

ORGANIZATION SYSTEMS AND THEIR SOCIAL ENVIRONMENTS: THE ROLE OF FUNCTIONALLY DIFFERENTIATED SOCIETY AND FACE-TO-FACE INTERACTION RITUALS

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ABSTRACT

Organizations are affected top-down by the overarching societies and bottom-up by foundational face-to-face encounters: societies provide norms, values, laws, institutions, beliefs, markets, political structures, and knowledge bases. What happens within organizations is done by people interacting with other people, arguing, discussing, convincing each other when preparing and making decisions. Organizations operate within social environments that leave their – however indirect – imprint on what is going on within organizations. This article argues that organizational sociology can benefit from an integrated theoretical framework that accounts for the embeddedness of organizations within the micro- and macro-levels of social order. The argument is developed in two main points: First, this article introduces the multilevel framework provided by Niklas Luhmann's systems theory to demonstrate how organizations are shaped by the functionally differentiated macro-structure of society. Organizations follow and reproduce the operational logics of societal domains such as the

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political system, the economy, science, law, religion, etc. Second, this paper demonstrates how organizations are shaped by micro-level dynamics of face-to-face interactions. Face-to-face encounters form a social reality of its own kind that restricts and resists the formalization of organizational processes. Here, this article draws on Erving Goffman's and Randall Collins' work on interaction rituals, emotions, and solidarity, which is inspired by Durkheimian micro-sociology. At the end, this article brings together all the elements into one general account of organizations within the context of their macro- and micro-structural social environments. This account can yield a deeper and more sociological understanding of organizational behavior.

Keywords: Functional differentiation; Goffman; interaction rituals; Luhmann; organizations; systems theory

INTRODUCTION

When we buy groceries in the supermarket, when we bring our children to school, when we take the bus to our workplace, when we file tax forms, when we get a parking ticket, when we stream videos, when we use our banking app, when we get our vaccinations, when we participate in meetings – in all of these situations we deal with organizations. What organizations do – organizing the supply of goods, education, transport, public administration, law enforcement, entertainment, finance, healthcare, business – has become indispensable for our lives in modern societies (Arnold et al., 2021, 2022; Bromley & Meyer, 2015; Perrow, 1991; Schimank, 2010; Simon, 1991). For tens of thousands of years of human history, social life was possible without organizations (Abrutyn & Turner, 2022; Boehm, 2009; Henrich, 2015), but modern, large-scale societies would end up in unimaginable chaos if all organizations were artificially removed.

Organizations are fundamental to the proper functioning of modern societies, both on the macro-societal level and on the micro-social level of everyday lives. At the same time, the very organizations that provide and sell supplies, educate us, transport us from A to B, regulate and administer us, etc. could and would not exist if they weren't highly affected top-down by the overarching societies and bottom-up by foundational face-to-face encounters: the societies provide norms, values, laws, institutions, beliefs, markets, political structures, and knowledge bases. Most of what happens within organizations is done by people interacting with other people, arguing, discussing, convincing each other when preparing and making decisions. Expressed differently, organizations operate *within social environments* that leave their – however indirect – imprint on what is going on within organizations: what goals are considered rational and desirable, and by which means these goals are to be achieved, how the relations between superiors and subordinates are regulated, what kind of talents and skills are available, what kind of products and services are in demand.

One of the major contributions of (neo-)institutional perspectives (DiMaggio & Powell, 1983; Scott, 2013) was to highlight the influence of macro-societal forces

on organizations. Organizations tend to conform to societal norms, values, and expectations in order to gain legitimacy and support, and over time, organizations operating in the same domains start looking alike. Oriented toward the micro-level end of environmental influences on organizations, human resource (HR) perspectives (Boxall & Purcell, 2022; Wright et al., 2001) have emphasized social-psychological factors driving organizational behavior such as employee motivation, job satisfaction, leadership, as well as interactional dynamics within teams or between management and employees.

Both perspectives have increased our understanding of what happens within organizations. These two schools are examples of how micro- and macro-levels are studied apart and relatively isolated from each other. As I intend to demonstrate in this article, a sociological understanding of organizations can benefit from an integrated theoretical framework that accounts for the simultaneous embeddedness of organizations in the micro- and macro-levels of social order: face-to-face encounters on the micro-level and societal domains such as the political system, the economy, science, law, religion, and others, on the macro-level.

One such integrated theoretical framework is the theory of social systems by German sociologist Niklas Luhmann. Luhmann's oeuvre (1995, 1999 [1964], 2018) includes dedicated studies of organizations, but more importantly, it offers a general social theory that can be applied to the societal level (Luhmann, 2012, 2013), to organizations, and to the level of face-to-face interactions (Kieserling, 1999). Most importantly, it allows for an integration of all those levels within one and the same conceptual framework (Fuchs, 1989; Luhmann, 1982).

Over the years, there have been many recommendable and accessible efforts to introduce Luhmannian theory to an international audience of organization scholars (Grothe-Hammer, 2022; Nassehi, 2005; Seidl & Becker, 2006; Seidl & Mormann, 2015). Because these cater primarily to readers invested in studying organizational behavior and management, their focus is on Luhmann's rather unconventional approaches to the theory of organization, especially with regard to decision-making and formal structures. The attention of the introductory literature, hence, is on Luhmann's *organizational* sociology but less so on the embeddedness of the latter within Luhmann's general theory of social systems (Luhmann's *social* theory) and within Luhmann's theory of *society*. Luhmann's multilevel framework, thus, holds some untapped potential for the understanding of organizations within their micro- and macro-social environments.

There are two purposes of this article. *First*, the text can be read as a supplement to the existing introductory literature to an English-speaking audience in organization studies with a focus on Luhmann's theory of society (functional differentiation) and the integration of face-to-face interaction, organizations, and society within the same framework. *Second*, I propose an amendment to something I consider a weak spot in the Luhmannian tradition regarding face-to-face interaction. Deviating a little from the orthodox grounds of Luhmannian scholarship, I argue that some aspects highly relevant to the study of organizations (interaction rituals and solidarity) have been addressed better by the "micro-wing" of the Durkheimian tradition. From this tradition, I import insights by

Randall Collins (2004) and Erving Goffman (1967) that, in my view, can be made compatible with the Luhmannian link interaction–organization–society.

While I touch the question of what goes on within formal organizations¹ (such as decision-making, informal power struggles, conflicts of rationalities) only briefly, my emphasis is on organizations as social systems that operate *within a society*, surrounded by interaction systems. The structure of this paper is as follows: First, we look at how we can understand formal organizations from a Luhmannian framework. Second, we will invoke Luhmann's theory of functionally differentiated society in order to get a better understanding of how organizations are shaped by modern society. Third, we will look at how face-to-face encounters form a social reality of its own kind that restricts and resists the formalization of organizational processes. Fourth, we bring all the elements together into one general account of organizations within the context of their macro- and micro-structural social environments.

1. ORGANIZATIONS AS SOCIAL SYSTEMS

In his earlier work, Luhmann (1999 [1964]) was interested in the functions and consequences of formal organization systems. With focus on organizations as systems in an environment, Luhmann argued that the formalization of expectations reduces the enormous complexity in the environment. Members in organizations are expected to behave in certain (but not other) ways, report to certain (but not other) persons, and do certain (but not other) tasks. Unless they want to jeopardize their position in the organization, members need to adhere to these expectations. These expectations are formalized with regard to achieving the goals the organization has set. When goals shift, members are expected to support these changing goals. The difference between social order inside and outside of organizations is that many more behaviors are possible in the environment. By reducing this vast complexity through the formalization of expectations, organizations can build up their own, internal complexity that is necessary to "organize" the achievement of the set goals, such as building products or providing services.

One of Luhmann's key observations was that the formalization of behavioral expectations in a decision structure inevitably leads to informal structures that partly support and partly counteract the formal structures. This is so because formal structures are notoriously prone to goal conflicts, conflicts between means and ends where means can reify and turn into ends in themselves, as well as conflicting rationalities toward contradicting goals. In order to fulfill or integrate goal conflicts, informal expectation structures may emerge as parasites within the formal structure that ultimately become functional for achieving the formal goals in the first place. An example of the latter is an unofficially tolerated violation of safety rules in order to achieve production schedules (Bensman & Gerver, 1963).

With the increasing role of communication as a key concept of Luhmann's (1995) general theory of social systems, he also slightly shifted focus in his work on organizations. Notions of complexity reduction and the difference between formalized and informal expectations have lost some importance, and Luhmann focused more on organizations as communication systems that reproduce through

decisions (for a detailed chronological overview of changes in Luhmann's organizational sociology, see, for instance, Seidl & Mormann, 2015). There are a few key elements of Luhmann's account that hold across different phases of his work. Importantly, Luhmann rejected the idea that social systems consist of human beings doing something together. In line with his general theory of social systems (Luhmann, 1995), he conceives organizations as communication systems, that is, emergent social orders that cannot be reduced to their constituent elements – for instance, interactions between people (Luhmann, 1992; Schirmer & Michailakis, 2019). Organization systems differentiate themselves from their environment through a recursive network of decisions and decision premises, and they distinguish members from non-members (Grothe-Hammer & Berthod, 2017; Luhmann, 2018). Membership is tied to formalized (and informal) behavioral expectations that apply within the system but not outside (Luhmann, 1999 [1964], 2018).

Decisions and membership are the lowest common denominators for any type of organization system, from barber shops to multinational concerns. Every organization has defined criteria for membership, and these criteria vary depending on the type of organization. The concept “decision” refers to the communication of a choice between alternatives of which one is selected, for instance, hiring candidate A instead of B, to find the defendant guilty or not guilty, to approve the export of high-precision artillery systems in order to support the territorial defense of an invaded country, to let a student just pass instead of fail in an exam. During the course of time, organizations build up a history of decisions, decision programs, and decision premises that define to a large degree what has to be done under which circumstances. Organizational structure is a “decided structure” (Grothe-Hammer et al., 2022).

Through its structure based on decision premises, an organization is capable of maintaining its operative difference toward the environment. At the same time, it can adjust past decision programs if changes in the environment (falling prices, new laws, new communication technology, outbreak of a pandemic) require new, more appropriate goals. This mix of variety and redundancy (Luhmann, 2018) allows organization systems to master contingency in and openness toward its social environment.

Organizations are social systems within which many elements of social life happen that we also find outside of organizations, a world full of social norms, conventions, coordination, cooperation, competition, and, more generally, communication. The functions and consequences of “formal organization,” thus, are *different* in the way organizations are affected by their environment. As we will show throughout this paper, two levels of environment are particularly important: face-to-face interactions and the encompassing society. We resume with the latter in Section 2.

2. HOW FUNCTIONALLY DIFFERENTIATED SOCIETY AFFECTS ORGANIZATIONS

Luhmann conceptualizes organizations as *communication systems* and not – as the mainstream does – as assemblies of humans who get together to achieve

joint goals. In the same manner, Luhmann argues that it makes sense to conceive of society not as a large group of people but as one complex communication system.² More specifically, Luhmann defines society as the encompassing social system that comprises all other social systems (= communication systems). Any face-to-face encounter, organization, or other social system is part of society, and thereby reproduces society as a whole. With the mere definition, we have not said much yet about society as such.

Luhmann's earlier conceptions of society stressed the function of complexity reduction. Society as an inner-social environment reduces the complexity for all other small-scale social systems such as organizations and face-to-face encounters. These same smaller social systems can rely to a large extent on the structures the encompassing society provides for them, such as norms, values, beliefs, legal and political structures, markets, knowledge, and skills. This is especially important for organizations that can focus on building up their internal decision-making structures within an already established societal environment.

As was the case with Luhmann's earlier writings on organizations, the notion of complexity reduction had been relegated to the background over time. The most important feature of Luhmann's account of society as the encompassing communication system is *differentiation*. This means that society is not a single, unitary entity but rather a conglomerate of different parts, realms, or subsystems. The notion of society as difference has a tradition in classical sociological theory, for instance, in Marxian conflict theories according to which society is characterized by difference in the form of conflict between ruling and oppressed classes (Marx & Engels, 2014 [1847]). Likewise, Max Weber (1968) rejected the notion of a societal unity in trade for difference through a plurality of "value spheres" such as politics, religion, art, ethics, science, love, and the erotic value sphere. These value spheres each operate according to different logics, rationalities, and values that cannot easily be substituted by or subsumed under the other: Art has a different telos than politics and love does not work like science – a fact that at least some of our colleagues are aware of.

2.1. What Is Functional Differentiation?

As I will demonstrate in the next paragraphs, Luhmann's approach is akin to Weber's (see also Bruun, 2008) but draws on another tradition of differentiation theory that has precursors in the works of Emile Durkheim (2012 [1893]) on the social division of labor and Talcott Parsons' earlier contributions to a systems theory of modern society (Parsons, 1951; Parsons & Smelser, 1956). Both Durkheim and Parsons describe modern society as *functionally differentiated*. For Durkheim (2012 [1893]), increasing complexity and competition forces different social groups to specialize, which, over time, lead to a differentiation of institutional spheres centered around societal functions. In modern society, there are several societal realms that are separate from each other by the function they fulfill for society as a whole. Parsons (1951) therefore calls these subsystems *function systems*. In his well-known AGIL scheme, he analytically distinguishes four of them by cross-tabulation of the two variables internal/external and consummatory/instrumental, which depict

the relation of the system to itself and its environment, and to the present and the future, respectively. The functions are **Adaption**, **Goal attainment**, **Integration**, and **Latent pattern maintenance**. Parsons claimed that, in order to survive, each system needs to have these functions fulfilled by its subsystems (= function systems). For **Parsons' (1977)** general systems theory, society is just a special case of a social system that has its very own subsystems: the A-function is fulfilled by the *economy*, the G-function by the *polity*, the I-function by the *societal community*, and the L-function by what he calls the *fiduciary system*.

Luhmann's theory of modern society is an enhancement of this functionalist strand of differentiation theory. Like Durkheim and Parsons, he considers functional differentiation as the key characteristic of modern society. In contrast to Durkheim and Parsons, however, Luhmann neither assumed that all these function systems are well integrated into a coherent whole. Nor did he consider functional differentiation a societal division of labor that expresses a cross-societal solidarity built from mutual dependence of the parts. Luhmann was especially skeptical toward the notion that modern society is integrated by a special system. Likewise, Luhmann did not envision a special function for pattern maintenance, as Parsons did. According to Luhmann, the societal instances Parsons had in mind for pattern maintenance such as families, law, religion, and education, each form separate function systems fulfilling a different function.

While Parsons derived four functions analytically through cross-tabulation of two variables, Luhmann derived "his" function systems empirically and finds a much larger number of them. Luhmann himself and some Luhmannian scholars proposed the political system, the economy, science, religion, law, art, healthcare, education, mass media, love/family, social help, and sports.³ For Luhmann, function systems solve a specific reference problem for society that arises with increasing complexity. To give some examples, the system of politics solves the problem of social order by providing the capacity to form and enforce collectively binding decisions through power (**Luhmann, 2000**). The economic system regulates the allocation of goods and services under the problem of scarcity. Science solves the problem of advancing knowledge. The modern function of religion is to handle the problem of meaninglessness by offering explanations of the unexplainable. The function of law is to stabilize normative expectations for future conflicts.

In contrast to pre-modern stratified societies, which had a center and an apex (represented by a royal court or some clerical leader), modern society has nothing of that sort. To be sure, there are national and supranational governments, usually organized strictly hierarchically and headed by prime ministers, presidents, or general secretaries. However, these are organizations of the global *political system* of society – not of society as such. Likewise, a globalized financial market is not a characteristic of an integrated society but of a globally operating economic system. Each of these systems has repercussions on other function systems. For instance, the financial markets will react if the government of a certain country falls or the government may fail to be re-elected because of a breakdown of some market. Luhmann's point here is that the political system reacts politically to events in the economic system, while the economic system reacts economically to events in the political system. The same is true for other function systems, of

course. In general, function systems are autonomous, but they are not independent from each other. They react to events in their environment, but they do it “their way” (Schirmer & Michailakis, 2019).

2.2. *How Functional Differentiation Works*

One of the clues of Luhmann’s notion of functionally differentiated society is that modern society is a paradoxical unity: its unity lies in the multiplicity of incongruent function system-specific views of it. The differentiation of functions and function systems is, according to Luhmann, not a societal division of labor in a Durkheimian sense postulating a cross-societal solidarity or position representing the unity from which the function could be delegated. Instead, the functions are operative logics or rationalities (comparable to Weber’s value spheres) that – at some point in history – have started to differentiate from each other and observe society from their own emerging perspectives. Each function system operates with its distinct point of view that their rationality and logic enables them to see. For the economic system, everything is a potential commodity that can be bought and sold for the right price. For the political system, everything is a matter of power distribution, alliances, coalitions, and majorities in elections. For science, everything is a potential object of research, to be analyzed, explained, and predicted. For religion, everything is a matter of sin, sacredness, and supernatural forces.

Using a formulation coined by philosopher Gotthard Günther (1979), Luhmann describes modern society as *polycontextural*. Günther defined a contexture as a view of the whole world through a binary logic such as true/false or legal/illegal. Each function system creates its own contexture: its own limited sphere of relevance through a binary logic. For everything else that falls beyond this sphere of relevance and logic, function systems are blind. Polycontextural, then, means that there is a multitude of contextures, all of which are incommensurable to one another.

The relative blindness for other perspectives has implications for society as a whole, as Luhmann (1989) demonstrates in his book *Ecological Communication*. Lacking a central “Archimedean” standpoint, society can only get a grip on the increasing ecological self-endangerment via its function systems. The problem is that function systems can only react in the way their logics and rationalities allow them but not in some all-encompassing rationality such as “stop climate change or else the planet becomes unlivable.” The economic system reacts in terms of prices: as long as raw oil is cheap and hydrogen too expensive, it will be hard to convince consumers and providers to shift. The legal system can only punish actors if they violate existing laws. As long as there are legal loopholes that allow to dump externalities that pollute the milieu, companies will continue doing it. Changing laws requires political support, but the political system is sensitive to public opinion. Drastic measures are unpopular and may cost elections. In the system of science, environmental problems offer plenty of opportunities for research and career, but successful scientific communication rests on truthfulness according to evidence, methodology, and accepted theories – a language that is not shared widely outside of academia. In order to have any impact, the scientific question “is it true?” has to be translated into “does it work?”, “how much does

it cost?”, “is it legal?”, “can we win elections with this?”, “is it a sacrilege?” etc. None of this means that environmental progress is impossible – history shows the contrary – but the functionally differentiated structure of society prevents a direct pathway to solve such complex problems that transgress the boundaries of several function systems. The interdependence and autonomy of function systems entails conflicts about goal alignment, time frames, and mutually exclusive rationalities that need to be managed. An analysis grounded in functionally differentiated society casts doubt against simpleminded blaming of allegedly unwilling, greedy, and immoral groups of people and questions the effectiveness of protest actions by radical environmental movements such as Extinction Rebellion which are ignorant of the “multiperspectivity” (Nassehi, 2003) built into the structure of modern society.

2.3. *How Functional Differentiation Affects Organizations*

Now that we have presented Luhmann’s analysis of modern society, we can address the question of what all of this has to do with organizations. The answer is threefold: (a) function systems are no agents but organizations are, (b) organizations are oriented to the operative logics of particular function systems, and (c) organizations need to console contradicting functional logics within their own operations.

(a) Function systems are communication systems, but they have no agential qualities. The economic system, for instance, operates and reproduces itself through economic transactions by processing payments that enable further payments through the use and circulation of money. Every payment that connects past payments to future payments reproduces the economic system, but the function system itself is not much more than the framework of meaning within which trades, payments, prices, money, merchandise, etc. make sense. The individual payments, however, have to be executed by concrete agents, such as individuals or organizations.

Like individuals, organizations have a communicative address, which means that they can participate in communication as subjects and recipients. The address is a name, such as John Doe or Harvard University, on the one hand, and a point of attribution for actions and communication, on the other hand. When a tech company launches a new smartphone on the market, when a social media platform changes its terms of service, when a state invades the territory of another state, when a scientific journal accepts a manuscript for publication, when a university awards a diploma to their students, we can be sure that an organization acted and communicated.

Having agential qualities entails being accountable for the actions or neglects thereof. When a sports apparel company fails to invest in safe work environments in their supply factories, or when a government fails to adjust its anti-pandemic lockdown measures resulting in social alienation and mental illness among its citizens, this will also be attributed as an action: the decision of not doing anything when something should have been done.

The ability of organizations to act and communicate collectively also comes at the price that they can be called out, claims can be directed at them, action

can be demanded from them, all of which requires (communicative) reactions – refusal or silence will be attributed as communication, too (Watzlawick et al., 1967). The ability of collective communication of organizations becomes clear if we consider other types of social systems for comparison: informal groups, function systems, and society as a whole have no communicative address. We can try to direct claims at them but shouldn't wonder why nothing happens when we call for "the economy" or demand that "we as a society" have to act now. Well, only organizations and (collectives of) individuals can "do" something – function systems cannot. Function systems operate more as an inner environment for organizations and individuals participating in function-system-specific communication.⁴ The problem is that organizations do not represent the function systems; they only represent themselves. For instance, governments *are not the* political system; banks and corporations *are not the* economic system. This brings us to the next point.

(b) Most but not all organizations are associated with a specific function system. "Associated with" is a careful formulation to address the circumstance that organizations and function systems are separate entities, and organizations are not part of "their" function systems (Schirmer & Michailakis, 2015). This thought is complicated and requires some explanation.

For starters, we associate the organization "government"⁵ with the function system of politics. Next to the government, there are a number of other organizations that can also be associated with the political system, such as parliaments, parties, nongovernmental organizations (NGOs), political counseling organizations, lobby firms, and many more. To make things yet more complicated, there are states, regional states, international organizations such as the United Nations, supra-states such as the European Union, defensive organizations such as the North Atlantic Treaty Organization (NATO), the Organization for Security and Co-operation in Europe (OSCE), and others. All of these organizations are somehow associated with the system of politics because politics is their bread and butter. They are directly or indirectly involved in the function of collectively binding decisions – either on the side of policy-making, the opposition, or general formation of political will.

For an example of the economic system, we immediately think of business corporations and banks as typical organizations. Here, too, are other organizations that also deal with primarily economic affairs, such as central banks, venture capital investors, money transfer services, audit firms, rating agencies, cooperatives, and others. In the context of the system of science, there are universities and research institutes but also funding agencies, ethical review boards, disciplinary associations, journals and publishers, and others. In general, we find many other function systems that have "their" typical organizations. Examples for organizations of the educational system are schools, universities, and kindergartens; examples for organizations of religion are churches and congregations; examples of the legal system are courts and law firms; examples of the health-care system are hospitals, clinics, pharmacies, therapy centers, wellness spas, etc.

What all of these examples have in common is that the mentioned organizations are, as I called it earlier, "associated with" one specific function system.⁶

Revisiting the older Luhmannian notion of complexity reduction, we can keep in mind that functional differentiation reduces the enormous complexity of social reality. In the same manner as function systems are ignorant to the logics of other function systems, we can observe that organizations can also ignore large parts of what happens in their environments. However, this does not mean that they can just do what they want. Their decision premises are to a large part determined by the logics and rationalities of “their” function system. Businesses cannot ignore the logics of the market and profit, so they will have goals and rules that submit to cost-cutting and increase of revenue. Courts have to submit to the rule of law; hence, for executing the prime function, they will hire people trained in law who are capable to understand statute books rather than people who are good at social media marketing. Political organizations cannot ignore the logic of power, alliances, and formal procedures. Universities are directly associated with two function systems: education and science. As such, their decision rules need to reflect the logics of the educational system (grades, admissions, trajectories) and goal programs (subjects, curricula, aspired skill levels, etc.). Nor can they ignore the demands of scientific integrity through evidence, methodology, and argument.⁷

As these examples illustrate, we find the societal structure of functional differentiation represented in the multitude of organizations that help executing the functions of “their” systems. However, and that is why I spoke of “associated with,” the situation is more complicated than that. On the one hand, much of what happens in the daily practice of the organization can have remarkably little to do with the high-level orientation to one (two in the case of universities) function system-specific code. We will address some of this in Sections 3 and 4. On the other hand, functionally differentiated society is an environment that strongly impacts organizations in yet another way, as we will see now.

(c) Organizations are operatively distinct from “their” function systems. As we said in Section 1, organizations are social systems that reproduce through decisions; function systems reproduce by operations that contribute to the functions they fulfill for society. So, while we can safely state that banks deal with different affairs than courts or churches – due to the logics and rationalities of different function systems, economy, law, and religion, all of them are organizations which means a number of commonalities apply to them: they have a couple of decision-making routines and rules about membership; the more complex they are, the likelier they will have formal hierarchies, differentiation into departments and subdivisions with different tasks and goals, and career paths with defined privileges. On the informal end, there will be factions and cliques with more or less influence to control uncertainty zones (Friedberg & Crozier, 1980), and there will be a decoupling of the daily practices and routines from the ceremonial and mythical representation of the organization (Meyer & Rowan, 1977). In sum, there are sociological phenomena that happen in any kind of organization, regardless of which function system they are associated with.

However, organizations have one advantage over function systems. Function systems are bound to their code that cannot be subsumed in another. One cannot observe politically from a scientific perspective or economically from a legal perspective. Although organizations are to some extent aligned with the respective

codes of their function systems (as argued in b), they are – more precisely: they must be – able to switch the codes of different function systems. A business corporation cannot act economically only while disregarding legal rules for conduct and contracts; if it has an own R&D department, it will submit to scientific codes as well. The same is true if it has its own trainee program that needs to adhere to the educational code of passing or failing exams. Likewise, any none-business organization needs to household with its budget, even if there is no legal obligation to be profitable and to please shareholders. If they depend on public sources, they may regularly have to apply for funds and thereby submit to logics secondary to the main function. As many researchers know, contemporary requirements for securing funding of *scientific* projects are practical applicability, societal impact, and political desirability.

In sum, organizations have to take into account several functional perspectives at the same time. Systems theorists [Andersen and Pors \(2021\)](#) have argued that organizations, in contrast to function systems, are “heterophonic” because when producing decisions, they can draw from a multiplicity of function systems at the same time ([Roth, 2014](#)). It is important, however, that this doesn’t happen at random. In most cases, there is a primacy of the function system (with which the organization is associated) under which all other logics are subordinated: while the R&D department of a business corporation follows scientific rules when researching new products or ways of production, the whole endeavor is subordinated the economic goal of profitability. In the long run, the research needs to lead to reduced production costs or higher profit margins or it will be shut down. Likewise, universities that are run under the premises of marketability or political impact while neglecting the telos of advancing basic knowledge independent from practical purposes may ultimately whither because they fail to attract talented researchers and students.

3. FACE-TO-FACE INTERACTIONS WITHIN ORGANIZATIONS

The previous section has focused on how organizations are (co)determined from “above” by their societal environment. We have looked in particular at how the functionally differentiated structure of society orients organizations toward contributing to the fulfillment of societal functions. In this section, we will see how organizations are influenced by social systems from “below”: the level of face-to-face interactions. Interaction systems – sociologist Erving [Goffman \(1961\)](#) calls them encounters – are based on the (physical) copresence of two or more people who perceive each other and share joint attention on the present situation ([Luhmann, 1982](#)). Compared to organizations, interaction systems are ephemeral and can only process low complexity due to the funnels of turn-taking and limited attention capabilities of participants. As will be demonstrated in the following paragraphs, interaction systems form a distinct reality of social order that makes significant imprints on social life in organizations. This section starts with a brief detour about online meetings in order to address a number of features

that are present in face-to-face encounters but absent in mediated communication. Drawing on work anchored in the Durkheimian tradition by Goffman and Randall Collins, I will demonstrate that the emotional and ritual aspects of interactions are highly important for life in organizations – something undertheorized in the Luhmannian tradition. At the end of the section, I show with Collins that power in organizations is often enacted through interactional rituals.

3.1. What Gets Lost in Mediated Interaction

Since the lockdown measures during the Covid pandemic, many of us had to participate in online meetings. From an administrative/managerial point of view, online meetings promise to be more effective than face-to-face meetings (Wu et al., 2022). They are supposed to be brief and on point; the technology affords screen- and file sharing for quick information exchange; automated calendar systems remind participants and prompt them to join the sessions with one click or tap. Another perk from a managerial perspective is that online meetings save costs for travel, catering, heating, and cleaning. Whether online meetings are for the benefit of the organization is an entirely different question, and research indicates mixed results (Angelova, 2020; Karl et al., 2022; Kremer et al., 2021; Purvanova & Kenda, 2022).

From a micro-sociological perspective, however, the shift to online meetings has laid bare one thing in particular: much of what is important for the functioning of organizations cannot be formalized in rules and procedures (see again: Bensman & Gerver, 1963). It is so much more, and much of it is lost in mediated communication (Collins, 2020; Kalkhoff, Dippong, Gibson et al., 2020; Kalkhoff, Dippong, & Gregory, 2011). Most striking about online meetings is the inability to observe subtle changes in body language and facial expressions in the audience during presentations and discussions. When everybody except for the speaker has their microphone off, we cannot hear each other's murmurs and sighs that give off non-articulated attitudes. As every leader knows, perceiving such visual and auditory cues is very important when seeking support for controversial decisions. In online meetings, it is almost impossible to "read" the proverbial room, so presenters and leaders cannot feed their intuitions about how to engage their audience and sway them in the right direction.

A second aspect of online gatherings is the lack of casual interaction with your seatmates right before and after meetings, in breaks or while the presentation technology doesn't do what it is supposed to. It is here when you can quickly exchange information, rumors, and gossip or make brief informal pre-agreements with a colleague that should not be official yet. Online settings afford that everyone else can hear what you say even if it is intended only for your seatmate's ears – so you watch your tongue closely. But uttering any of the above things via email or messenger app would require to overcome a social-psychological threshold: it demands more intent and leads to more accountability. In oral communication, particularly when whispered, we can always assert that we didn't really say or mean it this way. Once it is written and sent on electronic media, however, it persists – and we cannot plausibly deny it anymore.

3.2. *Interaction as Distinct Social Order*

All of these examples, which most of us will recognize from their own experiences, demonstrate that much of what happens in organizations takes place on the micro-level of face-to-face interactions. Expressed in Luhmann's terminology, we need to distinguish organizations and interactions as two different levels of social systems. While the interaction system takes place (in the context of) the organization system, we cannot unequivocally say that the interaction is *within* the organization or that it is *part of* the organization – akin to the circumstance that organizations do not exactly operate within function systems but rather are associated with them. As for the case of interactions and organizations, the jokes and the gossip told during meetings are hard to separate from the more formal aspects of the meeting (Kieserling, 1999). They will not make it into the minutes underlying the decisions made and thus will not be part of the official organizational memory, but individual participants may remember them well afterward and may refer to them in future meetings.⁸ It is these informal communicative actions that enact the reality of face-to-face encounters within the context of organizations.

A sociological account of organizations needs to acknowledge that interaction is a social order in its own right with its distinct dynamics (Goffman, 1983): What happens in organizations is, hence, much more than just preparing and making decisions and the work executed by the staff. Sociologist Randall Collins (2004) urges us to focus on the micro-sociological reality of the *situation* that occurs when people encounter one another. Hence, what also matters within organizations is what happens during encounters among the staff – whether the organization is a business or associated with any other function system.

3.3. *Rituals and Emotion*

Drawing on the works of Emile Durkheim and Erving Goffman, Collins has made a few theoretical points relevant to my argument. To begin with, Durkheim (2001 [1912]) analyzed the situation of primitive religious rituals when tribespeople gathered, chanted, and danced themselves into an extraordinary state of ecstasy or exaltation that Durkheim called “collective effervescence.” In these rituals, people lose their sense of individuality and feel a strong bond and unity with the other participants. According to Durkheim, this is the origin of religious experience: the feeling of sacredness and divinity.

Generalizing from Durkheim's analysis of religious rituals, Collins argues that successful interaction rituals can also occur in other, non-religious contexts, as long as people gather physically, direct their attention and focus on the same object, and do something that lets them get rhythmically entrained, for instance, through synchronized body movements, chanting, and/or shouting. Typical examples are political rallies, rock concerts, techno parties, group exercise, audiences in popular sports such as football, carnival (Ehrenreich, 2007), but also intensive conversations in pairs or small groups. Neuro-sociological research (Kalkhoff et al., 2011; Kalkhoff, Thye, & Pollock, 2016) has shown that interacting people tend to synchronize speech rhythm, intonation, pitch, and body language with

each other in conversations they experience as good.⁹ The individuals participating in successful interaction rituals get “pumped up” with what Collins calls “emotional energy,” a feeling of high self-esteem, happiness, and deep satisfaction.¹⁰

Goffman transported Durkheim’s insights to the secular, profane world of interaction rituals in everyday life. He showed that everyday life is full of an emotionally charged moral order and of sacred objects (such as the “face” and status of individuals) that need to be worshiped. If the sacred objects are violated (e.g., by failure to greet somebody or addressing them with the wrong title), the moral order needs to be restituted through correction rituals (Goffman, 1967). When caught, perpetrators feel shame, while victims feel righteous anger after violation and satisfaction after restitution. When things go smoothly, interactants feel moderate levels of satisfaction as accepted members of the moral community.

Collins argues with Goffman that small, casual everyday rituals such as greetings and brief friendly verbal exchanges create feelings of solidarity between individuals. Compared to the highly intensive experience of collective effervescence, this everyday solidarity is light and low intensity but not shallow because it supplies people with the emotional energy that carries them through their days. It is no coincidence that some organizations foster casual interaction between employees from different teams who normally don’t work together by placing espresso machines, watercoolers, and copying machines at strategic locations.¹¹ To the benefit of the company, this may help the spread of ideas across teams and divisions, but it also increases the odds that employees experience the time at work more positively and feel that they are part of a community.

An underestimated feature of face-to-face interaction in organizations is the possibility for experiencing intense emotions together. For an impressive example think of the cheers, cries, and hugs of joy when SpaceX successfully launched and landed their Falcon rockets. The collective experience of emotions is something that occurs frequently in organizational everyday life: joint cheering about accomplishments or swearing about failures. People also crave physical contact with their peers in less intensive situations, for instance, giving a high five or slap on the backs to encourage or express gratitude to each other.

3.4. Why Are Rituals and Emotions Important in Organizations?

Against that background, we can also understand better why seemingly irrelevant communicative acts such as jokes and gossip are important even in business meetings. It is not about the content of the jokes and gossip per se but the interactivity between tellers and audience. The laughter, murmurs, and smiles are a collective experience that creates a feeling of group solidarity. To get a glimpse of how natural and important this flow of casual interaction in organizations normally is, we can think of the period of forced telework during the Covid-related lockdowns (Brynjolfsson et al., 2020). The advantages of skipped commuting and no need to properly getting dressed were eaten up quickly by the lack of casual conversation and low-intensity interaction rituals, all of which in the course of months made many people more socially alienated and isolated (Lal et al., 2023; Yang et al., 2022).

Interestingly, in a recent trend that started already before the pandemic, there is an increasing number of dedicated remote-only companies that organize their whole operation with digital means. They double down on cost-effectiveness and productivity gains while attracting employees from a much larger talent pool than companies bounded by geography (Popovici & Popovici, 2020). However, the big micro-sociological challenge remote firms have to deal with is to create functional equivalents to the daily low-intensity interaction rituals that happen naturally in onsite organizations. A common strategy among remote working firms is to arrange annual retreats to exotic destinations in order to create group solidarity and social bonding among team members. As Collins (2004, 2020) argues with Durkheim, the “electricity” of collective effervescence that can occur in intensive teambuilding rituals pumps up the participants with emotional energy and creates a stronger group cohesion and identification with the firm. However, the social and emotional state of effervescence is precarious and withers away quickly unless it is repeated at regular intervals – something religious congregations are well aware of (Collins, 2004). The dilemma for remote working firms is that retreats are too costly to happen at high frequency, while the casual low-intensity rituals cannot occur naturally.

3.5. Power Rituals

Until now, we have emphasized the socially integrative aspects of face-to-face interaction in organizations. However, interactions also play a role in inequality. Organizations are the only types of social systems in modern society that allow legitimate socially unequal treatment based on rank (Luhmann, 2013; Nassehi, 2002). The formal structure of organizations is mostly hierarchical with discretionary power and privileges concentrated in the top positions. The formalized inequalities in organizations are expressed through what Collins (2000) calls “deference power,”¹² that is, the power to give orders. These inequalities are mainly enacted through power rituals during face-to-face interactions: “One person gives orders, in extreme cases with an imperious tone and demeanor, while the other acquiesces verbally and in bodily posture” (p. 33). A typical example is the Chief Executive Officer (CEO) who in front of everybody scolds a middle manager who failed to reach her target, making her look like a schoolgirl. Ritualistic display of deference power is socially significant as it marks the status differences between the superiors and subordinates (even high-ranking ones) and shapes the social relations among them: who can speak to whom in what way without getting punished.

Like other interaction rituals, power rituals require shared attention and mutual focus both by the superior and the subordinate, but they do not create much solidarity between the two unequal participants and usually have differential outcomes of emotional energy. Interaction rituals of deference power also produce sharp differences in social identity. Order-givers tend to identify more strongly with the organization and express this throughout official interactions, while the order-receivers rather feel “smouldering resentment and suppressed conflict” (Collins, 2000) and develop a cynical attitude toward the superiors (or the entire organization) which they can only express on a Goffmannian backstage among peers while the superiors aren’t watching.

In sum, we can add to our previous diagnosis that much of what happens in organizations happens on the interactional level, that this is also true for enacting power and status differentials among members.

4. BRINGING IT ALL TOGETHER: INTERACTION, ORGANIZATION, AND SOCIETY

From a purely Luhmannian approach that fathoms organizations as “decision-machines” (Nassehi, 2005) whose sole reality exists in reproducing themselves through (the preparation and communication of) decisions (Luhmann, 2018; Seidl & Becker, 2006), much of what I described in the previous section cannot be adequately understood. However, if we consider the merit of Collins’ (as well as Durkheim’s and Goffman’s) works in the analysis of what happens when co-present individuals engage in interaction with each other, we get a good insight into the importance of face-to-face interactions within organizations in a way that the Luhmannian vocabulary is less suited for.

On the other hand, Collins (2004) stretches his “radical microsociology” too far when he argues that society is not much more than chains of interaction rituals through which individuals move and that sociological phenomena on meso- and macro-levels can ultimately be reduced to and explained by micro-level dynamics of face-to-face encounters. In a worthwhile critique of this approach, Stephan Fuchs (1989) demonstrated that micro-approaches fail to adequately analyze the non-situational and non-ephemeral properties of organizations (such as formal structure, decision programs, organizational culture) and society (functional differentiation but also stock of shared knowledge, cultural values, social norms, semantics, and zeitgeist). Luhmann’s general theory of social systems, by contrast, allows us to understand interactions, organizations, and society as emergent realities *sui generis* (Fuchs, 1989; Luhmann, 1982). As Fuchs (1989) puts it, “copresence is typical of interaction but not of ‘macrosystems,’ the latter differ in kind from the former and thus cannot be ‘reduced to’ or ‘explained in terms of’ interactions or microevents” (p. 180).

Thus, my suggested way to go for a deep sociological understanding of organizations within their micro- and macro-social environment is the integration of key insights from both Collins’ micro-sociology and Luhmann’s theory of social systems. Since Luhmann’s theory is designed as a general theory of social systems, it can be applied with added value to analyze social systems on several levels. We have, in this paper, focused less on what all social systems have in common (they are self-referentially closed communication systems that, through their operations, differentiate themselves from an environment; see Luhmann, 1995) but rather what makes them distinct from each other: organizations are social systems that produce decisions; society is an encompassing social system and a differentiated unit of incommensurable function-specific rationalities; face-to-face interactions are small-scale social systems contingent on copresence.

A consequence of formal organization is that in organizational everyday life, all these system levels are invoked at the same time. To conclude this article, let us discuss a comprehensive example that brings everything together:

Imagine a meeting in the boardroom where a decision to purchase a production machine is prepared. First and foremost, it is a face-to-face interaction among real people. This means that the rules of copresence, such as turn-taking as well as norms of etiquette, demeanor, and politeness, apply. Furthermore, the co-present people will engage in Goffmannian impression management (Goffman, 1990 [1959]), ritualistically display their relative status and power, and they may become more or less emotionally energized from the interaction, contingent on their relative ownership of and identification with the issue at hand and the (verbal and subliminal) responses they receive from each other.

At the same time, every participant knows that this is a meeting within an organizational context – it is neither a dinner party nor casual chitchat. There is a defined topic and goal, there is possibly an agenda and a speaking order; participants have specialized roles such as CEO, Chief Financial Officer (CFO), Chief Technology Officer (CTO), project manager, which are known to everyone present without having to renegotiate every time anew. All of this is determined by the organizational programs and membership rules. In other words, these features are persistent beyond the here and now of the face-to-face interaction.

If the goal of the meeting is met, there will be a decision (buy or not buy the machine) which will be consequential for future decisions (more or less money available, precedents for similar situations, evaluations, future investments, etc.). Furthermore, the decision outcome of the meeting is enabled by a plethora of past decisions and decision premises (about product strategy, budget, space allocation, etc.) and documented work (research, market analysis, technical reports, etc.). While some of these aspects may have come about through past face-to-face interactions, they are stored, retrieved, and actualized on an emergent level of the organization system – irreducible to face-to-face interactions.

Finally, the meeting is about a purchase, which only makes sense in the context of the economic function system of society. The feasibility and utility of the purchase will be evaluated in light of prices for this machine and its alternatives, projected cost-saving and returns of investment, market evolution for the products the machine is supposed to produce, competitors in the market, and other business-related criteria. At the same time, the organization needs to take into account the operational logics of function systems other than the economy. Buying the machine does not only affect the business side (costs, profits, productivity gains), but it may require staff training to use the machine, it may trigger legal issues regarding safety and labor law, or it may have political repercussions because of shifting informal power dynamics between operators and maintenance personnel (Friedberg & Crozier, 1980). While the business organization in our example needs to be careful with regard to the rationalities of these other function systems, it is clearly the primacy of the economic logic that dominates all other operations in the system.

There is no simple causal pathway in how interaction systems and society determine organizational processes and vice versa. Every system level can affect another but is operationally closed and follows its own dynamics. A toxic collective mood in the meeting because of excessive deference power rituals may establish a culture of fear and yes-bias that leads to a suboptimal decision. Strict

organizational rules may protect subordinates from too abrasive deference power rituals, and convoluted decision-making procedures may prevent too heated choices and actions. To stay in the above example, the purchase of a machine is curbed by the rationalities of the economic system, but it may, in turn, affect the economic system (albeit in a limited intensity) by putting pressure on prices, concentration of capital, shifting supply of goods, more or less jobseekers, etc.

To summarize, this paper has two main points: *First*, much of what happens in organizations is heavily affected by face-to-face interactions. Simultaneously, much of what happens in organizations follows and reproduces the operational logics and rationalities of societal function systems. In order to get this point across, I introduced the multilevel framework provided by Luhmann to account for social systems on the interactional, organizational, and societal levels. The *second* point is an amendment of what I consider a weakness in Luhmann's theory with key insights regarding the role of emotion and ritual from Durkheimian-inspired micro-sociology by Goffman and Collins. As I have demonstrated, Collins' "radical" micro-sociological approach on its own has its shortcomings because it cannot account for matters that are better compensated by Luhmann's comprehensive framework. Looking at the organizations as "decision machines" alone without simultaneously looking at system levels of society and interaction will forego much. The conjunction, however, will yield a deeper, stronger, and more sociological understanding of organizations.

NOTES

1. This text focuses on formal organization systems, such as registered companies, public authorities, universities, etc., that is, social systems that in legal terms are called corporate bodies. It is open for debate, but not the place to discuss here, whether the presented arguments also apply to informal organizations.

2. It is important to stress that Luhmann's conception of society as communication system is a definition for scientific purposes. Defining society as a communication system has a heuristic and epistemological value that allows for original hypotheses and research questions, but – regardless of Luhmann's intentions – it should not be read as an ontological claim about the "true" nature of society, contrasted with an allegedly "false" nature of society as an assembly of humans.

3. Among contemporary Luhmann scholars, there is a debate about whether some systems (such as sports, family, social help) should receive the status of a function system and whether there is something like a canon of function systems. See the special issue of *Cybernetics & Human Knowing* 2015/4 and in particular Roth and Schütz (2015).

4. One example of such an inner environment is the "market" in the economic system.

5. To be more accurate, the government is a conglomerate of several organizations.

6. Universities are an exception insofar as they are associated with science and education. In the former, they contribute to knowledge production in the quest for truth. In the latter, they are involved in the production of competences and skills in the quest for credentials.

7. Universities are not the only case of a dual (or multi-) function system relationship. Within the context of many function systems, we find organizations that are also business operations, for example, private hospitals, media corporations, or for-profit sports teams. While each of these need to submit their respective function system's code (health, news, sport success), they also adhere to the economic telos of profit maximization. At times, these function system-specific logics may be at odds. It is, then, difficult to determine which telos is more important for the survival and legitimacy of the organization. I thank the editors for this comment.

8. Jokes and gossip can become part of the official organization history, however, if some boundary transgressing behavior occurred that violates formal rules.

9. Conversely, interactions where this synchrony fails to establish are experienced as unpleasant and energy draining. This is the case if the interacting people dislike or mistrust each other but occurs also when digital glitches interrupt online talks due to poor network quality.

10. Social psychologist Jonathan Haidt (2012), who puts Durkheim's observations into an evolutionary context, speaks of a "hive switch" in our brains that, when activated through interaction rituals, makes us less selfish, more cooperative, and more unison with our group.

11. It is said that companies such as Google even reduce the speed of the waterflow in watercoolers to increase waiting times and, thereby, make more interaction with others likely.

12. Collins distinguishes "deference power" from "efficacy power," which indicates the means to make others do something in order to achieve goals for the whole collectivity. While the former is more akin to Weber's definition of power as having others execute your will, the latter is a non-zero-sum form more in line with Parsons' and Luhmann's understanding of power as a generalized medium of interchange/communication.

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REFERENCES

- Abrutyn, S., & Turner, J. H. (2022). *The first institutional spheres in human societies. Evolution and adaptations from foraging to the threshold of modernity*. Routledge.
- Andersen, N. Å., & Pors, J. G. (2021). From self-evident norms to contingent couplings: A systems-theoretical analysis of changes in the relationship between schools and the function systems in Denmark. *European Educational Research Journal*, 20(6), 821–840.
- Angelova, M. (2020). Indicators for effectiveness and efficiency of e-platforms for business meetings. In *2020 III international conference on high technology for sustainable development (HiTech)* (pp. 1–4).
- Arnold, N., Hasse, R., & Mormann, H. (2021). Organisationsgesellschaft neu gedacht: Vom Archetyp zu neuen Formen der Organisation. *Kölner Zeitschrift für Soziologie & Sozialpsychologie*, 73(3), 339–360.
- Arnold, N., Hasse, R., & Mormann, H. (2022). Organisationsgesellschaft >>reloaded<<. Organisationsweisen und Herausforderungen im 21. Jahrhundert. *Soziale Welt*, 73(3), 419–424.
- Bensman, J., & Gerver, I. (1963). Crime and punishment in the factory: The function of deviancy in maintaining the social system. *American Sociological Review*, 28(4), 588–598.
- Boehm, C. (2009). *Hierarchy in the forest: The evolution of egalitarian behavior*. Harvard University Press.
- Boxall, P., & Purcell, J. (2022). *Strategy and human resource management*. Bloomsbury Publishing.
- Bromley, P., & Meyer, J. W. (2015). *Hyper-organization: Global organizational expansion*. Oxford University Press.
- Bruun, H. H. (2008). Objectivity, value spheres, and "inherent laws" on some suggestive isomorphisms between Weber, Bourdieu, and Luhmann. *Philosophy of the Social Sciences*, 38(1), 97–120.
- Brynjolfsson, E., Horton, J. J., Ozimek, A., Rock, D., Sharma, G., & TuYe, H.-Y. (2020). *COVID-19 and remote work: An early look at US data*. <https://www.nber.org/papers/w27344>.
- Collins, R. (2000). Situational stratification: A micro–macro theory of inequality. *Sociological Theory*, 18(1), 17–43.
- Collins, R. (2004). *Interaction ritual chains*. Princeton University Press.

- Collins, R. (2020). Social distancing as a critical test of the micro-sociology of solidarity. *American Journal of Cultural Sociology*, 8(3), 477–497.
- DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48(2), 147–160.
- Durkheim, É. (2001 [1912]). *The elementary forms of religious life*. Oxford University Press.
- Durkheim, É. (2012 [1893]). *The division of labor in society*. Martino Fine Books.
- Ehrenreich, B. (2007). *Dancing in the streets: A history of collective joy*. Granta.
- Friedberg, E., & Crozier, M. (1980). *Actors and systems: The politics of collective action*. University of Chicago Press.
- Fuchs, S. (1989). On the microfoundations of macrosociology: A critique of microsociological reductionism. *Sociological Perspectives*, 32(2), 169–182. <https://doi.org/10.2307/1389095>
- Goffman, E. (1961). *Encounters: Two studies in the sociology of interaction*. Bobbs-Merrill.
- Goffman, E. (1967). *Interaction ritual: Essays on face-to-face behavior*. Doubleday.
- Goffman, E. (1983). The interaction order: American sociological association, 1982 presidential address. *American Sociological Review*, 48(1), 1–17.
- Goffman, E. (1990 [1959]). *The presentation of self in everyday life*. Anchor Books.
- Grothe-Hammer, M. (2022). The communicative constitution of the world. A Luhmannian view on communication, organizations, and society. In J. Basque, N. Bencherki, & T. Kuhn (Eds.), *The Routledge handbook of the communicative constitution of organization* (pp. 88–103). Routledge.
- Grothe-Hammer, M., Berkowitz, H., & Berthod, O. (2022). Decisional organization theory: Towards an integrated framework of organization. In M. Godwyn (Ed.), *Research handbook on the sociology of organizations* (pp. 30–53). Elgar.
- Grothe-Hammer, M., & Berthod, O. (2017). The programming of decisions for disaster and emergency response: A Luhmannian approach. *Current Sociology*, 65(5), 735–755.
- Günther, G. (1979). *Beiträge zur Grundlegung einer operationsfähigen Dialektik II* Meiner.
- Haidt, J. (2012). *The righteous mind: Why good people are divided by politics and religion*. Pantheon.
- Henrich, J. (2015). *The secret of our success*. Princeton University Press.
- Kalkhoff, W., Dippong, J., Gibson, A., & Gregory, S. W. (2020). Society in peril? how distance media communication could be undermining symbolic interaction. In R. Serpe, R. Stryker, & B. Powell (Eds.), *Identity and symbolic interaction* (pp. 317–338). Springer.
- Kalkhoff, W., Dippong, J., & Gregory, S. W., Jr. (2011). The biosociology of solidarity. *Sociology Compass*, 5(10), 936–948.
- Kalkhoff, W., Thye, S. R., & Pollock, J. (2016). Developments in neurosociology. *Sociology Compass*, 10(3), 242–258.
- Karl, K. A., Peluchette, J. V., & Aghakhani, N. (2022). Virtual work meetings during the COVID-19 pandemic: The good, bad, and ugly. *Small Group Research*, 53(3), 343–365.
- Kieserling, A. (1999). *Kommunikation unter Anwesenden. Studien über Interaktionssysteme*. Suhrkamp.
- Kremer, L., Stock, G., & Rogelberg, S. (2021). Optimizing virtual team meetings: Attendee and leader perspectives. *American Journal of Health Promotion*, 35, 744–747.
- Lal, B., Dwivedi, Y. K., & Haag, M. (2021). Working from home during Covid-19: Doing and managing technology-enabled social interaction with colleagues at a distance. *Information Systems Frontiers*, 25, 1333–1350.
- Luhmann, N. (1982). Interaction, organization and society. In N. Luhmann (Ed.), *The differentiation of society* (pp. 69–89). Columbia University Press.
- Luhmann, N. (1989). *Ecological communication*. University of Chicago Press.
- Luhmann, N. (1992). What is communication? *Communication Theory*, 2(3), 251–259.
- Luhmann, N. (1995). *Social systems*. Stanford University Press.
- Luhmann, N. (1999 [1964]). *Funktionen und Folgen formaler Organisation*. Duncker und Humblot.
- Luhmann, N. (2000). *Die Politik der Gesellschaft*. Suhrkamp.
- Luhmann, N. (2012). *Theory of society: Volume 1*. Stanford University Press.
- Luhmann, N. (2013). *Theory of society: Volume 2*. Stanford University Press.
- Luhmann, N. (2018). *Organisation and decision*. Cambridge University Press
- Marx, K., & Engels, F. (2014 [1847]). *The communist manifesto*. Penguin Classics.
- Meyer, J. W., & Rowan, B. (1977). Institutionalized organizations: Formal structure as myth and ceremony. *American Journal of Sociology*, 83(2), 340–363.

- Nassehi, A. (2002). Exclusion individuality or individualization by inclusion. *Soziale Systeme*, 8(1), 124–135.
- Nassehi, A. (2003). *Geschlossenheit und Offenheit. Studien zur Theorie der modernen Gesellschaft*. Suhrkamp.
- Nassehi, A. (2005). Organizations as decision machines: Niklas Luhmann's theory of organized social systems. *The Sociological Review*, 53(1), 178–191.
- Parsons, T. (1951). *The social system*. Free Press.
- Parsons, T. (1977). *The evolution of societies*. Prentice-Hall.
- Parsons, T., & Smelser, N. (1956). *Economy and society*. Routledge.
- Perrow, C. (1991). A society of organizations. *Theory and Society*, 20, 725–762.
- Popovici, V., & Popovici, A.-L. (2020). Remote work revolution: Current opportunities and challenges for organizations. *Ovidius University Annals Economic Science Series*, 20, 468–472.
- Purvanova, R. K., & Kenda, R. (2022). The impact of virtuality on team effectiveness in organizational and non-organizational teams: A meta-analysis. *Applied Psychology*, 71(3), 1082–1131.
- Roth, S. (2014). The multifunctional organization: Two cases for a critical update for research programs in management and organization. *TAMARA: Journal for Critical Organization Inquiry*, 12(3), 37–54.
- Roth, S., & Schütz, A. (2015). Ten systems: Toward a canon of function systems. *Cybernetics & Human Knowing*, 22(4), 11–31.
- Schimank, U. (2010). Die funktional differenzierte kapitalistische Gesellschaft als Organisationsgesellschaft—eine theoretische Skizze. In E. Martin & M. Thomas (Eds.), *Die Ökonomie der Organisation—die Organisation der Ökonomie*, 33–61. VS-Verlag für Sozialwissenschaften.
- Schirmer, W., & Michailakis, D. (2015). The Luhmannian approach to exclusion/inclusion and its relevance to Social Work. *Journal of Social Work*, 15(1), 45–64. <https://doi.org/1468017313504607>
- Schirmer, W., & Michailakis, D. (2019). *Systems theory for social work and the helping professions*. Routledge.
- Scott, W. R. (2013). *Institutions and organizations: Ideas, interests, and identities*. Sage Publications.
- Seidl, D., & Becker, K. H. (2006). Organizations as distinction generating and processing systems: Niklas Luhmann's contribution to organization studies. *Organization*, 13(1), 9–35.
- Seidl, D., & Mormann, H. (2015). Niklas Luhmann as organization theorist. In P. Adler, P. du Gay, G. Morgan, & M. Reed (Eds.), *Oxford handbook of sociology, social theory and organization studies: Contemporary currents* (pp. 125–157). Oxford University Press.
- Simon, H. A. (1991). Organizations and markets. *Journal of economic perspectives*, 5(2), 25–44.
- Watzlawick, P., Beavin, J., & Jackson, D. (1967). *Pragmatics of human communication. A study of interactional patterns, pathologies, and paradoxes*. Norton.
- Weber, M. (1968). *Economy and society: An outline of interpretive sociology*. Bedminster.
- Wright, P. M., Dunford, B. B., & Snell, S. A. (2001). Human resources and the resource based view of the firm. *Journal of Management*, 27(6), 701–721.
- Wu, J., Rajesh, A., Huang, Y.-N., Chhugani, K., Acharya, R., Peng, K., Johnson, R. D., Fiscutean, A., Robles-Espinoza, C. D., De La Vega, F. M., Bao, R., & Mangul, S. (2022). Virtual meetings promise to eliminate geographical and administrative barriers and increase accessibility, diversity and inclusivity. *Nature Biotechnology*, 40(1), 133–137.
- Yang, L., Holtz, D., Jaffe, S., Suri, S., Sinha, S., Weston, J., Shah, N. P., Sherman, K., Hecht, B., & Teevan, J. (2022). The effects of remote work on collaboration among information workers. *Nature Human Behaviour*, 6, 43–54.