

# Language, Identity, and Collective Well-being: A Computational Perspective

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内 容 梗 概（1 ページ目に収めること）

Modern societies have shifted from inherited, place- and kin-based communities to fluid, self-selected forms of belonging. In this context, individuals increasingly shoulder the responsibility of finding and maintaining communities that provide psychological safety, mutual support, and a sense of shared identity, which risks reinforcing social inequalities if participation is treated solely as a matter of personal competence. Prior work has highlighted the importance of social environments, including constructs such as collective well-being and collective identity, yet quantitative evidence still relies on questionnaires that are burdensome, vulnerable to self-report biases, and difficult to scale to online settings. To address these limitations, this thesis adopts an engineering-based approach using computational methods, particularly natural language processing (NLP), to examine linguistic and interactional markers of collective psychological states, aiming to build scalable and interpretable frameworks grounded in existing theories from sociology, social psychology, and communication studies.

The thesis comprises three studies. First, I develop sharedness-based indicators of workplace social harmony using employees' ratings and diary texts. Second, I propose a linguistic innovation metric for online communities as a scalable proxy for collective identity. Third, I conduct a hybrid human-LLM conversational experiment to examine how the introduction and evaluation of a coined word relate to changes in collective identity. Together, these findings indicate that computational linguistic indicators can capture meaningful aspects of collective psychological states and that linguistic innovation can function as a conditional mechanism for strengthening group identity.