The Evolution of Philosophy: A Metaphorical Cognition Perspective

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Abstract

We present a large-scale study of philosophical cognition through the lens of Conceptual Metaphor Theory. Using a computational metaphor processing system that extracts target concepts, source concepts, and concept mappings from a curated corpus of 50+ canonical texts (300k sentences) spanning ten schools from antiquity to the late twentieth century, we quantify how metaphor organizes philosophical argument. We model temporal dynamics with year-level cosine series, authorial neighborhoods with PCA projections, and school signatures with heatmaps of normalized frequencies. The study demonstrates that the history of philosophy is structured by stable cross-domain schemas that are selectively recombined to address new problems.

Keywords: philosophy, metaphorical cognition, concept mapping, MetaPro

1. Introduction

Philosophers do not only argue with propositions; they organize problems by drawing selectively on conceptual domains, e.g., AGENCY and ACTION, BODY and PERCEPTION, ORDER and AUTHORITY, PRODUCTION and EXCHANGE. Conceptual Metaphor Theory (Lakoff and Johnson, 2024) treats such cross-domain structuring as a window of understanding cognitive frameworks: targets (what is theorized) are patterned by sources (the domains used to structure theorizing), and full concept mappings bind the two. Yet philosophy's metaphorical habits have rarely been studied at scale across periods and schools. This work leverages MetaPro (Mao et al., 2023, 2024a), a computational metaphor processing system that parses target concepts, source concepts, and concept mappings from a curated corpus (Alizadeh, 2020) of canonical works spanning antiquity to the late twentieth century, and measures their distribution and recombination via time, authorship, and tradition. In this work, we pursue three research questions:

RQ1. How has the metaphorical cognition evolved across historical periods in the domain of philosophy?

RQ2. How to position philosophers from different schools in terms of their metaphorical cognition?

RQ3. Which target domains, source domains, and composite concept mappings are most characteristic of each philosophical school?

To answer them, MetaPro builds year-level time series of similarity (via cosine means and min–max bands), author-level projections (via PCA bubble maps of targets, sources, and full mappings), and school-level heatmaps that highlight representative concepts and concept mappings.

These visual-analytic layers are mutually constraining: time series reveal convergence and divergence regimes; author maps reveal local neighborhoods and outliers; heatmaps reveal the binding templates that make schools legible. Our findings are threefold.

First, historical drift shows slow long-run convergence: mean similarity rises from classical to late modern periods, with early dispersion, consolidation around the 18th–19th centuries, and renewed variability as twentieth-century movements diversify the repertoire. This pattern is consistent with stabilization around entrenched schemas, e.g., ACTION/STATE/PERCEPTION/RELATION as targets and embodied/communicative frames as sources, followed by expansions when new socio-scientific domains (ECONOMY, INSTITUTION, POWER) enter philosophical work. Outliers are interpretable: early Stoicism falls below the mean, Communism dips under industrial–conflict frames, while Phenomenology, Continental, and Feminism sit near or above the mean by recombining shared embodied-communicative schemas.

Second, author positioning is principled rather than merely historical. The classical hub (Plato–Aristotle) anchors the space; early modern rationalists and empiricists cluster nearby around mind, representation, and lawlike order; German Idealists shift toward self-activity and normativity; phenomenologists recenter on embodied world-involvement near the centroid; continental theorists bridge embodiment with discourse/power; political economy extends an axis toward coordination and conflict; analytic figures form a compact outlying cluster around logic, semantics, and evidence; and Nietzsche rotates the frame toward valuation and force.

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Third, school signatures are most sharply captured by concept mappings. Many traditions share high-frequency targets and overlapping sources, but their concept mappings, e.g., PERCEPTION IS KNOWING (empiricism), STATE IS QUALITY (German Idealism), PERSPECTIVE IS SENSE (phenomenology), CREDIBILITY IS FACT (analytic), AGREEMENT IS AUTHORITY (continental), ATTRIBUTE IS QUALITY VS. PHYSICAL IS POWER (capitalism vs. communism), CONTENT IS SITUATION (Stoicism), HIGH_STATUS IS DEGREE (Nietzsche), SUCCESS IS JOURNEY (feminism), encode what each school treats as explanatory, evidential, and normative. These mapping-level features, rather than targets or sources alone, best distinguish school identity.

Our contribution is twofold. (1) We offer a systematic, multi-level analysis of philosophical cognition across historical periods, individual authors, and schools by operationalizing Conceptual Metaphor Theory to track targets, sources, and composite mappings over time. (2) We show that philosophical thought exhibits a discernible structure: a long-run convergence on an embodied–communicative backbone, distinctive mapping "signatures" that differentiate schools, and cognitive framework explanations of outliers.

2. Related Work

Prior surveys largely organize the history of philosophy through chronological narration and thematic comparison. Chakrabarti and Weber (2015) advocate for comparative philosophy transcending cultural and disciplinary boundaries and discuss ithe ntegration of Eurasian and African philosophical resources. Sahu (2021) traverse the arc from ancient Greece to late modernity, foregrounding major transitions from Heraclitus to Lyotard. Sfetcu (2022) provides a broad overview spanning Western and Eastern traditions and surveying core branches such as metaphysics, ethics, and political philosophy. Biswas and Biswas (2024) chart the aims and trajectories of intercultural philosophy as a contribution to pluralizing the canon.

However, much of the existing literature remains primarily expository: it offers periodization, comparison, and contextual framing, but it rarely formalizes the conceptual structures that animate these arguments, nor does it provide corpus-scale, reproducible measurements of similarity, divergence, or historical drift. At the same time, AI has become increasingly embedded in both cognitive inquiry and philosophical reflection (Cambria et al., 2026). To address this gap, we employ MetaPro, an AI-based analytic framework, to conduct a data-driven investigation of conceptual patterns in this domain.

3. Dataset

We analyze metaphorical cognition using a Philosophy Data Project corpus (Alizadeh, 2020) comprising about 300k sentences drawn from more than 50 primary texts spanning ten major philosophical schools: Plato, Aristotle, Rationalism, Empiricism, German Idealism, Communism, Capitalism, Phenomenology, Continental, and Analytic. Source texts were obtained from Project Gutenberg and a curated collection of digitized PDFs. Table 1 lists the canonical works included.

The dataset spans more than two millennia, from –350 (4th c. BCE) to 1985, enabling analyses of long-run semantic drift and school-specific developments. Table 2 summarizes the yearly distribution of extracted metaphors. Table 3 reports author-level totals, with substantial material for major figures (e.g., Aristotle, Hegel, Kant, Foucault) and representation across traditions. Table 4 aggregates counts by school, confirming broad coverage across historical lineages (e.g., German Idealism, Analytic, Continental, Phenomenology) as well as thematic movements (Communism, Capitalism, Feminism, Stoicism, Nietzsche).

As summarized in Table 5, the corpus supports 2,039 unique target concepts, 2,644 unique source concepts, and 15,988 distinct cross-domain mappings. This breadth enables fine-grained analyses at three levels: (i) targets (what is conceptualized), (ii) sources (domains used to structure targets), and (iii) composite mappings (systematic correspondences between sources and targets).

4. Methodology

4.1. MetaPro

MetaPro is used for parsing target concepts, source concepts and concept mappings from the applied corpus. It has been widely used in a wide range of cognitive analysis domains, including weather disasters (Mao et al., 2024b), AI (Mao et al., 2025a), neuroscience (Mao et al., 2025b), and behavioral science (Mao et al., 2024c).

MetaPro consists of three modules, namely metaphor identification, metaphor interpretation and concept mapping generation. The metaphor identification module identifies metaphorical words from sentences, based on a multi-task learning framework (Mao and Li, 2021). Then, the metaphor interpretation module paraphrases the identified metaphors into their literal counterparts (Mao et al., 2024a). Finally, the concept mapping generation module will generate a target concept from the paraphrase and a source concept from the original metaphorical word (Ge et al., 2022).

Year	School	Philosopher	Book
-350	Plato	Plato	Plato – Complete Works
-320	Aristotle	Aristotle	Aristotle – Complete Works
125	Stoicism	Epictetus	Enchiridion
170	Stoicism	Marcus Aurelius	Meditations
1637	Rationalism	Descartes	Discourse On Method
1641	Rationalism	Descartes	Meditations On First Philosophy
1674	Rationalism	Malebranche	The Search After Truth
1677	Rationalism	Spinoza	Ethics, On the Improvement of Understanding
1689	Empiricism	Locke	Second Treatise On Government, Essay Concerning Human Understanding
1710	Empiricism, Rationalism	Berkeley, Leibniz	A Treatise Concerning the Principles of Human Knowledge, Theodicy
1713	Empiricism	Berkeley	Three Dialogues
1739	Empiricism	Hume	A Treatise of Human Nature
1776	Capitalism	Smith	The Wealth of Nations
1779	Empiricism	Hume	Dialogues Concerning Natural Religion
1781	German Idealism	Kant	Critique of Pure Reason
1788	German Idealism	Kant	Critique of Practical Reason
1790	German Idealism	Kant	Critique of Judgement
1792	Feminism	Wollstonecraft	Vindication of the Rights of Woman
1798	German Idealism	Fichte	The System of Ethics
1807	German Idealism	Hegel	The Phenomenology of Spirit
1817	German Idealism, Capitalism	Hegel, Ricardo	Science of Logic, On the Principles of Political Economy And Taxation
1820	German Idealism	Hegel	Elements of the Philosophy of Right
1848	Communism	Marx	The Communist Manifesto
1862	Communism	Lenin	Essential Works of Lenin
1883	Communism	Marx	Capital
1886	Nietzsche	Nietzsche	Beyond Good And Evil
1887	Nietzsche	Nietzsche	Thus Spake Zarathustra
1888	Nietzsche	Nietzsche	The Antichrist, Ecce Homo, Twilight of the Idols
1907	Phenomenology	Husserl	The Idea of Phenomenology
1910	Analytic	Moore	Philosophical Studies
1912	Analytic	Russell	The Problems of Philosophy
1921	Analytic	Russell, Wittgenstein	The Analysis of Mind, Tractatus Logico-Philosophicus
1927	Phenomenology	Heidegger	Being And Time
1936	Phenomenology, Capitalism	Husserl, Keynes	The Crisis of the European Sciences And Phenomenology, A General Theory of Employment, Interest, And Money
1945	Phenomenology	Merleau-Ponty	The Phenomenology of Perception
1949	Feminism	Beauvoir	The Second Sex
1950	Analytic, Phenomenology	Quine, Wittgenstein, Heidegger	Quintessence, On Certainty, Off the Beaten Track
1953	Analytic	Wittgenstein	Philosophical Investigations
1959	Analytic	Popper	The Logic of Scientific Discovery
1961	Continental	Foucault	History of Madness
1963	Continental	Foucault	The Birth of the Clinic
1966	Continental	Foucault	The Order of Things
1967	Continental	Derrida	Writing And Difference
1968	Continental	Deleuze	Difference And Repetition
1972	Analytic, Continental	Kripke, Deleuze	Naming And Necessity, Anti-Oedipus
1975	Analytic	Kripke	Philosophical Troubles
1981	Feminism	Davis	Women, Race, and Class
1985	Analytic	Lewis	Lewis – Papers

Table 1: Corpus information.

Year	Count	Year	Count	Year	Count
-350	45,168	1790	8,198	1927	12,724
-320	68,569	1792	4,154	1936	13,347
125	379	1798	8,513	1945	12,520
170	3,164	1807	12,743	1949	16,786
1637	1,053	1817	22,829	1950	18,494
1641	1,501	1820	7,266	1953	5,574
1674	22,356	1848	660	1959	5,807
1677	6,210	1862	6,010	1961	12,246
1689	17,655	1883	14,732	1963	3,790
1710	9,762	1886	2,505	1966	7,974
1713	2,032	1887	4,229	1967	7,944
1739	15,404	1888	6,895	1968	9,622
1776	16,596	1907	1,573	1972	12,434
1779	2,207	1910	6,171	1975	10,989
1781	14,243	1912	2,407	1981	3,323
1788	3,899	1921	6,965	1985	14,574

Table 2: Metaphor statistics by years.

Author	Count	Author	Count
Aristotle	68,569	Plato	45,168
Hegel	39,456	Kant	26,340
Foucault	24,010	Malebranche	22,356
Heidegger	21,162	Deleuze	19,183
Locke	17,655	Hume	17,611
Beauvoir	16,786	Smith	16,596
Marx	15,392	Lewis	14,574
Kripke	13,862	Nietzsche	13,629
Merleau-Ponty	12,520	Husserl	10,836
Wittgenstein	8,601	Quine	8,538
Fichte	8,513	Derrida	7,944
Russell	7,863	Leibniz	7,716
Spinoza	6,210	Moore	6,171
Lenin	6,010	Popper	5,807
Wollstonecraft	4,154	Keynes	4,084
Berkeley	4,078	Ricardo	3,382
Davis	3,323	Marcus Aurelius	3,164
Descartes	2,554	Epictetus	379

Table 3: Metaphor statistics by authors.

School	Count	School	Count
German Idealism	74,309	Aristotle	68,569
Continental	51,137	Analytic	65,416
Phenomenology	44,518	Plato	45,168
Empiricism	39,344	Feminism	24,263
Rationalism	38,836	Capitalism	24,062
Communism	21,402	Nietzsche	13,629
Stoicism	3,543		

Table 4: Metaphor statistics by schools.

The resulting concepts balance semantic specificity (concreteness) with coverage of relevant attributes (abstractness), enabling concept mappings that capture broad cross-domain regularities while preserving fine-grained interpretability and faithfulness to the text.

Metric	Count
Unique target concepts	2,039
Unique source concepts	2,644
Unique concept mappings	15,988

Table 5: Statistics of unique concepts and concept mappings.

4.2. Visualization

To address RQ1, we compute, for each year (t), the average cosine distance of the year's top-k items (concepts or concept mappings) to a global centroid. Concepts are embedded with GloVe-50d vectors ($\mathbf{v} \in \mathbb{R}^{50}$); a concept mapping is represented by the concatenation of its target and source embeddings, ($\mathbf{m} = [\mathbf{v}_{\text{target}}; \mathbf{v}_{\text{source}}] \in \mathbb{R}^{100}$). The global centroid ($\mathbf{c}$) is the mean of all item embeddings across all years,

$$\mathbf{c} = \frac{1}{N} \sum_{j=1}^{N} \mathbf{x}_j, \tag{1}$$

and the cosine distance of an item ($\mathbf{x}$) to the centroid is

$$d(\mathbf{x}, \mathbf{c}) = 1 - \frac{\mathbf{x} \cdot \mathbf{c}}{||\mathbf{x}||\,||\mathbf{c}||}. \tag{2}$$

Let $S_t(k)$ be the set of the top-k items for year t (with $k \in K = \{10, 20, \ldots, 200\}$). The year–$t$ average distance at a given (k) is

$$\overline{d}_t(k) = \frac{1}{k} \sum_{\mathbf{x} \in S_t(k)} d(\mathbf{x}, \mathbf{c}). \tag{3}$$

We visualize three series: the mean curve, $M_t = \frac{1}{|K|} \sum_{k \in K} \overline{d}_t(k)$, and the envelope given by the lower and upper bounds over k, $L_t = \min_{k \in K} \overline{d}_t(k)$, $U_t = \max_{k \in K} \overline{d}_t(k)$. Here, M_t traces the central tendency of yearly distances to the centroid, while L_t and U_t capture the variability induced by the choice of k.

To address RQ2, we visualize authors as points whose geometric relations reflect similarities in their metaphorical cognition. For each author a, let S_a be the set of embedded items (concepts or concept mappings) extracted from that author's book(s). The author centroid is the mean embedding of these items, $\mathbf{c}_a = \frac{1}{|S_a|} \sum_{\mathbf{x} \in S_a} \mathbf{x}$. Bubble size encodes within-author dispersion as the average Euclidean distance of items to the author's centroid,

$$B_a = \frac{1}{|S_a|} \sum_{\mathbf{x} \in S_a} \big|\big|\mathbf{x} - \mathbf{c}_a\big|\big|_2. \tag{4}$$

For plotting, centroids are linearly projected to two dimensions with PCA.

To address RQ3, we quantify the salience of target concepts, source concepts, and composite mappings for each school and visualize the results as heatmaps. For a given school s and item i (concept or concept mapping), we compute its score by frequency normalization within the school's top–10 items: specifically, $\text{score}(i, s) = f(i, s) / \max_{j \in \text{Top-10}(s)} f(j, s)$, where $f(\cdot, s)$ denotes raw counts in the school's corpus. This max-normalization yields unitless values in ([0,1]) that are comparable across schools despite scale differences, highlighting each tradition's most characteristic items while attenuating long-tail noise. The resulting matrices (schools $\times$ items) are rendered as heatmaps; darker cells indicate greater within-school prominence and make cross-school contrasts in metaphorical cognition visually and statistically interpretable.

5. Findings

RQ1. How has the metaphorical cognition evolved across historical periods in the domain of philosophy? Across all the panels in Figure 1, the yearly mean (dark line) exhibits a slow upward drift from the classical period to late modernity, with local troughs around the early 20th century and peaks in the mid- to late-20th century. The min–max ribbons show great dispersion early on, then a partial consolidation around the 18th–19th centuries, followed by renewed variability as new schools diversify the repertoire. The pattern implies that metaphorical cognition stabilizes around entrenched conceptual schemas and then expands when new socio-scientific domains become salient source and target concepts for mapping.

The similarity of the target domain (Figure 1a) creeps up after 1900, culminating near 1981. Target concepts central to philosophical discourse, e.g., ACTION, STATE, PERCEPTION, RELATION, are cross-traditionally entrenched, so the mean never strays far. However, Stoicism (Epictetus, 125) sits below the mean because its target repertoire privileges virtue, self-command, and inner state under a cosmological rational order, emphasizing self-sufficiency and apatheia rather than the social-technical targets that later dominate. This yields lower cosine alignment with the long-run average. By contrast, Feminism (Davis, 1981) lies above the mean, reflecting target concepts that bridge agency, embodiment, and institutional power, now canonical across schools, which increases its proximity to the aggregate center. Source domain similarity (Figure 1b) shows a comparable drift. Communism (Marx and Engels, 1848) falls below the mean due to its emphasis on economic–conflict sources (PRODUCTION, COMMODITY, MACHINERY, CLASS, STRUGGLE) that are rare in pre-modern texts.

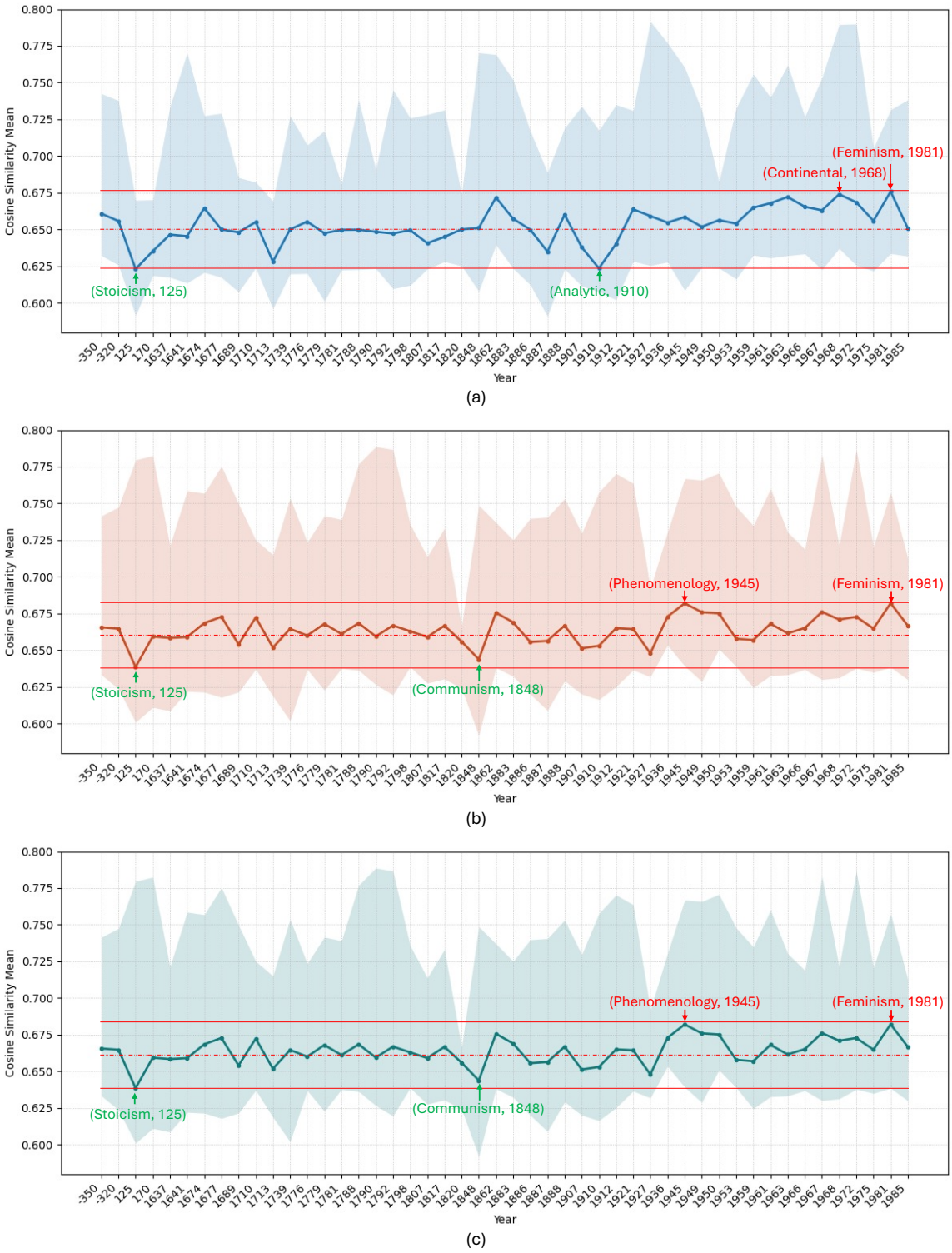

Figure 1: The similarity of (a) target concepts, (b) source concepts, and (c) concept mappings to the overall average by years. The dark-color lines are the yearly mean. The ribbon shows the upper and lower bounds.

Phenomenology (Merleau-Ponty, 1945) exceeds the mean because its sensory-embodiment sources (VISION, TOUCH, BODY, HORIZON, FIELD) align with durable schemas, e.g., embodied cognition, pervasive since Plato.

The concept mappings (Figure 1c) integrate the characteristics of target and source concepts. Peaks for Phenomenology and Feminism (Davis, 1981) arise because both reuse highly shared embodied–communicative templates.

Phenomenology relies on schemas such as KIND IS PATH, PERSPECTIVE IS SENSE, and TEMPORAL_ARRANGEMENT IS RELATION, recombining them with standard targets (PERCEPTION, ACTION, SELF), which brings its profile close to the historical centroid. Feminism similarly mobilizes SUCCESS IS JOURNEY, PERCEPTION IS KNOWING, PRODUCTION IS ACTION, and AGREEMENT IS AUTHORITY, aligning with the dominant MOTION/AGENCY and institutional frames of the twentieth century. By contrast, the trough around Communism (Marx and Engels, 1848) reflects a distinctive industrial–militant cluster, e.g., PHYSICAL IS POWER, underrepresented in the aggregate. Stoicism's distance follows from ascetic, inward mappings, down-weighting sociotechnical targets.

Taken together, the time series suggest an S-curve of convergence: a long premodern phase with heterogeneous repertoires, an enlightenment–industrial phase of partial stabilization around shared targets/sources, and a late-20th-century plateau where multiple schools reuse the same embodied and socio-communicative schemas while redirecting their normative force. The evolution we observe is not a linear replacement of metaphors but a progressive consolidation of a common embodied and communicative backbone. High-alignment cases (Phenomenology, Continental, Feminism) converge because they recombine the widely shared embodied–communicative sources with the most recurrent philosophical targets, yielding mappings that sit near the historical centroid while still advancing new explanatory agendas. The slowly rising means and narrowing ribbons after the 18th century indicate increasing reuse of these shared schemas; the renewed variance after mid-century reflects expansion at the edges rather than a shift of the center. The historical trajectory of metaphorical cognition in philosophy is therefore best described as centripetal consolidation with episodic centrifugal experimentation, which is a dynamics that reconciles continuity of the conceptual cognition with the emergence of novel schools and problems.

RQ2. How to position philosophers from different schools in terms of their metaphorical cognition? The three PCA plots in Figure 2 shows the following patterns: authors that fall close together tend to mobilize similar explanatory habits; those that stand apart favor different problem framings; bubble size reflects how tightly each author sticks to a single repertoire. Plato and Aristotle appear near the overall center in all sub-figures. They set the agenda later traditions repeatedly reuse: teleological nature, practical reasoning, norm-guided perception and knowledge, and a detailed scheme of causes and kinds.

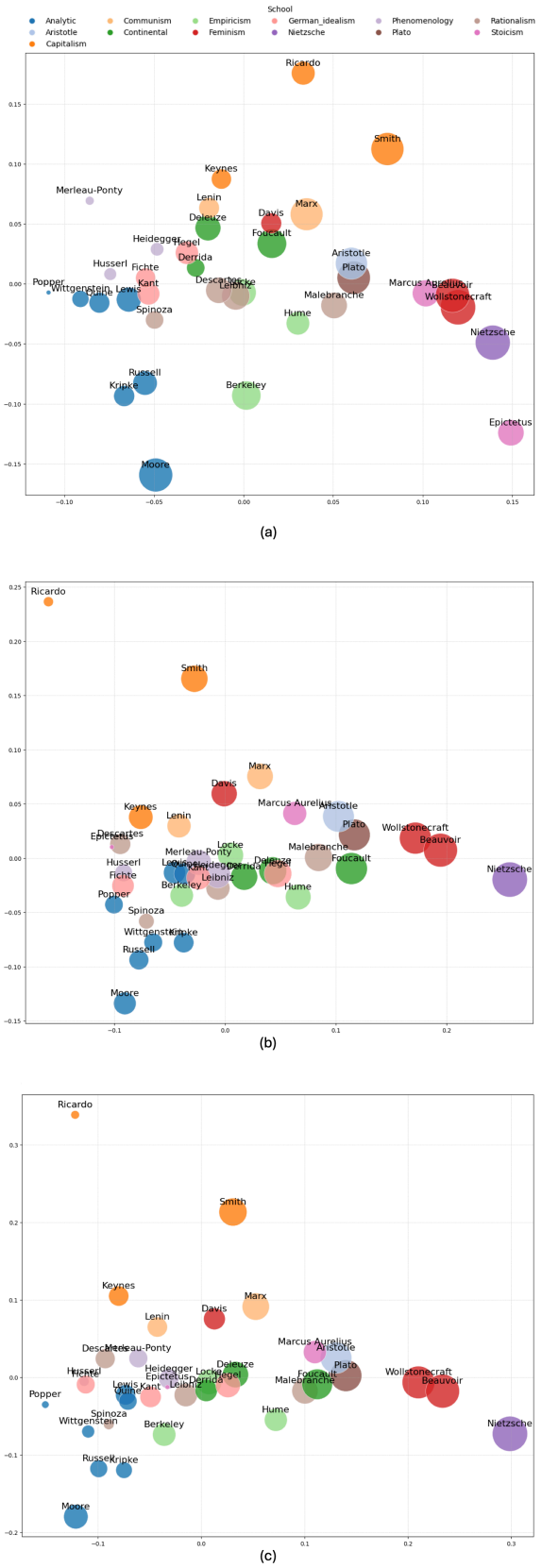

Figure 2: The distribution patterns of (a) target concepts, (b) source concepts, and (c) concept mappings by philosophers and schoos.

This shared template, e.g., forms and categorization, purposive action, rational control, helps explain why many points drift toward this hub. Descartes, Spinoza, and Leibniz cluster next to Locke, Berkeley, and Hume. Despite their dispute over the source of knowledge, both camps organize philosophy around systematic accounts of mind, representation, and lawlike order; "clear and distinct" reasons on one side and disciplined observation on the other yield neighboring locations on the maps. Kant, Fichte, and Hegel fall between the classical core and phenomenology. They shift the weight of explanation from substances and impressions to the self-activity of reason and its norms. Husserl, Heidegger, and Merleau-Ponty move slightly outward by treating lived embodiment, horizonality, and world-involvement as the basic explanantia of meaning and knowledge. They remain central because later schools appropriate these insights while retaining the older problem set.

Deleuze and Derrida sit close to Foucault, connecting the embodiment arc to political and institutional analysis. Their signature moves, e.g., critique of identity, difference and repetition, discourse and power, recompose familiar concepts rather than abandon them, which accounts for their near-centroid positions in the concept mapping space. Smith and Ricardo extend the map in the direction of market coordination and value theory. Marx and Lenin sit along the same axis with an intensified focus on production, conflict, and power. The analytic figures, e.g., Russell, Wittgenstein, Quine, Kripke, and Lewis, form a compact cluster farther from the center. Early analytic programs sought to regiment or deflate metaphysics and to minimize figurative scaffolding; where metaphors appear, they are treated as paraphrasable aids. The result is a comparatively "de-metaphorized" surface next to traditions that lean on embodiment, history, or institutional critique. Nietzsche stands at a distance for different reasons: he recenters explanation on genealogy, revaluation, and force, shifting attention from truth and representation to the creation of values and the dynamics of power and style.

In short, the maps arrange philosophers by the kinds of considerations they treat as explanatorily basic. The classical pair stabilizes enduring problems; the early moderns remain nearby by making cognition and representation central; the German Idealists reweight the field toward self-activity and normativity; phenomenology recenters it on embodied coping; continental theory bridges embodiment and institutional critique; political economy stretches the space along production and coordination; the analytic cluster privileges logical form and semantics; and Nietzsche marks a deliberate rotation toward valuation and force.

RQ3. Which target domains, source domains, and composite concept mappings are most characteristic of each philosophical school? The heatmaps in Figure 3 isolate, for each school, the targets (what is theorized), the sources (domains used to structure theorizing), and the composite mappings that bind them. Read together, they show how each tradition's core arguments are scaffolded by a compact set of recurrent metaphors.

Among classical foundations, Plato and Aristotle are saturated with ACTIVITY/ACTION as targets and with SITUATION, ACTION, and PATH as sources, yielding high weights for KIND IS PATH, CONTENT/ENTITY/EVENT IS SITUATION, and TEMPORAL_ARRANGEMENT IS RELATION. This mirrors the classical projects of explaining kinds by forms and natures, teleology in change, and rule-governed practical reasoning. Empiricism loads targets on PERCEPTION, CHANGE-OF-STATE, and STATE; sources emphasize ACTION, ACTIVITY, QUALITY, and KNOWING. Its composites, e.g., PERCEPTION IS KNOWING, CHANGE_OF_STATE IS ACTIVITY, ATTRIBUTE IS QUALITY, encode Locke's and Hume's program of building knowledge from sensory operations and regularities. Rationalism shares the activity skeleton but shifts to SITUATION, PATH, CONDITION, and COMMUNICATION as sources, with CONTENT IS SITUATION, KIND IS PATH, and AGREEMENT IS AUTHORITY prominent, reflecting Cartesian/Leibnizian ambitions to derive content from a priori structure and lawful order.

In German Idealism, the target emphasis on STATE and ACTION/ACTIVITY with sources in QUALITY, RELATION, POSITION, and COMMUNICATION is distilled in STATE/ABILITY IS QUALITY, KIND IS PATH, and SIMULTANEITY IS TIME. These mappings enact the idealist turn from substances to self-legislated form and process. Phenomenology yields frequent target concepts, e.g., STATE, ACT, PERSPECTIVE, source concepts, e.g., PATH, HAND/PROXIMITY, SITUATION, CONTENT, and concept mappings, e.g., PERSPECTIVE IS SENSE, KIND IS PATH, TEMPORAL ARRANGEMENT IS RELATION, and PROXIMITY IS HAND. The body-horizon complex operationalizes Husserlian and Merleau-Ponty's claim that intentionality is enacted through situated embodied comportment, not detached representation.

In Analytic philosophy, targets cluster on COGNITION, COMMUNICATION, CONDITION/PERSPECTIVE; sources emphasize ACTION, COMMUNICATION, PATH, and TRANSMISSION. Dominant concept mappings, e.g., PERSPECTIVE IS SENSE, CERTAINTY IS COURSE/PATH, CREDIBILITY IS FACT, align with the analytic program of clarifying propositions, inference, and reference (Moore, Russell, Wittgenstein, Kripke) by rigorously regimenting discourse and evidential status, rather than redescribing lived or worldly embodiment.

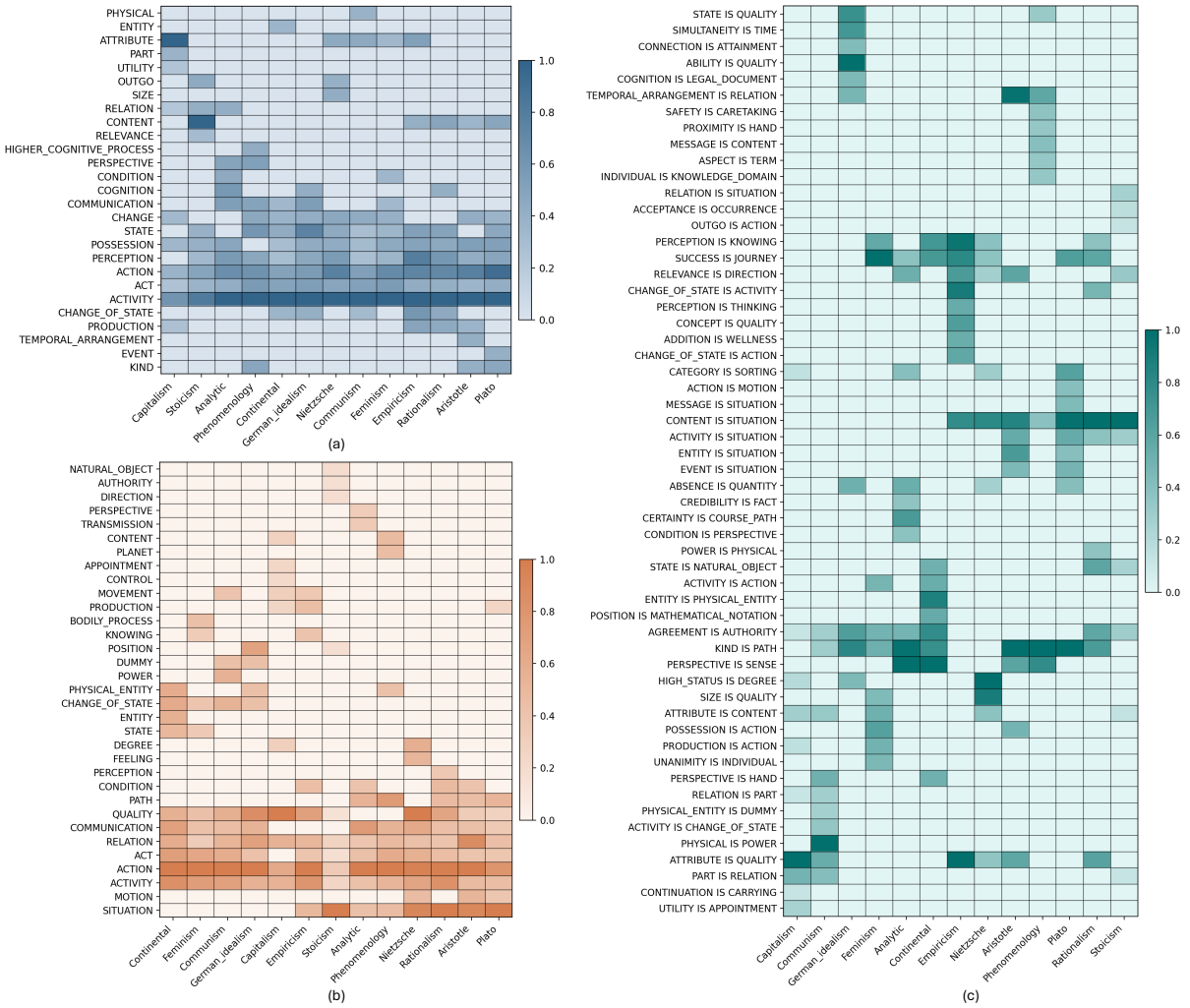

Figure 3: The most frequent (a) target concepts, (b) source concepts, and (c) concept mappings by schools.

For Continental theory, targets emphasize ACTION/ACT/STATE/CHANGE; SOURCES STRESS COMMUNICATION, RELATION, PHYSICAL ENTITY, and CHANGE_OF_STATE. Composites such as AGREEMENT IS AUTHORITY, ENTITY IS PHYSICAL ENTITY, and PERSPECTIVE IS SENSE/HAND support the shift from subject-centered reason to discourse, power, and material dispositifs (Foucault, Derrida, Deleuze). Capitalism peaks at the source QUALITY and target ACTIVITY/UTILITY, with ATTRIBUTE IS QUALITY, PART IS RELATION, and UTILITY IS APPOINTMENT.

This encodes Smith–Ricardo coordination through exchange, specialization, and valuation. Communism loads sources on POWER, CHANGE_OF_STATE, and RELATION, and concept mappings on PHYSICAL IS POWER, PART, RELATION, and AGREEMENT IS AUTHORITY, capturing Marx's re-reading of production and conflict as drivers of social form. Stoicism emphasizes ethical self-regulation as situational discernment (CONTENT/ACTIVITY/RELATION IS SITUATION).

Nietzsche is marked by evaluative gradients and ranking schemas: HIGH_STATUS IS DEGREE, SIZE IS QUALITY. SUCCESS IS JOURNEY captures Feminism's claim that women's and other marginalized groups' flourishing unfolds over time through navigation and collective action.

In summary, many schools share frequent targets (e.g., ACTION/STATE) and overlapping sources (e.g., SITUATION, COMMUNICATION), but their concept mappings—PERCEPTION IS KNOWING (empiricism), STATE IS QUALITY (German Idealism), PERSPECTIVE IS SENSE (phenomenology), CREDIBILITY IS FACT (analytic), AGREEMENT IS AUTHORITY (continental), ATTRIBUTE IS QUALITY VS. PHYSICAL IS POWER (capitalism vs. communism), CONTENT IS SITUATION (Stoicism), HIGH_STATUS IS DEGREE (Nietzsche), SUCCESS IS JOURNEY (Feminism)—determine placement and separability. They encode each tradition's habits and explain why mappings predict school identity better than targets or sources, as the same topics follow different cross-domain logics.

6. Conclusion

This work introduces a corpus analysis, tracking how philosophical cognition is organized and changes over time. Our results suggest that philosophical debates are not merely thematic but structurally metaphorical: schools are best identified by the cross-domain templates they reuse and recombine. Substantively, the field's center of gravity stabilizes around embodied and communicative schemas, while innovation proceeds via selective import of socio-economic and political-institutional frames. Limitations include uneven textual coverage and the historical Western focus of the present corpus. Future work will broaden the canon (non-Western and contemporary materials), refine mapping extraction with human-in-the-loop validation, and integrate diachronic semantic models to test causal hypotheses about conceptual change.

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