Television Advertising: A Cross-Modal Diachronic Multidimensional Analysis of American TV Commercials

Andrea Cristina Martins Santos
Pontifical Catholic University of Sao Paulo (PUCSP)
Graduate Program in Applied Linguistics and Language Studies
ra00365992@pucsp.edu.br

This paper presents a cross-modal, diachronic corpus study of American television advertising, combining verbal and visual analysis through Lexical Multidimensional Analysis (LMDA) (Berber Sardinha; Fitzsimmons-Doolan, 2025). The study examines how discourses in U.S. television commercials are constructed and how they evolve over eight decades, from the 1950s to the 2020s. The analysis of more than one semiotic mode within the same corpus poses a challenge for corpus linguistics, particularly due to the difficulties involved in analyzing visual elements at scale. However, the recent availability of AI-powered tools for image annotation, including GPT-image-1.5, Google Vision, and Google Vertex, has made it possible to annotate visual images (both still and moving) in quantities suitable for corpus-based analysis (Baker et al., 2025; Berber Sardinha, 2024, 2025). Previous studies, however, have not addressed the methodological issues involved in applying these techniques to a corpus of moving images. This study aims to address this gap. The corpus comprises 800 television commercials, with 100 commercials sampled per decade. The corpus is divided into two aligned components: a verbal subcorpus and a visual subcorpus. The verbal component consists of transcripts of the speech in the commercials; the visual component consists of frame-based annotations using GPT-image-1.5, consisting of descriptions of scenes, participants, and actions. This process results in 800 verbal transcripts and 800 annotated visual files. Each subcorpus was analyzed separately using LMDA, which identified dimensions of underlying discourses. In this study, discourse is understood as socially shared and socially situated representations of reality that implicitly frame and constrain meaning (Berber Sardinha; Fitzsimmons-Doolan, 2025). For both subcorpora, content words were extracted, frequency counts were compiled, and factor analysis was applied to identify dimensions of variation. To integrate the verbal and visual dimensions, a canonical correlation analysis was carried out, allowing cross-modal discursive patterns to be identified. Finally, ANOVAs were conducted to detect diachronic variation in the verbal, visual, and cross-modal discourses. The dimensions will be introduced and illustrated in the conference presentation. The study demonstrates how AI-based visual annotation enables corpus-driven cross-modal discourse analysis of television advertising.

Television Advertising: A Cross-Modal Diachronic Multidimensional Analysis of American TV Commercials

This paper presents a cross-modal, diachronic corpus study of American television advertising, combining verbal and visual analysis through Lexical Multidimensional Analysis (LMDA) (Berber Sardinha; Fitzsimmons-Doolan, 2025). The study examines how discourses in U.S. television commercials are constructed and how they evolve over eight decades, from the 1950s to the 2020s. The analysis of more than one semiotic mode within the same corpus poses a challenge for corpus linguistics, particularly due to the difficulties involved in analyzing visual elements at scale. However, the recent availability of AI-powered tools for image annotation, including GPT-image-1.5, Google Vision, and Google Vertex, has made it possible to annotate visual images (both still and moving) in quantities suitable for corpus-based analysis (Baker et al., 2025; Berber Sardinha, 2024, 2025). Previous studies, however, have not addressed the methodological issues involved in applying these techniques to a corpus of moving images. This study aims to address this gap. The corpus comprises 800 television commercials, with 100 commercials sampled per decade. The corpus is divided into two aligned components: a verbal subcorpus and a visual subcorpus. The verbal component consists of transcripts of the speech in the commercials; the visual component consists of frame-based annotations using GPT-image-1.5, consisting of descriptions of scenes, participants, and actions. This process results in 800 verbal transcripts and 800 annotated visual files. Each subcorpus was analyzed separately using LMDA, which identified dimensions of underlying discourses. In this study, discourse is understood as socially shared and socially situated representations of reality that implicitly frame and constrain meaning (Berber Sardinha; Fitzsimmons-Doolan, 2025). For both subcorpora, content words were extracted, frequency counts were compiled, and factor analysis was applied to identify dimensions of variation. To integrate the verbal and visual dimensions, a canonical correlation analysis was carried out, allowing cross-modal discursive patterns to be identified. Finally, ANOVAs were conducted to detect diachronic variation in the verbal, visual, and cross-modal discourses. The dimensions will be introduced and illustrated in the conference presentation. The study demonstrates how AI-based visual annotation enables corpus-driven cross-modal discourse analysis of television advertising.