Acknowledgments

First, and foremost, I would like to thank Tim Teitelbaum. Tim has worked very closely with me on the material in my thesis, and his guidance has been invaluable. He also extensively reviewed the thesis, and suggested many improvements. I am very lucky to have been able to work with him during my stay at Cornell.

I am also deeply indebted to Alan Demers. I have sought out Alan dozens of times when I was thoroughly confused, and almost invariably he straightened me out. I do not believe this work would have been possible without Alan's insights; each chapter of this thesis contains several of his ideas.

I would also like to thank Susan Horwitz. Her love and encouragement have been unfailing, especially during the last few months of writing. Susan has usually been the first person to hear my ideas and to read what I have written; she has been of immense help in making the ideas more precise, and the writing more succinct.

I received helpful suggestions from several people who ventured to build editors with the prototype Synthesizer Generator, including Bowen Alpern, Joe Bates, Michael Fingerhut, and Rick Palmer. Suggestions from several other individuals, including Dean Krafft, David Gries, Mark Horton, Jan Prins, and Barry Rosen, were also very helpful.

Special thanks go to Richard Conway, who, when he hired me in 1978, started a remarkable chain of events that has completely changed my life.

Finally, my parents, Constance and John Reps, have encouraged my endeavors during both high points and low points.

Thomas W. Reps Ithaca, New York December 1983