

Engagement in Medical Research Discourse

A Multisemiotic Discourse-Semantic Study of Dialogic Positioning

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Abstract

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This study investigates how medical researchers engage with a background of prior and anticipated utterances in a collection of highly cited English-language medical research articles. Taking a multisemiotic, systemic-functional approach, I examine the verbal, visual, and mathematical resources used by medical research writers to construe, engage with, and position themselves in relation to a dialogic background of different voices, positions, and propositions. I explore the dialogic functions of those resources and how they are integrated or combined. I also consider how those resources are distributed across different parts of the medical research article and to what extent their use might reflect some of the disciplinary practices of medical research.

The study shows that engagement can be realized by a broad and diverse set of verbal, mathematical, and visual resources. Verbal modality, projection, and concession, visual prominence and depiction-style, and mathematical probability, approximation, and prediction combine to construe a dialogic space that, on the whole, is more 'heteroglossic' than 'monoglossic' (i.e. multi- or other-voiced rather than single-voiced) and more dialogically 'expansive' than 'contractive'; that is, it opens up rather than closes down the dialogic space for alternative positions and propositions in the discourse. From a genre perspective, engagement resources have different distributions across the various stages and phases of the medical research article, which tend to construe a dialogically 'expansive' Introduction and Discussion and a dialogically 'contractive' Methods and Results, although there is considerable variation across generic stages and phases and among individual research articles. The intersemiotic analysis shows how verbal, visual, and mathematical engagement resources are generally integrated to complement and reinforce the meanings construed by each semiotic. Less commonly, they diverge or they combine to make meanings that are not explicitly carried by any one semiotic, creating moments of potential dialogic tension. These changing dialogic spaces are crucial to building and maintaining alliances with the reader. They are also part of what makes the medical research article a hybrid text, one that, from a disciplinary perspective, construes varying writer–reader relations and knowledge structures (e.g. hard–soft, regional–singular, hierarchic–horizontal) as the text unfolds.

The implications of this study are three-fold. Firstly, the study contributes to theoretical developments in the fields of social semiotics, systemic functional theory, and discourse analysis more generally. Secondly, it contributes to the growing body of discourse- and corpus-analytic studies of medicine and medical research discourse. Thirdly, the findings may have practical applications in academic literacy programmes.

Key words: engagement, medical research discourse, social semiotics, systemic functional theory, dialogic theory, linguistics, semiosis, multisemiosis, multimodality, intersemiosis, intermodality, corpus analysis, genre, disciplinarity, ideology