

## Article

# Regulation and Distinction—A Generalized Approach to Leadership Based on Social Systems Theory

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## Abstract

In view of the digital transformation of business and society, management literature discusses leadership not only as a function within organization, but as a broader and more commonplace phenomenon. Social systems theory has so far favoured a rather constrained concept of leadership. Its conceptual repertoire, however, also allows for a more general approach to capture a broader bandwidth of cases. The article at hand develops such an approach based on the regulatory character of leadership. In contrast to previous approaches, it argues that regulation reflects a general distinction in social systems, shifting from the participant to the observer perspective. This shift is a prerequisite for rational action, and as such deeply embedded in human thinking. In organizations and other larger systemic entities, this distinction presupposes some sort of agreement on the perspective from which a system is observed, the performance indicators that can trigger interventions and the execution of interventions. This agreement can be expected to result from autopoietic dynamics. Social systems theory can be used to address these dynamics. Furthermore, the different aspects of regulation provide the basis for a deeper investigation of leadership styles and the diverse accounts given of systems operation therein.

**Keywords:** leadership; regulation; cybernetics; guiding distinctions; Luhmann**JEL:** D23, L14, L29, M19

## 1. Introduction

Many generations of scholars in sociology, psychology, philosophy, and related disciplines have worked on the topic of leadership. It is therefore no surprise that this topic has also been picked up by system theorists in the second half of the twentieth century. One example is Niklas Luhmann, who deals extensively with leadership, particularly in his early works on management and public administration. Similar to many other researchers at the time, he refers to a specific concept of leadership in the context of business administration. Building on the works of Taylor and Ford (Ford and Crowther, 1922; Taylor, 1911), but especially on the German tradition of Schmalenbach and Gutenberg (Albach et al, 2000; Gutenberg, 1962), Luhmann views leadership primarily as a function within organizations, one that should be examined in terms of its operative mechanisms and its coupling with other functions.

Internationally, Luhmann's work on leadership has gained some recognition through the English edition of "The New Boss" (Luhmann, 2018), which explores leadership in organizations through the lens of changes of individuals occupying leadership roles. Other writings, e.g., the recently re-published Luhmann (2014, 2019) remain reserved to German readers, investigating such issues as the supposed contradiction between hierarchical position and emotional connection, or the problem of an increasing decoupling and self-referentiality of leadership structures.

In Luhmann's later writings, leadership does not play a prominent role (Luhmann, 2012, 2013), but many other topics related to it continue to be discussed, such as trust or power (Luhmann, 1979). Following up on these works, Clausen (2024) has shown that various connections to the overall imagery of leaders in society can be established. However, the focus on autopoietic dynamics of social systems (Luhmann, 1977, 1986, 2013) draws more attention to general phenomena, leaving little space to continue with elaborations on specific functions in organizations.

Given all this, one might wonder how Luhmann would respond to the breadth of the contemporary leadership discourse, which gives precedence to Anglo-American thought traditions, with little consideration of approaches cultivated elsewhere. System dynamics, on the other hand, play a significantly larger role in today's research than before—a development that is less driven by the appreciation of social systems theory than by the rise of information technology and systems engineering (Gawer, 2022; Holland, 2012; Jackson, 2009; Maglio et al, 2009). As interconnected digital devices permeate all areas of human life, research increasingly has to deal with the simultaneity of multiple interactions between different actors in society, raising new questions regarding leadership structures and processes.

Overall, this development seems quite accessible through Luhmann's theory. Roth (2019, 2021), in particular, has already made attempts to advance research in this



direction. At the same time, many of the assumptions upon which Luhmann built his understanding of leadership appear to be eroding. This is perhaps most evident in the concept of the “boundaryless enterprise” propagated by [Picot et al \(2023\)](#). As these authors note, operations that once took place behind closed doors in factories and office buildings now include participants from all over the world, whose work is coordinated through various kinds of platforms. Moreover, these connections are not stable over time. Collaboration is increasingly project-based ([Boltanski and Chiapello È, 2005](#)), relying on the temporary alignment of resource utilization, which can change again for the next task. Consequently, there is far less continuity in leader-follower relationships than Luhmann and his predecessors could imagine.

Within the leader-follower relationship itself, changes driven by the externalization of competencies are also taking place, as organizations rely increasingly on external resources to generate value ([Pralhad and Ramaswamy, 2000, 2004](#)). Connected through global data networks, employees can form communities online without any involvement of their superiors and draw on external sources of information at any time to guide their actions. This leads to the superimposition of various leadership dynamics, challenging the traditional distinction between leader and follower, or restricting it to specific aspects of interaction, while in other areas, the roles may even be reversed ([Sales et al, 2024](#)).

The study presented here is an attempt to develop a generalized approach to leadership on the basis of social systems theory that is able to give account of the wider range of issues discussed in contemporary research. This attempt does not only rely on Luhmann’s own writings, but also on the foundations of his work in social anthropology ([Plessner, 2019](#)), cybernetics ([Ashby, 1999](#)), and autopoietic systems theory ([Maturana and Varela, 1980](#)). It is based on the thesis that leadership, viewed from a systems perspective, is mainly an agreement about the design and execution of regulatory interventions. This agreement results from a distinction between leader and follower that is not limited to formalized organizational structures. Given the fact that human beings have a natural disposition to observe and intervene in ongoing operations ([Plessner, 2019](#)), agreements on regulation must be considered commonplace, but also fractured, incomplete and paradoxical, which reflects key issues in today’s broader discourse on leadership.

The article is structured as follows. The next section gives an overview of contemporary publications on leadership, showing how they deviate from earlier works. After that, the generalized approach to leadership on the basis of regulation as a fundamental act of distinction is introduced. The rest of the article explores potential applications of this approach to leadership and their implications for future research.

## 2. Background

### 2.1 Trends in Contemporary Leadership Research

According to the Scopus database, there are 18 outlets ranked in the first and second publication quartile that contain the word “Leadership” in their titles. Overall, the word “Leadership” appears more than 70,000 times in the titles of academic publications since 2000, with a steady increase in numbers from about 600 in the year 2000 to more than 6400 in 2023. It is impossible to do justice to the full range of these works in a brief overview. A common trait that can be recognized in most of the literature, however, is that leadership is treated phenomenologically as something given in human interaction. Leadership happens ([Clifton et al, 2020](#)), and the attention of research is mainly directed understanding how and under what conditions it occurs ([Day and Harrison, 2007](#)).

Although leadership is primarily studied within organizations, the phenomenon is by no means confined to such settings. Leadership also occurs in open communities, spontaneously formed and including changing members without fixed organizational structures ([Johnson et al, 2015; Kirk and Shutte, 2004](#)). Leaders and followers can also be studied in situations that have little to do with actions of individuals and interpersonal relationships. In competitive markets, the terms “quality leadership” and “price leadership” have long been used ([Deneckere and Kovenock, 1992; Lutz et al, 2000](#)). Similarly, there is literature on “innovation leadership” that does not look at human relations within a company ([Banerjee and Ceri, 2016](#)) but competitive phenomena between organizations concerning the implementation of innovations that push others to follow suit ([Lindgren, 2012](#)). The importance of innovation leadership in business ecosystems has become more relevant with the advent of interconnected digital technology, which has facilitated the coordination of large, decentralized networks ([Teece, 2018](#)). Following up on this, new work on platforms and business ecosystems has emerged, in which leadership is discussed in terms of operating and steering network operations ([Gawer and Cusumano, 2008; Leo et al, 2019](#)).

The common element in all these cases is that an asymmetry in the relationship between actors can be observed, as some actors respond more to what others do than vice versa ([Ansari et al, 2016](#)). Apparently, this already satisfies the intuitions underlying the notion of leaders and followers far enough to speak of leadership, even if personal relations between individuals are less relevant, as leadership may also concern organizations or other collectives. Furthermore, there is an increasing diversity in accounts of leadership within organizations, reflected in long lists of different leadership styles ([Kleefstra, 2019](#)), lacking a common ground on which they would agree.

In search for a contemporary approach to leadership based on social systems theory, the broad usage of the term needs to be taken into consideration, suggesting a general distinction that can be expected to inform social dynam-

ics on different levels (Luhmann, 2012). It is particularly important to note that this distinction is not confined to an extant organizational structure or a given set of codes to attribute meaning within a specific functional system in society. Instead, the distinction seems to have a separate basis in human interaction, unfolding its own dynamic alongside other processes of structural development. Indeed, one can observe across various functional systems in society that some actors respond more to others, as in the case of teachers and students, doctors and patients, journalists and their audiences, etc. At the same time, it is interesting to note how these relationships are currently being challenged by digital information technologies, as students, patients, etc. respond more strongly to very different actors in society than the ones that are conventionally recognized as their counterparts in each respective functional system (Castells, 2009). The disruption brought about by digital technology has fundamentally altered the relationships between traditional leaders and followers, providing alternative sources of influence and authority (Van Dijk et al, 2018).

The recognition of a distinction between leader and follower that evolves separately alongside other processes of structural formation also provides an explanation for the emergence of leadership as its own sub-discipline in management research. Other processes of planning, control, and management seem insufficient to fully capture leadership (Northouse, 2010; Rost, 1991; Yukl, 2013). Leadership often forms a kind of residual category in organizational studies, capturing effects that cannot fully be formalized and explicated in abstract organizational models. While earlier conceptions of leadership explain this by the personality of “great men” (sic) or charisma as an attribute of leaders (Carlyle, 1841; Weber, 1947), today’s leadership research seeks to replace romantic notions of genius from the 19th century with more precise behavioural studies (Avolio and Gardner, 2005). For instance, transformational leadership theory has gained significant attention for emphasizing the ways in which leaders inspire, motivate, and engage followers, making it a contrast to earlier notions of command-and-control leadership (Bass and Riggio, 2006).

Recent years have seen the identification of a wide range of patterns by which leaders exert influence, as well as documentation of various tools and success factors for leadership (Uhl-Bien, 2006). In consequence, the distinction between leader and follower can be further elaborated and specified. Departing from the intuitive notion of followers showing more reactive behaviour than leaders, attention is drawn to leadership as a purposive act to achieve certain results for the collective. An asymmetry can still be recognized here. Followers seek out leaders, sometimes from far away via digital technologies. They also call leaders explicitly to action on certain occasions, but these calls rather concern the provision of leadership as such, asking for more information about what the followers are supposed to do. Both parties are somehow involved in making lead-

ership happen, but in very different ways. The subsequent modelling of leadership from the perspective of social systems theory will build on this fact, providing a theoretical framework that acknowledges the inherent dynamic and reciprocal nature of leadership and followership (Luhmann, 2012; Uhl-Bien and Marion, 2009).

## 2.2 Diversity Expressed in Leadership Styles

Although leadership research is by no means limited to the discussion of specific leadership styles, a closer look at these styles can help provide a better understanding of the diversity in leader-follower relationships and thus contribute to a better understanding of the underlying system dynamics. More particularly, leadership styles are discussed here to gain further insight into the expansion of scope in leadership research, which is crucial for avoiding a narrow interpretation of the leader-follower distinction.

Popular overviews usually list anywhere between five and fourteen leadership styles. These lists can be quite diverse. In a comprehensive literature review, Kleefstra (2019) identified descriptions of 658 different types of leadership and counted 40 leadership styles that were mentioned at least 15 times. This abundance of styles can be both insightful and overwhelming for researchers and practitioners, prompting the need for a more structured categorization. Anderson and Sun (2017) raise concerns about the sheer number of styles, as some of them are barely distinguishable from each other, advocating a simplification of the field. In support of this view, Eberly et al (2021) argue that a lack of conceptual clarity can hinder theoretical advancements and practical implementation.

To give a general impression of the discourse in this field, Table 1 gives an overview of six leadership styles that are (a) mentioned very often in literature and (b) diverse enough to show the bandwidth of approaches.

It is worth noting that many of the considerations of leadership informing these styles have long been part of political, educational, or artistic literature. Important sources include Plutarch’s (1859) account of the leadership of Alexander the Great, Machiavelli’s (1908) goal-oriented recommendations for rulers, Frederick II’s (1915) ideas of the sovereign as the first servant of the state, as well as Tolstoy’s (1886) thoughts about the limitations of leadership (Badaracco, 2002; Greenleaf, 1977; Rost, 1991). As the leadership discourse in management expanded from operative intra-organizational questions, works such as these received increasing attention from different perspectives (Clausen, 2024; Galie and Bopst, 2006; Greenleaf, 1977; Michaelson, 2022), demonstrating that many modern approaches are rooted deeply in cultural history. This can be seen as a sign that recent developments such as the digital transformation have prompted a re-opening of the leadership discussion. As previously mentioned, reducing leadership to a mere function in organizations seems insufficient in today’s world. Leadership should rather be considered as

**Table 1. Overview of selected leadership styles.**

Name	Description	Key Features	References
Autocratic Leadership	Leader makes decisions independently with little to no input from team members. This approach is characterized by a clear, centralized authority where the leader maintains full control over all decisions. Followers are expected to follow the leader's directives without questioning.	<ul style="list-style-type: none"> <li>- Centralized decision-making authority</li> <li>- Leader maintains strict control</li> <li>- Limited follower participation</li> <li>- Clear, direct instructions and expectations</li> </ul>	<a href="#">De Cremer (2006)</a> ; <a href="#">Iqbal et al (2015)</a> ; <a href="#">Bass (1990)</a> ; <a href="#">Harms et al (2018)</a>
Transactional Leadership	Focus on structured tasks, clear goals, and a system of rewards and penalties for performance. Leaders manage by setting defined expectations and using contingent rewards to motivate performance. This style is highly task-oriented and is commonly used in organizations to meet specific performance benchmarks.	<ul style="list-style-type: none"> <li>- Based on a system of rewards and punishments</li> <li>- Clear goals and expectations</li> <li>- Task-oriented</li> <li>- Leadership as a transaction or exchange of services for rewards</li> </ul>	<a href="#">Downton (1973)</a> ; <a href="#">Burns (1978)</a> ; <a href="#">Avolio et al (1999)</a> ; <a href="#">Judge and Piccolo (2004)</a> ;
Democratic Leadership	Leaders to involve team members in the decision-making process. This style values collaboration and open communication, where team input is sought before making key decisions. The final decision, however, rests with the leader.	<ul style="list-style-type: none"> <li>- Involvement of followers in decision-making</li> <li>- Encourages collaboration and idea-sharing</li> <li>- Leadership based on majority opinion</li> <li>- Emphasizes group consensus</li> </ul>	<a href="#">Gastil (1994)</a> ; <a href="#">Goleman (2000)</a> ; <a href="#">Vroom and Yetton (1973)</a>
Laissez-Faire Leadership	This is characterized by a hands-off approach, where the leader provides minimal direction and allows followers to make decisions. This leadership style is most effective when the team consists of highly skilled and self-motivated individuals who can operate independently.	<ul style="list-style-type: none"> <li>- Little or no direct supervision</li> <li>- Followers have high autonomy</li> <li>- Minimal leader intervention in decision-making</li> <li>- Leader provides necessary resources but little oversight</li> </ul>	<a href="#">Skogstad et al (2007)</a> ; <a href="#">Bass and Avolio (1994)</a> ; see also <a href="#">Lewin et al (1939)</a>
Transformational Leadership	Followers are inspired and motivated followers to exceed their own self-interest for the good of the organization. Leaders focus on creating a vision, inspiring innovation, and fostering personal growth among followers. This style emphasizes long-term development and change.	<ul style="list-style-type: none"> <li>- Visionary leadership</li> <li>- Focus on motivation and inspiration</li> <li>- Encourages followers to exceed expectations</li> <li>- Promotes innovation and long-term growth</li> </ul>	<a href="#">Bass (1985, 1990)</a> ; <a href="#">Avolio et al (1999)</a> ; <a href="#">Judge and Piccolo (2004)</a> ; <a href="#">Burns (1978)</a>
Servant Leadership	Needs of followers are placed above those of the leader. Leader acts as a servant to the team, focusing on the development and well-being of followers. The goal is to help followers grow and perform as highly as possible, with the belief that the success of the team leads to the success of the organization.	<ul style="list-style-type: none"> <li>- Focus on follower well-being and development</li> <li>- Ethical, value-based leadership</li> <li>- Empowerment and growth of team members</li> <li>- Community-building and shared power</li> </ul>	<a href="#">Greenleaf (1977)</a> ; <a href="#">Van Dierendonck (2011)</a> ; <a href="#">Liden et al (2008)</a> ; <a href="#">Spears (1996)</a>

a more complex, diverse, and wide-spread phenomenon in society ([Lichtenstein et al, 2006](#)).

Regarding the leadership styles that have recently gained increasing popularity, [Anderson and Sun \(2017\)](#) detect significant similarities. Where leadership is guided by notions of transformation, laissez-faire, and service (see Table 1), but also ethics ([Brown and Treviño, 2006](#); [Brown et al, 2005](#)), authenticity ([Sparrowe, 2005](#)), or spirituality ([Fry, 2003](#); [Fry et al, 2005](#)), it seems to resonate with the same idea of granting followers maximum autonomy, allowing them to act according to their own abilities and interests. For instance, authentic leadership emphasizes transparency and relational openness, which encourages followers to find their true potential while fostering trust in leader-follower dynamics ([Avolio and Gardner, 2005](#)).

While earlier approaches, including [Luhmann \(2018\)](#), already emphasise the need of a mutual commitment of leaders and followers to their roles in order for leadership to succeed, recent literature highlights the active involvement of followers in decision-making about the results of leadership. Older approaches to leadership are criticized for not acknowledging this ([Haslam et al, 2024](#)), thus also limiting the pool of potential leaders ([Eagly and Carli, 2007](#)). Conversely, recent approaches also give leaders a way out of taking full responsibility for the outcome that is achieved, as followers are also to blame to some extent if transformational leadership, servant leadership, etc. do not succeed.



### 2.3 Summary

In view of the aforementioned literature, four key conclusions about the current discourse on leadership can be drawn, which are relevant for system-theoretical modelling:

(a) As a general asymmetry in responses to the actions of others, leader-follower relationships do not merely evolve within existing organizational structures. They may, in fact, be the origin of a newly emerging structure.

(b) The reference point for understanding this must be the actions of the followers. They determine whether someone else is perceivable as a leader or not. Followers may orient themselves towards existing hierarchies, but they do not necessarily have to.

(c) Leadership involves influencing the actions of followers, but it is not limited to issuing orders that are followed exactly. It is widely accepted that the actions of followers are based on their own interpretation.

(d) Over the past decades, there has been growing interest in maximizing the agency of followers to make the most of their own interests and motivations, sharing responsibility with the leaders regarding the implementation of leadership.

## 3. A Generalized Approach to Leadership

### 3.1 Leadership and Regulation

The generalized approach to the leader-follower distinction presented here is based on a fundamental principle of general system theory, which is addressed in literature as control or regulation. The following considerations favour the term regulation over control, because literature uses the term control also in other senses that might cause confusion. It should be noted, however, that regulation also might be misunderstood as a mere legal intervention, while it is discussed here on a much more fundamental level.

As described by [Ashby \(1999\)](#), regulation enables successful system operation by ensuring that a state of dynamic equilibrium is maintained. The goal of regulation is not to provide detailed instructions to every entity within a system but rather to ensure that each entity can fulfil its role in the system. The study of regulation underpins the entire field of cybernetics. A common example for regulation from engineering are dampers in cars, which absorb shocks and allow the tires to maintain traction with the road. This way, they enable a successful operation of the car. In human biology, perspiration provides another typical example for a regulatory mechanism, which maintains normal body temperature.

Research in cybernetics has shown that regulation can occur in many different forms. In every case, however, it requires monitoring the system's condition to detect critical values that necessitate intervention. In the case of dampers and sweat, intervention occurs automatically. The wheels of a car are pushed more onto the ground by springs or hydraulic systems when traction is about to be lost; sweat

glands automatically secrete fluid when the body temperature rises. Elsewhere, however, interventions involve conscious decisions. In a car, this is exemplified by the fuel warning light, which signals a low filling level of the gasoline tank. The driver must respond to this signal by refuelling in a timely manner. Similarly, hunger is a bodily signal that requires a conscious response from the individual.

Regulation does not necessarily aim to maintain the status quo of a system. Rather, it may seek to balance system operations during a developmental process in terms of a so-called allostasis ([Sterling, 2020](#)), ensuring that the system is not overwhelmed by change while also preventing stagnation that halts progress. This is illustrated, for example, by plant irrigation and fertilization in agriculture to ensure plant growth, but also by teaching students at school, using advanced didactic methods to ensure learning.

Just as the term cybernetics for the “science of regulation” refers to the leadership role of a helmsman on a ship, it stands to reason that leadership and regulation are closely connected. Regulation gives account of the fact that leaders supervise followers, observing their performance and intervening where necessary. At a closer look, numerous metaphors of regulation can be found in leadership literature, including gardening, benevolent education, or housekeeping by domestic staff. Speaking about regulation in the context of leadership is therefore nothing new. It continues an established line of thought ([Birnbaum, 1989](#); [Rowe, 2010](#)).

Regulation is compatible with the idea of leadership as a function in a hierarchical organization, where the performance of the organization is monitored, and interventions are executed. Moreover, regulation can also be studied on other layers of systems operation in society, with the market and its potential to self-regulate being the most prominent example in public discourse ([Spulber, 1989](#)). Price and quality interventions can be considered as triggers to re-balance a market. Regarding technology, innovation can be considered as an intervention, too, which forces application systems and infrastructures to rebalance. The discourse on the disruptiveness of innovations shows how the question of systems sustaining a floating equilibrium is relevant here as well ([Öberg, 2023](#); [Skog et al, 2018](#)).

### 3.2 Human Dispositions for Regulation

It is tempting to consider regulation as a response to growing complexity in systems operation, which suggests that regulation is only introduced in the later stages of systems development. From the perspective of engineering design, this makes perfect sense. Cars already had wheels long before suspension was introduced, and a fuel control light requires a fuel tank first to make sense. In a similar way, leadership as a specific function in organizations can be expected to ensue after the introduction of other functions. This, however, does not necessarily have to apply to all phenomena that are currently studied in leadership re-

search. On the following pages, it will be argued that the opposite is actually true. Regulation is considered as a rather primordial phenomenon in social systems, due to the fact that social systems involve human beings.

This claim can be derived from Plessner's (2019) notion of excentric positionality. What Plessner means by this is that humans possess the general ability to keep track of their own behaviour from an external point of view, monitoring and judging what they do. We watch our actions while we perform them, often with a strange feeling of alienation from ourselves and from the situation we are in. The observer perspective, which forms the basis for regulatory interventions, is in consequence ubiquitously present, and only because we can look at our own actions and their effects on our environment from the observer perspective, we are able to reflect them rationally. The distance of the observer allows us to comprehend the difference between the current state of affairs and their desired state, and then develop a plan how to change this. In doing so, we not only look at what happens from an external point of view, but also have criteria in mind for the evaluation of the situation that allow us to decide on interventions.

Humans can thus be believed to have a general disposition to simultaneously carry out and regulate system operations. Approaching leadership as regulation, one can therefore say that humans always lead and follow simultaneously to some extent, with different kinds of performance evaluations and disciplinary measures at their disposal that they apply to themselves in similar ways as a supervisor in a larger organization.

It therefore seems that ideas of leading and following are inherently present in human nature (Ancient myths already seem to address this, e.g., as eating the fruit from the tree of knowledge, which let Adam and Eve recognize their nudity and intervene against it). Before any other person gets involved, leadership already occurs within each individual person. It is consequently not necessary to presuppose the emergence of second-order system structures in society to discuss leadership. In surprising accordance with rather trivial self-improvement literature (Carnegie, 1993; Ferrazzi and Weyrich, 2020), we are—as far as our individual dispositions are concerned—indeed all leaders.

Once the ubiquity of regulation in human thinking is acknowledged and identified as a fundamental disposition for leadership, the scope for applications of social systems theory to leadership research broadens considerably. Among other things, it becomes possible to address differences in leadership styles, as well as incomplete, fractured, and contradictory assignments of roles.

### *3.3 Regulation as a Fundamental Act of Distinction*

As a last step of concept development in this section of the article, a connection is established between regulation and distinction as a fundamental operation in social systems. With regulation as a ubiquitous phenomenon, such

a connection presents itself in a very different way than in the establishment of specific functions in organizations to reduce complexity. It is highly relevant for the application of social systems theory in contemporary leadership studies.

Luhmann (1995, 2006) describes distinction as a fundamental mechanism in social systems and key to self-referentiality. Essentially, what distinction does is establish notions of inside and outside, thus enabling the operational closure of a system and its observation at the same time. In autopoietic systems, distinction must be considered as an ongoing effort that involves all parts of the system together (Luhmann, 1986; Maturana and Varela, 1980). Distinction results from communication in the system and leads to a continuous redefinition of its boundaries and operations over time, which is key to its survival. Studying distinctions can add to a better understanding of organizations (Roth, 2021) and enable insights in larger socioeconomic structures as well (Roth, 2021).

Regulation on the more basic levels of systems operation draws attention to various important aspects of distinction. It is not just about setting an arbitrary boundary to establish an outside point of view from which a system can be observed. Observation in regulation happens for a purpose. The distinction that establishes inside and outside corresponds with communication in the system regarding performance indicators that make it possible to track the system's status. The point of view for regulatory intervention is shaped in such a way that deviations from an equilibrium can be identified, enabling decisions about interventions. Furthermore, interventions in regulation must be meaningful for the system. In other words: the system must also be able to process the disturbance caused from outside productively, rebalancing internal operations around a floating equilibrium. For successful regulation and, in consequence, leadership, many preconditions therefore have to be met.

In a society, systems are continuously observed from different perspectives. Not all perspectives, however, allow conclusions about the system's deviations from an equilibrium state. Most observers will rather be fixated on their own interaction with the system, complaining about deficiencies that have nothing to do with the status of the system itself. And if an observer is actually able to recognize critical deviations from an equilibrium, there is still no guarantee that the observer's reaction will be recognized as an intervention and processed accordingly. It might just be perceived as a complaint, an expression of anger or concern, etc. As much as the observer might have understood the problems of the system, he or she will still not be considered to be a leader, as no improvement is achieved.

Last, but not least, the continuous evolution of autopoietic systems must be taken into account as well. As communication in such systems does not stop, distinction has a processual quality. It is constantly renewed, as the paradox of system observation persists (Luhmann, 1995).

Performance parameters, triggers for interventions and their execution have to be continuously realigned with the operational structures of the system in order to ensure successful regulation. It stands to reason that this cannot be accomplished by any individual person. Instead, the system performs this alignment collectively.

## 4. Application to Leadership Research

The aim of this section is to connect the previous considerations from the perspective of systems theory with the discourse in leadership studies. As this is a conceptual paper, the section will be limited to general outlines and illustrations of application. Further theory building and application have to proceed in a later publication.

### 4.1 *Change of Perspective in Leadership Studies*

Through the association with regulation, a large variety of different phenomena becomes accessible for leadership research. Regulation, as mentioned before, can be studied in many contexts and on many different layers of systemic operation in society. At the same time, however, regulation bears the risk of reducing leadership to a very mechanistic pattern of intervention, which can easily be formalised and—to a large degree—even be automated. During the last decades, leadership research has rather advanced in the opposite direction of such engineering approaches to regulation, addressing aspects of human interactions in leadership that are hard to formalize and resist automation. Applications of social systems theory can follow up in the same direction, if they take regulation into account as a ubiquitous phenomenon in human action, providing everyone with a disposition of leadership, and explore distinction as a fundamental systemic operation in this context. In doing so, it seems most important to remember that distinction is an achievement a system, based on a communal effort of everyone involved.

In organizations and other social entities studied as systems, distinction must be understood as key to functioning leadership structures. If everyone in the organization somehow leads, then everyone also observes a part of the organization from an external point of view. The organization can only operate as a system if it brings these many different points of view together in a unified observer perspective from which understandable interventions can take place. Thereby, distinction has less to do with determining who leads and who follows. It is more about aligning existing individual ideas about what leadership is in such a way that a common understanding emerges of which performance indicators need to be observed and what types of interventions could be made.

Social systems theory offers a rich conceptual repertoire for studying such acts of distinction. The repertoire includes media of communication and the associated codes that determine what is considered meaningful in the system (Roth and Schutz, 2015). Documenting media and codes

can help research to find out whether interventions are actually perceived as such or simply disrupt the operations in the system. Furthermore, it is also possible to examine how distinction manifests itself in objects that reflect the codes relevant for leadership (Clausen, 2024). Art-based approaches, which are increasingly used in leadership education, provide further insight into communication dynamics in systems that reveal the processing capacity for interventions (Purg and Sutherland, 2017).

Once the process of distinction is understood, the interface with the engineering-oriented approaches to leadership as regulation comes into view. Clearly defined procedures can now be implemented to carry out performance monitoring and interventions, which connect leadership with management in a broader sense, concerning strategy, human resources, marketing, etc. Social systems theory can help to gain a better understanding of the degree to which these implementations stay true to the generation of meaning in the system, or how they deviate from it, resulting in inefficient or failing interventions and causing an immense effort in the system to adapt.

On a different scale, it is interesting to investigate what social systems theory, as used here, has to say about common intuitions of leadership. As mentioned already, the general idea is that followers differ from leaders in that they respond more to what leaders do than vice versa. After everything that has been said so far, however, it should be clear that long before leading and following can be recognized in social systems, important clarifications must be made. Fundamental acts of distinction first determine what a system can process, which then provides an interpretive framework on the basis of which actions and reactions can be recognized. Distinction as a systems operation defines shared expectations of leaders and followers, and it depends on the system in question what is considered as a stimulus and a response, an action and a reaction. So, if someone is called a leader or a follower, the next question from a social systems theorist should probably be: “in reference to what system”? In the talk of innovation leadership, for example, implicit references to a trajectory of progress are always included, defining the direction in which a distance between leader and follower is recognized, and it is very well possible that the follower is much more advanced than the leader when progress is observed in other directions.

### 4.2 *Diversity of Leadership Accounts*

Regarding the phenomenological orientation of leadership that states that leadership just happens, it is now clear that it is not just leadership that happens, but that there are much bigger constitutive forces at work to establish an agreement on what leadership is supposed to be. One does not have to go as far as Kleefstra (2019) in distinguishing 658 types of leadership to regard reaching such an agreement as a significant challenge, requiring an alignment of a multitude of processes going on at the same time.

**Table 2. Accounts of regulation recognized in leadership styles.**

Name	Main Target System	Performance Indicators	Forms of Intervention
Autocratic Leadership	Organization as performing mechanism	Efficient and effective operation, Success in Competition	Setting of behavioural rules Design of disciplinary measures and their execution
Transactional Leadership	Operational structure of the organization as defined by contractual agreements	Adherence to job descriptions	Drawing attention to jobs Criticising deviations Execution of agreed disciplinary measures
Democratic Leadership	Citizenship, i.e., engagement in operating a democracy	Achievement and implementation of agreements	Initializing new democratic decision-making process Correction of over-/underrepresentation
Laissez-Faire Leadership	Organization as grey box	Output of the box	Elimination of disturbances
Transformational Leadership	Evolving Organization/evolving individuals in organization	Ongoing change, commitment of individuals to their role	Motivation and inspiration Help setting goals Expression of visions
Servant Leadership	Organization as performing mechanism	Performance level of individual action	Enablement of individuals, new placement in organization

Considering all this, the juxtaposition of leadership styles in contemporary literature appears to be a rather flat mapping of a higher-dimensional phenomenon. It can be assumed that leadership styles do not only provide insight into different behavioural patterns of leaders from which further conclusions about their personalities might be drawn. More likely, leadership styles must be considered to express comprehensive accounts of the target system that is supposed to be regulated. This concerns the way the system constitutes itself through its functioning and the trajectories along which the fluid equilibrium is to develop, as well as the parameters by which performance is observed, the types of intervention expected, and their triggers.

Leadership styles might therefore provide interesting source material to study the variety in which distinction in social system informs the interactions between leaders and followers. This variety might be addressed through the different aspects of regulation. Based on discussions in a leadership seminar, Table 2 gives a rough impression of how these aspects have been recognized to be reflected in the previously mentioned leadership styles. The content of the table should be understood as a summary of informed opinions of individuals that requires confirmation through a more comprehensive and systematic analysis at a later point of time. Despite all reservations and limitations, however, Table 2 already gives first evidence of the heterogeneity regarding their accounts of monitored system operations and regulatory interventions perceived in these respective leadership styles.

While other interpretations of these leadership styles are also possible, there is sufficient reason to conclude that they propagate very diverse accounts of systems operation and regulatory intervention, each expressing different criteria for the distinction between leaders and followers.

## 5. Discussion and Conclusion

During the last decades, the scope and research interests of leadership research have changed quite a lot. Social systems theory provides a powerful conceptual repertoire to keep track of these changes. In order to make use of it, however, it is necessary to depart from the approach to leadership taken in Luhmann's early writings. The study presented here has developed a new basis for leadership research from scratch, avoiding any baggage from earlier works that would add a historical bias. Furthermore, it has done something that the guardians of orthodox doctrines might hesitate to do—it has relied on a mix of Luhmann's own works and other contributions that seem relevant in this context, although they are not directly part of the same line of research.

Regarding its contribution to theory, the study presented here should therefore not be placed in the centre of the ongoing discourse on Luhmann's theory of social systems, but more at the periphery, where this discourse corresponds with general systems theory, cybernetics, and sociological anthropology. While the study makes use of key concepts of social systems theory such as distinction, autopoiesis, and functional differentiation, Plessner's (2019) notion of excentric positionality plays an important role as well, not to mention allostasis and regulation as fundamental dynamics in open systems. For this reason, the study should be accessible to different research communities, adding a new facet to extant research through a combination of concepts that seem mutually compatible, but have so far not often been set in relation to one another.

In leadership research, regulation is widely acknowledged as a basic principle for intervention, but often considered as a mere technical aspect of leadership that should



rather be covered by other subdisciplines of management. This article suggests that there is actually a lot more to learn from the study of regulation in leadership research, in particular when the ubiquity of regulatory interventions in human life is acknowledged. With social systems theory, this can be addressed through the study of distinction as a fundamental, constitutive operation in social systems. Distinction brings about the asymmetries in social interactions that indicate that some lead and others follow. As this article shows, such asymmetries can be addressed on the basis of sociological anthropology but without the need to engage into a deeper psychological discussion. Nevertheless, it might be interesting to establish a connection between the approach taken here and other works informed by theories from this domain, in particular those used in studies of organizational behaviour.

Regarding the contribution of the article to practice, two different aspects can be mentioned. On the one hand, attention is drawn to the different steps that have to be taken to implement regulation in social systems, starting with the elaboration of a shared perspective from which a system is observed over the identification of performance measures up to the actual execution of interventions. All this is relevant for the practice of leadership and can further be explored—not only within organizations, but also in other settings where leadership is believed to happen. On the other hand, this article has also shown how the approach to leadership developed in the previous sections can advance research through the study of leadership styles and the differences between them. This gives access to a new layer of reflection in organizational practice that may increase transparency regarding the behavioural patterns of leaders and their effects.

Future work is necessary to elaborate the approach to leadership presented here. Empirical studies are required to flesh out the abstract considerations in this article. Furthermore, depth needs to be added in reference to extant works on social systems theory and related streams of research. Finally, there is also potential for further work at the interface to engineering-oriented approaches to leadership. For example, simulations of the dynamics described in this article might be conducted with the help of modern information technology, which has already made a lot of progress in modelling regulatory processes. This might not only generate new insights for research, but also show the value of this approach to larger audiences that have so far not been in contact with social systems theory.

### Availability of Data and Materials

Data sharing is not applicable as no data were generated or analysed.

### Author Contributions

The author confirms sole responsibility for study conception and design, data collection, analysis and interpreta-

tion of results, and manuscript preparation. The author read and approved the final manuscript.

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### Conflict of Interest

The author declares no conflict of interest.

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