Vectorial Habitus: Embeddings, Class Language, and the Limits of the Computational Proxy in the Social Sciences

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Text embeddings are increasingly used as proxies for social phenomena, but their interpretability in social stratification contexts still lacks systematic examination. This research seeks to clarify whether pretrained language models capture structural social position through discursive style, or whether vector separation responds solely to differences in thematic interest. The distinction is epistemologically crucial for the responsible use of artificial intelligence in the social sciences. The theoretical framework draws on the Bourdieuian notion of habitus : language not merely as content, but as a practice endowed with registers, valuations, and lexical choices that reflect acquired social dispositions. Community embeddings will be constructed from corpora of social media groups with documented socioeconomic profiles, using pretrained models without fine- tuning. The central axis is a lexical ablation experiment under four progressive conditions : complete corpus, removal of hyper-specific terms, removal of explicit consumption markers, and exclusive retention of evaluative and argumentative terms. Under each condition, separability metrics will be recalculated to diagnose which linguistic dimension sustains group differentiation. The main methodological contribution is the ablation delta : a diagnostic metric that quantifies the relative drop in separability between conditions. If separability collapses when thematic nouns are removed but persists when only evaluative adjectives and argumentative connectors are retained, this would constitute evidence of discursive habitus capture. The study will also explore asymmetries between community pairs, providing direct sociological interpretation of the model's selectivity as a proxy for social class.