MACHINE TRANSLATION
THE LATEST CATCHBAG

"Machine Translation Systems," edited by Jonathan Slocum (Cambridge University Press, 1987) Price: UK£9.50 (US$17).

As well as being a welcome addition to the CUP's prestigious Studies in Natural Language Processing series of monographs on computational linguistics, this book is also a reprint of a 1985 special number of the journal Computational Linguistics, devoted to MT.

Judging from editor Slocum's useful historical introduction, it seems that the burning drive behind this book is to inform the U.S. computer community - plus any Rich Uncle Moneybags happening to loiter in their vicinity – loud and clear of three important facts: first, that the 1965 ALPAC thumbs down on MT was misguided; second, that despite enormous difficulties MT systems are now in their fourth generation; and third, that there are MT rigs in operation and they're cost-effective.

Slocum's 45-page state-of-the-art survey showers "myopic" Americans with putdowns such as "Though U.S. government interest once again languished . . ." and "There has been no rift between AI and MT researchers in Japan as there has been in the West – especially in the U.S." In comparison, initiatives in Europe, where translation is "a fact of life," fare much better.

Slocum sees his mission as redefining the value of automatic translation for Americans in terms of its endusers' requirements and not the extent to which it approaches human-output quality.

The contributors have updated their original articles and references especially for this book, and Slocum himself has made all the necessary additions to his monster 76-page trilingual bibliography of MT references. The result is a sober showcase of where MT is at on the research front, plus information on one or two production systems.

After the introduction, there are six chapters each devoted to a different project. Saarbrücken's ASCOF system for French and German translation is reviewed, as is the GETA work at Grenoble. Then comes a survey of the Texas LRC system, better known today in its commercial guise as the Siemens-backed METAL.

There's a description of the Japanese government's Japanese-English MT project. And the same again for SPANAM and ENGSPAN, the Spanish-English MT systems in use at the Pan American Health Organization. Finally, there's a sketch of TAUM-AVIATION, the now-defunct Montreal-based project for English and French.

Each article offers a detailed description of how the system in question works, usually followed by some discussion on efficiency and the speed of actual throughput. It then ends with a brief note on future research plans.

A collection like this, covering a fast-moving field, will inevitably fall prey to built-in obsolescence. In this case, the French National Project to commercialize the Grenoble research seems to have been abandoned since the book went to press.

Two other minor gripes: it's a shame that it was impossible to include anything on EUROTRA; and the fact that much of the information exists elsewhere may make you giddy with déjà vu.

Nevertheless, for the semi-specialist reader who hates indexes and wants objective summaries of current MT systems, this book is good value for money.

—Andrew Joscelyne