Precarity in the Ivory Tower: Exploring the Challenges of Postdoctoral Researchers in German Higher Education

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Abstract

This article critically investigates the structural and experiential dimensions of precarity among postdoctoral researchers within the German higher education system. Drawing on the conceptual lens of neoliberalism, precaritisation, and intersectionality, the study examines how institutional policies, particularly the *Wissenschaftszeitvertragsgesetz* (Academic Fixed-Term Contract Act), have normalised short-term contracts, undermined academic freedom, and restructured knowledge production around market imperatives. Employing a qualitative methodology, the research integrates document analysis with seven in-depth interviews conducted with postdoctoral scholars at the University of Bayreuth and the University of Bonn. The thematic analysis reveals that postdoctoral precarity is experienced through intersecting dimensions of job insecurity, constrained career progression, dependency on external funding, lack of agency, and psychosocial distress. These conditions not only impact individual well-being and career sustainability but also erode the epistemic integrity and ethical foundations of the university. The study argues that academic precarity is not merely a labour issue but a systemic manifestation of neoliberal governance, operating through temporal, spatial, and affective mechanisms. It concludes by calling for a fundamental reimagining of academic labour and institutional responsibility, contending that confronting precarity is essential for safeguarding the future of higher education as a democratic, inclusive, and intellectually autonomous domain.

Keywords: academic precarity; postdoctoral researchers; neoliberal higher education; *Wissenschaftszeitvertragsgesetz*; labour inequality



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Introduction

The precarity of academic staff is an inherent feature of the German higher education system, where a significant proportion of academic staff are employed on temporary contracts. According to a survey conducted in 2021, approximately 82% of academic employees who do not hold full professorships are bound by fixed-term contracts, with an average contract duration of just 20 months (GEW 2021). Furthermore, statistical data from the German Federal Ministry of Education and Research (BMBF) indicates that only 5% of PhD holders have a realistic prospect of securing a tenured position in higher education, highlighting the limited career stability within the academic sector (BMBF 2021). This structural reliance of the German higher education sector on fixed-term employment fosters an environment of instability, where researchers face persistent uncertainty regarding their career trajectories and long-term professional security. Despite their crucial contributions to research and teaching, many scholars navigate a precarious academic landscape with limited tenure prospects, raising concerns about the long-term sustainability of academic careers.

This widespread reliance on temporary employment is rooted in the *Wissenschaftszeitvertragsgesetz* (Academic Fixed-Term Contract Act), which grants universities and public research institutions the authority to issue fixed-term contracts aligned with specific qualification phases (Davidson et al. 2023). This legal framework not only legitimises but also perpetuates the inherently temporary nature of academic employment. This condition prompts serious ethical concerns about academic labour. If the university is to be seen as a space for critical inquiry and intellectual stewardship, then the ongoing precarity of its academic workforce stands in stark contrast to its professed ideals. The epistemic mission of higher education is, in this context, threatened by labour practices that weaken the very individuals responsible for advancing it. A system reliant on sustained intellectual engagement cannot flourish under conditions where structural impermanence supplants security and where scholars are forced to navigate careers defined more by contingency than continuity.

A growing body of scholarship has highlighted the multifaceted challenges associated with precarity in higher education. These challenges encompass not only job insecurity and restricted opportunities for career advancement but also the psychological burdens endured by academic staff, factors which, in turn, have demonstrable consequences for scholarly productivity and institutional cohesion (Davidson et al. 2023; Franz 2019; GEW 2021; Möller 2018; Musselin 2020). Precarious employment in academia thus emerges not merely as a labour issue but as a structural condition that shapes the epistemic and affective landscape of academic life. In response, both academic discourse and organised social action have increasingly interrogated the implications of these conditions. Scholars such as Brady and Biegert (2017) and Vatansever (2023) have critically examined the systemic entrenchment of academic precarity, situating it within broader socio-economic and institutional dynamics. Moreover, the emergence of the #IchBinHanna movement in Germany, as a direct reaction to the Academic Fixed-

Term Contract Act, constitutes a paradigmatic case of digitally mediated academic resistance.

The #IchBinHanna digital protest gained momentum following a 2021 explanatory video released by the BMBF, which sought to justify the temporary nature of academic employment, but instead provoked widespread criticism. The movement galvanised widespread criticism by exposing the dissonance between official narratives and the lived experiences of early career researchers. The movement, named after a fictional academic figure used in the BMBF's video, rapidly evolved into a platform for a collective articulation of discontent. It foregrounded the existential dilemmas faced by non-tenured academics, as well as the erosion of institutional loyalty in a context where permanence is the exception rather than the rule. The movement brought together the voices and concerns of early career researchers and academic staff, venting the systemic issues and fostering critical discourse on the rights of academics, institutional accountability, and the urgent need for structural reforms in academic employment practices.

Parallel to digitally driven movements such as #IchBinHanna, the Network for Decent Work in Academia (Netzwerk für Gute Arbeit in der Wissenschaft—NGAWiss) has emerged as a critical platform for collective advocacy among precariously employed researchers in Germany. Founded in 2017, NGAWiss has cultivated a sustained and strategic engagement with the structural challenges faced by non-tenured academics. Through public campaigns, policy-oriented interventions, and solidarity-building initiatives, the network has played a central role in rendering academic precarity a matter of national concern (Vatansever 2023). Over time, NGAWiss has established itself as a key representative of the academic precariat, successfully elevating the issue of academic precarity to the national political agenda. This advocacy culminated in the issue being formally addressed during a plenary session of the German Parliament in June 2021 (Deutscher Bundestag 2021). Thus, NGAWiss has elevated the issue of precarity to a politically significant level, establishing itself as a key organising space within Germany's contingent academic networks of precarious researchers.

Such movements, whether digital or network-based, exemplify the transformative potential of collective academic agency. They reframe precarious employment not merely as a matter of individual misfortune or career instability but as a structural inequality demanding political redress. The condition of precarious academics is not peripheral to the university's mission but central to its present contradictions. Nevertheless, precarity is far from a homogeneous experience. It is mediated by intersectional dynamics that shape how different groups encounter and endure structural instability. Postdoctoral researchers (postdocs) may face epistemic marginalisation within disciplinary hierarchies; women and racialised scholars disproportionately experience institutional invisibility and labour devaluation; international academics often confront additional barriers through legal precarity, cultural dislocation, and linguistic exclusion. As such, any robust understanding of academic precarity must go

beyond structural critique to encompass a nuanced intersectional analysis, one that accounts for how gender, "race", nationality, and career stage intersect to configure diverse forms of academic vulnerability.

Moreover, academic precarity is not incidental but rather a structural consequence of market-oriented institutional logics that increasingly govern higher education. As Woldegiorgis (2024) argues, contemporary academic labour regimes are shaped by neoliberal policy frameworks prioritising productivity, output metrics, and international competitiveness, often at the direct expense of employee well-being and long-term career sustainability. In this context, pursuing institutional efficiency and cost-effectiveness frequently overrides commitments to equitable employment practices, resulting in systemic employment instability and the normalisation of temporary labour (Franz 2019; GEW 2021). Nonetheless, the challenges of precarity are not unique to the German higher education system; rather, they reflect a global trend in academia. This phenomenon is deeply embedded in the tenets of the capitalist system, which thrives on precarious labour structures that devalue academic work. Within this framework, academic employees are often reduced to mere instruments of production, reinforcing alienation and exploitation in the academic enterprise.

As rightfully outlined in Hlatshwayo's (2024) work, precarity constitutes a structural condition intrinsic to the neoliberal governance paradigms that increasingly shape academic institutions. It is not merely a contingent employment status but a broader modality of regulation and subject formation that governs how academic labour is organised, evaluated, and lived. Under such frameworks, precarity extends well beyond the domain of contractual insecurity, influencing a spectrum of personal and professional dimensions, ranging from career advancement and long-term planning to social participation, family life, and the constitution of academic selfhood (Chia, Mossman, and Johnston 2024). This expanded understanding of precarity aligns with Isabell Lorey's (2015) critical analysis in *State of Insecurity: Government of the Precarious*, where she theorises precarity as a governing rationality rather than a marginal condition. According to Lorey, neoliberal managerialism transforms productivity from a quantifiable labour output into an internalised demand, blurring the boundaries between work and life, public performance and private identity. Within this regime, the academic subject is increasingly interpellated as an entrepreneurial self, constantly optimising, competing, and adapting to institutional exigencies. The effects of precarity manifest in the fragmentation of academic identities, the erosion of long-term aspirations, and the internalisation of insecurity as a norm rather than an exception. In this context, precarity becomes both a labour condition and an ontological horizon, a structuring force that delimits how individuals relate to time, stability, and possibility within the academic field.

While academic precarity is a widespread structural challenge in the German higher education system, this article focuses specifically on the conditions experienced by postdoctoral researchers, who represent a particularly vulnerable subset of the academic

workforce. Often employed on fixed-term contracts ranging from one to five years, postdoctoral researchers are typically engaged in research projects with limited institutional integration or long-term career security (Wendel-Hansen 2024). Their roles, though essential to the research output and global competitiveness of German academia, are characterised by temporal uncertainty, project dependence, and constrained professional mobility. While determining the exact percentage of postdoctoral researchers in the German academic system is challenging due to variations in data reporting and definitions, they undeniably represent a substantial segment of the academic space, with a considerable number being international scholars. For instance, a 2022 survey by the Max Planck Society highlighted that approximately 75% of their postdoctoral researchers are international, with 50% originating from outside the European Union (EU) (Russell et al. 2023). The survey further revealed that many postdocs depend on unstable project funding, which impacts their ability to pursue long-term research goals. Various studies (FEBS Network 2023; Heidt 2023) also echo the challenges faced specifically by German postdoctoral researchers, emphasising precarious working conditions, short-term contracts, and restricted opportunities for career advancement.

This research critically examines the structural and experiential dimensions of precarity faced by postdoctoral researchers within the German higher education system. Specifically, it interrogates the implications of short-term contractual employment, constrained career trajectories, and the broader institutional logics that sustain precarious academic labour. The notion of the "Ivory Tower", often symbolising academia as a space of intellectual freedom and excellence, contrasts sharply with the realities of many postdoctoral researchers, who navigate systemic barriers and job insecurity. Adopting a qualitative methodology, the study employs a combination of document analysis and semi-structured in-depth interviews to capture both structural trends and individual experiences. A total of seven interviews were conducted, four with postdoctoral researchers at the University of Bayreuth and three at the University of Bonn, each selected for their institutional diversity and relevance to the study's thematic focus. This methodological approach enables a contextualised understanding of how precarity is not merely a contractual condition but a deeply embodied and affectively charged experience, shaping how researchers relate to their work, their institutions, and their envisioned futures. Preliminary findings indicate that the precarity experienced by postdoctoral researchers not only impacts their immediate professional progression and job security but also has broader implications for the continuity of long-term research projects and the overall sustainability of the German research ecosystem.

The German Higher Education Landscape and the Career Path of Academics

To comprehensively examine the issue of precarity within the German higher education sector, particularly concerning postdoctoral researchers, it is essential to first outline the structural composition of the system, its institutional framework, and the various

academic positions within it. As of 2023, the German higher education system consists of 422 institutions, representing a diverse and multifaceted academic landscape. These institutions include approximately 120 universities (*universitäten*), among which 20 are designated as universities of technology (*technische universitäten*). Moreover, the system includes around 210 universities of applied sciences (*fachhochschulen*) alongside a range of specialised colleges of art and music (*kunst und musikhochschulen*), all of which contribute to the diversity of the sector (German Academic Exchange Service [DAAD] 2024).

A fundamental distinction within this framework pertains to institutional focus: While universities primarily emphasise research and theoretical knowledge, universities of applied sciences are oriented towards practice-based education, vocational training, and industry collaboration (Möller and Hornbostel 2023). This differentiation is particularly relevant in understanding the career trajectories and employment conditions of academics, especially postdoctoral researchers, who are predominantly employed within universities. Since the adoption of the Bologna Process in 1999, the German higher education system has also been aligned with the standardised *Bachelor-Master-Doctorate* structure, enabling integration into the broader European Higher Education Area (EHEA) (Musselin 2020).

Another crucial aspect in understanding precarity is the diversity of academic positions within the system. Academic positions in Germany can be broadly categorised into non-professorial and professorial roles. Non-professorial academic positions primarily include doctoral researchers (*doktoranden*), postdoctoral researchers (*postdoktoranden*), habilitation candidates (*habilitanden*), and junior professors (*juniorprofessoren*). Doctoral researchers are typically employed on fixed-term contracts as researchers, often working on externally funded projects or receiving scholarships. While doctoral candidates benefit from structured training programmes, they are required to secure external grants or scholarships to sustain their research (Franz 2019). Following the doctoral phase, postdoctoral researchers hold a crucial yet highly precarious position within German academia. They engage in independent research, contribute to teaching, and expand the publication portfolio of their institutions. However, their employment is contingent upon the availability of project funding. Consequently, postdoctoral researchers must navigate a series of short-term contracts, usually lasting between two and four years, under the *Wissenschaftszeitvertragsgesetz* (Fixed-Term Academic Contracts Act) (Davidson et al. 2023).

A distinctive academic position within the German higher education system, rarely found in other higher education systems worldwide, is that of *habilitanden* (habilitation candidates). The *habilitation* is a traditional postdoctoral qualification that grants scholars the right to teach (*venia legendi*) at universities. While it shares similarities with the postdoctoral stage, it is specifically designed as a pathway to a professorship or a permanent teaching role. *Habilitation* candidates are expected to conduct

independent research, publish extensively, and deliver lectures. However, this route has been widely criticised for being excessively time-consuming and for perpetuating job insecurity, as it does not guarantee a permanent academic position upon completion (Armano and Murgia 2013). Nevertheless, as part of the Bologna Reforms, the German higher education system has also introduced the Junior Professor position, which also offers a temporary six-year position as an alternative route to professorship without requiring a *habilitation*. Junior professors have independent teaching and research responsibilities, yet their tenure prospects remain uncertain, with only a small percentage securing permanent positions (Murray et al. 2020).

Professorial positions in Germany, on the other hand, are permanent and classified into Wissenschaft 2 (W2) (associate professor) and Wissenschaft 3 (W3) (full professor) ranks. Professors enjoy significant autonomy in research, teaching, and supervision. However, securing a professorship is highly competitive, requiring a strong publication record, substantial research funding, and proven leadership experience (Kreckel 2017). Fewer than 20% of academic staff in German institutions attain full professorships (GEW 2021), while only 5% of PhD holders have a realistic prospect of securing a tenured position. This reflects the highly competitive and exclusionary nature of the German academic system, where career stability remains limited (BMBF 2021).

The structural composition of the German higher education system, with its diverse institutional types and rigid career pathways, plays a crucial role in shaping the precarity faced by academics, particularly postdoctoral researchers. A clear understanding of the system's structure, institutional framework, and academic career paths is essential to contextualising precarity and its broader implications for research and teaching in Germany. Nevertheless, before examining the challenges faced by early career researchers and their precarious situations, it is necessary to first conceptualise precarity itself. Understanding its meaning, theoretical foundations, and the broader global phenomena influencing its emergence provides a crucial framework for analysing its impact on the German higher education system. The following section explores how precarity is conceptualised within the context of higher education, examining its definitions, key theoretical perspectives, and the structural factors that contribute to its persistence in academic institutions.

Conceptualising Precarity in Higher Education

The increasing prevalence of precarious employment conditions within academia has emerged as a critical concern in contemporary discussions on higher education (Franz 2019; Mason and Megoran 2021; Vatansever 2023). Precarity is broadly defined as a condition marked by uncertainty, instability, and a lack of protection, particularly in the context of employment relations (Standing 2011). In higher education, precarity manifests in various ways, including short-term contracts, the casualisation of academic labour, exclusion from major decision-making activities, and the limiting availability of tenure-track positions (Burton and Bowman 2022). Precarity, in a broader sense, is conceptualised as a liminal state of transition, where graduates experience uncertainty

and instability while moving from higher education to employment (Tomlinson 2024). For instance, Bosanquet, Mantai, and Fredericks (2020) explain the anxiety among early career researchers resulting from "a deferred state of waiting for academic careers that are yet to come" (2020, 736). Thus, precarity refers to the instability, insecurity, and lack of predictability in employment and working conditions. The term is often associated with the gig economy, contract work, and other non-standard forms of employment that do not offer long-term stability. It has been widely studied in sociology, labour economics, and political science, as it is linked to broader socio-economic issues such as income inequality, social exclusion, and mental health challenges. Scholars such as Guy Standing have discussed the precariat as people who lack the seven forms of labour-related security that were integral to industrial citizenship in the twentieth century: labour market security, employment security, job security, work security, skill reproduction security, income security, and representation security (Standing 2011).

This phenomenon is not an isolated development but is intricately woven into the broader socio-economic fabric of neoliberal capitalism, which has progressively transformed higher education into a market-driven enterprise (Burton and Bowman 2022; Hardy 2017). The term "academic precariat" has been used to describe faculty members and researchers who face employment insecurity, a condition often intensified by the neoliberal restructuring of academic institutions (Read 2023). For instance, Spina et al. (2022) have conceptualised precarious employment in academia as a structural consequence of neoliberal restructuring, particularly affecting early career researchers. Their study underscores how the shift towards market-driven academic policies has intensified job insecurity, reliance on casual contracts, and restricted career progression opportunities, ultimately shaping a precarious academic workforce (Spina et al. 2022). As universities increasingly prioritise efficiency, competition, and financial viability, the restructuring of academic labour has led to the systematic erosion of stability, security, and long-term career prospects. The decline of traditional tenure-track positions in favour of short-term contracts, adjunct appointments, and contingent faculty roles marks a profound shift in the institutional logic of higher education, one that aligns more with corporate imperatives than with the preservation of knowledge as a public good (Mason and Megoran 2021).

This paradigm shift has engendered a restructuring of academic labour, characterised by a systematic reduction in permanent faculty positions and an increasing reliance on precarious, short-term contracts that undermine job security and intellectual autonomy (Cantwell and Kauppinen 2014; Standing 2011). The contemporary influence of neoliberalism on higher education, coupled with the persistent decline in public funding, has heightened the pressure to "efficiently" achieve institutional targets such as publications, research income, graduate outputs, and rankings, fundamentally reshaping the academic experience. This shift has fostered an alternative valorisation of speed, what some scholars such as Rosa (2003), Vostal (2014), and Gravett (2021) describe as "accelerated time" where scholarly worth is increasingly measured by the rapidity of

output rather than the depth of intellectual inquiry. In other words, the relentless pressure to publish prolifically, secure competitive grants, and continuously demonstrate quantifiable impact has restructured academic labour, imposing market-driven logic onto knowledge production.

Beyond critiques of neoliberalism, however, precarity in higher education has also been examined through a range of theoretical frameworks, offering diverse perspectives on its structural and experiential dimensions (see Burton and Bowman 2022; Hardy 2017; Mason and Megoran 2021; Muthiah 2024; Read 2023; Tomlinson 2024). For instance, Hardy (2017) has analysed the phenomenon of precarity within the broader context of political economy, highlighting the systemic forces that perpetuate instability in academic labour. She argues that capitalism systematically produces precarity as a way to maintain economic flexibility, reduce labour costs, and ensure the dominance of capital over labour. Rather than an unfortunate side effect, Hardy (2017) suggests that precarity is a deliberately maintained feature of capitalism. It ensures that labour remains cheap, flexible, and disempowered, making it easier for institutions to extract value while keeping wages low and employment unstable. This analysis highlights how capitalism's structural demand for labour flexibility drives the expansion of adjunct faculty positions, increases reliance on contingent labour, and intensifies competition for funding. These trends are not merely responses to economic deregulation or austerity policies but rather reflect capital's ongoing strategy to shift risk onto workers, maximise profit, and weaken labour's bargaining power. Hardy (2017) argues that:

> Competitive accumulation and the incessant search for profits, drivers that lie deep in the structures of capitalism, render all work precarious. Three structural aspects that have a direct bearing on the precariousness of employment are the dynamism of the system and the constant creation of new spatialities, its endemic tendency to crisis; and the increasing commodification of the public sector under neoliberalism. (Hardy 2017, 265)

Hardy (2017) critiques simplistic binary explanations of precarity and instead proposes a political economy framework that considers the structural, institutional, and agential influences on precarious employment, emphasising the need for worker solidarity to resist its effects.

Nevertheless, precarity operates on multiple dimensions, impacting individuals differently based on intersecting structural inequalities. While it is fundamentally embedded in the neoliberal capitalist macrostructure, precarity is not experienced uniformly; it is deeply intertwined with broader systems of inequality related to gender, "race", class, and disability. This intersectionality reinforces precarity as a systemic condition that extends beyond contract status alone, shaping lived experiences in diverse ways. As argued by Burton and Bowman (2022), "The political core of precarity is important in recognising the relationship between 'feeling precarious' as an academic and experiencing other forms of social inequality such as gender, race, social class and disability" (Burton and Bowman 2022, 500). Therefore, rather than confining precarity

to those on insecure employment contracts, it is important to theorise it as a broader perspective that links contractual precarity with deeper structural inequalities. In a sense, precarity is not solely defined by job insecurity but also manifests through gendered, racialised, class-based, and ableist exclusions that shape experiences within academia. Thus, it is crucial to draw attention to these intersecting dimensions for a holistic understanding of precarity, one that captures not only its contractual aspects but also its emotional, relational, and institutional impacts on academic life.

Apart from the neoliberal capitalist macrostructure and the intersectional dimensions of precarity, temporal-spatial analyses also provide a critical lens for understanding how precarious employment reshapes academic life across different temporalities and institutional spaces. Despite the prevailing notion of the university as a timeless "bubble" insulated from external socio-economic pressures, academic cultures and practices are deeply entangled with multiple, often conflicting, temporal dynamics. Temporally, precarious work is experienced through delayed career progression, uncertain futures, and cyclical job insecurity, while spatially, it is shaped by institutional hierarchies, geographic inequalities, and differences in funding structures. This perspective underscores that precarity is not a static category but a dynamic process continuously shaped by the interplay of time, space, and broader structural inequalities.

Universities, often idealised as inclusive spaces of knowledge production, are paradoxically characterised by structures of exclusion that marginalise certain scholars, particularly early career academics in precarious employment. These scholars frequently find themselves positioned at the periphery of institutional life, treated as disposable labour rather than integral members of the academic community. Read (2023), for instance, applies Foucault's concept of heterotopia to explore how universities simultaneously operate as spaces of knowledge production and sites of exclusion. This duality reveals how precarious academic labour is embedded within institutional structures that sustain hierarchical divisions, marginalising certain groups while perpetuating the rhetoric of meritocracy. The interplay between time and space within academia thus functions as a disciplinary mechanism where early career academics, particularly those in precarious positions, must continually prove their worth to secure even temporary employment. The demand for constant self-optimisation and relentless productivity reinforces an academic culture where time itself is weaponised, privileging those with institutional security while further alienating marginalised scholars. Often confined to peripheral spaces with limited resources and professional opportunities, these scholars navigate a system that paradoxically extols inclusivity and diversity while structurally reproducing inequalities.

Casualised academics often experience institutional invisibility, as they are systematically excluded from departmental decision-making and long-term academic planning. Despite their significant contributions to teaching and research, universities frequently fail to provide them with essential institutional recognition, such as dedicated office spaces, name plaques, or formal acknowledgement of their work. This

marginalisation extends to administrative processes, where precarious academics often struggle to access fundamental professional resources, such as travel funding, research grants, or even logistical support, further reinforcing their precarious status. Moreover, job titles such as Postdoctoral Researcher, Teaching Fellow, or Teaching Assistant frequently carry lower intellectual and academic prestige despite the fact that these scholars perform labour comparable to, and sometimes exceeding, that of permanent faculty. This structural invisibility not only alienates precarious academics from their institutions and colleagues but also erodes their sense of belonging and professional self-worth.

Scholars such as Mason and Megoran (2021) have conceptualised such precarity within frameworks of dehumanisation, critiquing the erosion of academic dignity and agency in casualised work conditions. They argue that the casualisation of academic labour is not merely a structural adjustment to financial constraints but a profoundly dehumanising process that strips individuals of dignity, agency, and security. “It is not just that casualisation is the product of a reprehensible political economy that harms both education and those who deliver it. Rather, we insist that it is an affront to the very meaning and nature of being human” (Mason and Megoran 2021, 55). Precarity in higher education, therefore, should not be understood solely as a labour issue but as an intricate manifestation of the neoliberal capitalist macrostructure shaped by diverse intersectional dimensions, temporal-spatial dynamics, and systemic dehumanisation. It is a multidimensional phenomenon shaped by structural economic forces, institutional policies, and individual agency.

Precarity extends beyond contractual insecurity to function as a mechanism of control and exclusion, where scholars, particularly those marginalised by gender, “race”, class, and disability, are rendered disposable resources rather than valued intellectual contributors. This process erodes not only individual dignity and professional autonomy but also compromises the ethical and intellectual foundations of academia itself, replacing critical inquiry and knowledge production with market-driven imperatives that prioritise efficiency, metrics, and profit over scholarly well-being and academic freedom. While the rise of the academic precariat reflects broader trends in labour market flexibilisation, its consequences extend beyond employment insecurity to impact knowledge production, equity, and intellectual autonomy.

Methodology

This study adopts a qualitative research design to explore the lived experiences of postdoctoral researchers navigating precarious employment within the German higher education system. Qualitative inquiry was deemed appropriate due to its capacity to capture the complexity of individual perceptions, structural constraints, and socio-institutional dynamics that are often not fully accessible through quantitative methods alone. The research aims to uncover not only what challenges postdoctoral researchers face but also how these challenges are experienced, interpreted, and negotiated in their professional and personal lives.

Two primary data sources were employed: (1) document analysis and (2) semi-structured, in-depth interviews. The document analysis involved a critical review of policy frameworks (e.g., the *Wissenschaftszeitvertragsgesetz*), institutional reports, national statistics, and scholarly literature related to academic labour in Germany. This provided the structural and contextual backdrop necessary for understanding the institutionalised nature of precarity. The second and central component of the study consisted of seven semi-structured interviews conducted with postdoctoral researchers employed at two public research universities: the University of Bayreuth ($n = 4$) and the University of Bonn ($n = 3$). These institutions were selected for their disciplinary breadth and relevance to the broader German academic landscape. Interviews lasted between 45 to 75 minutes and were conducted either in person or via secure video conferencing platforms. All interviews were audio-recorded with participant consent and subsequently transcribed verbatim for analysis.

Participants were selected using purposive sampling to ensure representation across key demographic and institutional variables. The final sample included three female and three male postdoctoral researchers, with one participant preferring not to specify gender in depth. In terms of nationality, the sample comprised three German participants, alongside international scholars from Cameroon, Italy, and Morocco, reflecting the transnational character of the postdoctoral workforce in Germany. All participants were employed on fixed-term contracts, with durations ranging from 12 to 36 months, and funded through diverse sources, including the German Research Foundation (DFG), university-funded projects, and European Union-based research grants (see Table 1).

Table 1: Participant demographic information

Participant ID	Gender	Nationality	Institution	Contract Type	Contract Duration (Months)	Funding Source	Research Area
P1	F	German	University of Bayreuth	Fixed-term	24	DFG	Social Sciences
P2	M	German	University of Bayreuth	Fixed-term	36	University-funded	Physics
P3	M	Cameroonian	University of Bayreuth	Fixed-term	12	Third-party project	African Studies
P4	M	German	University of Bayreuth	Fixed-term	24	DFG	Engineering
P5	F	Italian	University of Bonn	Fixed-term	18	EU Project	Linguistics
P6	M	Moroccan	University of Bonn	Fixed-term	30	BMBF	Environmental Studies
P7	F	German	University of Bonn	Fixed-term	24	University-funded	History

The interview transcripts were analysed using thematic analysis, following the guidelines of Braun and Clarke (2006). An initial coding phase was conducted to identify recurrent patterns, experiences, and institutional critiques. These codes were then organised into broader themes that aligned with the study's core research questions, including contractual uncertainty, career development constraints, institutional support, and identity formation under precarity.

The Challenges and Implications of Precarious Postdoctoral Researchers in Germany

Drawing on the key thematic areas that emerged from the interview data (see Table 2), this section critically analyses the lived experiences of postdoctoral researchers within the German higher education system through the lens of precarity as a structural, intersectional, and temporal-spatial condition (Hardy 2017; Read 2023; Standing 2011). The findings demonstrate that postdoctoral employment in Germany is not only precarious but also systematically structured to reinforce instability, marginalisation, and disempowerment. Thematic analysis of the interview data reveals a complex and deeply entrenched system of academic precarity that shapes the lived experiences of postdoctoral researchers in the German higher education sector. Drawing on the insights of seven participants across diverse disciplines and institutions, the analysis highlights how precarity manifests not merely as a contractual condition but as a multidimensional structure of vulnerability, disempowerment, and exclusion.

The findings also highlight how neoliberal governance, temporal dislocation, and institutional hierarchies coalesce to produce a system in which early career academics are simultaneously essential to research production yet denied stability, autonomy, and

recognition. The thematic areas presented in this section not only reflect individual struggles but also expose broader structural contradictions at the heart of the academic enterprise, challenging the idealised notion of the university as a sanctuary of intellectual freedom and meritocratic advancement. What emerges is a portrait of academic life marked by uncertainty, deferred aspirations, and systemic devaluation, a condition that demands urgent reflection and institutional reconfiguration.

Job Insecurity and Vulnerability

The prevalence of short-term contracts among postdoctoral researchers constructs an institutional culture of instability where job insecurity becomes a defining feature of academic life. This systemic uncertainty is not simply an unfortunate byproduct of funding scarcity but a strategically normalised practice, as outlined by Standing (2011) in his concept of the "precariat", a class that lacks labour protections, continuity, and representation. Interview participants repeatedly expressed the strain of living from contract to contract, unable to project into the future or make personal commitments. As P4 candidly reflected:

> You're constantly wondering, what happens after this? You don't plan a future; you just survive. There's no room to think about five years from now or even next year. You're applying for jobs while also working full-time, trying to finish papers, write grant proposals, and teach, all without knowing if your current job will be renewed. It's exhausting. You start to feel like you're chasing something that keeps moving just out of reach.

This precarious status renders early career scholars vulnerable to exploitation, trapped in asymmetrical relationships with senior colleagues or principal investigators whose recommendations are essential for survival in academia's hierarchical ecosystem.

This vulnerability fosters a culture of fear, dependency, and self-exploitation, in which academics feel compelled to work unpaid hours, accept additional responsibilities, and remain silent in the face of injustice. As one interviewee (P2) noted: "You can't say no. You know they can easily find someone else to do the job." This environment reflects Hardy's (2017) argument that capitalism does not just tolerate precarity; it actively produces and sustains it as a mechanism of labour discipline, reducing workers to replaceable entities. The neoliberal university, in this framing, becomes a site where labour is not only commodified but also rendered docile through the institutionalisation of insecurity. The academic promise of autonomy is thereby replaced with a structural ethos of obedience, fear, and silence.

Limited Career Progression and Structural Constraints

One of the most deeply felt consequences of precarious employment is the absence of meaningful career progression. Most postdoctoral researchers interviewed articulated the sense of being stuck in a holding pattern despite fulfilling roles that mirror the responsibilities of full faculty. This experience resonates with Tomlinson's (2024) and

Bosanquet, Mantai, and Fredericks's (2020) concept of "deferred careers", where scholars remain suspended in professional liminality, endlessly waiting for a permanent position that rarely materialises. As P6 shared: *"*You move from contract to contract doing the same work, teaching, publishing, mentoring, but you're never seen as permanent. It's like you're always temporary by design." The institutional logic of the German higher education system, particularly through the Wissenschaftszeitvertragsgesetz, entrenches this transience, justifying it under the guise of professional development while systematically excluding most from tenure-track possibilities.

This career stagnation serves a dual ideological function. First, it reinforces institutional flexibility by ensuring a rotating supply of low-cost academic labour. Second, it masks systemic failure by individualising the problem; positioning stalled careers as personal shortcomings rather than structural design. As Read (2023) argues, this kind of institutional arrangement cultivates a myth of meritocracy, where scholars internalise blame for structural failure. As P5 reflected with visible frustration:

> Sometimes, I feel like I've done everything right. I've published, I've taught, I've applied for grants, and still, I'm told to "wait my turn" or "be patient". But there's no queue, there's just a cliff. And the longer you stay in this system, the harder it gets to believe that it's about merit. At some point, you realise it's about politics, about luck, about who you know. And yet, when things don't work out, you still blame yourself.

This powerful reflection illustrates how the internalisation of systemic precarity not only demoralises individual scholars but also obscures the institutional responsibility to provide sustainable career pathways. The system, in effect, reproduces elite academic trajectories for a privileged minority while relegating the majority to perpetual cycles of contingent employment and professional invisibility. Consequently, the system reproduces elite pathways for a select few while relegating the majority to cycles of precarious employment. Such a model reflects the neoliberal restructuring of higher education (Cantwell and Kauppinen 2014), where institutions mimic corporate hierarchies and long-term academic citizenship is gradually eroded.

External Funding Dependence and Lack of Agency

Another core theme that emerged was the loss of intellectual and professional autonomy due to dependence on external funding. Project-based contracts often compel postdocs to align with the visions of senior researchers or institutional agendas, thus constraining their ability to define independent scholarly trajectories. As P3 noted: "I'm here to carry out someone else's project, not to develop my own ideas. That's just not realistic when you're on a one-year contract." This diminishment of agency directly contradicts traditional ideals of academic freedom and aligns with Lorey's (2015) assertion that neoliberalism governs not only labour but also the subjectivity of labourers, recasting scholars as productive instruments rather than autonomous thinkers.

Moreover, this institutional prioritisation of grant income over scholarly inquiry restructures the academic subject into an entrepreneurial figure. As Hardy (2017) suggests, such restructuring is a manifestation of capitalism's broader agenda: to reduce labour to flexible, risk-bearing units that serve capital's demands. Researchers are incentivised to pursue fundable topics over critical or speculative work, thus altering not just how they work, but what knowledge is produced. As P1 emphasised:

> It's hard to think about originality when your next paycheck depends on whether your idea fits a call for funding. I've shelved so many ideas because they didn't tick the right boxes, too theoretical, too long-term, not aligned with any major funding priority. It's not that we lack creativity, it's that the system doesn't value it. Instead of asking "what's worth exploring?", we ask, "what will get funded?" That shift affects everything: the kind of questions we ask, the risks we take, even the identity we build as researchers.

This quotation underscores that the erosion of academic freedom is not merely symbolic or procedural, it reaches into the core of knowledge production itself. The university, once conceived as a space for speculative inquiry and critical dissent, becomes governed by the logic of monetisation and audit. Consequently, the scope of intellectual exploration is narrowed, and the epistemic structure of higher education is reorganised around market imperatives rather than the public good or scholarly curiosity. This commodification of research compromises not only the autonomy of individual scholars but also the diversity and richness of the academic canon, as entire lines of inquiry may be abandoned due to their incompatibility with funding criteria. The result is a hollowing out of the university's critical function, replaced by a performance of innovation that is scripted by funders and administrators rather than scholars themselves.

Short Contracts and Inability to Project into the Future

Short contract durations, most commonly 12 to 24 months, pose a major barrier to long-term academic planning and personal life stability. Participants described the difficulty of designing research projects, applying for grants, or planning family life under these fragmented conditions. P7 described the emotional toll:

> Every year I go through the same cycle, wondering where I'll live next, whether I'll still have a job in six months, whether I should delay having children again. You can't make plans when everything is conditional. Even writing a grant feels absurd, because by the time it's approved, you might already be gone. I've stopped thinking in years, I think in semesters now. That's how fragmented it's become.

This testimony reflects the condition that Rosa (2003) and Gravett (2021) describe as temporal dislocation, in which the erosion of stable timelines and the compression of academic life into accelerated, short-term cycles prevent scholars from constructing coherent narratives of the future. Within such a structure, postdoctoral researchers are caught in a paradox, and they are expected to produce long-term scholarly impact while operating under short-term conditions that undermine continuity, imagination, and planning. The result is a recursive form of professional paralysis, where the inability to

invest in the future becomes both a symptom and a strategy of institutional control. This chronopolitics of precarity, where time itself becomes a mechanism of labour discipline, ultimately fragments not only academic productivity but also personal agency, displacing scholarly lives into cycles of waiting, reacting, and coping.

This inability to plan one's life, both professionally and personally, functions as a mechanism of disciplinary control. By keeping postdocs in a state of perpetual contingency, institutions maintain labour flexibility while externalising the emotional and psychological cost. As one participant (P6) starkly put it: *"*We are the drug dealers of academia, doing all the dirty work, taking all the risks, while the professors sit comfortably." This metaphor captures the profound asymmetry of labour relations in the neoliberal academy, where those who contribute most are structurally prevented from accessing the benefits of academic life. The result is not only individual burnout but a systemic erosion of the academic profession as a viable long-term vocation.

Table 2: Thematic analysis of interview data

Thematic Area	Key Issues Identified	Implications
Job Insecurity and Vulnerability	Widespread reliance on fixed-term contracts fosters uncertainty about long-term employment. Casualised academics often feel powerless due to patronage structures, are expected to work unpaid hours, and are vulnerable to exploitation and institutional arbitrariness.	Promotes a culture of fear and self-exploitation; deters long-term career planning and undermines academic dignity.
Limited Career Progression and Structural Constraints	The absence of clear career pathways for postdocs; highly competitive environment for permanent positions; structural bottlenecks and legal policies such as the *Wissenschaftszeitvertragsgesetz* reinforce precariousness.	Stagnates professional growth; normalises transience as a structural feature of academic life.
External Funding Dependence and Lack of Agency	Reliance on project-based funding demands constant grant applications; many researchers work under the guidance of senior academics without autonomy to define their research. Teaching responsibilities are often imposed without input into content or structure.	Undermines academic freedom and intellectual ownership; reduces early career researchers to tools of institutional goals.
Short Contracts and Inability to Project into the Future	Contract durations (12–24 months) obstruct continuity in research and teaching. Precarity hampers life planning, including family, housing, and mental health. The system resembles exploitative hierarchies where casualised workers carry all risks.	Generates emotional distress and long-term psychological strain; disconnects academics from long-term intellectual and personal narratives.
Gender Inequities and Intersectional Precarity	Women and marginalised groups face disproportionate burdens due to caregiving roles, systemic bias, and exclusion from career progression pipelines.	Exacerbates existing inequalities; decreases diversity in senior academic roles; reinforces structural discrimination.
Brain Drain, Turnover, and Research Quality	High turnover and lack of stable contracts reduce institutional memory and continuity. Talented researchers leave Germany, leading to brain drain.	Weakens Germany's global research standing and compromises the quality and sustainability of academic programmes.
Psychosocial Challenges	Precarious employment induces burnout, anxiety, and depression. The constant pressure to prove oneself, publish, and secure funding takes a mental toll.	Undermines academic well-being, productivity, and long-term retention; erodes motivation and institutional loyalty.

Implications of the Study

The findings of this study underscore that precarity is not an incidental feature of the German academic system but a deeply entrenched structural condition. The reliance on short-term contracts, performance metrics, and project-based funding constructs a research environment that is fundamentally unstable. Far from being transitional, postdoctoral precarity has become institutionally routinised, serving the dual function of labour flexibility and economic rationalisation. The university, rather than a space of critical engagement and scholarly development, increasingly resembles a corporate entity driven by efficiency, speed, and calculable outcomes. This neoliberal logic positions postdoctoral researchers as a buffer class, highly skilled, heavily burdened, and yet easily disposable. Their insecure employment status allows institutions to offload risk while maintaining high research productivity and external visibility. However, this system is not sustainable. It represents a clear violation of the principles of academic stewardship and collegiality. The university depends on the intellectual labour of postdocs while denying them the conditions necessary for intellectual flourishing. As a result, precarity has become a mode of institutional extraction, where knowledge is produced under duress and careers are sustained by sacrifice rather than support.

One of the most disturbing implications of this system is the internalisation of blame. Participants repeatedly described feelings of inadequacy and failure despite meeting or exceeding professional benchmarks. This reflects Read's (2023) observation that precarious systems often operate by converting structural injustice into personal responsibility. Postdoctoral researchers are encouraged to "try harder", "publish more", or "network better", while the system itself provides no meaningful opportunities for long-term advancement. This moral individualism masks the systemic dysfunction of academic labour and perpetuates a culture of silent endurance. Moreover, the prioritisation of grant income over scholarly inquiry fundamentally reshapes the academic subject. Researchers are compelled to become entrepreneurial actors, constantly seeking funding, aligning their work with shifting institutional agendas, and tailoring proposals to predefined criteria. This market-driven model incentivises short-termism and discourages critical, speculative, or foundational research. The epistemic consequences of this shift are profound. The pursuit of knowledge becomes secondary to the pursuit of resources, and intellectual autonomy is traded for financial viability.

This erosion of autonomy is particularly evident in the suppression of academic freedom. The data show that precarious academics often have little control over what they research, how they teach, or how they define their scholarly identity. They are bound to the strategic needs of principal investigators, funders, or administrative mandates. This lack of agency undermines the intellectual core of academic labour, reducing scholars to functional operatives rather than generative thinkers. The result is a diminished academic landscape, where conformity is rewarded, and dissent becomes a liability. The temporal structure of precarity further compounds these challenges. The

acceleration of academic life, measured in semester-long contracts, rapid output cycles, and immediate impact, is incompatible with the slow, reflective nature of meaningful scholarship. As Rosa (2003) and Gravett (2021) argue, this compression of time reduces scholars' ability to engage deeply, take intellectual risks, or envision long-term projects. For precarious academics, the future is not a space of possibility but a source of anxiety. Their professional lives are experienced in fragmented episodes without the coherence or continuity necessary for sustainable academic development.

These temporal dislocations also intrude upon personal lives. Many participants described the impossibility of planning for families, housing, or even holidays. The inability to "project into the future" is not merely a logistical inconvenience; it is a form of existential dispossession. When individuals cannot plan, they cannot hope. And when they cannot hope, they cannot resist. This is how precarity operates, not simply by denying security but by undermining the very conditions of imagination and agency. It is not just a matter of employment; it is a structure of life. Intersecting inequalities deepen this precariousness. Women, international scholars, and racialised minorities face compounded vulnerabilities, often excluded from informal networks of power or penalised for caregiving responsibilities. As Burton and Bowman (2022) note, precarity intersects with gender, "race", and class to produce differentiated experiences of marginalisation. In this study, female participants, in particular, highlighted how maternity leave, expectations of flexibility, and systemic bias worked against their advancement. This demonstrates that precarity is not evenly distributed; it is socially stratified and structurally patterned.

At the institutional level, precarity compromises not only individual well-being but also academic quality and continuity. High turnover among temporary staff disrupts research teams, impairs mentorship, and weakens departmental cohesion. Temporary contracts inhibit the development of innovative teaching practices and long-term collaborations. Students suffer from inconsistent supervision; colleagues must repeatedly bring new staff on board. In this context, excellence becomes a superficial performance rather than a lived practice. The constant churn of personnel undermines the very excellence that institutions claim to pursue. This dynamic contributes to a broader phenomenon of brain drain. Talented postdocs, often trained at public expense, leave academia or move abroad in search of stability. This not only represents a loss of intellectual capital but also a fundamental failure of academic institutions to retain and value the scholars they produce. When institutions function as revolving doors rather than intellectual homes, they cease to serve the public interest. The ideal of the university as a space of collective inquiry and critical citizenship is replaced by a marketplace of temporary labour and migratory scholarship.

Conclusion

This study has critically examined the structural and lived dimensions of precarity among postdoctoral researchers within the German higher education system. Through a qualitative exploration of institutional frameworks, policy regimes, and individual

experiences, the research has shown that academic precarity is not a peripheral issue but a core structural feature of contemporary academia. Far from being an aberration, precarity is embedded in the very architecture of the neoliberal university, legitimised through policies such as the *Wissenschaftszeitvertragsgesetz* and perpetuated by funding models and managerial logics that prioritise efficiency over equity and competition over care. The voices of postdoctoral researchers presented in this study reveal not only the emotional and professional toll of insecure employment but also the deep epistemic and ethical consequences for academia itself. Precarity stifles intellectual autonomy, corrodes academic freedom, and reshapes knowledge production through the imperatives of fundability and speed. It dismantles the university's social contract by treating its core intellectual labour force as disposable, replaceable, and perpetually temporary. The result is a two-tiered system of academic citizenship, where opportunity and recognition are unequally distributed, and the majority must navigate cycles of uncertainty, underappreciation, and exclusion.

The findings have demonstrated that precarious conditions are experienced through intersecting dimensions of time, power, gender, and identity. They impact not only what scholars can do, but who they can become. The inability to project into the future, pursue original ideas, or participate meaningfully in institutional life reflects a systemic failure of the university to uphold the principles of inclusion, dignity, and scholarly sustainability. Precarity, as this article has argued, is not just a labour condition; it is a disciplinary mechanism, a form of structural violence that produces compliance, suppresses dissent, and narrows the horizon of academic possibility. If the university is to remain a space of critical inquiry, public good, and intellectual transformation, it must confront the reality of its own complicity in producing and normalising precarity. Reform cannot stop at better contracts or extended funding cycles; it must involve a fundamental reimagining of academic labour and governance. This includes dismantling exploitative hierarchies, investing in long-term academic careers, and restoring value to slow, reflective, and speculative scholarship. Ultimately, addressing postdoctoral precarity is not simply a matter of justice for early career scholars; it is a fight for the future integrity, legitimacy, and humanity of higher education itself.

References

Armano, E., and A. Murgia. 2013. "The Precariousness of Research Careers: A Comparative Study of Academia in Italy and Germany". *Work Organisation, Labour and Globalisation* 7 (1): 117–136. https://doi.org/10.13169/workorgalaboglob.7.1.0117.

BMBF (Bundesministerium fur Bildungund Forschung). 2021. *Bundesbericht wissenschaftlicher Nachwuchs (BuWiN) 2021: Statistische Daten und Forschungsbefunde zu Promovierenden und Promovierten in Deutschland*. Accessed April 8, 2024. https://www.buwin.de/dateien/buwin-2021.pdf.

Bosanquet, A., L. Mantai, and V. Fredericks. 2020. “Deferred Time in the Neoliberal University: Experiences of Doctoral Candidates and Early Career Academics”. In “The Timescapes of Teaching in Higher Education”, edited by P. J. Burke and C. Manathunga, special issue, *Teaching in Higher Education: Critical Perspectives* 25 (6): 736–749. https://doi.org/10.1080/13562517.2020.1759528.

Brady, D., and T. Biegert. 2017. “The Rise of Precarious Employment in Germany”. In *Precarious Work*, Vol. 31, edited by A. L. Kalleberg and S. P. Vallas, 245–271. Leeds: Emerald Publishing. https://doi.org/10.1108/S0277-283320170000031008.

Braun, V., and V. Clarke. 2006. “Using Thematic Analysis in Psychology”. *Qualitative Research in Psychology* 3 (2): 77–101. https://doi.org/10.1191/1478088706qp063oa.

Burton, S., and B. Bowman. 2022. “The Academic Precariat: Understanding Life and Labour in the Neoliberal Academy”. In “The Academic Precariat: Understanding Life and Labour in the Neoliberal Academy”, edited by S. Burton and B. Bowman, special issue, *British Journal of Sociology of Education* 43 (4): 497–512. https://doi.org/10.1080/01425692.2022.2076387.

Cantwell, B., and I. Kauppinen, eds. 2014. *Academic Capitalism in the Age of Globalization*. Baltimore: Johns Hopkins University Press. https://doi.org/10.1353/book.49259.

Chia, A., L. Mossman, and A. L. Johnston. 2024. “Academic Precarity and Mental Health: Reviewing the Domains of Precarity ‘of'’, ‘at’, and ‘from’ Work”. In *Research Handbook of Academic Mental Health*, edited by M. S. Edwards, A. J. Martin, N. M. Ashkanasy, and L. E. Cox, 168–180. Cheltenham: Edward Elgar Publishing. https://doi.org/10.4337/9781803925080.00017.

DAAD (German Academic Exchange Service). 2024. *Studying in Germany: A Practical Guide for International Students*. Accessed October 1, 2025. https://static.daad.de/media/daad_de/pdfs_nicht_barrierefrei/in-deutschland-studieren-forschen-lehren/daad_sid_en_web.pdf.

Davidson, J. D., F. N. de Oliveira Lopes, S. Safaei, F. Hillemann, N. J. Russell, and H. L. Schaare. 2023. “Postdoctoral Researchers’ Perspectives on Working Conditions and Equal Opportunities in German Academia”. *Frontiers in Psychology* 14: 1217823. https://doi.org/10.3389/fpsyg.2023.1217823.

Deutscher Bundestag. 2021. “Plenarprotokoll 19/236—30598/C”. June 24. https://dserver.bundestag.de/btp/19/19236.pdf.

FEBS Network. 2023. “FEBS Network Survey 2023: Share Your Views”. FEBS Network, November 23. https://network.febs.org/posts/febs-network-survey-2023-share-your-views.

Franz, S. 2019. “Funding and Employment Conditions for Doctoral Researchers in Germany: Between Scholarships and Third-Party Funding”. *Higher Education Policy* 32 (2): 153–171. https://doi.org/10.1057/s41307-018-0102-5.

GEW (Gewerkschaft Erziehung und Wissenschaft). 2021. *Fixed-Term Contracts in the German Academic System: A Guide*. Gewerkschaft Erziehung und Wissenschaft. https://www.gew.de/index.php?eID=dumpFile&f=119032&n=Fixed-Term-Contracts-Guide-2021-A5-web.pdf.

Gravett, K. 2021. "Disrupting the Doctoral Journey: Reimagining Doctoral Pedagogies and Temporal Practices in Higher Education". In "Working in the Borderlands: Critical Perspectives on Doctoral Education", edited by S. Carter, K. Smith, and N. Harrison, special issue, *Teaching in Higher Education: Critical Perspectives* 26 (3): 293–305. https://doi.org/10.1080/13562517.2020.1853694.

Hardy, J. A. 2017. "(Re)conceptualising Precarity: Institutions, Structure and Agency". *Employee Relations: The International Journal* 39 (3): 263–273. https://doi.org/10.1108/ER-06-2016-0111.

Heidt, A. 2023. "Europe Pumps €10 Million into Effort to Combat Brain Drain". *Nature*, February 21. https://doi.org/10.1038/d41586-023-00527-x.

Hlatshwayo, M. N. 2024. "You're Brought in as a Workhorse and There's No Real Security Here! Postdocs, Precarity and the Neoliberal University in South Africa". *Psychology in Society* 66 (2): 26–44. https://doi.org/10.57157/pins2024Vol66iss2a6331.

Kreckel, R. 2017. "University Career Models and International Staff Mobility. Germany, France, Great Britain, USA and Russia Compared". Available at SSRN. https://doi.org/10.2139/ssrn.2924590.

Lorey, I. 2015. *State of Insecurity: Government of the Precarious*. New York: Verso.

Mason, O., and N. Megoran. 2021. "Precarity and Dehumanisation in Higher Education". *Learning and Teaching* 14 (1): 35–59. https://doi.org/10.3167/latiss.2021.140103.

Möller, S. 2018. "The Psychosocial Impact of Precarious Academic Employment in Germany". *Journal of Academic Studies* 25 (4): 567–589.

Möller, T., and S. Hornbostel. 2023. "The Long and Winding Road to Excellence: The German Case". In A*cademic Star Wars: Excellence Initiatives in Global Perspective*, edited by M. Yudkevich, P. G. Altbach, and J. Salmi, 177–202. Cambridge, MA: The MIT Press. https://doi.org/10.7551/mitpress/14601.003.0012.

Murray, D., C. Boothby, H. Zhao, V. Minik, N. Bérubé, V. Larivière, and C. R. Sugimoto. 2020. "Exploring the Personal and Professional Factors Associated with Student Evaluations of Tenure-Track Faculty". *PLoS One* 15 (6): e0233515. https://doi.org/10.1371/journal.pone.0233515.

Musselin, C. 2020. *The Long Road to Tenure: Academic Employment Systems in Comparative Perspective*. Princeton: Princeton University Press.

Muthiah, V. 2024. “Rethinking Precarity”. PhD diss., London School of Economics and Political Science.

Read, B. 2023. “The University as Heterotopia? Space, Time and Precarity in the Academy”. *Access: Critical Explorations of Equity in Higher Education* 11 (1): 1–11.

Rosa, H. 2003. “Social Acceleration: Ethical and Political Consequences of a Desynchronized High-Speed Society”. *Constellations: An International Journal of Critical and Democratic Theory* 10 (1): 3–33. https://doi.org/10.1111/1467-8675.00309.

Spina, N., K. Smithers, J. Harris, and I. Mewburn. 2022. “Back to Zero? Precarious Employment in Academia amongst ‘Older’ Early Career Researchers, a Life-Course Approach”. In “The Academic Precariat: Understanding Life and Labour in the Neoliberal Academy”, edited by S. Burton and B. Bowman, special issue, *British Journal of Sociology of Education* 43 (4): 534–549. https://doi.org/10.1080/01425692.2022.2057925.

Standing, G. 2011. *The Precariat: The New Dangerous Class*. London: Bloomsbury Academic. https://doi.org/10.5040/9781849664554.

Russell, N. J., H. L. Schaare, B. Bellón Lara, Y. Dang, A. Feldmeier-Krause, M.-T. Meemken, and F. N. de Oliveira-Lopes. 2023. *Max Planck PostdocNet Survey Report 2022*. Max Planck Society PostdocNet. https://doi.org/10.17617/2.3507886.

Tomlinson, M. 2024. “Conceptualising Transitions from Higher Education to Employment: Navigating Liminal Spaces”. *Journal of Youth Studies* 27 (8): 1079–1096. https://doi.org/10.1080/13676261.2023.2199148.

Vatansever, A. 2023. “The Making of the Academic Precariat: Labour Activism and Collective Identity-Formation among Precarious Researchers in Germany”. *Work, Employment and Society* 37 (5): 1206–1225. https://doi.org/10.1177/09500170211069830.

Vostal, F. 2014. “Thematising Speed: Between Critical Theory and Cultural Analysis”. *European Journal of Social Theory* 17 (1): 95–114. https://doi.org/10.1177/1368431013505014.

Wendel-Hansen, A. 2024. “Academic Precarity in Germany—#IchBinHanna in #ResearchWonderland”. *1700-Tal: Nordic Journal for Eighteenth-Century Studies* 21: 166–173. https://septentrio.uit.no/index.php/1700/article/view/7697.

Woldegiorgis, E. T. 2024. “Internationalisation of Higher Education under Neoliberal Imperatives: The Political Economy of Student Mobility in Africa”. In *Critical Reflections on the Internationalisation of Higher Education in the Global South*, edited by E. T. Woldegiorgis and C. Q. Yu, 13–31. Leeds: Emerald Publishing Limited. https://doi.org/10.1108/978-1-80455-778-520241002.