## **Book Reviews**

## General

Karine Chemla; Jacques Virbel (Editors). *Texts, Textual Acts, and the History of Science*. ix + 430 pp. Cham, Switzerland/New York: Springer, 2015. \$129.

This book is a programmatic development of linguistic Speech Act Theory (SAT)—theories of how utterances perform actions—for analysis of texts in the history of science, along with substantial papers demonstrating the fruits of such a project. It is the result of a series of workshops hosted by the editors, starting in 2002 in Paris, initially under the title "Textes de consignes et d'algorithmes: Approches historiques et linguistiques." The participants in these workshops worked together to understand the approaches of SAT and to digest the sources of their respective, and sometimes disparate, fields. The product is a series of essays that provide not only examples of the application of SAT to textual analysis in the history of science but also substantial contributions to the textual approach in the history of medicine, zoology, and, especially, mathematics.

In the first chapter the editors introduce the project and provide summaries and analyses of the individual papers. For readers interested in this project, but without enough time to read the entire book, this introduction provides a valuable service. The next chapter, by Jacques Virbel, gives a concise overview of SAT and a systematic presentation of the types of speech acts that are found to occur in procedural and instructional texts. This paper is dense and highly structured, and while a good resource for scholars it might be somewhat inaccessible to the uninitiated. Chapter 3 is a lengthy study by Florence Bretelle-Establet of Chinese medical writings that uses SAT to differentiate a wide selection of texts on the basis of the types of acts that they are written to facilitate in readers, the syntactical characteristics of the writing, and the types of directives the authors use to indicate the acts that they dictate.

In Chapter 4, Yves Cambefort uses SAT to explore the way in which zoologists use nomenclatural acts to institute names for organisms that they claim to have discovered and to distinguish these new organisms from all other previously named organisms. These nomenclatural acts, in the form of specialized zoological publications, employ a number of features of interest to SAT, such as enumerations and declaratives, and they act as a sort of key that allows readers to distinguish and identify the named organisms.

In Chapter 5, Agathe Keller uses both traditional philology and SAT to discuss procedures for extracting square roots in Sanskrit, in two treatises and three commentaries. This study shows that although certain aspects of the context of these sources seem to be irremediably lost to us, we can read them as not merely stating a procedure but as also commenting on the fundamental mathematical properties on which such procedures are based.

The second half of the book begins with a theoretical treatment of enumeration as a type of speech act and textual object, also composed by Virbel. "Enumeration" is used as a technical term for the type of textual structure often known as an outline, which may structure the whole or a part of a text, and for the production of which computer programmers sometimes write specialized outliners. Enumerations may be numbered or unnumbered, but they organize text into structured, nested hierarchies. Virbel provides a detailed, theoretical, and itself highly enumerated study of these objects, focusing on syntactical, semantic, logical, and pragmatic aspects. Michel Teboul uses this type of analysis in the next chapter to elucidate the function of structure as a governing principle in the composition of the *Ĕryă*, one of the first semantic lists composed by ancient Chinese scholars. This leads to some results not obtained through classical philological methods. In her study of the obscure genre of Old Babylonian mathematical tablets, known

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as series texts, Christine Proust uses enumeration to analyze their elaborate nested structure. These series texts appear to have been produced by distributing operations through a sort of combinatorial procedure over the resulting nested structure of the text, in such a way as to produce problems that are amenable, at least in principle, to the methods available to the ancient scribes. In the next chapter, Karine Chemla studies numerical algorithms presented in two classics of Chinese mathematics and some commentaries on them, as well as one ancient Chinese mathematical manuscript. An interesting finding is that the enumeration structure of texts that proscribe algorithms involving different cases requires that readers possess competence in working with these texts in order to circulate through the algorithm. This is an indication that working with these texts was part of a long-term scholarly tradition. In the last chapter, Anne Robadey shows that Poincaré, in his early work on differential equations, uses the structure of his texts as a way tacitly to treat the degree of generality of particular cases.

Taken as a whole, *Texts, Textual Acts, and the History of Science* offers a number of novel and productive approaches to textual studies; these should be particularly valuable to historians working on the premodern sciences, for which textual sources significantly predominate over other types of evidence.

## Nathan Sidoli

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Matthew Bell. *Melancholia: The Western Malady*. xvii + 210 pp., bibl., index. Cambridge: Cambridge University Press, 2014. £65 (cloth).

Stephanie Shirilan. Robert Burton and the Transformative Powers of Melancholy. (Literary and Scientific Cultures of Early Modernity.) xii + 218 pp., bibl., index. Farnham, Surrey: Ashgate, 2015. £60 (cloth).

A man poses for his portrait. Rather than striking a conventionally commanding, manly stance with legs apart, Edward, Lord Herbert (ca. 1582–1642), lies down. Reclining with his head resting on his clenched fist, he stretches his booted and spurred legs out to one side and lies with his sword and shield over him. The posture is an oddly uncomfortable one (I have tried it), as no part of his torso touches the floor—fortunate, then, that he is only posing for a miniature. The artist, Isaac Oliver (ca. 1565–1617), adds surroundings: not a richly draped interior, but a verdant woodland landscape. The setting may be peaceful, but the final image is hardly so. Herbert's pose, his serious, long gaze, his stiff upper body—all conjure up the spirit of melancholy. In the foreground, a river bank drops away sharply just inches from the subject's body, hinting at the fate awaiting those afflicted with mental turmoil.

Why did Herbert choose to be pictured as a melancholic? The simple answer is that, in this period, it was fashionable for English aristocrats to be so, wearing suits of solemn black or lying in shady retreat. That melancholy was seen as desirable and glamorous stemmed ultimately from the pseudo-Aristotelian *Problems* 30.1, which asked why artists, thinkers, and poets were so often affected by the disease of black bile. Marsilio Ficino elaborated this prompt into a full-blown neo-Platonic theory of melancholic genius, enabling the disorder to become a self-identifying marker of high status in the early modern period.

These new studies of melancholy by Mattthew Bell and Stephanie Shirilan address why melancholy has been such an enduring and—for some—attractive condition. Bell's invigorating book has the more ambitious scope: it investigates the broad cultural, social, and medical contexts of the affliction from ancient Greece up to the end of the nineteenth century, covering topics including gender, nomenclature, geography, class, and nationality. Preferring the term "*melancholia*," as an indicator of the "European character of the disease" (p. xiii), Bell argues that the condition is fundamentally associated with a Western understanding of self-consciousness. It is not simply a product of Renaissance cultures of individualism, as