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It is my intention to publish two different kinds of algorithms articles: articles that present utilities built on top of Common Lisp and articles that discuss and explain interesting parts of Common Lisp. The following article is an example of the latter type. It shows how to take advantage of some of the advanced features of the pretty printing facilities that have been adopted as part of the forthcoming draft Common Lisp standard.

Pretty printing has been an important feature of Lisp for more than twenty years. Without it, big pieces of output such as programs and large data structures are virtually incomprehensible. When Common Lisp was initially designed, pretty printing was included as a feature. However, very little was said about what the pretty printer would do, no provision was made for allowing the user to control what it did, and very little provision was made for the pretty printing of data structures. The pretty printing facilities that have been adopted as part of the forthcoming draft Common Lisp standard fix these problems by allowing a user to specify in detail exactly how any particular type of list or other data structure should be pretty printed.

The following article explains how the new pretty printing facilities can be used to gain detailed control over the printing of lists. As an example, it shows how the pretty printer can be used to print a subset of Lisp as Pascal.

While I enjoy writing articles for this column, I enjoy the idea of publishing other people's articles even more. Please consider writing an article on an aspect of Lisp that interests you.

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