

Into the complexity of morphogenesis, social evolution and differentiation

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In *Die Gesellschaft der Gesellschaft* Niklas Luhmann argues that so far, no other theory has been able to explain the building and reproduction of the structures of society (Luhmann 1997:413). In outlining the theory of evolution, he points out that an essential theoretical problem is the morphogenesis of complexity (Luhmann 1997:415) – how society has changed its own form of complexity. The theory of evolution is then based on the premise that social evolution and the reproduction of society must be conceptualized as a paradox: complexity is what makes society both impossible and possible (Luhmann 1997:451). Having stated this paradox, Luhmann explores how society communicatively, and through changing modes of self-description, has reformed unsolvable problems of complexity into plausible operative solutions rebuilding its own structures and 'against all odds', so to speak, has reproduced and made itself possible. In terms of explaining social evolution operatively (how is society possible?) the paradox seems unfolded. However, what Luhmann does, seems to be displacing the theoretical question of the relationship between complexity, social evolution and differentiation to the analysis of the operative construction of society. This is very fruitful in relation to social analysis, and will be sufficient as long as the concept of functional differentiation will offer a plausible way of conceptualizing the present. But in relation to theory development this displacement is perhaps not sufficient, if we want to understand elements of social change, which seem to and perhaps evolve without reference to already known structures which can be understood from the concept functional differentiation – elements that in the end might be related to how society is beginning to change its own form of complexity. Note that Luhmann defines morphogenetic processes as processes of change taking place on an unknown ground (cf. Luhmann [1984] 2000:416)). We might say that the theoretical problem, which Luhmann to some degree leaves unsolved, is not the morphogenesis of complexity, but the *complexity of morphogenesis*.

The complexity of morphogenesis can at the outset be understood from the distinction between variation/selection (Luhmann 1997:451), which is the distinction that enables autopoietic restabilization and reproduction through the operative marking of the distinction between system and environment. In *Die Gesellschaft der Gesellschaft*, Luhmann clarifies the meaning of variation, selection and restabilization:

- (1) Durch *variation* werden die *Elemente* des Systems variiert, hier also die Kommunikationen. Variation besteht in einer abweichenden Reproduktion der Elemente durch die Elemente des Systems, mit anderen Worten: in unerwarteter überraschender Kommunikation.
- (2) Die *Selektion* betrifft die *Strukturen* des Systems, hier also Kommunikation steuernde Erwartungen. Sie wählt an Hand abweichender Kommunikation solche Sinnbezüge aus, die Strukturaufbauwert versprechen, die sich für wiederholte Verwendung eignen, die erwartungsbildend und -kondensierend wirken können; und sie verwirft, indem sie die Abweichung der Situation zurechnet, sie dem Vergessen überlässt oder sie sogar explicit ablehnt, diejenigen Neuerungen, die sich nicht als Struktur, also nicht als Richtlinie für die weitere Kommunikation zu eignen scheinen.
- (3) Die *Restabilisierung* betrifft den Zustand des evoluirenden *Systems* nach einer erfolgten, sei es positiven, sei es negativen Selektion. Dabei wird es zunächst um das Gesellschaftssystem selbst im Verhältnis zu seiner Umwelt gehen [...] Im weiteren Verlauf der gesellschaftlichen Evolution verlagert die Restabilisierungsfunktion sich dann mehr und mehr auf Teilsysteme der Gesellschaft, die sich in der innergesellschaftlichen Umwelt zu bewähren haben. Dann geht es letztlich um das Problem der Haltbarkeit gesellschaftlicher Systemdifferenzierung" (Luhmann 1997:454-455)

However, this clarification also raises some questions. If systems, given (selection and restabilization of) their elements, at the same time produces variation as unexpected communication, and in the face of complexity (variation), will select what they expect will contribute to the rebuilding of expectations, is it then plausible, that their selected form of communication will (always) contribute to the reproduction and restabilization of the system? Or is it rather so that variation, in terms of unexpected communication and the tendency to select what seems to contribute to the rebuilding of expectations, will at the same time lead to destabilization eventually destruction of the system? Or in other words: If complexity is what makes society both impossible and possible, what morphogenetic structures make the difference between restabilization and destabilization eventually destruction? This question is important not only due to a binary logical effort. Even though Luhmann finds, that evolution is unpredictable, it would be meaningless to make a theory of evolution, which not at least implicates an effort to explore and develop concepts that enables us to observe and discuss present elements or potential 'signs' of the generation of new forms of complexity. In fact it might be important, if we are to understand unexpected communication without an immediate acceptance of for example semantics of risk and social change that can lead to a simple demand for or believe in scientific prediction. To explore and develop concepts that enables us to observe and discuss present elements or potential 'signs' of the generation of new forms of complexity.

So far this abstract has just pointed out a discussion, which might be important. In my concrete contribution to the conference, I will discuss more in depth the theoretical aspects of understanding the complexity of morphogenesis in relation to social evolution and differentiation. My suggestion will be that in order to understand the complexity of morphogenesis, we must offer more theoretical and not the least empirical attention to what it actually means, when Luhmann writes, that the function of restabilization to a greater extent is dependent on the subsystems of society. My suggestion will be, that theoretical development on the complexity of the morphogenesis must and can be explored in observance of how the difference between restabilization/destabilization (eventually destruction) is at work operatively and semantically within subsystems of society, and I will argue that this might reveal signs of changing forms of complexity. From this we point of observation, we might get a more complex theoretical understanding of the complexity of morphogenesis. I will try show this by casting empirical light on what might be potential structures of morphogenetic change within the communicationssystems of *help* and *solidarity* within Denmark (Nissen 2005). Empirically this is an interesting case in terms of exploring the complexity of morphogenesis of social evolution and differentiation: Changes in semantics about help and solidarity are closely linked to the possibility and impossibility of integration and reproduction of society. The analysis shows that destabilization and eventually destruction is the other side of restabilization, and that morphogenetic processes are enforced by a structural coupling between semantics of "risk of negation and ignorance", the "lack of effectiveness" of subsystems and a "performance of no use" – a semantic structure which is related to changes in semantics of solidarity. By abstracting these findings into a model, I see possibilities for a development of our understanding of the complexity of morphogenesis, especially the morphogenetic structures that make the difference between restabilization and destabilization.

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Luhmann, Niklas [1984] (2000): Sociale Systemer. Grundrids til en almen teori. Übersetz von Cederström, Rasmussen und Mortensen (2000): Soziale Systeme. Grundriss einer allgemeinen Theorie. Suhrkamp Verlag. Frankfurt am Main.

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