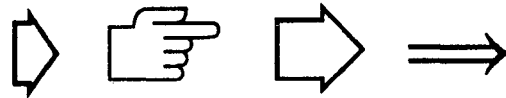


LISP Pointers



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Dear Colleague,

Two issues down and we're still alive and well. That's hopeful. Our mailing list is now around 800 subscribers. Of course the fact that we're free has nothing to do with our popularity. You'll notice that this issue is supported by two separate companies. I.N.R.I.A. has agreed to sponsor all forthcoming non-US mailings. They will be mailing directly from France, which should speed along our issues to our non-US subscribers. Xerox PARC is sponsoring Issue 2 for the US subscribers. Our thanks to both of these companies. Immediately following this letter, you'll find a description of the sponsorship program. We still need sponsors for forthcoming issues. Our thanks to both I.N.R.I.A. and Xerox PARC for their support of Lisp Pointers.

The comments that have been coming in the post and electronic mail have been very encouraging. We hope that we'll continue to provide the sort of newsletter that you want to read. Some department heads have reported that they began receiving responses to the first newsletter from the first week it hit the streets. Thanks from all of us. But we still need contributions from YOU. Take a minute and look through the list of departments to see if any are applicable to your work. We'd certainly like to hear from you.

John Ramsdell made the suggestion that authors consider the guidelines set down in Leslie Lamport's book "LaTEX: A Document Preparation System". In this book, the author suggests that line lengths not exceed 75 characters, including punctuation and spaces. Any other suggestions from out there will be passed on.

David Wallace has corrected one of our fillers that attributed a quotation on airplanes made in 1941 to Marechal. Since Marechal died in 1929, he is presumably not the actual source. Does anyone know who is?

We are still in need of fillers. I abhor white space and feel an obsessive need to cover it with lines. Graphics would also be appreciated. Is anyone out there doing graphics in Lisp? Does anyone have any anecdotes to share?

Sincerely,



Mary S. Van Deusen, Editor

SPONSORSHIP OF LISP POINTERS

Lisp Pointers is a non-profit publication created by the Lisp community for the Lisp community. Currently, Lisp Pointers is not affiliated with any organization. For this reason, it is dependent upon the sponsorship of companies interested in Lisp for its publication.

Lisp Pointers is a newsletter, that is, it contains technical articles which are not refereed and which, therefore, may be republished in other technically refereed journals later. Lisp Pointers is a forum for preliminary papers, as well as for the fast interchange of ideas. As well as technical articles, Lisp Pointers contains columns and departments, such as the following:

- Query IO - questions and answers about Lisp
- The Scheme Environment
- International News
- Programming Environments
- Key of Lisp - user-oriented issues
- Book reviews
- ((lambda (discussions) (report on X3J13))) - Common Lisp standardization
- Lisp Implementations

Sponsors are permanently listed on the back cover of Lisp Pointers. We do this to thank those companies who have joined us in producing a publication which we think is both needed and wanted by this important research and production community.

Because no organization is involved, the board running Lisp Pointers tends to be very conservative both legally and financially. A disclaimer for a sponsor company appears on the inside front cover. The disclaimer for the first issue reads as follows:

This issue of the Lisp Pointers newsletter has been funded by the IBM Corporation. The IBM Corporation has not directed or controlled its publication. The opinions expressed herein are solely those of the authors, editors, publisher and other contributors and do not necessarily reflect the opinions of the sponsoring company, the IBM Corporation, or the opinions of companies affiliated with individuals involved with this effort.

Sponsorship involves the commitment to cover cost and work involved in the printing and distribution of a single issue of Lisp Pointers. The editor creates a camera-ready copy which is sent to the sponsoring company. The sponsor arranges for the duplication and mailing of the issue. Cost to the sponsoring company is dependent upon the size of the mailing list, which will increase over time, the access to inhouse duplication facilities, the size of the issue, and the cost of mailing to subscribers within the US. INRIA has accepted permanent sponsorship of all non-US subscribers. The number of US subscribers was approximately 500 for the first issue, and 800 for the second issue. An overprinting of 100 copies is requested for backorders. The first issue was 60 pages long. The size of the second issue is 48 pages. The cost of mailing the first issue was \$1.07 to US subscribers.

At the time this letter is being sent to you, we are looking for sponsors for issues 3 and beyond. Lisp Pointers is published six times per year on a regular schedule.

If you have any questions or would like to volunteer for sponsorship, please contact the editor, Mary S. Van Deusen.

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Lisp Books in Print

A Bibliography - First Draft

Daniel Weinreb

This is the first draft of an annotated bibliography of books about Lisp. Only books in print from general publishers are included; the list does not include technical reports nor commercial software documentation.

There's no sharp definition of the phrase "about Lisp". In general, Lisp reference manuals and textbooks are the main body of the list. Books about implementations of Lisp and about implementation techniques for Lisp are also included. "Lisp" as a category is used in the same way as the rest of *Lisp Pointers*; for example, Scheme is included.

The list is quite incomplete. There are several books missing even though I am aware of them, because I lack an immediately-available bibliographic reference. Furthermore, I'm sure there are many other books that I'm not aware of. I apologize to anyone whose book is omitted; the blame for such omissions is entirely mine and is not intended to reflect on the omitted book! I hope that the readership of *Lisp Pointers* can fill out the list. Please send contributions to the author (whose addresses are given at the end). In a future issue, we'll publish a more complete list, based on these contributions.

While writing the annotations, I was sometimes torn between trying to stay completely neutral and omit value judgements entirely, and writing capsule reviews. I believe that I found a compromise that should be acceptable. However, a complete list of all Lisp textbooks would have to include several whose quality I consider low, and I'm not sure how to handle the entry for such a book. On one hand, it seems nasty and callous to list a book, only to deliver it a brief put-down. On the other hand, it seems a disservice to the reader to list a book, simply describing it as a "textbook for Lisp", when I feel sure that the reader would find more value elsewhere. I'd welcome your feedback on this topic.

1. Abelson, Harold and Gerald Jay Sussman; *The Structure and Interpretation of Computer Programs*; MIT Press, 1985

The textbook for the entry-level subject in computer science at MIT. This work is intended to teach deep, fundamental points about programming, specifically to present programming as a novel formal medium for expressing ideas about methodology, and for teaching the techniques used to control the intellectual complexity of large software systems. It uses Scheme, and the programming techniques usually associated with Scheme, some of which are not applicable to non-Scheme-family Lisp dialects. However, the main points of the book are not language-specific. You don't need to know how to program to understand this book.

2. Allen, John; *Anatomy of Lisp*; McGraw-Hill, 1978

Discusses fundamental principles of Lisp rather than any particular Lisp dialect. Several chapters discuss the implementation of Lisp, about which little

is written anywhere. This book is not useful for learning Lisp, nor is it meant to be. You need a computer science background to understand this book.

3. Bromley, Hank; *Lisp Lore: A Guide to Programming the Lisp Machine*; Kluwer Academic Publishers, 1986

Discusses the Symbolics software environment. Several chapters describe features of the Zetalisp language, such as streams, flavors, and various more advanced constructs, and explain how and why they are used. The language-related chapters assume familiarity with Lisp, in the Maclisp family of dialects.

4. Gabriel, Richard P.; *Performance and Evaluation of Lisp Systems*; MIT Press, 1985

The final report of the Stanford Lisp Performance Study, performed by the author from 1981 to 1984. It presents the results of running a series of benchmarks on a large number of Lisp implementations and configurations, discussing the benchmarks, the Lisp implementation, and the results. The meaning of the results is controversial within the Lisp community, and many of the actual figures in the book have already been made obsolete by new hardware and new software releases. Nevertheless, it is the most useful body of information available to someone who wants to learn about Lisp system CPU performance. It also teaches a lot about the hazards of interpreting benchmark information. You need to know Lisp to understand this book, and the more you understand about computer architecture and Lisp implementation techniques, the more you'll be able to learn.

5. Meehan, James R.; *The New UCI Lisp Manual*; Lawrence Erlbaum Assoc., 1979

Reference manual for the UCI Lisp dialect for the PDP-10. UCI Lisp is a descendent of Stanford Lisp 1.6, and is distinct from Maclisp and Interlisp. With the ascent of Common Lisp and the decline of the PDP-10/20 architecture, it is less widely-used than it once had been. You need to know Lisp to understand this book; this is a reference manual, not a textbook.

6. Siklossy, Laurent; *Let's Talk Lisp*; Prentice-Hall, 1976

Another basic Lisp textbook. The dialect is unspecified, but is archaic by today's standards. You don't need to know how to program to understand this book.

7. Steele Jr., Guy L.; *Common Lisp: The Language*; Digital Press, 1984

Reference manual for Common Lisp. This book currently serves as the definition of the Common Lisp language. It's often referred to be its initials, as *CLtL*. It's also commonly known as *The Aluminum Book*, or similar phrases involving similar-looking metals and alloys. A second edition, incorporating many minor fixes, is planned. Eventually a document will be issued by the ANSI X3J13 committee that will supersede this book as the official definition of the Common Lisp language. You need to know Lisp to

understand this book; this is a reference manual, not a textbook. Also available in Japanese.

8. Tatar, Deborah; *A Programmer's Guide to Common Lisp*; Digital Press, 1987

Textbook for the Common Lisp dialect. Several chapters discuss the more advanced features of Common Lisp, and explain how and why they are used. Reviewed in the first issue of *Lisp Pointers*. You need to know how to program to understand this book, but you don't need to know any Lisp.

9. Touretzky, David; *Lisp: A Gentle Introduction to Symbolic Computing*; Harper & Row, 1984

Textbook for basic Lisp. The description "gentle introduction" is accurate: the book slowly and carefully provides a firm explanation of the fundamentals of Lisp. Common Lisp is the dialect, although most languages features covered in the book are present in nearly every current dialect. You don't need to know how to program to understand this book.

10. Wilensky, Robert; *LISPcraft*; W. W. Norton, 1984

Textbook for the Franz Lisp dialect, including several advanced features, and some of the Franz programming environment under Unix. You don't need to know how to program to understand this book.

11. Winston, Patrick H. and Berthold K. P. Horn; *Lisp* (second edition); Addison-Wesley, 1984

Textbook for Common Lisp. Notable for extensive, well-developed examples, particularly in areas of artificial intelligence programming. You don't need to know how to program to understand this book. Be sure to get the second edition.

Please send contributions to the author via electronic mail. The proper Internet address is "dlw@symbolics.com". However, if the whims of your computer's host table or the Internet's interesting domain system don't like that address, you might try "dlw@mc.lcs.mit.edu" or "dlw@mit-mc". If all else fails, or you have no convenient access to the network, the U.S. mail address is:

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