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THE COGNITIVE-FRAME STRUCTURE OF GERMAN MANAGEMENT TERMINOLOGY¹

Kiyko Svitlana

Ph.D., Full Professor

Institute for Language and Communication

Technical University of Berlin, Germany

Management as a theory and practice of organizational governance in a market economy has existed for quite a long time. Within this field of human activity and its corresponding academic discipline, a substantial system of terminological units has been developed. A terminological system is an ordered set of terms with defined relationships between them, reflecting the relationships between the concepts these terms designate [Roelcke 2020: 14].

In recent decades, the field of management has undergone a enormous number of changes. An increasing emphasis – both in management theory and practice – is being placed on so-called "bottom-up management," that is, on a significant democratization of the relationship between managers and subordinates, on encouraging employees to become active participants in management activities, and on managers' drive to obtain information in the form of feedback from subordinates. Conceptually new approaches to solving management challenges are gaining increasing popularity in this field. Among such approaches are knowledge management and innovation management, new concepts in financial management [Guserl, Pernsteiner 2022] and information management [Heinrich, Riedl, Stelzer 2014], project management [Handbuch Projektmanagement 2022] and (total) quality management [Brüggemann, Bremer, Zischka 2024], as well as many other management paradigms. Under these conditions, the terminological system of the field in question is, in our view, characterized by a dialectical balance between the stability inherent in an already mature, well-established terminological system and the dynamic growth characteristic of younger systems still in their formative stage. Such a combination of entirely different ontological features within a single lexical subsystem appears significant for linguistic analysis and supports the relevance of this research topic. Furthermore, despite the importance of effective management for the progressive development of many contemporary social and political institutions and organizations, the German terminology of this field has not been subjected to comprehensive linguistic analysis, meaning that the criteria-

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based framework for the general systematization and standardization of management terminology remains insufficiently developed. This too underpins the relevance of the present study.

The object of study in this work is the contemporary German terminology of the management field, analyzed from the perspective of frame-thesaurus modeling. The subject of the research consists of the structures of specialized (scientific) knowledge verbalized by the terms under investigation and reconstructed by means of a frame model. The material consists of a sample comprising 4,500 terminological units from the management domain of contemporary German, selected from monographs and dictionaries, academic works on management issues, websites dedicated to management, and articles in popular science publications on the subject.

The aim of the study is a cognitive-frame characterization of the contemporary German terminological system of management. The research hypothesis holds that the contemporary German terminological system of management constitutes a systematically ordered set of terms whose units represent structures of specialized knowledge in the field of management, which in turn can be rendered as a frame model. The main task of the study is to construct a frame model of the terminological system under consideration, representing the static and dynamic structures of managerial knowledge that correlate with this terminological system.

To achieve the aim and accomplish the stated objectives, the comprehensive research methods are employed, combining definitional and contextual analysis, componential analysis of the semantic structure of terminological units, and the technique of frame modeling. We consider that, of all cognitive models, the frame is the most suitable for describing the knowledge structures verbalized by German terms in the management domain. A frame is a loosely fixed structure that models a domain of specialized knowledge and possesses a certain hierarchical organization, within which sub-frames, slots, and sub-slots are connected by hypero-hyponymic (genus-species) relations. A frame, as a means of organizing knowledge, makes it possible to model the structure of concepts while considering their hierarchy as well as thematic and categorical relationships. At the same time, it should be noted that lexical material distributed across terminals, slots, and subframes can be conveniently subjected to semantic analysis, and frame modeling may be considered, if not an indispensable, then certainly a desirable stage of analysis preceding the construction of a lexical-semantic field.

The frame of the conceptual structure "MANAGEMENT" constructed in this study consists of four sub-frame structures and represents a branching, content-rich architecture. At the apex of the model is the frame-name node "MANAGEMENT". The management field is sufficiently complex and multifaceted, encompassing various sub-domains; accordingly, the frame of the management terminological system also exhibits a comparably complex and branching structure. The second level of the frame structure is represented by four sub-frames: Managementrelevante Fakten "Management-relevant facts", Führungspositionen "Management positions", Managementtypen "Management types", and Struktur von Managementprozessen "Management process structure" (see Figure 1).

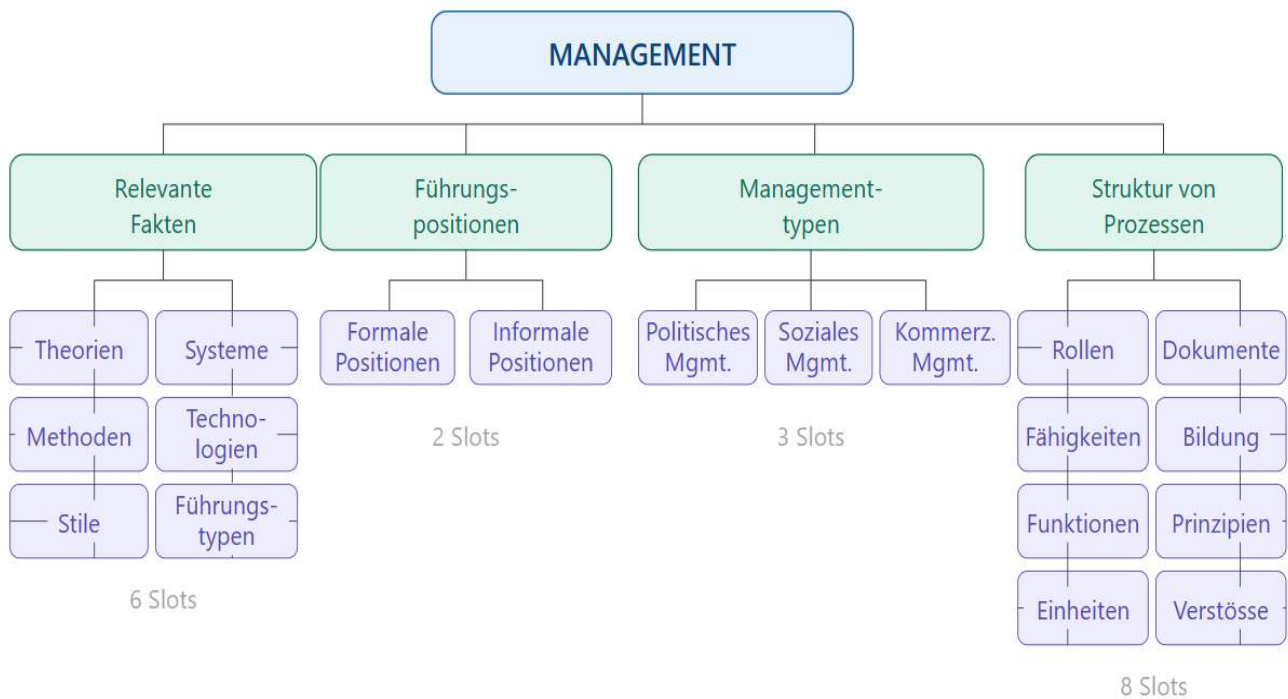


Figure 1. The frame of the conceptual structure "MANAGEMENT"

Each of the sub-frames comprising the overall model consists of at least two slots. Analysis of the German management terminology sample revealed that a sub-frame cannot contain more than eight slots. Some sub-frames have a greater number of slots, e.g., six in the case of Managementrelevante Fakten "management-relevant facts" and eight in the case of Struktur von Managementprozessen "management process structure", than others: Führungspositionen "management positions" and Managementtypen "management types" have two and three slots respectively.

The first sub-frame, Managementrelevante Fakten "management-relevant facts", encompasses information about management theories, systems, methods, technologies, styles, and leadership types. The sub-frame is represented by six slots:

(1) Managementtheorien "Management theories": die Systemtheorie des Managements "systems theory of management", die Kontingenztheorie "contingency theory", die Motivationstheorie von Maslow "Maslow's motivation theory", die Zwei-Faktoren-Theorie von Herzberg "Herzberg's two-factor theory", die Prinzipal-Agent-Theorie "principal-agent theory", etc.

(2) Managementsysteme "Management systems": das Qualitätsmanagementsystem (QMS) "quality management system", das Umweltmanagementsystem (UMS) "environmental management system", das Informationsmanagementsystem "information management system", das Wissensmanagementsystem "knowledge management system", das Risikomanagementsystem "risk management system", etc.

(3) Managementmethoden "Management methods": die SWOT-Analyse "SWOT analysis", die Kosten-Nutzen-Analyse "cost-benefit analysis", das Benchmarking "benchmarking", die Szenarioanalyse "scenario analysis", die Nutzwertanalyse "utility analysis / scoring model", etc.

(4) Managementtechnologien "Management technologies": das Enterprise-Resource-Planning-System (ERP) "enterprise resource planning system", das Customer-Relationship-Management-System (CRM) "customer relationship management system", die Business-Intelligence-Technologie "business intelligence technology", die Cloud-Computing-Technologie "cloud computing technology", die Workflow-Management-Technologie "workflow management technology", etc.

(5) Managementstile "Management styles": der autoritäre Managementstil "authoritarian management style", der kooperative Managementstil "cooperative management style", der partizipative Managementstil "participative management style", der situative Managementstil "situational management style", der bürokratische Managementstil "bureaucratic management style", etc.

(6) Führungsstile "Types of leadership": der transformationale Führungsstil "transformational leadership style", der transaktionale Führungsstil "transactional leadership style", der laissez-faire-Führungsstil "laissez-faire leadership style", der charismatische Führungsstil "charismatic leadership style", der demokratische Führungsstil "democratic leadership style", etc.

This sub-frame is verbalized by 536 German terminological units (11.9%) from a sample of 4,500 lexical units in the management domain. Most of these terms belong to the slots Managementsysteme "management systems" (123 terms), Managementtheorien "management theories" (57 terms), and Führungsstile "Types of leadership" (39 terms).

The second sub-frame, Führungspositionen "Management positions", is more extensive. It comprises two first-order slots. One of them – Positionen "formal positions" – contains a second-order slot. This slot is further divided into three sub-slots. These sub-slots localize information about the distribution of specific types of managerial positions across management levels. The sub-frame corresponds to 786 lexical units. This accounts for 17.5% of the total number of analyzed German management terms.

Among the terms verbalizing this sub-frame, the highest frequency of use is observed in units containing the components Manager "manager" (196 lexical units) and Vorgesetzte / Leiter "leader" (112 lexical units) as the core terminological element: Verwaltungsmanager "administrative manager", stellvertretender Manager "assistant manager", Kreditrisikomanager "credit risk manager", Linienmanager / Linien-vorgesetzte "line manager", der autokratische Vorgesetzte "autocratic leader", der demokratische Leiter "democratic leader", der Laissez-faire-Vorgesetzte / die Führungskraft mit Laissez-faire-Stil "laissez-faire leader", etc.

Within the sub-frame Führungsstile "Management types", three slots were identified: politisches Management "Political management", soziales Management "Social management", and Kommerzielles Management "Commercial management", containing one, three, and seven lower-level slots respectively. The structure of this sub-frame is the most branching of all, which reflects the considerable number of lexical units verbalizing it. According to our calculations, the number of verbalizers of this sub-frame is the largest compared to the other sub-frames, amounting to 1,791 units, or 39.8% of the total number of German management terms selected.

The majority of examples include high-frequency terms denoting specific types of managerial activity, some of which partially coincide with the names of slots and sub-slots: innovatives Management "innovative management", Projektmanagement "project management", Personalmanagement "human resource management", Zeitmanagement "time management", Wissensmanagement "knowledge management", Qualitätsmanagement "quality management", Organisationsmanagement "organizational management", strategisches Management "strategic management", Staatsmanagement "state management", and others.

A substantial portion of the German terms verbalizing the "MANAGEMENT" frame (630 units) falls within the sub-slot "Business management," which is further divided into four lower-level sub-slots. Among the high-frequency verbalizers of this structure, the following are worth noting: Marketingmanagement "marketing management", Unternehmensmanagement "business management", Finanzmanagement "finance management", IT-Management / Informationsmanagement / Management der Informationstechnologie "information technology management", Produktionsmanagement / Produktionsmanagement der Güterproduktion "production management", Rechnungswesenmanagement / Management des Rechnungswesens / Rechnungswesen "accounting management", Investmentmanagement / Vermögensmanagement "investment management", akkreditierter Investor / qualifizierter Anleger "accredited investor", die Cashflow-Prognose / die Liquiditätsprognose "cash flow forecast", die finanzielle Fusion / die Unternehmensfusion / die Fusion von Unternehmen "financial merger", die Gewinnmarge / die Umsatzrendite "profit margin", etc.

The sub-frame Managementprozessen "Management process structure," which is less branching in its organization, comprises eight slots containing information about management principles, roles, functions, skills, units, documents, the educational process, and violations directly related to the management domain. This sub-frame corresponds to 1,389 terminological units in our sample, accounting for 30.9% of the total number of analyzed lexical units – slightly less than the number of verbalizers for the sub-frame Managementtypen "Management types". The following are examples of high-frequency terms verbally representing the structure of the management process: Managementprinzip "management principle", Planung "planning", Koordination "coordinating", Personalbesetzung / Personaleinsatz "staffing", Leitungsteam / Managementteam "management group/team", Managementprozess "management process", Kontrolle "control", Managerausbildung "manager training", Managementschule "management school", Managementkompetenz / Managementfähigkeit "management skills", Machtmissbrauch "abuse of power", etc.

The three last analyzed sub-frames, namely "Management positions", "Management types", and "Management process structure", contain, in addition to purely frame-based structures, a special script (scenario) component. The sub-frame "Management positions", for instance, is characterized by the following actional components: how career advancement occurs, how one becomes a leader, what it means to be a leader with verbalizers to lead, to promote, etc. For the sub-frame "Management types" – how to manage people or a country (slot "Political management" with verbalizing terms: to govern, to rule, etc.), how to hire/dismiss

employees (slot "Social management" with verbalizers to employ, to lay off, to staff, to outstaff, to outsource, etc. Within the sub-frame "Management process structure" and its script component, the characteristics of the management process are expressed, along with the distribution of roles and functions among the subjects and objects of management (to downsize, to cooperate, etc.).

Conclusions. Within the thematic stratification of management terminology, four groups of terminological units are identified, unequal in their quantitative lexical distribution. These groups are associated with (1) the level of theoretical generalization in management concepts (terms of general and specialized management), (2) the area of application (terms of commercial, political, and social management), (3) the specifics of the objects of managerial activity (terms of production, financial, strategic, innovation, and other types of management), and (4) the scope of distribution of managerial activity (terms of intra-organizational, inter-organizational, and international management).

The frame model of the knowledge structures in the management domain, verbalized by the lexical units of the terminological system under study, constitutes a multi-level hierarchical structure. The second level of this model is represented by four sub-frames correlating with the thematic macro-fields of management terminology. The number of slots within a single sub-frame ranges from 2 to 8. The quantitative distribution of verbalizing terms across sub-frames and slots is uneven and reflects varying degrees of structuredness in the specialized knowledge represented in these fragments. The sub-frames with the highest number of verbalizers are Managementtypen "Management types" and Struktur von Managementprozessen "Management process structure." Three sub-frames in the model are marked by the presence of script components encompassing procedural knowledge about management methods and processes, as well as the distribution of roles and functions among the subjects and objects of management.

References

1. Brüggemann H., Bremer P., Zischka S. Grundlagen Qualitätsmanagement. 4. Aufl. Wiesbaden: Springer Fachmedien Verlag, 2024. 336 S.
2. Guserl R., Pernsteiner H. Finanzmanagement. Grundlagen – Konzepte – Umsetzung. 3. Aufl. Wiesbaden: Springer Verlag, 2022. 687 S.
3. Handbuch Projektmanagement. Agil – Klassisch – Hybrid. Hrsg. von J. Kuster, Ch. Bachmann, M. Hubmann, R. Lippmann, P. Schneider. 5. Aufl. Berlin: Springer Verlag, 2022. 509 S.
4. Heinrich L.J., Riedl R., Stelzer D. Informationsmanagement: Planung, Überwachung und Steuerung der Informationsinfrastruktur. 11. Aufl. Berlin: de Gryter, 2014. 680 S.
5. Krcmar H. Informationsmanagement. 6. Aufl. Berlin: Springer-Verlag, 2015. 799 S.
6. Roelcke Th. Fachsprachen. 4., neu bearb. und erw. Aufl. München: Verlag C.H. Beck, 2020. 327 S. F