürgen, and Gregory Bateson. Communication: The Social Matrix of Psychiatry. 2nd ed. New York: Norton, 1968.
- Spencer Brown, George. Laws of Form. 2nd ed. New York: Dutton, 1979.
- von Foerster, Heinz. "Für Niklas Luhmann: Wie rekursiv ist Kommunikation?" Teoria Sociologica 1.2 (1993): 61–85.
- ———. Observing Systems. Seaside: Intersystems, 1981.
- ——. "Principles of Self-Organization—In a Socio-Managerial Context." Self-Organization and Management of Social Systems: Insights, Promises, Doubts, and Questions. Ed. Hans Ulrich and Gilbert J. B. Probst. Berlin: Springer, 1984. 2–24.
- Willke, Helmut. Ironie des Staates: Grundlinien einer Staatstheorie polyzentrischer Gesellschaft. Frankfurt: Suhrkamp, 1992.
- Winograd, Terry, and Fernando Flores. Understanding Computers and Cognition: A New Foundation for Design. Reading: Addison-Wesley, 1987.