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Humanities in Crisis: A Study of 65 Years of American Dissertation Trends

Natural Language Processing of 443,543 Doctoral Dissertations in the Humanities and Social Sciences, 1960–2025

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Humanities in Crisis: A Study of 65 Years of American Dissertation Trends presents our findings in accessible, non-technical language; it is intended for wide circulation.

A companion technical report, *Humanities in Crisis: Quantitative Analysis of 65 Years of American Dissertation Trends* presents the same findings but includes statistical details and methodological discussion. It is available at `https://academysciencesletters.org/humanities-in-crisis/technical`.

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Preface

In Spring of 2024 the President of the American Academy of Sciences and Letters appointed a committee of six AASL members, chaired by Carlos Eire, to produce a white paper on the Crisis of the Humanities. The white paper was to identify the most pressing threats faced by humanities programs, as well as the probable causes of the current crisis, and to provide hard data on the material, intellectual, and cultural losses created by that crisis. It was also to suggest possible ways of stemming or reversing these losses. Josiah Ober, as a member of the committee, agreed to take the lead in writing a preliminary version of the paper. Ober subsequently enlisted Rachel George as co-author and project manager, and Kirill Kalinin as co-author and data scientist.

After conducting an extensive literature review on the nature, causes, and ramifications of the crisis, our team decided to use natural language processing to analyze the terminology employed in American PhD dissertations in the humanities and social sciences, written between 1960 and 2025. Our premise was that PhD dissertations, written within a given field at a given time, provide a uniquely clear window into the language and underlying conceptual assumptions dominant in that field at that time. This is because dissertation writers, seeking approval and certification by committees of senior disciplinary scholars, must be acutely attentive to what they perceive to be the terminological and conceptual norms of their chosen discipline. Our hope was that using computational methods to track changes over time in dissertation terminology, and the valuation of certain terms, based on the verbal context in which those terms were deployed, would reveal patterns that bear on the questions that the AASL Committee was charged with investigating. This report, jointly written by Ober, George, and Kalinin, is the result of our work.

This project could not have been completed without the help of many others. The authors thank Don Landry, President of AASL, Carlos Eire, and the members of the AASL Humanities Crisis committee—Flora Champy, Steven Justice, Jon Levenson, and Noel Valis. Each offered us valuable insights, suggestions, and made substantive contributions to the project. Jacob Light and Justin Grimmer reviewed the statistical methods; each presented a detailed series of suggestions, some of which have been incorporated in this study; others may be incorporated in future work. Greg Forster provided efficient and friendly administrative support. The team at ProQuest TDM—Brandon Williams, John Dillon—was generous with their time and expertise in giving us access to the dissertation data.

While our conclusions are largely descriptive, we hope that studying a very large body of relevant texts—produced by scholars at beginning of their academic careers—will contribute to the goal of better understanding the causes and effects of developments that are widely, and we believe, correctly, perceived as a crisis in the humanities.

This report is a first step—we recognize that the dissertation data could fruitfully be analyzed using different methods and asking different questions. Meanwhile, those wishing to examine our methods of data collection and analysis, should consult the companion technical paper available at https://academysciencesletters.org/humanities-in-crisis/technical.

Executive Summary

About This Report

This report, commissioned by the American Academy of Sciences and Letters, examines 65 years of American academic research in the humanities by analyzing the content and sentiment of 443,543 PhD dissertations written between 1960 and 2025. These dissertations were written in programs in the Humanities, Arts, and Social Sciences at 678 universities across the United States. The data comes from the ProQuest TDM Studio archive.

What Makes This Study Different

Unlike studies that look only at dissertation titles or abstracts, this analysis examines the complete text of each dissertation—titles, abstracts, and the full body of the work. This comprehensive approach allows us to identify patterns across the entire body of scholarly writing by scholars at the beginning of their academic careers.

What We Analyzed

Using this dataset, we conducted several types of analysis to better understand the terminology and underlying concepts employed in humanities research. This helps us move beyond broad claims about a "crisis" in the humanities by looking at actual evidence. Specifically, we:

- Measured how often certain types of academic language appear across five different subject areas
- Analyzed the tone and emotional associations of nine important terms by examining the words used near them in the text
- Tracked changes in both vocabulary and tone year by year from 1960 to 2025

Together, these methods show us how intellectual trends in these fields have evolved over 65 years, as reflected in the language choices of doctoral students. By including Social Science dissertations alongside Humanities dissertations, we can also compare humanistic fields with another major area of academic study outside of science, technology, engineering, mathematics, and professional programs (like business or law).

How We Analyzed the Data

We examined the dissertation collection in four different ways. Each method helps us answer different questions about how American doctoral research has changed over time.

1. **Counting Dissertations**

   First, we simply counted how many dissertations were written each year, broken down by broad academic field (Humanities and Arts, Social Sciences) and sub-fields as follows:

   Humanities and Arts: History & Related Fields, Literature & Language, Philosophy & Theology, Interdisciplinary Studies

   Social Sciences: Social Science I (Economics, Political Science & Related Fields), Social Science II (Anthropology, Communications, Psychology, Sociology & Related Fields)

This gives us a direct measure of the size and direction of doctoral education in the Humanities and Social Sciences across 678 universities from 1960 to 2025 (443,543 dissertations total).

2. Tracking Key Vocabulary

Next, we used computer text analysis (called Natural Language Processing, or NLP) to count how often certain types of vocabulary appeared in dissertations—and how this changed over time. We focused on five categories of words that help us understand trends in the humanities:

1. *Facts/Truth* – words related to truth, evidence, and factual claims
2. *Power* – words about authority, control, and influence
3. *Evaluation* – words that judge or assess value
4. *Aesthetics* – words about beauty, art, and artistic quality
5. *Identity* – words about personal and group identity

For each category, we created a list of between 60 and 105 related terms and had the computer count how often they appeared in each dissertation (see Section 2.2 for the complete word lists).

3. Measuring Tone Toward Specific Terms

Third, we analyzed whether nine specific terms illustrative of changes in sentiment toward concepts within the humanities were discussed in positive or negative ways: *Truth, Power, History, American, European, Western, Identity, Subversive,* and *Activism*.

To do this, we examined the words that appeared near each term (within five words before or after). We then compared these surrounding words against established databases that rate words as positive or negative. This gave each term a score from −1 (very negative) to +1 (very positive).

4. Statistical Modeling

Finally, we used statistical models to verify our findings across different groups of universities. We looked at both:

- A consistent group of 10 universities with data for every year from 1960 to 2025
- All 678 universities in our dataset

These models help us separate general trends over time from differences between individual universities. (Technical note: we controlled for unchanging characteristics of each university and isolated year-by-year trends, with statistical adjustments for repeated measurements from the same institutions.)

What We Found

1. Dissertation Numbers Show a Decline in Humanities

The total number of dissertations supports concerns regarding a "crisis" in the humanities; these fields appear to be less attractive to advanced students, as evidenced by the number of dissertations completed and registered in the standard ProQuest repository.

Combined Humanities and Social Sciences dissertations peaked at about 13,408 per year in 2015, then dropped sharply. However, the decline isn't equal:

- Humanities fell by nearly 49% from the 2015 peak

- Social Sciences fell only 4.5%
- By 2025, Social Sciences account for 64% of all dissertations (compared to 43% in 1960)

An interesting pattern emerged within Social Sciences: Fields like Anthropology, Psychology, and Communications (what we call Social Science II) experienced much less decline than did Economics and Political Science (Social Science I). In fact, Social Science II grew continuously from 1960 to 2020—a 70-fold increase over 60 years. By 2025, it accounted for over 40% of all dissertations in our study.

This pattern contradicts a simple explanation that students are merely migrating toward math-heavy STEM fields. Instead, students are sometimes choosing social science programs that, in their methods and questions, overlap substantially with the humanities.

2. How Academic Vocabulary Has Changed

Facts/Truth vocabulary is the most common category overall and has actually *increased* since the 1960s. This is strong evidence that truth-seeking language hasn't disappeared from academic writing.

Power vocabulary surged sharply starting around 1988, especially in Literature and Language programs. During the 1990s, Power vocabulary in Language and Literature programs overtook both *Evaluation* and *Aesthetics*.

Identity vocabulary has risen steadily since 1980 and is now as common as Evaluation vocabulary (as of 2022). The sharpest growth is in Literature/Language, Interdisciplinary Studies, and Social Science II, with a dramatic acceleration after 2019. Our statistical models show *Identity* vocabulary growing at 5–8% per year—meaning it doubles every 8–12 years. This is much faster than any other category.

Aesthetics vocabulary (words about beauty and art) has declined modestly but steadily across all fields since 1988. The drop is most notable in Literature/Language, where *Power* and *Identity* vocabulary have replaced it as the second-most-common category.

As a subfield, **Philosophy & Theology** shows the most stable vocabulary patterns of any sub-field and is the only one where Evaluation vocabulary has remained more common than Power vocabulary.

3. How Tone Toward Key Terms Has Changed

As a single term, *Truth* is more positively valued (based on verbal context) than any other term we tracked (scoring about 0.35 on our -1 to $+1$ scale)—five to seven times more positive than other terms. This hasn't changed notably over time.

- Philosophy departments are most positive about *Truth* (≈ 0.40) and most consistent
- Interdisciplinary Studies are least positive (≈ 0.00–0.02)
- Only Literature/Language shows a modest decline in positive associations with *Truth* after 1990, and even there it remains substantially positive

Other terms, *American*, *European*, and *Western* have become significantly more negative in tone over time across all fields. The sharpest declines are in Social Science II and Interdisciplinary Studies. While none of these terms have become absolutely negative, the consistent shift toward more critical framing is statistically strong across all 65 years.

Subversive has consistently negative associations across all fields (between -0.20 and -0.15), but has gradually become *less* negative over time—suggesting a rhetorical rehabilitation, especially visible in Literature/Language and Social Science II.

4. Statistical Confirmation of Trends

Our statistical models—which control for differences between up to 678 universities from 1960 to 2025—confirm and quantify these patterns:

Vocabulary growth rates (annual % change):

- *Identity* shows by far the largest growth (≈8% per year, doubling every 8–9 years)
- *Power*, *Facts/Truth*, and *Evaluation* show intermediate growth
- *Aesthetics* shows the weakest growth

Tone trends (annual change on the −1 to +1 scale):

- **Becoming more positive:** *Identity*, *Activism*, *Subversive*
- **Becoming more negative:** *Western*, *American*, *Power*, *European*, *History* (with *History* and *European* showing the largest negative shifts)
- **Staying stable:** *Truth*

These patterns are driven primarily by Social Science II, Interdisciplinary Studies, and Literature/Language.

5. Important Findings

Among the most significant findings is that positive attitudes toward *Truth* have remained stable while attitudes toward Western heritage terms have declined.

Truth-oriented vocabulary and its positive associations have been maintained across all fields and all decades. Meanwhile, the tone toward *American*, *European*, and *Western* has shifted systematically and durably.

This means that the changes we document may be better described as a shift in cultural values rather than an abandonment of truth-seeking. Scholars have become more critical of terms that concern the Western and American cultural heritage in their writing while simultaneously maintaining—or even strengthening—their rhetorical commitment to the vocabulary of facts and truth and to the value of the term *Truth*. These are two separate phenomena. Conflating them risks creating a distorted picture of what has actually changed in American doctoral scholarship over the past six decades – and perhaps, by extrapolation, to the humanities more generally.

Geographic patterns also matter: Our analysis shows that the cultural shift isn't uniform across the country. Large research universities in the Northeast and California drive these trends most strongly, while Midwestern and Southern institutions provide a counterbalance.

Literature and Trends

1.1 The Humanities in "Permanent Crisis": Origins and Persistence

The idea that the humanities face an existential crisis has a history nearly as long as the humanities themselves. As Reitter and Wellmon (2021, p. 91) document, early warnings date to the eighteenth century: Johann Heinrich Zedler's encyclopaedia already noted a growing "prejudice" against humanistic study on the grounds that it did not respond to "immediate needs" and constituted mere "impractical arts". By 1929, the German philosopher Eduard Spranger was addressing the Berlin Academy of Sciences about a cultural crisis stretching back centuries, in which the "positivist ideals and methods of the natural sciences had infiltrated the humanities" (Reitter and Wellmon, 2021, p. 5). The concept of a *studia humanitatis*—first established in early-sixteenth-century university curricula as a domain distinct from scholastic theology—was, it seems, perpetually under siege.

The term "humanities" has been employed in various ways since the early fifteenth century, when reform-minded scholars in Italy called for a revival of classical modes of learning. Their educational ideal of the *studia humanitatis* was rooted in the Roman concept of "humanitas" and emphasized the development of human virtue and a balance between action and contemplation. The Renaissance humanist curriculum was a liberal arts program, distinct from medieval scholastic theology, and it centered on five key areas: grammar, rhetoric, poetry, history, and moral philosophy. Its goal was to cultivate well-rounded, virtuous, and active citizens, prioritizing critical thinking, admiration for classical culture, and appreciation of human achievements over purely vocational training.vIn 1808 German philosopher Friedrich Niethammer weaponized the term *Humanismus* as a polemic against school reformers who wanted more practical pedagogical training; the term referred to a "curricular program and a moral project" whose essential feature was elevating the student's humanity over his "animality" (Reitter and Wellmon, 2021, p. 29). The very act of resurrecting the Renaissance concept of the humanities as a category at the dawn of the industrial revolution, was an act of resistance against forces perceived to be threatening them.

The modern crisis terminology entered Anglo-American discourse prominently in 1964 when the British historian John Harold Plumb edited the volume *Crisis in the Humanities*, declaring that humanists faced a stark choice: "either change the image they present, adapt themselves to the needs of a society dominated by science and technology, or retreat into social triviality" (Plumb, 1964, p. 8). A year later, the Report of the Commission on the Humanities defined the disciplines as constituting "the soul of our culture" and warned that "an evident disregard, or at best a deep devaluation, of the things that refine and dignify and give meaning to our humanity…creates a crisis for national leadership" (American Council of Learned Societies, 1969, pp. 1–2). The charge that the crisis was partly self-inflicted appeared in the same period: Plumb (1964) cataloged complaints that humanists had become too specialized, that their work had grown narrow and insular, that they wrote in jargon opaque to outsiders, and that the curriculum had fragmented without any common purpose.

Reitter and Wellmon's central argument is that this persistent invocation of crisis is not merely rhetorical bad habit but structurally necessary: "the self-understanding of the modern humanities didn't merely take shape in response to a perceived crisis; it also made crisis a core part of the project of the humanities" (Reitter and Wellmon, 2021, p. 3). For both politically progressive and conservative scholars alike, crisis rhetoric has served to ground claims that the humanities have a special civilizational mission—what the philosopher Wilhelm Dilthey called a "bulwark" safeguarding something sacred against threatening forces (Reitter and Wellmon,

2021). The humanities, in this reading, have been in permanent crisis because they have needed to be.

1.2 The Quantitative Decline of Humanities Graduate Education

Whether or not the crisis is structurally conjured, the quantitative evidence of decline in recent decades is substantial. As early as 1949, Brée (1949, p. 337) voiced concern about a "crisis in the humanities" as literary study seemed to have lost its sense of "delight and newness". A first wave of quantitative decline is visible in enrollment data from the 1970s; a second, steeper wave has unfolded since roughly 2010.

The more recent "crisis" discourse since 2010 reflected recurring ideas from past waves, while also introducing new concerns—among others, those related to the rise of STEM fields in the computing boom and related employment shifts. Writing in 2018, historian Benjamin Schmidt—who had long resisted applying the crisis label, believing the numbers were overstated and the term strategically misused—finally acknowledged that the evidence compelled alarm (Schmidt, 2018). Data compiled by the Humanities Indicators Project of the American Academy of Arts & Sciences confirm that, as of 2020, the share of master's and doctoral degrees awarded in the humanities had fallen to a record low (Townsend, 2022). History and philosophy experienced the steepest sub-field declines between 2012 and 2020, with program counts falling by approximately 12 and 10 percent respectively; only communication among the large humanities disciplines grew (Inside Higher Ed, 2022). A 2014 study by the Council of Graduate Schools found that applications for humanities doctorates decreased an average of nearly one percent per year from 2009 to 2014, with an almost four-percent drop in a single year (The Chronicle of Higher Education, 2014). By 2017, bachelor's degrees in the humanities were down five percent year on year (Times Higher Education, 2017).

Subsequent indicators have intensified this picture. Nathan Heller's widely-discussed *New Yorker* essay "The End of the English Major" (Heller, 2023) reported that enrollment in English and history at the collegiate level had fallen by approximately one-third over the prior decade, an account that helped move the recent collapse from a specialist to a mainstream public concern. The American Academy of Arts & Sciences' Academic Humanities Today: Findings from the 2024 Department Survey documents that bachelor's degrees awarded in the humanities had fallen to 165,489 by 2024—the smallest annual figure since 1991 and roughly 30 percent below the 2012 peak—and that the number of humanities doctorates conferred in 2022 was 14 percent below the 2015 high (American Academy of Arts & Sciences, 2024).

Scholarly commentary has identified a cluster of mutually reinforcing causes. Jay (2014) diagnoses the crisis as primarily driven by the poor case being made to families about employment prospects: the "intangible value" of education in history, philosophy, and literature is "of decreasing interest to families worried about their children's employment prospects," while STEM fields appear "forward looking" in an age of exploding technology. The constraints of the academic labor market burdened by high supply and low demand—disproportionately severe in the humanities—compounds this: fewer than half of new humanities PhDs had employment secured at graduation by 2020, compared with nearly two-thirds in 1990 (The Scholarly Kitchen, 2022). Structural funding constraints make doctoral study financially precarious for candidates who carry undergraduate debt (Newfield, 2024; Taylor et al., 2023), while the corporatization of higher education has eroded the institutional standing of disciplines whose contributions are long-term and difficult to monetize (Australian Humanities Review, 2025).

Detailed empirical evidence on post-PhD employment outcomes for humanists comes from the American Historical Association's "Where Historians Work" project, which traces the employment of more than 12,000 history doctorates conferred at U.S. institutions between 2004 and 2017 and finds that fewer than half occupy tenure-track academic positions, with substantial shares dispersed across government, public history, the nonprofit sector, and the private economy (American Historical Association, 2022). This suggests that

the supply of humanities doctorates has continued to outrun the academic labor market the discipline trains them for, even as graduates demonstrably succeed in non-academic careers.

The picture is complicated, however. Maxwell (1969) argued that "economic determinism" cannot explain the plight of the humanities: the crisis is "relative rather than absolute," and a decline in financial support cannot account for it because the costs of humanities research are far lower than those of the sciences. His hypothesis, instead, was that the crisis "stems from a missing methodological link between the humanities themselves and the goals which the humanities espouse"—a failure of the disciplines to demonstrate to society what, precisely, they have to offer (Maxwell, 1969, p. 72). Contrary to the bleakest readings, the absolute number of humanities degrees conferred in the United States has actually risen since the 1970s, reflecting the overall expansion of higher education; it is the share of degrees that has fallen (Jay, 2014).

Geographic and cultural variation matters as well. Dallal (2017) shows that the crisis of academic humanities in the Arab world has different causes and a different historical trajectory than the Western crisis, cautioning against universalizing a crisis narrative whose drivers are specific to particular political economies and university systems. d'Abrera (2019) documents a parallel Australian case, arguing that government-funded research councils have narrowed humanities funding toward identity-politics topics at the expense of research on Western civilization, rule of law, and free inquiry—a pattern that, she contends, both reflects and accelerates the disciplinary narrowing at the heart of the crisis. Yonezawa (2017) traces a parallel Japanese case to the 2015 MEXT directive urging national universities to scale back or repurpose humanities and social-science faculties—a turn he attributes to long-standing STEM-prioritization policies combined with the structural disadvantage facing Japanese-language scholarship in the English-dominated metrics that increasingly govern university funding and prestige.

1.3 Contesting the Crisis: Skeptical Voices

Not all scholars accept the crisis framing. Writing in 1978, Byrum Carter argued that the "cries of 'crisis"' were "also misleading" and drew "distinctions that are false and portray threats that are delusory," contending that the humanities would survive even if federal support were entirely withdrawn Carter (1978). Herbert Muller pointed to a more fundamental definitional problem: the humanities have "no clear definition" and "no common core," being merely what remains "when the sciences and technical or vocational studies have been separated out" Muller (1970). Without a common core, the category may be too internally heterogeneous for any single narrative of crisis or decline to describe it accurately.

Stefan Collini, the British intellectual historian, represents the most prominent recent skeptic. In his essay collection *Speaking of Universities* (2017), he called the crisis discourse "distracting" and potentially ahistorical: "if academics were aware of how much of their crisis rhetoric repeated old laments, they might adopt a different tone, or come up with more original turns of phrase" (Reitter and Wellmon, 2021, as discussed in p. 3). Spencer (2014, p. 406) similarly warns against framing the challenges facing the humanities "in terms of a crisis discourse that deprecates freedom in accord with the neoliberal agenda."

The debate hinges partly on what counts as evidence of crisis. Townsend and Bradburn (2022, p. 11) capture the ambiguity neatly: "Depending on how you look at it, the humanities in America are either racing down a steep decline or entering a state of renewal and vitality". The present study contributes to this debate by bringing systematic computational evidence to bear—tracking not just counts of dissertations but the terminological and conceptual content of doctoral scholarship over sixty-five years.

1.4 The Cultural and Linguistic Turns in Academic Scholarship

Parallel to the quantitative decline in total numbers of PhD's granted and dissertations written, runs an intellectual transformation of disputed significance. The "linguistic turn" of the 1970s and 1980s—associated with poststructuralists including Foucault, Derrida, and Lacan—redirected scholarly attention toward language, discourse, and representation as constitutive of social reality (Armstrong, 2001, 9). The subsequent "cultural turn" spread these commitments into history, sociology, and anthropology; cultural theories, especially in their postmodernist inflections, "challenged the very possibility or desirability of social explanation"(Bonnell and Hunt, 1999). Sewell (2005) located the timing of this shift in the structural economic transformations of the Reagan–Thatcher era.

By the 1990s, postmodernism had become closely associated with postcolonialism and identity politics, while terms such as "subject position," "hegemony," and "discourse" entered mainstream critical vocabulary (Best and Kellner, 1991; Hall, 1996; Aylesworth, 2015). Critics argued that the displacement of traditional truth-seeking norms by power-centered frameworks contributed to humanities disciplines' declining public credibility (Newfield, 2024). d'Abrera (2019, p. 4) is explicit on this point, contending that in the 1970s and 1980s the humanities "rejected their original purpose" and "adopted a range of radical post-structuralism and post-modernist theories," resulting in a "gradual homogenization of academic life" governed by "one particular orthodoxy: class, race and gender". The extent of this rhetorical transformation and whether it is cause, symptom, or incidental to the quantitative decline are questions the present study is uniquely positioned to address.

Three observations from the theoretical literature directly motivate the construction of explanatory variables in this report. First, the poststructuralist vocabulary of power, hegemony, and resistance is sufficiently distinctive lexically that it is detectable in bag-of-words term frequency analysis even without sophisticated parsing. Second, the identity-politics vocabulary that followed the linguistic turn in the 1990s—"intersectionality," "positionality," "decolonization"—emerged primarily within the humanities and culture-oriented social sciences, making its diffusion traceable through subfield comparisons. Third, if the linguistic turn genuinely displaced epistemological norms, we would expect to observe declining Facts/Truth Claims vocabulary alongside rising Power and Identity vocabulary. Trend H3 tests this directly; the data, as reported below, decisively reject the displacement Trend.

1.5 Computational Analysis of Academic Discourse

Within computational social science, diachronic analysis of word frequency distinguishes selection (systematic directional change) from drift (stochastic fluctuation) in the evolution of academic vocabulary (Karjus et al., 2020). Natural language proximity measures—the approach used here to estimate sentiment—situate words within their co-occurrence contexts, capturing the evaluative associations that surround a term rather than merely its raw frequency (Boyd and Schwartz, 2021). Titles and abstracts are well suited to this analysis because they represent the author's most deliberate rhetorical choices (Hyland, 2000). Hou and Huang (2025) note that temporal analysis of institutional documents can identify shifts in research priorities with precision unavailable to qualitative reading at scale.

The present study extends this tradition in three ways. First, unlike most prior corpus studies that focus on published journal articles or books, we examine doctoral dissertations in full—including abstracts, titles, and main text—a form that captures scholarly production at the point of entry into the profession, before editorial and peer-review filters have shaped the final output into professional publications. Dissertations

therefore reflect the full distribution of scholarly practice at a given institution and moment, not merely its published apex. Second, the scale of the corpus (443,543 documents, 65 years) substantially exceeds most prior text-analytic studies of academic discourse, enabling subfield-level comparisons with adequate statistical power. Third, the combination of term-frequency and proximity-sentiment measures—applied simultaneously across five conceptual baskets and nine focal terms—provides a richer portrait of rhetorical change than either measure alone could deliver.

While this dataset allows analysis of dissertation data on an unprecedented scale, it is still affected by common issues in automated text data, such as changes in word meanings over time and OCR errors in older records. By comparing relative changes over time and accounting for differences between universities, we reduce the chance that these data issues drive the main patterns we observe.

1.6 Key Trends We Examined

Drawing on this literature and the structure of our data, we focused our analysis on five key trends.

Trend 1 Different Rates of Decline Across Fields

We examined whether the decline in dissertation production after 2015 was steeper in Humanities/Arts subfields than in Social Sciences, and whether it was milder in culturally-oriented fields (Social Science II: Anthropology, Psychology, Communications) than in more quantitatively-oriented fields (Social Science I: Economics, Political Science). Previous research on the academic job market collapse and the partial shift of student interest toward culture and identity-oriented fields outside the humanities suggested this pattern might exist.

Trend 2 Growth of Identity and Power Language

We tracked whether vocabulary associated with identity and power relations showed the largest growth over the study period, consistent with the cultural and linguistic turns documented in prior research. We paid particular attention to whether this growth was most pronounced in Literature/Language, Interdisciplinary Studies, and Social Science II—the subfields thought to be most deeply influenced by poststructuralist and postcolonial theoretical frameworks.

Trend 3 Persistence of Truth-Seeking Language

Testing claims that humanistic scholarship has abandoned truth-seeking norms, we examined whether Facts/Truth vocabulary declined or maintained high frequency across all fields throughout the study period. If truth claims remained important to scholarship across fields we expected that truth-related vocabulary—evidence, empirical, hypothesis—would remain pervasive in academic writing as a genre convention, even if underlying epistemological commitments shifted.

Trend 4 Changing Attitudes Toward Western Heritage Terms

We analyzed whether tone toward terms associated with Western cultural heritage (*American*, *European*, *Western*) became more negative over time, and whether this shift was, as expected, most pronounced in Social Science II, Interdisciplinary Studies, and Literature/Language. We also examined whether Philosophy—where truth-oriented discourse is most deeply institutionalized—showed the least negative shift and maintained the most positive associations with *Truth*.

Trend 5 Growing Similarity Between Social Sciences and Humanities

We investigated whether Social Science II showed growing similarity in vocabulary and tone with Humanities subfields most associated with identity and power discourse (Interdisciplinary Studies, Literature/Language), rather than with Social Science I. This pattern would reflect the partial adoption of poststructuralist frameworks by Anthropology, Communication, and related fields within Social Science II.

How We Collected and Analyzed the Data

2

2.1 The Complete Dataset

Our analysis uses a digital collection of academic dissertations provided by ProQuest's TDM Studio. In total, we examined 443,543 U.S. dissertations.

How we processed the data

Given the enormous size of this collection, we processed the dissertations in batches using ProQuest's server system. We worked through the documents in groups, analyzing each batch and then moving to the next, until we had covered all 443,543 dissertations.

What information each dissertation included

Each document came with thirteen key pieces of information: a unique ID number; the full text; publication details (title, date, publisher); author information (first and last name); university information (school name and location); academic classifications (degree name and subject categories); and document length (page count). We processed the dissertations in batches of 10,000 at a time.

Important limitations to keep in mind

Coverage varies by time period. Our dataset includes only 1,101 dissertations from 1960, but the numbers grow rapidly through the 1970s and 1980s as ProQuest digitized older dissertations. From approximately 1990 onward, our coverage is high and broadly representative of U.S. doctoral production. However, the early decades should be interpreted cautiously, particularly for small subject areas where we might have as few as 10–30 dissertations per year.

Most recent years are incomplete. Registration delays—especially pronounced in 2023 to 2025—mean that the most recent data undercounts actual dissertation production. The drop from 10,485 dissertations in 2023 to 8,740 in 2024 and 7,097 in 2025 almost certainly reflects this delay rather than an actual further decline in student enrollment.

Not all universities are equally represented. Our dataset captures dissertations from programs that automatically archive with ProQuest and individuals who choose to archive with ProQuest if their institution does not automatically archive. As a result, some institutions and programs may be systematically underrepresented.

Notwithstanding these limitations, the core disciplinary trends in the corpus are independently validated. Dissertation counts and the relative Humanities–Social Sciences composition are benchmarked against federal degree-conferral data from the National Center for Education Statistics (NCES). These external data confirm both the direction and the approximate magnitude of the trends documented below (see the companion technical report for a detailed discussion).

2.2 How We Organized Dissertations by Field

We organized the dissertations into broad intellectual areas. The primary division separates *Humanities & Arts* from *Social Sciences*.

Humanities & Arts includes disciplines focused on cultural production, interpretation, and aesthetic analysis. *Social Sciences* covers fields concerned with social structures, institutions, and behavior.

Within these groupings:

- *History & Related Fields* covers historical research across different time periods and regions
- *Literature/Language* includes national and comparative literatures, linguistics, and rhetoric
- *Philosophy/Theology* encompasses work on knowledge, ethics, metaphysics, and belief systems
- *Interdisciplinary Studies* captures programs combining methods from history, sociology, politics, and the humanities
- *Social Science I* includes Economics and Political Science
- *Social Science II* includes Anthropology, Psychology, and Communications

The complete classification covers 443,543 dissertations across 165 sub-categories. For the complete coding list, see Appendix Table 1.

Some classification decisions worth explaining:

Psychology is assigned to Social Science II rather than standing alone, despite its acknowledged diversity: clinical and counseling psychology share interpretive approaches with Communications and Anthropology, while experimental psychology is closer to Social Science I.

Three categories appear in multiple groupings. Military Studies and Classical Studies are coded as History and Interdisciplinary Studies. Translation Studies is coded as Literature and Interdisciplinary Studies. Rather than arbitrarily choosing one category, we handled these overlaps proportionally to minimize misclassification. We tested whether alternative classification decisions would change our main findings and found they had negligible impact, given the relatively small number of dissertations in ambiguous categories.

2.3 The Five Categories of Terms We Tracked

We created five categories (or "baskets") of words to track, each capturing a different type of language.

Category 1: Facts, Evidence, and Truth-Claim Discourse

Words related to factual claims, evidence, and empirical reasoning: *fact, evidence, chronology, artifact, record, archive, document, manuscript, timeline, civilization, event, discovery, chronicle, heritage, tradition, antiquity, monument, inscription, annals, memorial, antiquities, primary source, secondary source, museum, narrative, oral history, dynasty, kingdom, treaty, constitution, declaration, edict, decree, proclamation, statute, law, battle, war, trade, economy, restoration, preservation, reconstruction, interpretation, legacy, inheritance, influence, impact, analysis, documentation, antique, context, continuity, factual, objectivity, data, library, empirical, causal, causation, inference, explanation, explanatory, medieval, sovereign, authoritative, intention, definitive, conclusive, proof, argument, premise, hypothesis, demonstrate, demonstrable, truth, evolution, evolutionary, articulate, quantitative, qualitative, judgment, logic, evaluation, regression, statistics, statistical, formal, treatise, disambiguate, correlation, a priori, deductive, inductive, uncertainty, probability, diachronic, synchronic, forensic, scientific, wrong, false,*

falsify, disprove, mathematical.

Category 2: Aesthetic, Artistic, and Stylistic Terminology

Vocabulary related to aesthetic analysis and artistic form: *beauty, art, design, style, harmony, form, composition, proportion, balance, symmetry, elegance, grace, color, texture, pattern, shape, contrast, light, shadow, tone, shade, sublime, picturesque, minimalism, ornament, decoration, abstract, figurative, realism, surrealism, modernism, postmodernism, classicism, romanticism, expressionism, impressionism, baroque, renaissance, aestheticism, avant-garde, beautification, iconography, unity, essence, creativity, originality, craftsmanship, taste, refinement, delicacy, simplicity, charm, allure, radiance, vibrancy, serenity, tranquility, dynamism, rhythm, euphony, ornamentation, subtlety, ethereal, visuality, poise, artistic, craft, canonical, genre*.

Category 3: Authority, Hierarchy, and Power Relations

Terms describing political and social power relationships: *authority, control, dominance, hierarchy, power, status, subordination, oppression, resistance, hegemony, coercion, consent, negotiation, conflict, competition, dependency, sovereignty, empowerment, disempowerment, manipulation, persuasion, force, submission, obedience, revolt, rebellion, revolution, exploitation, privilege, inequality, equity, patriarchy, matriarchy, colonialism, imperialism, feudalism, capitalism, socialism, communism, dictatorship, anarchy, elitism, oligarchy, plutocracy, meritocracy, class, caste, race, gender, ethnicity, power struggle, domination, subjugation, solidarity, polarization, authority figure, charisma, legitimacy, policy, agency, constraint, injustice, advantage, disadvantage, monopoly, oligopoly, tyranny, dictate, command, order, subversion, control mechanisms, power relations, dominant group, marginalization, state, citizen, subject, coerce, coercive, deconstruct, subaltern, interpellation*.

Category 4: Identity, Social Category, and Critical Theory

Vocabulary related to identity politics and critical social theory: *ableism, ageism, alterity, anti-Blackness, belonging, BIPOC, biopolitics, borderlands, cancel culture, cisnormativity, colorism, critical race theory, colonialism, decoloniality, decolonization, diaspora, disability, diversity, embodiment, empowerment, equity, erasure, ethnicity, eurocentrism, exclusion, feminist, gender, gender fluid, gender nonconforming, genderqueer, hegemony, heteronormativity, identity, inclusion, indigeneity, intersectionality, internalized oppression, lgbt, lgbtqia, marginalization, masculinity, misogyny, multiculturalism, nativism, normativity, oppression, othering, patriarchy, performativity, political correctness, positionality, privilege, queer, queerness, racial capitalism, racialization, racism, representation, settler colonialism, neocolonial, social construct, social justice, structural inequality, systemic racism, toxic masculinity, transgender, transphobia, visibility, white fragility, white supremacy, whiteness, wokeness, xenophobia, gender ideology, feminism, intersectional, gender affirming, sexism, anti-racist, transexual, neurodivergent*.

Category 5: Evaluative, Normative, and Judgment-Oriented Language

Terms expressing normative assessment and ethical reasoning: *good, bad, right, wrong, normative, evaluative, value, persuasive, probable, taxonomic, perceptive, intuitive, judgement, correctness, moral, ethical, categorical, liberal, illiberal, conservative, traditional, pious, virtuous, moderate, brave, courageous, loyalty, faithful, generous, perfect, excellent, superior, inferior, articulate, clarity, precision, comprehensive, holistic, truthful, coherent, strong argument, weak argument, effective, successful, skillful, convincing, profound, relevant, thorough, significant, erroneous, honest, appropriate, robust, beneficial, advantageous, preferable, just, fair*.

Why we chose these terms: Each category is defined by a list of terms selected to capture a type of language rather than any single theoretical perspective. For instance, the *Facts/Truth* category includes terms from empirical science (*evidence, empirical, causal*) alongside more general terms about truth (*fact, truth, hypothesis*). This breadth is intentional—it allows us to detect truth-seeking language across both quantitative

social science (which uses *causal* and *empirical* heavily) and philosophical analysis (which uses *truth* and *hypothesis*).

Similarly, the *Identity* category is broad, including terms from multiple waves of identity theory: second-wave feminist vocabulary (*positionality*), *queer theory*, *heteronormativity*, *queer*), postcolonial studies (*decolonization*), and intersectional frameworks (*intersectionality*).

How we counted: We counted how often terms from each category appeared in dissertations, then *normalized* these counts—meaning we adjusted for the total number of words in each group. This gives us a rate (words in category / total words) that can be fairly compared across different groups and time periods. This is important because it separates genuine changes in language use from simple changes in the number of dissertations written.

For example, if Identity terms appeared 100 times in 10,000 total words in 1960 (a rate of 1%), and 500 times in 100,000 total words in 2020 (a rate of 0.5%), the normalized rate actually decreased even though the raw count increased.

2.4 How We Measured Tone (Sentiment)

For nine specific terms—*Identity, History, Truth, American, European, Western, Subversive, Activism,* and *Power*—we went beyond just counting how often they appeared. We also measured whether they were discussed in positive or negative ways.

Why we chose these nine terms: They span the key issues in debates about cultural change in academia: truth-seeking (*Truth*), Western heritage (*American, European, Western*), historical consciousness (*History*), and political activism (*Identity, Subversive, Activism, Power*).

How we measured tone: We looked at the words appearing near each focal term (within ten words before or after it) throughout the full text of dissertations. We then used established databases that rate words as positive or negative (called LIWC and AFINN) to calculate an average tone score. The resulting scores range from -1 (very negative) to $+1$ (very positive). We calculated these scores for each subject field and year, then used them in our statistical analysis.

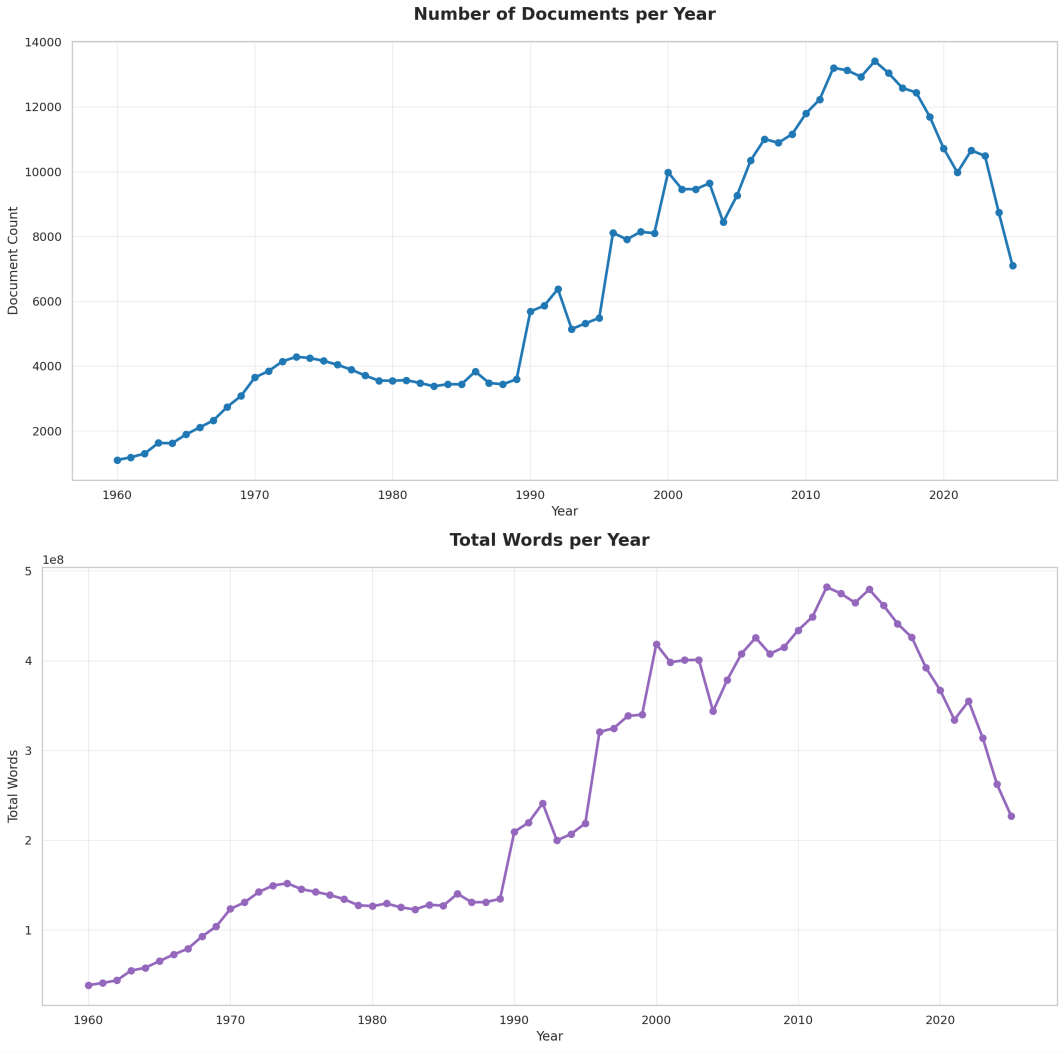
For a technical description of the statistical models, the panel analysis design, and sensitivity analyses, see the companion technical report at `https://academysciencesletters.org/humanities-in-crisis/technical`.

3 Dissertation Counts and Temporal Trends

3.1 Aggregate Trends

Figure 1(a) shows how many dissertations were produced each year from 1960 to 2025. The overall pattern shows steady growth from 1960 through the mid-2010s, followed by a sharp decline. This pattern is consistent with data from the American Academy of Arts and Sciences, which draws on Department of Education statistics. Figure 1(b) tracks the total number of words across all dissertations each year, which follows a similar pattern. Data from 2023 to 2025 should be read with caution, since there is often a delay between when a dissertation is completed and when it is registered in the database.

Figure 1 Document and Word Counts, 1960–2025



(a)

(b)

The long-run pattern is striking in its regularity. Between 1960 and 1975, annual dissertation output roughly quadrupled—from approximately 1,100 to 4,200—reflecting both the postwar expansion of American higher education and the baby-boom generation passing through graduate school. A plateau and modest retreat

followed through the 1980s, before a second and more pronounced wave of growth began in the early 1990s: the corpus records 5,686 dissertations in 1990, 9,980 in 2000, and a peak of 13,408 in 2015. The subsequent decline is sharp. By 2025, the corpus records only 7,097 dissertations—a fall of 47% from the 2015 peak.

This contraction reflects two forces working together: a genuine structural decline in Humanities doctoral production, and a data-recording delay in which recently completed degrees have not yet been registered in the ProQuest database. Federal data from the National Center for Education Statistics (NCES) allow us to separate these two forces: they confirm a real decline of approximately 9% in Humanities doctorate degrees awarded from the 2011–12 peak through 2016–17 (see Appendix RC-1 in the companion technical report), while the much larger drop visible in our data is partly explained by registration delays and by the fact that our database covers elite institutions—where the contraction has been sharpest— more thoroughly than the national average.

3.2 Humanities versus Social Sciences

Figure 2 separates counts by broad field. Until approximately 1980, Humanities programs produced both more dissertations in total and a larger share of the combined output. A period of rough parity followed until around 2015, after which Humanities numbers fell far more steeply. By 2025, Social Sciences account for nearly 64% of the combined total, compared with roughly 43% in 1960.

The contrast in numbers is stark. While Social Science dissertation counts fell only 4.5% from their 2015 peak (from 31,416 to 29,997), Humanities dissertations dropped by nearly 49% (from 33,473 to 16,951) in the same decade. This gap suggests that the decline is not a general result of factors that would affect all fields equally—such as overall cuts in university funding or changes in the size of the college-age population—but rather a crisis concentrated specifically in the Humanities.

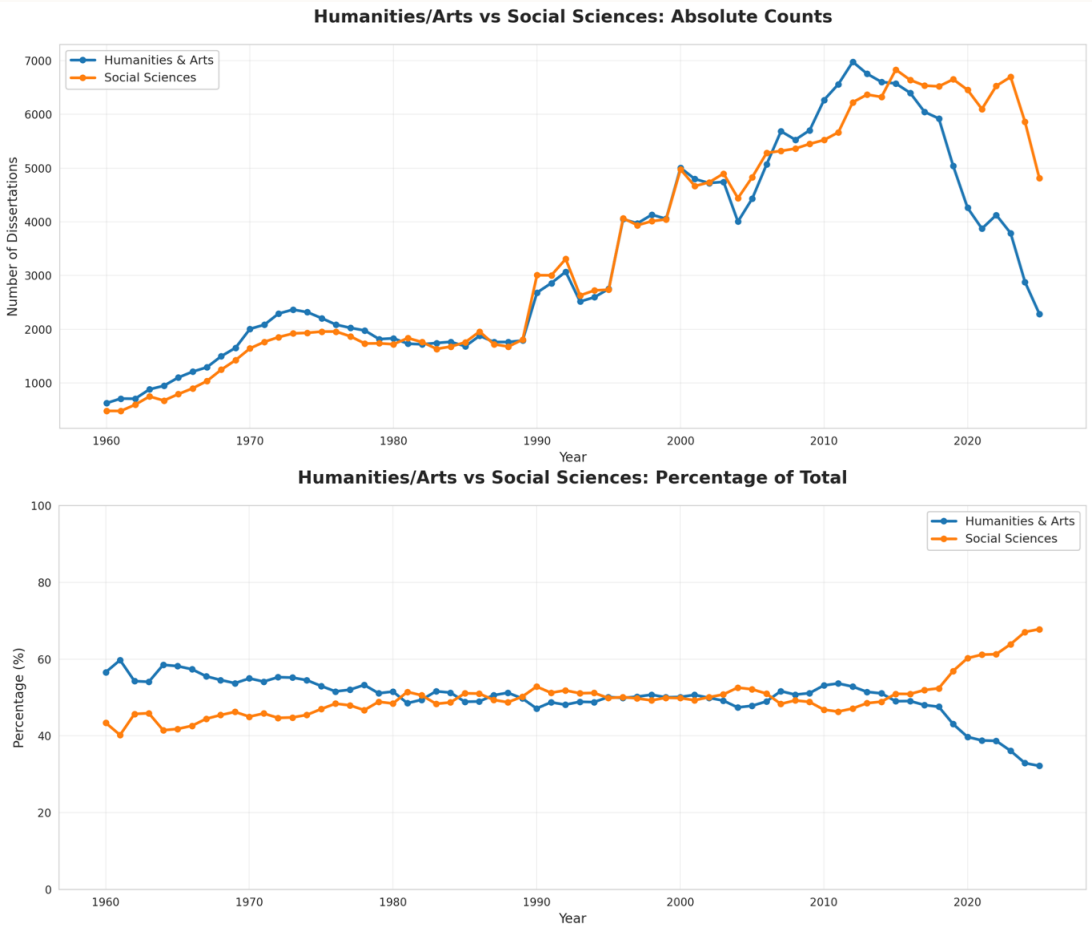
However, these sharp declines may be partly exaggerated by the time delay in database registration, since newer research takes time to be processed and appear in the database. Because this delay can artificially depress recent totals, it is more accurate to focus on relative shares rather than absolute numbers. Assuming all fields are indexed at a similar rate, looking at the distribution allows for a more reliable comparison even with the missing recent data.

When viewed through this lens of relative shares, the long-term shift is clear. As shown in the companion technical report, the Humanities held a steady majority in the 1960s (57% of output), a gap that narrowed until both fields reached parity (50% each) around 1985. This balance held remarkably steady for the next 30 years. That parity ended abruptly after 2015: in a single decade, the Humanities' share of the corpus collapsed from 51.6% to 36.1%, leaving the Social Sciences with nearly twice the output of Humanities fields by 2025.

An alternative interpretation of these trends deserves explicit acknowledgment. The observed contraction may reflect a rational market adjustment rather than a broader disciplinary crisis: if humanities doctoral programs enrolled more students during the 1990s and 2000s than there were academic jobs available for them to fill, the post-2015 contraction may represent institutions and prospective students responding sensibly to signals of a weak job market—such as increased time to complete a PhD, intensifying competition for fewer faculty positions, and limited career options outside academia (The Chronicle of Higher Education, 2014). On this reading, the pre-2015 peak was the historical anomaly, and the current decline represents a structural adjustment to long-term economic realities.

The external enrollment data provide a partial but important counterpoint. Federal degree-conferral records show that humanities doctorates made up 6.6% of all U.S. research degrees in 1970–71 but only 4.0% by 2016–

Figure 2 Dissertation Trends: Humanities/Arts versus Social Sciences



Notes: Panel (a) shows absolute dissertation counts; panel (b) shows percentage shares. Data span 1960–2025.

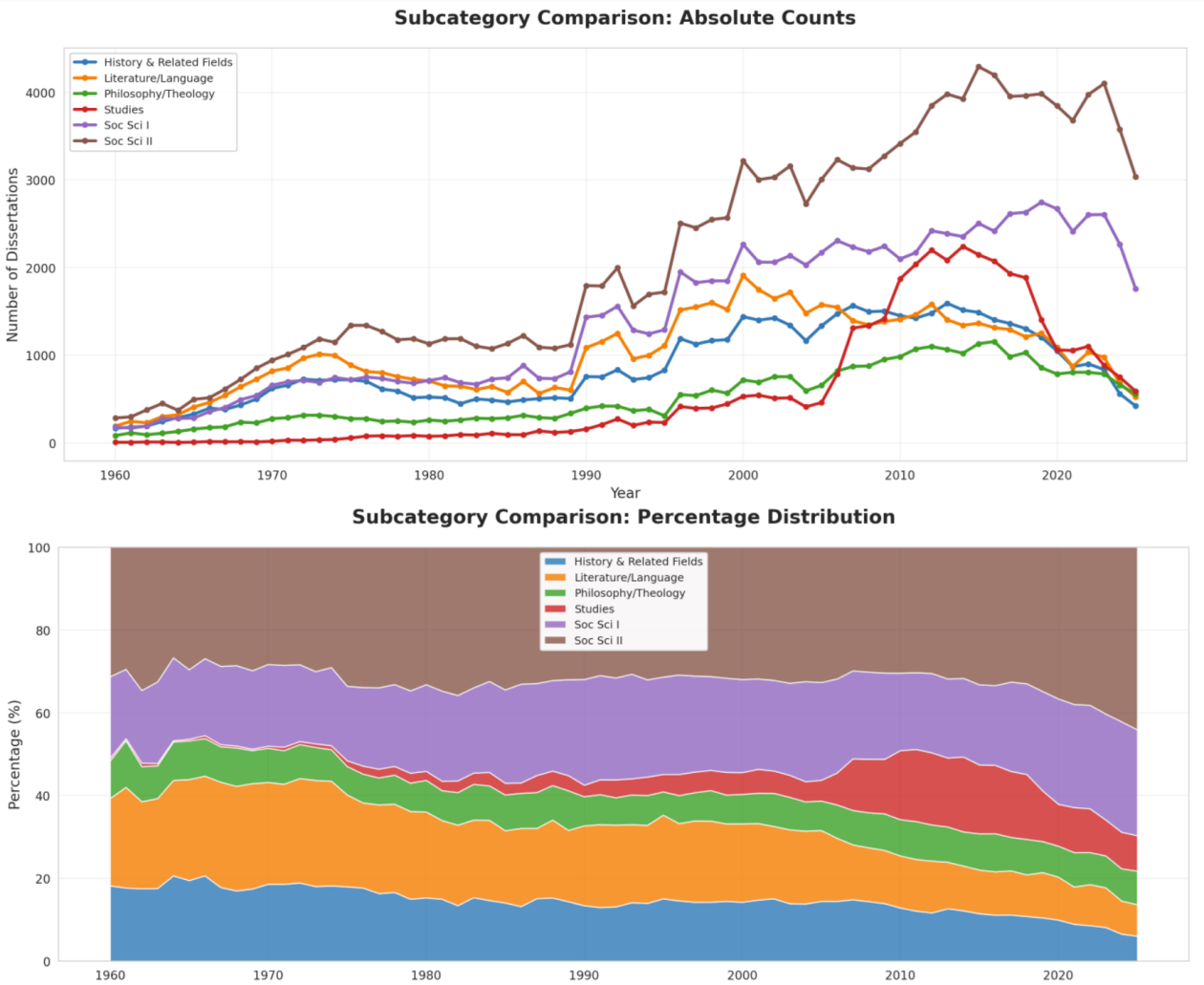
17 (National Center for Education Statistics (NCES))—a continuous decline in relative standing that persisted even during the years of absolute growth. In other words, humanities doctoral education was already losing share of a rapidly expanding graduate sector throughout the supposed "over-enrollment" period; the 1990s–2000s expansion was simply slower than overall graduate degree production, not an exuberant overshoot. Had humanities maintained its 1970–71 share of total degrees, the 2016–17 cohort would have numbered approximately 11,900 rather than the 7,170 actually awarded—a shortfall of 40%. This longer view suggests the decline is structural and long-term rather than a temporary correction, though competitive job-market pressures may have accelerated the post-2015 rate of contraction on top of the pre-existing trend.

3.3 Subfield Trends

Figure 3 breaks down the aggregate decline by individual subject area and reveal that it is not evenly distributed. Literature/Language fell from 8,162 dissertations in 2005 to 4,084 in 2025—a 50% decline. History & Related Fields dropped from a peak of 7,496 in 2015 to 3,583 by 2025, a contraction of 52% in a single decade. The most dramatic arc belongs to Interdisciplinary Studies, which grew from near-zero in 1980 (64 dissertations) to a peak of 10,707 in 2015, only to fall by 59% to 4,373 by 2025.

While these sharp drops in raw counts are likely made worse by the database registration delay, the relative

Figure 3 Dissertation Counts by Subfield



(a)

(b)

percentage distribution confirms a deeper structural realignment. Even when looking at shares rather than totals, the patterns remain striking: History and Literature together contributed 30% of all dissertations in 1965; by 2025, their combined share had fallen below 11%.

By contrast, Social Science II (Anthropology, Psychology, Communications) shows a picture of unique resilience. From just 283 dissertations in 1960, it grew continuously to a record 19,940 in 2020 and remained at 18,368 in 2025. Its share of the combined corpus rose from 31.3% in 1960 to 40.2% in 2025, making it by far the largest single sub-grouping by the end of the study period.

The fact that Social Science II—the group that is arguably the *least* mathematically and quantitatively oriented of the two social science groupings—has grown most strongly directly challenges the idea that students are simply moving away from the Humanities toward more technical, data-driven fields. PhD students are not simply moving from the Humanities into Economics or Political Science. Instead, they are moving into fields that share many of the Humanities' interpretive and theoretical concerns while carrying the institutional legitimacy and job-market signaling of a social-science label.

4 Normalized Metrics: Baskets of Terms

This section examines how often each of the five vocabulary categories appears across different fields, treating the full 65-year period together to establish baseline patterns. All frequencies are adjusted for the total number of words written—this removes the effect of differences in dissertation length or how many dissertations are written in a given year, making comparisons across fields and time periods fair.

To give a sense of scale: a value of 0.010 means that, on average, one in every 100 words in a dissertation from that field belongs to the relevant category—a meaningful share, given that most academic writing is made up of common connecting words rather than field-specific terminology.

One limitation of this approach is worth noting: normalized frequency cannot fully separate genuine differences in topic emphasis from differences in how verbose a field's writing conventions are—disciplines like English and History tend to use more words per page than fields that rely heavily on figures, tables, or formal notation, which means their raw term counts may be somewhat inflated relative to more *dense* fields even after normalization by total word count.

Figure 4 shows bar charts for each major field and subfield. The error bars (the thin vertical lines above each bar) show how much variation exists around the average: a taller error bar means that individual dissertations within that field vary widely from the average, while a shorter error bar means most dissertations are close to the field average.

Across all fields, *Facts/Truth Claims* appear most frequently, followed by *Power Dynamics*, with *Evaluation* in third place. *Aesthetics* shows the most variation between fields, reaching its highest level in Literature/Language and its lowest in Social Science I. Philosophy is the only subfield in which *Evaluation appears* more often than *Power*. In Interdisciplinary Studies, Identity vocabulary is nearly as common as *Evaluation* and more common than *Aesthetics*.

Figures 5 and 6 place all fields on the same scale, allowing direct comparison of the numbers across fields. The substantially higher *Facts/Truth Claims* frequency in Social Science I compared with Literature/Language is particularly striking, as is the markedly higher *Identity* frequency in Interdisciplinary Studies.

These figures and the detailed tables in the companion technical report reveal several patterns that are not visible from the raw counts alone.

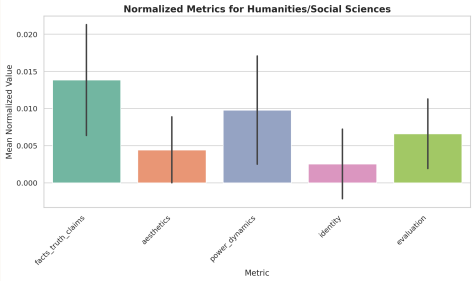
Facts/Truth Claims vocabulary appears in every field, but its frequency varies substantially. Philosophy/Theology has the highest long-run average (0.0177 words per total word count), followed closely by Social Science I (0.0172), while Literature/Language has the lowest (0.0101). The spread is roughly 1.7 times between the highest- and lowest-scoring subfields. Both Philosophy and Social Science I make the most intensive use of formal evidence language, while Literature/Language uses it least.

Power Dynamics is the second most common category in almost every field. Its frequency ranges from 0.0075 in Literature/Language to 0.0117 in Interdisciplinary Studies, with Social Sciences as a whole averaging 0.0105. The high level of *Power* vocabulary in Interdisciplinary Studies—even higher than in Social Science I—is consistent with the theoretical literature on how poststructuralist frameworks spread into interdisciplinary programs.

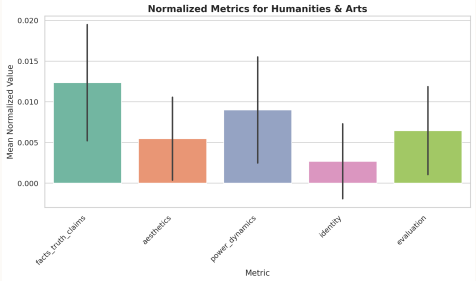
Aesthetics vocabulary is the most field-specific of all five categories. Its average ranges from 0.0033 in Social Science I to 0.0062 in Literature/Language—a ratio of nearly 2:1. This reflects the nature of each field: aesthetic vocabulary is central to literary and art-historical scholarship in a way it simply is not for economics or political

science. The large variation within the Literature/Language category also tells us that aesthetic analysis is unevenly distributed within that field rather than being a uniform feature of all literary dissertations.

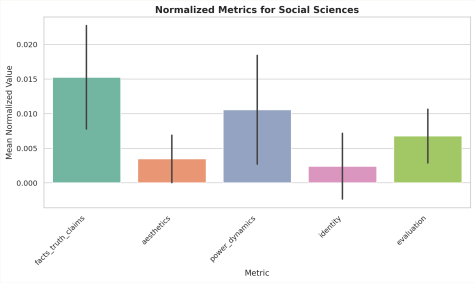
Identity is the category with the widest variation across fields relative to its average. Interdisciplinary Studies has an average of 0.0057 words per total word count—more than four times the History figure of 0.0014 and more than twice the Social Science I average of 0.0013. This extreme concentration in Studies and Social Science II foreshadows the changes over time documented in the next section: *Identity*'s growth is not spread evenly across all fields but is concentrated in precisely those fields that expanded most rapidly in the 2000s and 2010s.



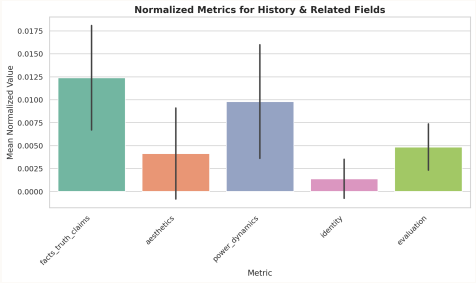
(a) Hum. & Social Sciences



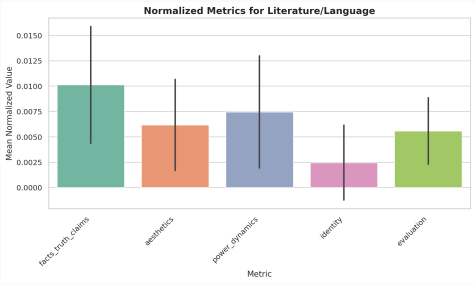
(b) Humanities & Arts



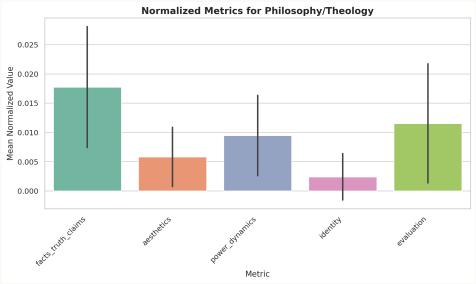
(c) Social Sciences



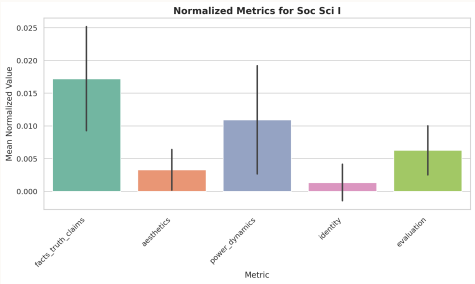
(d) History & Related Fields



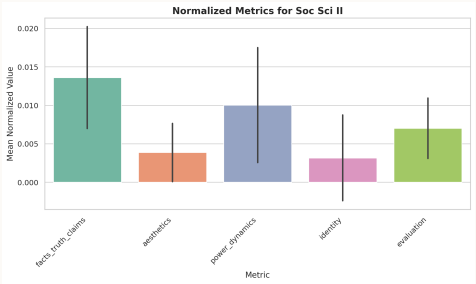
(e) Literature & Language



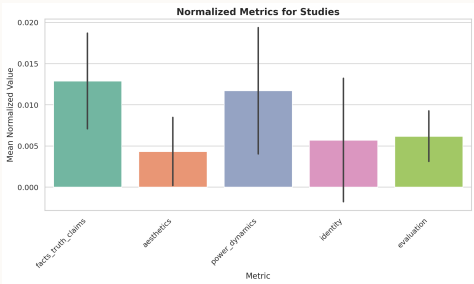
(f) Philosophy & Theology



(g) Social Sciences I



(h) Social Sciences II



(i) Interdisciplinary Studies

Figure 4 Normalized Term-Basket Frequencies by Field

Figure 5 Normalized Metrics: Three Major Fields

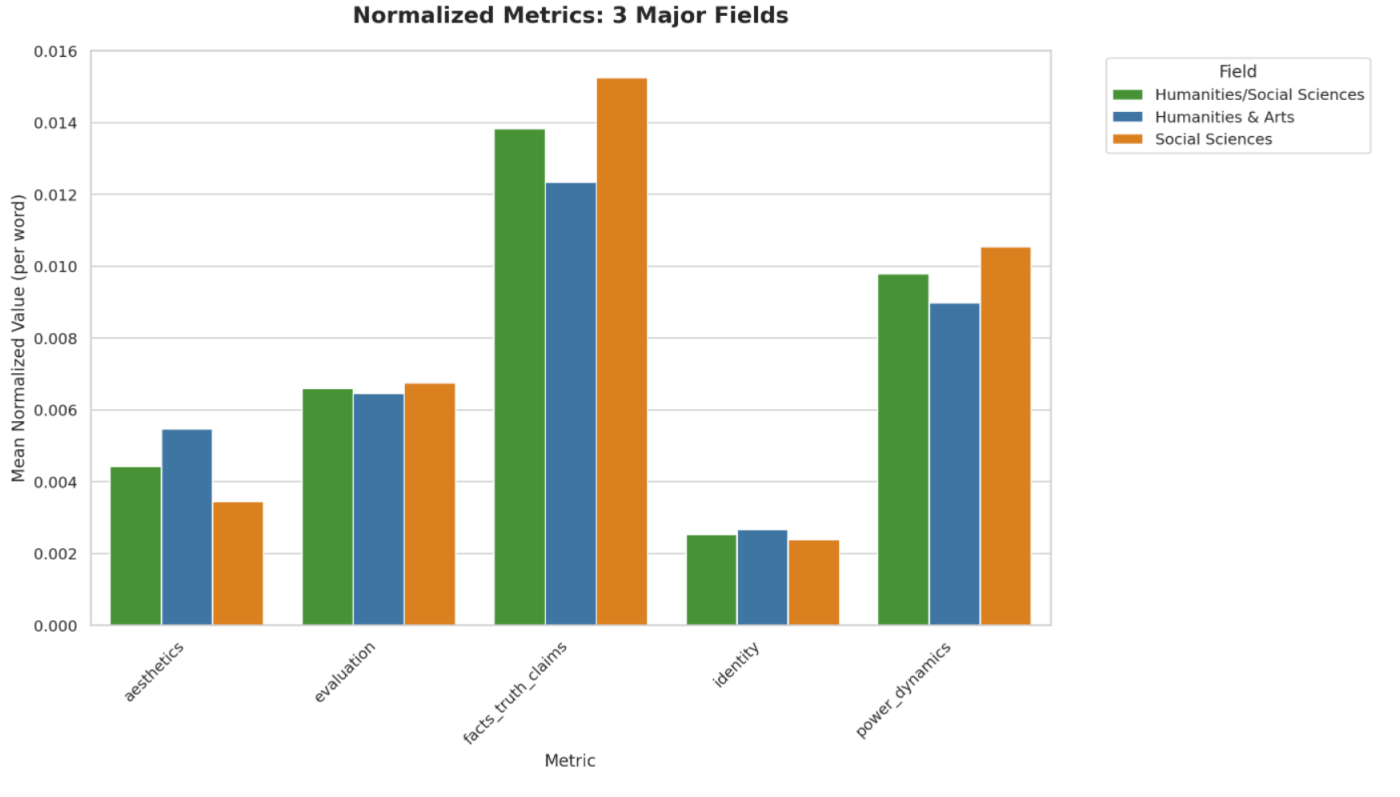
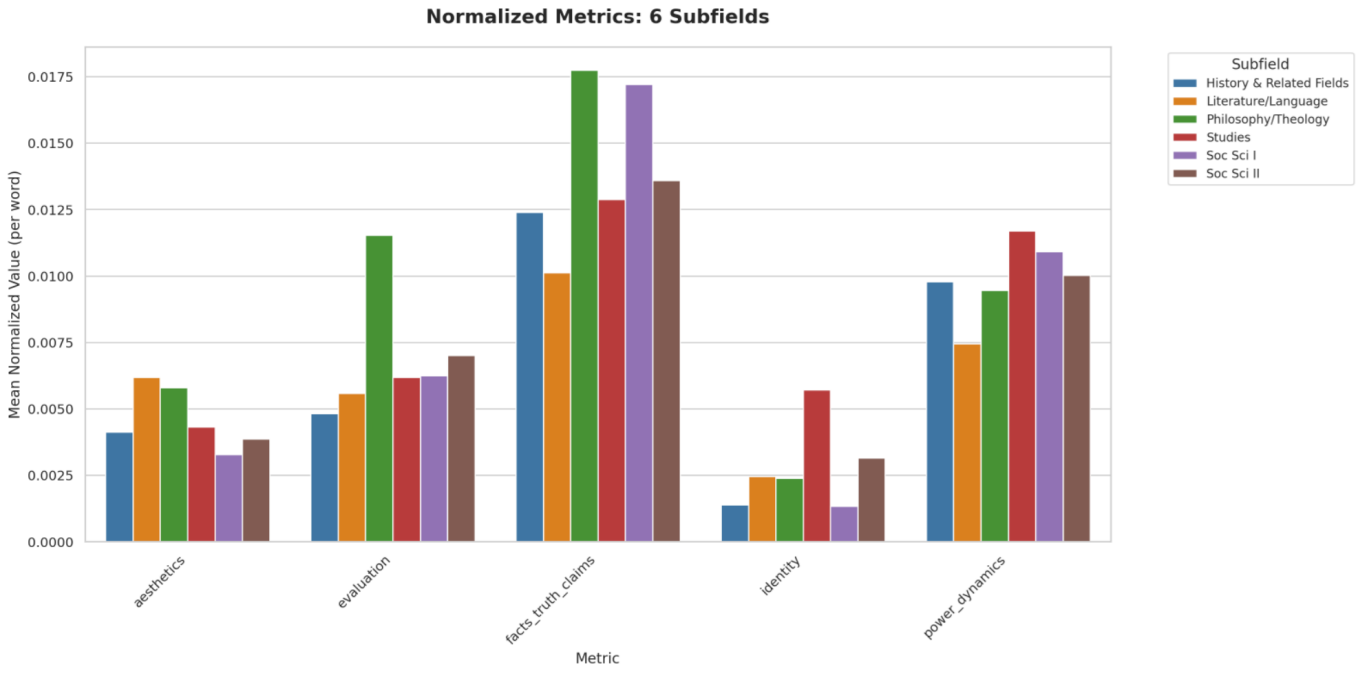


Figure 6 Normalized Metrics: Six Subfields



5 Temporal Dynamics

5.1 Full-Corpus Trends

Figure 7 tracks all five vocabulary categories across the full dataset from 1960 to 2025. *Facts/Truth Claims* has grown steadily throughout the entire study period. *Power Dynamics* rose sharply from around 1988 but has stayed broadly flat since 2000. *Evaluation* has been relatively stable throughout. *Aesthetics* has declined steadily since 1988. *Identity*, which was negligible in the early decades, has grown continuously since 1980 and reached rough parity with *Evaluation* by 2022.

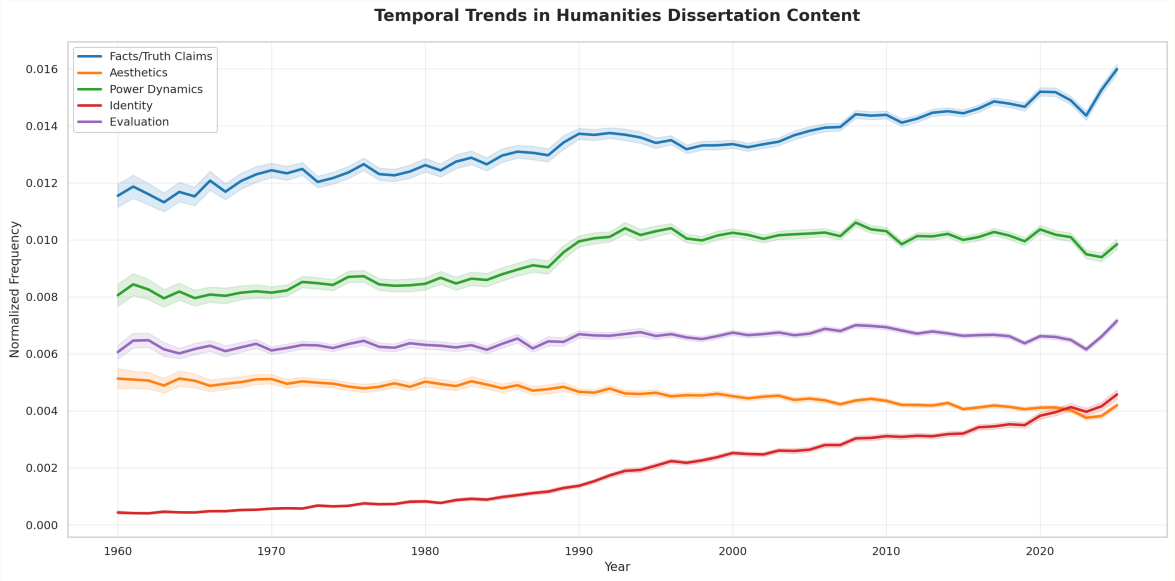


Figure 7 Temporal Trends in Term-Basket Frequencies: Full Dataset

Figure 7 shows smoothed five-year averages with shaded bands that represent the typical range of uncertainty around each estimate. Several features deserve close attention.

The 1988 turning point. Both *Facts/Truth Claims* and *Power Dynamics* show a pronounced upward shift beginning around 1988 and continuing through the mid-1990s. The timing is consistent with the spread of poststructuralist and postcolonial scholarship from its initial strongholds in Literature into History and the Social Sciences—a spread that has been extensively discussed in the secondary literature (Bonnell and Hunt, 1999; Sewell, 2005) but is here given quantitative confirmation. Importantly, *Facts/Truth Claims* and *Power Dynamics* rose *together*: rather than power-analytic language crowding out empirical vocabulary, the two grew at the same time. This suggests that the linguistic turn of the 1980s did not replace scientific norms in academic writing so much as add an additional rhetorical layer alongside them.

The decline of Aesthetics vocabulary. The steady fall of *Aesthetics* vocabulary from approximately 0.0050 words per total word count in 1988 to 0.0042 by 2025 is modest in percentage terms but consistent across the full corpus. It partly reflects the shift away from Literature—the field with the highest *Aesthetics* vocabulary—and partly a genuine shift within that field toward theoretical rather than formal analysis. The decline accelerates slightly after 2005, coinciding with the period of rapid growth in Social Science II and Interdisciplinary Studies.

The Identity trajectory. Identity vocabulary was negligible in 1960 (0.000432 words per total word count) and remained well below 0.001 through 1975. Its growth thereafter traces a remarkably smooth upward curve through 2025, where it reaches 0.00457 per word—a tenfold increase over 65 years (Table A.7 in the companion technical report). By 2022, *Identity* had achieved rough parity with *Evaluation* (approximately 0.0065). Our statistical analysis in Section 8 translates this visual picture into formal estimates: *Identity* grows at approximately 5–8% per year after accounting for differences between universities, a rate approximately twice that of any other category.

5.2 Field-Specific Dynamics

The overall trajectory conceals important variation between fields. The eight field-specific figures below are summarized in the annotated table that follows.

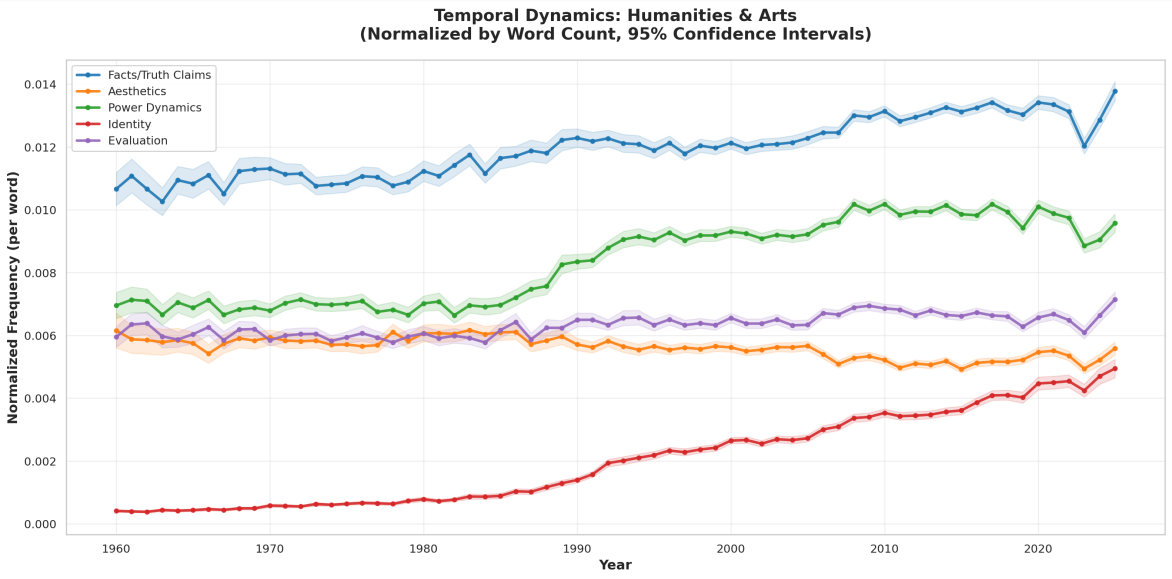


Figure 8 Temporal Dynamics: Humanities and Arts

The Humanities & Arts aggregate (Figure 8) shows a gradual increase in *Facts/Truth Claims* throughout the study period, marked by a particularly sharp rise in both *Facts/Truth Claims* and *Power Dynamics* beginning in 1985 and leveling off around 2000. *Evaluation* remains flat over the same interval. *Identity* begins a sustained rise from near-zero in 1980; by 2025 it has overtaken both *Evaluation* and *Aesthetics* within Humanities & Arts—a structural reordering that would have been virtually impossible to predict from the data of 1970.

History (Figure 9) is the subfield with the most stable overall profile and the most gradual change. *Facts/Truth Claims* has been dominant throughout, reflecting the discipline's reliance on evidence, and has edged upward consistently since 1960. *Power Dynamics* shows no clear trend, fluctuating within a band of roughly 0.009–0.011 per word across the entire study period—a notable contrast with the pronounced surge visible in Literature and the Humanities aggregate. *Aesthetics* and *Identity* both rise from 1980, but modestly; neither overtakes Evaluation. History's relative stability in these dimensions may reflect the discipline's sustained commitment to archival and evidence-based scholarship even as neighboring fields underwent more pronounced change.

Literature/Language (Figure 10) is the field that has undergone the most dramatic internal change. Three

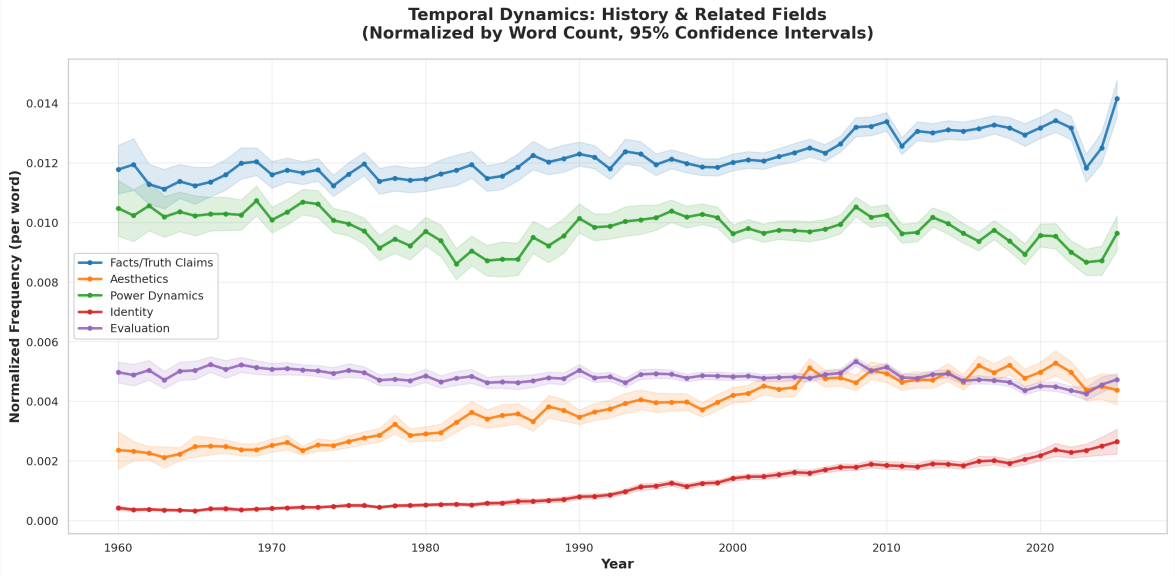


Figure 9 Temporal Dynamics: History and Related Fields

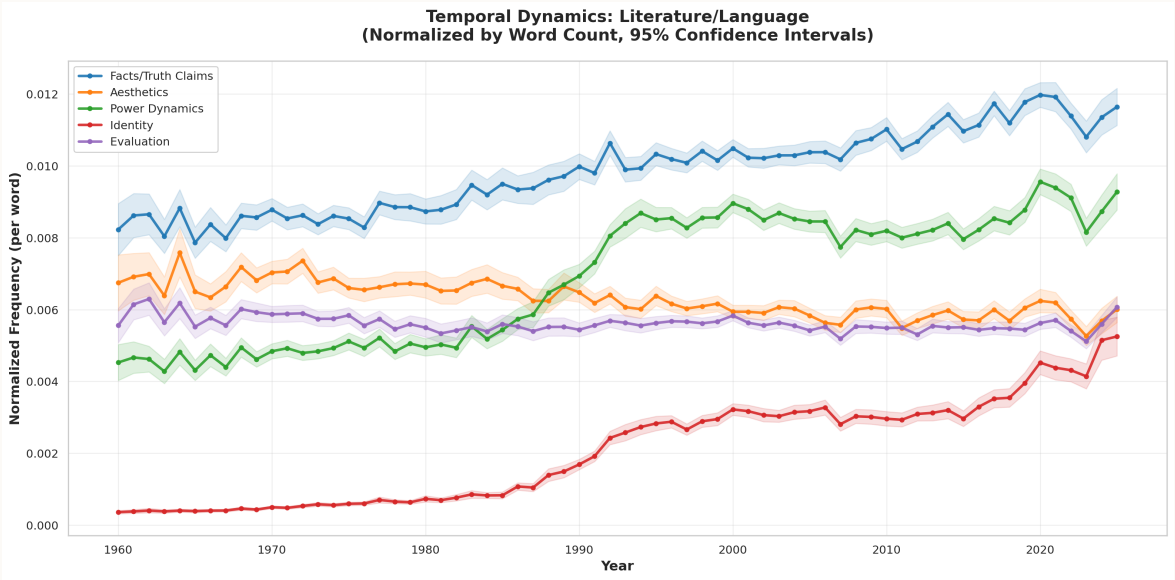


Figure 10 Temporal Dynamics: Literature and Language

features stand out. First, *Power Dynamics* shows two distinct surges: a first wave from approximately 1982 to 2000 (during which it surpassed *Facts/Truth Claims* for the first time) and a second wave beginning around 2015 and continuing to 2020. Second, *Identity* grew in near-perfect lockstep with *Power Dynamics* during the post-2015 acceleration, reaching 0.0043 per word by 2025 and almost pulling level with *Aesthetics*—the historically central vocabulary of literary analysis. Third, *Aesthetics* itself, while still the second-ranked category in Literature through the mid-2000s, has declined steadily and by 2025 is barely distinguishable from *Identity* and *Evaluation*. The substitution of power-analytic and identity vocabulary for aesthetic vocabulary within the flagship humanities discipline is among the most consequential findings of this analysis.

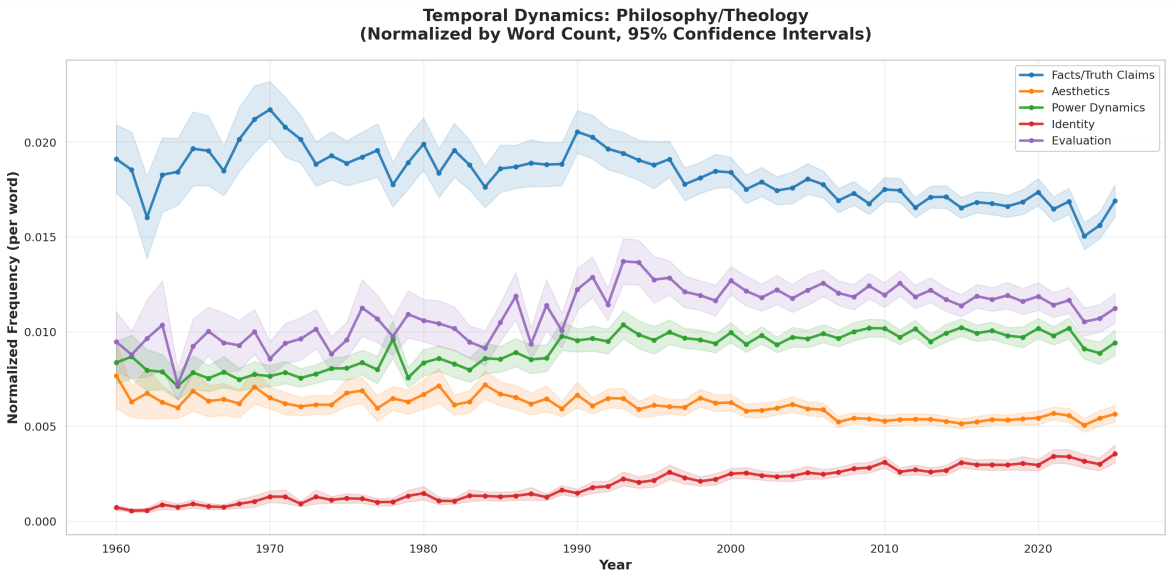


Figure 11 Temporal Dynamics: Philosophy and Theology

Philosophy/Theology (Figure 11) is the most distinctive subfield in the entire dataset. Its *Facts/Truth Claims* frequency is the highest of any grouping (0.0177 on the long-run average) and, uniquely, declines slightly after 1970. More striking still is the exceptional height and stability of the *Evaluation* category: at 0.0115, Philosophy's *Evaluation* average exceeds every other subfield, reflecting the discipline's central commitment to normative reasoning. While other categories show long-term stability, *Identity* also undergoes a sustained rise within *Philosophy*, mirroring broader corpus-wide trends despite the subfield's otherwise unique profile. The wide shaded bands in Figure 11 reflect the smaller number of dissertations in this subfield relative to History or Social Science II, and caution against reading too much into year-to-year movements.

The Social Sciences aggregate (Figure 12) presents a cleaner picture than the Humanities: a steady, near-linear rise in *Facts/Truth Claims* from 1960 to 2025 (reaching 0.0175 by 2025—the highest value in any major grouping), a broadly stable *Power Dynamics*, modest *Aesthetics* decline, and continuous *Identity* growth. The aggregate conceals an important difference between Social Science I and Social Science II, since the two subgroups have moved in quite different directions on *Identity*, as the figures below show.[1]

[1]The division of Social Sciences into Social Science I (Economics, Political Science) and Social Science II (Anthropology, Psychology, Sociology, and Communications) is a conventional grouping reflecting broad methodological orientation rather than a data-driven classification. The placement of Psychology and Sociology in Social Science II is contested: experimental psychology shares more with Social Science I's quantitative methods, while clinical and counseling psychology share interpretive approaches with the humanities, and sociology spans both traditions. The robustness checks in Appendix RC-2 of the technical report confirm

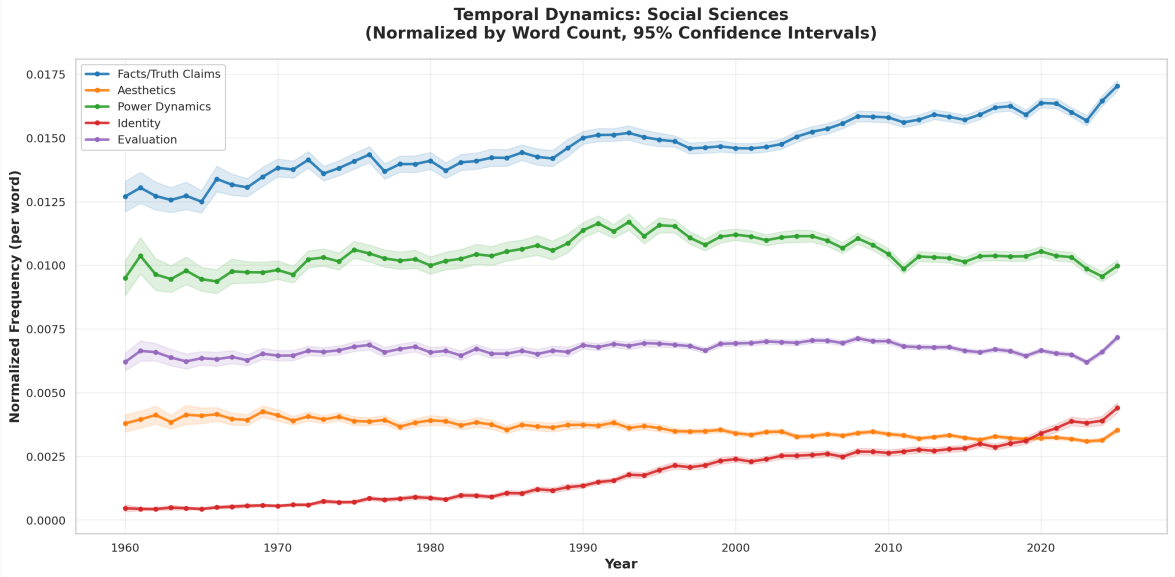


Figure 12 Temporal Dynamics: Social Sciences

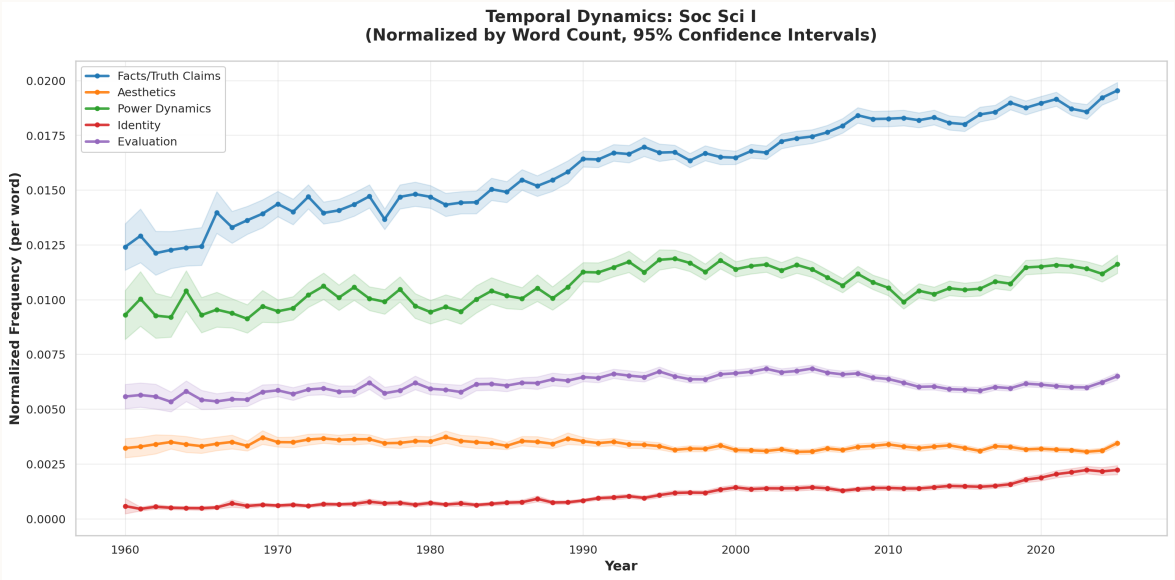


Figure 13 Temporal Dynamics: Social Sciences I

Social Science I—Economics and Political Science— (Figure 13) shows the most pronounced growth in *Facts/Truth Claims* of any subfield: from approximately 0.0125 in 1960 to 0.0200 by 2025, a 60% increase. This reflects these disciplines' ongoing turn toward quantitative and experimental approaches that require extensive evidence-based vocabulary. *Power Dynamics* is elevated but shows no clear trend. Most tellingly, *Identity* showed only marginal growth through 2018 before a modest uptick in the most recent years—suggesting that the identity-focused rhetorical shift documented elsewhere in the corpus has barely touched Economics and Political Science. This makes Social Science I a useful reference point against which the rhetorical changes in Literature/Language, Studies, and Social Science II can be assessed.

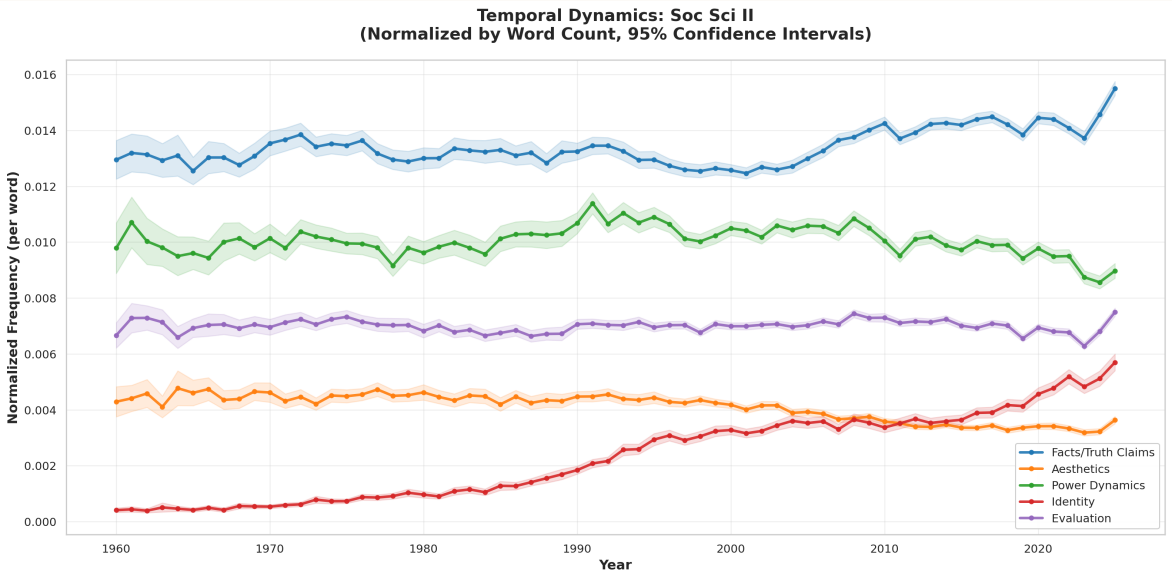


Figure 14 Temporal Dynamics: Social Sciences II

Social Science II—Anthropology, Psychology, and Communications— (Figure 14) is, alongside Literature/Language, the field with the most dramatic rhetorical change recorded in this corpus. Its *Identity* trajectory is the steepest of any subfield: from a level effectively at zero in 1960, *Identity* grew to 0.003 per word by 2010 and then accelerated sharply after 2019, reaching 0.006 per word by 2025.

Two additional features distinguish Social Science II from Social Science I. First, *Aesthetics* declines continuously from 1990 onward in Social Science II, whereas it is already low and stable in Social Science I. Second, the gap between *Facts/Truth Claims* and *Power Dynamics* is notably narrower in Social Science II than in Social Science I. Together, these observations document the substantial rhetorical convergence of Social Science II with the Humanities fields examined above—precisely the pattern anticipated in Trend 5.

Interdisciplinary Studies (Figure 15) is the subfield with the most distinctive profile. It is the *only* grouping in which *Facts/Truth Claims* and *Power Dynamics* reach approximate parity—both hovering in the 0.010–0.014 band—throughout most of the study period. This near-parity reflects the hybrid character of Studies programs, which combine the interpretive and critical vocabularies of the Humanities with normative social-science concerns. Identity rises steadily from around 1990, consistent with the theoretical foundations of Women's Studies, African American Studies, Gender Studies, and related programs that make up much of this

that the within-field trends documented in this section are not artifacts of the grouping: field and university fixed effects amplify rather than attenuate the core findings, indicating that the results are robust to compositional variation within each category.

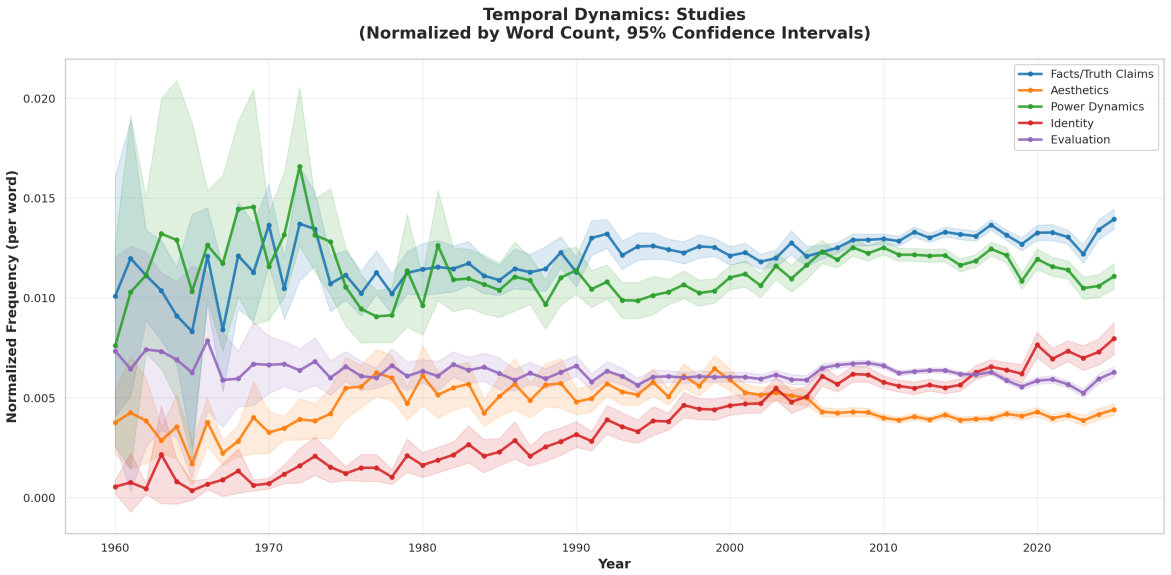


Figure 15 Temporal Dynamics: Interdisciplinary Studies

category. Aesthetics declines from a high point around 1999, suggesting that earlier programs with cultural-studies orientations have been joined by more activist and policy-oriented fields. The very wide shaded bands in the early decades—when Studies programs were few and heterogeneous—narrow substantially from 2000 onward as the category grew large enough to produce reliable estimates.

Sentiment Analysis

6

This section reports how the tone surrounding nine key terms has changed over time: *Identity, History, Truth, American, European, Western, Subversive, Activism,* and *Power*. Rather than measuring the overall tone of an entire dissertation, we measured the emotional "atmosphere" created by the words appearing near each term (within ten words before or after it throughout the full text). This tells us about the *framing* of specific concepts in academic writing, not about the topics themselves.

We calculated an average tone score for each term based on how positive or negative its surrounding words are, using established word-rating databases. Scores range from −1 (very negative) to +1 (very positive), with scores near zero representing neutral or balanced contexts. This approach is particularly suited to large-scale analysis because it tracks how the rhetorical framing of specific concepts evolves over decades, even when the overall tone of scholarly writing stays formally neutral.

However, this approach does carry specific limitations. It is effective at detecting "rhetorical drift"—for example, whether the term *Power* is increasingly surrounded by words of conflict or words of stability. Its main limitation is that it cannot distinguish between a researcher's own stance and the stance they are describing or critiquing. Despite this, assuming that all fields are subject to similar citation and descriptive conventions, the relative shifts in these scores provide a reliable indicator of the changing "affective climate" of different subfields.

6.1 Full Dataset

Figure 16 and Table A.16 in the companion technical report present the full-corpus sentiment baseline. The figure shows nine separate panels, one for each term, each displaying the average tone score from 1960 to 2025. The shaded bands show the typical range of uncertainty around each estimate. Several patterns deserve systematic attention.

Truth is an outlier in the positive direction, sustaining a score near 0.35 throughout the entire study period with a slightly upward movement in the final decade. This score is approximately five to seven times higher than that of any other term tracked. The stability of *Truth*'s positive context confirms that truth-oriented vocabulary has not been negatively reframed in overall academic writing, even as its distribution across disciplines has shifted.

History shows the steepest long-term decline of any term, falling from approximately 0.07 to 0.01 over 65 years. By the end of the period, the term "history" appears in doctoral dissertations in contexts that are virtually neutral on average—a remarkable transformation for a discipline that, in earlier decades, was consistently surrounded by positive scholarly framing. This trend is particularly pronounced in the Social Sciences, where the term moves into slightly negative territory.

American, *European*, and *Western* all show steady downward trends, though their starting points and slopes differ. *American* began at approximately 0.07 and has fallen to 0.03; *European* began at approximately 0.07 and has fallen to below 0.03 by 2025; *Western*—which carried the highest initial score among the geopolitical terms—fell from 0.08 to approximately 0.045. All three remain positive throughout, indicating that these terms are not framed negatively in absolute terms, but their declining trajectories document a consistent shift in the rhetorical positioning of Western and American cultural referents within the academy. The three terms behave differently, however, once we account for the general trend toward more negative academic writing: see Appendix RC-4 in the companion technical report for the full analysis.

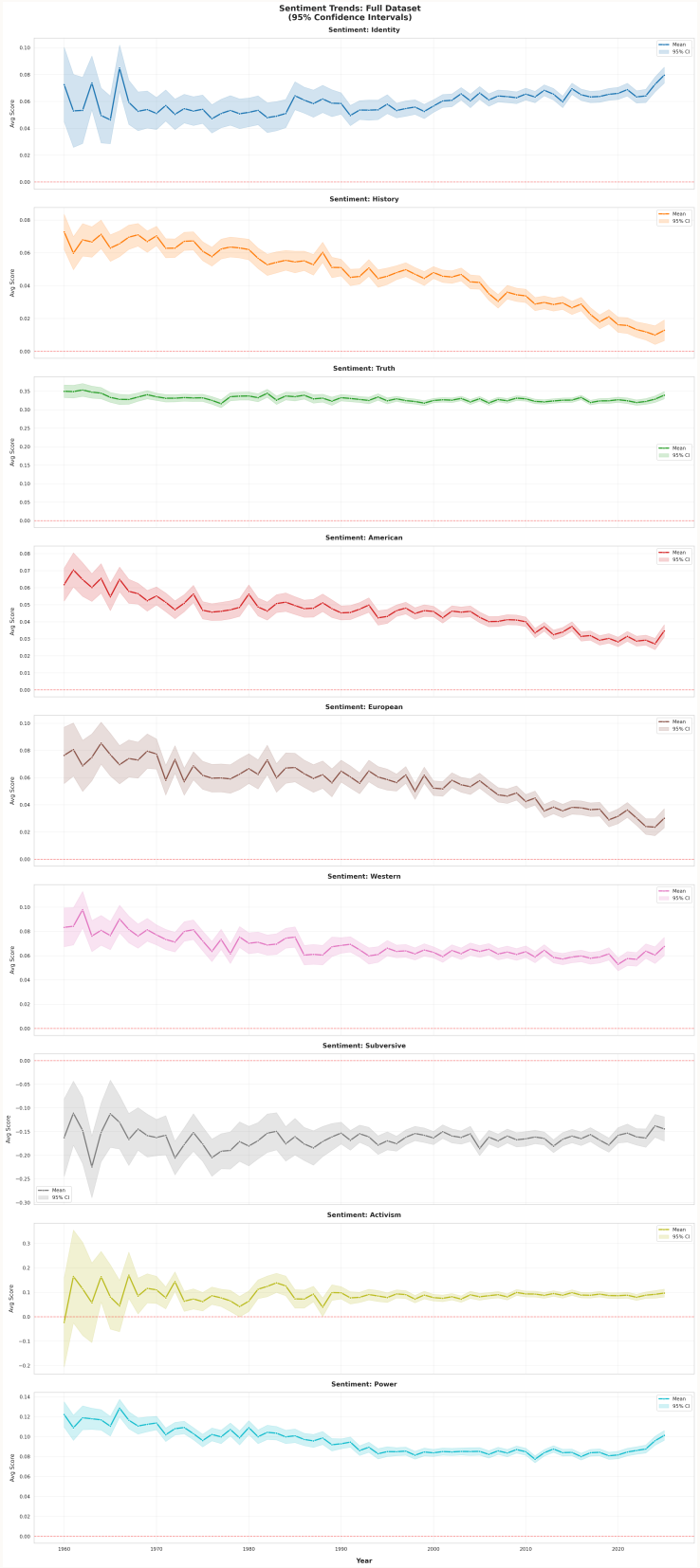


Figure 16 Sentiment Trends: Full Dataset (95% confidence intervals)

Subversive is the only term that sustains a consistently *negative* tone score throughout the study period, ranging between −0.20 and −0.15. Importantly, our statistical analysis in Section 8 shows that Subversive's tone is becoming *less* negative over time—a gradual rehabilitation consistent with the growing embrace of subversive and activist scholarly identities documented elsewhere in this corpus.

Activism and *Identity* remain broadly stable at low positive levels across the study period when examined in the full corpus, though field-specific breakdowns below reveal important variation.

Across the full corpus, *Truth* sustains the highest positive tone score (≈ 0.35) with no meaningful downward trend. *History* fell from approximately 0.07 to 0.01. *Identity* remained broadly stable (0.05–0.07). *American* and *European* each declined from around 0.07 to approximately 0.03. *Western* fell from 0.08 to 0.045. *Subversive* maintains a consistently negative score (between −0.20 and −0.15). *Activism* held steady near 0.01. *Power* remained moderately positive, declining from 0.12 to 0.09.

6.2 Field-Specific Sentiment Trends

Figures 17–24 break down the tone trends by field. Most of the patterns seen in the full corpus are broadly repeated across subfields, but several field-specific differences illuminate the diversity of scholarly rhetoric.

Humanities & Arts (Figure 17). The Humanities aggregate closely mirrors the full-corpus patterns, with the notable feature that the decline in *Power* tone is shallower here than in the Social Sciences. *Power* sentiment in Humanities fell from approximately 0.12 to 0.09—a decline of about 25%—while remaining higher in absolute terms than in the corpus as a whole. The *Subversive* series maintains its characteristic negative baseline but is considerably less negative in Humanities than in Social Sciences, suggesting that subversion-oriented rhetoric is more naturalized within literary and historical scholarship.

History (Figure 18). The most striking feature of the History panel is the severity of the *History* term's own tone decline *within* history dissertations: from approximately 0.07 in 1960 to 0.03 by 2025. This self-referential negative drift—the term "history" becoming more neutrally or critically framed within history dissertations themselves—may reflect the influence of metahistorical and postcolonial critiques that treat *History* as a contested construction rather than a neutral descriptor. *American* and *European* tone declined comparably in History to the full-corpus trend. *Truth* remains strongly positive and is one of the most stable series in this subfield.

Literature (Figure 19). *Power* tone fell from 0.14 to 0.07—a sharper decline than in any other field—and the slope steepens after 2005. This is paradoxical given that power-analytic *vocabulary* surged in Literature/Language during the same period (Section 5): what happened is that *Power* became more ubiquitous but less positively valued in the sense that it appeared increasingly in critical rather than descriptive contexts. *Western* declined from 0.10 to 0.05. The *Truth* series in Literature/Language is lower in absolute terms (≈0.30) than in Philosophy or History and shows a slight downward slope post-1990—the only field in which Truth sentiment trends meaningfully downward.

Philosophy (Figure 20). *Truth* tone is both exceptionally high (≈0.40) and unusually stable—the clearest evidence of field-specific insulation from the broader negative drift. This is consistent with the discipline's constitutive commitment to epistemological inquiry, where *Truth* functions as an irreducibly positive terminal value rather than a contested political category. *American* and *European* tone in Philosophy show less pronounced decline than in the Social Sciences or Literature/Language, and the wide shaded bands caution against over-interpreting year-to-year movements. *Subversive* occupies its characteristically negative zone but at a notably higher (less negative) level than in any other field, suggesting that Philosophy engages with



Figure 17 Sentiment Trends: Humanities and Arts



Figure 18 Sentiment Trends: History and Related Fields



Figure 19 Sentiment Trends: Literature and Language

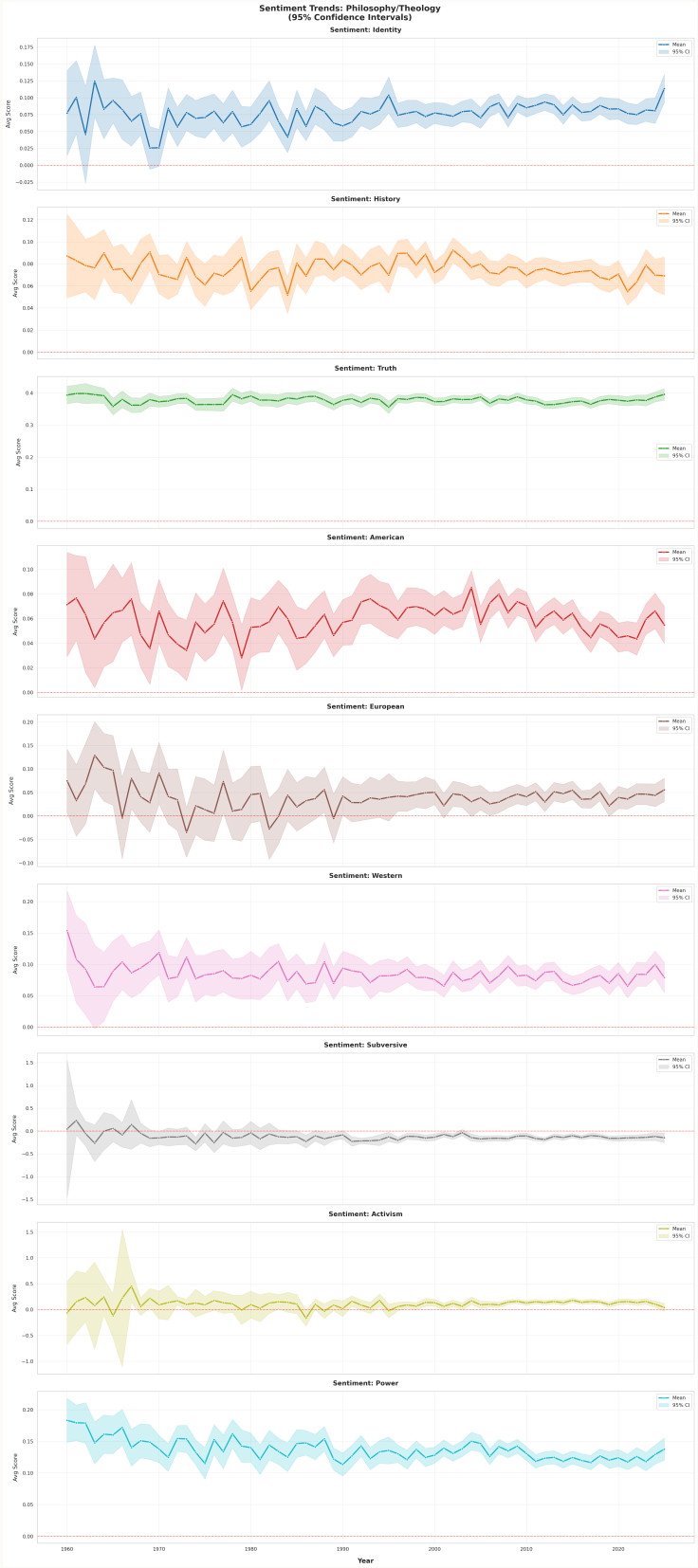


Figure 20 Sentiment Trends: Philosophy and Theology



Figure 21 Sentiment Trends: Social Sciences



Figure 22 Sentiment Trends: Social Sciences I

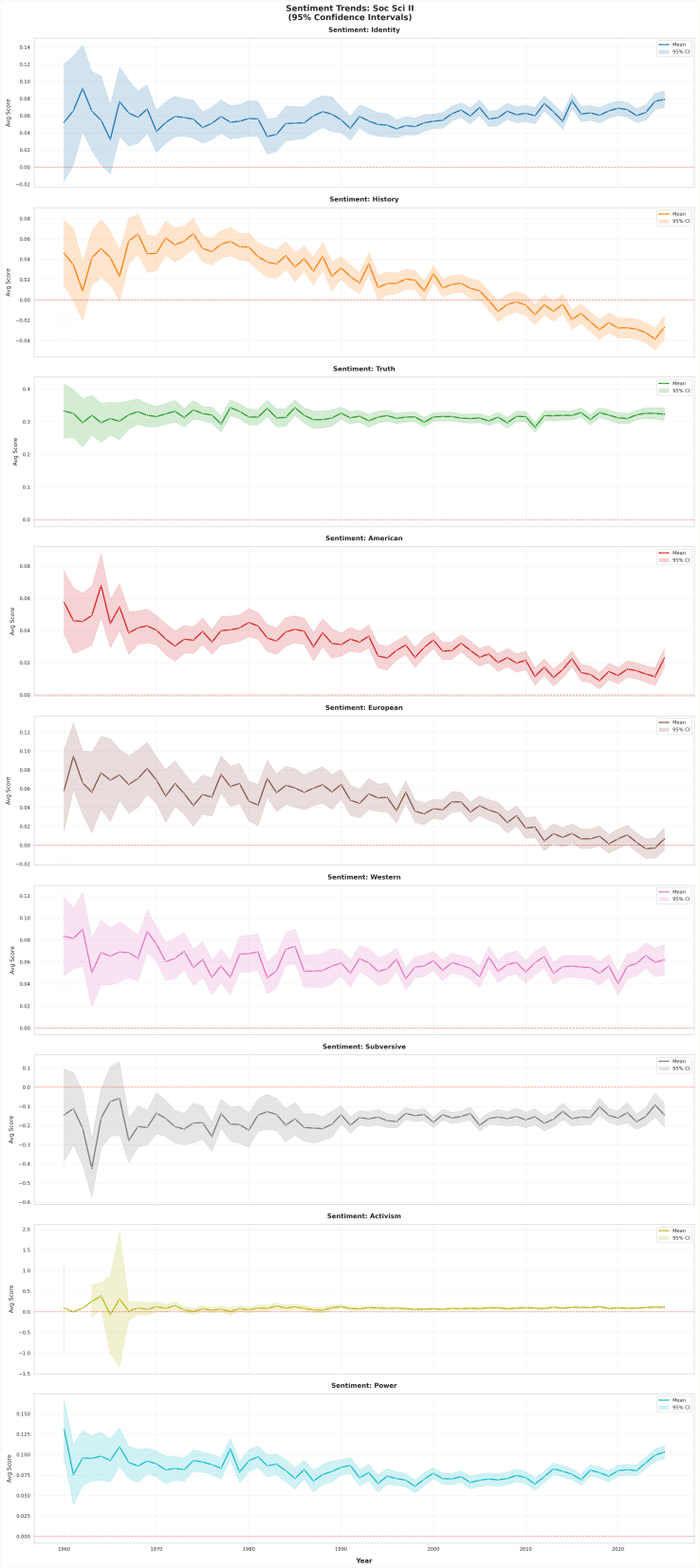


Figure 23 Sentiment Trends: Social Sciences II

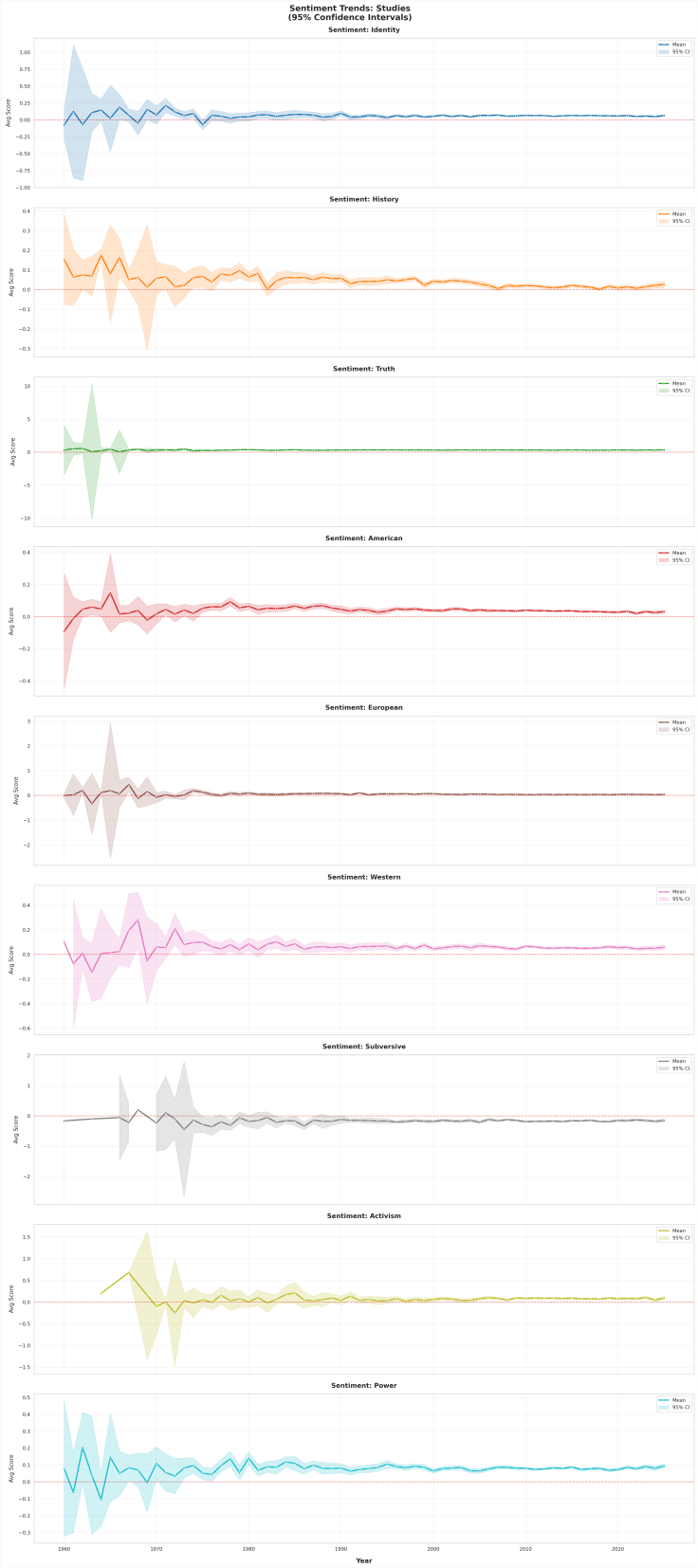


Figure 24 Sentiment Trends: Interdisciplinary Studies

subversive ideas with somewhat greater equanimity.

Social Sciences (Figure 21). The Social Sciences aggregate shows the most consistent downward drift across geopolitical and historical terms. *History* fell into negative tone territory by approximately 2015 (score ≈ -0.01)—the only grouping in which this term crosses zero. Declines in *American* and *European* tone are the steepest of any major grouping. These patterns are driven disproportionately by Social Science II, as the disaggregated panels below confirm. *Activism* displays a modest upward trend in the Social Sciences that is not present in the Humanities—consistent with the growing influence of applied and activist scholarship in these fields.

Social Science I (Figure 22). Economics and Political Science show tone profiles closer to the full-corpus baseline than to Social Science II. *Truth* remains strongly positive (≈ 0.35) and stable. *American* tone declined but less sharply than in Social Science II; the series ends at approximately 0.05 rather than the near-zero levels recorded in the latter field. *Power* shows an unusually stable trajectory in Social Science I compared with other fields, consistent with these disciplines' analytical treatment of power as a technical concept (legislative power, market power, state power) rather than primarily a critical-theoretical term.

Social Science II (Figure 23). Social Science II shows steeper downward trends than Social Science I across geopolitical and historical terms, making it the field with the most pervasive negative drift across the widest range of terms. *History* descends to approximately -0.04 by 2025—the most negative value for this term in any subfield. *European* falls below 0.02—approaching zero. *American* tracks a similar trajectory.

Interdisciplinary Studies (Figure 24). The Studies panel has very wide shaded bands through the 1960s and 1970s, reflecting the very small number of dissertations in this category before 1980. Once the category grows large enough to produce reliable estimates (post-1990), a characteristic pattern emerges: very low and declining geopolitical term tones (*American*,[2] *European*, *Western* all approach zero or turn slightly negative), a near-zero *History* tone, and a broadly stable *Truth* series that is lower than in any other subfield (≈ 0.00–0.02). The latter observation is notable: in Interdisciplinary Studies, Truth appears in contexts that are effectively neutral on average, rather than positively valued—the closest any subfield comes to a genuinely skeptical treatment of truth-claims in the aggregate.

The field-by-field panels above show how each subfield has evolved over time, but they do not permit direct comparison of the *same term* across fields on a common scale. To address this, the nine-term overlay figure presents each term in a separate panel, overlaying the tone trajectory for all eight fields simultaneously (see Appendix B in the companion technical report).

Taken together, the tone evidence confirms Trend 4 and provides additional support for Trend 5. Geopolitical and historical terms have been framed more critically or neutrally across all fields, but the shift is sharpest in Social Science II and Interdisciplinary Studies. Truth remains a stable positive anchor everywhere, and most strongly so in Philosophy. The fields that have grown most rapidly in dissertation volume—Social Science II and, until 2015, Interdisciplinary Studies—are precisely those in which the negative drift in geopolitical tone is most pronounced, suggesting that compositional change in the academy is reinforcing the rhetorical shifts documented here.

[2]Note that while *American* tone declines in raw field-level data across all groupings, the baseline-adjusted specification in Appendix RC-4 (companion technical report at https://academysciencesletters.org/humanities-in-crisis/technical) shows this decline does not survive controls for corpus-wide negativity drift. The field-level patterns describe the raw rhetorical register; they should not be interpreted as evidence of targeted negative framing of the United States.

PhD-Granting Universities and Locations

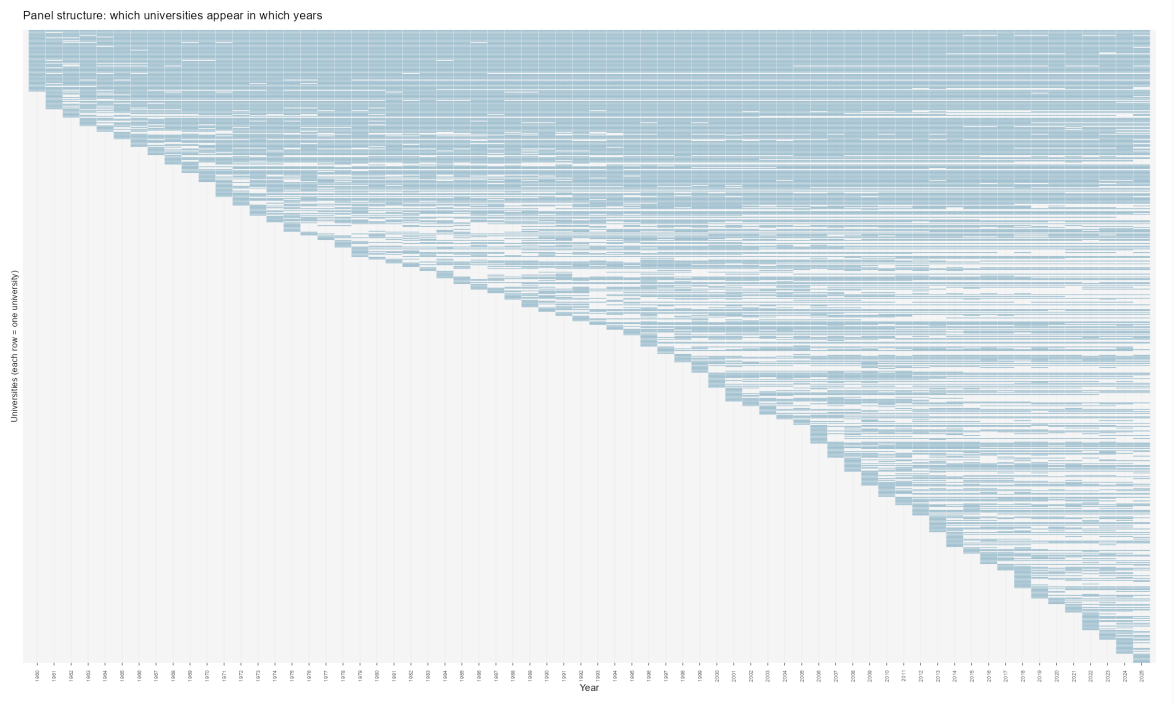


Figure 25 Panel Structure

Figure 25 maps the university-by-year structure of the two groups of universities used in Section 8. Each row represents one PhD-granting institution, sorted by the year in which dissertations first appear in the corpus; each column represents a year from 1960 to 2025; a shaded cell indicates at least one dissertation recorded for that institution in that year. The triangular gap in the upper left reflects the gradual entry of newer institutions into the corpus: many universities that now produce substantial dissertation volumes did not have active doctoral programs in the humanities and social sciences until the 1970s or 1980s. The increasingly dense coverage from 1990 onward reflects the expansion of graduate education documented in Section 3. The ragged right edge reflects post-2020 registration delays, which disproportionately affect recently founded programs at smaller institutions.

The corpus draws on 678 PhD-granting institutions. The distribution is highly unequal: the typical (median) institution contributes 55 dissertations, while the average is 654 and the highest-contributing single institution exceeds 11,000 (University of Chicago). Geographically, California institutions collectively contribute the largest volume, followed by New York and Illinois.

Figure 26 reveals substantial concentration at the top. The 20 highest-volume institutions account for approximately 35% of all dissertations in the corpus, with the top five (Chicago, Michigan, NYU, Indiana, Berkeley) alone contributing nearly 19%. The distribution shown in Figure 27 is characteristic of processes where a few entities account for a disproportionate share of the total: the chart is almost entirely concentrated in the first bar when plotted on a normal scale, while a logarithmic scale reveals a broad distribution across one to four orders of magnitude. This concentration has implications for the statistical analysis: the consistent group of ten well-covered universities used in Section 8 necessarily overweights these research-intensive institutions relative to the broader academy, which is why the larger group of 678 universities—despite

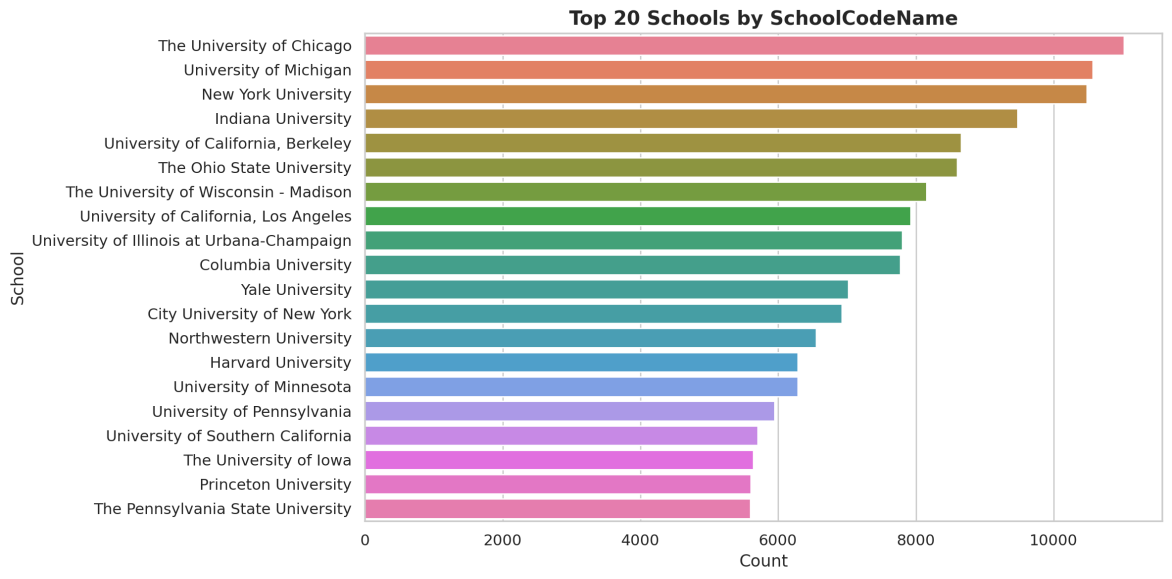


Figure 26 Top 20 Institutions by Dissertation Count

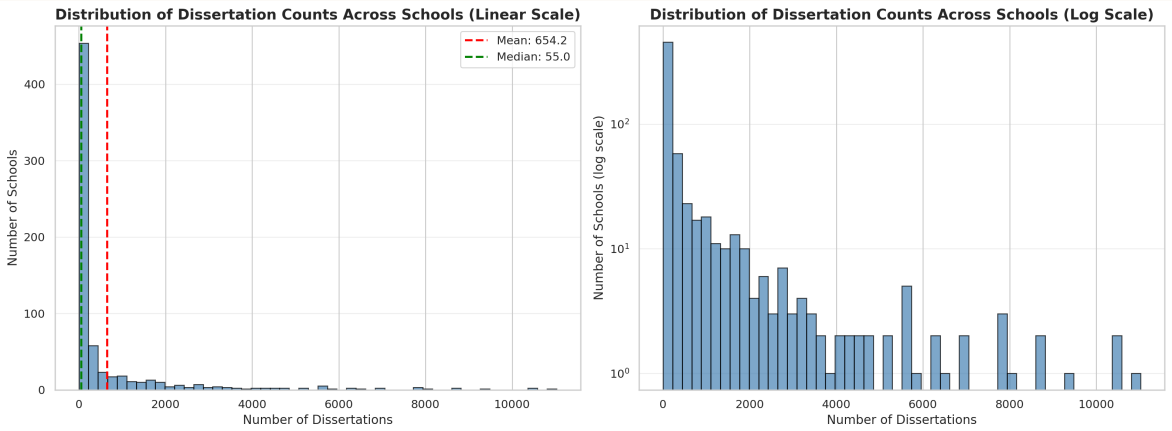


Figure 27 Distribution of Dissertation Counts across Institutions

its compositional challenges—provides an important check for drawing conclusions about corpus-wide trends.

Table 3(Appendix) records the full top-20 ranking. The presence of large state university systems (Michigan, Indiana, Ohio State, Wisconsin, Illinois) alongside elite private research universities (Chicago, NYU, Yale, Columbia, Harvard) indicates that the rhetorical trends documented in this report are not purely an artifact of elite-institution culture but are replicated across a diverse range of institutional types.

The geographic distribution (Figures 28 and 29, Table 4 in the Appendix) mirrors the concentration of research-intensive doctoral education in the United States. California leads with over 56,000 dissertations across the study period, reflecting the combined output of the University of California system, USC, Stanford, and numerous smaller programs. New York (50,293) and Illinois (34,281) follow, the latter driven substantially by the University of Chicago and Illinois at Urbana-Champaign. The location distribution, like the institutional distribution, is highly skewed to the right: the typical state contributes 1,353 dissertations while California contributes 56,450—a ratio exceeding 40:1. States in the South and Mountain West are

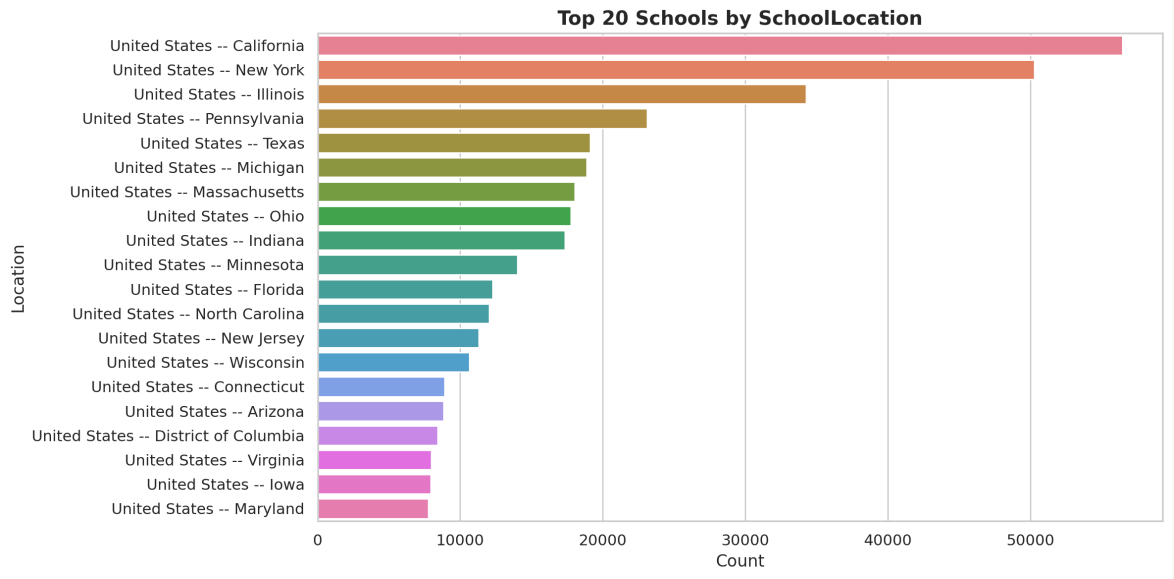


Figure 28 Top 20 States by Dissertation Count

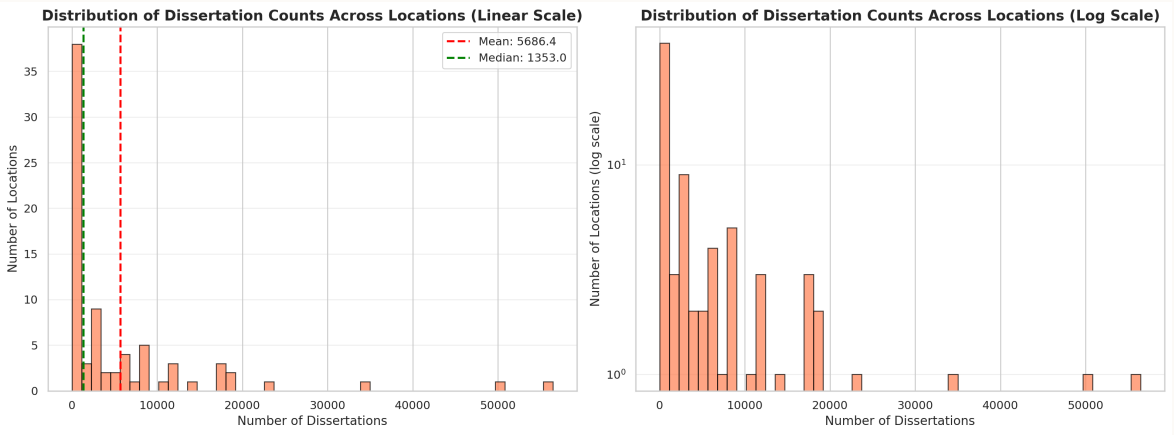


Figure 29 Distribution of Dissertation Counts across Locations

systematically underrepresented relative to their share of the general population, reflecting longstanding differences in doctoral-program density across US regions.

8 Statistical Confirmation of Trends

8.1 How the Analysis Works

This section uses statistical models to confirm that the patterns described in the preceding sections are genuine—not the result of chance, or of changes in which universities and fields contributed most dissertations at different points in time.

The key idea is to compare each university against its own historical record rather than against other universities. This approach—called using *fixed effects* in statistical terminology—controls for stable differences between institutions such as their prestige, size, location, or disciplinary mix. What remains after making this adjustment is the average rate of change *within* each institution over the 1960–2025 period.

We report results from two groups of universities:

- A **consistent group of 10 universities** with data for every year from 1960 to 2025 (Columbia University, Indiana University, New York University, Ohio State University, University of Chicago, University of Wisconsin–Madison, University of California Berkeley, University of California Los Angeles, University of Illinois at Urbana-Champaign, and University of Michigan). These 10 institutions were selected because they have complete annual records, which eliminates a potential source of distortion from institutions entering or leaving the dataset. Together they contributed approximately 90,000 dissertations—roughly 20% of the full corpus.
- **All 678 universities** in the dataset, which provides the broadest possible coverage but includes institutions that entered the database at different times.

We use two types of models. For vocabulary frequency (how often each category of terms appears), we use a model that measures the average annual percentage growth rate. For sentiment scores, we use a model that measures the average annual change in the score on the -1 to $+1$ scale. In both cases, the results are adjusted so that changes within each university are compared only to that university's own history.

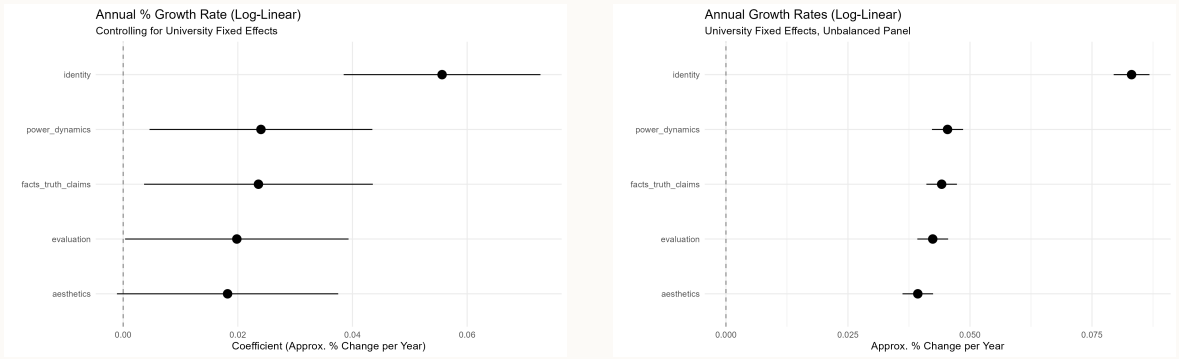
To ensure that our conclusions are not distorted by the fact that observations from the same university across many years are correlated with each other, we use a correction technique (called *clustering* standard errors at the university level). This provides a conservative and reliable basis for identifying genuine disciplinary shifts.

8.2 Findings

Across both groups of universities, *Identity* terminology shows by far the largest annual growth rate (approximately 5–8% per year in the full 678-university group). *Power Dynamics*, *Facts/Truth Claims*, and *Evaluation cluster* in an intermediate range. *Aesthetics* shows the weakest growth of all five categories. The ranking of categories is consistent across both groups.

The charts in Figures 30a and 30b and the regression tables in the companion technical report translate the visual patterns of Section 5 into formal estimates with error bars that reflect the confidence in each estimate. Several features deserve close attention.

Identity growth is the dominant signal in the corpus. In the consistent 10-university group, the *Identity*



(a) Consistent Group of 10 Universities **(b)** All 678 Universities

Figure 30 Annual Growth Rates in Term-Basket Frequencies

coefficient is 0.056 in a log-linear specification—equivalent to an annual growth rate of 5.76%. This implies a doubling of *Identity* vocabulary roughly every 12.4 years. In the full 678-university group, the coefficient rises to 0.083—an effective growth rate of 8.3% per year—implying doubling every 8–9 years. The difference between the two groups likely reflects two forces: (i) the full group includes recently founded programs at universities where identity-focused scholarship has grown fastest; and (ii) the growth rate measure is more sensitive to the steep post-2019 acceleration visible in Social Science II. Both results align with the patterns anticipated in Trend 2.

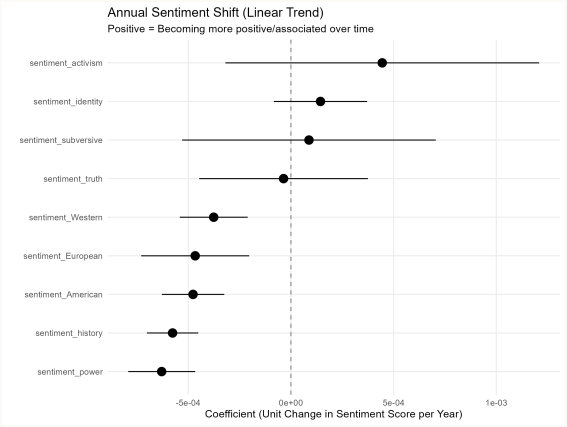
In contrast, the subsequent categories show significantly slower growth. *Power Dynamics* (4.5% per year, full group) and *Facts/Truth Claims* (4.4%) grow at roughly half the rate of *Identity*. *Evaluation* (4.2%) is statistically indistinguishable from *Power* and *Facts* in the full group, suggesting that normative vocabulary has not been displaced—it has merely been outpaced by a faster-growing category, consistent with Trend 3's prediction that truth-claim discourse is resilient. *Aesthetics* (3.9% in the full group) records the slowest growth, consistent with the secular decline visible in Figure 7.

Reliability of the estimates. All estimates in the full 678-university group are calculated from 15,994 university-year observations, providing a very large and reliable sample. The consistent 10-university group, with only 660 observations, produces wider error bars; *Identity* is the only category significant at $p \leq 0.001$ in this smaller group, while *Facts/Truth Claims*, *Power Dynamics*, and *Evaluation* reach $p \leq 0.01$, and *Aesthetics* reaches $p \leq 0.05$. Crucially, the *ranking* of estimates is identical across both groups, validating the full group as the primary basis for drawing conclusions about trends across the broader academy.

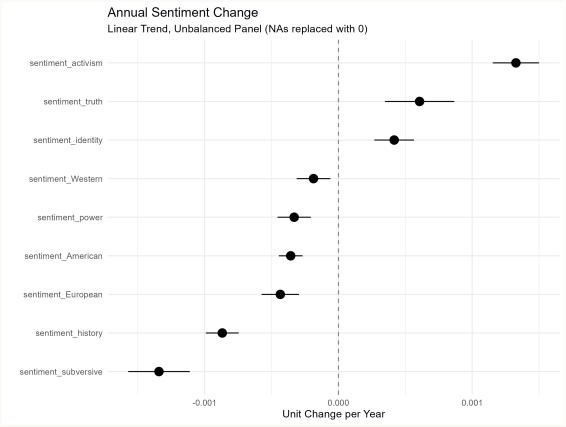
8.3 Sentiment Trends

History shows the most consistently negative annual drift in the balanced panel, with *Power* and *History* exhibiting the strongest downward trends, followed by *American*, *European*, and *Western*. While *Truth* remains near zero, the analysis of the balanced panel indicates that *Identity*, *Activism*, and *Subversive* do not show statistically significant trends over time. The relative stability of these estimates compared to the full group reinforces the conclusion that the identified negative drifts represent genuine long-run shifts in scholarly rhetoric.

The formal estimates confirm the trends described in Section 6. Figures 31a and 31b present the estimates as forest plots, where points to the right of zero indicate terms gaining in positive associations over time and points to the left indicate terms becoming more negatively framed.



(a) Consistent Group of 10 Universities



(b) All 678 Universities

Figure 31 Annual Sentiment Change by Term

Terms becoming more negatively framed. The five terms with clear negative trends in the consistent 10-university group are *History*, *Power*, *American*, *European*, and *Western*. While the annual shifts are modest in absolute terms, they are precisely estimated and consistent across groups. Cumulatively, these trends represent a roughly one-third reduction in the terms' baseline sentiment scores since 1960. Over this 65-year period, this constitutes a systematic and substantively meaningful rhetorical transformation.

However, additional analysis (see Appendix RC-4 in the technical report) reveals important differences among the three geopolitical terms once we account for the possibility that all academic writing has generally become more negative in tone over time. The decline in tone toward *Western* is fully robust across all our analyses and survives this additional control; it warrants strong interpretive language. The *European* decline attenuates to statistical insignificance once this control is applied, and should be described with caution. The *American* trend reverses sign entirely, indicating that the apparent decline reflects a general drift toward more negative academic writing rather than targeted negative framing of the United States; this finding should not be cited as evidence of anti-American sentiment in the corpus.

Terms becoming more positively framed. Two terms gain robustly in positive associations across both groups: *Activism* (the strongest positive gainer in the full group) and *Identity* (positive and significant in the full group). *Subversive* presents a more complex picture: it shows a positive, though statistically insignificant, trend in the consistent 10-university group, contrasting with a clear, robust negative trend in the full group. This reversal likely reflects the composition of the broader 678-institution sample: many smaller and newer institutions use "subversive" primarily in clinical and social-work contexts where the term retains negative associations, diluting the positive rehabilitation trend visible at the 10 larger research universities. The rehabilitation of *Subversive* at elite institutions remains noteworthy: a term that in 1960 appeared almost exclusively in negative contexts (score ≈ -0.22) is now framed progressively less negatively there, reflecting its revaluation within activist and critical-theory frameworks where resistance and subversion are scholarly virtues rather than vices.

Truth's stability. In the consistent group, *Truth*'s annual trend is near zero; in the full group it is positive. This is consistent with Trend 3: across nearly seven decades of academic publishing, the term "truth" has maintained—and if anything marginally strengthened—its positive contextual associations. *Truth*'s persistence as a positively framed anchor term in academic rhetoric is one of the most striking regularities in this corpus, and complicates simple narratives of a postmodern turn against truth-seeking norms in the academy. Scholars may use more language about power and identity in their work, but they still tend to frame their

arguments as aiming at truth throughout the full text of their dissertations.

Geographic Evidence

The temporal maps and fixed-effects maps in the companion technical report add a spatial dimension to the findings that the statistical models alone cannot provide.

Before examining the geographic patterns, one caveat is worth stating: the maps reflect the institutional composition of the ProQuest corpus, which over-represents large research universities and may not fully capture the distribution of doctoral production across the full range of American degree-granting institutions, including smaller regional universities and historically Black colleges and universities that archive with ProQuest at lower rates.

In brief, the geographic evidence shows five consistent patterns.

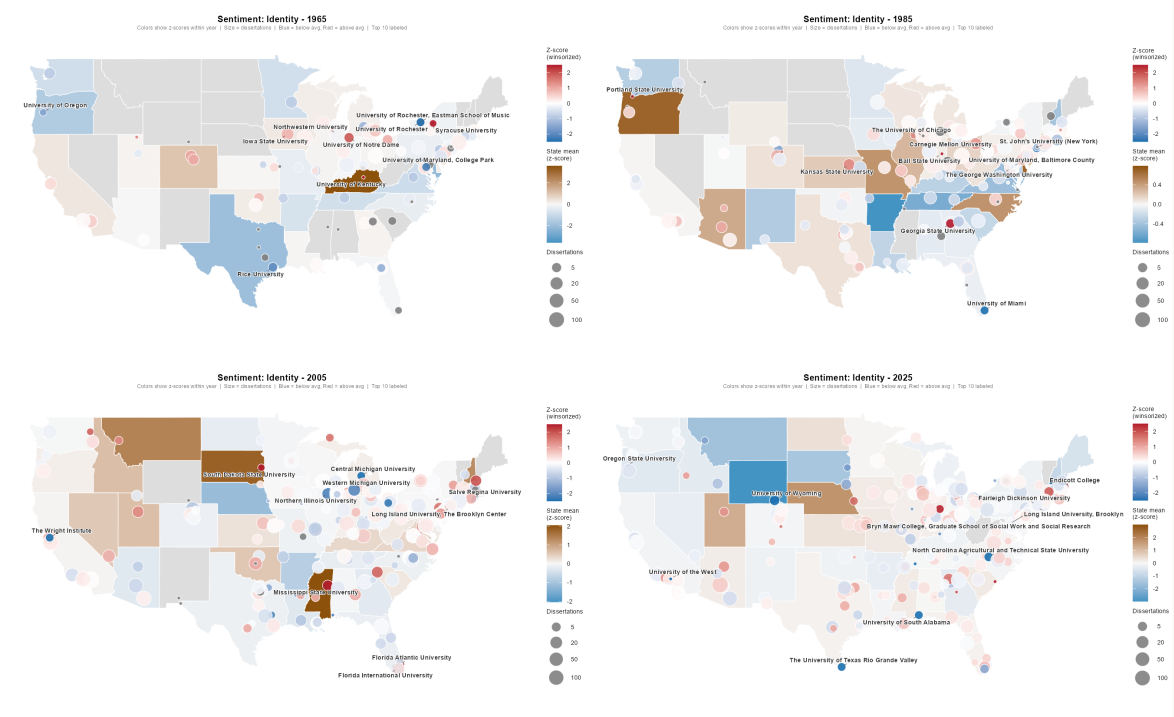


Figure 32 Sentiment: Identity—Temporal Geographic Distribution (1965–2025)

Notes: Positive-sentiment clustering shifts from diffuse and small (1965) to concentrated at large urban research universities by 2025, consistent with the institutionalization of identity-affirmative frameworks in Social Science II and Interdisciplinary Studies.

Facts/Truth Claims vocabulary is persistently concentrated at a stable cluster of research-intensive institutions, with no systematic regional shift toward below-average values—the spatial confirmation that truth-claim vocabulary was not displaced (Trend 3). *Identity* vocabulary undergoes the most dramatic geographic change of any variable, with near-uniform below-average values in 1965 giving way to broad geographic expansion by 2025, including at institutions well outside the traditional elite (see Figure 32). *Power Dynamics* diffuses from a modest northeastern cluster in 1965 into a broader multi-regional pattern by 2025. *Aesthetics* shows the inverse of *Identity*: a concentrated above-average cluster in the Northeast and California in 1965 contracts steadily. Geopolitical sentiment (*American, European, and Western*) shifts from broadly positive or neutral state shading in 1965 toward negative relative values in the Northeast and California by 2005–2025, while the South, Mountain West, and Midwest retain positive or neutral shading throughout. *Truth* sentiment stands

apart as the most geographically uniform of all nine variables, showing no systematic regional shift in any direction over time.

For the full set of temporal maps across four benchmark years (1965, 1985, 2005, 2025) and the university-level fixed-effects maps for all five vocabulary categories and nine sentiment terms, see the companion technical report.

Summary: What the Evidence Shows

Trend 1 — Different Rates of Decline Across Fields: Confirmed Humanities counts fell 49% from their 2015 peak; Social Sciences fell only 4.5%. Within Social Sciences, Social Science II (less STEM-oriented) outperformed Social Science I throughout, ruling out simple STEM-substitution as the primary driver.

Trend 2 — Growth of Identity and Power Language: Confirmed *Identity* grew at 5–8% per year after accounting for differences between universities—by far the fastest-growing category. *Power Dynamics* surged post-1988. Both trends were most pronounced in Literature/Language, Interdisciplinary Studies, and Social Science II, exactly the fields anticipated by the trend.

Trend 3 — Persistence of Truth-Seeking Language: Confirmed *Facts/Truth Claims* ranked highest across all fields and all years. The annual trend for *Truth* tone is positive, or at worst near zero. The possibility that truth-claim vocabulary has been displaced—despite shifts in theoretical orientation—is not supported by the data.

Trend 4 — Changing Tone Toward Western Heritage Terms: Confirmed with important qualifications Tone toward *Western* declined significantly and robustly across all fields and all analyses. *European* and *American* show raw declines that require qualification—the former attenuates substantially under additional controls, the latter disappears after baseline adjustment (Appendix RC-4 in the technical report). Philosophy showed the least negative drift and the highest Truth tone, as anticipated.

Trend 5 — Growing Similarity Between Social Sciences and Humanities: Confirmed Social Science II's *Identity* trajectory, *Power Dynamics* profile, and geopolitical tone trends are far closer to those of Interdisciplinary Studies and Literature/Language than to Social Science I. The convergence is visible in both vocabulary and tone measures and is confirmed by the statistical estimates.

Conclusion

9

This report has examined 65 years of American doctoral scholarship through four complementary approaches—dissertation counts, normalized vocabulary frequencies, sentiment analysis, and statistical models that account for institutional differences while tracking trends over time. The analysis draws on 443,543 PhD dissertations submitted between 1960 and 2025 across 678 universities. The findings are mutually consistent and, taken together, support five important conclusions for ongoing debates about the "humanities crisis," the cultural turn in academic discourse, and the standards of scholarly writing.

1. The Structural Divergence in Doctoral Output Is Real and Field-Specific

PhD production in the Humanities has lost ground relative to Social Science. The overall decline in dissertation production since 2015 hides a sharp imbalance. Humanities counts fell by nearly **49%** from their 2015 peak, while Social Sciences counts contracted by only **4.5%**. This divergence cannot be attributed to common factors such as demographic change or funding cuts, which would have affected both broad groupings similarly. It reflects a field-specific institutional contraction in the Humanities—History and Literature/Language have each shed roughly half their output in a decade—alongside the sustained vitality

of Social Science II (Anthropology, Psychology, Communications), which grew 70-fold over the full study period and by 2025 accounts for over **40%** of all dissertations in the corpus.

The rise of STEM is inadequate as an explanation. The evidence is more consistent with a crisis concentrated in the *institutional* Humanities than with a broad flight toward quantitative fields: the fastest-growing grouping is Social Science II, which shares many of the Humanities' interpretive concerns and has been shaped by similar cultural and linguistic turns. Our analysis suggests that Social Science II may be serving as a functional successor to the traditional Humanities, while sharing with them a focus on thematic frameworks of Identity and Power Dynamics. This suggests that while the institutional prominence of the Humanities has been reduced, themes characteristic of humanistic inquiry remain popular, having migrated into some parts of social science.

2. The Cultural Turn Is Quantitatively Documented and Still Ongoing

Identity vocabulary has grown at approximately 5–8% per year after accounting for institutional differences—the fastest rate of any of the five thematic categories, implying a doubling of Identity frequency every 8–12 years. Its growth is not an artifact of changes in which universities appear in the database; estimates based on 10 institutions with continuous data since 1960 confirm the trend. Power vocabulary surged sharply from the 1988 inflection point—the signature of the spread of poststructuralist and postcolonial frameworks from Literature into the broader academy—and has remained elevated. Critically, this growth has not been uniform. It is heavily concentrated in Interdisciplinary Studies, Literature/Language, and Social Science II. History and Social Science I, by contrast, show considerably more modest growth in Identity vocabulary and a more stable Power profile. The geographic evidence reinforces this picture: the cultural turn exhibits a clear Northeast–Midwest–South gradient, with high-output coastal research universities as the primary carriers and Midwestern flagship institutions as a structural counterweight. Maps reveal a coherent pattern where above-average emphasis on Power and Identity is tightly clustered at large research universities in the Northeast and California, while Southern and Midwestern public universities maintain a consistent structural focus on Facts and Evaluation.

3. Truth-Claim Norms Have Not Been Displaced

The most striking single finding of this study may be the one that *fails* to confirm a widespread narrative. Despite the dramatic rise of power-analytic and identity vocabularies, Facts/Truth Claims terminology has maintained the highest frequency across all fields throughout the entire 65-year study period. Our statistical models show that academic writing has, if anything, *increased* its use of truth-oriented vocabulary over time.

The sentiment evidence is equally clear. Truth sentiment (≈ 0.35 on the $[-1, +1]$ scale) is five to seven times higher than that of any other tracked term and has not declined meaningfully overall. Even in Interdisciplinary Studies—the field where Truth sentiment is lowest—it remains effectively neutral rather than negative. Only in Literature/Language does Truth sentiment show a slight downward slope post-1990, and even there the score remains substantially positive. Scholars may have multiplied the rhetorical registers surrounding their inquiries, but they have consistently continued to frame their knowledge claims as truth-oriented in dissertation texts. This finding complicates simple "postmodern turn" narratives and should inform how the humanities crisis is diagnosed and debated. Geographic evidence reinforces this stability; Truth-related vocabulary and sentiment display the highest degree of spatial uniformity of any variable across all four benchmark periods, resisting the regional polarization observed in almost every other thematic category. It

is, however, important to note that the relationship of terminological frequency to the actual commitment of scholars to truth-seeking cannot be tested by the methods used here, and remains an area for future research.

4. The Rhetorical Reframing of Western and Historical Heritage Is Systematic

The sentiment analysis reveals a long-term, cross-field shift of a different character. Sentiment toward *Western* has declined monotonically across the full study period in every field and survives all robustness controls. *European* shows a similar raw pattern that attenuates substantially under compositional controls. *American* shows a raw decline that disappears after absorbing corpus-wide negativity drift, and should not be characterized as targeted negative framing of the United States The shifts are small annually but cumulative: over 65 years, they represent a roughly one-third reduction in the baseline sentiment score of each term. *History* sentiment has undergone the steepest decline, reaching near-zero in the overall corpus and crossing into negative territory within Social Science II—a finding of particular significance given that the discipline of History has itself been one of the worst affected by the output contraction.

Once again, these are changes in rhetorical framing, not direct measures of ideological commitment: the methodology captures the associative context of words rather than authorial intent. But associative context in scholarly writing is itself a meaningful indicator of how concepts are positioned within a field's discourse. The robustness of these trends across different model specifications, across all fields, and across 65 years gives them the character of a genuine long-term transformation in the emotional climate of American doctoral scholarship. The maps isolate this transformation to a sharp regional and religous/secular divide: while the South and Midwest retain positive or neutral associations, sentiment towards *Western* at large coastal research universities has dropped substantially below that of regional and religiously affiliated institutions.

5. The Divergence between Truth Stability and Heritage Reframing Is the Core Analytical Distinction

Perhaps the most theoretically consequential finding is the separation between the stability of *Truth* sentiment and the decline of heritage-term sentiment. These two outcomes are sometimes conflated in debates about the academy: critics of the cultural turn argue that skepticism toward Western heritage reflects a broader skepticism toward truth and knowledge; defenders argue that humanities scholars remain committed to rigorous standards. The evidence here supports neither the most alarming nor the most dismissive version of these claims.

Truth-oriented vocabulary and its positive associations have been maintained across all fields and all decades. Sentiment toward heritage terms, by contrast, has shifted systematically and durably. This separation implies that the changes documented in this corpus are better described as a reorientation of cultural valuation than as an abandonment of intellectual standards. Our study suggests that the academy has become more critical of Western and American cultural heritage in its scholarly rhetoric while simultaneously sustaining, or even strengthening, its rhetorical commitment to truth-seeking. These are separable phenomena, institutionally, geographically, and historically.

Limitations and Future Work

Several limitations of the present analysis merit acknowledgment. First, although the analysis draws on the full text of dissertations (including titles, abstracts, and main text), these materials still reflect conventions of academic writing and cannot fully capture the underlying research processes or intellectual motivations of authors. The patterns documented here should therefore be interpreted as features of scholarly discourse rather than direct measures of substantive inquiry. Second, as noted above, the most recent years (2023–2025) are subject to time-lag bias in the archive, and the apparent declines in dissertation counts for this period should be treated as lower bounds rather than definitive measurements. Third, the basket-of-terms methodology is sensitive to the initial word choices; while the five categories used here were validated against the secondary literature, alternative coding schemes could yield different quantitative results, even if the broad patterns prove to be robust.

Future work should extend the analysis in several directions. First, expanding the comparison to other academic fields—fields in the natural sciences and professional fields—would help clarify whether the patterns observed here are field-specific or part of broader shifts in scholarly language. Relatedly, incorporating international dissertation corpora would allow for cross-national comparisons and a more systematic assessment of variation across institutional and cultural contexts. Second, further work could explicitly measure the extent of variation in vocabulary and sentiment across institutions, fields, and time, providing a clearer picture of how concentrated or diffuse these patterns are. Third, linking dissertations to individual career trajectories would open a new line of inquiry: by tracking authors through sources such as Google Scholar profiles, CVs, and other public records, it would be possible to examine whether the rhetorical and conceptual patterns documented here are associated with subsequent academic placement, publication trajectories, or career outcomes. Beyond individual trajectories, future research could also examine collective employment outcomes at the subfield level over time—an approach that may prove more tractable given the relative accessibility of aggregate placement data.

The corpus assembled for this report constitutes a longitudinal record of American doctoral scholarship without precedent in its temporal scope and thematic breadth. The findings reported here track terminology and sentiment towards certain terms. We have identified some clear trends in terminological frequency and sentiment towards certain terms. But the identification of those trends cannot, in itself, explain why humanities disciplines have lost ground. Any use of the trends we have identified to address the causes of the humanities crisis (or alternatively to rebut the claim that there is a crisis in need of explanation) should acknowledge that limitation. This study is a preliminary analysis. It establishes some of the contours of a 65-year transformation and lays the groundwork for more targeted investigations of its causes, mechanisms, and consequences.

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9 Appendix: Coding List and Basic Counts

The following four tables are retained in this circulation draft for reference. All other statistical tables and maps are available in the companion technical report at https://academysciencesletters.org/humanities-in-crisis/technical.

Table 1 Complete Classification Summary of Dissertations by Subcategory

Subcat.	N	H&A	SS	H/SS	Hist	Lit	Phil	Stud	SS1	SS2
Economics	26,280		X	X					X	
Political science	19,000		X	X					X	
Social psychology	16,247		X	X						X
Philosophy	14,818	X		X			X			
Psychology	14,581		X	X						X
Statistics	14,042		X	X					X	
Linguistics	13,239		X	X					X	
Cultural anthropology	12,517		X	X						X
American history	12,016	X		X	X					
Communication	9,993		X	X						X
American literature	9,894	X		X		X				
British and Irish literature	9,790	X		X		X				
Modern literature	9,377	X		X		X				
Sociology	8,427		X	X						X
Behavioral psychology	8,117		X	X						X
Social work	8,096		X	X						X
Music	8,021	X		X						
Religion	7,924	X		X			X			
Experimental psychology	7,279		X	X						X
Geography	6,774		X	X						
Comparative literature	6,496	X		X		X				
European history	5,970	X		X	X					
Modern history	5,921	X		X	X					
Archaeology	5,898	X		X	X					X
Womens studies	5,798	X		X				X		
American studies	5,709	X		X				X		
African American Studies	5,656	X		X				X		
Literature	5,229	X		X		X				
Cognitive psychology	5,201		X	X						X
Agricultural economics	5,145		X	X					X	
Economic theory	5,100		X	X					X	
Theology	4,989	X		X			X			
Romance literature	4,885	X		X		X				
Counseling Psychology	4,857		X	X						X
Social research	4,600		X	X						X
Individual & family studies	4,403		X	X						X
Language arts	4,373	X		X						
Mass communications	4,371		X	X						X
Theater	4,180	X		X						

Continued on next page

Table 1 Complete Classification Summary (continued)

Subcat.	N	H&A	SS	H/SS	Hist	Lit	Phil	Stud	SS1	SS2
Religious history	4,021	X		X	X					
Latin American literature	3,692	X		X		X				
Public policy	3,633		X	X					X	
Educational sociology	3,501		X	X						X
Art history	3,445	X		X	X					
Biblical studies	3,212	X		X				X		
Labor economics	3,073		X	X					X	
Psychobiology	2,854		X	X						X
Asian History	2,695	X		X	X					
Social structure	2,692		X	X						X
International law	2,671		X	X						X
Ethnic studies	2,578	X		X				X		
Medieval literature	2,508	X		X		X				
Classical literature	2,405	X		X		X				
Law	2,391		X	X						X
German literature	2,347	X		X		X				
Black studies	2,280	X		X				X		
Latin American history	2,150	X		X	X					
History	2,143	X		X	X					
Ethics	1,926	X		X			X			
Physical anthropology	1,882		X	X					X	
Fine arts	1,843	X		X						
Education history	1,615	X		X	X					
Film studies	1,594	X		X				X		
Rhetoric	1,546	X		X		X				
English as a Second Language	1,527	X		X		X				
Asian Studies	1,495	X		X				X		
Medieval history	1,420	X		X	X					
Behavioral Sciences	1,417		X	X						X
Demography	1,407		X	X					X	
Biographies	1,395	X		X	X					
African Studies	1,354	X		X				X		
Social studies education	1,199		X	X						
Science history	1,145	X		X	X					
Economic history	1,104	X		X	X					
Middle Eastern history	1,069	X		X	X					
African history	1,056	X		X	X					
Ancient history	1,027	X		X	X					
Education philosophy	1,012	X		X			X			

Continued on next page

Table 1 Complete Classification Summary (continued)

Subcat.	N	H&A	SS	H/SS	Hist	Lit	Phil	Stud	SS1	SS2
Black history	999	X		X	X					
LGBTQ studies	968	X		X				X		
International Relations	940		X	X					X	
Religious education	925	X		X						
Language	910	X		X		X				
Rhetoric and Composition	908	X		X		X				
Asian American Studies	875	X		X				X		
Folklore	836	X		X		X				
Epistemology	802	X		X			X			
Environmental Studies	745		X	X				X		
Ancient languages	741	X		X		X				
Latin American Studies	735	X		X				X		
Modern language	732	X		X		X				
Gender studies	588	X		X				X		
Foreign language education	559	X		X						
Dance	547	X		X						
Philosophy of Science	534	X		X			X			
Philosophy of religion	512	X		X			X			
Music history	478	X		X	X					
Sexuality	446	X		X						X
African literature	431	X		X		X				
Middle Eastern literature	418	X		X		X				
Creative writing	415	X		X		X				
Caribbean literature	402	X		X		X				
Military studies	397	X		X	X			X		
French literature	393	X		X		X				
Metaphysics	390	X		X			X			
Musical composition	383	X		X						
Classical Studies	352	X		X	X			X		
Peace Studies	323	X		X				X		
Multimedia Communications	321	X		X						
Environmental education	312	X		X						
Caribbean Studies	303	X		X				X		
Logic	282	X		X			X			
Spirituality	268	X		X			X			
Islamic Studies	259	X		X				X		
European Studies	248	X		X				X		
Music theory	237	X		X						
Native American studies	231	X		X				X		

Continued on next page

Table 1 Complete Classification Summary (continued)

Subcat.	N	H&A	SS	H/SS	Hist	Lit	Phil	Stud	SS1	SS2
Sociolinguistics	227		X	X						X
Art Criticism	203	X		X						
Technical Communication	197		X	X						
Aesthetics	196	X		X			X			
Film, television, and media studies	190	X		X				X		
Hispanic American studies	183	X		X				X		
Environmental philosophy	178	X		X			X			
Medical Ethics	170	X		X			X			
East European Studies	161	X		X				X		
Canadian history	159	X		X	X					
Fashion	145	X		X						
Environmental Justice	143	X		X						X
Italian literature	137	X		X		X				
Forensic anthropology	137		X	X				X		
South Asian Studies	126	X		X				X		
Translation studies	122	X		X		X		X		
Internet and social media studies	118	X		X				X		
Russian history	117	X		X	X					
Southeast Asian studies	116	X		X				X		
Performing Arts	110	X		X						
Judaic studies	107	X		X				X		
Military history	101	X		X	X					
Theater History	100	X		X	X					
Near Eastern Studies	88	X		X				X		
Canadian studies	85	X		X				X		
Musical performances	82	X		X						
World History	82	X		X	X					
Experimental/theoretical	79		X	X						
Slavic Studies	76	X		X				X		
Performing arts education	74	X		X						
Regional Studies	69	X		X				X		
Museum studies	68	X		X				X		
Canadian literature	59	X		X		X				
Environmental Law	58		X	X						
Indigenous studies	57	X		X				X		
Holocaust Studies	54	X		X				X		
Divinity	49	X		X			X			
Sub Saharan Africa Studies	46	X		X				X		
Pacific Rim Studies	40	X		X				X		

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Table 1 Complete Classification Summary (continued)

Subcat.	N	H&A	SS	H/SS	Hist	Lit	Phil	Stud	SS1	SS2
Cinematography	35	X		X						
French Canadian literature	34	X		X		X				
Comparative religion	32	X		X			X			
North African Studies	30	X		X				X		
Icelandic & Scandinavian literature	28	X		X		X				
Scandinavian Studies	24	X		X				X		
South African Studies	22	X		X				X		
History of Oceania	18	X		X	X					
Baltic Studies	15	X		X				X		
Australian literature	14	X		X		X				
Social trends & culture	14		X	X						X
United States	14	X		X				X		
Canon Law	11	X		X			X			
Social responsibility	10	X		X						
East Asian studies	8	X		X				X		
French Canadian Culture	7	X		X						
Organizational structure	6		X	X						X
Russian literature	5	X		X		X				
Psychotherapy	4			X						
Art therapy	3	X		X						
Spanish literature	3	X		X		X				
Economic conditions & forecasts	2		X	X					X	
International trade & foreign investment	2		X	X					X	
Politics & political behavior	2		X	X					X	
Eastern Europe	2	X		X				X		
Museums	1	X		X	X					
Latin America	1	X		X				X		
Economic policy & planning	1		X	X					X	
Asia & the Pacific	1	X		X				X		
Ancient civilizations	1	X		X	X					
Africa	1	X		X					X	
Arts, entertainment & recreation	1	X		X						
TOTAL	443,543									

Table 2 Dissertation Counts by Classification Category and Year

Year	Hum/Arts	Soc Sci	Hum/Soc Sci	History	Lit/Lang	Phil/Theol	Studies	Soc Sci I	Soc Sci II
1960	623	478	1,101	165	191	82	6	178	283
1965	1,099	790	1,889	327	408	156	7	281	495
1970	2,005	1,642	3,648	620	818	275	17	656	942
1975	2,204	1,955	4,159	719	886	274	55	719	1,340
1980	1,830	1,720	3,550	522	705	260	74	711	1,129
1985	1,681	1,756	3,437	465	574	284	93	742	1,134
1990	2,681	3,005	5,686	755	1,085	394	156	1,434	1,794
1995	2,750	2,735	5,485	829	1,109	308	231	1,290	1,720
2000	5,005	4,975	9,980	1,439	1,908	716	530	2,264	3,218
2005	4,433	4,831	9,264	1,335	1,575	656	459	2,173	3,007
2010	6,268	5,522	11,790	1,450	1,410	983	1,871	2,098	3,416
2015	6,575	6,833	13,408	1,488	1,365	1,131	2,147	2,504	4,293
2020	4,260	6,455	10,715	1,048	1,089	785	1,060	2,670	3,845
2025	2,286	4,811	7,097	420	524	559	589	1,760	3,038
Total	216,140	227,399	443,543	56,895	66,284	34,093	37,660	93,749	140,843

Table 3 Top 20 Schools by School Code Name

School Code Name	Count
The University of Chicago	11025
University of Michigan	10570
New York University	10486
Indiana University	9476
University of California, Berkeley	8661
The Ohio State University	8601
The University of Wisconsin - Madison	8151
University of California, Los Angeles	7923
University of Illinois at Urbana-Champaign	7802
Columbia University	7774
Yale University	7018
City University of New York	6929
Northwestern University	6550
Harvard University	6289
University of Minnesota	6288
University of Pennsylvania	5950
University of Southern California	5702
The University of Iowa	5639
Princeton University	5605
The Pennsylvania State University	5598

Table 4 Top 20 Schools by Location

School Location	Count
United States – California	56450
United States – New York	50293
United States – Illinois	34281
United States – Pennsylvania	23111
United States – Texas	19104
United States – Michigan	18862
United States – Massachusetts	18029
United States – Ohio	17770
United States – Indiana	17344
United States – Minnesota	14026
United States – Florida	12286
United States – North Carolina	12017
United States – New Jersey	11312
United States – Wisconsin	10627
United States – Connecticut	8894
United States – Arizona	8845
United States – District of Columbia	8412
United States – Virginia	7956
United States – Iowa	7919
United States – Maryland	7761