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Social Systems Theory as Theoretical Framework for Human Resource Management – Benediction or Curse?**

Social systems theory as developed by Niklas Luhmann is an option for the theoretical foundation of Human Resource Management (HRM). After clarifying the advantages of using a grand (social) theory as the basic theoretical perspective, the roots of this social systems theory – the deterministic view of systems as machines, the open systems approach and non-linear systems theory – are addressed. Based on the view of social systems as autopoietically closed systems, five major contributions to a theoretical foundation of HRM are identified: (1) the conceptualisation of organising and managing human resources as social processes, thus overcoming an individualistic angle; (2) the new importance of individuals as essential element in the system's environment; (3) the abstention form far reaching or highly unrealistic assumptions about the 'nature' of human beings; (4) the interaction between various levels and units of analysis built into the theory which is essential for comprehensive and in-depth analyses of HR phenomena and (5) the openness for additional theories for which social systems theory provides the overall framework.

Key words: Systems Theory, Human Resource Management, Organisation Theory

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Introduction: Why using a grand theory?

Critics frequently diagnose a lack of comprehensive theoretical frameworks for human resource management (HRM; see, e.g., Drumm 1995). In recent times, however, things slowly seem to change (see, e.g., the overview in Weber 1996). Within these efforts, a number of 'grand' and less grand theories like behavioural theory (Schanz 2000; Martin 2001) or economic theory (Backes-Gellner 2001) are used as basic perspective for HRM. Looking at HRM from a 'grand' and unified theoretical perspective has a number of advantages for theory building as well as organisational practice.

From a theoretical viewpoint, borrowing from established grand theories supports a better understanding of HR phenomena. With its historical roots in practices and tools, HRM has to rely on other sciences for a theoretical foundation. Thus, it enriches the HRM-discussion if well established concepts from a different scientific field are applied to HRM. In addition, such an approach contributes to the integration of HR research into the organisational theory discussion. This not only helps HR theory, but also strengthens the theoretical link to the general organisational theory debate, thus underscoring the vital role HR plays in an overall view of organisations. Looking at HRM from a unified theoretical perspective also allows to discuss the great variety of HR aspects with a single theoretical language. Thus, new ways of reconstructing and making sense of these phenomena can be developed because the categories of the framework can be used to reconstruct organisational reality in a different way than using classic organisational and HR theory categories: It establishes similarities and differences between phenomena and actors that otherwise are regarded as conceptually and socially disperse (see Karpik 1978: 46, for a similar argument in organisation theory). Informal meetings of employees, working group processes or organisations as a whole can be analysed by focusing on the crucial elements of organising without getting distracted by highly visible, but not very powerful surface phenomena. Of course, it depends on the chosen theoretical framework which elements of organising are regarded as crucial.

Ideally, theory building does not only support theoretical advancement. It should also be related to better practice – at least this would be a widely shared view of business administration being a practical-normative science and thus also responsible for better practice. A grand theory helps building practical decisions on sound assumptions about crucial elements within the myriad of practical elements that practitioners face. In addition, it allows practitioners more than an educated guess about the outcome of practical decisions since such theories at least roughly outline the link between crucial elements ('variables'). Beyond that, such grand theories offer a basic view of organisational reality. As such, they help to answer the basic questions managers face when encountering the irritating mess called daily organisational life: What goes on, how can I differentiate between important and less important factors and what happens if? Only in answering these questions you can follow the dictum 'know what you are doing' (Weick 1969) which contributes to more reflected and better practice.

2. Social systems theory

Social systems theory as developed by Luhmann (Luhmann 1984) and used in organisation theory (see, e.g., Kasper et al. 1998; Hernes/Bakken 2003) and HR (see, e.g.,

Mayrhofer 1996) is one of the theory candidates HRM can use to better understand itself and, at the same time, contribute to better practice. Beyond doubt it is one of the grand social theories of the past 30 years. Like comparable efforts (see, e.g., Giddens 1984; Bourdieu 1977) it provides a unified framework for the analysis of social reality at a highly aggregated level.

In terms of theory history, there is no unified social systems theory as there is no singly systems theory, too. There seems to be consensus that systems are units differentiated from the environment and consist of at least two interrelated and distinguishable elements. Beyond that, a number of different theoretical traditions have developed systems theoretical views that are partly compatible with each other and partly are principally different from each other.

2.1 Systems theory – major influences during its history

At least three important roots and development steps, respectively, can be identified during the development of systems theory.

Systems as machines

The machine model stemming from mechanics can be regarded as the foundation of all systems theoretical considerations. Natural sciences, in particular physics, have popularised this view. They conceptualise machines as closed systems more or less decoupled from their environment. Linear causality is the building principle of such systems. It is in the tradition of determinism (for an overview see, e.g., Wildfeuer 1998) that this thinking is located. A typical example for the underlying logic is the world-machine concept which, among others, Pierre Laplace proposed in the late 18th century. It explains the current state of the world as the causal consequence of earlier states: "We may regard the present state of the universe as the effect of its past and the cause of its future. An intellect which at any given moment knew all of the forces that animate nature and the mutual positions of the beings that compose it, if this intellect were vast enough to submit the data to analysis, could condense into a single formula the movement of the greatest bodies of the universe and that of the lightest atom; for such an intellect nothing could be uncertain and the future just like the past would be present before its eyes" (Laplace 1996 (Orig. 1814): 1 f.).

The dominating differentiation inherent in such a view is 'part-whole'. Systems are constituted through the interplay between its various parts, order is produced through order.

In organisation theory, these assumptions have gained some importance. Implicitly, they serve as the foundation for the bureaucracy model of Max Weber (Weber 1980 (Orig. 1921)) or the concept of Gutenberg (Gutenberg 1983) about the firm as a combination of production factors. Explicitly, this is the frame of reference for the machine metaphor used by Morgan to demonstrate one possible view of firms (Morgan 1986).

Cybernetics

Cybernetics reverse the clear distinction between system and environment as proposed in the machine view (Wiener 1948). The environment provides influencing

forces that contribute to the steering of systems. The primary mechanism is the cybernetic feedback loop as illustrated, e.g., in a thermostat or a water tank equipped with a float. Through positive and negative feedback mechanisms a system changes its states. It is important to note that the system does not directly react to environmental influences. The systems itself translates inputs from the environment into its own language. In other words: it creates its own informational image about the environment.

The dominating differentiation focuses on the distinction between system and environment. Systems constitute themselves by differentiation from the environment with which they are tightly or loosely coupled. Vague environmental complexity is transformed in selective systems complexity, order emerges from selectivity.

In organisation theory cybernetics constitute the basic framework for the view of organisations as open socio-technical systems (see, e.g., Rice 1963; Miller/Rice 1967; Emery 1970). In the German speaking area, this view has influenced the discussion about the theory of the firm especially through the systems theoretical approach of Hans Ulrich and his colleagues (see, e.g., Ulrich 1970; Malik 1986; Probst 1987; Ulrich/Probst 1988). They emphasise the manifold and cyclical interrelationships between organisational variables and the resulting dynamic. Both support a better understanding of organisational processes not available when simply applying a static view.

Non-linearity

A further step in the development of systems theory is the transgression of a homeostatic and cyclic view of system states. Unlike the comparatively well-understood regularities of cybernetics, some systems produce, due to their specific characteristics, unpredictable states. Yet, these states are not random, but the result of specific systemic characteristics. The theory of non-linear systems (e.g., Schuster 1989), dissipative structures (e.g., Prigogine 1955; Prigogine 1987) or synergetics (e.g., Haken 1990) provide different building blocks for a better understanding of non-linear systems.

Probably the best-known approach within the theories of non-linear dynamic systems is the concept of chaos. Chaos (in the sense of non-linear dynamics) denotes extremely complex dynamic processes that can only be forecast for a very limited period of time ("butterfly effect"; e.g. Lorenz 1963), but that are not random either. As such hardly predictable processes can be found within deterministic systems, chaos – unlike random – always has a certain degree of order. Originally, these concepts have been used in physics and chemistry. Meanwhile, they are successfully applied in areas like psychological processes, psychotherapy or opinion building (see, e.g., Tschacher et al. 1992; Schiepek/Strunk 1994; Haken 1995; Küppers 1996; Mainzer 1999).

Coming from a different angle and focusing on biological aspects, some authors emphasise the self-referential closure of systems (Maturana/Varela 1987; Maturana 1992). Their ideas have also been applied to social systems. The concept of Luhmann has gained special importance in this respect (see below).

The dominant differentiation within self-referential closure approaches is the distinction between self- and other-referent views. Systems constitute themselves through observation of difference and through relating themselves to those differences. Order emerges through processing noise from turbulent environments (,order from noise').

2.2 Social systems theory – organisations as autopoietically closed social systems

Organisations and organisational processes are often viewed from an open sociotechnical systems point of view (e.g., Scott 1981; Stewman 1975). Social systems theory as developed by Niklas Luhmann, the late German sociologist, departs from this route of thinking. The theory of social systems (Luhmann 1984) sees organisations as autopoietically closed and consisting of communications or – in the case of formalised organisations - decisions, i.e. actions under the pressure of expectations. At the basal level they are not open to their environment, but autopoietically closed: they reproduce the elements they consist of out of the elements they consist of. Social systems are non-trivial machines that constantly alter their internal states and relationships (von Foerster 1985a). From the outside - and all observers are outsiders belonging to the internal or external environment – it is impossible to diagnose their functioning exactly. As indicated, the constituents of social systems are communications, actions and decisions (these three differ mainly with respect to the observers' position). Persons - more exactly: psychic systems - belong to the internal environment of social systems. They are a conditio sine qua non for social systems, but they reside outside and stimulate communications (Luhmann 1984; Luhmann 1988; Luhmann 1989).

In a widespread view of management the basic possibility of goal oriented management is not questioned. Though there are a number of difficulties, the use of good' management instruments leads to calculable effects in the system – here: the organisation. Social systems theory is much more sceptical in this respect. Social systems are not fully transparent and manageable. Attempts to push the system in a certain direction – in other words: management efforts – cannot rely on an adequate understanding of the system. Interventions through other psychic or social systems that necessarily come from the outside follow a different intervention logic than the logic of processes within the social system. Thus, an unbridgeable gap between intervening systems and the organisation exists (Willke 1987).

This does not imply that management is impossible. However, the conception of organisations as autopoietically closed social systems has significant consequences for management efforts. Management of such systems can only be self-management. Interventions, i.e. management efforts from the outside of the system, for example by managers, are initially sheer environmental noise. Only after the system reacts to this noise, i.e. after the noise stimulates internal operations that in turn trigger further operations (communications, actions, decisions), one can talk about a successful intervention. If and how the social system reacts to intervention noise and further proceeds internally does not depend on the intervening systems, e.g. managers, but solely on the system intervened in. From this perspective, management as an intervening effort fully depends on the autonomous, not forcible and not foreseeable processes of the system intervened in, e.g. a department or a work group. All-embracing fantasies of managerial omnipotence are not replaced by helplessness and impotence, but by a more modest and realistic view of the possibilities of management. The sovereign economic big boat captain going upwind in rough seas with his (seldom her) sure hand on the tiller is replaced by the fragile managerial surfer on the wave of developments, who has to restrict him- or herself to stimulating offers and has to accept the ,eigenlogic' of the system. Managerial efforts may or may not be taken up by the intervened system and be further processed. Management from this perspective means first and foremost making offers to the system that are not part of the options and possibilities of the system, but may become so in the future. To do this, self observation and action have to be separated from each other to a greater degree, thus enabling the development of potential for self reflective activities in order to promote self organising processes (Kasper et al. 1999b).

Organisations as formally organised social systems are autopoietically closed in their basal processes. Nevertheless, it is evident that pure self-reference in the autopoietic processes, i.e. looking only within the system, is not enough. Beyond the internal horizon, communication processes have to relate the system to the external world, i.e. have to deal with finance and labour markets, global competitors, new legal regulations etc (see, e.g., Mayrhofer 2001 for a more elaborated view on the relationship between organisation and environment in multinational companies). Thus, external reference is essential, because pure self-reference does not provide organisations either with information or with resources. However, from the theoretical point of view it is beyond doubt that self referential closure is the prerequisite for external reference. The combination of self-reference and external reference that simultaneously refers to the internal and the external horizon is called accompanying self-reference (Luhmann 1984: 604). Therefore, autopoietic closure of organisations is not an end in itself and does not negate environment. On the contrary, it is essential for social systems to relate to their environments. These relationships are formed and influenced by the internal structure of rules, the internal mode(s) of operation and the guiding differences used. Overall, one can define the relationship between social systems and their environments in a dual way. Systems are ,without' environment in their basal structure, their self organising processes and their operative closure. On the other hand, they are dependent on the environment since the system enriches and interpunctuates its internal operations from the environment (Willke 1987: 341). They need the environment as a condition for the possibility of continuing their autopoietic processes (Luhmann 1990: 36).

For organisations, autopoietic closure is essential for survival in a complex environment. The relationship between system and environment is characterised by a difference in complexity. This difference is the constituting force behind the existence of social systems. If there were no difference, there would be no system, but only environment. The question emerging is: How do social systems relate themselves vis-à-vis the environment, which part of the environment do they (re-)construct within the system and translate into the internal process logic of the system (Luhmann 1990: 32 ff.; Luhmann 1992: 38 ff.; similar Bühl 1985: 372 f.; Maturana 1986: 25)? From a systems theoretical point of view the answer is clear: via structural coupling. Structural coupling enables social systems to disregard many parts of the environment. Given the enormous number of possibilities, they are impressed only by very few 'instances'. Indifference is the standard reaction to most of the environmental incidents. It is very sharply selective towards the environment as well as towards its own possibilities of 'reaction' (Luhmann 1988a: 35). Thus, on the one hand structural coupling implies mutual dependency and selectivity. On the other hand, this also means an enhance-

ment of the system's potential. Through structural coupling, people (psychic systems) or groups (interaction systems) can provide organisations with complexity – and vice versa. In the language of social systems theory, the mutual provision of eigencomplexity to enhance the complexity of the other system is called interpenetration (Luhmann 1984: 286 ff.)

3. Contributions to a theoretical foundation of HRM

Social systems theory as a grand social theory has a number of contributions to offer for the theoretical foundation of HRM. It advocates a focus on social processes and not on individual behaviour and proposes a new role for the individual in the internal environment of the organisation. At the same time, it does not make any far reaching assumptions at the individual level. From a theory architectural point of view, it offers the opportunity for multilevel and multi-actor analysis. Likewise, it is open for integrating other theoretical concepts, thus enriching the theoretical possibilities for HRM while improving the quality of analyses.

3.1 Social systems theory conceptualises organising and managing of human resources consequently as social process

Theoretical approaches of HRM often tacitly or overtly take an individualistic angle. The individual constitutes the primary source of reference. From such an angle, even group and organisational phenomena are ultimately reduced and/or traced back to individual behaviour. This is true for more behavioural oriented (see, e.g., Reber 1978) as well as economic approaches (see, e.g., Backes-Gellner 2001). Individual behaviour is the focus of the analysis. While environmental influence factors partly are acknowledged, the person-related reasons for behaviour constitute the primary source of attention. Thus, within the spectrum of subjectivist and objectivist conceptions of behaviour, there is a bias towards the former: motives, needs, behavioural tendencies or subjective goals constitute the motivational or cognitive core constructs.

The major problem inherent in such an approach is the lack of attention for the specific environment that usually is the point of reference for HRM: organisations or, in the language of social systems theory, formally organised social systems. Organisations are no a tabula rasa for individuals with antecedents and consequences of individual behaviour largely undetermined and not influenced. On the contrary, they constitute a highly regulated environment. Characterised by numerous overt and hidden rules, traditions, organisational and national culture assumptions etc., they influence the emergence as well as the result of individual behaviour. Regarding the former, what organisational members do is heavily influenced by these regulations. Likewise, but often overlooked, the immediate outcome of individual behaviour is not the final step. The logic of the system frequently does not allow good intentions, well-meant ideas, good deeds etc. to bear fruit. They can be converted to the contrary, be isolated, misunderstood or ignored. This makes clear that organisations constitute a special environment with their own logic. Thus, the focus on the individual is not sufficient.

Consequently, social systems theory proposes a focus shift because of different basic assumptions about social and organisational reality. Social reality cannot sufficiently be explained through the aggregation of individual behaviour and related individual intentions. Individual behaviour is explained within the specific environmental context, actions are elements of a greater social context. This is not merely a reflection of the importance of environmental factors also acknowledged in clearly individualistic approaches like, e.g., in Lewin's behavioural formula (Lewin 1936: 12): Behaviour = f(Person, Environment). Rather than simply acknowledging the importance of environmental factors social systems theory makes it clear that depending on the specifics of the social system individual behaviour is processed in a specific way which is not necessarily connected to individual intentions or actual behaviour. Social systems organise behaviour/action and give the resulting social processes a certain structure, imprinting on them direction and form (Kneer/Nassehi 1993: 29). Thus, social systems theory allows conceptualising the emerging phenomena of the interrelation of behaviour of two or more individuals as a construct of its own kind and not merely as an addition to individual behaviour. In this way, it lays the foundation to overcome an ultimately individualistic perspective.

This does not imply that individuals are of not important in this approach: Without individuals (or more precisely: psychic systems) no social systems. However, systems theoretical constructs like the communication concept based on the threefold selectivity of information, message and understanding or the 'relocation' of individuals out of the organisation into the (internal) environment of the organisation enables social systems theory to radically construct organising and managing human resources as social process and not as a sum of individual behaviour/action. As such, it is not the individual but the social context and processes enabling individual behaviour that receive attention.

3.2 Social systems theory bans individuals from the organisation and designates new importance to them

Although refocusing from the individual to the social system and its processes, the individual still plays – as indicated above – an essential role in the theoretical concept. This is especially true for organisations as special types of social systems. Here, the designation of an individual to be a member of the organisation – or no member – is crucial. It is crucial in a practical sense since the member/no member distinction has important consequences for being on the payroll, having a job, getting social status, having specific types of influence in organisations etc. It is also crucial in theoretical terms as any theoretical foundation for HRM has to conceptualise the relationship between individual and organisation. Social systems theory uses the theoretical figures of organisational boundaries and structural coupling to shed new light on this relationship.

Organisational boundaries are formed via expectations: they are the structures that decide whether communications/decisions are counted as part of the system or the environment. Thus, their core contribution to the system is the supply of inclusion/exclusion signals (Luhmann 1984: 55ff., 177ff.). Expectation structures are an expression of those schemes that allow organisations to differentiate between communication stemming from the system and those coming from the environment. Individuals have a central role in this process: Communications/decisions are regarded as belonging to the organisation if the individual to whom this communication/decision is attributed belongs to the organisation. Usually, the criterion for 'belonging to the organisation' is membership. In other words: organisations make their boundaries

clear to their environment by signalling who belongs 'inside' and who does not via membership. If a communication/decision is attributed to a 'member (non-member)', then this is a clear indicator that the communication/decision can be attributed to the organisation (the environment). Thus, organisations can act as 'collective actors' (Luhmann 1994; for a similar perspective see Coleman 1986 who talks about corporative actors) that make their drawings of boundaries highly visible and plausible for their environment.

Whatever the case, it is only communications/decisions and never individuals that are the elements of the organisation. Nevertheless, the latter are of crucial importance. First, they play a major role in structural coupling with environment(s). Second, they act as instances of attribution, especially for the case of success and failure (see. e.g., Kasper et al. 1998; Kasper et al. 1999a). However, individuals – e.g., cleaning personnel, clerks, skilled workers or managers in the case of formally organised social systems like companies - never belong to the system itself. They are always part of the system's environment. At the same time, they are conditiones sine quibus non for the existence of the system and are structurally coupled as mentioned above. As parts of the environment they provide organisations with a stimulation that triggers other referential processes within the system. However, a caveat applies here: not all individuals have the same chance to trigger such processes. How individuals are structurally coupled with the organisation can make a big difference. There is - not very surprisingly – a big difference according to whether the call for a fundamental process of change within the organisation comes from the former wife of a fired manager of the company, the CFO of the largest creditor bank, or from the CEO of the company.

In other conceptions using the individual as the point of departure, its integration is given from the beginning. Social systems theory – emphasising the emergence and uniqueness of social systems that cannot be explained simply by adding up individuals – has to discuss specifically discuss this issue. In this way, the relationship between the individual and the organisation as a core theme of HRM is addressed in a new way. In addition, the core focus of HRM is no longer the individual (alone): Social processes and the conditions for these processes as well as individual behaviour gain new importance for HR efforts.

3.3 Social systems theory abstains from far reaching or highly unrealistic assumptions about the 'nature' of human beings

While social systems theory proposes a new relationship between individual and organisation and assigns the latter a specific place in the internal environment, it does not make far reaching or unrealistic assumptions about the nature of human beings. Many of the theoretical concepts used in HRM do make such claims which lead to a lot of criticism. For example, personnel economics rely – to a varying degree – on partly brave assumptions about the tendency of individuals towards utility maximizing decisions or the degree of rationality of decision making. Likewise, motivation theories often assume inherent tendencies like drives, needs or striving for cognitive harmony and homeostasis as a basis for their theoretical framework. While all of these assumptions do make sense as far as they go, they also have some problems linked with

them. In addition, they limit the opportunities for a comprehensive view because of restrictions following from the starting assumptions.

Social systems theory abstains from such assumptions at the individual level. Rather than conceptually emphasising some elements within the 'infinity of the psyche' (and risking to get lost in the latter...), social systems theory focuses on social processes and specific aspects of individual behaviour/action (see above). This has several advantages. First, it keeps the framework open for a great variety of theories operating with different types of assumptions about the genesis of individual behaviour/action, thus allowing the integration or at least the use of such theories (see below). Second, leaving the internal mechanisms of the individual in the black box of the psyche gives the whole theoretical architecture more flexibility. It is not bound by assumptions at the individual level that have consequences for the whole theoretical concept. Third, this prevents critique at this level.

3.4 The interaction between various levels and units of analysis is built into social systems theory

HRM clearly involves the recognition of phenomena at very different levels. Individual motivation and behaviour plays a role as do dyad relationships, e.g., in mentoring or leadership, formal and informal work and social groups. Beyond that, organisational processes, e.g., during organisational development, the relationship between different organisations, e.g., in mergers and acquisitions or new organisational forms like network organisations, the importance of various parts of the external environment like the national and global economy like the labour market, the political environments and the rules and regulations stemming from play a role in various aspects of HRM. This clearly requires a theoretical framework capable of including various levels of analysis as well as different types of actors. The conceptual architecture of social systems theory basically meets these requirements.

Although not specifically conceptualised for the individual level, there are some attempts to apply the basic ideas of autopoiesis and self-referential closure also to individuals, i.e., to psychic systems, and their processing of internal and environmental stimuli. At its core, however, the theory focuses on social systems, i.e., an entity consisting of communications/actions/decisions. As such, it comprises various forms of social systems: dyads, groups, organisations and society as a whole (see, e.g., the various aspects covered in Baecker et al. 1987). Organisations as a specific type of social system – formally organised with membership rules – receive special attention in social systems theory (see, e.g., Luhmann 2000). Not only the relationship between organisations and their members is a major topic (see above). The theory also addresses the relationship between organisations as social systems and their environment.

The autopoietic closure of social systems makes it impossible for the environment to directly influence the organisation. All events in the environment have to be translated into the 'language of the system', i.e., into system internal operations. Relevant issues from the external organisational environment become relevant only via internal communications: What does not appear on the internal communicative agenda does not exist for the organisation: It can see what it can see and it is blind for those issues that it cannot see. A priori, environment exists for organisations only as noise.

Environment does not contain any information, but mere data. Information only emerges, if social systems – using their own distinctions – make a difference, 'forcing' data on one side or the other of such a distinction: an economic downturn (data) can become an opportunity for cheap labour or a threat for further growth in personnel (information). Whether it becomes the one or the other is not a question of the external environment, but the result of processes and decisions within the system. Hence, information always and with no exception is an internal quality and cannot be 'transferred' from the environment into the system. Environment emerges within the organisation (Luhmann 1990: 32 ff). However, if information is in-formed, i.e., formed within the system, then the systems specific differentiation schemata and the conditions for their use gain new importance. In addition, this also increases the importance of using other theories that can explain why specific schemata emerge and are used, e.g., power theoretical concepts. Such theories are necessary for the full usage of social systems theory in the organisational settings (see below).

Overall, it becomes clear that socials systems theory touches on issues at various levels as well as different actors: individuals and different types of social systems, their relationship among each other and to the external environment. As such, it allows addressing important HRM related questions in terms of the mutual influence of various actors at different levels.

3.5 The social systems theoretical concept allows – and partly requires – the integration of additional theories

Social systems theory as a grand theory is also a super theory: It offers theoretical considerations adequate for different actors and levels of analysis at a quite high level of abstraction. The primary value of such a theoretical approach is in providing a framework that guides thinking about organisations in general and HRM in particular. By formulating basic assumptions about core characteristics of social systems, e.g., autopoietic closure, identifying crucial elements like the focus on communication/action/decision or structural coupling between individuals and organisations as the system/environment interface, and naming critical processes like self- and other-reference, social systems theory offers the opportunity to reconstruct organisational reality along these lines. A new understanding – even if 'only' in broad terms – of organising is made possible.

However, in a more detailed perspective, social systems theory remains vague. For example, even when one accepts the social constructivist notion of the external environment being constructed by the social system itself and the generation of information depending on the application of system internal differentiation schemes, several things remain unclear. How does the system choose between various available differentiation schemes? Usually a number of differentiation schemes are available in the system ready for application to environmental noise. It is by no means clear which of these schemes will be chosen, what the criteria for the choice are and what other factors influence the choice. In what parts of the system will the information be generated? In organisations, usually several units have the task of scanning the organisational environment. If several of these units produce information through the application of differentiation schemes, one does not have any idea what happens with these

pieces of information once they are fed into the communicative processes in the system. What happens if several of these informations generated happen to be conflicting with each other? Social systems theory again remains very abstract, using the concept of viability to describe the ultimate goal of systems and solutions. However, this is only of little help in the concrete theoretical and practical analysis.

This example makes clear that for the full use of social systems theory in management in general and HRM in particular, it needs to be supplemented by more fine grained theoretical concepts. These concepts cannot provide the overall view and the general direction. However, their strength lies in a much more restricted focus, thus being able to provide an analytical and practical framework for very concrete situations. For HRM, both elements – the direction provided by a super theory like social systems theory and the detailed analysis made possible by mid- or short-range theories – are important. The former provides the overall framework that guides academic research and practical interpretation efforts and makes it possible to see the overall picture without getting lost in the details. The latter is essential for the analysis of specific aspects of HRM and concrete action.

A number of theoretical concepts can be built into social systems theory. For example, power concepts (Pfeffer 1992; Sandner 1990) can help to shed light on the issue of voice and communicative patterns in social systems. As indicated above, it is by no means clear which communicative efforts are picked up by the social systems. In addition, not all communication efforts have the same chance to further get processed within the systems. If they are ascribed to a powerful actor, they have less risk to get 'drowned in noise'. Likewise, when thinking about which communications are fed into the system by individuals, classic motivation theories or economic views of the individual can play an important role. It goes without saying that it is not easy to 'console' the partly differing basic assumptions of various theories with each other or with the assumptions of social systems theory. Nevertheless, the potential advantages offer an incentive to pursue a 'playful' course of action looking for fruitful combinations of various theoretical concepts under the roof of social systems theory.

As a result, the use of social systems theory has a double advantage. First, it allows the use of concepts already established in HRM theory and practice. Social systems theory does not devalue these concepts. On the contrary, it enhances their value by providing an overall framework that helps focusing on the 'right' issues and combining the insight of these theories. Second, the specific focus of such theories can contribute to a more fine grained description of the dynamics of social systems. In principle, organisations are black boxes – they can never be fully understood. However, using social systems theory as the broad framework and integrating other theories with a more modest range leads to 'quasi-descriptions', resulting in an understanding of organising in an 'as if' mode: assuming that one understands. In this way, social systems theory contributes to non-trivial insight and advice relating to HRM.

4. Concluding remark

A theoretical foundation for HRM has to link micro- and macro-perspectives, individual, organisation and society, action and structure. It must mediate between rigid structuralist approaches, which regard careers as constituted by social (or personal)

structure, and individualist approaches, which overemphasise individual actions and strategy. HR relevant processes are neither fully determined by social rules and regulations nor are they only based on free individual choice. In addition, the theory has to be flexible enough to copy with recent developments like new organisational forms, virtualisation, flat hierarchies in organisations, more fragile forms of employment, new self employment, to mention just a few. It also has to be flexible enough to integrate constructs and the corresponding results of a long and successful tradition of HR research.

For social systems theory, social reality is more than the mere aggregation of individual behaviour/action and its intentions. It emphasises the 'structural' element and argues that behaviour/action in social systems has to be analysed separately from the individuals that they are usually attributed to. Social systems are emerging units with their own quality. Thus, it helps HRM to overcome a view implicitly or explicitly solely based on the individual. For sure, it is not the only theory candidate for a theoretical foundation of HRM – but as sure, it is one of them.

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