

CONTENTS

Acknowledgments ix

Introduction 1

Understanding media 1

Software, or the engine of contemporary societies 6

What is software studies? 10

Cultural software 20

Media applications 24

From documents to performances 33

Why the history of cultural software does not exist 39

Summary of the book's narrative 43

PART 1 Inventing media software 53

1 Alan Kay's universal media machine 55

Appearance versus function 55

"Simulation is the central notion of the Dynabook" 64

The permanent extendibility 91

The computer as a metamedium 101

2 Understanding metamedia 107

The building blocks 107

Media-independent *vs.* media-specific techniques 113

Inside Photoshop 124

There is only software 147

PART 2 Hybridization and evolution 159

3 Hybridization 161

Hybridity *vs.* multimedia 161

The evolution of a computer metamedium 176

Hybridity: examples 184

Strategies of hybridization 195

4 Soft evolution 199

Algorithms and data structures 199

What is a “medium”? 204

The metamedium or the monomedium? 225

The evolution of media species 233

PART 3 Software in action 241

5 Media design 243

After Effects and the invisible revolution 243

The aesthetics of hybridity 254

Deep remixability 267

Layers, transparency, compositing 277

After Effects interface: from “time-based” to
“composition-based” 282

3D space as a media design platform 289

Import/export: design workflow 296

Variable form 307

Amplification 323

Conclusion 329

Software, hardware, and social media 329

Media after software 335

Software epistemology 337