Beyond System-bound Terminology: Multi-level Variation in German University Terminology and its Consequences for Terminology Work

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Abstract

University terminology in German exhibits a high degree of variation that cannot be fully explained by system-bound legal and administrative differences alone. This paper investigates variation in university terminology across four standard varieties of German (Germany, Austria, Switzerland and South Tyrol) within the framework of the European Higher Education Area. Building on a multi-level analysis of university terminology (supranational, national, regional, institutional and functional-discursive), the study shows how shared European concepts coexist with nationally and regionally specific ones, institution-bound terms and communicative purposes. These system-related factors are complemented by an analysis of general causes of denominative variation as proposed by Freixa (2006), including dialectal, functional, discursive, interlinguistic and cognitive causes. The paper argues that variation in university terminology often results from the interaction of several levels and causes. On this basis, implications for terminology work are discussed. Concept-oriented terminology databases containing information about the relevant system and level of use (ideally complemented by visualised concept systems) are essential for capturing variation in university terminology and for documentation and cross-system comparison as well as translation in pluricentric (as well as multilingual) settings.

Keywords

terminological variation, higher education terminology, German language varieties, pluricentric language, communicative purpose

1. Introduction

University terminology is a multi-layered field, which is situated at the intersection of legal, administrative, educational and institutional terminology and is shaped by multiple, partially overlapping systems. In Europe, German university terminology is embedded in a pluricentric language context and is influenced by supranational coordination frameworks, national higher education legislation, regional governance structures, institutional autonomy and functionally differentiated discourse practices. As a result, terminological variation emerges not only between countries and institutions, but also within individual universities and across text types and communicative contexts. Against this background, this paper explores the levels and causes of variation in university terminology in German and discusses the implications of this complexity for terminology work and terminology database design.

1.1. System-bound terminology

System-bound terminology or system-specificity [1] refers to the fact that concepts (most prominently legal concepts) are intrinsically bound to the institutional, normative and historical framework of a particular system and cannot be transferred unchanged to another system. In law, concepts are created within independent national legal systems, shaped by distinct legislative traditions, interpretative practices and socio-political choices [2], which means that 1:1 equivalence across systems does not exist. This system-bound nature is further reinforced by the transdisciplinary character of law (as it can be applied to any field of human activity), its dual orientation towards expert and lay audiences and

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the fragmentation of legal discourse into national systems. As a consequence, terms do not exist 'in a language' but in a specific legal system, while the same language may serve multiple legal systems or, conversely, one system may be multilingual. For terminologists and specialised translators, this entails the necessity of a strictly concept-oriented, system-aware approach: concepts must be analysed, described and documented with explicit reference to the system they belong to. This requires profound domain knowledge of both source and target systems and underlines the importance of comparative terminology work that makes system boundaries explicit, thereby avoiding false equivalence and ensuring accurate communication across legal and institutional contexts [1]. Similarly, culture-bound terminology [3] means that terminology creation is inseparable from processes of understanding and is inherently dynamic, evolving over time alongside institutional and societal developments. While some concepts can be readily transferred across language cultures, others are strongly culture-bound, reflecting specific ways of organising knowledge and conceptualising reality. This poses particular challenges for knowledge representation in terminology databases.

While law and legal systems are commonly regarded as the paradigmatic case of system-bound terminology, a number of other specialised domains are similarly characterised by pronounced system specificity, including higher education [4] and the related university systems.

1.2. University terminology

Despite harmonisation efforts such as the Bologna Process and the establishment of the European Higher Education Area [5], higher education systems remain embedded in national frameworks [6] shaped by distinct political, educational and societal traditions. As a consequence, the terminology associated with these systems encapsulates historically evolved structures, norms and practices. System-bound terms therefore carry with them the (institutional) memory of the systems in which they emerged.

While the terms h*igher education terminology* and *university terminology* are often used interchangeably, they refer to related but distinct concepts. Higher education terminology encompasses the concepts associated with post-secondary education, including universities and other tertiary education providers. It covers degree structures, accreditation systems as well as teaching and learning methods, among others. In contrast, university terminology is focused on concepts specific to universities as institutional entities [6]. This includes organisational structures, academic positions, university governance, internal regulations and institution-specific procedures. This means that universities in the same country usually share higher education terminology, but they might share university terminology only to a certain (limited) extent.

University terminology thus encompasses all terminology used at universities from a broad and heterogeneous range of subdomains, including human resources, finance, information technology, communication, research management, study administration, teaching, quality assurance, facility management and library services, among others, which can be subsumed under 'administrative university terminology' [6]. In addition, there is also terminology specific to academic disciplines, such as biology, psychology or linguistics [6]. As such, university terminology extends beyond the scope of higher education terminology in the narrow sense and is situated at the intersection of (supra-)nationally regulated higher education terminology and institution-specific terminological practices developed at the level of individual universities [6]. This demonstrates the complexity of terminology work in the field of university terminology.

As university terminology is a blend between legal and administrative terminology, it is (also) characterised by system-boundness, context-dependency and (in some cases) also proximity to general language [7]. From an intra-lingual comparative view, Wissik [7] analysed the legal and administrative language used in higher education in three standard varieties of German, including Germany, Austria and Switzerland.

1.3. German as a pluricentric language

German is an official language spoken by approximately 87.5 million speakers (as first language) and 8.5 million speakers (as second language) [8] in a contiguous language area in Central Europe encompassing Germany, Austria, Switzerland, Liechtenstein, Luxembourg, eastern Belgium and South Tyrol in Italy [9]. In these regions, standard varieties differ in lexicon, pronunciation, orthography and occasionally grammar, as evidenced by official dictionaries (such as the *Duden* in Germany, the *Österreichisches Wörterbuch* in Austria, and Swiss school dictionaries) [10]. Compared to Germany, Austria and Switzerland, South Tyrol is not considered a full centre of German language codification, as no authoritative dictionary codifies a South Tyrolean standard variety [11]. While German functions as a fully developed official language in several countries, its situation in South Tyrol is distinct: there, German has minority status within Italy, despite being an official language locally and a majority language elsewhere [2]. Yet the variety displays distinctive features, largely shaped by contact with Italian [2]. This is particularly salient in the legal domain, where the system-bound nature of legal language necessitates the development of original German terminology to express concepts of the Italian legal system. Consequently, terminology planning in South Tyrol focuses especially on legal and administrative domains and relies on micro-comparison with other German-speaking legal systems, reflecting both the minority position of German within Italy and the strong connections to larger German-speaking communities [2].

While terminology work usually focuses on system-bound concepts, the relationship between terminology in certain domains and general language also warrants closer consideration. From a linguistic point of view, standard German is a pluricentric language [12], i.e. a language with multiple interacting centres, each of which maintains its own codified norms and standard conventions. Pluricentricity positions German alongside other pluricentric languages such as English and Spanish, emphasising that although German remains structurally a single language, it cannot be adequately described from the perspective of a single, unified centre due to its multiple nationally established norms [12], the main centres being Germany, Austria and Switzerland.

The pluriareal model [13] departs from the pluricentric-plurinational view by allowing multiple standard varieties within a single nation, recognising that standard varieties need not be nationally homogeneous, and acknowledging that in contiguous language areas standard varieties may extend across national borders rather than being confined to individual states [9]. The concept of pluriareality [9] thus complements pluricentric models by emphasising the usage-based variation that exists not only across national borders but within geographically contiguous regions where different standard norms interact. In this view, German's variation cannot be captured solely through a plurinational lens; rather, the everyday linguistic reality reflects a spectrum of usage patterns shaped by contact, regional norms and individual linguistic repertoires [9].

2. Scope of this study

The present study focuses on German as used in Germany, Austria, Switzerland and South Tyrol, four contexts in which university terminology is embedded in distinct legal systems. German as used in Germany represents the largest variety in terms of number of speakers, while 'Austrian German' constitutes the second-largest German variety in the European Union and is recognised as such even at the political level, as evidenced by the inclusion of Austrian (culinary) terminology in Austria's EU Accession Treaty [14]. South Tyrol occupies a particularly complex position as a German-speaking minority context within the Italian legal system, where university terminology in German must be developed to express concepts originating in Italian higher education law [2]. Despite the Bologna Process, aimed at the harmonisation at a European level, there are several inconsistencies in higher education terminology, including a high-number of culture-specific concepts, nationally coined terminology and intralingual incongruency between terms (e.g. used in Austria and South Tyrol) [4]. Given this multi-level variation in the German language, this study examines how terminological variation in university texts arises from the interaction of multiple higher education systems, institutional

practices and communicative factors. The analysis is limited to four standard varieties of German (Germany, Austria, Switzerland and South Tyrol) and does not encompass other German standard varieties (e.g. Liechtenstein, Luxembourg or Belgium), nor does it address variation in German dialects. Focusing on public universities, the central research question asks which levels of system-bound terminology must be considered to adequately explain variation in university terminology, and what implications this has for terminology work and terminology database design. While empirically grounded in these four varieties, the proposed analytical framework is intended to be transferable to other German standard varieties and comparable pluricentric contexts. This study does not aim to provide an exhaustive or conclusive account of university terminology in German, but rather to offer a structured overview of the challenges encountered in terminology work within a formally monolingual yet systemically heterogeneous context.

The corpus used for this study is the UniTermGPT corpus compiled for the project 'University terminology in German in the age of ChatGPT' and consisting of texts from different universities in Germany, Austria, Switzerland and South Tyrol as well as terminology resources from universities and other sources. The corpus comprises texts from different (administrative) university domains, including statutes, guidelines, policies, strategic documents and legally binding documents. The examples in this study are taken from this corpus, as well as from legal documents that address the organisation of universities and documents of university associations in these German-speaking areas.

3. Levels influencing system-bound university terminology

System-boudness characterises university terminology in German-speaking European countries, where terminological practices are shaped by the interaction of (supra-)national regulations and institution-specific usage [6]. University terminology is influenced by multiple, overlapping system levels (Fig. 1), ranging from an international view to the functional level of terminology, which will be explained in the following by focussing on public universities (excluding private universities and universities of applied sciences). The implications for terminology work are discussed afterwards.

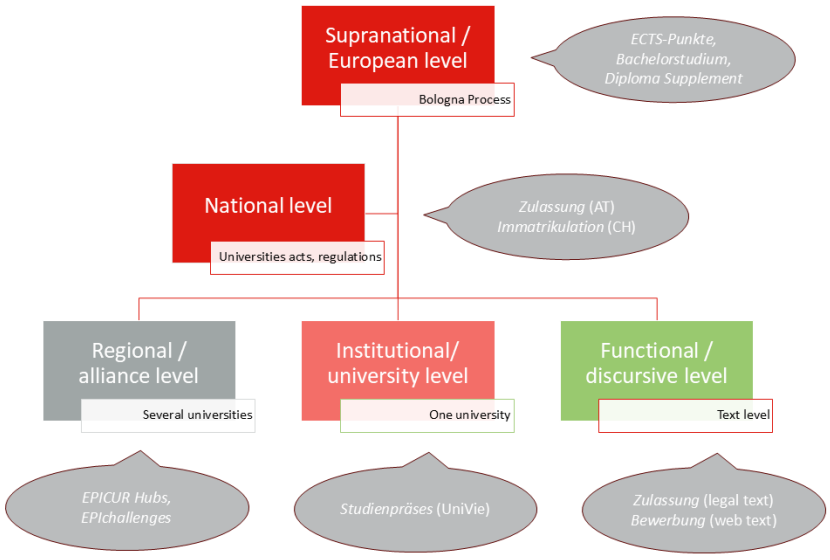

Figure 1: Levels influencing system-bound terminology in the university domain.

3.1. Level 1: Supranational / European level

The overarching level comprises the international, supranational and European context. The European Higher Education Area [5] constitutes the overarching framework shaping contemporary higher educa-

tion systems in the European Union (and beyond) through processes of (partial) harmonisation initiated by the Bologna Process. Although Switzerland is not a member of the European Union, it nonetheless participates in and aligns itself with the Bologna Process, illustrating that EHEA-driven convergence in higher education extends beyond EU membership [4]. At this level, university terminology is strongly shaped by European coordination frameworks, which introduce shared concepts (also often designated by shared terms) including *bachelor*, *master* and the acronym ECTS (*European Credit Transfer and Accumulation System)* as well as *Diploma Supplement*.

3.2. Level 2: National level

At the national level, university terminology is primarily shaped by higher education legislation and regulatory frameworks, such as university acts, which may define the purpose, institutional structures, (academic) roles and functions and administrative procedures at universities. These legal instruments codify key terms, thereby (often) creating nationally binding university terminology. In system-bound domains such as higher education, legal definitions often function as de facto 'terminology' authorities, stabilising usage within a given national context while simultaneously limiting cross-border equivalence. Thus, 'national' university terminology interacts closely with the pluricentric nature of German. In contrast to Germany and Austria, neither Switzerland nor South Tyrol can be characterised as monolingual settings in which German functions as the sole official language (apart from recognised minority languages). In South Tyrol, as an autonomous province, German and Italian are official languages throughout the province, with Ladin as an additional official language in certain areas [15]. Switzerland, by comparison, is characterised by a territorially organised multilingualism, with German, French, Italian and Romansh coexisting as national languages within clearly demarcated language areas, in which one of these languages is dominant [16], whereas in higher education German and French prevail [17].

In the following examples, some general observations are presented. However, this does not imply that they apply to every university, as exceptions may occur. Examples of national university terminology in the field of studies include *Wintersemester* and *Sommersemester* (winter and summer semester) in Germany and Austria, whereas *Herbstsemester* and *Frühjahrssemester* (autumn and spring semester) are used in Switzerland. While the term *Immatrikulation* is used in Switzerland to refer to admission to university, it is considered obsolete in Austria, where *Zulassung* is preferred.

Differences are also found beyond the field of studies, for example in human resources. While the Free University of Bozen-Bolzano in South Tyrol uses the term *akademisches Personal* (academic staff), *wissenschaftliches (Universitäts-)Personal* is more common in Germany and Austria.

In addition to general terminology, differences in administrative systems across countries are reflected in the terminology used for university governance structures. Management bodies may have different competences, which is mirrored in distinct terms. Conversely, identical terms may refer to partially or substantially different concepts.

Furthermore, variation may arise from parallel systems within a national context. In Germany, for example, due to changes in the legal framework, the head of a university may be designated either as *Rektor*in* (rector) or *Präsident*in* (president), with differing legal provisions applying to each role. Although these systems coexist at the national level and may be adopted by individual universities, they remain part of the national framework. Another example concerns the designation of the deputy to the *Rektor*in*: *Vizerektor*in* in Austria and *Prorektor*in* in Germany and Switzerland. Here again, similar terminology does not necessarily imply identical responsibilities.

3.3. Level 3: Regional / alliance level

At the regional or alliance level, university terminology is further shaped by subnational governance structures and cooperative frameworks that mediate between national regulations, (collaboration frameworks) and individual institutional practices. In federal or decentralised systems, such as the *Bundesländer* in Germany or the cantons in Switzerland, higher education competences are partly

exercised at the regional level, resulting in additional layers of regulation, procedures and administrative bodies with their own 'terminological repertoires'. Beyond territorially defined regions, this level also encompasses inter-university alliances (also on an international level) or cross-border networks, which may introduce hybrid terminologies combining elements from multiple systems. As a result, this level is characterised by partial terminological standardisation, the coexistence of competing designations and overlapping system-bound concepts.

For example, in Switzerland, responsibility for higher education is shared between the Confederation and the cantons, with the cantons exercising primary authority over universities and the federal level ensuring coordination, legal frameworks, quality assurance and international alignment [18].

University alliances, on the other hand, can be found at the national level, e.g. the *Hochschulrektorenkonferenz* in Germany (German Rectors' Conference), uniko (*Österreichische Universitätenkonferenz*, Universities Austria) in Austria as well as swissuniversities (*Konferenz der Rektorinnen und Rektoren der schweizerischen Hochschulen*) (Rectors' Conference of the Swiss Universities) in Switzerland. These alliances have their own organisational bodies and therefore, their own terminology.

University alliances can also be found at the regional or interregional level. For example, the universities of Bolzano, Innsbruck and Trient form the Euregio universities. This network also coins its own terms, including terms for their 'products' such as the *Euregio Science Funds* or the *Euregio Mobility Funds*.

Even larger alliances can be found at the European level, e.g. EPICUR or Circle.U. EPICUR, the European University Alliance, fosters the collaboration among nine European higher education institutions, while Circle.U is a similar transnational alliance of nine universities aimed at fostering cooperation in European higher education. Both alliances focus on facilitating cross-border collaboration among university members, especially students and researchers through initiatives such as joint courses, mobility schemes and collaborative formats. Each of these alliances creates their own services and coins their own terminology. For example, EPICUR offers a virtual campus called *EPICURus* and *EPIChallenges* for research.

3.4. Level 4: Institutional / university level

At the institutional level, university terminology is shaped by university-specific concepts (or terms) in which individual institutions develop a distinct corporate language to position themselves and differentiate from other universities. Due to their autonomy, universities sometimes coin internal terminology, such as in statutes or administrative communication [6], resulting in institution-bound terminology (or corporate terminology) that may diverge from terms on all the other levels. This leads to significant terminological variation both between universities (where different terms may coexist for comparable roles, bodies or procedures) and within universities [6]. An example of this is the term *Studienpräses* at the University of Vienna, which denotes the supreme monocratic body in the field of studies at that institution and is not used at any other German-speaking university. Although the term *Meldung der Fortsetzung des Studiums* (re-enrolment) is codified in the Austrian Universities Act, it is not consistently used across Austrian universities; instead, the term *Rückmeldung*, similar to usage in Germany, is also frequently employed.

At this level, proper names (named entities, individual concepts) are likewise coined, including designations for organisational units (e.g. faculties, departments, service units), professorships, degree programmes, continuing education programmes, university awards and products and services (such as e-learning platforms, course registration systems, university accounts, research management systems and institutional repositories). Examples from the University of Vienna include: *Philologisch-Kulturwissenschaftliche Fakultät* (Faculty of Philological and Cultural Studies), *Bachelorstudium Publizistik- und Kommunikationswissenschaft* (bachelor's programme in Mass Media and Communication Science) or *Forschungsverbund Umwelt und Klima* (Environment and Climate Research Hub) as well as *u:account* (user account), *u:cris* (research information system), *PHAIDRA* (institutional repository), *u:space* (studies and teaching portal), *u:find* (course catalogue) and *u:search* (library catalogue).

Also, between organisational units of a university, terminology might differ (even if it refers to the same specialised language). For example, at the University of Zurich, the German term *Gesuch* is usually 'translated' as *request*. However, one organisational unit uses *petition* (instead of *request*). Other types of intra-university variation can be explained by the level explained in the following section.

3.5. Level 5: Functional–discursive level

Across all institutional levels, university terminology is additionally shaped by a functional-discursive dimension that reflects communicative purpose, text type and target audience rather than the system boundaries mentioned above. University discourse can be differentiated into several functions, including legal-normative, educational or promotional, each of which imposes distinct constraints on the choice of terms. This level (and the aspect mentioned in the following) explains why terminological variation persists even within a single university and why the same system-bound concept may be realised differently in a university policy, a study regulation or a student-facing website. Ignoring the functional-discursive level risks attributing variation solely to system differences, leading to misleading frequency-based term extraction and the conflation of variation with text-type-specific terms in terminology databases. To account for terminological variation, Freixa [19] proposed a typology of causes of denominative variation in terminology. While this typology overlaps with some of the levels discussed above (most notably "dialectal causes", which capture geographical variation and are therefore relevant to German as a pluricentric language and to system-bound terminology), it also extends beyond legal and administrative contexts, which underpin the levels outlined above, by explaining variation arising from broader linguistic and communicative factors. The five causes according to Freixa [19] supplemented by examples from university terminology are:

3.5.1. Dialectal causes

Dialectal causes of terminological variation arise from differences linked to the origin of authors and communities, encompassing geographical, chronological and social variation [19]. Geographical variation reflects regional or national usage differences, which are particularly relevant in pluricentric languages (as shown before), while chronological variation results from diachronic change, often characterised by periods in which older and newer terms coexist as knowledge and concepts evolve [19]. This is also evident in university terminology, particularly in transitional phases such as the implementation of the Bologna Process, where legacy and reformed study structures existed in parallel for a certain period of time [6]. In Austria, this coexistence has led to paired terminological distinctions (e.g. *Studienplan* vs. *Curriculum*) (curriculum) and to the continued use of terms such as *Diplomstudium* (diploma programme) [6], for degree programmes that are not subject to the three-study-cycle framework. At the University of Zurich, the term *Lizenziat* denotes the academic degree prior to the introduction of the Bologna Process (as the "Licenciate program has been replaced by the Bachelor's and Master's degree programs"[1]). Social variation, finally, reflects differences between professional groups, institutional settings or schools of thought, where terminology is shaped by specific social practices, histories and conditions of production [19], as emphasised in socioterminology [20, 21]. Variation in university terminology arising from social factors can be observed, for example, in the differing terminological preferences of organisational units (such as human resources and finances) and the associated professional groups.

3.5.2. Functional causes

Functional causes are related to the adaptation of terminology to the communicative situation and intended audience. Terminological choices vary according to factors such as the level of specialisation, communicative purpose, degree of formality and channel of communication [22, 19]. Specialised language tends to favour precision, whereas less specialised language allows for more paraphrasing, synonymy and explanatory variation. This functional adaptation reflects pragmatic principles, as

[1]Universität Zürich (2026). https://www.uniterm.uzh.ch/lists.php?termnr=790

authors tailor their terminology to the presumed knowledge and needs of recipients [19]. In the case of university terminology, text types and target audience are certainly the most important functional causes for terminological variation. For example, in curricula, which are legally binding documents specifying degree programmes (containing information about entry requirements, objectives, qualification profiles, academic degrees and modules, for example), the term *Zulassung zum Bachelorstudium* (admission to a bachelor's programme) may be used, whereas on university websites, primarily addressing prospective students unfamiliar with institutional terminology, expressions such as *sich für ein Bachelorstudium bewerben* (applying for a bachelor's programme) may be preferred. However, terms vary not only across text types but also across subdomains (e.g. in the field of law, family law vs. criminal law) [23], which is why in university terminology, we can also find differences between human resource administration and student administration.

3.5.3. Discursive causes

Discursive causes stem from stylistic and rhetorical considerations within texts [19]. Specialists may deliberately vary denominations to avoid repetition, enhance lexical cohesion, achieve linguistic economy or introduce emphasis, creativity and expressiveness. While such variation can enrich discourse and improve understandability, it may also introduce ambiguity or reduce precision. Discursive variation thus reflects the tension between communicative effectiveness (and expressiveness) and terminological precision in specialised texts [19].

3.5.4. Interlinguistic causes

Interlinguistic causes of variation result from language contact, often driven by geographical (and cultural) proximity, prestige or international communication needs. In many domains, loanwords coexist with local terms, particularly when the borrowed term is more stable or internationally recognised than its domestic equivalent. Such variation frequently occurs when concepts originate in another language, leading specialists to prefer foreign terms (loanwords) [19].

In university terminology, Anglicisms are widespread, in part as a consequence of the Bologna Process, which was initiated and largely articulated in English. Anglicisms play a limited but functionally significant role in German university texts. A comparison between German, Austrian and Swiss legal texts [24] revealed notable national differences in university legislation influenced by the Bologna Process: the highest relative presence of Anglicisms is found in Austrian university law texts, while German university law shows the lowest proportion [24]. These are mostly directly linked to Bologna-related concepts, such as *bachelor*, *master* and *Diploma Supplement*, which were introduced as part of European higher education reform. This suggests that the use of English-derived terminology is not the result of general language contact but is driven by the importation of new system concepts. Overall, Anglicisms in German university texts function primarily as carriers of newly institutionalised concepts (rather than as indicators of widespread lexical Anglicisation).

However, beyond legal and regulatory texts, numerous degree programmes in these countries are being offered entirely in English, including in Germany [25]. In other cases, English terms are also used in German texts without designating the same concept as the 'original' English term, which may lead to misunderstandings in a lingua franca [6]. Examples are the terms *senior scientist* and *senior lecturer*, which are used in German-speaking university contexts but do not fully correspond to the characteristics of their original concepts.

Furthermore, universities in German-speaking Europe increasingly pursue internationalisation strategies aimed at attracting international students and researchers. These strategies often shape the language used, with English frequently functioning as the primary (or even exclusive) language of international communication. Awareness of such differences is therefore essential for translation and terminology work, as internationalisation in many universities, particularly in Germany and Austria, is often narrowly equated with the provision of English-language information and degree programmes, while other languages tend to be marginalised or excluded.

3.5.5. Cognitive causes

Cognitive causes are rooted in differences in conceptualisation, perception and categorisation of reality [19]. Terminological variation may arise from imprecise or evolving concepts, differing theoretical perspectives or ideological positioning among authors or schools of thought. Ultimately, cognitive variation reflects the non-uniform nature of knowledge construction and the diversity of mental representations underlying terminological choices [19]. In the field of university terminology, gender-inclusive (or gender-neutral) terms in German may be attributed to this cause, such as *Lehrperson* (instead of *Lehrer/Lehrerin*), *Studierende* (instead of *Student/Studentin*) or *Professor*in* (instead of *Professor/Professorin*). In these cases, the variation reflects differences in conceptualisation and categorisation, as the terminology is adapted to encompass a broader understanding of gender (beyond male and female only).

Two causes for terminological variation that are not covered by Freixa's [19] typology are terminology contact and unreflected (mindless) use of terminology, which will be added in the following.

3.5.6. Terminology contact

In addition to formally defined system levels, terminology contact phenomena within the same language (which may be also termed 'intralingual causes') contribute significantly to the blurring of boundaries in university terminology. One important factor in this regard is the high degree of mobility among university members, including researchers, teaching staff, students and administrative personnel. As academic careers are increasingly transnational, individuals moving between higher education systems tend to bring 'their terminology' acquired at another university (in another country) with them. When, for instance, a university lecturer relocates from Germany to Switzerland, previously internalised designations for academic positions or study structures may be transferred into the new institutional environment, even if these terms diverge from nationally regulated or institution-specific terminology. Such contact-induced transfer aligns with findings from socioterminology and usage-based approaches [20, 21], which emphasise that terminology is shaped not only by formal norms but also by communicative practice and professional communities. For example, as Austrian universities increasingly employ staff from Germany, these individuals bring their terminological preferences with them, resulting in the originally German term *Studiengang* (which is not grounded in Austrian law[2]) being used with growing frequency alongside the Austrian term *Studium*. To add to Freixa's [19] "interlingual causes", terminology contact is intensified in multilingual countries or regions, such as Switzerland and South Tyrol, where German coexists with other official languages. In these contexts, university terminology is influenced not only by intralingual variation within German but also by interlingual contact with 'neighbouring' official languages. Universities located in language border regions may exhibit terminological convergence, calquing or borrowing, for example from French into German in Switzerland or from Italian into German in South Tyrol. This interlingual contact or influence can manifest at different levels. For example, it can be reflected in the orthography and pronunciation of terms, such as in Switzerland the contact with French: *Departement* (e.g. *Departement für Nutztiere* (Department for Farm Animals), *Departement Frauenheilkunde* (Department of Gynecology and Obstetrics) or *Reglement* (e.g. *Drittmittelreglement* (regulations on grants), *Reglement über die Aufnahmeprüfung an die Universität Zürich* (Regulations Governing the Entrance Examination at the University of Zurich). These contact phenomena challenge strictly system-based or nationally bound models of terminology and highlight the need for approaches that can capture the dynamic interaction between mobility, multilingualism and institutional practice in university terminology.

3.5.7. Unreflective use

Terminological variation is not always the result of an author's deliberate choice but may also arise from unreflective, mindless or inconsistent usage. Terminology work often assumes that authors make

[2]Although *Studiengang* is legally established in Austria, it applies specifically to universities of applied sciences (and not to public universities, which are the focus of this study)

conscious and motivated decisions when using certain terms, yet practical experience shows that several inconsistencies (or terminological variation) stem from a lack of awareness rather than intention. From the author's experience as a specialised translator, queries often show that authors use different terms for the same concept within a single text without noticing the inconsistency. This is not necessarily due to any of the variation types discussed above and may be further reinforced when several authors contribute to the same document (without final proofreading).

4. Implications for terminology work and terminology database design

The study shows that variation in university terminology cannot be explained by system-bound differences alone. While supranational, national, regional and institutional influences shape terminology, functional-discursive (concrete usage-based) factors also play a significant role, requiring an integrated approach in terminology work. Even within a single language, 'apparent equivalence' may be misleading, which highlights the need for domain knowledge and carefully designed corpora. Challenges increase when terminology circulates beyond individual institutions or when terminology contact introduces socially conditioned variation.

Unlike pluricentric variation, which can often be modelled by assigning terms to clearly defined national varieties (e.g. German in Germany vs. German in Switzerland), pluriareal variation reflects usage-based differences across regions, institutional networks and communicative practices. As a result, the same term may occur with different frequencies, collocational patterns or pragmatic functions across regions without being exclusive to any single variety.

In terminology databases, language varieties can be modelled either by treating language variety as a term-level attribute, particularly when standard language identifiers are lacking, as is the case for South Tyrolean German [26], or by representing varieties at the language level with separate language sections (e.g. de-AT, de-DE). The first approach allows other term-level data categories (such as /definition/ or /context/) to be distinguished by country or variety codes (e.g., /Definition AT/, /Definition DE/) making it clear to users which legal system or language variety the information refers to. While the former facilitates filtering and data export, it may compromise the principle of term autonomy, whereas the latter more consistently supports concept-oriented modelling, standardised data categories and interoperability, especially in domains lacking shared concepts [27].

With regard to the first four system levels introduced above: Intralingual system-bound terminology work requires an explicit acknowledgement that 'equivalence' across systems is often only partial and that the overlap of concepts may mask substantive differences. Consequently, terminology work must address overlapping or diverging concepts by incorporating system-specific definitions and explicitly documenting the degree of 'equivalence' or 'non-equivalence' in terminology databases. This requires specification of the system in which the term is used. Here, the levels mentioned above come into play. Failing to capture system-boundness can lead to 'false equivalence', unless the level and directionality of equivalence are provided in the terminological record as well.

In addition, concept systems (and knowledge graphs) are means for representing the different levels of university terminology identified in this study. These structured representations allow concepts to be modelled and linked simultaneously to multiple dimensions, such as supranational frameworks (e.g. EHEA concepts), national legal systems, regional governance structures and institution-specific solutions. Through relations (e.g. *is defined by*, *is regulated at*, *is used in*, *is superseded by*), these can explicitly encode system-boundness and functional variation while still enabling the identification of shared concepts across systems. For terminology work, this facilitates the comparison across systems and levels.

The functional-discursive level has consequences for both term extraction and documentation. Terms vary across text types, communicative purposes and target audiences, even within the same institution. As a result, corpus-based terminology work must be sensitive to text types and the use among professional groups. In terminology databases, register-specific or text type-specific variants

(e.g. legal-normative vs. student-facing terminology) can be included (e.g. in usage notes). Otherwise, variation that is primarily functional may be misinterpreted as system-based, leading to misleading information in a terminology database entry. Consequently, this level is crucial for corpus design, as corpora must be sensitive to text types and for corpus-based term extraction and variation analysis, which must account for communicative function to capture the dynamics of university terminology.

Chronological and cognitive causes of variation underline the importance of diachronic information and notes in terminology databases. In higher education systems undergoing reform, such as the transition from pre-Bologna to Bologna structures, older and newer terms often coexist. Terminology databases should therefore document temporal validity, deprecated terms and periods of overlap, as well as changes to the concept. This is particularly relevant for system comparison.

Interlinguistic variation and the widespread use of Anglicisms further highlight the need for careful handling of multilingual university terms. Loanwords and English designations may function as internationalised terms, institutional branding elements or pragmatic solutions in international communication, but they do not necessarily correspond to the original concepts in Anglophone systems (as diverse as they are too). Terminology databases in the university domain should therefore avoid uncritical alignment of terms across languages, as the example of *senior lecturer* has shown above.

Thus, terminology databases can be considered crucial knowledge resources that highlight variation and enable users to select the most appropriate term according to the context. Such an approach supports more reliable system comparison and a better-informed choice of terms in the heterogeneous field of university terminology. Proper representation ensures that both human and machine users, including translators, terminologists and AI tools, can correctly 'interpret' and use terms within their intended system and at the appropriate level.

5. Conclusion and outlook

Variation in university terminology cannot be adequately accounted for by reference to system-bound terminology alone. While higher education systems at supranational, national, regional and institutional levels provide an essential framework for understanding terminological choices, a comprehensive explanation of variation requires the integration of additional dimensions, in particular functional-discursive causes. University terminology thus emerges as a highly stratified and dynamic domain in which concepts and terms are shaped not only by legal structures but also by institutional autonomy and communicative practices.

By proposing a multi-level model of university terminology and relating it to established typologies of terminological variation, this study contributes to a better understanding of how and why variation arises within a single language characterised by multiple (although very similar) higher education systems and pluricentric language norms. The focus on German-speaking contexts illustrates how homonyms may conceal significant system-specific differences, while apparent inconsistencies may in fact be functionally or discursively motivated. However, not all variation may be deliberate or meaningful, as unreflected use can also be observed.

The implications for terminology work and terminology database design are that these levels should be made explicit in terminology databases to support system comparison, text generation and translation.

Although this study is limited in scope and does not claim to provide an exhaustive account of all German language varieties or university systems, the proposed framework is transferable to other pluricentric languages and institutional domains. This applies in particular to domains such as public administration, where terminology is shaped by supranational frameworks (e.g. EU policies), national legal systems and regional or municipal implementation, leading to comparable patterns of partial equivalence and institutional variation. The framework is also applicable to school education systems, which, like higher education, are governed at multiple levels. Beyond the public sector, large multinational organisations and corporate environments likewise develop institution-specific terminology that interacts with national regulatory frameworks and global corporate standards. In all these domains, the combination of system-boundness and functional variation necessitates comparable approaches to

terminology work and terminology database design.

Future research may expand the empirical basis, explore additional varieties or institutions and further refine methods for considering terminological variation in terminology work. Overall, the findings emphasise the need for a multi-level system and context-aware approach to terminology work in university settings.

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Declaration on Generative AI

During the preparation of this work, the author used ChatGPT-GPT-5 in order to: draft content, paraphrase and reword, improve writing style and content enhancement. After using these tool(s)/service(s), the author reviewed and edited the content as needed and takes full responsibility for the publication's content.

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