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SELF-REFERENCE AND/VERSUS IMMANENCE

1. Self-reference and system theory

In the last decades, self-reference has become a concept used in relation to sociological and epistemological theories. From a historical point of view, self-reference is interpreted as the consequence of abandoning absolute and transcendent foundations. When they appeared to be questionable and inadequate in scientific contexts laying the claim to independent knowledge and to autonomously discoverable truth, the focus of cognitive activity and foundation shifted to consciousness. Heisenberg's discovery that the observer modifies the conditions of an experiment by means of his or her mere presence signified two, in some respect contradictory, consequences. It implies, on the one hand, the inability to exclude the influence of the subject from supposedly objective processes of scientific knowledge, and, on the other hand, the tendency to integrate the subject as a mere element partaking in the experiment, or, more extensively, in a system.

In the context of the development and the argumentation underpinning the system theory, which has been elaborated with particular accuracy by Niklas Luhmann, self-reference turns out to be a central and at the same time a consistently recurring component of that theory. Self-reference is understood as the capacity of the system to refer to itself. In relation to social organization, this is considered as evident, as the subject observing is also and unavoidably involved. But it also works in the context of scientific theory, progressively asking for a more exact investigation concerning the assumptions made and the correct use of concepts. The extension of this circular process, taking place in a conscious way as a consequence of developments in science and in view of the increasing complexity of world understanding, implies self-reference as an integrating part of the system concerned.

From this perspective, self-reference becomes a typical characteristic of systems and relates not only to consciousness, but also to the world of experience. It can be defined as an activity which accompanies the process of functioning and reproduction performed by every single system. As this implies an inner dynamic interrupting the simple linearity of development, and mirroring the system itself, it can be described as a circular structure. Nevertheless, this reflective circle is internalized: in the system theory, it is conceived of as a structure exclusively referring to the system concerned and developing in relation to it.¹ Since self-reference takes

¹ See: Niklas Luhmann, Soziale Systeme, Frankfurt 1984, p. 25.

shape as self-observation and self-description, it is susceptible of extension and enrichment. This is due to the fact that self-observation is understood as a single operation, while selfdescription implies an articulated analysis and elaboration (normally in a text)² of the structures, processes, and concepts involved.³ However, this happens only in reference to the system itself, avoiding every possibility of transcending it or, alternatively, of allowing external access. In doing so, self-reference acquires, in its higher form of reflection,⁴ the capacity to self-develop and self-produce, which guarantees a form of autonomy consisting of a controlling function within the system itself. On the other hand, self-reference operations turn out to be characterised by being immanent and closed. Immanence is produced by constantly and repeatedly recurring and referring to the system which generated it, inhibiting connections and the other forms of transfer or transition. The closed structure is achieved by creating a kind of impermeability to the external, taking shape as a closed circuit excluding outer influence. The reflection circle can develop a capacity to verify and also to supervise a reproduction of the system excluding external criticism, which can be connected with its immanent and closed feature. This makes for its exclusive reference, which increasingly implies acceptance, especially since self-reference is performed by individuals confronted with a system determining their modality of being as integral elements, and isolated from one another in their reflecting activity.

Self-reference develops in any context of *complexity* and contributes to increasing complexity itself. Complexity is conceived of as the result of a repeated process of differentiation, which accomplishes, through self-reference, a further level of separation and distinction. The increase of complexity is thereby performed on two levels: firstly, the level of self-observation and self-description, which is capable, as we have seen, of extension and enrichment, and secondly, the level of the system concerned, in which complexity implies not only a supervising instance, but also a possibility of optimisation and planning. Recognising complexity means giving up the claim to completeness and exhaustive results. «We want to call a quantity of related elements complex, if, on the strength of immanent restrictions concerning the capacity of interconnection, it is not possible any more to bind at any time every element with every other».⁵ As a consequence of this, a further distinction has to be made between simple complexity and complex complexity. A "simple complexity" would still admit the possibility of an exhaustive interconnection, while a "complex complexity" requires criteria of selection and self-reduction excluding or limiting one another and is therefore subjected to optional choice and contingency.⁶

As complexity is the product of increasing differentiation, which initially takes place through the distinction between system and environment, it also implies the renunciation of the acquisition of an all-embracing view. This derives firstly from the process of differentiation,

² Cf.: Niklas Luhmann, Das Recht der Gesellschaft, Frankfurt/M., 1993, p. 498.

³ About the difference between observation and description, see: N. Luhmann, *Die Politik der Gesellschaft*, Frankfurt 2000, p. 320.

⁴ For an analysis of reflection, see: Niklas Luhmann, Soziale Systeme, p. 617 ff.

⁵ Ibid., p. 46

⁶ Cf. Niklas Luhmann, Einführung in die Systemtheorie, 4th ed. Heidelberg 2008, p. 174.

which continually increases the number of levels and distinctions, and secondly, from the initial separation between system and environment, which is understood as a contrast between respectively self-organization and its absence. The differentiation process and the implementation of an asymmetry creates a series of discontinuities unable to be unified. Self-reference as an internalised component, changing from system to system, and converting into specialised knowledge, augments distances and deepens gaps.

From this perspective, the system theory criticizes all universalising conceptions of thinking which intend to provide general rules or principles working in all systems and allowing for interconnection. A specific criticism concerns Hegelian dialectics and the aprioristic transcendental method.

Hegelian dialectics is criticized from two points of view. Firstly, criticism concerns the procedure of development, which is considered as producing a continuity and linearity without interruptions. In doing so, dialectics is seen as a defective method which is unable to offer sufficient explanation about transitions, and transforms the different moments and spheres into a continuous and homogeneous succession. Secondly, criticism applies to the fundamental relationship between unity and difference. Dialectics is seen as stressing the unity of unity and difference by forgetting to take into account the difference of unity and difference (in other words, emphasising system and neglecting environment).⁷ This leads to a universal claim which is judged to be inadequate to complex complexity and its high grade of achieved (and achievable) differentiation.

With respect to transcendental conception, the system theory judgement is less negative. The method of reflexivity (entailing the possibility of a consciousness process) and reflection (making self-reference possible) is considered as a positive and necessary requirement. Also the idea of a priori principles is not completely denied. What is criticized is rather the extension of validity which transcendental theories intend to confer to a priori principles. Their claim to a universal realm of application does not correspond to the requirements of different and differentiated systems and is accomplished on to a general and abstract level. Thus, transcendental method is considered as a good model which nevertheless is falsely made absolute. It therefore fails to provide the diversification needed by self-referent processes of knowledge concerning different systems.

2. Luhmann's autopoietic systems

Luhmann's theory represents a highly sophisticated and elaborate analysis of the mechanisms of functioning concerning complex systems in a complex society. Without the pretension either of systematically reconstructing the articulate theoretical structure supporting his investigation, or of reproducing its conceptual richness, it is nevertheless possible to refer to some relevant issues which turn out to be decisive for the question of immanence.

Firstly, Luhmann explicitly acknowledges that his conception of self-reference concerning systems is derived from modern theories of consciousness. Nevertheless, thanks to this

⁷ See: Niklas luhmann, Soziale Systeme, p. 607.

⁸ See for instance: Niklas Luhmann, *Die Wissenschaft der Gesellschaft*, Frankfurt 1990, p. 99.

shifting, «the concept of self-reference (reflection, reflectivity) is released from its classical location in human consciousness or subject, and it is transferred to objective domains, that is, to real systems considered as objects of science». In doing so, self-reference is deprived of its subjective connotation, but not of its fundamental operation, resting on the capacity of systems to analyse their own conditions, to raise methodological questions, and in general to transfer scientific focus from facts (*what-questions*) to mechanisms and rules (*how-questions*). Following Luhmann, this speaks for the autonomous activity of systems connected with their capacity to analyse themselves and to understand their own conditions of possibility and of functioning. In

Secondly, Luhmann does not deny a historical perspective, which is developed on at least two levels: firstly, on the level of social complexity, making for an increasing differentiation and creating a plurality of detached systems, and secondly, on the level of theoretical knowledge, choosing alternative concepts and distinctions. In particular, he stresses the transition from the articulation "whole/parts" to the distinction "system/environment". While the first was concerned with the unsolvable problem of conciliating identity and plurality aiming at a final comprehensive unity, 12 the second permits the making of differentiations without being concerned with unity. In addition, this makes it possible to create new systems or sub-systems in the course of time, which can reproduce internally the original separation and distinction from environment.

Through this analysis, which entails a diacronic survey and transfers the process of consciousness to social reality constituted in organizations and institutions, Luhmann emphasises the existence of autopoietic (self-building) systems. *Autopoiesis* means «that all unities which the system requires are produced by the system itself». ¹³ In other words, systems produce themselves through their operations and progressively establish their structure by means of the processes enacted by those operations. As a consequence of this, we assist, within systems, the building of a circularity between structures and processes which reciprocally cooperate in shaping and consolidating themselves. ¹⁴ At the same time, this grants internal development and dynamism.

On the one hand, the existence of autopoietic systems, which, according to Luhmann, are initially started by and founded on a basic differentiation between system and environment, guarantees a form of freedom in the sense of indetermination. As these systems are conceived of as emerging self-organizations without a strict causal determination, their self-building process produces a break of continuity, linearity, and immanence. Moreover, their capacity of self-production, concerning their operations and their structures, confirms their intrinsic dynamism and potential of evolution. They performatively deny any form of rigidity and immobility, in so far as their circularity is a constant source of self-production.

⁹ Ibid., p. 58.

¹⁰ Ibid., p. 98.

¹¹ See: Niklas Luhmann, Zweckbegriff und Systemrationalität, Tübingen 1968, p. 120 ff.

¹² See: Niklas Luhmann, *Die Gesellschaft der Gesellschaft*, Frankfurt/M. 1997, Vol. II, p. 912 ff.

¹³ Niklas Luhmann, Die Politik der Gesellschaft, p. 126.

¹⁴ See: Niklas Luhmann, Das Recht der Gesellschaft, p. 50.

On the other hand, the autopoietic characterisation based on a circular processuality implies "closure". ¹⁵ Autopoietic systems are closed systems: they are not directly influenced by the environment, as they are initially produced through a basic distinction and separation from it. Thanks to that exclusion, they are relatively autonomous, since the environment remains indetermined and unorganized in relation to them. The environment can therefore at most produce some irritations which stimulate, but do not necessarily cause, adaptations by the system concerned. ¹⁶ However, it can be hypothesised that, in the long run, autopoietic systems turn out to be detached from comprehensive society (the "society of society"). ¹⁷ In addition, interconnections between systems also appear to become very difficult or nearly impossible.

According to Luhmann, autopoietic systems (for instance justice, politics, education, etc.) develop a form of self-knowledge which starts when the system organizes itself and progressively improves its capacity of self-observation and self-description. He distinguishes between two "orders" of self-description: the first one inquires into the differences which are operative within the system and into the mechanisms of functioning; the second one is concerned with the globality of the system, conceived of as a problematic unity looking for identity and self-definition. The two orders indirectly refer to the transcendental concepts of consciousness and self-consciousness, so that the self-description of the second order can be identified with the operation of reflection. Nevertheless, Luhmann denies any kind of subjectivity and traces self-description, as well as reflection, back to activities performed by the system itself. On their part, persons are not considered as independent systems, but only as reference elements within the system (at least from a sociological or epistemological point of view).¹⁸ This implies that they are thought to be influenced by the system, but conversely not able to influence the system itself.¹⁹

Self-descriptions are conceived of as cognitive activities which depict processes and structures and visualise mechanisms and procedures. As the name says, they are essentially descriptive operations connected with the system and its functioning. Nevertheless, especially the second order, constituted by reflection, allows a form of criticism which implies the possibility of correction and revision. However, criticism is also understood as an internal activity which is never capable of bringing the basic differentiation originating the system into question. In addition, criticism has to operate with the concepts concerning the system itself and therefore does not rely on alternative perspectives produced by other systems (for instance, economy cannot be taken into account in order to criticise politics, and vice versa). In doing so, criticism turns out to be only an internal operation of the system which confirms its closed and immanent status and maintains a capacity of adaptation only by means of the plurality of possible self-descriptions.

¹⁵ Cf. Niklas Luhmann, *Soziale Systeme*, p. 60. For the connection between closure and complexity, see for instance: N. Luhmann, *Die Gesellschaft der Gesellschaft*, Vol. I, p. 68.

¹⁶ Cf. Niklas Luhmann, Die Politik der Gesellschaft, p. 373.

¹⁷ The concept refers to Luhmann's work *Die Gesellschaft der Gesellschaft*.

¹⁸ See: Niklas Luhmann, "System und Absicht der Erziehung", in: N. Luhmann, K.E. Schorr, *Zwischen Absicht und Person*, Frankfurt/M. 1992, p. 121 ff.

¹⁹ Cf.: Niklas Luhmann, Einführung in die Theorie der Gesellschaft, Heidelberg 2005, p. 40.

Autopoietic systems have a further constitutive characteristic: they progressively reduce the importance of pursuing ends. Max Weber had insisted on the fact that formal rationality concerning modernity was based on means-ends procedures (that is, optimising means in order to reach ends). Luhmann, on the contrary, considers Weber's view centred too much on the perspective of human agency. Therefore, he argues that the main function of a system is not the pursuit of purposes, but the reproduction of the system itself. This change of perspective implies making the distinction between means and ends relative, since ends are transformed into means in order to maintain and reproduce the system concerned. That systems continue to pursue ends, is not under discussion. In this sense, they accomplish a reduction of complexity, diminish uncertainty and instability, and provide order.²⁰ Nevertheless, they focus less on reaching aims than on defining conditional programmes resting on the "if, then" scheme which is typical for norms.²¹

Focusing on reproduction means once more stressing the system as a closed entity and conceiving self-reference as consolidating a closed-circuit structure. To this respect, Luhmann states that the question at stake is not whether to integrate open and closed systems, but to explain how a self-referential closed system is able to produce openness. His solution is brought about by means of the distinction between *self-reference* and *hetero-reference* (in the case of economy, for example, by considering money as a self-referential component allowing for internal operations, but also for acquiring goods)²². Nevertheless, it can be argued that openness is achieved only in one direction (going from the system to the outside) and does not question the consistency of the system as such. The strict correspondence between self-reference and reproduction confirms the priority ascribed to systems as self-centred, closed, and immanent structures, which are able to reflect about their being and proceedings, but remain primarily concerned with their stability and self-preservation.

3. Self-reference and contemporary issues

System theory illustrates a widespread trend which characterises institutionalised structures of the contemporary world. Max Weber had already pointed out the tendency of organizations to develop their own forms of rationality performed by a system of autonomous rules. The example of bureaucracy was intended to show the progressive detachment of organization (and machinery) from the human subject who had originally brought it about. The apparatus is seen by Weber as developing its own process of functioning and reproduction "encaging" human life and dominating it.

This perspective corresponds to the creation of systems incorporating individuals as mere elements exclusively working within their frames. Furthermore, the description of these systems applies to their inclination to differentiation and production of closed and nearly non-communicative structures. The gap between institutions and citizens is the most

²⁰ See: Nilas Luhmann, Legitimation durch Verfahren, Neuwied/Rh.-Berlin 1969, p. 41.

²¹ Ibid., p. 130 ff.

²² See: Niklas Luhmann, *Die Wirtschaft der Gesellschaft*, 3rd ed. Frankfurt/M. 1999, p. 16.

palpable piece of evidence for the existence of an autonomous course of development which increases distance, distrust, and misunderstanding. It responds to a self-made logic which is hardly explicable to the layman. But this lack of reciprocal comprehension also hinders connections among systems. It is not difficult to experience how different systems work in different ways and follow different laws. Discontinuance and dissimilarity burden their concrete possibilities of reciprocal understanding and cooperation. This unease affects people included in and working for one system even more directly when they are confronted with another context. It is nearly impossible to explain the peculiar logics of a system to people accustomed to dealing with other systems, and especially to make it appear sound and consistent. Moreover, it is possible to observe that people embedded in a specific system incline in course of time to develop personal strategies matching the order produced by the system and sometimes even enhancing it. In such a context, self-reference usually becomes a very limited form of consciousness immediately applying to the internal needs of the system. Control activity tends to restrict itself to supervising the continuity of functioning, and criticism is more concerned with discovering incongruences between means and ends, than with questioning the real value of ends.

A consequence of this is a fragmentation of human life and knowledge in different and nearly incommensurable segments, which mirror complexity in a multitude of highly organized, but unconnected systems existing separately near one another. The increasing specialisation of the modern world and the correspondent creation of new sectors sustain this tendency and require specialised roles in which individuals are progressively absorbed. Yet, a claim of unity is not to be excluded or overcome, and it is entered not only on the basis of a need for unification characterising personal existence, but also in order to answer to the new questions posed by global society, the planetary dimension of interaction, and universal or almost universal institutions.

One possibility could reside in the creation of a unifying, homogeneous hypersystem. Some tendencies are available in contemporary world, embodied by overlapping communication, interaction, and organization. Nevertheless, they contrast with the qualitative nature of the world, presenting a high level of specialisation, specification, and differentiation, which appears to resist against every form of oversimplification. The reduction of complexity, which is necessary all the same, cannot be performed by sacrificing every form of qualitative difference, plurality, and specificity. On the other hand, in the present condition, giving up unity would signify not only accepting the image of a fragmented world, but also failing to meet global challenges (politics, economy, environment) of our time. It has not necessarily to be a unity defined and structured once for all. This would not correspond to the intrinsic dynamism characterising modern life. It cannot even be represented by a simple articulation of identity and difference. Complexity, if it has to be considered as including a form of reflection overcoming simple empirical knowledge, is expected to introduce a structure articulated in different levels not immediately reducible from one to another. From this perspective, if we want to face complexity adequately, self-reference should be understood as a process entailing a plurality of levels and at the same time reconstituting a complex unity, or making it possible.

By following Hegel, for example, an alternative model of self-reference can be figured out, which is neither subjected nor limited to a specific system. It includes, as is made clear in the course of *Phenomenology*, different attitudes of the subject and different forms of being concerned which are in relation to various methods, forms, and objects of knowledge and intended as distinctive ways of understanding life. These different aspects and "moments" are constitutively related to one another and contribute to building the subject, focussing on the essential, epistemological as well as historical and cultural experiences made by the subject him- or herself. Using this procedure, self-reference is thus prevented from reduction to immanent reflection and from modelling the single subject on the reference system. The concatenation and interconnection of experiences and the consciousness of this process entail the emancipation of the subject from his or her dependence on a particular system and allow for the concrete possibility for the subject to articulate the world (and not only to be articulated by it). Although Hegel's hierarchical and exclusive order can be refuted, the search of a complex interconnection and organization of experience shows an effective way of dealing with complexity without being overwhelmed by its being. At the same time, as the subject concerned makes the experience of the encounter with another subject and relates to facts and occurences which are shared with other subjects (for example religion or ethical life), he or she is also released from the internalisation and isolation which would affect a merely individual subject. Basing on these considerations, self-reference could be enriched and amplified in at least three directions:

- 1) as a capacity to articulate identity and otherness, unity and plurality, etc. as logical categories with a structuring function;
- 2) as a self-performing constitution of a plurality of levels opposing the reduction to linearity and one-dimensionality of simple difference;
- 3) as a dynamic relation developing and modifying itself, but maintaining the accompanying and connecting unitary function.

3.1 Logical articulation

If self-reference is taken as an articulate process, it permits us to become conscious of the relation between identity and otherness, unity and multiplicity, etc. in different forms and on different levels. Within the self, first of all, manifold functions and ways to relate to reality are implied which reveal, through the process of self-reference, a persistent activity allowing for unity and continuity. The relationship between identity and otherness is discovered and articulated especially by becoming conscious of the forms and ways connecting the self to reality. A specific function is also taken on by the body, which is seen as a part of reality, but at the same time is felt of as an integrating component of the self and is influenced in its concrete and palpable activity by feelings and thinking processes. The body allows us to perceive the problematic unity with mental activities and internal states, but nevertheless offers a clear pattern of a whole entity detached from the rest. To the conscious and auto-referring self, reality appears as structured, but modifiable, and this is the moment in which self-reference is clearly emancipated from a relation to dependence.

Identity and otherness, unity and difference become fundamental logical categories to organize the different moments, objects, and aspects of reality. Their manifold forms of relation indicate, in spite of selection and reduction, the possibility to create complex interconnections as well as a complex and stratified unity organizing them. The world of complexity has therefore to give up completeness, but not necessarily the capacity of conceiving of an articulate unity. Different logical relations can illustrate this stratification. The articulation between unity and plurality (or multiciplicity), for example, emphasises a quantitative aspect having also a qualitative implication, as unity does not impede richness and variety and they do not imply desorder or unintelligibility. On the other hand, the articulation between the general and the particular operates an integration, showing how differences can be qualitatively significant beyond mere numerical distinction and can include a content which is relevant for the whole.

3.2 Plurality of levels

Through self-reference it can be made clear that there are multifarious ways to approach reality which require different modalities to organize and to structure the world. The reference to the same generic self, even if it concerns various faculties, capacities, and activities, guarantees the possibility of interconnected or overlapping forms of knowledge. This also corresponds to the needs of science, since specialised information often requires integration with other elements which can be only provided by investigations made in other fields. Therefore, if self-reference can provide some idea of unity, it is also possible to infer that some basic structures and categories of logic maintain a certain meaning and can help to organize the world in different phases and sectors of knowledge. In other words, it is thinkable to affirm that items like identity and otherness, unity and difference, individuality and plurality continue to play a universal role even in a scenery characterised by complexity. Nevertheless, it has to be conceded that there are different levels of application which cannot be reduced to a simple and continuous line. By referring to Hegel, logical structures and categories can be conceived of, which maintain their validity in different "moments" and spheres, but they reveal a specific capacity to show flexibility in relation to the specific level considered. Beyond Hegel, they can also be released from am implementation mirroring a vertical and hierarchical structure.

This change of perspective opens the way to a plural and therefore more complex range of interrelations, which are to be thought of as involving more (and not linear) levels. They can be performed only in the awareness that the model concerned cannot be rigidly applied to every field of science and experience, since each of them needs their own methods, concepts, and requirements. The recognition of the existence of a plurality of levels permits us to guarantee a certain autonomy (in the literal sense of self-legislation) of the single spheres, without completely sacrificing the possibility of unity. Linearity is broken, but not the return of some basic structures under other conditions and with some adjustments.

3.3 The dynamic reconstitution of unity

Self-reference can help to create a focus constituting unity, provided that it is able to reflect on itself by means of its internal complexity of articulation (that is, for instance, unity and multiciplicity, or identity and otherness), conceived in a very dynamic way. In this sense, "genetic" and narrative models of (re-)construction play an irreplaceable complementary role. The genetic process consists of a procedure which seeks the logical-transcendental origin, so that unity can be comprehended as an articulating principle, while multiplicity, on its part, is unified through a common generating point or structure. On the other hand, the perspective of narration constructs the unity through life experience and the plurality of happenings, radically demonstrating the necessity of the historical development and of the presence of the other as well as of the interaction and dialogue with them. In this sense, interrelation turns out to be at the same time possible and unavoidable also from an a posteriori point of view which refers to common sets and shared experiences performed in the specificity of concrete life. Through these two processes, the dynamism of self-reference is assured. The genetic process demonstrates how facts can be traced back to the activity generating them. On the other hand, the narrative modality permits us to discover a dialectic relationship between permanence and change affecting the self as well as a productive interacting between the self and the other performed by dialogue and the interweaving of the points of view. Furthermore, the perspective of narration creates the capacity to recognise the commonly shared structures (social order, habits, language) and at the same time to perceive the discrepancies between individuals (misunderstanding, contrasting interpretations, the difference of attitudes and opinions).

In doing so, genetic-transcendental method and narrative process allow for reconstructing the unity from a perspective of differentiation. This unity is then a product of complexity and entails in its fundamental structures the articulation of qualitative and quantitative categories. These categories stress the irreducible richness of reality and plurality, and strive nevertheless after an interconnected unity mirroring complexity from the innermost of the self.

4. Self-reference and immanence

As a general theoretical undertaking, system theory can be considered as a comprehensive project aimed at "breaking" immanence. The idea of systems starting from a basic differentiation and of an asymmetrical duality between system and environment interrupts linear continuity, admits new and not exactly foreseeable constructive processes, and is compatible with a vision based on openness, difference, and plurality. Its philosophical counterpart is Hegel's speculative system, assumed as the most elaborate expression of the "project of modernity" aimed at (re)constituting a unity grounded on subjectivity. This project is rejected by system theory partly on the basis of the simplified assumption that dialectics only produces a linear continuity not contemplating distinct levels, and partly with the argument that the Hegelian

system turns out to be, at the end, a closed unity which appears to have reached a final stage (the much contested thesis of an "end of history").²³

System theory contrasts the immanence of a unifying "global" system with the conception of complexity, which depicts the condition of an extreme richness of possibilities (with Luhmann's words, variety and redundance). Thus, complexity is characterised by a constitutive impossibility of unification and reduction to a unified global entity. To be sure, systems achieve a reduction of complexity, but systems represent only limited and detached spheres in the world. In their basic operation of differentiation, they draw a border. They clearly distinguish between an inner and an outer side, and rest on strict criteria of inclusion and exclusion. In doing so, they radically oppose immanence, as there can be no unifying principle between each of them and the external, and there can be no unifying principle among them. Moreover, there is no predetermined hierarchy and no universal finality. Thus, system theory successfully avoids immanence as a global issue, even if this implies some difficulties concerning the interconnections among systems and the possibility of general views (and decisions).

However, immanence is reproduced on the level of the single systems. According to Luhmann's analysis, there are some structural conditions and mechanisms of systems which make for the strengthening of immanence. The status of self-reference and "closure" pertaining to autopoietic systems prevents an effective contact with the environment. When this contact takes place, it is subjected to the mechanism of re-entry, thus reproducing the differentiation between the system and the environment, and only making use of the concepts and the differences entailed in the system. In addition, the circularity between structures and processes actuated by self-referential systems provides for a progressive estrangement from environment, since the internal dynamism of the system strengthens its autonomous development. This is the reason why the development of the system does not necessarily imply an improvement, a progress, or an increasing capacity to adapt to the environment and to give appropriate answers.²⁵

Immanence is therefore seen as a direct consequence of self-reference residing in the internal development which does not authorise other (that is, external) forms of processuality. Nevertheless, this does not prevent systems from being able to give more or less adequate answers to the "irritations" of the environment. Their acting can be directed, for instance, to reform their own procedures and to improve and optimise their effectiveness, or, alternatively, can exclusively aim at assuring self-reproduction and self-legitimisation. In the latter case, the system is mostly concerned with justifying its actions by covering its weak points or mistakes, and answers are often inconsistent and dictated by immediate need. Even a capacity for inventiveness is not to be excluded, since systems are released from preorientated finality. However, the exclusively internal procedure is a limiting factor to the range of alternatives and to the possibilities of innovation.

Are then self-reference and immanence unavoidably interconnected? Especially when considering the aspect of self-observation and self-description, it seems possible to find out

²³ Cf. for instance: Niklas Luhmann, *Die Gesellschaft der Gesellschaft*, Vol. II, p. 1142.

²⁴ See: Niklas Luhmann, Die Gesellschaft der Gesellschaft, Vol. I, p. 136.

²⁵ Cf.: Niklas Luhmann, Das Recht der Gesellschaft, p. 552 f.

some issues which overcome immanence. With respect to the self-observation of the first order, which is mainly concerned with a form of self-knowledge performed by the system, the perspective of immanence prevails. This kind of knowledge is mainly concerned with defining what belongs to the system (procedure of inclusion) and what is external to it (procedure of exclusion). Also the description of the functionality of the system and of the mechanisms and structures entailed within it does not require a really external point of view. On this level, self-description can be exhaustively described as a parallel operation of the system providing for clarification of its basic norms and conditions and therefore for a form of "self-understanding".

The perspective changes nevertheless, if the self-observation of the second order is taken into account, implying a reflective process. To this respect, Luhmann oscillates. On the one hand, he affirms that the second order grants more freedom and that the observer "can see more". ²⁶ On the other hand, reflection always entails for him a blind spot, and the observer is not enabled, during the process of observing, to observe him- or herself. ²⁷ Thus, observation turns out to be exclusively concerned with its object. This opacity is even stressed, as the observer is not identified with a subject, but only stands in for an operation led by the system.

In spite of restrictions, however, self-reference produced by reflection seems to open the way to a further level not immediately reducible to the immanence of a system, even if one accepts Luhmann's prescription that the characterisations pertaining to the system have on principle to be accepted. This is even more feasible if reflection implies a form of self-distancing performed by the systems and by their observers, and if it is also able to deal with inputs and suggestions coming from other systems.

This could open the way to the possibility of considering the closure of systems in a more flexible way. It does not imply the complete abandonment of closure as a constituting factor, especially if this is conceived of as the operation of drawing a border and creating an internal order. Nevertheless, the tendency of autopoietic systems to self-organization and autonomy has not to be unavoidably taken as an absolute necessity. Closure could be considered as not totally incompatible with a certain permeability and capacity of interchange and interaction to be performed by systems. Also Luhmann admits to the possibility that systems can communicate with one another and does not exclude on principle the possibility of further interweaving between their structures or operations.²⁸ Closure and openness of systems do not necessarily need to be understood as one-way processes, whereby closure is considered as the precondition for allowing contact to the outside. On the contrary, closure and openness could be understood in a more dialectic way, finding a dynamic balance between self-reference and interrelation.

In particular, self-reference in the form of reflection should be considered as a constitutive self-distancing process operated in the system. This would allow for more critical activity and also permit us to selectively take into account solicitations coming from the environment

²⁶ Cf. Niklas Luhmann, Die Wissenschaft der Gesellschaft, p. 97, 170 f.

²⁷ Cf. for instance: Niklas Luhmann, *Organisation und Entscheidung*, Opladen-Wiesbaden 2000, p. 129, 461, and *Die Gesellschaft der Gesellschaft*, Vol. I, p. 69.

²⁸ Cf. for instance: Niklas Luhmann, Die Gesellschaft der Gesellschaft, Vol. II, p. 748.

or from other systems (in order to make some examples, it could be referred to the problematic, but necessary interrelation between politics and economy, or between politics and ethics). This does not imply a hierarchy among the systems, since their interrelationship can also be seen in a flexible and modifiable way. However, it implies developing a capacity of articulation between closure and openness which is not completely extraneous to the logical concepts of unity and multiplicity, identity and difference, general and particular, which are extended on a plurality of non linearly reducible levels. Once more, this capacity cannot be exclusively ascribed to systems intrinsically orientated to reproduction, and seems to call for interconnections sustained by the will and activity of conscious and responsible subjects.