

Abstract

**Discipline-specific ways of representing discovery? Coming-to-know verbs in research articles in four academic disciplines**

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Discovery of new knowledge can be represented in different ways in academic writing. Writers of research articles can choose between various linguistic resources to specify what precisely the study has achieved, and how the relevant information is acquired. One such strategy is to use a verb with appropriate semantic properties before the actual knowledge claim, such as *find*. This is illustrated in the following example from a medical research article.

In the current study, we **found** that the five treatment groups were considerably more different from each other at the 2-year follow-up than they were before treatment.

(BenDebba, M. et al. "Persistent Low Back Pain and Sciatica in the United States: Treatment Outcomes". *Journal of Spinal Disorders & Techniques*. 15(1), 2002. p. 15.)

In this paper, my aim is to discuss the extent to which this strategy is constrained by the disciplinary context with which writers of articles are affiliated. This study is a part of my PhD thesis on disciplinary differences in the language and style of academic research articles.

This paper focuses on the use of a group of 58 verbs that Meyer (1997) refers to as "coming-to-know verbs" (eg *find*, *see*, *observe*). These verbs refer to epistemic gains in academic texts: they report the acquisition of knowledge as the result of the scholar's intentional action. By studying the use of these verbs in a corpus of research articles, it is possible to compare the ways of representing discovery in academic writing in different disciplinary contexts.

This study is based on a corpus of 256 research articles in four academic disciplines: academic law, literary criticism, physics, and medicine. These disciplines are situated

in different sections in Becher's (1994) fourfold typology of disciplinary groupings. Each discipline is represented by 64 articles which have appeared in influential journals between 2001 and 2005. The size of the corpus is ca. 2.000.000 words.

This corpus was searched for all instances of coming-to-know verbs. The returned tokens were categorised according to semantic criteria, and classified with respect to a set of linguistic and extralinguistic factors (including voice, mood, and the number and type of the subject of the verb, where applicable). The data from each subcorpus were first analysed separately, and then contrasted with the data from the other three subcorpora. Furthermore, results from the two hard disciplines were merged and contrasted with those from the two soft disciplines. Finally, results from disciplines representing the same main division were contrasted with one another. In order to account for the observed differences between disciplines and disciplinary groupings, a selection of texts was subjected to qualitative analysis, involving close reading of relevant passages and consideration of typical patterns of argumentation in each discipline.

The results of this study suggest that there are differences in the way in which discovery is represented in different academic disciplines. Academics in medicine and physics generally use more coming-to-know verbs than scholars of law and literature, implying a preference for more explicit formulation of knowledge claims in the hard sciences. However, the data on subgroups of these verbs and on individual verbs also points to ways of representing discovery which are specific to one of the studied disciplines. Overall, my results seem to be in agreement with previous research (e.g. Hyland 2000) on the difference between the disciplinary rhetorics in hard and soft sciences.

## **References**

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