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Strategy is Structure. A Systems Theory-Based Definition of Strategy

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Abstract: Hardly any other management concept sounds as hackneyed as strategy, and at the same time hardly any other concept in organizational science is as vaguely defined. As a means of escaping the conceptual tangle, this article suggests a systems theory-based definition which allows us to sort out the various threads of the strategy discussion. Strategy, according to this interpretation, entails programs that search for the means to achieve previously defined goals. This makes it possible to systematically link classical notions of strategy to discussions concerning organizational theory. Casting the concept of strategy in terms of systems theory enables us to resolve the artificial contradiction between strategy and structure, clarify the relationship between end and means, determine the relationship between a plan and its practical implementation, relativize the importance of strategies, and explain the surprising limitation of the strategy discussion to businesses.

Keywords: strategy; means; ends; systems theory; strategy as practice

1 Introduction. The Imprecise Definition of Strategy

Hardly any other management term is used as carelessly as "strategy" (see Hambrick and Fredrickson 2001; Hambrick and Chen 2008). We hear strategy referred to as "the determination of the long-term goals and objectives of an enterprise, and the adoption of courses of action and the allocation of resources necessary for carrying out these goals" (Chandler 1962, 14), a choice of "a different set of activities to deliver a unique mix of value" (Porter 1996, 64), a "pattern, consistent behavior over a period of time" (Mintzberg 1978, 934) or a "unique, new position that a company is striving to achieve" (Kolbusa 2012, 7). Strategy is defined as a "pattern in a stream of decisions"

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(Mintzberg and Waters 1985, 257), as the “planned evolution” of a company (Kirsch 1997, 654) or a “plan that integrates an organization’s major goals, policies, and action sequences into a cohesive whole” (James B. Quinn 2014, 9).

Considering the confusing usage of the word, it is understandable that organizational science has attempted to approach the concept using the parable of the blind men and the elephant (first mentioned in Mintzberg 1987). Repeatedly cited in the discussion of strategy, it tells of a group of blind men who try to describe what an elephant is like after simply touching it. Since each of them touches only one part of the elephant’s body, their interpretations differ. Depending on which part they touched, they claim that an elephant is like a tree, a fan, a wall, a rope, a spear, or a snake. The same applies to the debate about strategy: very different aspects emerge according to one’s perspective. To one person, strategy appears as a plan to master the challenges faced by an organization, to another it is a pattern of behavior, and yet a third sees it primarily as the position of an organization within its environment. Someone else might use strategy to mean a lens an organization uses to focus on the world.

Consequently, the great majority of monographs and articles on strategy forget to give a precise definition of the term. Even in a book with the title “What is Strategy? ” (Whittington 1993) the concept is not defined and therefore not demarcated from other concepts in organizational research either. From the practitioner’s perspective, the vagueness of the idea may not be a problem. Generating catchy phrases that can be interpreted almost at will by the members of an organization is part of everyday practice. Communications in organizations are so heavily laden with terms that can be interpreted almost entirely at the user’s discretion – “synergy effects,” “proactive leadership,” “win-win situations,” “paradigm shifts,” – that “strategic orientation” and “strategic management” attract no attention at all. For a scientific examination of strategy in greater depth, however, such random definition is problematic (for a discussion of the problem, see Hirsch and Levin 1999, 209; Alvesson and Blom 2022, 73ff.). If the concept of strategy remains poorly defined or altogether undefined, it cannot be placed in relationship to other concepts that are used to describe organizational phenomena (see, in this regard, Rasche and Seidl 2020, 4; Grothe-Hammer, Berkowitz, and Berthod 2022, 30ff.).

1.1 The Reasons Behind the Weak Definition

The vagueness of the definition of the concept of strategy can be traced to the fact that scholarly discussion of strategies, with a few exceptions, has remained strangely disconnected from the debate in organizational theory over the relationship between ends and means in organizations (see Greve 2021). Early discussions of strategies in the central texts of Alfred Chandler (1962), Igor Ansoff (1965), and Kenneth R. Andrews (1971) were characterized by a strong orientation toward a purposive-rational model of organizations and, interestingly, began at almost the same time as the erosion of Max Weber's purposive-rational concept of organizations in organizational theory (see P. S. Adler and Heckscher 2018, 82ff.). In contrast to Weber, organizational science discovered that "not all ends" were "instructive" in the sense that "real means" could be derived from them (see, e.g., Perrow 1961b); that, in addition to end–means orientations in organizations, other forms of rationalization played an important role (see, e.g., Nokes 1960); that organizations often featured "contradictory goals" (e.g., Merton 1957); that internal conflicts between departments allowed one to recognize that, in spite of the end–means model, contradictions repeatedly arose in the way that organizations were oriented (see, e.g., Firey 1948); and that serving an end could not guarantee the preservation of an organized system (see, e.g., Perrow 1961a).

The reason for the extensive decoupling of the academic discussion of strategies on the one hand and the limitations of purposive-rational perspectives in organizations on the other, is that the two debates were split into two different disciplines (for the background, see Parker 2000, 124ff.; Ruef 2003, 244ff.; Grothe-Hammer and Kohl 2020, 420ff.; for the general problem, see Abbott 2001).[1] The researchers who laid a claim to strategy primarily viewed themselves as anchored in the field of management studies or business administration. The main concern of practice-oriented scholars was applicability and relevance to managers—they showed only minor concern for organization theory. (See, e.g., the critiques by Shrivastava 1986; Knights and Morgan 1991, and Whipp 2006). Conversely, in the 1960s, the organizational theory-based critique of Max Weber's purpose-rational view of organizations was primarily driven by sociologists, for whom the discussion of strategy played no role at all, or only a subordinate one, because it primarily involved solving problems pertaining to organizational practice rather than distanced, scholarly analyses (see Lounsbury and Carberry 2005).

Granted, the evolution of Management Studies with its interdisciplinary orientation – and in particular the development of Organization Studies, which serves as its scholarly framework, particularly in US business schools – has resulted in a closer relationship between organizational theory, which is primarily anchored in scientific research, and strategy approaches, which for a long time were oriented towards practice (see Augier, March, and Sullivan 2005; for greater detail see Augier and March 2011). In terms of decoupling, however, nothing has changed in a fundamental sense. In the field of organizational sociology, there are still no

1 For sociological research into strategy, partly limited itself to non-market actors, see King and Jasper 2022.

systematic attempts being made to arrive at a precise definition of the concept of strategy. For sociology, it does not represent a basic concept, and is consequently not defined in key sociological dictionaries. In the fields of management studies and business administration, there have been various attempts to link the discussion of strategy to organizational theory (see Williamson 1991; Simon 1993). In the scientifically oriented mainstream discussion of strategy, however, positioning one's approaches within general organizational theory has not been a primary concern (see Dess and Lumpkin 2001, 5). And when the relationship between strategy discussion and organizational theory is examined, it is often limited to theories such as contingency theory or population ecology, which can be easily linked to the strategy discussion thanks to their purposive-rational orientation (e.g., see Keats and O'Neill 2001, 521; Donaldson 2001, 11ff.; for an exception, the strategy-as-practice approach, see e.g. Whittington 2007).

1.2 The Aim of the Article in the State of Research

The aim of this article is to contextualize the relevant scientific discussions of strategy from a systems-theory perspective (see, for the approach in this article, Locke and Golden-Biddle 1997, 1033f.).[2] From this perspective it is possible to define strategy as programs that search for the means to achieve previously determined goals, a definition that makes it possible to link classical notions of strategy to discussions concerning organizational theory. Drawing on systems theory to conceptualize strategy thus enables us to resolve the artificial contradiction between strategy and structure, clarify the relationship between end and means, determine the relationship between a plan and its practical implementation, and reconsider the importance of strategies within organizations.

In systems theory, an organization is defined as a specific social system in which decisions regarding the entry and exit of individuals – the determination of membership – are a central instrument for establishing compliant behavior on the part of members. An organizations can decide who belongs to it and, more importantly, who should no longer belong to it because they no longer follows its rules (Luhmann 1979, 205; see also Luhmann 1982b, 75). Through the possibility of conditioning membership, organizations can develop decision communication as a system-specific form (see Luhmann 2002, 160). This does not

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2 A presentation of Luhmann's general understanding of organizations would go beyond the scope of the article. For a short introduction see Kühl 2021. For insights into central ideas of his concept, I refer in particular to Luhmann 1976, Luhmann 1982a, Luhmann 1982b, Luhmann 1996, Luhmann 2003; Luhmann 2020.

mean, however, that all communication within organizations takes the form of decision communication. The peculiarity is that the conditioning of the membership can turn any communication into a decision communication (see Kühl 2020a, 500).

Discussions about strategies are one prominent example of communication that can be turned into decision communication. The article addresses scholars trying to link strategy research with a comprehensive organizational theory. Naturally, in the framework of this article I can only address the central theoretically ambitious threads of the strategy discussion (for an overview see Duhaime, Hitt, and Lyles 2021). It is not my intention in any sense to address the strategy discussion in comprehensive terms. However, I do intend to offer an alternative approach to the three strands of research that have recently striven for a stronger connection between strategy research and organizational theory.

The first of these, the strategy-as-practice approach, considers "strategy as something people do rather than simply something organizations have" (Cloutier and Whittington 2013, 803). Inspired by the "practice turn" in the social sciences, the approach investigates the forms in which "practitioners" of strategy create concrete "strategizing" practices (see Chia and Holt 2006; Jarzabkowski 2005; Jarzabkowski, Balogun, and Seidl 2007; Whittington 1996; Whittington 2003, 2006).[3] An important contribution of this approach has been to initiate more realistic and richly detailed descriptions of strategic practices in organizations (see, for overviews, Golsorkhi et al. 2015a, b; Jarzabkowski, Seidl, and Balogun 2022; Johnson et al. 2007). Nevertheless, it is often difficult to ascertain what precisely is meant by the concepts subsumed under strategy as practice, for example, "practices," "practice," "actions," or "strategizing" (Ortmann 2010, 15; similarly Blom and Alvesson 2015, 410f.; Jarzabkowski, Kavas, and Krull 2021, 3ff.; Rouleau and Cloutier 2022, 722ff.). As the label "strategy as practice" already indicates, in this approach, much as in the classical subject-and-actor theories in sociology, practical actions are placed at the center of attention, thereby obscuring the relationship between plan and practice (see Langley and Maria 2015). A systems-theory approach seems better fitted to clarify the relationship between strategic plans and strategic practices.

The second, the approach of communication as constitutive of organization, allows us to address how strategies are formed within a communicational context (for an overview, see Spee 2022). The general idea is that organizations are "invoked and maintained in and through communicative practices" (e.g. Schoeneborn and

3 For criticism of the theoretical outcome of the practice turn in management studies e.g. Chia and Holt 2006; see Tourish 2020, 101.

Blaschke 2014, 286).[4] This approach has stimulated a wealth of empirical studies about communicative practices in organizations (see, e.g. Cooren 2004a, 377; Cooren 2004b, 520ff.). However, from a sociological standpoint the approach lacks a clear understanding of how decisions constitute a specific kind of communication (Luhmann 2018, 44ff.; Nassehi 2005, 185ff.).[5] By conceptualizing “organizations as systems of decisions” (Grothe-Hammer 2022, 93), we are able to define strategy as a type of decision premises.

The third strand, the systems-theory perspective, has so far had only a minor impact in the area of strategy (Rasche and Seidl 2020, 2; Baralou, Wolf, and Meissner 2012, 290ff.; Sohn 2020, 471ff.; Hernes and Bakken 2003, 1511f.). Still, a few management studies scholars have used systems theory in their approach to strategy (for an overview, see Ortmann and Seidl 2010, 360ff.).[6] They argue that strategy takes place in economic, scientific, and educational systems and that the adaption of a general strategy concept can lead to “productive misunderstandings” (Seidl 2007, 206). Using the concept of organizations as self-referential systems, they have shown that organizations do not so much react to objective markets as construct their own competitive environments (Vos 2003, 5ff.; Vos 2006, 367ff.; Rasche and Seidl 2020, 4). In line with systems-theory considerations about decision making (Luhmann 2006, 85ff.; Luhmann 2018, 98ff.), they contend that strategy is a way to deal with the paradox that we can only decide questions that are in principle undecidable (Rasche 2008, 182ff.; Rasche and Seidl 2020, 6f.). However, due to the focus on systems theory after the so-called autopoietic turn, they missed the chance to link the conceptualization of strategy to the discussion about end–means relation.[7] From an organizational sociological standpoint, this connection is essential for an understanding of strategy based on systems theory (see, as central reference, Luhmann 1973).[8]

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4 I focus on the so called “Montreal School” which is fundamental for the understanding of the approach (see Schoeneborn and Vásquez 2017, 372ff.). In my opinion, it does not make sense to treat the “four-flows-model” and especially the “theory of social systems” as part of the approach.

5 However, see the attempt by Cooren and Seidl 2020.

6 See for this strategy of “theory borrowing” in organization studies and management studies, Whetten, Felin, and King 2009; Kenworthy and Verbeke 2015.

7 Niklas Luhmann himself did not consider it necessary to provide a detailed definition of the concept of strategy, which originated in the field of business economics. In Luhmann’s writing 2005, 423, 446 there is merely an observation that premises that have been determined as the basis for a multitude of other decisions are referred to as “strategic decisions,” in which respect he follows John Child (1972). For these “decisions about decision premises”, however, Luhmann (2018, 186ff.) introduced the concept of “planning” – and with good reason. The notion of planning captures much more adeptly than the idea of strategy that decisions about decision premises are about more than (goal and conditional) programs, they are about communication channels and personnel as well.

8 Because of language barriers, the central text by Luhmann outlining a systems-theory understanding of strategy (Luhmann 1973) is not discussed nor even mentioned by the scholars working in

1.3 The Structure of the Article

Building on the definition of strategies as "programs that search for means" to accomplish previously defined ends, the second section shows how strategies can be integrated into an overarching understanding of organizations. The classical understanding of strategies views organizations from a perspective referred to as "goal fetishism," the idea being that the entire organization is geared to a superordinate goal. In contrast, this section uses the concept of decision premises – introduced by Herbert Simon and further developed by Niklas Luhmann – to demonstrate that strategies can be understood as only part of an organization's structure. If, following Luhmann, one distinguishes between communication channels, programs, and personnel as three types of decision premises in the structure of an organization, then strategies can be understood as a search for the means to accomplish a particular type of program, namely, a goal program.

The third section shows the gain in understanding associated with such a precise definition of strategies. The heated debate about whether structures follow strategy or strategies follow structure can be resolved because strategy can be understood as *part* of structure and, with the help of the concept of decision premises, the position of strategy within structure can be determined systematically. The question, already posed by Chandler, as to whether strategies are to be understood more as searches for ends or searches for means can be resolved by linking it to organizational theory discussions about ends – means chains. It can be shown that what constitute means on one level of an organization represent ends on the level below. Furthermore, limiting the concept of strategy to a search for the means to achieve "important goals" can be overcome by demonstrating that what is understood as strategy depends on the perspective of the specific unit of the organization. For "strategy as practice" the gain is that by defining strategy as a structure the relationship between plan and reality or target and practice is defined.

As the fourth section demonstrates, the particular gain offered by the systems-theory concepts presented here is that it enables a connection to be established between critical approaches in the strategy discussion (from incrementalism to emergent strategies and effectuation) and the older critique of a purpose-rational understanding of organizations. Explanations can be provided for the problems that the development of strategies encounters in the presence of goal conflicts; why strategy can be used as legitimation; why it frequently acts not as the means for ends

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the field of management studies with a systems-theory approach (see, e.g., Vos 2002; Rasche 2008; Seidl 2016. The general idea is accessible in English in a very short version through Luhmann 1982a. For the devastating effects of "Englishization" in management studies, see Boussebaa and Tienari 2021.

that are sought but rather as the ends for existing means; and why strategies are often only formulated officially once a course of practical action has already been established.

Building on these considerations, the systematic location of the strategy discussion in organizational theory is defined in the concluding fifth section. In contrast to the idea of "strategy as the showcase of management activity," we show that thinking in terms of goal programs represents only *one* approach to change. From a systems-theory perspective, it may just as well happen that changes are conceived on the basis of communication channels or personnel as decision premises. A systems-theory perspective offers no support for the idea of conceiving organizations simply from the standpoint of strategy.[9]

2 Strategy – a Definition of a Systems-Theory Attempt

From a systems-theory perspective, then, strategy denotes the *process of defining the appropriate means to achieve a previously defined end*. *Strategy formulation*, from this perspective, is the process of searching for appropriate means.[10] *Strategy implementation* refers to the process of applying the means that have been identified as appropriate for achieving the previously defined end. *Strategy formation* refers to means that develop around and underneath the official process of a search geared to an end.[11]

It is only by using these precise definitions that one can associate the strategy debate with the discussion of the relationship between ends and means that is highly relevant for organizational science (see the early contributions by Georgiu 1973; Gross 1969; Luhmann 1982a; Perrow 1961b; Thompson and McEwen 1958). In organizational science, an *end* or, synonymously, a *goal* refers to a precisely defined

9 For a version of the general argument for practitioners see Kühl 2017.

10 See Georg Schreyögg's (1984, 246) early suggestion that strategy should be viewed as a means to achieve a (long-term) business goal. Schreyögg's attempt to understand "strategy theory" as a "rational model of selecting means" enabled him to position strategy within the context of theoretical considerations on the relationship of ends and means. Thus, strategy is interpreted as an attempt to create a decision-making situation such that an optimal selection of means can take place. In this way, strategy theory offers rules for discovering and comparing alternatives. Using this narrow definition of strategy, it became possible to integrate discussion of strategy with a circumscribed purpose-rational view of organizations by assuming that a business acts rationally as long as it succeeds in finding the means to accomplish its long-term goals.

11 On the concept of strategy formation – and the contrast with strategy formulation – see the detailed discussion in Mintzberg 1987.

state that is to be achieved. *Means* are the potential ways this state can be achieved. If ends are supposed to guide the search for means, which is to say, are to have a structuring effect in an organization, then they must be specified sufficiently precisely for one to be able to ascertain whether the goal has been met or not. For that purpose, the following must be established: the nature of the end (what is to be achieved?); the scope of the end (how much is to be achieved?); the time frame (by when is the end to be achieved?); the personnel aspect (who is responsible for the end being achieved?); and the location (where is the end to be achieved?).

2.1 Goals – the "Blinders" Principle in Organizations

Setting goals always represents a remarkable narrowing of an organization's horizons. It focuses an organization on a small number of things that appear important, while screening out everything else. All goal setting emphasizes one particular factor, but always at the cost of neglecting, even damaging, a multitude of other possible aspects. In that sense, goals – or ends, to use the other term – can be referred to as an organization's "blinders" (Luhmann 1973, 46). Just as horses have a very wide field of vision due to the lateral placement of their eyes, organizations too, at least in principle, have the ability to expand their horizons almost at will. And just as blinders shield horses from distractions coming at them from the side or from behind, goal setting prevents organizations from being sidetracked by a host of other options.

By setting goals, that is, by putting on blinders, organizations create a very simplified picture of their environment on their "goal screen" (Luhmann 1973, 192).[12] The narrowing of the organization's horizon through goal setting has an additional important function: it focuses energy on achieving the goal and mobilizes creative thinking on the best means of doing so. If a company has adopted the goal of becoming one of the three global market leaders in agricultural utility vehicles, it will use a so-called benchmarking process to compare itself with other companies in the sector, to find out whether there may not be even more appropriate means for producing tractors.

In search logic, the saying "The end justifies the means" (Luhmann 1973, 46) applies here. After all, the function of ends is to mobilize as much creative thinking as possible for the selection of suitable means. As a rule, however, the spectrum of means that can be utilized to achieve an end is always limited. When the management of a hydroelectric plant manufacturer announces the goal of capturing

12 See for a similar perspective on the strategy discussion van Assche et al. 2020.

the markets in Greece or Turkey, then it is at least questionable whether bribery can be accepted as a legitimate means of achieving that goal.

In organizational science, this search for the best means of achieving a goal is referred to by the special term *purposive rationality.* This rationality does not refer to the *selection* of the goal, as that has already been determined. Rather, it is a question of searching for suitable means to *achieve* the end. The goals of an organization may in themselves appear highly questionable to an observer, for example, the creation of prison camps for political dissidents, the training of suicide assassins, or the production of hairspray. Nevertheless, if an organization were to proceed as efficiently and effectively as possible in the selection of the means to achieve its goals, it would deserve to be credited with a high degree of purposive rationality. As Max Weber put it, acting in an purposive-rational way entails first weighing various goals against one another, then selecting the most effective means of achieving the goals that have been defined, while taking the possibility of undesirable ancillary effects into consideration during the selection process (Weber 1976, 13). Classical strategy theory is firmly ensconced in the tradition of this purposive-rational approach.

2.2 The Purposive-Rational Orientation of Classical Strategy Theory

In the classical understanding of strategy, a strategy process begins with the specification of a mission – the long-term goal of an organization. Based on an analysis of the organization's environment, its internal capacities, and the available resources, the object is then to determine the various means to achieve the overarching goal. Following that, the various strategy alternatives are analyzed in detail with respect to their potential and risks, and the strategy that guarantees the accomplishment of the overarching, long-term goal is selected. Next, the chosen strategy is operationalized. Quantitative targets are formulated, milestones defined, and action plans prepared, while management monitors achievements at regular intervals (for examples of this approach see Hussey 1998, 71; for a concise presentation see Mintzberg 1994, 36).

This classical understanding of strategy is advocated by the so-called "Design School" or "Planning School" and reflects an understanding of organizations which is called *goal fetishism* in organizational science. The organization is seen as revolving from A to Z around its top-level goal. Its leadership sets an overarching goal to be accomplished. The resources are then defined by which the top-level goal is to be achieved. The means defined in this manner are then identified as subgoals, and, in turn, resources must be sought to achieve them. A pyramid-shaped concatenation of superordinate and subordinate goals is thus formed that allows every action within the organization to be examined for its utility. In short, what eventuates is the structure of a “strategy-focused organization” (Kaplan and Norton 2001, 2).

The organizational reasoning behind this end–means thinking has existed for a long time. As early as 1932, Fritz Nordsieck, a founder of the discipline of business economics, expressed the view that the task an organization had to fulfill should be the “point of departure” for defining its structure (Nordsieck 1932, 10). According to Nordsieck, an analysis of the organization would systematically break down its overall task into subtasks, which were to be assigned to specific units or, better still, to specific positions. The meshing that occurred during the fulfillment of the subtasks would then result in the achievement of the overarching objective.

This requires that the strategy process does not contain any contradictory goals or subgoals. If goals or subgoals were to conflict with one another, then fulfilling the subtasks would not result in the completion of the overarching task. The contradictions would already create confusion while a strategy was under development and ultimately block the process of formulating a coherent strategy.

The purposive-rational approach distinguishes strictly between the development and the implementation of strategies. According to this line of thinking, a strategy must first be properly and completely formulated before one can begin to think about deploying it in practice. The idea evokes a military strategist who confers with his general staff to devise a strategy and then passes it on in the form of an order to the soldiers at the front. After that, the execution of the order is ensured through military discipline and is therefore comparatively unproblematic (on this analogy, see Whittington 1993, 17).

This method often finds expression in strategic master plans that run to several hundred pages and lay out precisely defined targets, schedules, and budget allocations. The master plan includes detailed descriptions of subgoals, all of which are supposedly “smart,” in other words, specific, measurable, accepted, realistic, and [already] scheduled (see Doran 1981). The timetables sometimes state the day, and not infrequently even the exact hour, when hundreds of these individual subgoals are to be achieved. And the budget for achieving each of the subgoals is precisely set out in dollars, euros, or renminbi. Then, all that remains is for the plans to be made accessible to the relevant employees and their compliance monitored by management (see Goold and Campbell 1987, 74).

What position does strategy, when conceived in this way, occupy within a basic understanding of organizational structures?

2.3 Integration of the Strategy Discourse in a Comprehensive Understanding of Organizational Structure

According to Herbert A. Simon (1957, 34), organizational structures are decisions that serve as premises that are prerequisites for other decisions. Organizational structures therefore always involve the kind of decisions that are not exhausted in a single event but influence a multitude of future decisions. When a maintenance worker decides to repair a malfunctioning machine on the shop floor, the decision does not qualify as a decision premise because its relevance applies only to this specific event. However, when the CEO decides that a member of the maintenance team must be on location within 10 minutes to address any machine malfunctions in the production area, then that does constitute a decision premise (see Luhmann 2003, 38ff.; Luhmann 2018, 181ff.).

On this basis, it has become accepted in organizational science to differentiate between three fundamentally different types of structure (see also Martens 2006, 90ff.; Seidl and Mormann 2014, 140ff.; Kühl 2021, 102ff.). The first type consists of the *decision programs*, including, for instance, economic goal systems, work instructions, IT programs, and policies. They determine which actions are to be viewed as right or wrong. The second type is made up of *communication channels*, which include such things as rules of operation, the division of labor, information channels, co-signing authority, hierarchical structure, or signature regulation, that determine the manner in which communication has to flow and the pathways it has to follow. The third type of structure or decision premises can be understood as involving *personnel*. The underlying idea is that it makes a difference for future decisions which person (or type of person) is chosen to fill a position (for greater detail, see Luhmann 2018, 230ff.).

Programs – the first type of structure – bundle the criteria that must be used in reaching decisions. They determine which actions are permitted and which are not. In that respect, programs have the function of allowing accountability to be established when errors are made, thereby distributing blame in the organization. If an employee does not meet the goal of increasing revenues by 10 percent, as specified by the program, he or she may try to find excuses but ultimately the program allows the fault to be laid primarily at their door. In principle, there are two different kinds of programs: conditional programs and goal programs (for a concise summary, see Luhmann 2018, 212ff.).

Conditional programs determine which actions must be undertaken when an organization registers a certain event. For example, when a pre-assembled component arrives at a workstation on an assembly line, then, according to a company-determined conditional program, a certain action must be imitated.

Consequently, in conditional programs there is a strong link between the prerequisite for an action, the *if*, and the execution of a decision, the *then*. The procedure is precisely defined. The program determines what must be done, and in conditional programs what is not expressly permitted is forbidden.

Goal programs, on the other hand, determine which targets or objectives are to be achieved. Goal programming is found at the top of an organization, for example, when a company sets itself the goal of attaining the leadership position in the washing machine market, but it also takes place in the activities of middle and lower management when the so-called "management by objectives" approach to achieving goals is taken. In fact, even simple activities can be governed by goal programs. In goal programs, the choice of means is left open. The object is to reach the stated goal, no matter how – within certain limits. And this is the point where the concept of strategy enters in. Ultimately, formulating a strategy describes the process of searching for suitable means to achieve an objective; strategy implementation refers to the process of putting those means into effect once they have been identified as optimal.

Communication channels account for the second basic type of organizational decision premises. Initially, establishing legitimate points of contact, proper channels, and domains of responsibility massively limits the opportunities for communication. In reaching its decisions, the organization forgoes a large number of possible contacts as well as participation by the entire range of potentially helpful and interested parties. Only a limited number of legitimized contacts and authorized decision-makers are allowed, and the members must respect this if they do not wish to put their membership at risk (see Kühl 2021, 105f.).

For the members of an organization, establishing communication channels has an unburdening effect, as do all the other types of structure. Those who are responsible for a particular decision may assume that it will be considered correct within the system and not be questioned. Conversely, if a problem arises, they also have to assume responsibility and be held accountable for potential errors or the negative consequences of their decisions. This not only takes the onus off managers, who can assume that their subordinates will follow instructions or at least officially act as if they were doing so. It also removes a burden from their subordinates because they know whom they may and may not speak with. Well-defined communication channels also take pressure off cooperative efforts between people at the same level because, to cite an example, one department does not have to verify the correctness or usefulness of information received from another.

There are a wide variety of ways to regulate communications within an organization. The most prominent method of putting firm communication channels in place is through a *hierarchy*. On the one hand, hierarchies define who is subordinate or superior to whom and therefore establish inequality. Yet, at the same time, they also produce equality because they specify which departments are situated on the same hierarchical level. A further important method of establishing communications channels is *co-signing authority*. Co-signing authority is based on equality of rank among participating organizational units. It is therefore correspondingly sensitive because there are no simple ways to resolve conflicts when they arise (see Luhmann 2003). Another increasingly important way to define communications channels is to view them in terms of *project structures*. To this end, members of different departments are assembled to work on a project – which is to say, a goal program – over a specific period of time.

Hierarchies, co-signing authority, and project structures can be combined with one another to produce highly specific forms and networks of communication channels, for which highly simplified terms such as a functional organization, divisional organization, or matrix organization are employed. Depending on the combination of hierarchies, co-signing authority, and project structures chosen, there will be corresponding changes in the likelihood of cooperation, competition, or conflict in the organization. In the context of strategy processes, a high degree of creativity is mobilized to develop and implement such networked communication channels as a means of achieving a goal.

Whereas it is common practice in organizational science to classify programs and communication channels as organizational structures, the suggestion that personnel should be viewed as a third and coequal type of structure is somewhat surprising. The reason personnel has been widely ignored in this context can be found in a blind spot that crept into organizational research via classical economics. Due to its orientation on the classic ends–means model, managerial organizational research often views personnel merely as a means to an end, not as something that represents a structure.

It will be clear to any observer, however, that organizations do not merely reach decisions *about* personnel; personnel decisions also represent important premises for further organizational decisions: it makes a difference who occupies the position in charge of making them. Given the same position, a lawyer will often reach different decisions than an economist who, in turn, will arrive at different decisions than a sociologist. People with upper-class socialization tend to reach different decisions than those from the lower social strata. It is also said that decision behavior in women tends to differ from that in men.

Organizations have different options when it comes to turning the personnel adjustment screw (Luhmann 1971, 208). The *hiring process* determines which type of person will make future decisions. The *firing* of individuals can be used to signal which kind of decisions are no longer desirable in the future. Particularly when positions at the highest levels are involved, this option is frequently used to send an internal and external message that different forms of decisions are to be expected.

Internal transfers can be made in several directions: upward – in the form of a promotion, or to put someone on ice as a figurehead; downward – in the form of a demotion; or laterally. *Personnel development* represents an attempt to change people's behavior, so that while remaining in the same position they will reach different decisions in the future. Here, one often has the impression that personnel represents the organization's software, so to speak, and can be reprogrammed in any way one desires through coaching and training seminars. In contrast, programs, technologies, and official procedures constitute the organization's hardware. Yet, the opposite seems to be more plausible. Whereas an organization's plans and task descriptions can be easily changed, practically with the stroke of a pen, people can only be changed with difficulty, if at all (Luhmann 2018, 231).

Having established this kind of understanding of organizational structure, we will recognize the position of strategies within the system. From a systems-theory point of view, communication channels, programs, and personnel are, in principle, equally ranking forms of structuring organizations. As a search for the means to accomplish a previously defined goal program, strategies are ultimately only one possible form of organizational structure.

3 The Strengths of a Systems-Theory Definition of Strategy

It is understandable that such a precise attempt at defining strategy has drawn a significant amount of criticism. The trend within the strategy debate is to establish an eclectic theory that can accommodate very different paradigms. For those who advocate a narrow definition, the burden of proof is high. They must explain how their definition relates to other definitions of strategy and demonstrate why it is superior. It has to be proven that relevant strategy discussions can not only be replicated with help of their definition, but will be better understood as a result of it. They must delineate what kind of new scientific approaches their definition will open up for the understanding of strategy. And finally, because of the practical implications typical for the discussion of strategy, they have to demonstrate what defining strategy with the help of the end–means model represents for the practice of developing strategies.[13]

13 The discussion that follows will point to areas where empirical research could begin. Thus, this article also views itself as part of a broad tradition of studies that endeavor to show how systems theory can be utilized for empirical research (see Besio and Pronzini 2010).

3.1 The Resolution of the Artificial Contradiction Between Strategy and Structure

An initial benefit of a narrow definition of strategy is that it helps to resolve the controversy over the relationship between strategy and structure in the Hegelian sense. In other words: to overcome the contradiction between two concepts while at the same time preserving the distinction between them and ultimately synthesizing them at a higher level. Ever since the 1960s, when the first studies on strategy were written that claimed to be scientific, a contentious debate has been taking place about whether the formation of organizational structure follows from managerial strategy decisions or the reverse – strategy decisions are direct results of the structure of an organization (see Galan and Sanchez-Bueno 2009).

Under the axiom "structure follows strategy," Alfred Chandler (1962), a forefather of the discussion of strategy in management, promulgated the idea that organizations respond to changes in environmental conditions by adjusting their strategies and that their structures are subsequently adapted to fit the strategies (see Fligstein 2008). In contrast to Chandler, David Hall and Maurice A. Saias (1980) coined the catchy formula "strategy follows structure" to point out that strategies are instead the outcome of an organization's structure. Hall und Saias argue that information about the environment can only be processed through a lens created by the structure of the organization itself. In their opinion, the strategy process can only result from the structure of the organization.

Following this comparatively simple juxtaposition, a multitude of research papers were published claiming to demonstrate the degree to which strategy decisions shape the structure of an organization or, on the other hand, the extent to which structure influences strategies. Rather than simply contrasting structure and strategy, it became popular to assume recursive relationships between the two. A strategy, the assumption ran, influenced the structure of an organization, which in turn had an impact on the formulation of a strategy, which then influenced the structure (for examples, see Mintzberg 1990b, 171; Amburgey and Dacin 1994, 1427).

While the recursive explanatory model is certainly not wrong, it is inadequate because it too fails to specify what structure and strategies are actually supposed to be and how they relate to one another. The debate over whether "structure follows strategy" or "strategy follows structure," like the recursive, Solomonic formula "structure follows strategy and strategy follows structure," is misleading because it treats the concepts of strategy and structure as coequal.[14] If strategy is the process

14 Only see as examples for the attempts Jauch and Osborn 1981; Venkatraman and Camillus 1984; Amburgey and Dacin 1994; Farjoun 2002; Siggelkow 2002; Yin and Zajac 2004.

through which the means to achieve an end are sought and implemented, then strategy can be nothing other than an aspect of organizational structure. If one wishes to express this in the language of the controversy, one would have to say that "strategy *is* structure" or, more precisely, "strategy is *part* of structure."

This specification now puts us in a far better position to describe the relationship between decisions about goal programs and the choice of means to achieve goals on one the one hand, and additional structural decisions on the other. When decisions about the structure of an organization are involved, there is always the possibility that one of the types of structure will "take the lead." It can happen that hierarchical communication channels are viewed as fixed, and an attempt is made to formulate program and personnel requirements for existing departments. Yet, it can also happen that structural decisions are conceived in terms of goal programs, in other words, an attempt is made to find suitable communication channels and the appropriate personnel for goals that have already been set. Particularly when personnel is immobile as a decision premise, it is beneficial for the organization to define suitable programs and appropriate communication channels.

Instead of always equating an organization with its goal program, as in classical approaches to strategy, the object now becomes to determine for each individual organization which type of structure is taking the lead and why. In some cases, the thinking in terms of goal programs may be the reason, although it can equally well be that an organization is conceived with the personnel as its decision premise, or that communication channels, perceived as immutable, are used as a starting point for a process of change.

3.2 The Solution to the End–Means Confusion

In Chandler's eyes, strategy represents both the definition of goals and the determination of the means to achieve them. This dual definition has led to chaos in the discussion of strategy. Sometimes the concept is used with the emphasis on formulating a goal program, leading to statements like "the company's strategy is to increase revenues by two percent this year." In other formulations, the concept underscores the choice of resources, In which case, the wording reflects the idea that the object of a strategy process is to "identify the appropriate means to increase revenue by two percent this year." Sometimes the job of strategies is seen as establishing goals *as well as* making decisions about resources (see D. E. Schendel and Hofer 1979, 15).

According to Henry Mintzberg, Bruce Ahlstrand and Joseph Lampel (1999, 66) there is "considerable confusion." For a deeper understanding of strategies, it is problematic if the concept is used arbitrarily: in one instance to designate the formulation of goals, in another the identification of resources, and in a third the two together. The cause of the confusion lies in the early phase of strategy research when opinions were expressed off the cuff, as it were, without systematically referencing the discussion in organizational research over end–means relationships, which, in turn, originated with Max Weber.

From the perspective of systems theory, the relationship between ends and means becomes clear when one focuses on a distinctive feature of organizations – namely that, as a rule, they result in the formation of ends–means chains. In a business or a government administration it is not simply that a goal is defined for which various resources are then sought. Rather, when a means that appears to be suitable has been identified, it is itself treated as a (sub)goal for which other suitable means are sought. Those means are subsequently treated in the same way again, leading to a further search for suitable means to achieve this (sub-sub)goal.

It now becomes clear why strategy processes sometimes emphasize goal identification and sometimes the search for means. For example, if management decides that the reject rate in the production process has to be cut from one percent to 0.5 percent, then, from an executive viewpoint, that is a means – a strategy – to achieve the goal of reducing costs. From the point of view of the production manager who has been instructed to reach this target, however, it presents itself as a goal for which he or she must develop the appropriate means, in other words, a strategy or strategies. In the strategy process, therefore, the question of whether something is seen as an end or a means is substantially determined by a person's position in the organization.

3.3 Differentiating Between Programmed and Unprogrammed Decision Making

In strategy literature, a great deal of creative energy is expended on defining a strategy merely as a search for a means to accomplish a particular type of goal program. For example, the case is made that a search for the means to achieve an organization's overall goal (for example, maximizing profit in businesses) should not be defined as a strategy. Instead, the concept of strategy should be limited to the search for resources to accomplish more strongly operationalized goal programs (on this discussion see Hofer and D. Schendel 1978, 18). Goal programs are sorted hierarchically in order to assign the respective strategies to the organization's objectives on the one hand or its policies and programs on the other (Hunger and Wheelen 1996, 10). The object is not to apply the concept of strategy as a matter of principle to any search for the means to implement any goal program, but to use it only for searches for the means to achieve special forms of goal programs.

Yet one notices uncertainty in the discussion when it comes to defining precisely what is special about the goal programs for which suitable means of realization are sought in a strategy process. Strategy is always invoked in somewhat vague formulations where the goals are "fundamental" to the organization or where a search is on for the means to achieve "long-term" goals. But who defines "fundamental," and who defines "long-term"?

The most convincing and, from a systems-theory standpoint, best-informed suggestion is to single out the phenomenon of "unprogrammed decision-making" as a characteristic criterion of strategies, taking up an idea already laid out by Herbert A. Simon (1957), namely, to differentiate between "programmed" and "unprogrammed" decision-making. A large number of organizational decisions are programmed in the sense that they have been stipulated by if–then rules or the ends determined by the organization for which means are being sought. Yet, particularly at the top of the organizations, many of the decisions taken are unprogrammed in the sense that they are not guided by programs.

The strength of this approach lies in its ability to explain why organizations are especially inclined to designate as strategies their attempts to (re)position themselves in their environment. One need only think of Igor Ansoff's (1965) Product/Market Matrix which urges businesses to distinguish between market penetration, market development, product development, and diversification as a growth strategy. The same holds true for Michael E. Porter's (1980) idea that the positioning of an enterprise depends on the threat posed by new participants in the market, the negotiating strength of suppliers, the negotiating strength of customers, the threat of substitute products, and the intensity of rivalry from competitors. All of these strategy tools begin with a new definition of a company's system–environment boundary, in other words, with decisions that are comparatively unprogrammed.

Nevertheless, it goes without saying that even "unprogrammed decision-making" does not occur in an unstructured environment. The strategy decisions taken by top management are, after all, geared to criteria such as maintaining short-term solvency, maximizing profit, and safeguarding the company's market position over the long term. Granted, because a principle such as profit maximization is so abstract, it does not meet the classic criterion of a goal program, which – in order to be effective – must specify precisely whether a goal has been achieved or not. But it still structures the space in which organizations make "unprogrammed decisions." In this sense, one can paradoxically state that strategies often entail the search for means to accomplish a goal which is undefined in the broadest sense.

3.4 The Overall Position of Strategy Processes in the Organization

If one examines the way the concept of strategy is used in organizations, it becomes clear that strategy cannot be restricted to "unprogrammed decision-making." If the head of a division receives an order from the CEO to develop a strategy that will increase revenues by 15 percent in a specified regional market during the coming year, then that constitutes a goal program. It is equally a goal program when the trustees of a university demand that the amount of third-party funding must be doubled over the next five years and that an appropriate strategy be developed to achieve that goal.

Goal programs can be found at all levels of an organization. The target of achieving market leadership in Eastern Europe for drill sets is just as much a goal program as when an executive instructs her assistant to serve her a latte macchiato prepared with hand-foamed milk at the beginning of the workday. Targeting an annual return on investment of 15 percent is every bit as much a goal program that mobilizes a search for resources as the order issued to a Mafia debt collector to exact weekly protection money from restaurants in a certain part of town. Now, does it make sense to apply the concept of strategy to the search for the resources required in order to achieve such widely differing goal programs?

The attempt to chase down a latte macchiato, even in a remote region, may not deserve to be designated as a strategy from the perspective of the caffeine-craving executive, but it could very well appear as a strategic project to the executive assistant who is charged with the task. If one assumes that strategies are set not only at the top echelons for the purpose of achieving major goals, but are defined throughout the organization, then there is no reason to reserve the concept of strategy for special cases of searching for means to implement specific goal programs.

3.5 The Clarification of the Relationship Between Plan and Reality

One criticism that has been leveled against the discussion of strategy is that it focuses too much on strategy in the sense of planning considerations and not enough on strategy as concrete work, that is, "strategizing." However, it would be a conceptual mistake to focus only on the practice of strategizing. Instead, it is necessary to define the relationship between "strategies as a framework for action" and "strategic maneuvers" or – to put it in different terms – between a set of strategically relevant procedures and resources, and strategic action. If one wishes to define this relationship as more than merely a recursive mutual relationship between structure and action, as is the case in subject-oriented sociology or Gidden's structuration theory, then one can draw on sociological systems theory.

Nevertheless, it is this very strategy-as-practice approach that raises the question of the relationship between strategic practices and strategic plans, even though the approach seems to focus primarily on what people "do" in strategy processes (Cloutier and Whittington 2013, 803). And this is exactly the point where the praxeological approach comes up against its limitations (Langley and Maria 2015). As the label "strategy-as-practice" already indicates, in this approach, much as in classical subject-and-actor theories in sociology, practical actions are placed at the center of attention, thereby obscuring the relationship between plan and practice (see, however, Seidl 2007).

It is this very relationship between plan and practice, however, which must be defined through an understanding of strategy that is founded in organizational science. It is a question of defining the relationship between "strategies as a framework for action" and "strategic maneuvers" (Knyphausen-Aufseß 1995, 359) or – to put it differently – the relationship between strategies as a set of strategically relevant procedures and resources and strategic action (Ortmann 2010, 14). If one wishes to define this relationship as more than merely a recursive mutual connection between structure and action as is the case in subject-oriented sociology or in Anthony Giddens's structuration theory, then one can draw on sociological systems theory.[15]

Systems theory allows us to address the relationship between plan and practice because the concept of structure is not built on the regularity of actions but rather on expectations (see Hendry and Seidl 2003). Structures, according to Luhmann (1995, 267), represent expectations that do not determine actions but rather burden those who deviate from those expectations with the obligation to explain why they have done so. And it is precisely this perspective that puts systems theory in a position to examine the difference between expectations in the form of formalized programs and concrete practices in organizations.

15 The problem with both subject-oriented theory and structuration theory is that they do not have an elaborated expectation concept. Despite the similarities, the relationship between subject-oriented sociology (see, e.g., Voβ and Pongratz 1997) and structuration theory (see, e.g., Giddens 1984, Barley and Tolbert 1997, or Pozzebon 2013) has received remarkably little theoretical attention from either side.

4 The Limitations of a Purposive-Rational Approach

Complaints about the "implementation gap" clearly indicate that classical strategy management has its limitations. The point is made that organizations do not so much lack good visions, ideas, or strategies as much as the corresponding ability to realize them. It is lamented that while organizations have little difficulty in creating plans, they lack "implementation excellence," the ability to swiftly translate their plans into practical actions (e.g. Rho, Park, and Yu 2001; Riccò and Guerci 2014).

In the classical approaches to strategy management, the implementation gap is not taken as a reason to reconsider methods for developing strategies. Instead, organizations are called upon to develop greater implementation competence. This suggests that there is no need to change anything in the purposive-rational approach; one simply has to place management under an obligation to implement the adopted strategies through the use of professional project management. This position does not require executives, consultants, and professors to change their strategy development methods, while at the same time allowing them to open up "implementation management" as a new field of activity.

There is a different explanation for the implementation gap which we consider more plausible. The implementation gap following a strategy process should not be attributed to a lack of commitment in top executives, a lack of professionalism in implementation management at middle-management level, or inferior consultants. Rather, it is the unavoidable result of a purposive-rational perspective during the strategy process. In organizational research, meanwhile, there is extensive agreement that the notion of organizations as harmonious derivations of subgoals from a distributed superordinate goal is nothing more than a figment of the imagination among senior executives. In fact, organizations are characterized by competing goals, regularly occurring ends–means reversals, goals as pure window dressing, arbitrary and unnoticed goal switching, and subgoals taking on the life of their own. In the development of strategies, this should not be understood as organizational pathology; instead, the method of developing strategies should be adapted to such characteristics.

From this perspective, it is understandable why suggestions have been developed for a fundamentally different approach to strategy processes over recent decades. While different in their details, methods such as "logical incrementalism" (James Brian Quinn 1978), the "grass-roots model of strategy development" (Mintzberg and McHugh 1985) or "effectuation" (Sarasvathy 2001) are all, at their core, based on a departure from the purposive-rational understanding of organizations proposed by classical strategy theory. For that reason, they can ultimately be understood and classified only against the backdrop of a critique of purposive rationality in organizational theory.

4.1 Developing Strategies when Goals Conflict

Organizations often endorse a whole array of goals, thereby implying that the ends are compatible with, or even support. one another. As an example, some companies define their goals in terms of having profitable business operations, tapping new markets, developing fundamentally innovative products, treating their employees extremely well, and additionally serving their community.

As soon as such goals are operationalized, however, it becomes clear that they generally conflict. The development of new and innovative products lowers profit in the short term and thereby reduces a firm's ability to pay higher dividends, wages, or taxes. Raising the dividend for shareholders can often only be achieved by decreasing investment in the development of new products, cutting salaries, or reducing tax payments (vgl. Luhmann 1981, 405).

Classical strategy management admits that such goal conflicts exist but then advocates solving them through "conscious prioritization," According to this line of reasoning, prioritizing can be used to produce "goal rankings." It assigns greater weight to specific goals so that goal conflicts can be diffused. In the end, the dominant idea is that if there are "multiple conflicting objectives" in an organization, rational decisions can be reached with the help of "goal weighting." Confronted with the organizational reality of goal conflicts, the normative model of an organization consisting of unequivocal "goal rankings" rather than being abandoned actually receives additional emphasis.

From the perspective of systems-theory-based organizational research, one cannot dispute that there are successful attempts at forming "goal rankings." Yet, according to Niklas Luhmann's criticism, if the entire organization were structured that way it would be focused on a much too simplistic view of its environment. Down to the technical details of its work, the organization would be subject to bias with respect to the simplicity of its environment. As a result, a great many problems would have to be glossed over and some of the experiences created through collaboration would remain unacquired, at the very least, undiscussed (Luhmann 1973, 76).

For these reasons, the reality of organizations is often more complex than the end–means models of classical strategy processes suggest. Organizations can withstand goal conflicts for decades and derive their autonomy from precisely this source. One need only think of universities with their conflicting goals of teaching and research, or the goal conflict in prisons between resocializing inmates and the need to keep them in custody for security. Or, in addition to their dominant formal goals, organizations develop informal ones that enable them to react to the complexity of their environment.

4.2 Strategy Development as Legitimation. Goals as Window Dressing for the External World

One form of criticism directed at strategy formulations is that they are too vague. According to Richard Rumelt (2011, 34), for example, the sign of a “bad strategy” is that the goals are fuzzy. In his view, this often results when people from different departments and units attempt to assert their interests during a planning meeting. Frequently, the outcome is either a wish list with a multitude of potential strategies, or a set of formulaic compromises that are so abstract that everybody can agree on them. While it is correct to describe such abstract formulations as the result of strategy processes, the fact is overlooked that they, too, fulfill a function in the organization.

As Luhmann recognized early on, not all goals are instructive enough to allow one to deduce the right means, let alone the *only* right means to achieve them (see Luhmann 1973, 94). Slogans such as “the customer is king,” the “humanization of the workplace,” “profit maximization,” or “environmental protection” represent abstract behavioral expectations at best. The question of which behaviors are expected in a concrete situation is left unaddressed. If we are simply told, “Simultaneously maximize everything that’s good,” we will have difficulty inferring instructions for how to act under specific circumstances. How far should we take the idea of “protecting our environment”? Would it be permissible to kill somebody in an emergency? What are we expected to do if our actions line up with “the customer is king,” but hurt employees, the “company’s most important capital resource” (Kühl 2021, 58)?

The formulation of somewhat abstract goals – one might also call them *values* – is often not at all intended to serve as a set of instructions for concrete actions but aims instead at gaining acceptance for the organization in its surroundings (see Luhmann 1964, 108ff.). If business executives in a capitalist economy do not aggressively affirm the goal of profit maximization, they will presumably raise the hackles of their shareholders, just as labor union functionaries will run afoul of labor activists if they do not strive to represent union members as effectively as possible, or at least communicate that they are doing so.

As a result, organizations often turn into veritable “affirmation machines,” regularly embracing every conceivable social value that is *en vogue*. In the meantime, not only businesses but also hospitals, universities, schools, public administrations, the military, law enforcement agencies, and associations pledge their commitment to extensive catalogs of values. Although these values have a “high consensus potential” (Luhmann 1972, 88f.) because they are so abstract, they contradict all of the demands that are classically placed on strategies.

Nevertheless, as Henry Mintzberg (1990b, 184) was not the only one to point out, abstract formulations of strategies have their advantages. Granted, the more clearly a strategy is expressed and formalized, the more firmly it will anchor itself in the thinking of the members of the organization and the more difficult it will become to deviate from it. But, when an organization works primarily with abstract value formulations that are subject to interpretation, it can at least adapt to concrete changes more quickly.

4.3 Unplanned Goal Changes

Changes in strategy often take place unnoticed by customers, employees, or suppliers and occasionally even by those at the top levels of the organization (see Inkpen and Choudhury 1995). For this reason, Henry Mintzberg and James A. Waters differentiate between "intended" and "emergent" strategies (Mintzberg and Waters 1985). From a systems-theory perspective, intended strategies would be spoken of as already determined premises for organizational decision making or, more precisely, as means that have been decided upon for a previously defined goal program. Emergent strategies, on the other hand, would be seen as decision premises that are not the result of a previous decision, that is, as decision premises that have separated out from a multitude of decisions without a prior formal decision having been reached about them.

Naturally, organizations do not enjoy unlimited freedom to change their goals, if only because companies, public administrations, or hospitals invest large sums of money to purchase machinery, provide training and professional development for their staff, or develop procedures – in other words, in things that cannot be readily retooled for a different organizational goal. It may be possible to beat swords into plowshares, but not into computers. With some effort, engineers can be retrained as call-center workers, but they can't be transformed into an elite combat unit. In this context, economists speak of "sunk costs" – resources that have already been spent on certain things and are simply no longer available for other purposes. Nonetheless, in spite of the commitments that organizations have entered into through previous decisions, the speed at which they revamp their goals is fascinating.

4.4 End – Means Reversal

The discussion of core competencies in the strategy debate drew attention to an important factor, namely, that organizations are not entirely free in the choice of their goals but are strongly dependent on the resources at their disposal. The available resources that enable an organization to reach its goal better than the competition, are understood as core competencies (Prahalad and Hamel 1990). These considerations stem from a resource-dependence approach developed by Jeffrey Pfeffer and Gerald R. Salancik (1978), according to which an organization is to be understood primarily in terms of the skills and abilities at its disposal. Core competencies can therefore be understood as the resources that ensure an organization's survival because its competitors cannot readily duplicate them or because they provide quick access to new products.

That concept draws attention to an important point. Means not only serve to achieve the goal of an organization. In practice, means often take on a quality of their own that no longer has anything to do with the original goal. The ends for which the means were originally developed are forgotten, and the means themselves are retained with such enthusiasm one might think that *they* now represent the organization's goal. Accordingly, school testing no longer functions as a means of allowing pupils to monitor their progress in learning, but instead becomes the very reason for their learning. Getting together in church-sponsored youth groups, at senior citizen meetings in the parish hall, and for après-church service coffee klatches at some point no longer amounts to praising the Lord as "where two or three are gathered together in my name," rather the primary focus of parish work has now shifted to socializing.

The problem with the idea of core competencies has to do with the observation that many goals defined solely on the basis of available resources – which is convincing from a systems-theory perspective – are translated too quickly into a purposive-rational understanding of organizations. When core competencies are understood as a harmonious relation of the diverse resources and abilities through which a firm can stand out in the market (Schilling 2013, 117), then one is acting as if an organization were using a strategy process to clarify which resources it has at its disposal and then, from there, deriving corresponding goals. Although such planned searches for goals to suit the available means do exist, these processes generally tend to be unplanned. As a rule, end–means reversals happen incrementally, with the result that the organization barely notices.

4.5 Goals are Sought after Action

Research on organizational decision-making processes has further radicalized criticism of the purposive-rational model. A company, public administration, or university will portray its decision making to the outside world as if its defining goals came first – through elaborate strategizing processes, goal-setting workshops, or by virtue of a lone decision by the CEO – and all subsequent decisions were geared to achieving those goals. The suggestion is that goals come first, then actions.

While such cases no doubt occur, many times strategy is explicated only *after* action has been taken and its effects can be observed. When Mintzberg (1990a, 105) defines strategy as a "pattern in a stream of action," he then points out that often such patterns only emerge later, namely, after the actions have taken place. Gary Hamel (1998, 10) underscores this point when he emphasizes that the "strategy industry" – the strategy consulting firms, business school professors, planners in organizations, authors of management books – always only recognizes a strategy after a development has proven successful. While the post hoc explanations produced for an organization's success may be breathtakingly beautiful, no one would have dared to predict the success beforehand.

A large body of research on decision making shows that organizations constantly make decisions without always being clear about the basis or reason for them. Once a decision has produced an effect, the search begins for potential goals that might serve as justification for it. According to James G. March, organizational decision-making behavior involves not only the members' goal-oriented activity, but also a continual process of finding goals to legitimize activities that they have already been engaged in. In brief, "action often precedes the goal" and the "announcement of the goal is often a justification of steps that have already been taken" (March 1976, 72).

Karl Weick refers to this process of seeking goals after the fact as "sense making," in other words, the process of "making heads or tails out of something." In that respect, according to Weick (1987, 221), who references the thinking of Edward de Bono (1984, 143), strategy is best understood as luck that is rationalized after the event. In his view, the sense of an action or decision is frequently constructed retrospectively because one generally doesn't discover what purpose an activity actually serves until it has been carried out. The classic, fundamental idea – and this infuriates purposive-rationalists – could be formulated as, "How can I know what its goals are, as long as I can't see what decisions are being made inside the organization?" Weick concludes that the task of management lies not so much in defining appropriate goals and deducing the means to reach them, but rather in creating a framework within which the many diverse decisions made in the organization can be interpreted and ordered (Weick 1995, 9ff.).

5 Concerning the Classification of the Strategy Discussion – Conclusion

Adherents of the purposive-rational perspective on strategy processes do not need to be disturbed by such "contaminations" of their goal optimization-oriented view of organizations. If end–means reversals are observed in an organization, a strategy retreat can be used to call for reflection on its original goals. If focusing on two contradictory goals is preventing a streamlined rationalization of processes, then one can demand a clear strategy of splitting into two different organizations, each with its own distinct purpose.

In this manner, the organization's day-to-day operations can be used to immunize oneself against the various insecurities entailed by the classical purpose model. The motto could be: if reality does not correspond to my PowerPoint slides with their straightforward end–means model, then too bad for practical reality. Managers, consultants, and researchers use this divergence as an occasion to call for "clearer goals," "precise goal definition," and "the resolution of goal conflicts." In strategy processes, the goal becomes a kind of fetish which is adhered to in organizational analysis. As an observer, one is reminded of a Sisyphus trying time and again to roll the stone of a new strategy process up the hill of purposive-rationality, even though the stone rolls back down again every time. Yet, a heretic might note that it is precisely this eternal failure, caused by a general demand for rationality, that keeps Sisyphus going and the strategists among managers and consultants busy (see Kühl 2020b). And to a certain degree that is probably a good thing too; think of the concept of organizational blinders!

The picture that classical strategy theory paints of the purposive-rational organization based on an end–means relationship is, however, no more than a simplified caricature of organizational reality. Simple, neatly arranged, and understandable. it makes analyzing organizations relatively easy. Depending on the complexity of the problem, one simply requires a greater or lesser amount of computing capacity and a larger or smaller number of strategy experts or research assistants to "calculate" the proper strategic solution for an organization. Unfortunately, this picture has very little to do with reality.

It is more productive to inquire into the logic behind all of these "contaminations" of the classical, goal-focused picture. Why do shifts in goals, the continuing existence of an organization irrespective of its success or failure in goal attainment, and end–means reversals make sense? What is the rationale behind focusing on several competing goals? Why are organizations unable to do without formulations that are as attractive as possible, but do little to inform decision making?

Imagine if the dream of purposive rationalists, namely, alignment of the organization with a single goal, actually became reality. The problem can be illustrated by imagining a human being in the same situation. The staunch and exclusive pursuit of a single goal would likely drive a person insane. A researcher who saw the sole meaning of their life in solving one of the world's scientific mysteries would end up at some point having to be fed artificially because an occupation as banal as taking nutrition would seem entirely unimportant to them. More likely, though, they would be externally forced to take other goals seriously.

Nevertheless – and this point is important for the discussion of strategy – people cannot treat goals in a completely erratic fashion either. Goal rigidity can ruin a person, but you can also founder because you lack the ability to concentrate on one goal, and one goal only, for at least a short period of time. An employee who finds themselves in a meeting devoted to positioning a new electric toothbrush will encounter acceptance problems if their attention continually, not just occasionally, wanders to other interesting thoughts such as the romantic experiences of the night before, beating a new video game record, or the dishwasher that remains unloaded. Conversely, an executive having a romantic dinner with a new love interest will encounter acceptance problems if telephone calls, text messages, and e-mails continually remind them of other responsibilities, and they are no longer certain which goal to actually pursue.

In practical terms, *opportunistic goal setting* – in other words, more or less abruptly adjusting goals to suit existing opportunities and constraints – predominates (see Cyert and March 1963, 35f. and 118). Depending on which pressures or opportunities present themselves, one switches back and forth between different goals. If people happen to be in love, they might let work slide a little. By the same token, it's a well-known fact that the best books are written during phases when one is not distracted by the day-to-day chaos of a romance. Sometimes it's business before pleasure, and sometimes just the reverse.

Goals represent *one* of the possible ways to program an organization, but only *one* of them. Goals can also function as guiding parameters, for example, in the search for suitable personnel or for assigning them meaningful positions. Yet, it can also happen that one already has the employee and is looking for suitable tasks, a goal, for them – or that the number of available positions is simply considered a symbol of the size and importance of an organizational unit and tasks and personnel are being sought for them (Luhmann 2018, 189f.).

From this vantage point, the many deviations from a single-purpose orientation no longer appear to be pathological, as they do in the classic purposive-rational model, but rather as expressions of organizational adaptability. Conscious or unconscious switching of goals, the continuing existence of organizations regardless of their success or failure in reaching their goals, the reversal of ends and means, as well as the use of goals to justify decisions after the fact, are all – to use a big word – expressions of an organization's "intelligence."

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