

Semantic Shifts of Nationalist Lexemes in German: From Pre-War to Post-War Periods (1918–2024)

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Abstract

This study investigates semantic changes in four historically loaded German political lexemes: *Volk*, *Nation*, *Staat*, and *Land*. These terms denote basic categories of peoplehood, national community, institutional statehood, and territorial belonging, but their use and emotional associations were reshaped by the ideological language of National Socialism and by the political reconstruction of Germany after 1945. Using DWDS as the empirical basis, we compare a pre-war and wartime baseline (1918–1945) with the post-war period (1945–2024). Our study combines frequency analysis, collocation analysis, and LLM-assisted annotation along three dimensions: nationalist intensity, emotional valence, and temporality. The results suggest different trajectories across the four lexemes: *Staat* and *Land* remain comparatively stable as institutional and territorial terms, while *Volk* shows clearer signs of contextual restructuring, semantic distancing, and possible renewed political markedness. *Nation* displays intermediate patterns shaped by historical rupture, reunification, and contemporary political discourse. By integrating corpus-based semantic analysis with conceptual history, our study contributes empirical evidence to debates on post-war German national identity and the linguistic reconfiguration of political concepts.

1 Introduction

The meaning and use of political words can change after major historical events. In post-war German, this problem is especially visible: words such as *Volk* (people or ethno-cultural peoplehood), *Nation* (nation), *Staat* (state), and *Land* (country, land, or homeland) refer to basic political categories—people, nation, state, and country—but they also carry traces of Germany’s twentieth-century history. After 1945, the German public had to address political words carefully, avoiding the ethnic and nationalist language associated with National Socialism.

This historical burden is not accidental. Modern national communities are partly produced through shared language, public narratives, and collective imagination. Anderson (1983) conceptualizes nations as “imagined communities,” emphasizing the role of print culture and shared discourse in making national belonging socially real. In the German case, however, the vocabulary of national belonging was deeply shaped by the ideological language of National Socialism. The Nazi regime did not merely invent new political terms; it also transformed existing words into ideological instruments. Terms related to *Volk* and *Volksgemeinschaft* became especially charged because they were used to construct a racialized community of belonging and exclusion (Schmitz-Berning, 2007; Wildt, 2017).

After the collapse of the Nazi state, Germany underwent political, institutional, and linguistic reconstruction. Denazification, constitutional democratization, Cold War division, European integration, and reunification all reshaped how national identity could be publicly articulated. Post-war German identity was often reoriented away from ethnic nationalism and toward civic or constitutional forms of belonging. Habermas’s idea of constitutional patriotism is central to this discussion: political attachment should be grounded not in ethnic descent or cultural homogeneity, but in democratic procedures and constitutional principles (Habermas, 1998). Later work further developed constitutional patriotism as a model for post-national or civic political identity (Müller, 2007). This background suggests that post-war German discourse may not simply abandon national vocabulary, but change how it is used.

In this work, we examine such changes through a diachronic corpus analysis of four German lexemes: *Volk*, *Nation*, *Staat*, and *Land*. Our study treats them as a related lexical field rather than as isolated words: *Volk* is associated with peoplehood and exclusion, *Nation* with national identity and

statehood, *Staat* with institutional order, and *Land* with territorial and everyday forms of belonging. Following the tradition of conceptual history, or *Begriffsgeschichte*, political concepts are understood as historically unstable semantic structures whose meanings shift through social conflict, institutional change, and historical rupture (Koselleck, 2011). Using DWDS as the empirical basis, this paper takes 1918–1945 as a pre-war and wartime baseline and focuses on post-war developments from 1945 to 2024. The analysis combines frequency analysis, collocation analysis, and contextual evaluation to examine changes in lexical salience, semantic neighborhood, and concrete usage contexts.

Additionally, we use LLM-assisted annotation to analyse sampled sentences containing the target lexemes along three dimensions: nationalist intensity, emotional valence, and temporality. The LLM is used as an auxiliary annotator to provide sentence-level judgments, especially for distinguishing neutral administrative uses from politically loaded or identity-related uses. Recent work suggests that LLMs can support lexical semantic change analysis and annotation, including in historical German data (Periti and Montanelli, 2024; Hagen, 2025). However, since historically burdened words require context-sensitive interpretation, LLM annotations are not treated as final ground truth. Instead, they are interpreted together with frequency trends, collocation patterns, and historical context. We use semantic distancing to describe a process in which a historically burdened lexeme remains in use but used less often for affirmative, identity-building, or future-oriented national discourse.

Our contributions are outlined as follows: (i) we provide a diachronic corpus-based analysis of four historically loaded German political lexemes from a 1918–1945 baseline to the post-war period of 1945–2024; (ii) we combine frequency analysis, collocation analysis, and LLM-assisted annotation to capture both macro-level lexical trends and sentence-level pragmatic variation; (iii) we show how our methods can complement conceptual history by providing empirical evidence of how the use of political words changed in post-war Germany. Our aim is not to claim that these words acquired entirely new meanings, but to show how their frequency, associations, and pragmatic environments changed during the post-war period. Our code and data are available at <https://github.com/yitingtong/cross-temporal-nationalist-lexemes>.

2 Related Work

Lexical semantic change. Computational research on lexical semantic change has increasingly used diachronic corpora and distributional representations to trace how word meanings shift over time. Hamilton et al. (2016) showed that diachronic word embeddings can quantify semantic change across historical corpora, while later surveys systematized the field and highlighted methodological challenges in comparing meanings across periods (Kutuzov et al., 2018; Tahmasebi et al., 2021). Evaluation has therefore become a central issue: DUREl operationalizes semantic change through diachronic usage relatedness judgments (Schlechtweg et al., 2018), and SemEval-2020 Task 1 standardized unsupervised lexical semantic change detection across multiple languages, including German (Schlechtweg et al., 2020). Recent work has also explored LLM-based approaches to semantic change: Periti and Montanelli (2024) survey the field, while Hagen (2025) examines LLM-based annotation using historical German data. These studies provide the methodological background for the present paper, but our focus is not open-ended change detection. Instead, we adopt a historically motivated target-word design and ask how frequency, collocation, and contextual evaluation can illuminate the post-war reconfiguration of politically loaded German lexemes.

German political concepts. The target words of this study—*Volk*, *Nation*, *Staat*, and *Land*—belong to the vocabulary of political belonging, collective identity, and statehood. Conceptual history, or *Begriffsgeschichte*, treats such concepts as historically unstable units whose meanings shift through social conflict, institutional transformation, and historical rupture (Koselleck, 2011; Brunner et al., 1972–1997). This perspective is relevant because political words often change not only by acquiring new dictionary senses, but also through shifts in salience, collocation, evaluation, and pragmatic acceptability. The longer history of *Volk* and *Nation* shows that these terms were already politically charged before the twentieth century: Schöнемann (1989) traces their development in Germany and France between 1760 and 1815, when both became central to modern political language. National Socialism then intensified and racialized this semantic field. The Nazi regime transformed existing political vocabulary into ideological instruments (Schmitz-Berning, 2007), and *Volk* and *Volksge-*

meinschaft became tied to racialized inclusion and exclusion, a problem that continues to shape contemporary debates (Wildt, 2017). This historical burden makes *Volk* especially relevant for studying lexical taboo, avoidance, and pragmatic reconfiguration in post-war German discourse.

Post-war nationalism in Germany. After 1945, German public discourse had to negotiate the need for collective identity with the moral discrediting of ethnic nationalism. This tension became visible again after reunification, when questions of nationhood, race, immigration, and belonging re-entered public debate (Huysen, 1994; Götz, 2016). The theory of constitutional patriotism captures one influential post-war response: political belonging is grounded less in ethnic or cultural nationalism than in democratic procedures, constitutional norms, and civic principles (Müller, 2007). This background motivates our comparison of *Volk*, *Nation*, *Staat*, and *Land*: while *Volk* and *Nation* may remain historically sensitive, *Staat* can function as a more institutional term, and *Land* may offer a more flexible vocabulary of territorial belonging. Neighboring concepts such as *Vaterland* (fatherland) and *Heimat* (homeland or home region) further show that German belonging is distributed across overlapping but politically distinct terms (Kreklaue, 2025; Rau and Schütz, 2024).

Computational work has begun to connect semantic change with nationalist vocabulary. Timmermans et al. (2022) analyze Dutch *vaderland*, *volk*, and *natie* as a diachronic semantic field, while Atzenhofer (2023) develops a quantitative approach to nationalist discourse in twentieth-century Germany. However, fewer studies combine computational semantic change, German historical semantics, and post-war public discourse in a word-centered analysis. This study addresses this gap by examining how *Volk*, *Nation*, *Staat*, and *Land* change in frequency, collocational profile, and contextual evaluation in the DWDS corpus.

3 Our Dataset

The empirical foundation of this study is drawn from two corpora provided by the DWDS (Digital Dictionary of the German Language) (Berlin-Brandenburgische Akademie der Wissenschaften, 2026). The study focuses on four central lexemes: *Volk*, *Nation*, *Staat*, and *Land*. For the pre-war baseline analysis (1918–1945), data were obtained from the DWDS *Gegenwartskorpora* in

order to ensure broader historical coverage of early twentieth-century discourse. For the post-war analysis (1945–2024), including frequency analysis, collocation analysis, and sentence sampling, the study relies on the DWDS *Zeitungskorpus*. Newspaper discourse was selected for its ability to reflect mainstream public communication and its rapid response to socio-political shifts over time. This design choice was made to maintain corpus consistency in the post-war period and to reduce potential distortions caused by the differing political and ideological language environments of East and West Germany during the Cold War. For the pre-war baseline, the period 1918–1945 is divided into two historically distinct phases: 1918–1932, corresponding to the Weimar Republic, and 1933–1945, corresponding to the Nazi period. The post-war period is further stratified into four historical phases: 1946–1969 (post-war reconstruction), 1970–1989 (Cold War consolidation), 1990–2004 (post-reunification), and 2005–2024 (contemporary era).

Using a balanced random sampling strategy, we randomly sampled 500 sentences for each target lexeme from each of the six historical periods. This resulted in 3,000 sentences per lexeme and a total of 12,000 sentences. Within each period, the sampled sentences were approximately evenly distributed across the constituent years. To ensure data integrity, the raw fragments were integrated into a unified database and processed using Python. Regular expressions (Regex) were applied to strip non-linguistic noise, such as HTML tags and metadata artifacts. All entries were then standardized and chronologically ordered, resulting in a clean and structured dataset for the subsequent LLM-assisted semantic-pragmatic analysis.

4 Our Methods

4.1 Frequency and Collocation

This study first conducts a macro-level corpus analysis using the built-in tools of the DWDS platform. Two indicators are used to identify long-term discursive trends: frequency change and collocation change. First, the DWDS frequency plotting tool is used to generate normalized frequency curves for the four target lexemes (*Volk*, *Nation*, *Staat*, and *Land*) across the period 1918–2024. Frequency patterns provide an overview of how prominent these terms are in public discourse over time. Although frequency changes do not directly indicate

semantic change, they can signal shifts in discursive salience, such as phases of decline, stabilization, or resurgence.

Second, collocation analysis was conducted using the DWDS DiaCollo tool. We used the logDice association measure, 10-year temporal slices, and the collocation-profile view. The resulting collocation profiles were compared across time to identify changes in the lexical environments of the four target lexemes.

The analysis assumes that a word's meaning and discursive function are partly reflected in its typical lexical environment. Changes in collocational patterns may therefore indicate shifts in semantic association and ideological framing. By combining normalized frequency trajectories with collocation profiles, the macro-level analysis provides complementary evidence about changes in the discursive salience and contextual use of the target lexemes.

4.2 LLM-Assisted Annotation

We use OpenAI's gpt-5-mini model via API to annotate 12,000 sentences within our corpus. In prompt construction, the model is assigned the persona of an "expert in German conceptual history and political linguistics." Crucially, the prompts are authored in German to ensure that the model operates within the linguistic and conceptual framework of the historical material. For each sentence, the specific year, keyword, and text are dynamically injected into the prompt to provide the necessary historical context.

To ensure structured data for subsequent quantitative analysis, the model outputs results in JSON format containing four variables: nationalist intensity, emotional valence, temporality, and brief reasoning. For computational efficiency, the full corpus is processed using multi-threaded execution to handle requests concurrently. The system also includes a checkpointing mechanism to track annotation progress and avoid redundant processing in case of interruptions. Finally, results are periodically saved to local storage during processing to ensure the integrity and safety of the generated data.

4.3 Annotation Dimensions

We define three dimensions for evaluating the target lexemes. To bridge computational annotation with humanities-oriented discourse analysis, each dimension is grounded in established theories from nationalism studies, memory studies, and concep-

tual history. These theories are used as conceptual anchors for designing the annotation criteria, rather than as direct quantitative measurement models. They are also incorporated into the LLM prompt so that the automated scoring is guided by historically informed interpretive categories.

Dimension 1: Nationalist Intensity (Scale 1–5)

Drawing on the distinction between civic and ethnocultural understandings of nationhood in nationalism studies (Brubaker, 1992), this dimension measures the extent to which a keyword is embedded in a civic, constitutional, ethnic, or biological framing of collective identity. In the German post-war context, this distinction is particularly relevant because national identity was often rearticulated through the idea of constitutional patriotism, or *Verfassungspatriotismus*: democratic loyalty to constitutional and institutional values rather than to ethnic origin (Habermas, 1990). Accordingly, a score of 1 indicates a primarily civic-democratic context, a score of 3 denotes a neutral reference to the population or political community, and a score of 5 indicates a strongly ethnic, biological, or *völkisch* orientation. Scores of 2 and 4 capture intermediate or transitional cases along this continuum.

Dimension 2: Emotional Valence (Scale 1–5)

This dimension assesses the affective framing of the keyword, which is especially important in the context of German *Vergangenheitsbewältigung* (coming to terms with the past). Grounded in memory studies and the concept of cultural memory (Assmann, 2006), this dimension captures whether a lexical item is presented as historically burdened, emotionally neutral, or positively reclaimed. A score of 1 identifies the keyword as an object of caution, shame, or historical burden; a score of 3 indicates a descriptive or neutral use; and a score of 5 frames the term as a marker of uncritical pride or positive identity-building. Scores of 2 and 4 capture more nuanced affective gradients, including cases of cautious rehabilitation or critical scrutiny.

Dimension 3: Temporality (Categorical)

This dimension draws on the tradition of *Begriffsgeschichte* (conceptual history) and examines whether a term is framed as a relic of the past, a neutral present-day descriptor, or a concept oriented toward future political expectations. In Koselleck's account of historical semantics, political concepts do not merely describe social reality; they mediate between the "space of experience" (*Er-*

Dimension	H-H α	H-H κ	LLM-A1	LLM-A2
Nationalist intensity	.710	.830 [†]	$\rho = .798$	$\rho = .871$
Emotional valence	.820	.821 [†]	$\rho = .919$	$\rho = .880$
Temporality	.844	.843	$\kappa = .917$	$\kappa = .886$

Table 1: Human–human and LLM–human agreement on the 120-instance validation sample. [†] Quadratic-weighted Cohen’s κ . A1 and A2 denote the two annotators.

fahrungsraum) and the “horizon of expectation” (*Erwartungshorizont*) (Koselleck, 1985). Based on this framework, the model assigns each keyword occurrence to one of three temporal categories: “historical/obsolete” (*historisch/überholt*), “present/neutral” (*gegenwärtig/neutral*), or “future-oriented/projected” (*zukünftig/projiziert*). This dimension allows us to examine whether a concept such as *Volk* is primarily anchored in past political experience or mobilized to articulate future-oriented collective expectations.

4.4 Human Evaluation

To assess the reliability of the LLM-generated annotations, we conducted an additional human annotation study following the full-scale annotation of the 12,000-sentence corpus. We randomly sampled 20 instances from each of the six historical periods, yielding 120 instances in total. The complete sample was independently annotated by two annotators who did not have access to each other’s labels. One annotator had a background in German linguistics, while the other had a background in German history.

We first measured human–human agreement to evaluate the reliability of the annotation framework. For the ordinal dimensions, nationalist intensity and emotional valence, we calculated ordinal Krippendorff’s α and quadratic-weighted Cohen’s κ . For the categorical temporality dimension, we used nominal Krippendorff’s α and unweighted Cohen’s κ . Agreement between the two annotators ranged from $\alpha = 0.710$ to 0.844 and from $\kappa = 0.821$ to 0.843 .

We then compared the LLM annotations separately with those of each annotator. For nationalist intensity and emotional valence, we used Spearman’s rank correlation coefficient (ρ); for temporality, we used Cohen’s κ . As shown in Table 1, agreement between the LLM and the two annotators ranged from 0.798 to 0.919 . These results in-

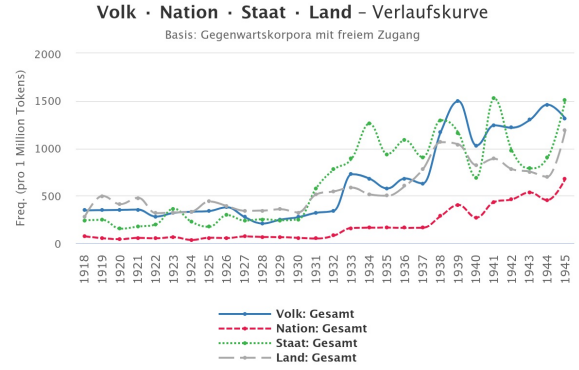


Figure 1: Pre-war and Nazi-era frequency trends (1918–1945) of *Volk*, *Nation*, *Staat*, and *Land* in the DWDS *Gegenwartskorpora mit freiem Zugang*. The figure was generated directly from the DWDS frequency interface (Berlin-Brandenburgische Akademie der Wissenschaften, 2026).

dicate that the LLM annotations correspond closely with the human annotations on the validation sample, while the comparatively lower agreement for nationalist intensity also reflects the greater interpretive difficulty of this dimension.

5 Results

5.1 Macro-level Trends: Frequency and Collocation

Historical baseline (1918–1945). To avoid interpreting post-war developments in isolation, the analysis first introduces a pre-war and Nazi-era frequency baseline. As shown in Figure 1, the four lexemes already followed differentiated trajectories before 1945. *Volk* remains relatively stable during the Weimar period, but rises markedly after 1933, reaching its highest levels in the late 1930s and early 1940s. This suggests that *Volk* became more discursively salient during the Nazi period, although frequency alone cannot determine the precise ideological function of each occurrence.

Nation also increases after 1933, but remains less frequent overall than *Volk*, *Staat*, and *Land*. *Staat* and *Land* show comparatively high frequencies across the period, indicating that they were not marginal terms, but central elements of political and administrative discourse. This baseline is important because it shows that the four lexemes entered the post-war period with different levels of discursive prominence.

Post-war frequency trends (1945–2024). The DWDS newspaper corpus reveals distinct post-war

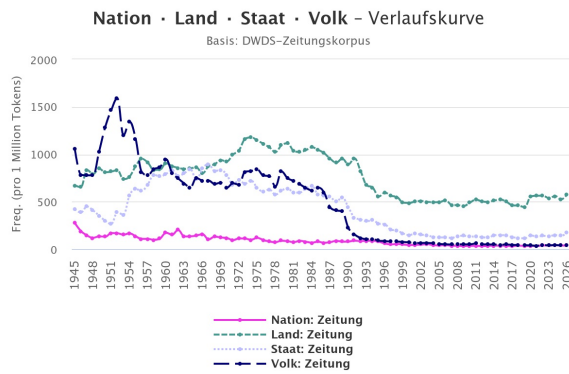


Figure 2: Post-war frequency trends (1945–2024) of *Volk*, *Nation*, *Staat*, and *Land* in the DWDS *Zeitungskorpus*. Frequencies are normalized per million tokens, and the figure was generated directly from the DWDS frequency interface (Berlin-Brandenburgische Akademie der Wissenschaften, 2026).

frequency trajectories for the four national and state-related lexemes. As shown in Figure 2, *Volk* shows the most pronounced long-term decline. It remains highly frequent in the immediate post-war years, but decreases substantially after the late 1980s and reaches a much lower level in the post-reunification period.

This pattern does not by itself prove lexical tabooing. However, the contrast with the other lexemes suggests that the decline of *Volk* was not simply part of a general reduction in national vocabulary. *Land* remains highly frequent throughout the post-war period, especially from the 1970s onward, while *Staat* stabilizes at a lower but persistent level after the early 1990s. *Nation* remains the least frequent of the four lexemes across most of the period. Taken together, these patterns suggest a differentiated restructuring of national vocabulary after 1945, with *Volk* showing the clearest pattern of declining public-discursive salience.

Collocational shifts. The collocation analysis complements the frequency trends by examining the lexical environments in which the four terms occur. As shown in Figure 3, the four lexemes are associated with different semantic domains. *Staat* is frequently linked to institutional, legal, and political vocabulary, which is consistent with its role as a term for statehood and governance. *Land* is often embedded in territorial, regional, and administrative contexts. *Nation* appears in more explicitly political and international contexts.

The profile of *Volk* is more heterogeneous. Its collocates include terms related to collective iden-

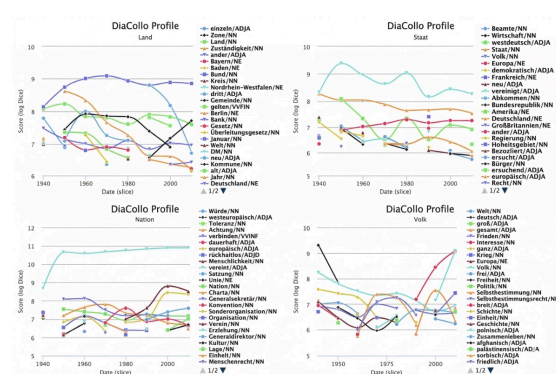


Figure 3: Diachronic collocation profiles of the four lexemes *Land*, *Staat*, *Nation*, and *Volk* in the DWDS *Zeitungskorpus*, showing changes in their most significant collocates across historical periods. The figure was generated directly from the DWDS DiaCollo interface (Berlin-Brandenburgische Akademie der Wissenschaften, 2026).

tity, historical reference, self-determination, and national or ethnic group labels. This suggests that *Volk* did not become a neutral substitute for population or citizens in the post-war period. Rather, it continued to appear in contexts where collective identity was historically or politically marked.

The frequency and collocation analyses suggest that post-war German discourse did not abandon national vocabulary as such. Instead, the four lexemes became functionally differentiated: *Staat* and *Land* remained relatively stable institutional or territorial terms, *Nation* occupied a more restricted political register, and *Volk* showed the clearest evidence of declining frequency combined with continued historical and political markedness.

5.2 Nationalist Intensity: From Ethnic Mobilization to Residual Markedness

The macro-level analysis suggests that the four lexemes differ not only in frequency and collocational environment, but also in their ideological load. Figure 4 shows the diachronic development of nationalist intensity scores. The main pattern is clear: *Volk* consistently receives the highest scores, especially in the 1930s and early 1940s. In this period, it often appears in contexts with stronger ethnic, collective, or nationalist associations.

After 1945, the intensity of *Volk* declines, but it does not fully converge with *Staat* or *Land*. Across much of the post-war period, *Volk* remains more ideologically marked than these two terms. This suggests that the word was not simply abandoned or

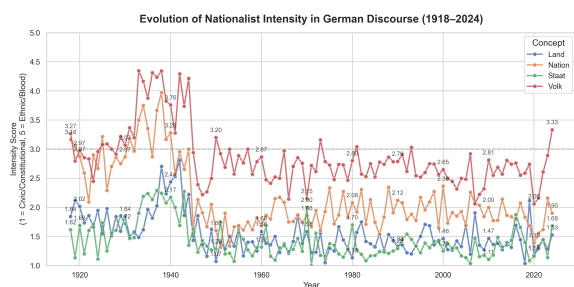


Figure 4: Diachronic development of nationalist intensity scores for the four target lexemes (*Volk*, *Nation*, *Staat*, and *Land*) from 1918 to 2024, based on LLM-assisted annotation of 12,000 sampled DWDS sentences using gpt-5-mini. Scores range from 1 = civic-democratic or constitutional framing to 5 = strongly ethnic, biological, or *völkisch* framing.

neutralized. Rather, it became a more restricted and context-sensitive expression of collective identity.

The other lexemes show different profiles. *Staat* and *Land* remain mostly in the lower range, indicating more institutional, territorial, or administrative uses. *Nation* occupies an intermediate position: it is more politically marked than *Staat* and *Land*, but less consistently intense than *Volk*. These differences support the view that post-war German national vocabulary did not change as a single block. Instead, ideological load was redistributed across the lexical field.

A recent rise in the score of *Volk* is visible in the final years of the series. This should be interpreted cautiously, since the analysis does not identify the specific actors or discourse communities behind these occurrences. Still, the pattern provides limited evidence of possible renewed political markedness in some contemporary uses of *Volk*.

5.3 Emotional Valence: The Decline of Positive National Affect

Nationalist intensity captures the ideological dimension of the lexemes, but it does not fully capture their affective tone. Emotional valence therefore provides a complementary perspective on whether these terms are framed positively, neutrally, or critically.

Figure 5 presents the 5-year rolling average of emotional valence scores. The main contrast is between the pre-1945 and post-1945 periods. In the late 1930s and early 1940s, *Volk* and *Nation* reach relatively high positive values, suggesting that they often appeared in affirmative or identity-building

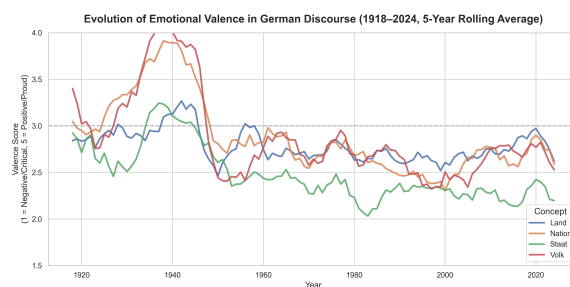


Figure 5: Five-year rolling average of emotional valence scores for the four target lexemes from 1918 to 2024, based on LLM-assisted annotation of 12,000 sampled DWDS sentences using gpt-5-mini. Scores range from 1 = historically burdened, critical, or cautionary framing to 5 = pride-oriented or identity-building framing; 3 indicates neutral or descriptive usage.

contexts. After 1945, this positive affective charge declines, and the scores remain closer to the neutral midpoint.

For *Volk*, this pattern is particularly relevant. Its post-war change is not only a matter of lower frequency, but also of weaker positive framing. In the post-war data, *Volk* is less often associated with clear pride or collective affirmation. Instead, its valence becomes more restrained, usually fluctuating around neutral or mildly critical values.

Nation follows a similar but less central trajectory. It also shows higher positive valence before 1945 and a decline thereafter, but its lower overall frequency makes the pattern less pronounced. *Land*, by contrast, remains comparatively stable and close to neutral, which is consistent with its territorial and everyday uses.

Staat shows a different profile. Its valence drops during parts of the 1970s and 1980s, suggesting more critical framings of state authority or institutional legitimacy. This should not be read as a direct measure of public trust, but as evidence of changing linguistic context. Unlike *Volk*, the lower valence of *Staat* appears to be linked less to ethnic-national identity than to debates about state institutions.

5.4 Temporal Framing of *Volk*: From Future Projection to Historical Constraint

The preceding analyses show that *Volk* combines frequency decline with residual ideological and affective markedness. The final analysis asks how the temporal orientation of this term changed: whether it was used as a concept of the past, the present, or the future. Figure 6 focuses on the temporal

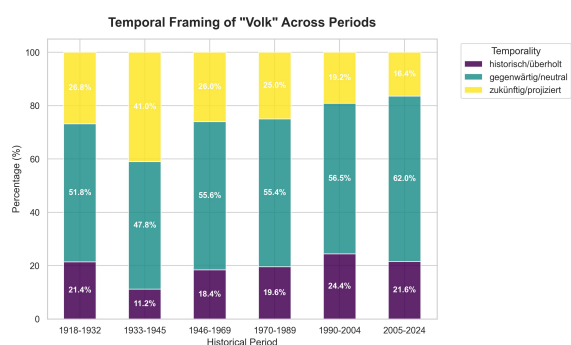


Figure 6: Distribution of temporal framing categories for *Volk* across six historical periods, based on LLM-assisted annotation of sampled DWDS sentences using gpt-5-mini. Each occurrence was classified as historical/obsolete, present/neutral, or future-oriented/projected; percentages indicate the share of annotated *Volk* occurrences within each period.

framing of *Volk* across the six historical periods. The clearest pattern is a decline in future-oriented framing. During the Nazi period, 41.0% of sampled occurrences are classified as future-oriented or projected, the highest proportion across all periods. After 1945, this share declines to 26.0% in 1946–1969 and 25.0% in 1970–1989, before falling further to 19.2% in 1990–2004 and 16.4% in 2005–2024. This suggests that *Volk* gradually lost much of its function as a language of collective political projection.

At the same time, present-oriented and neutral framing becomes more prominent, rising from 47.8% in 1933–1945 to 62.0% in 2005–2024. This does not mean that *Volk* became fully neutral. Rather, contemporary uses appear more often tied to specific descriptive contexts than to explicit projects of collective destiny or national future. The historical or obsolete category also reaches its highest value in 1990–2004, accounting for 24.4% of occurrences. While the data do not prove that reunification caused this increase, they suggest that references to *Volk* in this period were often embedded in retrospective or historically reflective contexts.

Taken together, the temporal results suggest that the post-war history of *Volk* is not a story of disappearance, but of narrowing. Frequency decline shows that the term became less common, while the intensity, valence, and temporality results indicate a more specific shift: *Volk* lost much of its earlier affirmative and projective force, but retained stronger historical and political markedness than

Staat, Land, or Nation.

6 Conclusion

This study examined the cross-temporal development of four German national and state-related lexemes: *Volk*, *Nation*, *Staat*, and *Land*. Combining DWDS frequency and collocation data with LLM-assisted sentence-level annotation, the analysis traced changes in frequency, semantic environment, nationalist intensity, emotional valence, and temporal framing from 1918 to 2024.

The results show that post-war German national vocabulary did not change uniformly. *Staat* and *Land* remained relatively stable as institutional and territorial terms, while *Nation* occupied a more restricted political register. *Volk*, by contrast, shows the clearest transformation: its frequency declined after 1945, but its collocations and sentence-level scores indicate continued historical and political markedness.

The annotation-based results further show that *Volk* lost much of its earlier positive affective and future-oriented force. At the same time, it did not become a neutral equivalent of population or citizens. Its nationalist intensity remained higher than that of *Staat* and *Land*, and its temporal framing shifted toward present description and historical reflection.

Overall, the findings suggest that post-war change is best understood as functional differentiation rather than simple disappearance. More institutional terms remained broadly usable, while historically charged terms such as *Volk* became more context-sensitive. In this sense, *Volk* appears not as a vanished word, but as a constrained one.

7 Limitations

The findings of this study should be read as evidence about public written discourse rather than German language use as a whole. The analysis relies on selected DWDS corpora, whose coverage, genre composition, and editorial structure shape the patterns that can be observed. Newspaper discourse is especially useful for tracing long-term public language, but it does not capture spoken interaction, private writing, regional communication, educational materials, or literary uses. These domains may preserve, avoid, or reinterpret national vocabulary in different ways.

The historical comparison is also shaped by corpus design. The pre-war baseline and the post-war

analysis are drawn from different DWDS resources. This allows the study to place post-war developments against an earlier historical background, but it also limits the extent to which changes across 1945 can be treated as purely lexical change. For this reason, the pre-war data are used mainly as a contextual baseline rather than as a fully symmetrical comparison with the post-war newspaper corpus.

The LLM-assisted annotations should be understood as an operationalization of contextual framing under the predefined coding scheme, rather than as a direct measurement of social attitudes or ideological commitments. The nationalist-intensity, emotional-valence, and temporality labels do not directly reveal speaker intention, reader perception, or the psychological experience of taboo. A sentence containing *Volk*, for example, may occur in historical reporting, quoted political speech, criticism, irony, administrative discourse, or extremist rhetoric. Similar surface vocabulary may therefore perform substantially different pragmatic functions.

Although the validation study indicates substantial correspondence between the LLM and both human annotators, the labels remain model-assisted interpretations of context-sensitive material. A decline in frequency may indicate reduced public-discursive salience, but it does not by itself demonstrate deliberate avoidance or a corresponding change in broader social attitudes.

The study also focuses on only four lexemes: *Volk*, *Nation*, *Staat*, and *Land*. These terms capture important contrasts within German national vocabulary, but they do not exhaust the broader lexical field of collective identity. Related terms such as *Bevölkerung*, *Bürger*, *Gemeinschaft*, *Heimat*, and *Vaterland* may reveal further patterns of replacement, avoidance, or refunctionalization. Extending the analysis to a wider lexical network would make it possible to test whether the constrained status of *Volk* is an isolated development or part of a broader redistribution of collective identity vocabulary in post-war German.

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A Appendix

A.1 A Prompt Design for LLM-Assisted Analysis

To ensure transparency and reproducibility, the original German prompt used for the automated content analysis (ACA) via the gpt-5-mini API is provided below. The variables {year}, {keyword}, and {sentence} were dynamically injected for each of the 12,000 requests. An English translation is provided for reference.

A.2 Original German Prompt (Used in the API)

Du bist ein Experte für die deutsche Begriffsgeschichte und politische Linguistik. Analysiere den folgenden Satz im Kontext der deutschen Vor- und Nachkriegszeit (Jahr: {year}).
Fokus-Wort: “{keyword}”
Satz: “{sentence}”

Bewerte das Fokus-Wort in diesem Satz nach folgenden DREI Kriterien:

1. Nationalistische Intensität (intensity): Tendiert der Kontext eher zur “Blutsgemeinschaft” oder zur “Verfassungsgemeinschaft”?
Antworte mit einem ganzzahligen Wert von 1 bis 5. (1 = rein staatsbürgerlich/demokratisch/Verfassungsgemeinschaft, 3 = alltäglich/Bevölkerung, 5 = stark ethnisch/biologisch/Blutsgemeinschaft).

2. Emotionale Valenz (valence): Erscheint das Wort als “Symbol des Stolzes” oder als “Objekt der Reflexion/Mahnung”?
Antworte mit einem ganzzahligen Wert von 1 bis 5. (1 = Objekt der Mahnung/Kritik/historisch belastet, 3 = neutral/deskriptiv, 5 = Symbol des Stolzes/identitätsstiftend).

3. Temporalität (temporality): Wird das Konzept eher als etwas “Vergangenes”

oder als etwas “Zukünftiges/Projiziertes” dargestellt?

Wähle exakt eine dieser drei Kategorien: “historisch/überholt”, “gegenwärtig/neutral”, “zukünftig/projiziert”.

4. Begründung (reasoning): Ein kurzer, präziser Satz zur Begründung.

Antworte AUSSCHLIESSLICH im strengen JSON-Format. Beispiel:

```
{"intensity": 1, "valence": 3, "temporality": "gegenwärtig/neutral", "reasoning": "Bezieht sich auf den souveränen Wähler."}
```

(historical/obsolete), “gegenwärtig/neutral” (present/neutral), or “zukünftig/projiziert” (future-oriented/projected).

4. Reasoning (reasoning): A short, precise sentence providing the rationale.

Answer EXCLUSIVELY in strict JSON format. Example:

```
{"intensity": 1, "valence": 3, "temporality": "gegenwärtig/neutral", "reasoning": "Refers to the sovereign voter."}
```

A.3 English Translation of the Prompt

You are an expert in German conceptual history and political linguistics. Analyze the following sentence in the context of the German pre- and post-war periods (Year: {year}).

Focus word: “{keyword}”

Sentence: “{sentence}”

Evaluate the focus word in this sentence according to the following THREE criteria:

1. Nationalist Intensity (intensity): Does the context tend more towards a “blood community” (*Blutsgemeinschaft*) or a “constitutional community” (*Verfassungsgemeinschaft*)?

Answer with an integer value from 1 to 5. (1 = purely civic/democratic/constitutional community, 3 = everyday/population, 5 = strongly ethnic/biological/blood community).

2. Emotional Valence (valence): Does the word appear as a “symbol of pride” or an “object of reflection/warning”?

Answer with an integer value from 1 to 5. (1 = object of warning/criticism/historically burdened, 3 = neutral/descriptive, 5 = symbol of pride/identity-building).

3. Temporality (temporality): Is the concept presented more as something from the “past” or as something “future-oriented/projected”?

Choose exactly one of these three categories: “historisch/überholt”