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German higher education managers in the multiple hybrid university and their positioning with respect to third space

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Abstract

Based on a re-analysis of data from the KaWuM and WiMaKo research projects, this article furthers our understanding of higher education management in German universities by focusing on communicative skills and competences, as opposed to roles and job descriptions. While higher education management is a relatively heterogeneous field of activity, resulting in a huge variety of different higher education manager roles, we argue that similarities between these managers are found in the skills and competences they need to cope in the unique organisation of the university. German universities can be described as multiple hybrid organisations, characterised by their many structural inconsistencies in their key decision premises. As a result, third space opens up between three university subsystems: academia, administration and leadership roles (mainly the

presidium). We suggest that higher education managers need communicative skills and competences, in particular negotiation and mediation, to work in the third space bridging these three subsystems. It is proposed, therefore, that future research on higher education managers should focus more on their skills and competences than on precise tasks, as outlined, for example, in a job description.

Keywords higher education management; multiple hybrid organisation; boundary-role; third space

Introduction: the development of higher education management in Germany

In Germany personnel in higher education could be traditionally divided into two categories: (1) research and teaching staff (academics), and (2) the administration. This strict dual or 'bicephalic' structure (Neave, 1988; see also Blümel, 2016) resulted historically from the fact that the *Kanzler* (registrar), as head of the administration, was commissioned by the government to regulate academic activity according to legal requirements. Therefore, tasks relating to finance, human resource contracts and administration of students or estates were assigned to the administration. The content and form of teaching and research were agreed by academics as part of academic self-governance. The presidium was made up of professors as part of this academic self-governance and as 'primi inter pares'. But since the 1990s, this has changed due to important reforms. As higher education institutions (HEIs) have gained increasing autonomy from government requirements, and therefore have had to become more strategic, administrative and academic tasks have become increasingly intertwined or 'borderless' (Baltaru, 2022), opening up third space. As Whitchurch (2018: 12) puts it: 'There is evidence that the traditional "binary" between academic and professional roles is breaking down, and that formal employment categories no longer reflect reality. Moreover, terms such as "non-academic" and "support" staff, implying that professional groups are an adjunct to academic colleagues, have become contested.' As a result, a new group, referred to as 'higher education managers' ('Hochschul- und Wissenschaftsmanager'), has evolved in the German context.

This article aims to describe this group by combining qualitative and quantitative findings from the two research projects KaWuM (https://kawum-online.de) and WiMaKo (www.wimako-kolleg.de) with the theoretical concepts of the multiple hybrid organisation (Kleimann, 2016, 2019) and third space (Whitchurch, 2008, 2018). In the first section, the current German discussion on higher education managers, as well as some theoretical concepts, will be introduced. The second section will report on empirical findings for Germany.

Higher education managers in multiple hybrid organisations

Higher education managers in the German context

The term higher education management has been used in Germany for more than a quarter of a century, but its definition is still debated today (Krempkow et al., 2023a; see also Kerridge et al., 2024 for an international comparison). Various developments, such as the rise in student numbers, the Bologna reforms, a shift towards big science, increase in project-based funding and in the autonomy of HEIs in the context of new public management, fostered the discussion and a conviction of the need to introduce these new positions. The divide between administration and academia becomes blurred (Whitchurch, 2018) as a more strategic approach is taken to academic issues and administrative concerns. To address such tasks, new types of training programmes and institutions were created to equip people with the required skills and competences for different types of roles. To distinguish these activities from the traditional administration, the terms *Wissenschaftsmanagement* or *Hochschulmanagement* (higher education management) were chosen.

Furthermore, there is an ongoing discussion as to whether higher education management is a 'profession' in its own right (see, for example, Kerridge et al., 2024) and whether higher education

managers should be a personnel category in their own right, in addition to academic and administrative positions. This is now mirrored in new higher education laws in some German federal states. These laws include higher education management as a new position, often as a career choice for postdoctoral researchers (see Mitgliedergruppe Universitäten, 2024). They distinguish higher education management from academia or administration, establishing them as a new category altogether. This will have a major impact on the recognition of these activities, as well as for career patterns.

Kottmann and Enders (2013) took an internationally comparative view of this group of professional (as opposed to academic) managers. Veles (2023), for Singapore and Australia, and Baltaru (2022), for the UK, have highlighted the importance of 'cross-boundary collaboration' and 'borderlessness'. Kerridge et al.'s (2024) edited volume includes findings from many other countries, although sometimes with a narrower focus on research managers and administrators (RMAs) – see, for example, Chapter 5.36 on Norway in Silva and Nedberg (2024). Current professional networks and development frameworks for research managers in Europe include CARDEA (Career Acknowledgement for Research (Managers) Delivering for the European Area) and RM (Research Management) Roadmap.

Within research on higher education, different approaches to explain the phenomenon of higher education management in Germany have been developed. These range from an understanding of higher education managers as a profession (Blümel et al., 2011; Enders and Naidoo, 2022; Kehm, 2015; Pechar, 2003; Schneijderberg et al., 2014) to experts working on tasks that occurred as a result of the new management responsibilities that universities have been facing (Klumpp and Teichler, 2008). Often, holding an academic degree is considered to be important for these tasks (Wissenschaftsrat, 2018). These new types of managers can be found in, for example, quality management and assurance, international offices, third-party funding departments and knowledge transfer offices, and decentralised units such as departments, for example, acting as faculty managers. This understanding goes beyond what are called research administrators in some countries, and includes at least part of the broader concept of 'professional and support staff' outlined in Bossu and Brown (2018). A more elaborated distinction between academic staff, administrative staff and higher education management can be found in Krempkow et al. (2019). In turn, Whitchurch's (2008, 2018, 2023) concept of third space in higher education encompasses areas where new space is created as a result of crossover activity between academic and professional fields, in which higher education managers may work.

While the significance of higher education management is acknowledged in these discussions, empirical research is still relatively scarce in comparison with the UK and Australia, for example. Figures on German higher education managers differ: between 5,441 (Henke et al., 2022) and around 20–25,000 (Banscherus et al., 2017; Konsortium, 2017). These figures mainly depend on the exact definition of higher education management.

In a three-year research project, called KaWuM, we examined career trajectories of higher education managers and their competences. These are the most comprehensive data available to date for Germany. A short overview of the historical institutionalisation of the field in Germany, including some results from KaWuM, is given in Winkler et al. (2024), and the full results are reported in Krempkow et al. (2023a, 2023b).

In this article, we focus not so much on the profession as such, but on the approaches of these higher education managers to their work. By doing so, we enrich our understanding of *Wissenschaftsmanagement* (higher education management) in German universities, and of how the work of higher education managers contributes to the overall functioning of these highly complex organisations.

The concept of the multiple hybrid organisation

A university can be understood as both an institution and an organisation. Institutions are 'socially constructed, routine-reproduced (ceteris paribus), programme or rule systems. They operate as relative fixtures of constraining environments and are accompanied by taken-for-granted accounts' (Jepperson, 1991: 149). This idea of a university is valid globally (Frank and Meyer, 2023). At the same time, universities are also organisations, concrete (in both senses) manifestations of this global idea. As such, they have a physical location, an infrastructure that has to be maintained, students, academics and an administration (Hoelscher and Marquardt, 2023). There is, however, an ongoing discussion about to what extent universities are 'specific' (Musselin, 2006) organisations, following other institutional logics than, for example, companies or public bodies, and not sharing all characteristics traditionally associated with

an organisation (for example, joint strategic goal, established routines of reaching this goal and clear hierarchy; see Wilkesmann and Schmid, 2012). Well-known models in this context are concepts such as 'organized anarchy' (Cohen et al., 1972: 1), 'loosely coupled systems' (Weick, 1976: n.p.) and 'professional organization' (Mintzberg, 1989: 173). They all claim that universities are specific organisations due to the characteristics of academic work and teaching. Due to recent developments, this discussion has been followed by a second strand claiming that universities increasingly resemble 'complete organizations' (Brunsson and Sahlin-Andersson, 2000: 722; Seeber et al., 2015; see also Krücken and Meier, 2006). As an overarching interpretation, one could argue that the 'specific' characteristics are inseparably connected to the institutionality of the university (Hoelscher and Schubert, 2022). And while academia is part and parcel of the institution and the organisation alike, the administration belongs mainly, or even exclusively, to the latter.

Currently the most interesting, and most complete, theoretical approach to the German university as an organisation can be found in Kleimann's (2016, 2019) concept of the 'multiple hybrid organisation'. Using the analytic tools of Luhmann's (1972, 1992, 2002, 2019) systems theory, Kleimann argues (2016) that a university as an organisation is characterised by multiple inconsistencies and contradictions in its programmes, communication channels and membership.

What Kleimann (2016) can show particularly well with his model is that there are frictions within the university that arise from the different system references. This allows a distinction to be made between three subsystems: leadership, academia and administration. The leadership of a university must respond to requirements of other subsystems, such as law, politics, economics, mass media and, in the case of medical universities, health. Because of this, leaders try to govern the organisation by using management tools such as budgets, performance evaluations and performance-oriented allocation of funds, and by developing a corporate strategy (Lauer, 2023). Academia, however, as an 'organized anarchy' (Cohen et al., 1972: 1) and a profession (Mintzberg, 1989), prefers to organise itself independently of external influences, and by this to guarantee freedom of research and teaching. The 'task' or systems logic of academia is finding 'truth', and it uses academic self-regulation of the academic system and community inside and outside the institution to reach this aim. This is supported by the fact that professors, as members of academia, are civil servants who are protected by Article 5 of the German Constitution and are not subject to many regulatory requirements (Kleimann, 2019). Because of this, it can be difficult to convince academics to abide by decisions made by the leadership of the university. As Rudolf Stichweh (2016) remarks, professors see themselves, by and large, as independent entrepreneurs. Similarly, Mintzberg (1989: 173) sees the university as 'the one place in the world where you can act as if you were self-employed yet regularly receive a paycheck'.

Finally, the administration attempts to monitor processes at the university for their legal compliance (for example, study regulations, registration regulations, and fairness of teaching and assessment processes) and their financial adequacy (for example, internal audit and financial monitoring by the financial department) (Stratmann, 2014). Its guidelines include a set of legal requirements, for example, for the use of public funds in research projects or within the area of teaching. Unlike academia, the administration of German universities is very strictly organised: 'the administration operates on the basis of labor division with clearly defined decisional authorities and reporting duties which are supposed to allow for swifter and stricter decisions' (Kleimann, 2019: 1094).

In contrast to earlier studies, we not only look at the tensions between academia and administration, but also consider the reforms of the 1990s and the presidium as the leadership of the university. The presidium is taking on an increasingly important role with its own objectives and tasks, which did not matter to such an extent in German universities 25 years ago. These include public relations, marketing, gaining income by establishing professional schools, competing for the best students, outsourcing processes and closing unprofitable degree programmes, which are, in some cases, detached from the goals of the administration and of academics.

The structural inconsistencies in universities' key decision premises (Kleimann, 2019), and their multiple hybridity, opens up 'third space' or even different 'third spaces' between the subsystems within universities (see Figure 1). In these third spaces, the different logics of functional subsystems and different sectors within the organisation (research and teaching as academia, administration, leadership) and from outside (society, economy, politics, law) are brought together, translated and mediated.

The concept of third space in higher education was introduced by Whitchurch (2008), and it has gained prominence since the 2010s. It has been described as 'a material space of professional identities' recombination, critiquing of exclusivity and power of one group over another, and re-establishing the

value of diversity for the purpose of creating new knowledge and developing genuine partnerships' (Veles, 2023: 3–4). Within the multiple hybrid and loosely coupled organisation, many third spaces open up. They not only need nurturing, but also carry huge potential for innovation and 'doing things differently', if the people filling and using them are able to create 'collaborative capital' (Smith, 2005, as cited in Veles, 2023) for the good of the organisation. In this case, individuals move from simply 'working in third space' to become what Whitchurch (2023) calls 'third space professionals', developing their activity and capitalising on their positioning.

Among many other scholars, Whitchurch (2018) identifies different forms of third space. One important distinction is between third space involving 'outsiders', bridging universities and their environment (for example, in transfer offices, science communication or career centres, the latter dealing with employability), and third space that is located solely within the university, bridging different parts and functions of the 'loosely coupled' organisation, such as international affairs, research service, accreditation, quality management or sustainability. In the following sections, we will concentrate mainly on the latter.

Our research hypothesis is, therefore, that higher education management in Germany has expanded as a result of new tasks within the university as a multiple hybrid organisation, and that this in turn shapes the need for new roles, skills and competences related to exchange and cross-boundary work (as illustrated below).

Data and methodology

The following considerations are based on a broader set of data sources. First, we draw on results of the project KaWuM (the methodology used for the surveys is explained in detail in Chapter 2 of Krempkow et al., 2023b; see also Krempkow and Höhle, 2021). This three-year joint project by partners from the University of Speyer, Humboldt-University Berlin and International University combined qualitative and quantitative evidence in a mixed-methods approach. First, a quantitative survey via an online questionnaire was conducted between December 2019 and July 2020, with around 1,380 fully completed questionnaires. Sampling was undertaken in two ways: first, we contacted all the alumni of three executive master's degrees in the field of higher education management (at Speyer, Osnabrück and Oldenburg Universities). For these, a response rate of 23 per cent was achieved (1,078 completed questionnaires), and the sample is largely representative of the population. Second, the link to the survey was sent out via relevant newsletters of professional associations and networks such as Netzwerk Wissenchaftsmanagement (Network for Science and Research Management), Zentrum für Wissenschaftsmanagement ZWM (Centre for Higher Education Management) and Hochschulforschungsnachwuchs HoFoNa (Network of Early Career Researchers in Higher Education Research), which produced another 302 completed questionnaires. As the numbers receiving the newsletters is unknown, no response rate can be calculated for this sub-sample. Evidence from this survey was, in a second step of data collection, the basis for more than a hundred qualitative interviews with higher education managers from public comprehensive universities, which included a broad spectrum of disciplines across teaching and research, as well as academic research institutes (such as Max-Planck, Fraunhofer, Helmholtz and Leibniz). Respondents included trainers and people from human resources departments hiring these managers, to gain a deeper understanding of the circumstances that inform the work of higher education managers who might be seen as working in third space. In the following, we focus mainly on 31 interviews with higher education managers from the largest German network – Netzwerk Wissenschaftsmanagement (Network for Science and Research Management) – sampled via an invitation to participate in this research. Additionally, we carried out a series of workshops in which we discussed our results and their interpretation with experts from the research community, as well as practitioners. The findings then informed a second quantitative survey in spring 2022, resulting in 1,236 valid cases. In the future, this will help to inform a panel design. However, as analyses are still ongoing, we restrict ourselves here to cross-sectional results. SPSS software was used for analysing the quantitative data, and MaxQDA for the qualitative data. Results of this project and additional information on the methodology can be found in two open-access books by Krempkow et al. (2023a, 2023b).

The second source of data is 24 qualitative interviews with higher education managers, conducted as part of a follow-up project more specifically focused on the role of trust in higher education

leadership and management (Lauer, 2024), in the context of a graduate programme on Management and Communication in Science and Research. This contributes directly to the literature on 'the ways in which professional staff work together with their academic colleagues on creating collaborative (as part of a larger social and intellectual) capital of their institutions', which 'have been researched to a lesser extent' (Veles, 2023: 5).

We combine the findings of the different data sources to paint a detailed picture of German higher education managers' activities as third space professionals. Additionally, we will also define our understanding of third space from a German perspective more specifically.

Third space and higher education managers in Germany

If you ask higher education managers in Germany to describe their daily work, the answers are likely to differ quite widely. An assistant to the president of a university would perhaps answer that they write minutes of the different board and committee meetings, write drafts for the president's opening words, prepare the president's meetings with the faculties and deans, and assist other members of the president's office in writing a strategic paper for the university. A quality manager at the same university would answer that they evaluate lectures, develop new surveys to measure academic success and organise meetings with faculty members to discuss how to improve the curriculum of a particular study programme. At first glance, it might appear that these two employees do not have much in common besides the fact that they work in the same organisation. But, in Germany, both these employees would be called higher education managers.

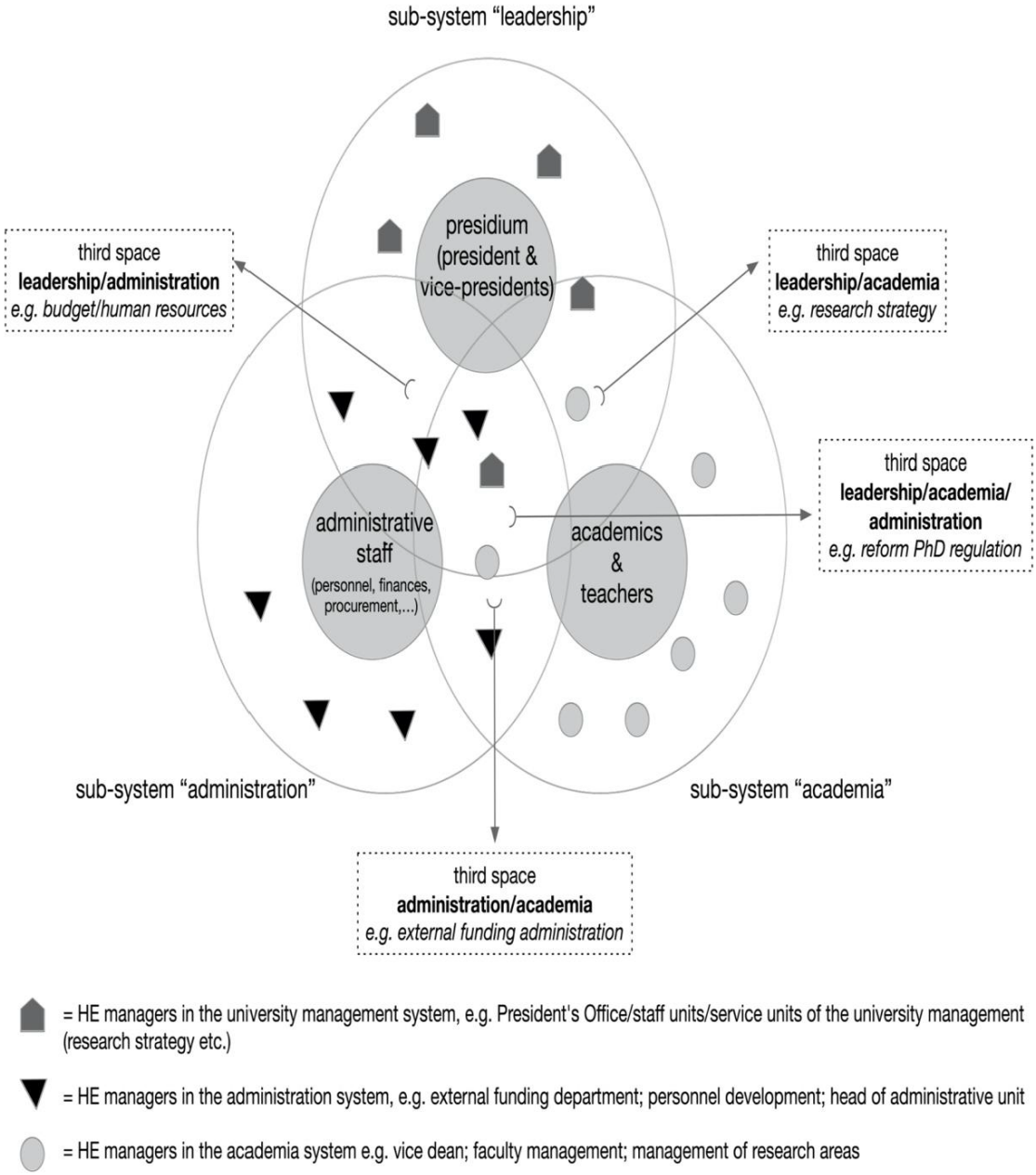
As we argued above, we assume that the university as a multiple hybrid organisation is characterised by different forms of third space, which can be understood as arenas for negotiations, as we will show later. Referring to the concept of the multiple hybrid university, up to four internal third spaces can be found, linking the following subsystems: leadership/administration; leadership/academia; academia/administration; and projects, where all spaces may be involved, leadership/academia/administration (see Figure 1). To clarify, academia in this context includes research and teaching. Research and teaching could have been observed separately as they follow different functional systems, as mentioned above (research refers to the academic – arts, science and social science – system, and teaching refers to education). However, at this point we decided against a separate analysis, which would have opened even more third spaces. On the one hand, the model would then have become unnecessarily complex (at least for the purpose of our analysis in this article) and, on the other, we understand both research and teaching as part of the 'organized anarchy' (Cohen et al., 1972: 1) of academia, which is the main difference from the other subsystems. Their common characteristic is to ensure and defend the freedom of research and teaching. Nevertheless, in a more detailed analysis, it could be fruitful to include this distinction, and to focus on the interaction of teaching with the other subsystems, including research (see, for example, Salden and Volk, 2023).

It is assumed that the subsystems have a core – such as the president and their vice-presidents for the leadership subsystems, academics and teachers for the academic subsystem and administrative employees for the administrative subsystem – but around these cores, different people (for examples, see Figure 1) are working in the intersections of the three subsystems (Lauer, 2023). This is where we see the main field of activity, and actually the basis of origin of the new higher education managers. For getting things done in this special environment, higher education managers have to know how to manoeuvre between, and to bridge, the different subsystems of the university, which all follow different logics (Lippmann, 2023; Thornton and Ocasio, 2008).

In our understanding, this third space between the subsystems does not represent existing structures or processes. Focusing more on a systems-theoretical approach, we conceive third space as occurring in arenas in which different higher education managers from the different subsystems come together to negotiate with other professional and academic staff. In this sense, 'third space' is understood as the environment of the respective subsystems (Luhmann, 1972). It is the space where the systems differentiate themselves from each other (Baraldi et al., 2021) by articulating their interests and identity to the other subsystems. This also means that higher education managers can be allocated to a subsystem as shown in Figure 1. In our understanding, they are boundary role persons for their subsystem (Lauer, 2023). According to Luhmann (1972), a boundary role person is a person within a system who is tasked with liaising with the outside world of this system (the environment of the

system). Although a boundary role person's main task can be seen in representing its own system's interests to the environment, they also act as 'antennas', as they warn their system about changes in the environment. Furthermore, they have the function of 'ensuring peace at the borders' by being responsible for 'balancing tensions' (Luhmann, 1972: 223). Following this approach, we understand third space as occurring in arenas in which different interests and values from the different subsystems are negotiated.

Figure 1. The three subsystems of the university and their third spaces (Source: based on Lauer, 2023: 144; see also: Schneider et al., 2022): 59



This means that higher education managers in their daily work operate in spaces of uncertainty characterised by contradictory requirements, goals and organisational structures. To survive, they need a similar set of skills and competences, as our results from qualitative interviews conducted as part of the KaWuM projects indicate (see Figure 2), and these are related to the ability to navigate through the different subsystems.

Figure 2. Which competences are of particular importance in your area? – Word cloud based on 31 interviews with members of a higher education professional network (Netzwerk Wissenschaftsmanagement [Network for Science and Research Managers]) (Source: Rathke et al., 2023a)

The quantitative surveys showed that higher education managers' required competences indicated a problem-solving orientation (see Table 1). The most frequently cited competences could be interpreted as related to communicative tasks and cross-boundary work, and they are most characteristic of third-space activity as understood in the literature. We suggest that higher education managers need these competences to cope in the multiple hybrid organisation. It is interesting that only a few higher education managers mention that their own professional expertise, such as in the legal or financial fields, is required, indicating that more general attributes are valued more.

Coping in the multiple hybrid organisation

To further strengthen the above hypothesis, qualitative research results from another project on trust and higher education management (Lauer, 2024) are presented in this section. Interviews with 24 higher education managers (for example, faculty managers, research funding assistants, assistants to the president and managers of large research projects) were conducted between December 2020 and April 2021 using video conferencing software. These managers were chosen from the three different subsystems: academia, leadership and administration. The interview method used was the critical incident technique (Dunn and Hamilton, 1986; Flanagan, 1954; Flick, 2002). The interviewees were asked to describe a successful project in which they had worked with different subsystems of the university.

At first, the higher education managers interviewed appeared to be well aware of the challenges of the multiple hybrid organisation. They knew about the role of their subsystem and, at the same time, they tried to understand other subsystems. For example, a higher education manager from the presidential office (assistant to the vice-president) states:

> Good cooperation must be based on mutual appreciation and acceptance of each other's perspectives and agendas. A presidium wants a certain thing. A faculty also wants a certain thing. ... Even if I'm just an assistant, if I only agree on one perspective with blinkers on and don't allow anything else, then I'm not a good discussion partner for my counterpart in the faculty.

However, trying to understand the other side does not prevent conflicts when the presidium and academia work together. A higher education manager in the President´s Office describes the clash between the need to lead the university strategically and the autonomy of academia:

> The biggest challenge is the difficulty that probably every presidium has to deal with, that it's hard to force people to do things that they don't want to do … Thus, the great autonomy of the faculties, on the one hand, and the dependence of a presidium on good performance in the faculty, on the other, and somehow also the feeling you have to work well together. All people have different levers and, in the end, you have to come together somehow.

Differences and conflicts are most evident when working with the legal administration. A manager of a graduate school explains:

> The biggest challenge from my point of view is that the academic wishes of the professors and academics have to be reconciled with legal requirements [from the administration].

A higher education manager from the academic subsystem, a student dean, goes so far as to state that 'the willingness to work with academia in a helpful manner is not always given' within the administration, although she tries to build a personal relationship. The administration is then perceived as an obstacle in a project. It is characterised as inflexible and even 'detached from university', as a higher education manager from a research support service stated. Another central manager of a research project thinks that there are sometimes moments when 'the administration is more rigid than it needs to be', and that a procedure could be approved more often without them having to give multiple explanations of why the process is important to the university and the research project.

Table 1. Required skills and competences of higher education managers (Source: based on the Scientific Use File of the KaWuM project)

Required skills and competences	Mean 1–2 = to a (very) high degree	Percentage
Work independently	1.31	95.4
Recognise connections	1.33	94.8
Plan and organise	1.35	93.8
Express myself adequately in writing	1.39	93.9
Assess the relevance of information	1.40	94
Search for information from different sources	1.48	90.8
Express myself adequately orally	1.50	90.2
Develop problem-solving strategies	1.60	87.1
Adapt myself flexibly to new situations	1.67	84.2
Develop new ideas	1.80	79.8
Work together in a team	1.81	79.6
Make decisions	1.84	77.4
Interdisciplinary cooperation	1.91	75.9
Give constructive feedback	2.31	60.4
Deal with received criticism	2.47	50.9
Communicate in English	2.53	51.6
Reflect myself	2.55	49.2
Apply theoretical knowledge practically	2.68	44.8
Act interculturally	2.78	43.7
Expertise in my own field	2.98	39.9

Notes: *N* = 1,409–1,427; Scale: 1 = *to a very high degree*, to 5 = *not at all*

There may also be clashes among administrative departments. A higher education manager from the research support service of the university, whose unit is more closely connected with the presidium, states:

> Challenges in the [university] are always with other departments and divisions. We are an administration, but the approach to such things [the administration of research projects] is different in the budget department or finance department compared to the HR department. So, in [our unit], at least that's my understanding, we are a bit more service-oriented. … That may not necessarily be the case in other departments.

Some statements give the impression that the administration speaks a different language, and that there is the need to explain academic requests in a different manner so that they can be understood by other administrative staff. Interestingly, this also applies the other way around. A department manager who works for the administrative subsystem complained that academics 'needed more than three years to understand what a chain of command is'. In the end, higher education managers deal with this 'degree of uncertainty', as a research project coordinator put it, in their projects when working with other subsystems, and they need a 'tolerance for ambiguity'.

But how do higher education managers deal with these uncertainties? As boundary persons, they leave their own subsystem and seek contact with members or boundary persons of the other subsystems to solve problems. By doing this, they try to translate, negotiate and mediate between the subsystems in third space. At the same time, they remain aware of where they come from, and they represent their subsystem with its values and ideas to the outside (Lauer, 2023). A higher education manager who works as a faculty manager in the academic subsystem describes this perfectly when she explains:

> So, for a lot of things, we've actually ended up with me being the bridge … into the administration, because it works quite well through me. I know to whom or how I can speak to the people over there, how I can talk to them, and ... I can play a bit of an interpreter between the different languages, as I always like to call it.

Similar descriptions can be found in other interviews, where higher education managers describe themselves as boundary persons or at an intersection, by seeing themselves 'neither [as] an administrator nor a researcher', as an assistant to the vice-president points out.

To act successfully in third space, personal contact and communication is important, as a higher education manager from a research support service unit said after being asked why they think that their project was successful: 'Trust. Communication, number one, very, very, very, very high up. Communication is the most, most, most important thing in a good collaboration.' Communication with the people involved is seen as a key point for successful projects. That is why higher education managers search for direct contact with other people, as another higher education manager from a research support unit describes:

> And that's why I always seek personal contact with the people in question. As a rule, it's a trivial coffee meeting. … I used to actually bring something, some kind of confectionary, but that was a bit naive of me. I don't do that anymore. But it was a very social, interpersonal gesture.

The interesting point is that when higher education managers were asked why their project was a success, none of them responded with specific professional qualifications. Nobody said, for example, that it was because of their legal, statistical or business qualifications. Most of them answered that it was communication, personal contact and/or the involvement with people from the other departments. As a research project coordinator puts it:

> Universities continue to be corporations at their core, which ... can only be understood well, at least in an academic management context, … as both an institution and an association of persons at the same time. And the part about the association of persons means, whenever possible, ... that building personal relationships of trust is crucial to the work.

Overall, these examples show that higher education managers at German universities distinguish themselves by their negotiating and mediating skills, and by doing so function as interpreters between the different subsystems. By doing this, they bring together the different groups, values and ideas that exist in the university. This seems to be what all higher education managers have in common.

Implications of the findings

As a result of developments since the start of the twenty-first century, the different logics of the university (leadership, administration, academia) have increasingly clashed. We claim that the new functions or roles that are called higher education management in Germany, emerge using third space to translate and mediate the different logics within HEIs, and between HEIs and their environment, for example, in processes associated with knowledge exchange. Our findings show that higher education managers

mediate between the different groups of actors and their respective logics in the multiple hybrid organisation. Based on this, to better understand current developments in this field, we claim that:

1. It makes sense to look at activities of higher education managers in third space, understood as 'boundary crossing' and 'collaborative spaces' (Veles, 2023: 15), rather than at their roles or positions.
2. Certain skills and competences are especially important for effective higher education management, independent of specific roles, even potentially more important than some professional qualifications. Thus, it is helpful if a research project coordinator knows about project management and budget planning, or even has some legal knowledge. But, in the end, they can learn this on the job. More important will be if they are able to negotiate between the different interests of the university (leadership, administration, academia) and find solutions, thanks to their ability to mediate.

Finally, as a conclusion of the first two points, it is assumed that skills and competences distinguish higher education managers (at least in some cases) from other members of the university. A professor first needs excellent academic qualifications to be a good academic. A *Kanzler* (legal adviser in the German university system) should have expert knowledge of law and public funding. The head of the finance division must have expertise in accounting. Although communicative skills, mediation, conflict resolution and so on might also be important for this group, they come second. It seems that it is the other way around for higher education managers, and that communicative skills come first, and special professional qualifications come second (see Table 1) because they are working more often in third space outside their own subsystem. Obviously, this does not mean that professional qualifications are not important at all. In a workshop of the KaWuM project where we discussed the communicative skills shown in Table 1, some participants highlighted the necessity of additional specific skills dependent on the particular job. Thus, a quality manager needs knowledge in quantitative research to conduct statistical surveys, and a research support officer needs at least an overview of the functioning of third-party funding. But while doing the job and working in third space, communicative skills will become more and more important.

These conclusions lead to some further considerations. First, it may be helpful for higher education research to focus more on approaches to work when studying higher education management. The focus would then no longer be on the question of *who* higher education managers are, but on how they interpret their roles. This could also lead to new insights regarding their function within the university (Lauer, 2023). And it could enlarge the circle of people who can be seen as part of higher education management. Above all, the outcomes of the projects have implications for the management of universities. If they are looking for higher education managers, for example, they should pay attention (as early as in the job description) not only to qualifications, but also to communicative skills and competences. These are likely to be critical to success in the job, even more than in other organisations, as the university as a multiple hybrid organisation has multiple constituencies and, as a result, greater potential for friction and conflict. In the example above, a quality manager can be a gifted evaluator who knows how to design, conduct and statistically evaluate surveys. However, this alone will not help if they do not have the skills to anticipate conflicts in advance, to negotiate between different groups, and to analyse situations. The best-designed study programme evaluation is of no use if it cannot be carried out because the faculties are opposed to it because they were not involved in advance. The assistant to the president can be an outstanding manager, knowing all the strategic tools for leading an organisation from Gantt charts to balanced score cards. But all these – admittedly important – qualifications will not help if that person is not able to negotiate parts of the strategy upfront with the different parts of the university. They need to make deals in the name of the leadership of the university, and to mediate with all the subsystems. Only this will ensure that the strategy will be followed and, most importantly, implemented.

From the research, the future training of higher education managers should ensure that they are taught key skills and competences such as negotiation and mediation. In the context of the KaWuM project, we therefore developed a competency model (Rathke et al., 2023b). These skills include not only understanding the university as a unique organisation, but also knowing how to operate within it. Communication skills, the ability to negotiate and to mediate conflict are therefore important parts of the model.

Conclusion

Current trends in Germany are somewhat ambiguous with regard to the findings of this article, as they focus more on officially assigned roles and positions than on the activities of higher education managers. Those individuals whose primary role is to safeguard legal and regulatory requirements (specialist areas such as finance, human resources and estates) might be seen as being valued primarily for their knowledge and associated qualifications, at least on appointment. Such individuals have been seen traditionally as part of the 'Administration'. Those individuals who have emerged as 'higher education managers' to deal with the strategic requirements of the contemporary university are increasingly valued not only for their knowledge, acquired either in higher education or elsewhere, but also for their communicative skills and competences. In particular this involves interpreting and translating formal requirements that relate to research and teaching, and negotiating with academic colleagues and administration staff on their application. Their contribution to the university, therefore, is likely to be a mix of knowledge, skills and competences, in particular, their role as interpreters, using mediation and negotiation skills. In this way, they negotiate between the different legitimate interests from the different subsystems within the university, such as the presidium, academia and the administration. Thus, those higher education managers who develop appropriate implementation strategies with all these subsystems, in fields such as research support and learning development, could be said to be creating and working in third space environments. In this sense, higher education managers who operate in what might be seen as a virtual, and increasingly diplomatic, third space between academic activity, legal and financial requirements, and presidential leadership, have become critical to the existence of the university in contemporary environments.

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Declarations and conflicts of interest

Research ethics statement

The authors declare that they have followed appropriate personal data protection regulations (EU General Data Protection Regulation) in the handling of personal data.

Consent for publication statement

The authors declare that research participants' informed consent to publication of findings – including any personal or identifiable information – was secured prior to publication.

Conflicts of interest statement

The authors declare no conflicts of interest with this work. All efforts to sufficiently anonymise the authors during peer review of this article have been made. The authors declare no further conflicts with this article.

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