

## Session 19: Sociology and Systems Theory

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### Title:

The Cybernetic Casings of Observing Systems: From Parsons to Luhmann via Weber

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### Abstract:

This paper argues that a reconsideration of Max Weber's famous characterization of modernity as a closed but at the same time malleable assemblage, or 'steel-hard casing' (*stahlhartes Gehäuse*), offers new theoretical insight into the development of systems theory from Talcott Parsons to Nikolas Luhmann. Weber deployed this suggestive figure first to characterize how the 'value-rational' principles of the Protestant reformers were superseded by the technological spirit of occidental capitalism, and later to dramatize how the charismatic ideals of political action in Wilhelmine Germany were contained by the bureaucratic ethos of the nation-state. In the decades after World War II, however, Weber's dual perspective on the machinations of the capitalist economy and the bureaucratic state was partially eclipsed in functional explanations of how the carceral boundaries of the social system form a kind of permeable 'iron cage' (Parsons's famous translation of Weber's metaphor) or a flexible cybernetic net of communication and information processing (Luhmann's revision of Parsons's action theory). The 'detour though Weber' brings into sharper focus the economic and political structure of social systems, the potential for ethical and cultural transvaluation, and the critical vocation of reason that may otherwise be obscured by later systems theoretical perspectives.

From its beginnings, systems theory has been more concerned with refining its own architectural design and incorporating new information than with telling the story of its origins. Nevertheless, the occasional reflection that systems theorists offer on the sources of their inspiration are worth taking notice of, especially when they touch on precedents from their own field. In the “Preface to the English Edition” of his monumental *Social Systems*, Niklas Luhmann addresses both the need for and the limits of revisiting the sociological founders of his own ‘brand’ of social systems theory:

The further the classical authors recede into the history of a discipline, the more necessary it becomes to distinguish a theoretical from a biographical, an abstract from a concrete treatment of them. If one dismembers them in this way, however, can one manage without them? A sociology of sociology might say that, when analyzing tribal relationships, one cannot avoid a genealogical orientation. But then one might ask whether one must restrict oneself to tribal relationships that describe themselves as pluralism and whether the introduction of constraints via genealogy is the only way of justifying the claim to the title of theory (Luhmann, 1995: xlvi).

Although Luhmann exhorts us to steer clear of the temptation to form theory-tribes devoted to the worship of revered ancestors, he also insists that we must avoid mummifying these sources “for later rediscovery” (Luhmann, 1982b: 47). As Katherine Hayles has argued in highlighting the importance of Humberto Maturana on the development of Luhmann’s thought, if systems theory is to explain not just logical necessities but also historical contingencies, it cannot dispense with a *narrative account* of its own sources: “Narrative reveals what systems theory occludes; systems theory

articulates what narrative struggles to see” (Hayles, 1995: 72). Likewise, addressing the Darwinian logic and vocabulary that pervades the Luhmannian text, Geoffrey Winthrop-Young has shown that an integral component of its own development is a *rhetoric of temporality* which emphasizes the distinction between before and after (and thereby focuses on events and breakthroughs) over the distinction between beginnings and ends (thus avoiding the search for origins and causes). For systems theory to remain alive and open to new ideas, it must resist setting restraints on itself by constantly retracing its foundations; rather, it must insist on recalling and reassessing the inaugural moments of its historical formation.

In this paper I return to the two most important inspirations of Luhmann’s work – Max Weber and Talcott Parsons – in order to provide some new insight into what is lost and what is gained by the shift from an *action-systems* to a *cybernetic-communications* theoretical framework for analyzing society. Insofar as systems theory is rendered unusable and unconvincing without a narrative account of the sources of its innovations, it also becomes ‘uncommunicable’ without the metaphors it employs for analytical purposes. Here I assume that the cybernetic concept-metaphor of *autopoiesis* is the most pivotal and innovative figure in the rhetorical repertoire of systems theory insofar as it compactly comprehends the interconnectedness and self-organization of social systems in simultaneously mechanical and organic (if not also natural and nautical) terms. Luhmann’s distinctive formulation of this concept is designed to account for how self-referential closure both creates and is maintained under conditions of openness (Luhmann, 1990). The focal point of the theory thereby shifts from the emphasis on *homeostasis* by early proponents (thus: normalcy, stability, and equilibrium) to

*autopoiesis* (hence: reflexivity, dynamism, and conflict). Notwithstanding the credit Luhmann gives to neurophysiology and biology, I argue that this key theoretical innovation was already prefigured in the classical sociologies of Parsons and Weber.

### **I. Weber's Sociological Window: Observing Social Action**

My strategy for exposing these 'elective affinities' in the present context will be to trace how the figure of the *stahlhartes Gehäuse* has served as a kind of 'travelling idea' or 'conceptual carrier' by way of its 'translation' into the analytical framework of *autopoiesis* in general, and its transposition into a theoretical model for the idea of second-order observation in particular. As Peter Baehr (2002) has pointed out, Weber famously evoked this image at the end of the first edition of *The Protestant Ethic and the Spirit of Capitalism* to express how the loose-fitting 'cloak' of external goods that once hung lightly on the shoulders of the early Protestants was later "decreed by fate [*Verhängnis*]" to contract into a 'shell hard as steel' or 'steel-hard casing': *ein stahlhartes Gehäuse*. The implications of Parson's canonical, though discreetly (if unintentionally) unfaithful translation of this phrase as 'iron cage' will be considered in the next section for the way in which he later developed his structural-functionalist theory of social systems. To begin with, however, I want to elaborate on Baehr's insight that in Weber's usage this figure implies that modern capitalism can be imagined simultaneously as a flexible though durable living assemblage that protects and shelters (on the analogy of the 'shell' of a mollusk or building) and as a malleable and even permeable artificial mechanism that frames or constrains (as in the 'casing' of a clock or window). Although Weber was never to invoke this image again with the same tragic pathos as in this famous

early passage on the rise of the capitalist economy, in later works the image of the casing or shell – now unqualified -- reappears to articulate the confining and constricting character of the domination of the bureaucratic state. The following excerpt from the ‘Preliminary Remark’ to the *Collected Essays on the Sociology of Religion*, written shortly before he died, suggests that this emerging institutional complex threatens to become the dominant mode of all social organization :

But apart from the modern West, no country and no period has quite known the absolutely inescapable confinement [or spellboundness: *Gebanntheit*] of the fundamental political, technical, and economic condition of our life and of our whole existence in the shell [or casing: *Gehäuse*] of an *organization* of specially trained officials, nor the technical, commercial, and especially *legally* trained state official as the bearer of the most important everyday functions of social life (Weber 2002: 368).

In the course of his career, Weber developed an ostensibly *dual focus* on the machinations modern society by deploying this suggestive figure first to characterize how the ‘value-rational’ principles of the Protestant reformers were superseded by the technological spirit of occidental capitalism, and later to dramatize how the charismatic ideals of political action in Wilhelmine Germany were contained by the bureaucratic ethos of the nation-state (e.g. Weber, 1994). On the basis of this dark view of the historically unique dialectic of enlightenment in the West, Weber conceived the polity and economy as relatively autonomous, self-governing (*eigensetzlich*) value-spheres which constitute an integral (and not just enviroing) framework for the dominant institutions of European modernity.

To be sure, the line of descent from Weber to Parsons to Luhmann is not inaugurated out of this fairly circumscribed empirical-historical and geographically bounded area of inquiry, but rather in the *general theory of action* which each takes as his point of departure. Weber's distinctively hermeneutic definition of sociology as "a discipline that seeks to understand *social* action interpretively and thereby to explain its course and consequences causally" is outlined in the opening pages of *Economy and Society* in terms of the methodological problem of discerning the variety of "contexts of meaning (*Sinnzusammenhänge*)" that constitute inter-subjective and collective action:

I. *Methodological foundations*

1. Meaning [*Sinn*] is here subjectively *intended* meaning which is either:

a) actually existing [*tatsächlich*]

i) in an historically given case of an actor or

ii) on average or approximately in a given number [*Masse*]

of cases of actors, or it is

b) conceived as a *pure*, conceptual type of such an actor or actors

*thought* of as a type.

It is not somehow or other the objectively 'correct' or metaphysically established 'true' meaning (Weber, 2004a: 312, translation modified).

Following Weber, Luhmann conceives 'meaning' (*Sinn*) as a way of coping with complexity – from particular experiences to hypothetical abstractions – through the faculties of perception (cultivating a 'sense'), selection (making a 'distinction'), and differentiation (indicating a 'direction'). Both Weber and Luhmann are therefore each concerned with the process by which the attribution of actors or actions (*Handeln*) takes

place through sense-making practices of *communication*, that is, as a social relationship which synthesizes information and utterances distinguished through the process of ‘understanding’ (*Verstehen*) (Luhmann, 1982a). Despite insisting that systems theory cannot plausibly be based on a Weberian concept of meaningful action, Luhmann -- following Parsons before him -- begins from the basic framework of Weber’s analytical scheme of the types of social action. As depicted in the following figure, this typology offers a useful device (a *heuristic*, in the etymological sense) or viewpoint (*Gesichtspunkt*) for searching out and selecting from the significant features of the social lifeworld (cf. Weber 2004a: 329-331; Weber 2004b: 381):

**Figure 1: Weber’s Sociological Window**  
(types of social action)

instrumental-rational action	value-rational action
traditional action	affective action

This initial phase in the development of systems theory is concerned with the first-order identification and observation of *action-systems*, in which instrumental-rational (*zweckrationale*) action (defined by the strategic choice of means given ends) is taken as the primary point of reference and standard of comparison against which ‘deviating’ modes of action are recognized and assessed: namely, value-rational (*wertrationale*) action (which fixes on the goal as an ideal, right or duty, even at the cost of an efficient choice of means), affective action (in which the pursuit of goals and means is driven more by non- or irrational emotions, instincts and sentiments) and traditional action (in which means and goals are primarily matters of habit, routine, and time-honoured

custom). My arrangement of these types in the form of a “window” here is intended to highlight the role of *disciplined observation*, that is, the conventional scientific standpoint of Weberian sociology in assuming a value-free point of view and distanced position apart from the social world it studies.

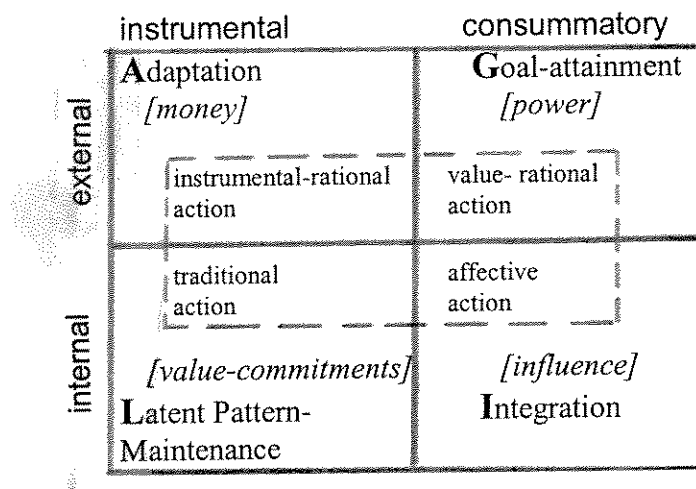
## **II. Parsons’s Sociological Window: Observing Social Systems**

That Parsons took these elemental components of Weber’s scheme over into his own theory of social structures, functions, and systems is evident in the quotation from Weber which he used as the epigraph to *The Structure of Social Action* in 1937: “Any thoughtful reflection (*denkende Besinnung*) on the elements of meaningful human action turns first of all on the categories ‘means’ and ‘ends’” (Weber 2004b: 361, quoted by Parsons, 1949: xiii). Like Weber and Sombart in the previous generation, Parsons focused on how purposive, means-end, or instrumental rationality (*Zweckrationalität*) intensifies the operative logic of the classical industrial and imperial capitalism of the 19<sup>th</sup> century while laying the foundation for its supersession in the economic crises and world wars of the 20<sup>th</sup> (Parsons, 1999a; Smelser, 2005). He thus came to see the market economy as providing the institutional and normative environment of adaptation for the modern bureaucratic state, whose function is to ensure a commitment to performance and to the attainment of common goals (understood as having ‘consummatory’ value or intrinsic interest; see Parsons, 1999b). Parsons supplemented this conception of “external” social organization with an explanation of how the “internal” need to maintain latent value-patterns and social integration must also be met, for example, by the education and legal systems respectively (Parsons, 1961). In effect, he drew another



‘structural’ frame of reference and reflection – now defined in terms of the attribution of the system-functions of boundary-maintenance, social order, and historical evolution – around the open and voluntaristic theory of social action previously proposed by Weber:

**Figure 2: Parsons’s Sociological Window**  
(Subsystem functions and *symbolic media*)



Parsons notes that the synchronic perspective implied in the grid of the AGIL scheme, which is designed to address *the problem of social order* or how stability and change take place, can be reconfigured as LIGA to project the layered vision of a *cybernetic hierarchy of social control*, that is, to explain how deviant social phenomena are kept within the limits of dominant legitimating cultural values. Simply put, Parsons’s sociological window is constructed to serve as a mediating and framing device for observing the relationship of action systems to social institutions:

‘[The analysis] “looks” out to the social system from the vantage point of the actor’ (Dubin)... Action is thus viewed as a process occurring between two structural parts of a system – actor and situation... The orientation set of [‘attitudinal’] pattern variables [i.e.: L-I] ‘views’ the relationship of actor to situation from the side of the actor or actors; the modality [or ‘object-

categorization'] set [i.e.: G-A] views it from the side of the situation as consisting of objects (Parsons, 1999b: 182-183).

In short, the concept of a self-regulating system in Parsons stands in for the notion of a constraining institutional casing in Weber, with the difference that for Parsons the relationship to the environment is set by more or less open and permeable boundaries. Notwithstanding the carceral implications of Parsons's translation of Weber's '*stahlhartes Gehäuse*' as 'iron cage', implying that social life may be captured from the outside without being transformed from within, when transposed into systems theory the figure suggests the simultaneously open and flexible, as well as asymmetrical and hierarchical interchanges between the boundaries of subsystems and their environments.

Luhmann's skepticism regarding the AGIL grid was based on his suspicion that it sacrificed a more complex understanding of the role of self-reference in sustaining social organization to an overly simplified emphasis on structures over functions (Luhmann, 1982b). Instead, he focused on how what Parsons (1977) called the *symbolic media of interchange* characteristic of each system – power, money, influence, and value-commitments – assist in converting dynamic contingencies of choice into stable patterns of interaction and systemic processes (Luhmann, 1976). Luhmann treats these media (along with others such as truth, beauty, love, and trust) as the key to solving Parsons's problem of "double contingency" – the dilemma of how actors are able to make their own behaviour contingent on the behaviour of others without being immobilized into a paralyzing state of infinity.

Because of this double contingency, communication, which is the preoccupation of cultural patterns, could not exist without both generalization from the

particularity of the specific situations (which are never identical for ego and alter) and stability of meaning which can only be assured by 'conventions' observed by both parties (Parsons and Shils, 1951: 16, quoted in Luhmann, 1995: 523n1).

Rather than assume that stability can be achieved with reference to a shared symbolic order, or on the basis of collective mutual understanding or conventional value-consensus, however, Luhmann radicalizes this notion of the impermanence of reciprocal dependencies and unequal expectations by identifying *contingency as the defining feature of modern society* (Luhmann, 1998b; cf. Turner, 1999). Thus, modernity cannot be adequately conceived solely in terms of the need to design, control, and plan for uncertainties but rather as an effort to address the improbable and unforeseeable character of social life as integral to its capacity to sustain autonomous self-development while transforming itself through environmental sensitivity and dynamic stability.

### **Conclusion. Luhmann's Sociological Screen: Observing the Observers**

In this paper, I have only been able to sketch a few of the ways in which Weber's critical and evaluative perspective on the "most fateful forces" of modern society – namely, capitalism and bureaucracy – were selectively incorporated into or 'screened' out of the analytical framework of systems theory from Parsons to Luhmann. Weber's tragic vision of the dominant institutional complex of the West as a *Gehäuse* – a self-sustaining functional casing or shell which is both confining and flexible, constraining and malleable – was qualified and relativized in Parsons's schema of subsystem-functions which maintain durable yet permeable boundaries with their environment. However, the unsatisfactorily resolved 'double contingency' of meaning and action at the basis of

Parsons's conception led Luhmann to focus on how symbolic media allow social systems to achieve *operative closure* under conditions of dynamic uncertainty and persistent openness. In effect then, in spite of Luhmann's claim to have replaced action theory with communication theory (1990: 6), Weber's 'casing' or 'shell' is reinserted into Luhmannian systems theory in the guise of the paradigm-shifting notion of *autopoiesis*, that is, in a conception of the capacity of systems to maintain their own boundaries through a strategy of self-production and protection. Thus, *Weber's* view of the historical emergence of functionally differentiated and autopoietic value-spheres since the advent of modernity – for example, in the form of positive law, autonomous art, experimental science, reflexive politics, self-regulating markets, romantic love, and so on – re-enters systems theory as its necessary supplement and indispensable frame of reference (Luhmann, 1998a; 1998b: 57-62). To put this another way, in the formula Parsons → Luhmann we must designate Weber as the name for the indispensable mediating symbol which articulates this relationship as one that both marks a division (–) and indicates a direction (>). This 'detour through Weber' brings into sharper focus the economic and political structure of social systems, the potential for ethical and cultural transvaluation, and the critical vocation of reason that is otherwise obscured by later systems-theoretical perspectives.

Elsewhere I have suggested that the combination of Parsons's AGIL schema and Weber's four-fold typology of social action can be used to map the negative dialectics of rebellion and revolution from Merton to the Frankfurt School, and to track the social dynamics of capital accumulation and cultural conversion from Bourdieu to Boltanski (Kemple, 2004). Sociological theory in the tradition of Weber cannot dispense with such

exercises in conceptual experimentation and empirical specification, as Parsons was fond of reiterating. By contrast, Luhmann's distinctive contribution consists in turning social theory back on itself, that is, in elaborating a notion of *second-order observation* conceived as a recursive process of questioning and qualifying, correcting and criticizing, in short, of communicating about communication. This reflexive dimension of systems theory moves it beyond the method of disciplined observation that characterized the 'value-free' stance of classical sociology, and sets it apart from any disengaged posture of passive spectatorship that compromises the work of social theory: as Weber once sarcastically remarked, "those who desire a 'show' should go to the cinema [*Lichtspiel*]" (Weber, 2002: 368). For Luhmann, the 'unknowability' of the social world is not due to the inherent limits of human knowledge and perception, but is rather a consequence of "the 'interactively' alterable limits" of the world itself (Rausch 1992: 25):

The operation of observing, therefore, includes the exclusion of the unobservable, including, moreover, the unobservable par excellence, observation itself, the observer-in-operation... Observation has to operate unobserved to be able to cut up the world (Luhmann 2002: 86, 87).

Returning to Weber only to arrive at Luhmann by way of Parsons, as I have done here, is therefore only another way of sharpening our sense of the ineluctable contingency of observing ourselves observing.

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