



The Making of KARATEKA Journals 1982-1985

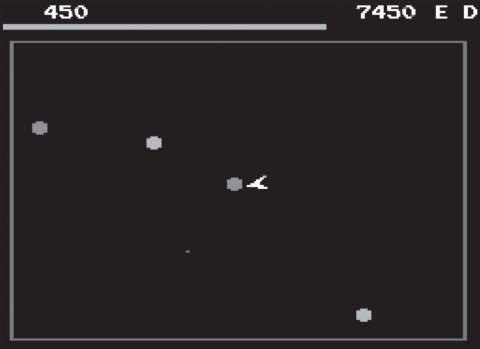
Jordan Mechner

Introduction

THREE YEARS BEFORE *Prince of Persia* was a gleam in my eye, I was a 17-year-old Yale freshman and avid gamer, trying to balance a college courseload with my aspiration to become a real, published game author... and maybe, someday, a screenwriter.

This is my journal from that time — excerpted so as not to strain the reader's patience, but otherwise unimproved and untouched by 20/20 hindsight.

Part 1: Deathbounce



JANUARY 27, 1982

History at 9:30, Psych at 1:30. In between I went into town and bought the *Monty Python and the Holy Grail* soundtrack to send to the Lillies, and this notebook. Discussed the nature of the universe with Ben and Rich until dinner.

About this journal: My basic intention is to write down, at the end of each day, what happened — what I did, thought, felt, and so forth — so I can read it, years from now, and remember what it was like.

I think it's best if I don't concern myself overly with style. I'll only get frustrated and quit. The second pitfall to avoid is using this journal as a kind of valve to let off steam — for example, writing 20 pages one night about how depressed I am. I've kept that kind of journal before. Rereading it, I invariably get disgusted and throw the notebook away. If I'm depressed, I'll just say so and leave it at that. Basically, I want to write what I'll want to read later. I'll

probably get better at that with practice.

In short, I'm not very concerned with quantity or quality; I just want a reasonable entry for every day of my life, starting now.

FEBRUARY 7, 1982

Qix is a great game. I want to program it for the Apple.

There was an article in *Creative Computing* about generating pseudo-random numbers — just what I need for *Deathbounce*!

FEBRUARY 13, 1982

Scott Barnes from Hayden called. Will they *ever* publish *Asteroids*? It's been over a year — fifteen months — since I submitted it and they accepted it.

(Sigh.)

If they only sell 1,000 copies, I'll make \$4,500 — if they sell 5,000, I'll make \$22,500 — ridiculously high sums of money. Right now I only have \$500, counting *everything*. So why am I not on the phone with them every morning, pushing, pushing?

Oh well. When I finish *Deathbounce* and sell it, I'll be rich and then I can stop worrying about money for the next few years.

FEBRUARY 16, 1982

Bought a record for the first time in a long time. Vivaldi's Seasons.

There's a Deutsche Gramophon and Philips sale on at Cutler's. I should buy a few more before the sale ends.

FEBRUARY 18, 1982

I missed all my classes today. Music, Philos, Philos discussion group, Sociology. Shit! What's the matter with me?

Exchanged Mozart's piano concertos (warped) for Mozart's *Requiem*, Colin Davis conducting. It's the best performance I've heard.

FEBRUARY 22, 1982

This morning I bought the DOS 3.3 upgrade (\$60) and upgraded my system. It is now a 3.3 system. In ten minutes I made the Hayden change (changing the ship from a triangle to a V), missing Sociology (sigh), then worked on *Deathbounce*.

Also, I started a new program — a hi-res, machine language *Blockade* (I'd done it in lo-res, integer BASIC, a long time ago). I'm considering adding ALF music. (Bolero? Carmina Burana? Marche Slav?)

FEBRUARY 24, 1982

If you took all the hours I've spent on coursework outside of classes in the first 7 weeks of this term, it wouldn't make 8 hours total. That's, like, one hour per week. And I've missed at least half the lectures. It's ridiculous. I might as well not be taking any courses. What a waste.

FEBRUARY 28, 1982

I decided to add a shield to *Deathbounce*. You have a certain amount

of energy (replenished at the beginning of each new screen as well as with each new ship) which normally recharges slowly; thrusting, firing, and shield all use up energy. It should be fun. It's at least original.

Did my laundry. There's nothing quite like a basketful of hot crackling clean clothes, carrying it back through the cool winter air.

March 3, 1982

[NY] Last night, walking to Grand Central, I passed a grizzled old salt — not a drunk, just an old, shabby sailor type with a duffel bag. He said "Hey, spare some change for a poor ol' guy?" in a tone of good-natured humor at his own predicament. I said sorry, and he said "Shucks. OK."

We were walking side by side. He said: "Y'know, I wish I were your age," then, like he'd just come to a big decision: "No, hang it all, *I don't*. I been through too much. It ain't easy bein' young, and that's the truth."

It made me kind of curious about what his life had been like.

An artist is concerned with *what*, a scientist with *why*. We read a scientific paper and say "Hey, that makes sense. Wow!" We read a poem and say "That's it exactly. That's just how it is!"

Which will I turn out to be? Education, heredity, everything seems to point toward science. I've never really seriously considered the

other option. And yet... Being a movie director. Writing novels. Screenplays. That sounds so appealing.

March 7, 1982

[Chappaqua] Spent most of the day playing D&D with David. Worked a little (very little) on Deathbounce.

March 11, 1982

Today I worked out a couple of principles that make arcade games fun.

First, you have to feel in control of your ship/car/man/whatever. So that when you get hit, you say "Oh, shit! I should have thrusted!" (*Asteroids*) instead of "Oh well, another ship gone. I wonder what hit me?" (*Star Castle*).

Second, you should be able to control the *form* of your attacks — in short, have a strategy: *Qix, Space Invaders, Asteroids, Pac-Man.* Counter-examples: *Space Firebirds, Scramble, Sneakers.*

Third, there should be two goals; the primary goal (getting points) should not overlap 100% with the secondary goal (clearing screens). In *Pac-Man*, for example, you can go for the monsters (points) or the dots (screen); in *Asteroids*, the saucers or the rocks; in *Invaders*, the creatures or the mystery ship. Whereas in *Star Castle*, you just go for the cannon; in *Galaxian*, the aliens; in *Qix*, area.

Interestingly, the only games with *all* these features are *Pac-Man*, *Space Invaders*, and *Asteroids* — the three #1 games.

Anyway, I'm hot to write new games.

Tomorrow: First, send *Star Blaster* (fka *Space Rocks* fka *Asteroid Blaster* fka *Asteroid Belt*) to Hayden; second, work on *'Bounce!* I've got a good thing going here. The Apple is still the #1 computer, arcade games are the #1 sellers, and I'm writing Apple II arcade games; so I should churn 'em out and make pots of money while I can. This summer I'll write three or four. I should establish a working relationship with some other publisher (*not* Hayden): Sirius? Broderbund?

March 13, 1982

Papi's 85th birthday at the Coopers. One day I'll be as old as Dad and have a teenage son; then as old as Papi and have a 50-year-old son; then I'll be dead.

Went to Adrian's, got a whole bunch of new games, printed out *Bounce* on his MX-80.

March 13, 1982

Feeling a little better, fever is down. Working on *Bounce*.

Right now I'm making the big conversion from single to dual-page animation. God, what a mess. It was a really bad idea to write it in single and convert at the end. I need a new printout, to go over the code step by step.

March 14, 1982

Played the new games I copied from Adrian: Space Eggs, Falcons,

Ring Raiders, Space Warrior, Orbitron, Gobbler, Pulsar II, and especially Sabotage. That's such a great game — it's original, fun, and a super programming job. The graphics are clean and colorful and pretty. The explosions are elegant. It's written by a guy named Mark Allen.

Worked a little on Bounce. I want to:

- 1) Make it so you can destroy the spike like the saucers in *Asteroids*
- 2) Change spheres and spike to more interesting things
- 3) Put in good, colorful explosions and sound, like *Sabotage*. Fuel gauge could be prettier.

March 18, 1982

Went to Greeley and copied more programs from Mrs. Lee, including *Prisoner* and *Reversal. Prisoner* is an adventure based on the TV series, which I'd been looking forward to seeing for quite some time. It has some neat touches, but on the whole, I'm disappointed. Also, it won't run properly on my computer (it needs Applesoft in ROM).

Reversal is an incredibly strong *Othello* program; it can cream Ben and me without even taking any time to think. It's by the Spracklens (*Sargon*).

Last night went to Adrian's, gave him some games, got one in return (*Gran Prix*) and a new printout of *Bounce*. SHIT! It's been two weeks since I finished *Asteroids* — it's in the envelope, ready to send — I'll mail it tomorrow.

MARCH 19, 1982

Dinner at the Green Tree with Dad and Joe Sucher. Ben was impressed that my dad knew Bobby Fischer and that he and Stuart Margulies had written *Bobby Fischer Teaches Chess*, which Ben had read. Then we went to see *Quest for Fire*.

March 21, 1982

[New Haven] I'm back. Classes restart tomorrow.

I got a ton of mail. All four magazines (*HiFi*, *Chess Life*, *Creative Computing*, and *Softalk*), both bills (Bursar and Co-Op), assorted junk mail... and a letter from Doug Carlston at Broderbund re: software submission. I like Broderbund. I'll send them a letter describing *Bounce*.

Doug's letter mentioned that they might even pay airfare for programmers to come work with them. WOW!! Out in sunny California... Oh man, I want to so bad... But first, *Bounce*. Yes, *Deathbounce* is a great title. I'll keep it. *Deathbounce*.

Ohh, reading *Softalk*'s got me so psyched up! I'll finish *Deathbounce*, Broderbund will publish it (I know, I'm counting chickens, but realistically, nobody would reject a hi-res, machine-language, fast-action videogame), then this summer I'll write one or two or three more. (*Revenge? Plague? Destroy Planet Earth?*) And next summer... maybe... go to CA and work for them? Dreams, dreams... Oh, I want it so bad!

March 22, 1982

Sent off the letter to Doug Carlston at Broderbund this afternoon; worked on *Deathbounce*. It's coming along. Since I don't have *too* much coursework this week, I should have dual-page working fine by Sunday.

By the way, I missed both History and Psych today. Not good.

Next: Ball and missile explosions; ship explosions; fix up scoring, extra ships, graduated difficulty, etc. Then... TEST, TEST, TEST. And the game will be finished. (Well, maybe one or two more small details: display high score in upper right; sound effects; etc.) Ohh... I can't wait! (What a silly expression! I don't have to *wait*, I just have to do it.)

Started programming a new game tonight (an easy one): the number-matching game from that guy's wristwatch at Papi's birthday party at the Coopers'. It's so irritating: I can't get it to work right, it's so simple, I've been over it a hundred times and all the parts work, but the whole doesn't.

Also, last night falling asleep I thought of a really new game idea: The Ten Plagues. Locusts, boils, frogs, hail. You're Pharaoh, trying to hold them off. In the end, of course, there's no way to win, as in any *Galaxian*-type game.

Considering using the ALF for a soundtrack. The music? Handel's *Plagues*, of course! ("He spake the word...") It'd be quite an ambitious project, even more so than *Revenge*.

March 23, 1982

Dual-page is almost working fine: Spike, balls and ship are all okay. Missiles, however, do not exist; neither do collisions. I should be done by Sunday, and send it off by the 4th.

I think I'll do *Star Fortress* (fka *Star Sentries*) next. I'm bursting with neat ideas for it. Also considering a *Qix*-like game; but originality is better.

Slept till noon again and missed all my classes (Music, Philos, Soc). This is getting ridiculous.

Today felt like spring -- sun shining, blue sky, people out in the quad sunbathing and playing Frisbee and football; Beethoven's Ninth blaring out a window above the post office. It's still cold, but that spring smell is in the air.

MARCH 24, 1982

Missiles and collisions now OK. Still remaining: Score, extra ships, screen number. Right on schedule. I'll do those tomorrow.

Saw *The Lady Vanishes* (I'd seen it once before, about five years ago); very neat, tongue-in-cheek Hitchcock.

March 25, 1982

Work is proceeding apace. This evening I added "bounce" — balls and spike now bounce off your shield. It was quite difficult. Had to take into account angle and conservation of momentum. But I did it, with some good ideas from Ben. The game looks so good

now — animation so smooth, balls zinging around going boing boing boing — I really am proud. If I can keep up the standard of quality, this will be technically one of the best Apple games of this type ever. Yup, I'm proud of myself. It looks like it might even be done this weekend.

Went to Sociology today, but not Music and Philosophy. Finished reading *The Nazi Seizure of Power*.

Another beautiful spring day.

Oh: Scott Barnes from Hayden called with some outlandish suggestions for changes. Like: no firing; you just dodge the *asteroids*. I drew the line. I'm afraid I was rather hostile. Katie was very proud of me.

Anyway, he'll talk to their General Manager and get back to me. I offered to change the *asteroids* to soap bubbles, but nothing more. I'm fed up.

MARCH 26, 1982

Just woke up from a nap, a truly incredible sleep: I was asleep, but I *knew* I was asleep and dreaming. I tried all sorts of things to test out my senses: I hurled myself on the gravel, scrambling, felt the little sharp stones digging into my knees with incredible clarity. I smelled the dust, even tried licking the ground with my tongue. I was in a dream, yet fully conscious and in control of my actions. God, it was great. Sleep should always be like that.

APRIL 4, 1982

It SNOWED today! It was an awesome blizzard! The air was just FILLED with whirling clouds of black flakes against a white sky — you couldn't see three feet in front of you — snow WHIPPING across the Old Campus, more horizontally than vertically — Blinding torrents of SNOW!

They closed the university. No classes, no library, nothing. Naturally, I did no further research on the Soc paper. I worked a bit on 'Bounce.

APRIL 11, 1982

Well, it's Monday, and my Psych paper is NOT all typed up and ready to be handed in. Maybe it has something to do with the fact that I haven't started it yet.

The day wasn't a total waste, though. I did some work on *Bounce* (got the top ten scores loading and saving to and from disk) and even started a new project: *Space War*.

I wrote to Broderbund on the 22nd. Allowing 5 days for my letter to get to them, they've had it for 12 days. Should I write again? Maybe I typed the address wrong on the envelope? Maybe it's Easter vacation for them? Maybe I offended them somehow? Should I have enclosed a SASE? (Don't be silly.)

If Broderbund doesn't respond, I'll try Sirius or On-Line. But I can't think *why* they wouldn't. They should have jumped at the description in the letter: "Hi-res, machine language, shoot-em-up video game!"

There's a minor Happening going on here in the suite: Kevin owes \$88 for his phone bill and he hasn't paid. Our service is due to be cut off tomorrow. Also, the walls are sprayed with shaving cream and fire-extinguisher foam from Mike, Rich, and Chris's battle.

APRIL 15, 1982

At dinner Ben, Katie and I were talking about life goals and majors. Then, about an hour ago, up in Ben's room, the idea hit me: What about being a writer?

Instant reaction: You could never pull it off.

Memory of Dad saying: "Writing's very useful; it can help you in whatever you do."

The problem: Almost everybody fails.

Can I write? Am I any good? Could I succeed?

I could always do it on the side, say, while writing computer programs.

Jeez, it'd be fun to write a short story. Just to try it. See how it works out.

APRIL 16, 1982

Deer Hunter at 7, pizza at Sally's, then Fame at midnight. All three were superb.

Deer Hunter is a truly great movie. It was three hours long, but I wasn't bored at all. It was like a Beethoven symphony; I had the sense that there were relationships between different parts of the movie, and symbolism, and the same things recurring on different levels, that there was a master plan.

Fame was good too — lots of fun, full of flesh — but I'll remember Deer Hunter longest.

APRIL 17, 1982

Bounce is virtually finished. But what's the rush, since I haven't heard from Broderbund?

I started it — when? Thanksgiving? Christmas? So, 4 or 5 months ago. Not that I've been working steadily. I bet I could have done it in a month, if this were summer vacation. It certainly went faster than *Asteroids*.

I still need to see it on a color TV. It might be worth waiting another week so I can see it at home, get a printout at Adrian's, before I send it in.

I should hear from Broderbund by the end of reading period, for sure.

I still need to:

- 1) Finish GAME module; clean up code.
- 2) Test, test, on typical college students. Hone gameplay.
- 3) Finish up TOP; add cursor control when entering initials, etc.
- 4) Combine into a single BRUNnable file, residing in memory from 5FFD to approx. 7E00 about 30 sectors or so.

Then put on a disk and send to Broderbund. Assuming they ever get around to asking for it.

I hereby vow NO MORE WORK on this project until Friday. Until Psych paper, History paper, Psych test, Philosophy paper, Music are out of the way. Then finish the game during reading period. Then a week of exams, and — whoops! Freshman year will be over and I'll have to pack my stuff and go home!

APRIL 20, 1982

I'm fucked. I just spent half an hour trying to study Psych. The Bartlett Effect — what the fuck is that? My only hope is to ignore everything in the book and the memos and just rely on Common Sense and bullshit my way through the test — *Fuck!* It counts 40% of the term grade and I haven't done a jot of reading — haven't been to a single session of class — since spring break, except for today — and I expect to somehow do OK?

Doug Carlston called this evening. He didn't get the first letter, but he got the second, and he definitely wants to see it. So I'm a happy guy. So why do I care about getting a meaningless little grade which, by all rights, should be an F?

I really have fucked this year up royally, in terms of taking the wrong courses and then not doing any work in them.

But I've learned so much about life. What college is like, what people are like, what *I'm* like. I got my act together, socially, personalitywise, and what-not. So what if I failed to read books and collect facts? I can do that any time.

So I might as well go to sleep. I'll bomb in the Psych test tomorrow and I'll still be okay. *Deathbounce* and Broderbund are more important.

Saw Bresson's Pickpocket. Really good movie.

APRIL 21, 1982

Took the Psych test. Did laughably. "What are the four postulates of Brynner's attitude-gradient theory?" I've never heard of Brynner or his theory. I wonder what grade I'll get.

Worked a wee bit on *Bounce*. I just realized, even if I finish it by Monday, I'll have to find a color TV to view it on... Oh! The computer store! Great idea, J.!

APRIL 27, 1982

Bounce is nearly finished. If I can stay awake for another hour, it'll be *really* finished — one 8K BRUNnable file.

There seems to be a distinct possibility that I will fail History.

I can't let that happen. I'll study for two days solid if need be. Learn German history backwards and forwards. Ace the final. Pass the course. I have to.

[4:45 am] Boy, it got late. Still not finished. Some dumb bug somewhere. I'll finish it in the morning.

APRIL 28, 1982

I know what question is in your mind.

Is it finished?

The answer (drumroll) is a resounding...

YES.

Deathbounce is viable.

One BRUNnable file, 30 sectors (and the TOPTEN file, 2 sectors).

Wa-Hoo!

I took it down to the computer store on Temple Street to see it in color. It was so beautiful, words cannot describe... To see *my Deathbounce*, fruit of my labor, on a stranger's Apple, an Apple II Plus with a fan and two monitors, one B&W and one color — oh, such beautiful monitors — to see *my name* in color in a computer store... What a great feeling. And yes, the colors worked fine.

The people in the store were very enthusiastic. I was happy.

I've written a covering letter and I'll send it off certified mail tomorrow. Oh Broderbund, I think this is the beginning of a beautiful friendship.

I've been getting advice and warnings from all sides about copyrighting and so on. I put COPYRIGHT 1982 JORDAN MECHNER

on the title screen, the HELLO program and the disk label. I think that'll be enough. My instinct is to trust Broderbund.

Everyone's been playing the game. Rich, Ben, Eduardo. It's addictive, I'm glad to report. Rich says it's as good as *Asteroids*; praise which would be more pride-inducing if the two games weren't so similar. (To write a *completely original* game as good as *Asteroids*; now, *that* would be an accomplishment.)

Anyway, it's great! and I'm very, very happy with the program and how it turned out, and the little good details keep sending thrills up my spine. It's clean. Smooth. Fast. Neat. I'm proud. I did a good job. I like it.

Meanwhile, I'm working on *Space War* and the number game (What should I call it? Something abstract, like *Sargon* or *Akalabeth*?) and maybe even *Star Sentries* (*Star Fortress*?)

I'll go to Applefest. Adrian, Adam, Ken might want to go too. Buy an Epson MX-80, if I have the money. I can buy more stuff when I get the first advance from Broderbund.

By summer's end (come September) I should have at least three or four more programs done and contracts signed with Broderbund. Then pack up and come back for CLASSES and SOCIAL LIFE and NO MORE APPLE.

This is, of course, pure fantasy. I've no idea what will actually happen.

APRIL 29, 1982

Deathbounce is in the mail.

May 5, 1982

Studied History pretty much all day. I'm really getting into it. Damn — I wish I could do it over again; go to all the classes, do the readings as we go, take notes, feel like *part* of it, get some benefit! What I'm doing now – just reading books — I could have done anywhere; it's the lectures and discussion groups that I'm "paying for." Oh well.

Got my May *Softalk* today. I note that Sirius has come out with a slew of new games in recent months; both Sirius and On-Line had big, color, multi-page ads in this issue, while Broderbund (this time) has only "Software Authors Wanted." I hope this isn't an ominous sign. I hope I made a good choice.

It would be kinda neat if *Deathbounce* became Broderbund's top game in the top 30... Full-page ads...

Dream on, kid. Dream on.

May 6, 1982

Doug Carlston called. He said he likes *Deathbounce*, but feels it needs more complexity, in the way of colorful cartoon animation and detail. At first I was surprised (and a little hurt) -- I'd deliberately created a stark, clean look, and tried to keep it as simple as possible – but he won me over.

A prospective buyer who just glances at it in a computer store would

say "Oh, a colorful *Asteroids*" (as someone passing through Doug's office did in fact remark). According to Doug, that's not enough. It needs something to distinguish it from everything else.

At first I resisted (thinking of *Sneakers* and *Threshold* with their maddening mother ships), but now I agree. My mind's working to think of replacements for the balls and Rover. (Chattering teeth? Rover a heat-seeking snake? Eyeballs? An eyeball with a tail?) Doug said there should be more of a scenario, a story line, not just abstract round things. I guess I can see where he's coming from.

By the way, he says programs like this usually make \$20-50,000.

I'm hooked. A letter, he says, is on the way. This could be the beginning of a good relationship.

Before dinner I stopped off at the computer store to say hi. I saw *Twerps* and *Lemmings*, two very complexly animated games. I see what Doug meant. (This first-name basis feels strange. "Carlston"? "Mr. Carlston"? "Comrade Carlston"?)

May 12, 1982

[Chappaqua] Looks like I'm not going to get to Applefest this weekend.

Adam dropped by; I got a copy of *Twerps* (not so great, really); he got S-C Assembler and the Zaks 6502 book.

I did some thinking (and playing) and I've decided that, as a game, *Bounce* is OK as it is. I'll change the graphics somewhat – Rover be-

comes an arrow or dart or heat-seeking missile, balls grow instead of appearing (a la *Space Eggs*, *Falcons*), classier explosions, more sound effects – but that's it. No "super roto-balls." *Maybe* shrinking balls. Maybe an enemy gauge. But the game will stay the same.

If Broderbund doesn't like it, I'll go to On-Line. They published *Sabotage*, after all, which I admire greatly.

Went to karate class. It was fun.

Broderbund Secretary called, got my new address, will remail letter.

May 17, 1982

Ordered an Epson MX-80 printer from Orange Micro. They say seven to ten days.

It's been eleven days since Broderbund's first letter was allegedly mailed, four days since letter number two. What's up?

For the last couple of hours I've been re-allocating my disk space, cramming as many games as possible onto each floppy disk and re-initializing others. It's hot, messy, tedious work, even with FID. I wish I had two drives.

Now I've got a lot of blank disks — but some may be years old, and I'm not so sure about their reliability. I wish all my disks were brandnew, clean, never-been-used (Dyson or Verbatim or Scotch — not *Maxell*). Neatly labeled, with no half-removed stickiness of previous labels underneath. My crazy perfectionistic mindset.

I'm mulling over a new game idea: *REFUGEE*. Open and close bridges to allow refugees to get from left to right side of screen (where they'll hop a fence), while making the cars that are chasing them fall into the water.

And then there's *Star Guards*, and *Revenge*. Those other clown games, and grid games, and *Plague*, don't feel too promising right now.

May 18, 1982

D'you know, I spend well-nigh all my time playing *Sabotage*, watching TV, snacking, and reading. As Dad said on the phone this afternoon, "it would be a shame to let the whole summer slip by that way."

True. Tomorrow I will PROGRAM!

May 25, 1982

Got the letter from Broderbund, All's well.

My printer came. It's all hooked up and working now. (First try, I put the IC's in upside-down.)

May 28, 1982

Saw *The Secret Policeman's Other Ball* with Adam, Mo, Dennis, and Andrea. A couple of the sketches cracked me up so bad I couldn't breathe and my eyes filled with tears and I thought I was going to puke.

June 1, 1982

Hooray! I'm working again!

Yup, started in this afternoon on *Deathbounce*. There is now an Energy Gauge and (I hope) the balls change color when you shoot them: Green -> Blue -> Violet -> Red -> Boom!

Ahh, *Deathbounce*, how long it took for us to be reunited! I've let three weeks slip by since I got back. Three unglorious weeks of rest and luxurious wastage of time. It feels so good, so good to be working again.

Ideas, ideas, rattling around in my head...

Papi came by yesterday. I've been reading his autobiography. Makes me feel like a descendant of ancestors.

June 2, 1982

Been working on *Bounce* all day. It's going GREAT! I just put in the new, wedge-shaped Rover. This game is getting more and more like *Asteroids Deluxe*. I didn't plan it that way, the wedge just seemed like the best shape. Great minds. Anyway: shield gauge, color-changing, new border, new Rover are all in and working. Hooray!

The program is assembling now. Should be finished by the weekend. I'll send it to Doug. If he still doesn't like it, I'll try On-Line.

June 3, 1982

Karate class today.

Bounce is virtually finished. Tomorrow morning I'll finish it up; then before I send it off, I'll test it out on people.

I'm so proud of it. It's such a good program! It turned out so well! Technically, it's *Ausgezeichnet!* Graphics so clean, so smooth — so many difficult routines, concisely executed with precision and elegance. Ahhhh.

I've decided on my next project: *Midas*. An original, innovative, elegant game idea. (I know, I've changed my mind about ten times already; but this time it's for real – although I may work on *Zap* and *Spacewar* concurrently.)

I'm happy.

June 4, 1982

Adrian came by, we went to the Knoxes and Tom evaluated *Bounce*. The problem, we agreed, is that the game is emotionally neutral. It's just an exercise in Newtonian mechanics: technically impeccable but without spirit.

But it's fun, and it's got a lot of neat features, so I'm leaving it as is. Save the cute creatures for the next game: *Midas*.

Rick's computer went dead about two hours ago. We couldn't fix it. Poor Tom; he's bearing the burden.

I told them it was my 18th birthday. Tom broke out the Michelob.

June 8, 1982

Watched *Midnight* (Billy Wilder) on TV. I laughed harder than I've done since *The Secret Policeman's Other Ball*.

I really would like to do some writing. Short stories, like Maugham, Munro, Maupassant (Hey! All M's!) Updated, of course. I don't think I have the qualifications to write stories set in Edwardian England.

June 15, 1982

Good news! Talked to Carlston on the phone; he liked 'Bounce ('Ray!) and wants me to consider doing another game for them. He's sending me a joystick so I can put in a joystick option. Yippy dippy day!

June 25, 1982

Broderbund sent a joystick and a copy of *Choplifter*, their new game. It's extremely well-done — I'd say the best Apple game I've seen. You're in a helicopter. Mission: rescue hostages.

Choplifter inspired me to write a 3D animated adventure; an ambitious undertaking, for sure. It'll be quite a challenge, and a lot of work.

July 7, 1982

Rastafest '82. Adam, Mo, Ayman, Jens, Tim, Kevin, Busty, Caroline, Alan and I camped out on a hilltop near the Mobaraks' house to watch the eclipse. Got home around 4 a.m.

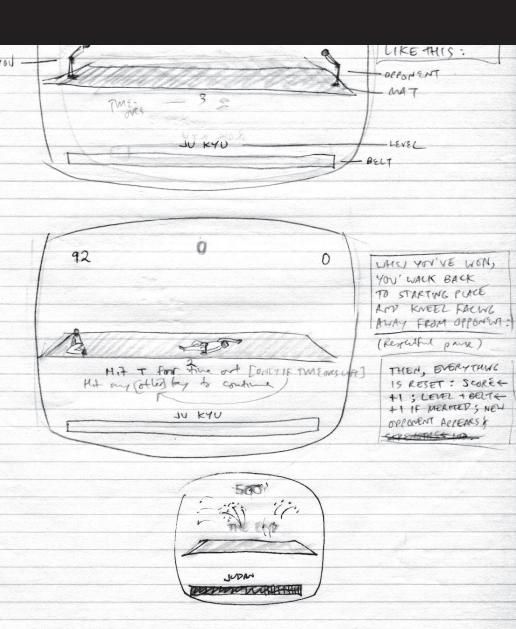
Earth game. I started a couple of days ago. Today I didn't do anything on it because my mind was occupied with...

Karate game! I worked out (with David's advice) an awesome system, using one joystick and the keyboard, to control a *karateka* -- and an elaborate combat system to determine what effect your blows have on your opponent, and vice versa. But — I must finish *Earth* first. It being summer, I could be done by the end of July.

I talked to Doug Carlston on the phone yesterday. He said *Choplifter* is selling 5,000 copies a month.

Holy Shit.

Part 2: Karateka



July 11, 1982

"Started" on karate program.

Got a 63 on Choplifter. One more man... one measly man...

July 15, 1982

Got the long-awaited Broderbund letter describing "Tiny Planets." I don't know if I want to do it or not.

Idea for *Deathbounce*: Little man in your ship, bails out when it blows up, runs across bottom of screen to next ship, climbs in. Scenario: You're a gladiator in the dangerous game "*Deathbounce*."

Karate class today. Felt good. I finally feel like I'm learning something, that I'd actually be better now in a fight.

July 16, 1982

Talked to Carlston on phone; all's well.

I worked out a scenario for 'Bounce, a really good one; I'll hit the bits and bytes tomorrow.

Sudden Thought:

Hey: Why *not* work with computers? Why not major in CS and go to work for Atari or someplace or even stay home and write more games? It's a good field, it's fun, and I'm good at it, and there's lots of money in it, and it's up-and-coming! My hesitation has always been "How could I devote my whole life to programming arcade games? Can you see me at 65?" But why limit myself to arcade games? Why not adventure games, AI games...? Why not invent a whole new style of games, games that go beyond games? And when I get too old to code, why not do game design?

July 17, 1982

Got up relatively early (9) and worked on *Deathbounce* for a few hours. Then it got so hot and I got so sleepy that I just didn't feel like working anymore. So I read *Catch-22*. Great book.

July 18, 1982

95°. Too hot to work.

The Apple's overheating. Gonna take it to be fixed.

July 21, 1982

Took the 12:33 into the city and bought a "System Saver" fan at 47th Street Photo for \$75. It seems to be working. Has it saved my system? We shall see.

July 24, 1982

The kind of movie I like best now is an "awesome" movie. 70mm, 6-track Dolby, clean print, big screen, third row, so that it fills my field of vision with a crisp clean color picture and my ears with crisp clean localized sound. It should be the kind of movie that creates a whole new world, that catches you up in a dream. *E.T.*, *Blade Runner*. And the music, whether the heart-rending or heart-pounding music of John Williams or the eerie electronic sounds of Vangelis. Ohhh, there's nothing like a movie. I hereby designate this class of movie "A" movies. A for scale. A for special effects. Note that even bad movies (*Tron*) can be A's. The A is for AWESOME. An "A" movie engulfs you, sweeps you away.

July 25, 1982

Adrian came over with his computer and we disassembled both of them and switched keyboards and cables in an effort to determine which of my components is at fault. Since the problem is intermittent, we were unable to come to a definite conclusion, but I've taken Adrian's cable and he's taken mine; so if the problem rears its ugly head in either of our houses in the following days, the cable will be either convicted or exonerated.

I hope, hope it's the cable. The cable costs \$8 to replace, the keyboard around \$300.

July 28, 1982

A PROMISE: Tomorrow by 12 NOON I will be sitting in front of the computer working on *DEATHBOUNCE*. (NOT playing *Snake Byte!*)

July 29, 1982

Just one month left till school starts again.

Been spending a lot of time on Karateka paperwork.

Did a couple hours work on *Deathbounce*.

Karate class tonight.

August 1, 1982

Adrian came by in the morning and we went to Ken's to swim. Ken lent me Rick's copy of Super Text II, which I prefer to Magic Window. Then to Adrian's house, where I finished Mrs. Lee's program (had to do it on a Plus). Pizza at John's Best, then back here.

I described the karate program ("Karateka") to Adrian; he's "bugged out," in his words. I did some more paperwork on it. Now I'm really really ready to start work. But first, I must finish Deathbounce. I've been reading Softline and Softalk, so I'm highly motivated. Tomorrow morning — Bounce! Spinning balls, running man — I'll do it!

I gave Adrian \$25 to buy me a lowercase chip at 47th St. Photo.

August 2, 1982

Adrian didn't get the adapter; it wasn't available for older Apples. I'll order a Dan Paymar by mail. Or call Rick and ask what kind he's got.

I took my computer apart again to analyze the keyboard problem. I pushed down a loose IC. Can that have been the problem? Naaah!

Super Text II has its problems. Why doesn't someone write the ideal word processor? I'd do it, but I'd rather write *Karateka*.

I worked out a timetable for *Karateka*. I figure I'll start in a month (after finishing *Deathbounce*) and be done before Christmas break.

Deathbounce, tomorrow you will be, finally, worked on! How long since I talked to Carlston?

(consulting diary...)

It was Friday, July 16. I wrote: "I'll hit the bits and bytes tomorrow." And then came the heat wave.

So it's been 16 days — over two weeks! You Fool! Well, I'll get it done by this Friday. And then — *Karateka* ho!

August 4, 1982

Mrs. Lee called early this morning at 11, waking me up. She had the RAM card and a disk drive she can loan (L-O-A-N) me till I go off to school. I said: "Come right over!"

She also brought ten pounds of printer paper.

Now I have two drives for a while. I'm gonna write that lady the best Oil program she ever saw.

Did some more work on 'Bounce: designed shapes (5) for the little guy who'll run across the bottom of the screen. He bears a strong resemblance to one of the 64 delegates to the U.N. Conference on Peace and Child Rearing. I'd better mention that in my cover letter to Carlston. I'd hate to have him think I'm a plagiarist.

So: we have an animated cartoon little feller, a scenario, spinning balls, and a joystick option. Good enough for a place in the *Softalk* Top Thirty, right?

August 5, 1982

If you'd asked me two hours ago, I'd have said "It's done."

I INITialized a nice clean new disk, BSAVED the *Deathbounce* file, and BRUNned it. It worked! Hooray! I was done!

One final test: I turned off the computer, rebooted, and ran it again.

It froze after the first frame.

Two hours later, by process of elimination, I've figured out that it only works properly when the S-C Assembler (ASMDISK) file is in memory. It's the most bizarre bug I've ever seen. I have no idea what's causing it.

[3 am] Fuck. It's too late and I'm too tired and too stupid. Maybe it'll come to me as I'm falling asleep. Or in the morning as soon as I sit down at the keyboard. Or, if I don't fix it before we leave for Rockaway, in the car or on the beach or in Grandma's living room.

The program as I wrote it has absolutely *no* traffic with the \$1000-1D00 area, where ASMDISK resides. \$6000-8000 is the code; \$800-B00 is the variable space.

There must be a bad byte somewhere. But what kind of bug would make it run OK if a certain location in ASMDISK is a certain value (I'm guessing) and politely freeze after the first frame if not?

It's bizarre. How far back does this bug go? When was the last time I did a cold run? I think... now might actually be the first time. Shit. It could be the spinning balls, the running man... anything.

It's almost as if S-C Assembler suspects that once *Deathbounce* is finished, I'm planning to switch to Apple Assembler and will have no further use for it, so it snuck in a dependency.

August 8, 1982

Adrian came over, we did uninteresting Apple stuff. I didn't work on the 'Bounce' bug, but filled about 20 pages with sketches for Animated Adventure and Karateka.

August 10, 1982

OK, here's how it went down:

Looking at the bug in the cold light of day, I tried deleting various sections of code and trying it without. I quickly ascertained that the culprit had to be the little man. Specifically, the problem lay in the routine that erases the little man before redrawing him.

I reread the erase routine. It looked fine. The only thing that could possibly go wrong was the position index. So I put in a BRK right before the JSR ZDRAW and ran it. When it broke, I checked the position index, which had to be in the range 0-4.

It was FF.

Suddenly it was all crystal clear.

The NEWMAN routine sets FP2 to FF so that when it's incremented, it goes to 0. But FP2 is copied into FP1 in the first cycle, so that when the man is erased in the *second* cycle, FP1 is FF.

By sheer chance, the 255th byte after the start of the MENL and MENH tables happens to point to an address in the middle of *S-C Assembler* itself... which, by sheer chance, happens to be followed soon enough thereafter by a byte with value 26 (my code for end-of-shape-table) that even when all the in-between bytes are treated as a shape table, the result is benign enough to allow the program to continue unmolested.

THAT'S why the program wouldn't run properly unless the S-C Assembler was in memory.

Whew.

Anyway, I made a quick fix (changed FF to 00), played a couple of games, and mailed it off to Broderbund. That was Monday. They should probably get it Friday or Monday.

Since then, I've been working mainly on a DRAW program to be used for *KARATEKA*. I'm writing it in Applesoft with a couple of machine language routines. I started to write it entirely in machine code, but decided it wasn't worth it. Applesoft is fine for some things.

August 13, 1982

Dennis was here for a couple of hours. I've been mulling over *Karateka*, filling sheet after sheet of graph paper, and I think I'm ready now to start making the actual drawings, to then be entered using DRAW.

Dennis thought the game might be too monotonous. I spent a couple of hours considering adding a scrolling landscape, but ultimately rejected it because it would have nothing to do with the game, which consists entirely of fights. A landscape would distract the player and make it seem like there's more to the game than there is, without really enhancing it. Trying to put mere fighting in a reallife setting, I think, would render the game banal, even tasteless. No, *karate* is *karate*, and it should be played on a blue mat as I originally planned. I'll just have to make the combat routines good enough so it won't get monotonous.

One option is to make each game very short, the opponents very tough, and get tougher very quickly. Also, the player should be able to start on any level up to black belt 1. Maybe the enemy *karatekas* could acquire new moves as they get stronger: roundhouse, hook kick, flying side kick...?

August 15, 1982

Mom and Dad left for a ten-day vacation, leaving me and Emily alone in the house with a well-stocked larder and a new punching bag hanging from the playroom ceiling. So I've been eating, hitting the bag, and working over the drawings for *Karateka*.

I'm getting a little of that old life-is-empty-everything-is-meaningless feeling. Being stuck at home is really not the greatest environment.

Oh well. Two weeks till school starts.

August 17, 1982

I've been working hard, by my standards. I'm well into *Karateka*. These shapes are an unbelievable pain in the ass. After I draw one on graph paper, it takes about two hours of pixel-picking – a tedious task, even with SuperDraw — to get it looking even approximately decent onscreen. The first three shapes took me all day.

I've decided to go back and improve DRAW. I want a "copy" function, a "fill" function, and a decent way to save shape tables after I've entered them.

Truly, SuperDraw is awesome. I shudder to imagine what this phase of *Karateka* development would be like without it.

My estimate is that I'll need the whole 13.5K from \$6000-9600 for the shapes; the code will just have to fit in the 6k from \$800-2000. *Asteroids* fit in 6K, *Deathbounce* took 8K. A squeeze, perhaps, but I think it'll be OK.

13.5K for shapes is a generous estimate anyway. It could turn out to be much less.

Enough shop talk.

This afternoon the doorbell rang a whole lot of times and Emily didn't get it, so I did. As I got to the door I thought: "Should I ask who it is before I open it? Oh well, if it's a burglar, what's he gonna do, force his way in?" So I just threw it open.

It was a burglar.

He was a big guy in a grey sweatshirt. He didn't seem pleased to see me.

"Uh," he said, "do you need somebody to take care of your lawn?" He had a croaky, raspy voice.

I said no. He left in a hurry. We don't have a lawn.

August 19, 1982

Finally reached Carlston. He thought *Deathbounce* still needed a lot of work. At first I was disappointed, but later I called Dad and he said it was very good that Carlston was so interested in the program. It's true. His suggestions are good; it's just my own laziness and reluctance to re-open the source code file.

Carlston said, among other things, that the game is (1) too monotonous, (2) too hard at first, and (3) too much a straight shoot-em-up, without making much use of the maneuvering, which

is its best feature. And (4) too visually boring. I agree on all counts.

I've already got some concrete ideas:

- A port which the player has to go through at the end of each level
- A TV camera drifting around, always on the prowl. Shooting it costs 1000 points penalty
- Twinkles which occasionally appear and zip right at the player. They can't be shot or shielded; you have to move out of the way.
- Start very easy, with just one very slow red ball, and add ROV-ERs, faster balls, and sparklers gradually.
- Make the "beaming up/down" animation more interesting
- Make the explosion more interesting.

So, it looks like a week or so more of *Deathbounce*.

Karateka's coming along.

August 20, 1982

Adam and Dennis dropped by in the afternoon, Adam's mom picked us up and dropped Dennis and me off in town. I spent \$4 playing *Tempest*.

The thrill is gone. I don't know whether it's just that there are no good new games, or whether I'm just no longer susceptible to the standard video-game schedule of reinforcement. The only games I've ever been really addicted to are *Asteroids* and *Pac-Man*. I've had short flings with *Star Castle*, *Qix* and *Tempest*, and played lots of others just for variety or out of curiosity or because the others weren't available. Now, even those five games have lost their appeal. I still play

them occasionally, but nothing has replaced them.

I achieved 96,000 in *Asteroids*, 54,000 in *Pac-Man*, and 15,000 in *Star Castle*. The only one I can really say I've "mastered" is *Asteroids* – I think I know everything about it and, theoretically, have all the skills necessary to play indefinitely; now it's just a question of concentration and frame of mind. At *Pac-Man* I got very good at improvising, but to truly "master" *Pac-Man* you have to play patterns, and I refuse to. *Star Castle*, *Tempest* and *Qix* I've played relatively little.

What about Apple games? I've been addicted to plenty, but now I play them the same way I play coin-op games: my heart isn't in it. Losing a life still elicits an "Oh, shit," but it's not the exuberant "SHIT!!!!" of the old days when games were fun. Breaking my high score is still pleasurable, but in a small way, not the old ecstatic "HOORAY!!" Playing just isn't enough fun any more. It's ho-hum. Oh-shit, RESET, who cares.

I often quit now mid-game. Is it the effect of an achievement-oriented attitude (it's not worth it if I can't break my high score)? Is it the effect of playing similar games with the same themes, over and over again? Or is it me? Have I become less susceptible, have I stopped finding *points* and *ships* rewarding?

There's a lesson in here somewhere.

Anyway: I called Carlston and told him "I think you're right, it's worth the extra work on *Deathbounce*." He said he was "delighted."

August 23, 1982

It really is worth it to get up early, get exercise, and eat well. I must make these things a habit.

August 24, 1982

Mrs. Lee was here. I printed out an hour's worth of printouts and showed her how to use the program. She wants me to be her "consultant" on Oil and she'll give me a disk drive as payment.

Tom and Adrian stopped by. Tom went nuts over Choplifter.

September 6, 1982

[New Haven] First day of classes is over. So far I've got German 138, Bio 120A, and CS 270A. Bio in particular looks like a really exciting course. Tomorrow I'll add two more. I'm psyched to work hard and learn a lot this year.

I've been neglecting the Apple. Maybe this weekend I'll get to it. Maybe an issue of *Softalk* will arrive in the mail and get me inspired and aching for fame and money.

OCTOBER 18, 1982

It looks like I may have an Apple II programming job with a New Haven software company made up of Yale CS Dept. faculty.

OCTOBER 20, 1982

Increased class-cutting. Decreased homework. Going to sleep later

and later. Mess piling up on my desk. Putting things off. D- on German midterm, 4/10 on CS assignment.

Feelings: Lethargy. Aversion to work. Feeling of missed opportunities, of chances passing me by. Nostalgia, melancholy.

Yep, all the signs are there. SLOTH is back.

Meanwhile, I've been poring over *Softalk* and *Writer's Market*, day-dreaming about having a bestselling game or novel. Dreaming about success.

You pride yourself on doing very little work, don't you? You pride yourself on getting a B+ in Philosophy 114 after attending only three classes. "I'm so brilliant," you say, "I can achieve in minutes what it takes other people days to do." Well, you're a fool. Because (1) nobody will ever know how little you work (and even if they did they wouldn't care), and (2) since you squander the time thus saved anyway, you're not even ahead of the game!

Look, Jerk: Ordinary mediocre people achieve a lot by working hard and diligently. If you're supposedly so brilliant and talented, think about what you could achieve!

Just DO IT! WORK! NO MORE OF THIS "MINIMIZE-EF-FORT" GAME! TRY "MAXIMIZE-EFFORT" FOR A CHANGE! OKAY? Okay.

OCTOBER 24, 1982

I've decided to major in Psych.

My reasoning: When I get out of this place in two and a half years, it'll be time to worry about real life. Work. Survival. Cash. Success. The Golden Age of Philosophical Speculation will be over. I'll probably never again be as preoccupied with Big Questions as I am now. So why not use my time here to ponder them while I can?

NOVEMBER 8, 1982

Flunked the Bio test with flying colors. I don't think I was the only one. One girl was crying.

NOVEMBER 29, 1982

I'm really psyched to finish Deathbounce. My #1 priority.

(Maybe work in California for Broderbund this summer...? Dreams...)

I feel good. I've got \$1000 in the bank and I'm relatively non-behind academically. I'm gonna finish *Deathbounce*.

Here goes!

DECEMBER 3, 1982

Movies I've seen so far this semester: Summer of '42, Casablanca (6), Richard Pryor Live on Sunset Strip, Deliverance, Day of the Jackal, Carnal Knowledge, Time Bandits (3), Judgment at Nuremberg, To Kill a Mockingbird (2), Cat People, Sisters, Prince of the City, Gallipoli, Inherit the Wind (2), Grapes of Wrath, Catch-22, American Graffiti (2), Tall Blond Man with One Black Shoe, The Ladykillers (2), Looking for

Mr. Goodbar, Gilda, Body Heat, Halloween, Klute, Midnight Express, Mr. Smith Goes to Washington (2), Network (2), Missing, Clockwork Orange (3), The Collector (2), The Blue Angel (2), Dial M for Murder (2), Bedtime for Bonzo, The Bicycle Thief, Taxi Driver, The Missionary, Still of the Night, The Stunt Man, Harold and Maude, Aida, The Verdict, Wrath of Khan, Airplane (3), Diner (2), The World According to Garp, Pink Floyd The Wall, Siberiade, Fast Times at Ridgemont High, The Road Warrior, The Empire Strikes Back (2), Fantasia (6?), Time Stands Still, Tex, Fitzcarraldo.

DECEMBER 16, 1982

German test went OK.

Typed a 31-page paper for Neil Burger down the hall at \$1.50 a page, on the Apple, using Super Text II. (Piece of shit. I should write a better word processor than that.) Anyway, a cool \$43.50 for five hours' work. Not bad.

DECEMBER 17, 1982

Oh oh oh man, I'm so hopping happy. I played *Aida* on the stereo and then *Pegasus* on the Apple and then *Aida* again. I've got a dream: an arcade game that plays that certain part of the ballet scene from *Aida*, where it suddenly gets all fast and stringy. I'm so arcade-game psyched: It's gonna be my life. I want to make arcade games like... *Choplifter. E.T.* The opening scene of *Blade Runner*. That feeling, right here (clonk on the chest) of *being* somewhere, of a whole new world... OhhhHHH!

Didn't study for Soc. I'll blow it.

DECEMBER 18, 1982

I missed my Soc final. I couldn't find it. I didn't know what room it was in. Am I in trouble?

DECEMBER 19, 1982

CS exam was a flop. Ha ha.

Bought a copy of *Cinefantastique* at Bookworld, a 24-hour bookstore that specializes in fantasy and sci-fi.

They're coming out with a movie of *Dune*! And *Foundation*! And *Revenge of the Jedi* is in only 5 months! ... Nggh! I'm psyched!

DECEMBER 20, 1982

I'm so psyched for the *Dune* movie! I'm gonna subscribe to *Cinefantastique* and *Starlog*.

DECEMBER 21, 1982

Prof. Rieder called. We set up the makeup exam for 8:30 Thursday morning. He was very nice and understanding. So, I'll study for it tomorrow after the Psych exam.

I've been to Bookworld every night for the past three nights.

There are so many movies I want to see. *Sophie's Choice*, *Tootsie*, *Dark Crystal*, and *Gandhi* are Must-Sees; *48 Hours* and *Frances* are would-like-to-sees.

DECEMBER 27, 1982

[Chappaqua] Working on 'Bounce every day. I'm in the swing.

DECEMBER 30, 1982

SHITFUCKGODDAMNPISSSNOT! This stupid bug is driving me crazy. It's occupied my whole brain all day and I still haven't cracked it.

DECEMBER 31, 1982

Worked on 'Bounce. Fixed bug. Made progress.

JANUARY 1, 1983

Spent the whole day on 'Bounce, though I didn't actually do any code; I spent the day doodling, planning, creating shapes, etc. Tomorrow I'll implement some of the nifty animation effects I thought up today. On second thought, I'll save those for last, in case I don't finish; that way I can be sure to send Carlston a playable version before I go back to school.

I have seven days.

Starting tomorrow, I'll read one chapter of Bio a day.

JANUARY 2, 1983

Another full day on *Deathbounce*. I didn't read my Bio chapter.

I have six days.

JANUARY 6, 1983

Deathbounce, as usual, filled the day, but it's lost its charm. I worked not out of excitement and enthusiasm but habit and a sort of desperation. I want to finish that thing and ship it off and be done with it.

Adrian came over and was less than bowled over by what I showed him. (He's the most critical games player I know, if only because he has access to a pirate network that puts games at his fingertips before they even come out.) He showed me some new games that made me lose enthusiasm for *Deathbounce*: one a graphic adventure based on *Raiders*, called *Aztec*; and one the 3D maze game I've dreamt about since the days of Bob Bishop and MUSE, incarnated at last as "Way Out." These games make me think, not "How can I hope to compete?" but "Why am I bothering to work on *Deathbounce* at all? Who even cares?" What I need to re-inspire me is a good dose of ordinary shoot 'em/eat 'em games: *Serpentine*, etc.

After the first two weeks of school things should have died down enough (bio exam, course selection, etc.) that I can start work on *Alphabet in* earnest. Then, with \$3000 under my belt, I'll buy a graphics tablet and get cracking on... *KARATE*! That game, everyone keeps telling me (Dad and Adrian, even), is going to be a winner. (What if it doesn't work out? What if someone else does it first? Aaarrrgh!)

JANUARY 7, 1983

Stopped by the school today. I won't be getting any more pirated programs from Mrs. Lee.

In the past our policy has been like this: She lets me paw through her

disks for half an hour and copy whatever I like, and she "charges" me (in labor) for the cost of the blank disks I've used. Now, she wants to "charge" me for a fraction of the list price of the programs I copy! It's funny, I've been able to rationalize pirating games as long as I'm paying nobody anything... but buying them from a pirate totally violates my sense of ethics. That's where I draw the line.

Worked some on *Deathbounce*. I'm happier with it now than I was last night. Tomorrow night, come hell or high water, it'll be in a nice sturdy mailer, addressed to Carlston, with a cover letter inside. I'll be SOOOO GLAD to be rid of it.

JANUARY 10, 1983

Typed an 8-page paper; earned \$10.

I'm so psyched to write *Karateka* – and *Animated Adventure* – and even finish *Deathbounce*. (Not so psyched to write *Alphabet*; but the deadline is Feb. 1.)

Got my grades: CS B, Psych B+, German C, Soc D. Pretty bad. I feel like I've let the family down.

JANUARY 11, 1983

I'm psyched to write *Karateka*; I shouldn't be. I still have to write *Deathbounce* and *Alphabet*, not to mention study for my bio exam one week from today.

Ben and I are going to subscribe to Starlog.

JANUARY 22, 1983

Put in five good hours on *Alphabet*. It's conceivable that I'll make the deadline. Every now and then, I realize how ridiculously little time I have and a pang of terror grips my guts. But, if I work my tail off I ought to do it in time.

Today I wrote the shape-drawing routine and modified DRAW to use it. It's a wonderful technique. I'll use it for *Karateka*. It's so simple, I don't know why I never used it before.

The only thing keeping me going is the thought of the money. \$3000 is a lot. If it takes me 60 hours, that's \$50 an hour.

JANUARY 23, 1983

A solid 10 hours on *Alphabet*. Packed up *Deathbounce*. I'll put it in the mail tomorrow on my way to German.

This is great! I'm gonna get \$3000! What will I do with all that money? I already have \$750 in the bank. I should probably spend about \$1000 of it on computer peripherals. (A drawing tablet? A second drive?)

JANUARY 30, 1983

Saw *The Misfits*. Boy, was it depressing. Boy, was Marilyn Monroe sexy.

Did two more letters on *Alphabet* today. Eight to go. Tomorrow might be a late night.

What, you wonder, did I do all day, if not *Alphabet*? For one thing, I spent a lot of time flipping through the dictionary. Also, I did a lot

of dreaming about Karateka and drawing pictures.

I no longer plan to do it pure-karate, on-the-mat; I've got a scenario. Your beloved has been kidnapped by the Big Man; he's taken her to his island hideout. He's scheduled to depart with her at midnight. You're dropped onto the island by parachute. Mission: beat up the guards (who, like you, are wearing gi and fight with their bare hands) and work your way up to the Big Man. Rescue the lady and flee in the Man's helicopter. Your only possession besides your gi is a digital wristwatch. Press a key (T? W?) to look at your watch; the time flashes above your head as you look at your wrist. No fanfare heralds the chimes of midnight; you merely look and see that it's 12:02 – SHIT! The only way to end the game is by committing hara-kiri. The key to this game is total realism and excellent graphics. I'm psyched.

Listened to Brahms' Violin Concerto. Man, I love that piece. The first movement is so, like, relentlessly driving. It sets me on edge. It gets me all hyper, like *The Rite of Spring*. Those violin solos. Wow. Am I eloquent.

FEBRUARY 1, 1983

Borrowed the *Empire* soundtrack from Tom Mugavero. Boy, is it up-psyching. I can't wait for *Return*.

I love John Williams movie music. *Star Wars*, *Raiders*, *E.T.*, even *Close Encounters*, even *Jaws*. I'm gonna buy the *Raiders* album next chance I get. I'm making that decision now, so that when I see the price tag (\$7.98 or \$8.98) I won't be dissuaded. I *will* buy it.

FEBRUARY 2, 1983

Stephen Slade came by at 3 to look at *Alphabet*. He was very impressed, had no criticisms and said there'd be no problem about the money. It took 60 hours of work. That's \$50 an hour. Not bad!

After he left I had nothing to do, so I just listened to music until dinner. I was in a tremendously receptive frame of mind for music. I went into a kind of trance listening to Schubert's Mass in E-Flat. Also listened to *Raiders* and Mendelssohn's E-Minor violin concerto.

I'm a little behind in my classes; I think I'll dedicate the next couple of days to catching up. There's a German paper due Friday, and tests coming up in Anthro, G&G, and Phys. Psych. I haven't missed a class yet in Stats and G&G, but I've missed three each of Anthro, Psych and German.

I'm not quite as psyched to do Karateka as I was a few days ago.

FEBRUARY 3, 1983

Phys. Psych this morning: learned about neurotransmitters. G&G: punctuated equilibrium model of evolution vs. phyletic gradualism.

Was it Butler who said "A hen is an egg's way of making another egg"? It occurred to me a few weeks ago that a zoologist from another planet, observing me, might well conclude — since I'm continually opening and closing doors and windows and turning heaters up and down in an effort to maintain a constant temperature in the room — that my other functions (eating, sleeping, reading, playing games, etc.) serve only to keep me functioning as a thermostat.

Been musing and doodling on *Karateka*. It could be very, very good. (Interesting that I get most psyched to do it when there's something else pressing that I should be doing; in this case, my German paper.) I'm very optimistic about it. If it turns out the way I see it in my mind, it could be a best-seller on a par with *Choplifter*. The key will be making it look three-dimensional; and the key to making it look three-dimensional is... SHADOWS.

My life feels kind of empty all of a sudden. I really must make an effort to fill it.

February 4, 1983

Ran into Laura at the post office this morning. She gave me the news she'd been trying to call me with for days: Next year's directors of the Yale Law School Film Society have been chosen. It's Laura, Nicola, Bill, Ben and me. I'm gleefully happy.

FEBRUARY 5, 1983

Actually getting quite a bit done on *Karateka*. I still haven't gotten down to the main coding. I'm very, very, very enthusiastic about it. Not only do I think I'll be able to do it to my satisfaction, but I think it could be the #1 Apple game. Dare I say such a thing?

Tomorrow, I must force myself to refrain from working on *Karateka* again; I'll devote the day to catching up on my coursework.

Worked at Law School. Kamala lent me her spiked wristband.

FEBRUARY 6, 1983

Another *Karateka* day. Without really meaning to, I spend all my time on this program. I've just reluctantly quit for the night so that I can write a German paper on Handke's *Wünschloses Unglück*.

I wish there were an extra month between today and tomorrow. I'd put it to good use.

Such a dichotomy between my "working" and "not working" modes. When I'm working, time is so precious, I begrudge every minute I spend away from whatever-it-is I'm working on: *Deathbounce* at Christmas, *Karateka* now. I forget to sleep, to eat, to change clothes. My life gets all fucked up around me through sheer neglect.

When I'm not working, I'm a lazy bum. I listen to music, wander into town to browse through records, sit around with nothing to do. I can waste a summer without realizing it.

FEBRUARY 7, 1983

Made a decision about *Karateka*. I'll change the stance from a cat stance to some other stance, where you always lead with the same side. That'll cut the number of fighting shape tables in half, and hopefully leave room for dual-page animation.

Ben and I are going into the city Friday to see *Gandhi*, *Tootsie*, and either *Sophie's Choice* (my choice) or *Road Warrior* (Ben's). I just called home to set it with Dad. He was disappointed he won't be there to see us. Oh well; only three weekends till spring break.

For the first time in a while, I'm feeling kinda psyched to get educated. *Ich will wissen, können*. I'm jealous that Ben is taking History of Art, History of the Earth, and Old English, and learning stuff I'm not.

I can't find my G&G folder.

FEBRUARY 10, 1983

I think Ben is the only person who truly comprehends the depths of how little classwork I do.

Here's what I do do: Listen to music. Browse in record stores. Read newspapers, magazines, play computer games, stare out the window. See a lot of movies.

And, sometimes, I go on the bit path.

When I'm on the bit path, I live, sleep, eat, and breathe in hex. When I lie in bed at night trying to fall asleep, my fingers are covertly typing out: 4000<2000.3FFFM. 7C1BG. 3d0G. I see the cursor flashing before my eyes. I have nightmares in which I'm being chased by a subroutine. During the day, I shut myself in my room and seat myself in front of the computer every time I have a spare half hour.

(I'm writing this in between trips to the basement to make sure my laundry doesn't burn in the dryer.)

FEBRUARY 11, 1983

[NY] Saw Gandhi in the Ziegfeld, the same theater where Ben and I saw *The Wall*. Big screen, wonderful stereo Dolby sound, clear sharp focused picture, new print. The movie was great: awe-inspiring, breathtaking, panoramic. It made me want to go out and get beaten up by policemen.

It's a blizzard here. When Ben and I stepped out into the swirling snow, it was like no New York I could remember seeing. You couldn't tell where the sidewalks ended and the streets began. There were very few cars and they were going very slowly. Sometimes the wind would get high and these huge clouds of snow would swirl up, like sand in the desert. There were swirling eddies of snow in the street. When we arrived at the apartment we felt like intrepid Arctic explorers. It was truly wonderful.

It's still snowing. I can't wait to see the city in the morning. I really should take up karate or gymnastics or something. It'd be good for me. I'm getting kinda scrawny and flabby. Dad says I have bad posture.

FEBRUARY 12, 1983

A beautiful winter day. Blue sky, sun shining, piles of snow on the ground. We walked through the park to the Museum of Natural History, found it closed, and walked across the park to the Metropolitan, where only the European wing was open.

Back at the apartment, I drew the first pictures I've drawn in a long time. Emily prevailed upon me to draw a couple of caricatures of her, none of which looked the least bit like her. Just now I drew the one of Ben at the top of this page. It feels good to be drawing again. I ought to buy myself a pad of paper, to encourage myself.

FEBRUARY 13, 1983

[Yale] Law School Directors' meeting, with outgoing directors David Stenn and Bruce Cohen. Oh boy oh boy oh boy, it's gonna be great!

Spent my free time today drawing caricatures in a pad I bought. I'm getting better.

Got a letter from Broderbund (Cathy Carlston, helping out Gary Carlston; Doug is now president of the firm): More monsters.

FEBRUARY 15, 1983

Spent most of the day playing *Deadline*. Is it ever frustrating.

I want to buy a graphics package with a drawing tablet. (Versa-Draw?) Budget: \$300.

I blew my G&G and Anthro exams. Shit.

FEBRUARY 16, 1983

Experiments I'd like to see done (if not actually do them):

- 1) Is beauty heritable?
- 2) Does chilling the skin increase susceptibility to pain?
- 3) What is motion sickness?
- 4) What is movie motion sickness?

Made a couple of breakthroughs on *Deadline*, but now I'm back to square one. There's still no evidence that Robert was murdered. I suspect Baxter did it, possibly with the help of Dunbar. Tom's got his pipe out.

Went to Slade's office to pick up my check. He showed me a nifty color Apollo with 1024×1024 pixels and 256 colors. That's 1 MB screen memory. Wow.

Also a Votrax speech emitter; you type in English text ("I pine for my far-away homeland") and it speaks it correctly, in a sort of Scandinavian-sounding accent.

FEBRUARY 17, 1983

I'm lying on a mattress on the floor in what used to be my room. It's now the Control Room. It contains every scrap of electronic technology Ben and I possess: Apple, Atari, stereo, TV and accessories.

It's dusty down here.

FEBRUARY 21, 1983

Sophomore dinner tonight: reception at the Napiers, then a fancy white-tablecloth/candlelight dinner in the dining hall, with better-than-average fare. A pleasant break from routine, and a chance to exercise my very rusty, little-used repertoire of cocktail-party behavior.

I'm glad I've been keeping this journal. Looking back, I realize I was pretty lonely and miserable most of freshman year. These are definitely the best times since I arrived at Yale.

My #1 enemy is still sloth: sleeping late, doing no work. #2 is social laziness: tendency to keep to myself, not make new friends.

Fiddled with the computer a bit this afternoon, trying to work ALF music into *Deathbounce*. There are page-zero conflicts preventing it from working.

FEBRUARY 22, 1983

Slowly attempting to psych myself up for *Deathbounce*. Tomorrow I'll write that letter to Broderbund. And I should call Slade.

FEBRUARY 24, 1983

I just talked to Slade. Gallen liked the program. BUT... they think there's too much variability in the difficulty of the words.

Bottom line: Now they want me to make two games, using the 26 words from the original game plus 26 new ones: *Alphabet I* (easy) and *Alphabet II* (hard).

And they want to pay me another \$3000.

"OK," I said. "That sounds good to me."

WHOO-HOO!

Money should *not* be this easy to get.

Every time I talk to Dad on the phone, I'm slightly afraid that he'll ask me about my grades for last term.

February 25, 1983

Slade came over with his little son and friend. They tested out *Alphabet*.

March 8, 1983

[Chappaqua] Worked on *Karateka* all day again. The main achievement today was mocking up some temporary animation routines to see what they looked like in motion. They looked surprisingly good, considering how rough they are.

Dad suggested filming somebody and counting the frames. Mom suggested Dennis [karate instructor] tomorrow evening. I remembered the film editing machine we had. Still have?

It was a very productive day. I know exactly what I'm going to do. Now I just have to do it. I'll try to get all the pictures drawn this vacation and save the programming for when I get back to school. I haven't been outside in two days.

March 9, 1983

Went to the Elmsford dojo in the evening to watch the sparring and film Dennis. Dennis was extremely cooperative. He got the idea right away and did everything with perfect form, even falling down. I pray the film will come out all right. Mom is taking it to be developed tomorrow morning.

I called around, looking for a VersaWriter. No dice. Tomorrow I'll try to order it from Versa Computing themselves, if they still exist.

Ohh, my heart will break if that film doesn't come out. The film was new, the batteries checked out, and the camera made all the right sounds when I pushed the buttons. It ought to be OK.

In the meantime, I'll work on the code. I know, last night I said different, but it wouldn't make sense to do any more work on the images until I get that film back.

Dennis was so good!

March 10, 1983

Ordered VersaWriter for \$225 from Compu-Ware in New Jersey. I got their name from Creative Computing, who used to sell it. It should arrive by Monday or Tuesday at the latest.

The film should be back by Monday; I can't wait.

I gave up on the broken Moviola and found a second one in the basement that works.

March 11, 1983

Drew a nice title page for *Karateka*. Tomorrow I'll program something innocuous. Maybe the input-configuration routine.

MARCH 12, 1983

Worked on Karateka again.

These last two days weren't wasted. I've been working with DRAX, creating pretty pictures of scenes from the game, making Design Decisions and trying to get the perspective right.

Dad was full of comments, advice and ideas on my DRAXing today. He's very enthusiastic about the project.

David keeps needling me with questions designed to prove the Atari's superiority over the Apple: "Jordan, don't you wish *you* had a delete key?"

March 13, 1983

More *Karateka* DRAXing. Played Ultimate in the afternoon. It was fun; got all nice and muddy. I was panting for the whole game. I'd better start jogging again.

Papi's 86th birthday party at the Coopers'. Papi made a nice speech about how a few years ago, he expected to die soon and kept thinking "Just vun more year!" so that he could finish his autobiography. Now, it's finished, and here he is, still alive.

He said that being old is like driving down a dead-end street: you know it's going to end any minute, but you don't know when.

MARCH 14, 1983

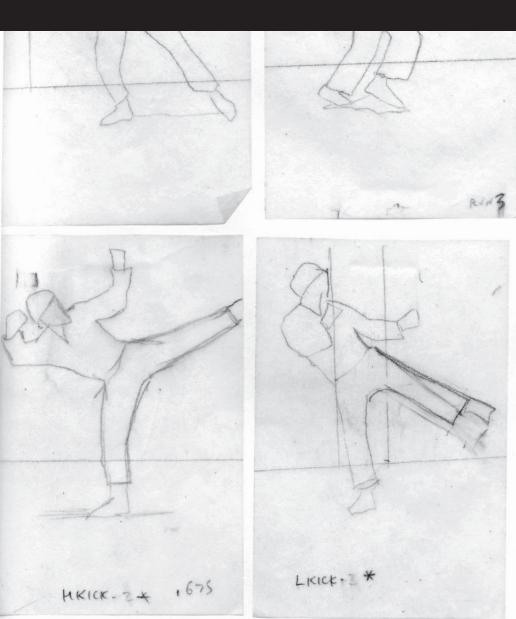
The film came back. There was nothing on it.

I was depressed for several hours. Then I roused myself to call Mo to borrow his camera, and Dennis for a repeat performance tomorrow evening.

The \$15 (\$10 for film, \$5 for developing) is down the drain. No big deal. What's really annoying is the wasted time.

The VersaWriter still hasn't come. Tomorrow, maybe.

Part 3: Rotoscoping



March 15, 1983

The UPS man came, but required a certified check.

March 16, 1983

Tomorrow I'll go to 47th Street Photo and buy that Atari tape recorder for David; and maybe a Walkman.

March 17, 1983

Apple II 16K	\$1200
32K extra RAM	\$100
Disk drive w/controller	\$600
ALF synthesizer	\$200
Epson MX-80	\$600

Interface card for printer	\$100
Language card	\$150
EZ Port	\$25
Joystick	\$60
Paddles	\$40
Dan Paymar lowercase adapter	\$30
RF modulator	\$25
(and now) VersaWriter	\$250

Total spent on computer system: \$3400

Earned so far: \$3750



I unpacked the VersaWriter and played with it for a few hours. It's a wonderful object. It's obviously ancient – the manual is copyright 1980; the disks are (believe it or not) DOS 3.2; the programs are written in BASIC – but it works, and I can tell it's going to pay for itself very quickly. For one thing, I can now do *Alphabet II* in a jiffy. For another, I can trace the Dennis-shapes (fingers crossed!) from the screen of the Super-8 editor onto paper, then trace the tracings on the VersaWriter to get the general outlines, then touch them up as usual with DRAX. This technique would eliminate 80% of the drawing work – namely, trying to get the outlines and proportions right with DRAX – and improve the quality immeasurably.

The film should be ready by 12:30 tomorrow, if the lady told me true. I hope it comes out, I hope, I hope it comes out! If I'm disappointed a second time, I'll be depressed.

Even if the image is hazy or dark, I can still use it. I just need to be able to see the rough outlines.

March 18, 1983

The film came back.

The film came out.

The picture quality, on a scale of 1-10, is about a 7. Not bad at all. The main problem I've encountered so far is that Dennis did roundhouse kicks instead of side-kicks.

I'm doing one frame per 3 film frames, or 6 frames/second.

I think it'll work.

March 19, 1983

KARATEKA status report:

Step, Punch, Turn, Bow, Walk traced onto vellum. [1]

Step traced onto Versawriter [2], positioned on screen using VersaWriter "Inspect" function [3], entered into memory using DRAX, and animated with a temporary routine [4].

Until I typed \$4000G and hit RETURN, I had no idea what it would look like. I had doubts: were my tracings too inaccurate? was VersaWriter too clumsy? would using one out of three frames work?

When I saw that sketchy little figure walk across the screen, looking just like Dennis, all I could say was "All RIGHT!"

It was a glorious moment.

Anyway, now I know: It is good. The technique I developed – film to vellum to Versa to Drax – works. I am reasonably confident that there has never been animation on the Apple as realistic as *Karateka* promises.

I now name *Karateka* my #1 priority. *Deathbounce*, *Alphabet*, and school are all #2.

March 20, 1983

A pleasant visit from Grandma and Grandpa.

Grandma asked me what my plans are for when I get out of school. I came up with my best formulation yet: "Hang around the forefront of the computer revolution and see what comes up."

March 21, 1983

[New Haven] I feel good: happy, confident. I've been saying hi to more people than usual today. I think spending time at home tends to "boost my self-esteem," as the pop-psychers would say.

Squeezed in as much *Karateka* work (vellum-tracing) as I could today. (I love stealing forbidden minutes to work on something; it makes it more alluring, makes me think about it and long to get back to it even when I'm doing other things.) Did tracings for Jab, Punch (tricky), and Block (trickiest). Assuming I won't have to do them over again, the worst is over. Only Kick (also very tricky) is left.

And then there's Run, Fall Down, Assume Stance. (Bow, Turn, Walk, Step already done.)

Got my mail this morning. It's more mail than I've ever gotten at once before: *Softalk, Creative Computing, InCider, Chess Life, Starlog,* and a lot of envelopes.

March 22, 1983

Went to Psych this morning for the first time in a long time, but cut both my other classes (G&G and Anthro) to work on *Karateka*.

I accomplished a lot today. I animated Mpunch ("animate" = trace drawings with VersaWriter, position using Inspect, define image tables with DRAX, write temporary code to step through the images when I hit a key), and edited Step 95% and Mpunch 50% ("edit" = work over images using DRAX until they are n% perfect ("perfect" = good enough to leave alone)).

I was afraid that tinkering with the traced outlines would distort the animation, make it look all wrong again. That this whole technology might be fatally flawed.

But it worked beautifully. Editing the images with DRAX not only didn't ruin the lifelike effect, it made it better. The little guy now looks even more like a little guy than he did when he was fresh from VersaWriter.

I'm continually amazed by how forgiving our perception is. It's wonderful. Otherwise, we wouldn't enjoy computer games and movies half so much.

Meeting with Slade tomorrow.

I've run out of vellum.

[11 pm] The new, cleaned-up Step is *not* actually better. Below the waist is OK, but above, the guy looks like a cardboard cutout. I'll make him wiggle a little bit, like he did in the original sketches, to seem more alive.

March 23, 1983

Met with Slade. I turned down the \$2000-a-month part-time summer job and told him I'd prefer to work on a per-project basis. They may give me an IBM PC to adapt *Alphabet*, and — who knows? — I may be able to use it to adapt *Karateka* as well.

Did no significant work on *Karateka*, just mucked about a bit, which is just as good. Mailed a letter to Cathy Carlston.

Oh my God! I just realized I didn't go to any classes today! First I missed German, then Statistics.

Typing a paper for Doug.

MARCH 24, 1983

Cut Psych this morning; went to G&G; cut Anthro.

Worked on Karateka some.

March 25, 1983

Walking out of *Reds* I saw a heartbreakingly beautiful young blonde out of the corner of my eye. She was wearing a blue down vest. As she passed, our eyes met. She smiled at me. As I went out I held the door open for her; her fingers grazed mine. Then she was gone.

Missed German; blew G&G lab test; skipped German lesson.

March 28, 1983

(Ben, wearing headphones and a woolen cap pulled down over his ears, enters control room, sees Jordan at the computer, and laughs.)

Ben: I see you're plugged in too.

(Jordan grins)

Ben: The Dreamies really are going to come true. As we let other people do more and more things for us, so we can spend all our time enjoying the full Sensurround experience of pretending we're doing them.

Jordan (wistfully): Yeah, modern civilization is definitely dying. (pause) And I'm going to be right up there at the cutting edge of technology, hammering in the nails.

MARCH 29, 1983

I haven't worked on *Karateka* in days. My room is a mess – this whole place is a mess, in fact – and my schoolwork is shit. I'm gonna clean up my room.

March 31, 1983

Finished up my income tax return. The depreciation on my computer equipment brought my net self-employment income below \$400, so I don't have to file this year.

I went to Dunham to sign the *Alphabet II* contract and pick up the first \$500. It's starting to seem almost natural — going into a room and making marks on a couple of sheets of paper and taking \$500 for having done absolutely nothing.

The deadline is July 1. I'll try to get it done before I go home at the end of April.

You know how banging your hand hurts more when it's cold out than when it's warm? The other day a possible explanation occurred to me: It's not that your pain receptors are sensitized by cold. It's that when it's cold, you tend to hit things harder. Your hand is numbed by cold, so it takes a fraction of a second longer for you to realize you've banged it against the wall and withdraw it.

APRIL 6, 1983

Letter from Broderbund. There'll be no Deathbounce advance.

APRIL 7, 1983

An utterly wasted day. Slept through both Psych and G&G, if you can believe that, and didn't get to lunch till half past twelve. Then I made the rounds of the record stores till Ben got back at four, and missed Anthro without even realizing it.

Things To Do:

Deathbounce. The ball's in my court. If I do nothing, nothing will happen, and I'll have wasted 500 hours. It would take only about 100 more to whip it into shape to peddle off somewhere, maybe not Broderbund.

Karateka. No real rush on this – I'll finish it this summer anyway; anything I do before then will just shift the completion date ahead a few months at most. Still, I should be working on it.

Alphabet. Any time. I ought to get it out of the way now and earn that \$4000.

School. Two German papers, one big Anthro paper, one big Psych test coming up. No really big worries.

And I want to start on a novel?

What's the matter with me?

My Academy Award predictions:

Best Picture = *Gandhi*

Best Actor = Newman

Best Actress = Streep

Best Supporting Actor = Gossett

Best Supporting Actress = Lange Best Director = Attenborough

Maybe next year I should leave the computer home, and write a novel instead of a game program.

APRIL 10, 1983

Things I hope to happen within the year:

Sell a *big* program of the caliber of *Karateka*. Make the *Softalk* Top Thirty. Rake in the royalties.

APRIL 14, 1983

Went to Stiles to see *THX 1138*. I happened to sit one seat away from George Hickenlooper, so I introduced myself. He thanked me for the \$200 donation YLSFS gave him to help pay for his film; he said it had helped a lot and that he's 85% finished. He asked if we'd be interested in showing any of his movies. I said we would.

May 1, 1983

Law School meeting. Hickenlooper showed us rushes of his film ("Ground Zero") and we decided to give him \$200 more in exchange for the rights to show his movies at the Law School. He said any money we give him will go to make movies.

May 4, 1983

[1 am] Just had an exciting conversation with Doug Berlent about

the possibility of a marriage of music and video games. He's the first person I've met who's thinking along the same lines as I am. We talked about collaborating on an Apple game (I'll do the game, he'll do the score); I showed him *Karateka*. Some of the things he said about people wanting multi-dimensional, total-immersion sensory experiences might have come out of my own mouth. It gave me a glimmer of what I could be doing ten years from now.

The hell with writing fiction or directing movies. I've got a handle on something, and I think I have the right qualifications: computer programming, writing ability, and fanatical love of movies and music. As the new art forms emerge, I want to be there. Interactive movies... joystick-controlled music... the possibilities are endless.

My goal for this summer is to finish *Karateka*. If it's half as big as I dream it may be, that should be enough to launch me into the Video Game World. Then: summer '84 in California working with Broderbund or Atari or something like that... senior year at Yale... then ZOOM! Off to the West Coast to throw myself into it body and soul.

It seems like a dream. I'd be so happy to be in CA, surrounded by people with similar interests, working and making money... If only it happens that way! It would solve all my problems, answer all my questions.

Moviemaking has been basically the same job, the same art form, since 1920. To help create a *new* art form that could become as ascendant as movies are now – now *that's* a calling! And it'd suit my temperament perfectly.

For the first time, I think I see a path ahead of me.

May 9, 1983

WarGames screening. John Badham answered questions afterward. He said something encouraging:

"If you want to go into film, get a well-rounded liberal arts education. When I graduated from the Drama School I knew nothing about film. The stuff I learned in psychology and sociology and history of art is what I've found really useful. What you need to know about making films, you can learn in a few days by asking questions and reading books."

(George Hickenlooper, to my left, was burning up.) Film draws me.

But I know nothing about filmmaking.

I don't want to write computer games! I don't want to work in a lab! I don't want to sit in a room with a typewriter! I want to go to...

(Music starts up)

Hollywood!

(Music swells and I start to dance)

I'd be a good director. I know I would. John Badham majored in philosophy, and look where he is now. I could do it if I really wanted to.

But... do I have the guts?

To do something that weird?

Yet... nothing excites me as much as movies.

Not even arcade games.

Not even 3D computer graphics.

I should seriously, seriously consider it.

Seriously, I should.

May 10, 1983

David Stenn liked *WarGames*. He was curious to know what I thought about it, since I'm a "computer person."

I told him Matthew Broderick was just like me in high school, except I didn't run around picking locks and I didn't have a girlfriend.

May 13, 1983

[Chappaqua] Just wanted to record that at this moment, the idea of making movies does not appeal to me quite as much as the idea of writing video games.

Possible contributing factors:

- Just read in a review of Blue Thunder in the New York Times:

"The movie is like a giant video-game; given the popularity of video-games, it should be a big success." That reminded me that the computer-entertainment field is booming, while movies have been basically the same since 1920.

- Booted up *Karateka* for a look and got psyched. David was greatly impressed. "It'll be Number One on the bestseller list," he said. "I guarantee you."
- I haven't seen any movies in a while (since WarGames).
- I'm home. Everyone here assumes I'll be a Computer Person and implicitly supports me in that.

Idea for a *Blue Thunder* video game: Aerial view of the city. You fly *Blue Thunder* above your girlfriend's car, covering her, shooting police cars (with extra points for not injuring the cops), dodging F-16 missiles. If you get her to the TV station safely, you have a climactic showdown with Malcolm McDowell.

Oh gosh, I just felt a twinge of the movie-making urge.

But this summer, *Karateka* is my big goal. By August I want it finished. Title page, dojo mode, girlfriend-rescue and all. I want it in the mail by the time I leave for school.

Also Alphabet and Deathbounce. (Sigh)

I must go for computing. Not only is it right at my fingertips, there

for the taking, but it's a booming field. Out of the explosion there must certainly come branches that will interest me. If I become a filmmaker, it would be too painful to watch neat-o things happening with computer graphics and video entertainment and realize I'd missed my chance to be part of it. Whereas if I go with computers, I can still admire and enjoy movies and get psyched about them as I do now. Perhaps I could even "go in the side door" with computer games/video games/"interactive movies" and get from that what I'd hoped to get from movies.

I hope I stay in this mindset. Computing is more practical, accessible, probable, and profitable than filmmaking. I can envision it.

May 15, 1983

Adam and Mo came by and were encouragingly impressed with *Karateka*. Mo kept saying: "Oh, wow!" Then we all went to see *Blue Thunder* in Mt. Kisco. It didn't do much for me the second time around. A movie is a fleeting thing: you can only see it for the first time once.

May 25, 1983

[Seattle] Waited three hours in line for the first show of Jedi and one hour in our second-row-center seats. The tension built geometrically: During the final ten-second countdown, as the audience's noise level rose to a roar, I reached a level of excitement so high that if the countdown had been prolonged five more seconds I might have suffered a heart attack. On "three" the lights began to dim at; on "zero" the curtain began to rise; and the crowd went wild.

A big, beautiful, curved screen, filling our fields of vision. 20th Century Fox. A Lucasfilm Ltd. Production. A long time ago in a galaxy far, far away...

STAR WARS.

The picture, the sound, the theater, the audience, the movie: everything was perfect.

May 29, 1983

Wrote 31 pages of my novel. That's 53 pages so far.

Browsed in Tower Books. Read Dean R. Koontz's *How to Write Best-Selling Fiction*. Very helpful.

June 4, 1983

Hines, Burster and Ben shocked me out of my skull in the afternoon with a pyrotechnic birthday greeting, a hail of balloons, and a cake with unsnuffable candles. I was touched.

We packed up and walked along the beach for a couple of hours, analyzing the driftwood and searching for suitable staffs.

Had a big talk with Ben about The Future. I don't want to just be a writer. It's too solitary, too little feedback, too little interaction with the outside world. I'd go nuts, I think; I'd submerge myself in my work and be fucked up and miserable.

The Big Choice, then, is (I knew this) between Filmmaking and

Computer Programming.

It's a tough one.

We talked a lot and in great depth about the nature of fiction, of art, and our perverse obsession with certain movies. The conversation sated me. I feel no urge to write about what we talked about. Pity.

I'm kinda looking forward to getting back to New York. If Brighton Beach Memoirs is still playing on Broadway in two weeks, I want to see it.

June 21, 1983

[New York] Had a long talk with Dad. He was telling me about his business deals and how his partner Marty is too humble, doesn't have the chutzpah to ask for enough, although he's the most brilliant guy you'd ever meet.

I mentioned that I have Marty's problem to some extent.

He said it would be worth getting rid of, because it's a handicap – no, worse than a handicap; that I'll never get anywhere in life unless I have the attitude that I can do it.

Dad recommended that any time I experience anxiety about attempting something, I should immediately attempt it.

June 25, 1983

Reflections on Jedi, one month later:

The principals – Luke, Han, Leia, even Darth – have lost their personalities. This is because each of them started out as a one-note caricature.

Luke was a farm boy from Tatooine longing for adventure. Han was a selfish mercenary. Leia was a proud, haughty, unkissable princess. Darth was evil incarnate.

These characterizations were fine for a tongue-in-cheek homage to the serials of yesteryear, which is what *Star Wars* seemed to be at first. But Lucas had something grander in mind: not a mindless serial that could go on forever, but a nine-episode Wagnerian cycle. As such, its characterizations and themes had to be taken seriously.

This meant that everything needed to be resolved by the end of the trilogy.

Luke lost his boyish competitiveness and grew up.

Han lost his selfishness and became a caring human being.

Leia lost her haughtiness and became kissable.

Darth turned out to have some good in him after all.

The trouble is, the faults these characters overcame were the only identifying characteristics they had. Without them, they lost their edge.

Character development only works if the characters are develop-able.

June 27, 1983

Just looked through old journals, read the entry for one year ago today. I'd just gotten *Choplifter* in the mail and was psyched to write a 3D adventure.

TO WORK!

June 28, 1983

Alphabet is assembling.

I've been working on it all day. I put in music using Leo Christophersen's "Celeste" program. It adds a lot.

The code is just such a mess. I can't remember how I set things up or anything. It's driving me CRAZY! AAAGH!

It was definitely a mistake to leave the program for this long. I've forgotten what all the labels mean. For *Karateka*, I must document much better.

June 29, 1983

I drew a blue car on a white background and was so impressed by the look of it, I immediately started thinking about new game ideas. I love the cartoony simplicity of it; it doesn't cry out its imperfection the way attempts at realism do. I'll keep the realistic style for *Karateka*, though.

July 1, 1983

Just now while D2 was assembling, I idly reread my English 120 papers. I was surprised at how bad they were. What disturbs me is not that they're bad – I cranked them out stupidly fast – but that I didn't realize how bad they were at the time. I'd hate to think that the stuff I'm writing now could be that much worse than I think it is.

HELP! I'm panicking! I just read an article by Ted Nelson in the May 1982 *Creative Computing* about Siggraph ACM. I can't believe I missed the July '82 one in Boston! I've GOT to go to this year's! Oh shit ... I'm ruined for the day now. I've got to get one of those "No Jaggies" Lucasfilm T-shirts!

200000

"It was at that moment that he realized that his future did not lie in scientific research, writing, academia, law, medicine, or the priest-hood. With that clarity that comes only in those rare moments of insight that shape our lives, the young Mechner realized that his future — whatever it was — would involve colorful things moving about on a screen and making noise."

OK: I *won't* drop everything and try to make it as a director in Hollywood. I'll stick with computers and get into Hollywood through the back door, so to speak, as computer programs become more and more like movies.

But I'll be keeping in touch with Hollywood all the while, through the film society, Insdorf's courses, and whatnot.

That's my life plan.

Stay on top of things. Subscribe to the magazines. And meanwhile keep on in my comfy little niche, making pots of money writing Apple II games, cultivating the cinematic and artistic skills I'll want.

July 11, 1983

I freaked out this afternoon when I realized it's been a month since I got back from Seattle. So little accomplished.

I might as well face it: I probably won't finish *Karateka* before I go back to school in the fall. But I can finish *Alphabet* and *Deathbounce* and make a good start on *Karateka*. If I work assiduously with few interruptions, maybe I can get it to where it's just a matter of finetuning, no more heavy coding. Doubtful, though, as I already have at least one major interruption planned: Wagner's *Ring*.

July 13, 1983

Vanessa is coming for the weekend! I'll try to finish *Alphabet* tomorrow, or Friday afternoon at the latest, to have the weekend free.

I really am under a lot of pressure, with this triple-headed *Alphabet/ Deathbounce/Karateka* making me feel guilty every moment I'm not in front of the computer. Maybe I should relax a bit. (A fine idea, coming after a solid week of non-work!)

July 14, 1983

Squeezed in two hours of work on Alphabet in the morning.

July 16, 1983

Raiders is an almost perfectly constructed movie. (At least until the end of the truck chase; then it starts to flag.) It's a perfect demonstration of Dean R. Koontz's formula — keep making things worse. Everything is set up ahead of time: like the monkey. Whenever the next twist is added, making things even more hopeless, you think: "Why didn't I see that coming!" And the way Indy gets out of it makes sense too: "Aha, I knew that would come in handy some day!"

July 17, 1983

Worked on *Karateka*, drawing backgrounds. Everyone who sees a screen says "Wow!"

It's definitely the most impressive-*looking* Apple game ever. We'll see how well it plays.

Playing *Choplifter* (with Vanessa and David) to the *Raiders* soundtrack really impressed upon me the importance of music. It's a shame there's no way to put real music into video games. Maybe the CD players will make it possible. Till then, the Apple is hopeless; the Atari and coin-op games offer slightly better possibilities. In time, in time.

I want to work on *Karateka*, but tomorrow I must finish *Alphabet*. Then, aaahhh! Freedom, of sorts.

July 18, 1983

Dad and Emily are leaving for France Wednesday, I think.

Spent most of the day working on *Karateka* backgrounds (not *Alphabet*). I think I'll put in music, using the regular Apple speaker and the equivalent of the Celeste routine I put in *Alphabet*. I'll write some generic themes in the style of Williams and Wagner: Hero theme (Luke, Siegfried, Superman, *Raiders*), Love theme (*Walküre*, Tristan, Leia, Marian), with Mournful and Triumphant variations, a Villain theme (Hunding, Vader), and a Palace theme, and play them at appropriate moments for dramatic enhancement.

I've already written a love theme; it's wonderfully derivative. It sounds vaguely like a hundred other tunes. I may or may not use it.

Oh. I'm psyched for *Karateka*. Fuck *Deathbounce*. (What a waste!)

July 22, 1983

Alphabet is done. All packed up. Total: 66 hours. (Part I only took 60.)

May this be good enough for CompuTeach and the publishers and whoever else needs to approve it. May I never have to LOAD C3 again. May I get my 4000 bucks soon.

I'm such a mercenary.

July 23, 1983

It's been a *Karateka* day. I Versa'd and DRAXed all twelve BLOCK shapes.

It really is a joy to work on something I enjoy working on. It seems

too good to be true after *Alphabet*. I can't wait to get up tomorrow morning and work on it some more.

July 25, 1983

Worked all day on *Karateka*. Made great progress: STEP, PUNCH, BLOCK, and KICK all work now, with full joystick/keyboard control. It's mind-bogglng to realize that last night at this time I had nothing but a couple of diskfuls of hi-res still images and a sheaf of handwritten notes.

Agenda for tomorrow (cancelled the city trip, to the disappointment of three out of four grandparents): CHOP, TURN, fine-tune input, add scroll control.

Then, I'll spend a couple of days adjusting the shapes until they look just right: add shadows, fix the belt, the neck, make them stylistically consistent, smooth the jumps, get the timing right. Put in a stationary guard to see where the blows land. Get the fighting routine into final form.

This should take me to Friday. Once this is done, I'll put in the damage-assessment tables, decide how the guard should be reacting to various blows, and add those shapes: head snapped back, fall-down, whatever. (At this point I might add run, walk and bow, for completeness.) I'll probably take a couple of days off for the city somewhere along the line. So let's say it's Wednesday, August 3, by the time I start writing the "smart" fighting routines for the guards. A few days for that; a few more for the railing, the gates, and Mt. Fuji.

Wow! I might conceivably finish the whole thing by the end of August!

July 26, 1983

It works, it works, everything works. I'm so happy.

I put in CHOP and TURN this morning and spent the rest of the day tinkering. The name of the game now is Fudging: making everything symmetrical and perfectly timed and synchronized, just like it isn't in real life. It's conceivable (a day really is a long time) that I may finish the whole fighting routine tomorrow. But there's no rush; I can take two days, or three. Once the movement is in final form, I can put it in a file and have something really impressive to show people.

Oh, this is exciting. Everything is turning out so well, going so smoothly. This program is gonna be *great*. I bet I could get a big advance from a publisher on the strength of what I have now. Especially after I finish polishing it. But I think I'll hang onto it until nearer the end.

July 27, 1983

Status report: STEP, TURN, BLOCK are perfect and integrated. KICK, PUNCH need more work.

Garo [karate teacher] came over and looked at it. He was greatly impressed and even more effusive in his praise than Adam. He said, in a quiet, almost awed tone, something to the effect of: Computers and art, together, that's a real talent.

I'm getting so much social reinforcement out of this, it's amazing.

Everybody who sees it says the enemies should be really evil and colorful. I hate to break the news that they'll look just like you, only with a mask.

This evening (after Garo expressed the same sentiment) I decided to have different-looking villains. Best so far are guards with a red or blue gi top, white pants, and a white mask, hands and feet. The Ultimate Evil will be fat; I haven't settled on a costume yet. The shapes are turning out to be pretty compact after all. And they won't need to walk, bow, and all that.

The girl only needs a couple of shapes; she could be kneeling on the floor, struggling with her gag. You run over to her, a heart pops up between you; cut to Mt. Fuji erupting. The End.

Forget scrolling the gate across the screen in 3D, forget perspective lines in the floor. There's just the gate, the palace entrance, and *maybe* the dojo entrance and interior. (I could load in the dojo from disk, but I hate programs that have to go to disk.)

It could all fit, conceivably. Wiping out DOS, of course, and 2-page graphics. We'll see.

Tomorrow:

- Finish KICK, PUNCH. (I'm integrating CHOP into PUNCH, so there are only three keys to worry about: block, kick, punch.)
- Add EDGE, WALK, RUN, BOW, FIGHT, WATCH (in both walk and fight modes), FALL.

This will probably take more than one day, perhaps a week, but it'll be the better part of the program.

Then do the guards. Then fighting. Then the background and scrolling. The end is coming into sight...

EDGE, by the way, is something David convinced me I need: a small step, achieved by a brief tap on the joystick, to edge closer to or away from the guy.

Maybe I can do without WALK, just have RUN.

The guards can do without WALK, BOW, FIGHT, WATCH, and TURN.

July 30, 1983

Krull was a pleasant surprise. The difference between a good movie of this type and a bad one is hard to pinpoint, but as clear as light and day. The fight scenes had me on the edge of my seat. The clash of blades and zap guns had a powerful, driving rhythm, and the music fit. I could tell what was going on, and I cared.

But I doubt it will be a big hit. If it had come out in 1977 or even 1980 it might have been. Now people are used to this genre, and *Krull* isn't special enough to set it apart.

Visited Grani and Papi. It was an eerie replay of the last visit and the one before that. As usual, Papi asked me if I'd ever been there before; as usual, he showed me the painting of Samson and Delilah in his room and asked me to guess what it was; as usual, he was amazed when I guessed it.

He invited me to go along with him to visit an elderly patient who's been in a coma for six months. ("It would be sad," Grani said. "It would be interesting," countered Papi.) Instead I escaped, took the A train back to Columbus Circle, and the 7:15 back to Chappaqua.

Put in an hour on *Karateka*, doing the step from standing up into *kiba-dachi*. It worked perfectly the first time.

August 1, 1983

Spent most of the day doing the title page. I settled on American Uncial for the typeface. It fits with the red/black/white motif; the whole thing has a kind of medieval feeling, appropriate to feudal Japan as well as feudal Europe. I think I'll make six or seven different pictures and choose a random one every time it boots. That way one won't get sick of the title page as is usually the case, at least not as quickly.

The guards will have your body and wear masks. Evil will be an impressive red-robed figure.

Slade called with a list of changes to *Alphabet*. He said the check is in the mail.

August 2, 1983

FINAL is in. Spent the rest of the day on SCROLL. God, is it a pain. With luck I should have the fence and gate going by the end of tomorrow. (Then: floor, shadow... GUARDS!)

Read an article in the *Times* about *Dragon's Lair*, the new videodisc arcade game with animation by Don Bluth. I've gotta see it. In a way, it was kind of depressing to read, because it's like my dream is coming true and I'm missing it. By the time I get there, it'll all be over. But it's also exciting.

For now, anyway, there's Karateka.

August 3, 1983

Accomplished quite a bit today. The fence and gate are going, and so is the floor. No shadow yet. The whole thing's chock-full of bugs, though; it'll probably take till mid-tomorrow to get it right.

One disappointment is that the gate does slow things down considerably. With two more figures on the screen, not to mention Mt. Fuji, it'll definitely be pushing the limits of acceptable slowness.

Actually, that might be a benefit. Normally it's reasonably fast, but it goes into slow motion when you approach a new gate and guard. I'll just change the slow motion "option" to an automatic "feature"...

We'll see. My goal for tomorrow is to get what I have now bug-free. Then add shadows. Then, at last, the GUARDS! Oh, boy! There really doesn't seem to be that much left to do.

[11 pm] My face is all twisted up in a wry expression because I just reread parts of my journal from last summer. By July I'd already gotten the idea for *Karateka*. I could have finished the damn thing last

summer, if I'd worked as hard and steadily as I am now.

But who knows? Maybe all that time to mull it over and draw ultimately useless pictures is why it's going so well now. Maybe if I'd plunged in prematurely I'd have made a mess of it. Certainly, I wouldn't have shot the film. I guess I can't really wish to have done anything differently.

August 5, 1983

Dad and Emily got back from France today. They were very impressed with what I'd done on *Karateka*. I needed that. I'd run out of people to impress.

August 6, 1983

My main project for the day was to rewrite the hi-res routines so that mirror-imaging is transparent to the rest of the program and doesn't require fiddling with the X-coordinate and shift values. I feared it would be a mammoth task that would require rewriting MOVEM and ANIM, but it turned out to be relatively straightforward. Now it works perfectly – almost. (I deliberately left fifteen minutes' worth of work to start me off tomorrow morning.) The whole program is slightly shorter and more elegant now.

I was just scanning through past issues of *Softalk* bestseller lists. Entertainment software seems kind of at a low lately. Oh well; what *Choplifter* did, *Karateka* theoretically ought to be able to do too.

August 8, 1983

Spent the day finishing *Alphabet*. Thank God that's done with. I feel kind of sorry that it isn't better. There are so many ways I could improve it, if I had the time and inclination, and if I'd done a cleaner is having the state of the s

job with the code so that every little change wouldn't be like plowing through a garbage dump. Oh well. I've learned my lessons:

- 1. Don't leave things for the last minute. Get them out of the way as soon as possible.
- 2. Write clean code and keep good notes.

Working on *Alphabet* always has the effect of psyching me up for *Karateka*. It makes *Karateka* a privilege, a treat, a forbidden fruit: "No, you can't work on *Karateka* until you finish this."

August 10, 1983

[New Haven] "Child-tested" Alphabet on Stephen Slade's son. He vindicated my faith in small children on three counts out of four, instantly recognizing Jacks, Queen, and Egg. For Nose, though, the kid unhesitatingly said: "Sailboat."

So they sat me down at an Apple for an hour and a half while I changed "Nose" to "Net" — working directly with the object code, to their amazement. (After *Asteroids*, the old Monitor is almost easier than an assembler.) I pressed the final versions onto two disks, with a title page they'd had someone else make (I remarked that it was a great honor to have my name on the same screen as Roger Schank's), and handed them their company's first completed program.

Jim Galambos was very excited. He shook my hand and couldn't stop grinning.

A nice girl named Tina showed me the IBM PC version she's working on. Alas, I can't imagine that young Master Slade will recognize more than half the pictures she showed me. I can start to see why they're so enthusiastic about what I gave them.

Elliott Soloway, who reminds me vaguely of William M. Gaines, clapped me on the back and poked me in the ribs a lot, joked about my being too young to drink, and kept telling me to "Have another sandwich," which I did, gratefully.

Well, I've had a four-day break from *Karateka*. Back to work tomorrow morning.

August 11, 1983

Converted *Karateka* to dual-page animation. Brought the guard to dubious life.

August 14, 1983

Set up hit-checking. Started shadows. Drew a sexy princess with a vague resemblance to Goldie Hawn. Not a super day's work, but by tomorrow I should be back in the swing of things.

August 15, 1983

Got up agonizingly early. Getting up early is good. It's painful, but once I've recovered from the shock, the day is longer and I feel better.

Worked on *Karateka* all day without achieving anything spectacular. I put in most of the shadows and the striped floor, and spent the rest of the day in DRAX designing the embrace, the palace front, the maps, the *Karateka* logo, the strength-meter, and other assorted things.

I also mulled over the whole game concept, what it should be like to play, and so forth.

Everything I did today had to be done. But I miss the thrill of the first few days, when in the morning I'd start with nothing and by nightfall have the little guy punching and kicking. I guess the only parts left that'll be *that* reinforcing are the Ultimate Evil, the princess, and the 3D gate scrolling.

For now, I'm wading in a morass of bugs, fine-tuning, and minor fixes — thankless work that produces little visible reward. Oh well. I should be done with the gunky stuff by Wednesday.

- Fix the HIRES bugs. All it needs is some good hard thinking.
 Not the clever kind of thinking that makes me feel smart and
 creative, but the keep-track-of-a-lot-of-things-and-concentrate
 thinking that makes my head spin and my brain hurt and makes
 me feel stupid.
- Tune the scrolling so the bastard stays in place.
- Get those bugs out of the BKGND scroll-control routine, once and for all. I've looked at it a hundred times, but they're in there somewhere.

Then I can get to the fun stuff.

August 16, 1983

Risky Business. Wow! Was it good! As a teen-sex movie, it's orders of magnitude sexier than, say, Class.

August 19, 1983

Impressed Jon's friend Bob with *Karateka*, *Alphabet* and *Deathbounce*. "I am in awe," he said, gratifyingly.

I really do thrive on praise. I act modest not because I don't think I'm great, but because I don't want people to think I'm conceited. I'd rather they think I'm great AND modest. But isn't that really the highest form of conceitedness?

August 20, 1983

Made a couple of major breakthroughs on *Karateka*. In my head, that is.

First, I solved the problem of what to do when the fighters overlap.

Second, I came up with a truly satisfactory storyboard. The number of gates is reduced to one; then there's a long stretch of fence to the palace, then an anteroom, then the dungeon. The "camera" cuts to the dungeon every time you beat a guard, to show the princess rejoicing and the villain wrathfully dispatching a new guard. I guess there'll be maybe ten guards in all. When you beat the last guard, you see the villain departing the dungeon himself and shutting the door behind him. Then you face him in battle. After you beat him you must kick the door down to get into the dungeon – an element of Adventure in a video game. If you die, the princess falls on the floor in grief as the villain exults.

For the first time in a long time, I'm satisfied. The vision in my head is now OK. Now all that remains is to make it reality.

I'm indebted to Dad for his good ideas and advice. Really, what's as important as anything in game design is taste: choosing between alternatives. In the beginning, I envisioned this game as two players facing each other across a mat. Hah!

This game is gonna be great!

August 21, 1983

More good ideas:

You fight the villain *in* the dungeon. You kick the door open, and he's hiding behind it. For the first time in the game, you have to turn around and fight an enemy who attacks you from the left. The princess climbs up on the bench and roots for you.

New character: A guard captain who dispatches the guards. You see them all lined up, so you know how many are left. Thus, you need no radar screen. At the end, you fight the guard captain himself. I'll give him a different helmet. If I had more memory, I'd make him fat.

George Newlin brought over a Japanese billion-dollar-bigwig friend to see the program. He'd seen it yesterday and it blew him away. I can't wait for it to be finished so I don't have to keep apologizing for it. August 22, 1983

I'm reasonably pleased with the way it's turning out. It's like that old MUSE game, *Tank War*. You just had to shoot and shoot, frantically trying to get the other guy's damage up to 99. That's how this will play, I think. Your strength will need to replenish fairly quickly, and the blows have to do relatively little damage, so that to win you really need a good streak, and there'll be a lot of back-and-forth close calls for both sides.

I'm so excited! Dad keeps bringing up the financial/business aspect of it, which freaks me out — partly because I'm scared I'll get screwed again like on *Asteroids*, and partly because it awes me to contemplate how much I *could* make. "You could become a millionaire on this," he remarked at dinner. My face instantly puckered up as if I'd just sucked a lemon. Thinking about things like this just destroys me. I wish I could work on the game like I did at the beginning — innocently, happily, without this stomach-churning anxiety and rush to *get it finished, make it good, get it out, get rich off it.* And then come out of my blissful trance just in time to receive a million dollars on a platter.

Unfortunately, hyperspace exists only in Asteroids.

As I get closer to finishing the game, the pressure gets more urgent, the fears more frightening. What if the disks get wiped out? What if someone else beats me to it? What if I get drafted?

Relax, J. Relax.

(I can't! Not with the thought that I might become a millionaire off this planted in my brain!)

Oh, well. I guess that's the agony and the ecstasy of capitalism. The guards are now blue, by the way.

Part 4: Finishing

```
1000 * "GAME"
1010 CLS .EQ $A00
1020 DRAW .EQ $A18
1030 RDRAW .EQ $B8D
1040 RMDRAW .EQ $898
1050 MDRAW .EQ $BA3
1060 WIPE .EQ $D00
1070 XIPE .EQ $D35
1080 MGIRL .EQ $DF2
1090 DGIRL
           .EQ $E4E
1100 DISPP
           .EQ $E86
1110 DISPE .EQ $EB2
1120 ADJP .EQ $F03
1130 ADJE .EQ $F14
1140 DECP
          .EQ $F25
1150 DECE .EQ $F47
1160 RECOVR .EQ $F71
1170 EBIRD .EQ $1840
1180 DBIRD .EQ $1886
1190 STAR .EQ $1020
1200 SLUDE . EQ $1D90
1210 ELUDE .EQ $1E03
1220 EVIL .EQ $1E20
1230 HERO .EQ $1E35
1240 MAJOR .EQ $1E42
1250 DEATH .EQ $1E48
1260 VICT .EQ $1E4E
1270 WIN .EQ $1E5B
1280 CHECK .EQ $1346
1290 VSHAD . EQ $12AF
1300 MOVE .EQ $64BA
1310 GETHT .EQ $6311
1320 RVERT .EQ $6339
1330 PLAYER .EQ $6341
1340 BUTT .EQ $74C0
1350 CTRL .EQ $6600
```

1360 ERASEM . EQ \$6820

August 23, 1983

I'm losing track of time. Was it really only yesterday that I had the idea of the villain hiding behind the door? Last night, as I was falling asleep, I decided to ditch it – and it seemed like such a wellestablished, long-standing idea.

Did more work on the fighting. Put in the energy bars. There's about two days' work left, which is what I had budgeted.

It really feels icky being under pressure. When I think about movies, the film society, Yale, friends, girls, I immediately realize that to enjoy them, I'll have to give up *Karateka*, even if only temporarily. "Working mode" really does have a destructive effect when it's prolonged for more than a week or two. It dulls the world; it makes anything but the thing I'm working on lose its power to reinforce.

Well, the hell with it. Starting August 30, I'll have to pack, move

into new rooms, reunite with all my friends, run a film society, and choose my courses for the whole term. I'll have to take a vacation from *Karateka* for at least four days.

One day at a time. Savor the changeover, J., savor it; you only get four years at Yale, and you've already done two.

August 24, 1983

What might have been a productive *Karateka* day was slaughtered in two blows. First, a visit from Tim Klinger in the afternoon, during which I showed him *Karateka*, *Alphabet*, *Deathbounce*, and even *Asteroids*, going back to the days of DOS 3.2 and finally cassette tape: "This is your life, Jordan Mechner."

Second, an Ultimate game at Gedney Park to celebrate Matt Lunetta's birthday, which eventually turned into playing pinball at Brad Kalish's house, and topped off the night at the Midnight Diner.

Ah well. I'm wrapping up my Chappaqua social life, such as it is, for the summer. And possibly for all summers.

August 25, 1983

A major change in *Karateka*. It's now pure joystick control, with the keyboard (space bar) used only to exit fighting mode. How did I do it? Simple: Buttons to punch and kick, left and right to walk, and – the inspiration – up and down to block. I'm very pleased. This is only possible because I've been systematically simplifying the game. Originally (remember?) there was going to be both front and side kicks, reverse punch and backfist. Then I got it down to one kick,

one punch. Then I took out the ability to turn. Now it fits on one two-button, self-centering joystick. I've been playing it all day. It's great! I'm so psyched! Broderbund will be happy.

I plan to make yet one more simplification: Get rid of the backfist. It's confusing — most people don't even realize it's there — and it doesn't really look that good. I'll replace it with a feebler (when moving) reverse punch; and I think I'll put in alternating-fist multiple punches. The punch needs to be made more attractive anyway; the kick has farther range, knocks the guy back a step, low kicks can't be blocked, and you can multiple-kick.

This just feels right. It's all moving in the direction of simplicity, ease of control, clarity. Originally I'd wanted a whole range of techniques, a complex damage system. Now it's just punch, kick, and block, and when you hit the guy, you really *hit* him. It looks better than I'd dreamed, especially with the sound effects: BAM! BAM! It really looks like those guys are creaming each other.

The game is at a point now where everything is in (I mean, everything to do with fighting). Now I should take the time to clean it up, make the code good, get out the bugs, make the fighting perfect, before I go on to the storyline and scenery.

Definite policy decision here. No cliff, no 3D gate, no guards running up, no Evil, until the two guys who now exist – you and Guard One – can bash each other's brains out to my satisfaction.

Because, basically, this is the game. Everything else is just trappings.

August 29, 1983

I'm beginning to realize that the main reason I don't want anybody to read this journal is that the writing is so bad. I write so quickly and messily, with so little time for consideration and formulation, I'm afraid someone will come across a glib, sloppily written paragraph that doesn't reflect my true thoughts, and think "What an asshole."

IMPROVED-QUALITY JOURNAL STARTS HERE.

Oh, the hell with it. Who cares.

August 30, 1983

Packed. The room is now bare except for a great pile of cardboard boxes in the middle of the floor.

All in all, it was a pretty major summer. A turning point in my life. "Puberty is OVER! Onwards and upwards!"

SEPTEMBER 2, 1983

[New Haven] Got the room set up. Thank God. Now I can go on living.

Tomorrow morning I'll start on Karateka.

It needs a new title. People think it's "Caretaker." True, if it becomes a huge hit, a distinctive name could be an asset. (There are lots of *Star Blasters* and *Space Aliens* and *Galactic Attacks*, but only one *ASTEROIDS*.) But shouldn't I come up with something that's easier to pronounce, like *SHOGUN* or *NINJA*?

I just read the latest *Softline*. Man, am I psyched. I want fame and fortune. I want Recognition, Acclaim, Money, Love.

Oh well. At least I've got a few more days of rest and relaxation before I have to start worrying about classes.

September 3, 1983

Put in five hours on *Karateka* today. Mt. Fuji in the background. It looks good. Very good. When the fence scrolls over it, it enhances the illusion of depth immeasurably.

I decided to ditch the perspective scrolling of the gate. It would need an AND-mask for each gate position, and Fuji would have to be redrawn each cycle. Too slow. Instead, I'll just cut to the next screen when your man passes through the gate.

Did some Blue Book browsing, during which I decided to major in Psych (as opposed to "CS and Psych").

SEPTEMBER 4, 1983

Last night I showed *Karateka* to Ruth (the priestess from Seattle) and Katherine (who's going to France). They were impressed. Katherine and Katie took me to task for my sexism: "Couldn't you be rescuing your *son?*"

Drew up a schedule. I should finish by October 6.

SEPTEMBER 6, 1983

At dinner Katie and Julia both wished there were a movie tonight. I suggested showing *Raiders* in the room. Ben and I took turns running the 16mm projector while I handled the sound system (my stereo). It was loads of fun. What a great movie!

Not perfect, though. The climax is the truck chase. Then Indy has to get the Ark back *again*, only this time it's not quite as difficult. And the unleashing-the-power-of-God sequence is too literal. ("Oh. So that's the Power of God. Hm.")

I guess big budgets and advanced SFX technology are a kind of curse. Audiences nowadays would feel cheated if they weren't shown the monster, the Beast, the Power, the Force. Remember the old days when monsters used to be scary, not gory? Seeing it really does ruin it.

September 7, 1983

[From my draft statement for declaration of major]

"I am extremely interested in how people respond to drama, not just theater but also film, fiction, television, opera, even video games. I hope eventually to discover some general, objectively testable principles that might enable dramatists to construct 'better' (more involving, more affecting) dramas. This endeavor appeals to me not only as a psychology student and an addicted audience member, but as a would-be filmmaker, writer of fiction, and designer of video games."



Saw Citizen Kane for the first time in my adult life. It wiped me out.

A couple of moments – when Kane opens the envelope from Leland and slowly unfolds the Statement of Principles, and when Rosebud goes up in flames – brought a lump to my throat.

I guess I'm particularly susceptible at this stage of my life, because I could imagine myself going the way of Charles Foster Kane. The first time I saw the movie, I was twelve or thirteen and it was lost on me. I was too young to understand.

Classes started today.

I'm not working on *Karateka*. This is dangerous. At this moment, computer programming seems boring compared to a lot of other things. If I don't jump back in soon, I may not want to.

SEPTEMBER 8, 1983

Lit 378 (Film Studies) is a yes.

CS 470 (Natural Image Processing) is a no. Five minutes into the hour, I remembered what CS courses are like. The sheer folly of deliberately choosing to spend my nights in a terminal room, working on boring computer programs for which I'm not getting paid... instead of here in my cozy room, working on fun computer programs that might actually make me some money.

Psych 121 (Sleep and Dreams) is a yes, on the strength of its subject matter alone.

Art 113 too.

I'm psyched for *Rear Window* at the NY Film Festival on Sept. 30. We'll make a field trip of it. Hope we can get tickets.

September 12, 1983

Browsed for an hour in Bookworld after dinner, bringing myself up to date on the latest developments in various technologies, and the latest opinions of various movie critics.

An interview with George Miller in *Starlog* – "Anyone who wants to understand *Star Wars* should read *The Hero With A Thousand Faces*" – prompted me to buy the book. It's hard reading; the guy [Joseph Campbell] is so erudite, his prose so ornate, his footnotes frequent and long. But it's amazing stuff. I like it, I like it.

SEPTEMBER 18, 1983

[Reflections after seeing Dumbo]

I guess the secret is to have big, powerful, resonant *themes* underlying small, everyday, believable *actions*.

If the themes are missing, you get a trivial, boring story. But if the actions are as grandiose as the themes, you get a myth, which is harder for contemporary audiences to identify with. What you need to do is translate the myth into modern, small-scale terms.

Dinner tomorrow with George Hickenlooper.

SEPTEMBER 22, 1983

Classes are going OK. I'm already starting to fall a little behind, but that's to be expected. It won't be as bad as last year. I'm shooting for B's.

From now on, I'll have to pour all my spare time into *Karateka*. The stakes are too high to waste this.

I have a feeling this year is a turning point. If I stay in my rut another year, I'll never get out of it.

Be At Cause. Be powerful, dangerous. Take responsibility for your actions. © 1972 est

Open up to people. Be generous. Care.

SEPTEMBER 25, 1983

Put in three "game-design" hours on *Karateka*. Not nearly the 20 hours a week I'll have to average to finish in mid-October according to schedule.

September 28, 1983

Tried to work on *Karateka*, but I just was not in the mood. This is not good.

Should I force myself to just sit in front of the computer until it's finished? I might end up hating it. But if I wait until the "mood" strikes me, I may never get back to it at all.

(Sigh.) Projects like this should be undertaken only in leisure, i.e., summer. Remember at the end of the summer, *Karateka* was going to be my #1 priority? Instead, I've completely lost momentum. I'm at zero MPH. I have no clue where to start. The once-habitual behavior of booting up the program and getting to the current place now seems alien.

It's true I did quite a bit of dawdling this summer. I don't think it would be an exaggeration to say that I could have finished the program by summer's end if I'd kept my nose to the grindstone. But, be real: How long can I concentrate on one thing without diversions? Longer than most people, maybe. But not long enough.

As long as the game is unfinished, there's a shadow hanging over everything I do. I'm waiting for it to be done; I can't let go and live life fully until it's out of the way.

OCTOBER 1, 1983

Seven hours on Karateka. A start.

OCTOBER 2, 1983

What is my problem?

I've lived at home all my life.

I've never been responsible for anybody but myself.

I'm still on an allowance.

I haven't even bothered to get a driving license – the primary symbol of maturity in American society.

I've been dawdling at the threshold of adulthood for *two years*, afraid to take that final step.

My concerns are the concerns of a kid. I'm completely immersed in myself. C'mon, Mechner, grow up!

Finish *Karateka*. Learn to drive. Get a girlfriend. That would be a start.

OCTOBER 10, 1983

Congratulations! I put in eight hours on *Karateka* today – and I even went to Art, the Lit screening, and the Law School meeting.

On a scale of 0-60, I'm at 35 mph.

Tomorrow I'll put in another full day. My goal is to get the terrain down, including guards being sent out, and the map at the top. There's trickiness to that.

After that I'll *finally* fix the fighting routines, like I've been putting off doing for a month and a half. Then I'll add the palace entrance, hallway, and dungeon; then the villain's shapes; then the animated interlude (2 days). Call it 7 more full days to finish.

I'm not stopping now. I don't have anything powerful enough to interfere with *Karateka* until – Oops! Next Wednesday I have two midterms and a paper due. Well, *Karateka* will lose some momentum, but hopefully not much.

OCTOBER 11, 1983

Put in only two hours today. Cut only Social Psych; went to Psych and Lit. Saw *Major Barbara* at the Rep.

OCTOBER 13, 1983

Three hours on Karateka.

Got an A on my Lit paper about Keaton's Cops.

OCTOBER 15, 1983

Only three hours on *Karateka*, but fruitful ones; the fighting routines basically work now. I'm starting to feel good about the program for the first time since summer.

By the end of tomorrow I expect to have everything working correctly except the villain, the princess, and the cliff. (OK, the palace entrance, hallway, and dungeon background artwork may take a bit longer.)

OCTOBER 16, 1983

Five hours on Karateka.

OCTOBER 17, 1983

Slept late, missed Art. I'm so ashamed.

I spent the whole day on *Karateka* (yay). Seven hours. It's shaping up. It might well be finished by the end of next week.

What will I do then?

- Finish Blue Harvest?
- Write another novel?
- Make a film (Assassin?) with Ben?
- Do a new Compu-Teach project?
- Buy video equipment and fool around with the computer?
- Start another game, a worthy successor to Karateka?
- Do a comic strip?
- Really get into drawing?
- Make a film with George?

OCTOBER 18, 1983

On the way to Psych this morning, Ward Wheeler asked me what I was going to do with my life. I gave him my stock answer: "Write video games, probably."

"Not much of a future in that, is there?" he asked.

He was referring, of course, to the recent collapse of the coin-op market. I didn't have time to explain that I was interested not in video games *per se* but in their successors.

OCTOBER 19, 1983

Seven hours. I put in the cliff. Obviously, I've grossly underestimated how much time things take.

By Sunday night (after *Seven Samurai*—appropriately), I should have everything working but the figure animation. The remaining work should take no more than two weeks:

- You fall off cliff (and climb up)
- Villain exists, fights with you in hallway
- Princess exists, embraces you in dungeon
- Dungeon cuts including villain, princess, guard, prologue and game-over
- Fuji erupting, if possible
- Music
- Attract mode, title

I'm pleased with how it's shaping up, and I'm glad to be in "working mode" again (or as close an approximation of it as Yale life permits)... but I'm starting to feel squeezed. I haven't done any significant coursework, or any other work, since Green Monday. Film society, classes, movies, Joseph Campbell – everything else is getting pushed aside.

The sooner I get this game finished, the better, even though I am enjoying it. At \$13K a year tuition, Yale deserves more than my peripheral attention. My next project should be something that requires less than total immersion. No more mega-projects during the school year. It's too much of a sacrifice.

OCTOBER 20, 1983

Went to Compu-Teach to drop off the changes I'd made to *Alphabet* last night. It took half an hour to get it working on the IIe.

Jim Galambos wanted me to change the "Sunset" music from Taps to something happier. I resisted. He said, with a fixed smile: "What do I have to do to make you see it my way? Suppose I offered you \$100 to make the change?"

I instantly said: "If you feel that strongly about it, I'll be glad to change it." Of course, I didn't take the hundred dollars. That would have been tacky. Maybe even unethical.

Put in two hours on *Karateka*. Tuesdays and Thursdays are always hard.

Spent a few hours playing with Apple-Talker. Should the villain go "Hahahaha!" when you lose? Perhaps improved impact sounds? Ki-yis?

OCTOBER 21, 1983

Adrian called. He waxed enthusiastic about *Karateka*, urged me to make it as good as possible.

OCTOBER 22, 1983

Five hours on *Karateka*. It's looking better. Most of the bugs are out. I'm less panicked now than I was yesterday. I can see finishing it in two weeks.

I'm starting to think about the selling of it. I'll consult with Dad.

OCTOBER 23, 1983

When the movie ended I walked straight out. I didn't want to talk to anyone for fear of losing the mood. I wandered around in the rain until I was wet enough, and recovered enough, to go back to the room.

Seven Samurai is my favorite film of all time.

OCTOBER 25, 1983

Today I received *Disney Animation: The Illusion of Life*. I'd ordered it a month ago for a 30-day trial. I think I'll keep it, even for \$60.

October 26, 1983

What did I do today? Not much. Went to Art class, wrote a letter to Doug Carlston about *Karateka*, did some Psych 121 readings.

Today we invaded Grenada.

October 27, 1983

Been reading the Disney book. Walt Disney is a god. The guys who worked with him are amazing. I want to see every movie he ever made a dozen times, as soon as possible.

Remembering great scenes – the mad-mother reunion scene in *Dumbo*, the spaghetti scene in *Lady and the Tramp* – I'm awed and inspired by what went into them. I realize how difficult and rare it is to strike just that right balance where everything – story, characters, animation, acting, music – interacts to make you believe it, feel it. Can I do that on the computer? In prose? I can't help vaguely dreaming about doing for video games what Walt Disney did for animation.

But there's only one Walt Disney.

October 28, 1983

Did five hours of unspectacular work on Karateka.

NOVEMBER 1, 1983

I'm in a *Karateka* slump. At this rate I won't finish before Christmas. I would prefer not to lug The System home for Thanksgiving if at all possible – but it looks like I may be doing just that.

I think for the past few days, my creative juices have been sapped by enthusiasm for (a) Desmond Morris, (b) Walt Disney, (c) films and filmmaking, (d) writing and the theory of narrative. Under other circumstances there'd be nothing wrong with this, but I need all my energy and enthusiasm for the project at hand: *Karateka*.

I need the intellectual equivalent of a vow of celibacy. Or at least monogamy.

NOVEMBER 2, 1983

At last — my excitement is back! While browsing at Newsstand #3 waiting for it to be time to go see *Ugetsu* at Berkeley, I encountered an article in *Home Electronics* called "Five Millionaires (All Under 30) and How They Got There." One of them was Dan Gorlin.

He wrote *Choplifter* in six months, during which his principal worry was finishing it. (Sound familiar?) He then submitted it to Broderbund. They were so enthusiastic, they flew him out to California to make changes for \$1000 a week. The rest is history.

Now, for the first time since summer, I'm more excited about Karateka

than about anything else... even writing a best-selling novel or directing a block-busting feature film. *This* is what I should be doing.

- 1. Clean up all the garbage, incomplete erasures, etc. (By Friday.)
- 2. Make the door to the dungeon kick open. Lose strength if you punch it or walk into it. (By Saturday.)
- 3. Draw and put in the shapes for the villain. Make him fight. (By Monday.)
- 4. Get the fighting routines working perfectly. Guards must not retreat past their "honor points." (By Friday.)

When this is done, the game will be playable and lack only decorative animation and sound effects.

OK, that's enough planning for now.

NOVEMBER 4, 1983

Ben Kingsley gave a wonderful talk at the Drama School this afternoon. Ben, George and I sat in the front row at the left.

Kingsley sat up on a table in front of the black curtain, wearing a sweater and loafers. He didn't look a whole lot like either *Gandhi* or Robert. He was forty, fit, balding, with dark hair. He looked like a squash player.

He held our rapt attention for an hour. We loved him. You could just feel the warmth flowing out from the audience. He was sincere, charming, amusing, interesting. He's a great guy.

How is it possible, in the course of an hour, to develop such affection

and regard for a complete stranger?

On his way out, Ben Kingsley shook my hand. George's too.

NOVEMBER 5, 1983

Read Stephen King's *Firestarter* this afternoon, having bought it last night. I wish I'd spent the day working on *Karateka*. I really am a self-destructive bastard. Tomorrow morning I'll leap out of bed and plunge into it.

(Dreaming)

Money.

Financial independence.

A place in the *Softalk* Top Thirty.

Getting interviewed by computer magazines.

It's hard for me to imagine such significant changes in my life. Maybe I'm procrastinating partly because I'm afraid to disturb the stasis I've been enjoying for two years now. Which is stupid.

So get to work!

(But not tonight. I'm really very tired.)

This fantasy is different from my other fantasies, in that it may very well come true just the way I've said. There's no reason why not.

This could be the time it doesn't fizzle. The time I don't *sabotage* myself. The time I finally gather my courage (for that's what's needed, when you strip away the excuses), burst across the line, break the tape, enter a bold new era.

Or I could blow it... like I did with *Asteroids*, with Rubik's Cube, with *Deathbounce*.

Not a chance.

Not. A. Chance.

When I raise my glass on New Year's eight weeks from now, I'll look back on 1983 and say: This was the year I made the jump.

NOVEMBER 7, 1983

Ten hours on *Karateka* today. My first ten-hour day since summer. It helps that I'm sick, and therefore room-bound.

This afternoon I was stricken by the sudden fear that disk K13 might be damaged or erased. Every time I accessed it I had visions of the vinyl being scratched, dust ground into the grooves; every time I took it out of its jacket I pictured myself dropping it face down into the lint and dust on the floor. This kind of irrational panic is linked to deep work mode.

I started thinking about the packaging and title page. I decided to stick with *KARATEKA* as a title; Ben will find out the Japanese characters for me.

At one point I went down to the piano in the TV room to pick out the theme from *Seven Samurai*, which I'll use to begin the game. All of these are signs that, at long last, I'm in Working Mode again.

NOVEMBER 9, 1983

Don Normark arrived this morning. Ben and I took him on a walking tour of Yale. I saw things I'd never seen before. It was a gorgeous autumn day. He took a lot of photos.

NOVEMBER 13, 1983

This morning I put on Ben's oversized Army jacket, loaded it up with buttons ("Save the Seals," "Question Authority," "No Nukes," etc.) and walked to the El Dorado to play a bit part in George Hickenlooper's film *Newark Needs Insurance*. I hope I did OK.

Seeing George direct, my admiration for him has gone up a notch.

NOVEMBER 18, 1983

[Chappaqua] It's good to be home. Dad was full of comments and suggestions for Karateka, which gave me a needed boost.

To my chagrin, I discovered this morning that I'd left some important *Karateka* papers in New Haven, so the amount of work I'll be able to do this vacation will be limited. This depressed me for a while.

NOVEMBER 29, 1983

[New Haven] Saw Rear Window a second time. I'll write my Lit

paper about it. It's a film critic's dream: rife with meaningful stuff just dying to be analyzed to death.

DECEMBER 1, 1983

I've got to write that Social Psych paper. If I don't I'll get an F. *No-body* gets F's. Nobody.

DECEMBER 3, 1983

I dropped by A&A today to visit George. Sure enough, there he was, editing his film. He showed me the rushes from the day I was there. I'd been afraid my acting was terrible, but to my surprise I was pretty good. I hope I stay in the film. George assures me I will. I especially hope he keeps my star moment, when I push through the crowd and jar the camera.

DECEMBER 8, 1983

Waited after Social Psych class to talk to Abelson. I was miserable, running over what I could possibly say to him. I stood there for endless minutes while he had pleasant chats with other students. Finally I took the plunge, and confessed I hadn't handed in either of the papers.

"Oh, so *you're* the mysterious Mr. Minchner. How do you pronounce it?"

It was painful, it was embarrassing, I felt bad – but when it was over, when we'd parted (with the understanding that if I hand in one of the two papers and do reasonably well on the exam, he'll pass me),

a huge bubble of exhilaration welled up inside me. At least now I know where I stand, and I don't have to dread it any more.

Of course, it's not over yet. I still have to take the exam.

DECEMBER 15, 1983

Surprisingly, I aced the Social Psych final this morning. I'm sure I can't have missed more than one or two questions.

Had dinner with George at Stiles and borrowed his book *The Movie Brats*, about Lucas, Spielberg, etc. It's excellent. I think I'll buy it.

The book was simultaneously inspiring and discouraging. It gave me heroes, but made what they did seem awfully hard, not to mention a little lucky. Do I have what it takes?

DECEMBER 16, 1983

Been reading Wells Root's Writing the Script.

I've been thinking a lot lately about careers – Novelist? Director? Screenwriter? – and realizing how horrible it would feel to be one of hundreds of people all competing for the same thing.

I *must* finish *Karateka* this Christmas break. It is the #1 priority in my life.

"You might make a million dollars off this thing," Dad said this summer. *A million dollars!* People struggle to make \$20,000 a year. If I had a million dollars I'd never have to work again. How can I be

so blasé as to put off finishing the game this long, just to earn grades in classes? It's insane.

DECEMBER 19, 1983

"I want to be a crashing, crazy success." -Jordan

Ben is confident that I'll achieve my goal. He says I have the right profile. Most people, he says, never even think in those terms; they think in terms of getting jobs and being promoted. That made me feel good. Especially when he pointed out that at nineteen, George Lucas wanted to be a race-car driver.

DECEMBER 24, 1983

[Chappaqua] I got in an hour or two on Karateka this morning. I'm still not in "working mode"; it's not that I feel impelled to work on it, drawn to work on it, it's just that not working on it makes me feel guilty.

Then Grandma and Grandpa arrived, and that ended work for the day.

DECEMBER 25, 1983

Five hours on Karateka. Gathering momentum, slowly.

Had a long talk with Dad about psychology and the future.

DECEMBER 27, 1983

Wasted two hours this morning videotaping me running. I con-

cluded I'd better film it. (And the princess running, embracing, and fainting, and the villain falling.)

Anyway, I'm rolling now. I've lined up a color TV and a Super 8 camera; now all I need is a bulb for the Moviola. I really should have brought the VersaWriter from school.

DECEMBER 28, 1983

Seven hours of work. Things are looking good. I can see myself mailing this thing off to Broderbund two weeks from now.

Sarah will bring by her TV tomorrow morning. I should do the filming as soon as possible, like tomorrow or Friday, so the film can be developed before I run out of other things to do.

DECEMBER 30, 1983

Worked for seven hours, mostly on the villain's fighting. I quit early, went out to the C.C. and then to John's Best and the Bazaar parking lot to shatter a Frisbee in the cold with Adam, Mo, Ayman, Brad K, Brad R, Jens and Alan.

DECEMBER 31, 1983

[New Year's Eve] Dad told the story of how his father kicked him out of the house when he decided not to become a doctor. Mom told how she met and married Dad. Then we all spun fantasies about our future lives.

Dad: "Make the companies I've already started succeed, so I can

spend the rest of my life on more important things, like writing books."

David: "Graduate from high school, go to a college like Yale or Stanford or something, open a computer store, become a millionaire, get married, have four kids."

Emily: "Flunk out of high school so I don't have to worry about being rejected by colleges."

Me: "Finish the karate game, make a million dollars, meet a nice girl, go to Hollywood to make a movie, make another million, forge a new art form and become the Walt Disney of the 21st century."

JANUARY 1, 1984

Ten hours on *Karateka*, most of it designing (with advice from the whole family) a new antechamber. It's a great improvement.

Goal for tomorrow: All backgrounds finished: hall, dungeon, palace and gate.

Adam came over with Jill Strothman and a copy of *Hard Hat Mack*. We played it for a couple of hours. It's a reasonably well done *Donkey Kong*-type game. It inspires me to write a really great *Indiana Jones* game – but first things first.

What if I really do make a million dollars?

What if my disks crash and I lose it all?

JANUARY 2, 1984

Eleven hours. The new hall and dungeon are in.

The real accomplishment was on the game design front. Dad and I realized the game lacks two important elements: (1) conflict of interest and (2) vigilance.

So, we came up with a solution: The villain's pet vulture, which attacks you every now and then when you're between guards. You need to be in fighting stance when it comes onscreen, and punch or kick to the correct height to repel its attack. If you're in running stance, you'll get clobbered and lose a lot of hit points.

So why not always stay in fighting stance? Tradeoff: Running is faster. This addition, I think, will improve the game immeasurably. It makes it a real game.

Also, the bird will come back and fight you to the death right before you fight the villain. It'll serve as the reporter of guard-deaths to the villain, too. I'll give it a digitized caw.

Dad and I spent the last four hours or so on the music: *Seven Samurai* for the hero, Wagner for the villain. Dad's contribution to this game has been major. It's gonna be great.

JANUARY 3, 1984

Logged seven hours today, but looking back, I accomplished virtually nothing. I also went to Fox & Sutherland to check out the camera and buy film (*mirabile dictu*, it worked!) and to Software City to show Frank *Deathbounce*.

What I need is a couple of solid, full, efficient days (how's tomorrow and Thursday sound?) to iron out all the major bugs and eyesores:

- Get the hit handling perfecto (5 hours)
- Get the villain and player animations perfecto, including stencils (8 hours)
- Get the backgrounds scrolling at 6 bpc for running (8 hours)
- Once this icky stuff is accomplished, I can go on with a lighter heart to:
- Change the walk to a run (Spectacular!)
- Fix various and sundry minor bugs (Satisfying!)
- Fine-tune the guards' fighting routines (Pleasant!)
- Put in the bird (Creative!)
- Work on the interlude animations (Enjoyable!)

But first things first.

For the record:

This does not feel good.

There is a phase after the beginning (when there's nothing but a blank disk and a head full of ideas, when the amount of work left and the time left to do it both seem infinite) and before the end (when the thing is basically finished and it's just a matter of fine-tuning and fiddling). It's called the middle.

I'm there.

The amount of work still seems infinite, but suddenly the time is finite.

How will I ever finish this game once I'm back at school, with classes, the film society... Oh, I don't even want to think about it.

JANUARY 4, 1984

Slacked off today even more than yesterday. *Hard Hat Mack's* bleeps and buzzes became a requiem. I felt miserable, just awful.

Back to work I go.

JANUARY 7, 1984

Shot the film this morning with Dad and Emily.

JANUARY 8, 1984

In a brainstorming session with Dad I got many good ideas. The most important is to (1) Add footstep sounds for you and the guards, and (2) Keep crosscutting between the two of you. If you stop running, it cuts back to the guard running toward you. Tension!

JANUARY 10, 1984

I think I can get everything done except the film, the title page, demo mode, and other light work that I can do up at school. I'll send a letter to Broderbund tomorrow.

It's still snowing. The first big snowfall of the winter. Ben, Emily, David and I went outside and played in the snow in the dark. The only light came from the carport and it was silent and misty in the forest. It felt like a movie.

JANUARY 11, 1984

Today's major accomplishment was the crosscutting. Tomorrow it'll be the buzzard. Still plenty of minor bugs and graphics patches to fill the day.

I'm spending virtually all my time in front of the computer, but somehow I'm not amazing myself with how much I'm getting done. Part of it, I guess, is that I'm working in a family-room-full of David, Emily, Linda, Ben, and occasionally Sarah – not an environment maximally conducive to concentrating.

I can't let this project slip away again, wait until spring, until summer. I must work on it every day when I'm up at school, even if only for an hour.

JANUARY 12, 1984

A so-so workday, interrupted by a fruitless trip to Mt. Kisco to seek a new joystick. The old TG is acting up.

Dad came home this evening; I showed him what I'd done. I told him my worries about the game not having enough skill. He had the good idea of visual flashes to indicate hits. I came up with comic-book-like stars, red for you, blue for the guards, at the appropriate height.

Jabs won't merit stars, only punches and kicks. I'll implement the idea tomorrow morning.

I've been getting used to the idea that this program will be a hectokilodollar blockbuster. Hope I'm not disappointed. Tomorrow I'll send Broderbund a letter.

JANUARY 13, 1984

Today I put in the stars, and horns for the guards. They improve the game enormously. I also (on David's suggestion) eliminated the map altogether. Another huge improvement, although it was sad to see thirty hours of programming excised in three minutes. Somehow it doesn't seem like those three things should have taken me all day. Oh well. Tomorrow I'll put in the vulture – and leave the debugging for school.

JANUARY 14, 1984

Worked on the eagle, mostly. I'll put in a few hours tomorrow morning before I pack up.

JANUARY 15, 1984

[New Haven] It's good to be back. Ben and I are frantically flipping through the Blue Book. I'll go to Leonhard's Russian History course tomorrow morning.

This morning Dad and I discussed the fighting routines, incorporating ideas from the motor control book Dad is reading. I had the idea of having the guards move at half speed. It's too early to tell, but I think it's a breakthrough idea. It just may become a real game.

It's amazing how much the game has improved in the last week. This is the phase when it's tempting to just wrap it up, but it's also the phase that makes the different between an okay product and a

really outstanding one.

Maybe what makes great artists — composers, painters, writers, filmmakers — different from competent ones isn't so much raw ability or talent (although they help) as the willpower to continue refining a design until it's really perfect. I'm not saying I'm a genius or anything, but this is turning out to be a pretty damn great game — and I'm not a great artist, or a brilliant programmer, or a seasoned filmmaker. I'm just competent at all the various tasks that go into this.

So why is this game so good? Because the conception is so high; because I believed I could do it, because I bring together all the areas of competence required for an integrative discipline like game design – and because I've been working at it for nearly a year now.

This is bragging.

Anyway, Dad deserves a lot of credit. It wouldn't be nearly as good without him. A lot of the best ideas came out of conversations with him, and he's kind of an inspiration in his enthusiasm and optimism and high expectations.

I'm still an apprentice in many ways. But I can see I'm getting to be the kind of person that could accomplish great things. I have the obsessiveness, the optimism, the self-confidence. At least, I'm working on it.

JANUARY 16, 1984

Spent a good part of the afternoon putting the film society in order.

Got in an hour on *Karateka*. It did wonders. I think an hour a day and five on weekends can keep me out of the abyss.

Saw *Vertigo*. It blew me away. It wasn't as perfect as *Rear Window*, but it had an emotional depth unlike anything I've seen in Hitchcock before – and I've seen nearly all his films. I want to see it again.

JANUARY 18, 1984

Two hours on Karateka. I've pretty much decided to call it Black Belt.

JANUARY 20, 1984

Dad called to ask if the film had arrived. I said no. He said "WHAT?!" so loud I jumped. He called Kurt Louda to confirm that it had indeed been sent; it had. I checked the P.O. box three times that afternoon. The third time it was... was it?... yes... YES! THE FILM!

Ripped open the envelope. Don't get your hopes up. It didn't necessarily come out. Unwound it right there in Yale station. Leader, leader... YES! IT CAME OUT!

Step Two: Borrowed a Moviola viewer from AV. They were very nice. Unfortunately, it only worked for half an hour. Enough for me to get the run, but I'll need to work out something else for the rest.

JANUARY 21, 1984

Worked most of the day on the running shapes, with the aid of the Moviola I borrowed from George H.

JANUARY 26, 1984

Crafton's class in the morning. He showed us the Film Study Center on Crown Street. I'm looking forward to spending many profitable hours there, in the screening room and crouched over a VHS tape desk with fast forward, slow motion, and freeze-frame.

Lunch at Branford with Kevin Burget, over which we talked about – what else? – films. In the evening Ben and I went to Stiles for the Filmmakers' Table.

In attendance: George, Jeff Kleeman (the little blond guy I first met in line to buy books at the Co-Op his freshman year, and have seen in the front row of about nine hundred movies since), Mike Saltzman, Ken Goldstein (our lovably loathsome projectionist), Doug Riblet, David Lee and Bob Simonds (Jennifer Beals's boyfriend), both of "University Pictures."

My conversation with David and Bob disturbed me somehow. It's hard to explain. It was a *business* conversation. We were sounding each other out. We laughed and grinned and joked, but it was on the surface. I was watching myself behave like a grownup, and it spooked me. I suddenly realized what Dad means when he says you never make friends again like the friends you make in your youth.

JANUARY 27, 1984

Visited CompuTeach at Bradley Street this afternoon. I told Steve and Jim I should be free to take on a new project in a few weeks. It looks like I'll be doing the Spanish *ABsCenes*.

Their operation is expanding. They've got a couple of real artists

working for them now. The new "Word Pieces" has some of the best art I've ever seen on an Apple. Of course it's just pictures, but impressive nonetheless. Inspired, I came straight back and put in two hours on *Karateka* before dinner.

I feel strange. Who am I turning into?

JANUARY 29, 1984

Five hours on *Karateka*. I'm overhauling all the figure shapes, especially the kick and run.

FEBRUARY 5, 1984

Five good hours. All I did was fix a bunch of bugs, but what a difference! Today I saw the crosscutting while running for the first time, and it gives the game a whole different feeling. It looks the way I'd imagined it. I'll work in the timing and the sound effects and it should look even better. Like a movie.

The big question is: How much memory will be left over for the eagle?

There are other things I'd like to do too. Kiyi, climb up cliff, fall down cliff, princess embrace, villain pointing. But will there be memory for any of that?

I've been toying with the idea of dropping the eagle – the running makes the game so much faster and visually richer, and the space so much smaller, that I could get away with it – but it would be

disappointing. (I can imagine Dad's reaction: "Oh no! The eagle is terrific! It'll make a hundred percent difference!")

The eagle is key. It's like the saucers in *Asteroids*.

But what if I just don't have enough memory?

Go to 64K? No. There are no 64K games.

I could make the bird smaller. Or not flap its wings. Or take off the bad guy's expensive shoulder pads for the fighting.

I'll squeeze it in somehow.

FEBRUARY 8, 1984

Ben and I had lunch with George at Stiles. He showed us his film-in-progress *Putting on Heirs*. Then I came back and put in an hour of programming.

FEBRUARY 10, 1984

Most games just have a static view – PacMan, *Asteroids, Space Invaders* – that they keep for the whole game. But cinematic techniques have been used as far back as *Lunar Lander* – that game had not only tracking to follow your LEM, but also a cut to a close-up when you start to land. There have been subjective-POV games like *Night Driver, Star Fire, Tail Gunner, Battlezone*. But nobody's really played up the cutting. *Karateka* is the first game to do cross-cutting.

In class today Leonhard discussed Andropov's death and what it means.

I hadn't even known about it; it wasn't in the paper this morning.

Showed the game to Larry Goon. He was impressed. It did me good; I feed on other people's enthusiasm. I'm psyched to do a lot of work tomorrow. The problem is memory.

FEBRUARY 17, 1984

Four hours on *Karateka*, refining the fighting routines. By the end of tomorrow they should (finally!) be perfect.

The old joystick arrived, refurbished with a new cable. Only eleven days. I'm impressed.

FEBRUARY 19, 1984

Three hours on Karateka.

Ninotchka.

Been reading Hitchcock/Truffaut. It's inspiring.

FEBRUARY 20, 1984

Read *Skywalking*. At first it was inspiring, but now I don't know any more if I want to be a "wild roaring success" (as Ben puts it). The Walt Disney/George Lucas American work ethic suddenly seems slightly alien.

All I know is, I've got to finish this computer game. Then we'll see what happens.

FEBRUARY 21, 1984

Today I read book about squash by Hashim Khan. I go in court with Katie, I remember what Hashim say: Keep eye on ball! Take big step! Go quick to T! I win five games in row. Maybe better I find new opponent.

March 1, 1984

Filmmakers' Table at Stiles. I met Amanda Silver, who's very beautiful and whom I liked right away. She asked: "What is success to you?"

Amanda: "You can always make money. What's important is to be happy."

Me: "Being happy is easy too. The secret of life is to become very, very good at something."

Amanda (turning and looking straight into my eyes): "Yes, that's right. Find something you really love and stick with it."

I wonder if she has a boyfriend? (Sigh.)

Went to Compu-Teach. Jim and Stephen showed me the packaged product of *ABsCenes*. Then they started putting pressure on me to sign a contract for Spanish *ABsCenes*. I begged off, telling them I still have a couple more weeks' work on my current project.

I decided not to sign anything until *Karateka* is finished. I have too much invested in it. \$5000 for a week's work is attractive, but it's not worth jeopardizing the fruits of a whole year's labor.

March 4, 1984

Two hours on *Karateka*, because I spent the whole day with Katie, watching the first reel of *Snow White* in Bill's room, then *Peter Pan* at the Art Gallery. I'm inspired. Disney is my major hero at the moment. George Lucas too, but Disney comes first.

MARCH 8, 1984

Dinner at Stiles with Bob, David, Amanda and another girl. George Hickenlooper does a really good Bob Simonds imitation.

The room is wonderfully hot and damp and it's snowing outside.

March 11, 1984

[Chappaqua] Accomplished quite a bit on Karateka in two or three hours. The bird is in now, and it's flapping its wings. Goal for tomorrow: attacking and hit checking.

March 15, 1984

7 hours. It's really almost finished. There just isn't that much left to do. I just have to keep plugging away at it.

Goal for tomorrow: Fix all the stencils and the remaining graphics bugs. After that, what is there?

- The princess (1 day)
- Climb up cliff (1/2 day)
- Fall off cliff (1/2 day)
- Embellish dungeon cuts (1/2 day)
- Fix remaining structural problems (1/2 day)

- Finish guards' fighting routines (1/2 day)
- Set graded difficulty (1/2 day)
- Demo mode, title page, etc. (The rest of spring break)

March 16, 1984

Sarah, Emily, David, and Karen are writing a book. It's a fantasy scifi adventure written in rotating first person, with each of them doing a different character.

David's stuff is terrific. I was amazed. It's some of the funniest stuff I've read in a long time. His character, "Kevin," is a tall, blond, blue-eyed guard captain who looks like a typical stolid hero on the outside; the other characters (notably Karen's tiresome princess) have no inkling of what he's really like or what's really going on in his head. It's hilarious. It's not just good considering David's age, it's really *good*.

MARCH 17, 1984

People kept coming over today. First Rob Popper and his mom. Then Adam. Then David's friends Alex and Colin. Alex returned later to trade programs; he gave me *Pinball Construction Set* and *One on One*, I gave him *ABsCenes* and *Deathbounce*.

Everyone was tremendously impressed with *Karateka*. I got heavy doses of adulation, especially (and most gratifyingly) from Alex. So, I'm psyched. And nervous.

Only seven days left.

Alex thinks I should call it Karateka. At the moment, I agree.

A dojo mode is still a possibility. (On the flip side of the disk, perhaps?) I'll hold off until I've sent the game to Broderbund. Same with the randomly-selected rotating title pages, demo mode, and scrolling-up prologue.

March 18, 1984

Put in about seven miserable hours, messing up one thing after another, before the clouds broke and — one by one — the messes I'd made cleared up. I fixed the graphics bugs (cliff, gate), and several severe mistakes in the fighting routines I hadn't even known were there. The fighting is much cleaner now, and so are the graphics.

After dinner I redid the climbing-up-the-cliff with six stages instead of three. I think it's worth the trouble. It's the very first animation in the game, and first impressions are important.

Idea for saving memory in a pinch: Take out the intermediate frames for the villain's death – or even just have him vanish in a blinding explosion.

March 19, 1984

Today I put in the princess, and the climbing-up-cliff. A pretty good day's work, actually.

Alex took *Deathbounce* to HGHS. He says everyone was playing it, all down the row of Apples. (Sigh) It's depressing. I should have sold it. I should *still* sell it.

March 20, 1984

12 hours.

What I did today:

- Printed out the whole program
- Villain dispatches bird
- Kiyi
- Sent a letter to Broderbund

Talked to Dad about how to market the program. I think I'll write a letter to Electronic Arts, too.

March 21, 1984

This afternoon, as the panic of time pressure set in, I decided not to make any more "improvements" until the game is finished. Things like better strength registers, sunset at the end, more visually exciting bird attacks, villain explosion, can all wait. From now on, I'll concentrate on only those things that would prevent me from sending it to a publisher: Bugs. Empty spaces. Graphics glitches. My motto from now on is: Most important things first.

Dad left this morning. He has many good ideas, but I don't have time for them now.

I used Garo's single *kiyi* for everything, including the bird – I just varied the pitch. It sounds quite good, especially the princess and the bird. And it only takes up 256 bytes!

March 22, 1984

It's approaching completion. Strange feeling. I remember it from

Deathbounce. I've grown accustomed, over the past year, to saying "I'll get around to that eventually" or "This'll do for now; I'll come back to it" – as if I had all the time in the world. Now it's time to make hard decisions that I'll have to live with. Is this staying or going? In or out? Am I done with this, can I go on to the next thing, or does it still need work?

It's a little scary, actually.

But I'm making the right decisions, I think. I like the game that's emerging from the cloud of stubs and bugs and placeholders. I have faith in it. Of course there are a million things I wish I could fix. But the main thing is, it's good.

Alex says there's a program called *Black Belt*. He hasn't seen it. He's going to get a copy to me tomorrow. I hope it sucks.

!POW!!!

YOU HAVE BEEN WHAKED!!!!!! MR. FUCKHEAD!

YOU ARE DEAD!.

CARE TO PLAY AGAIN, MR. FUCKHEAD??

Pipe dreams.

March 23, 1984

I'm a mess. My face is unshaven and greasy, my hair matted. Two weeks of CRT radiation and no exercise or sunlight can't be good.

But it was worth it.

The program is 99.99% finished. I just need to play-test it for a couple of hours, get the graded difficulty right, time the cross-cutting and bird attacks properly.

Then send it to Broderbund. Go back to school, take a week off, sign a contract to do Spanish *ABsCenes*.

The prologue had better be scrolling up the screen by three o'clock tomorrow, or my timetable will be screwed up.

March 25, 1984

[2 am] The prologue was scrolling up the screen by three o'clock this afternoon, and looking pretty damn good, if I may say so. By dinnertime I'd merged everything into one mammoth 129-sector file that, when you BRUN it, moves all its parts into their proper places and runs.

Now here I sit, waiting for GAME36 to reassemble.

So many little bugs! I'll never stomp them all out.

March 26, 1984

[New Haven] Went to Linguistics, jogged with Ben, flipped disc with Ward, Katie, and Dan. It was a gorgeous spring day. I made the instantaneous transition from winter to spring on the way out of New Haven station, my head clearing from an hour of deep sleep on the train.

I'm exhausted — both the good physical exhaustion that comes from outdoor exercise, and the kind that comes from getting only four hours of sleep.

Put in an hour on Karateka. It's looking better than it did last night.

March 27, 1984

Printed out and mailed the letter to Electronic Arts.

March 28, 1984

Went to Compu-Teach and showed *Karateka* to Jim. Everybody in the office came in to see it. They were most impressed.

Jim had some good suggestions:

- It should start out easier, to "hook" the player.
- There should be more reinforcement along the way (an aerial map, shrubs, a tree, whatever) to show that you're making progress.

Then we got down to brass tacks of working out contract terms for Spanish *ABsCenes*. The upshot: I get a \$2500 advance, plus an Apple IIe system with disk drive and color monitor, worth about \$2500. It's a good deal. (The system is now set up in my room.) I felt kind of guilty, or greedy, or something, for driving such a hard bargain.

It's been seven days since I sent Broderbund the letter. When I wrote them about *Deathbounce* two years ago, only six days elapsed between my query letter and Doug Carlston's phone call. What's up?

(Sigh) I had such hopes for 'Bounce. It was a good program. It was sheer folly to do nothing with it after Broderbund blew me off. Even now, I still could make some money off the game.

Crushed optimism, shattered hopes. Oh well. This time I'll strike gold.

March 31, 1984

I feel kind of drifting. I need a girlfriend. And a project to replace *Karateka*.

APRIL 3, 1984

Temperature 102°. Spent the whole day in bed. It hurts to swallow and I cough when I try to talk.

APRIL 6, 1984

Dad told me about the problems he's having with the Haimovsky venture. I asked him some questions. After he answered them he said: "Those were exactly the right questions to ask, by the way. You're getting to be a good businessman." I swelled with pride.

Called Broderbund. Talked to secretaries. Someone will get back to me.

APRIL 9, 1984

The Oscars are on. So far *The Right Stuff* has been cleaning up on the technical awards. I hope it wins Best Picture.

The show opened with a shot of Jennifer Beals being escorted in by Bob Simonds. That was weird.

APRIL 10, 1984

Bought Syd Field's *Screenplay* and Bill Goldman's *Adventures in the Screen Trade*. Ben and I analyzed *WarGames*, *Eye of the Needle*, and *The Third Man* and agreed on their division into three acts according to the Syd Field paradigm.

APRIL 16, 1984

Finished Spanish *ABsCenes* and took it over to CompuTeach. Jim wasn't there; his secretary took the program and handed me a check for \$750.

Spent about an hour with Robert playing a wonderful educational program called *Rocky's Boots* (terrible name) in which you build circuits to select certain objects from a set. It was inspiring.

APRIL 17, 1984

The first issue of the *Yale Film Quarterly* came out. It reminded me that there is a filmmaking community at Yale.

I definitely want my next project to be film-related. Video games have taken up enough of my time for now. I may go back to them; but you're only young once. It'll get harder to experiment as I get older. I want to give film a serious shot.

APRIL 19, 1984

Kevin gave his *Godfather* presentation in Crafton's class. We had lunch at SOM and he came over and played *Karateka* for about an hour.

Had dinner at Stiles with George, Mandy Silver, Bob Simonds, and Jennifer Beals. Filmmaking at Yale is a pretty chic business. My state of placid out-of-itness is threatening to dissolve.

I'm getting to be pretty good friends with George. I finally decided he's sincere. He's ridiculously humble and self-effacing; he mumbles with shifty downcast eyes, often interrupting himself to say things like "I don't know, maybe this is immodest" or "I hope I'm not offending you, but..." He's got a slobby style of his own, knows almost everybody, and everyone has heard of him. I admire his filmmaking behavior.

APRIL 24, 1984

I gave my *Third Man* presentation this morning. It went pretty well. Afterwards, I had lunch with Kevin in Branford and we helped George shoot an insert of Kevin's hand locking an office door. Then Kevin and I watched *Paths of Glory* at Insdorf's.

Kevin and George will be going west this summer to look for work in L.A. It'd be fun if I found myself in the Bay Area.

Kevin gave me his screenplay "You Name It" (the one about Macbeth). It's surprisingly good.

I didn't succeed in contacting either Broder Roy Freborg or Elec-

tronic Artist Stephanie Barrett. I'll try again tomorrow.

APRIL 26, 1984

Finally got in touch with Freborg. He said "Send the program."

Made the *ABsCenes* changes and delivered them to Jim. He offered me a summer job at \$2K/month (I assume he means \$2,000, not \$2,048). I'm considering it, but I hope something better will come along.

Tomorrow after Leonhard I'll take the train into New York and, hopefully, buy (1) a word processing program and (2) a stereorecording Walkman. If the word processor requires 80 columns, I just may pick up (3) a green monitor. I'm in a buying mood.

I've arranged to meet George Saturday morning at the Yale Club, where he and the Pips (the other three members of the Yale College Bowl-winning team, George Hickenlooper and the Pips") are staying.

APRIL 27, 1984

The computer show was a waste of \$7.50. I made the rounds of the midtown dealers: Computerland, Computer Factory, Computer City. The only word processor I got to look at was PFS: Write. I got such shabby treatment that I was steaming by the end of the day.

I guess I do look, dress and act like a wise-ass kid with no intention of buying. Still, it burns me up that they treat me that way. The only friendly salesman was a black guy named Kevin at Computer City, and he got squelched by his evil-looking boss with eyebrows that met in the middle.

Anyway, I'll go back to Computer Factory tomorrow and finish looking at PFS: Write, and maybe buy it. (Price: \$125.) On Sunday I'll pick up a green monitor and a Walkman at 47th Street Photo.

Saw *Splash* at the National 2 on Broadway and 44th. What a great movie! It's got some of the same magic as *E.T.* and *Lost Horizon*. I can't believe David Stenn is living with Daryl Hannah.

APRIL 30, 1984

I used PFS: Write to write a cover letter and instructions for *Karateka*. It's still got bugs; but this is no time for perfectionism. The important thing is to get the ball rolling. I'll make all the changes in one go this summer — *after* I've got an advance.

May 1, 1984

I mailed *Karateka* to Broderbund this morning. In my P.O. box was a form letter from Electronic Arts. I've just sealed up an identical package for them. We'll see who responds first and more enthusiastically.

Did some work on my *Third Man* paper. PFS: Write has a disappointingly small capacity – four single-spaced pages. I guess it's not their fault. I keep noticing nice little features, like the way it splits words on the hyphen, and automatically adds two spaces after a sentence. It's a good program, but I wish I could get in there and add some more features, like more flexible printer control.

Part 5: Broderbund



May 9, 1984

When I got back from dinner I had a message from Roy Freborg. I called him back. He'd taken the program home with him the day he got it. "Everybody loved it" were his words. He's a quiet, friendly-sounding sort of guy. He didn't rant and rave, but gave a definite impression of enthusiasm.

He wants a "cheat key" so he can see what's at the end. I made one up, called him back and gave him instructions on how to make the fix. He said I can expect to hear from them very soon.

When I called him back, he said that from his desk he could see the game being played on three screens, one amber, and that it looked fine on the amber screen.

During the first conversation we discussed the possibility of going to 64K. I mentioned that I'd like to avoid that. They offer a 15% roy-

alty, by the way. He asked if I'd submitted it to any other publishers. I said "Yes, but you're first."

So, things are looking good... I'm starting to get kinda excited... I've got to write that *Third Man* paper.

May 17, 1984

I talked to Roy Freborg. He wants more levels, more different kinds of enemies.

May 22, 1984

[Chappaqua] I told Roy my ideas. He suggested 3 levels instead of 2; I agreed. Then he asked what it would take to get me to do that. I said: A contract guaranteeing that they'll publish it when it's finished, and an advance. I suggested \$15,000. He thought that was a lot. He said he'd get back to me.

May 23, 1984

I bought *Variety* and read it on the train. There are four "year" movies currently in production: 2010, 1984, 1919, and 1918.

May 25, 1984

Listening to the *Raiders* soundtrack filled me with awe and wonder – the old Williams/Wagner effect – and made me want to see *Jones* again (which I will, on Sunday, with the rest of the family). It also rekindled my urge to write an *Indiana Jones* video game.

May 26, 1984

Dad suggested I incorporate myself. Yikes. Having money is a lot of work. Dad countered that not having money is even more work.

May 30, 1984

I outlined my counter-offer to Roy, in a prepared speech stating all the points in my favor. He said he'd talk to Ed and Gary.

A few hours later, Roy called back and said he'd talked to Gary, who "didn't think I was out of line" and, without talking to Ed, had agreed to everything except the \$10,000 when it's finished. He offered five. I suggested seven and a half. Roy said: "Okay."

We've got a deal.

So I'll be making at least \$12,500 this summer, plus whatever of the expenses I don't spend.

More importantly, I'll be flying out to California pretty soon – maybe within a week – and living there for two months or so.

Roy's sending a contract by Fed Express.

Wow.

It's all happening so fast. I haven't quite absorbed it yet.

June 1, 1984

Got the contract from Broderbund. I don't want to think about this

stuff. I just want to get out there and sit down at a computer and do what I do best.

June 2, 1984

Visited Norman Senior to ask his legal advice.

June 11, 1984

Went into the city and met Ben at Grand Central. Saw *Gremlins* at the RKO Warner Twin 1. I was blown away. I don't know when I've enjoyed a movie that much. After the movie, I browsed in bookstores for an hour or two (and learned a lot about *Gremlins*, including that the screenwriter was 21 when he wrote it), then went down to Barney's to pick up my new suit.

Dad spoke to Roy and prevailed on nearly every contract point. It looks like I've got a deal. It's taking a while for this to sink in — I may leave as soon as Friday.

The real weird-out, though, was that Roy mentioned that he'd put Rey Montez, my Product Manager, to work finding a place for me to stay, and that Rey is checking out a share with some Lucasfilm employees.

Lucasfilm is still, for me, not quite of this world. The idea of working for Lucasfilm is in the realm of fantasy, not reality; sort of like the idea of marrying Diane Lane. Life's weird.

If I could have written one of the last twenty movies I've seen, *Gremlins* would be it.

June 15, 1984

Rey Montez told me on the phone how honored they are that I'm working with them, how excited everyone is about *Karateka*, etc. I meekly said "Thanks."

I'll be staying at Doug's house for the whole two weeks, and getting the use of his car, all for free. They're really giving me the royal treatment. Too bad I can't drive.

I booked a flight for Monday. I'm starting to get excited. I'm seriously looking forward to this.

June 18, 1984

[Marin County, CA] Doug met me at the airport and drove me to his house. Then we went to Broderbund (it was empty, but he showed me around) and to a Chinese restaurant for dinner, then back here to meet his fiancée Mary.

Doug is a nice guy, very pleasant and easy-going. We talked about computers and other stuff. I felt a teensy bit self-conscious when his fiancée arrived and I wasn't sure whether to excuse myself and go to bed or not, but we got along fine.

It was exciting to see the Broderbund headquarters. Also, we passed George Lucas's house in San Anselmo. I like it here. I think it's going to be a good summer. At the moment my major problem seems to be transportation between here and Broderbund.

June 19, 1984

Doug drove me to work in the morning and that was pretty much the last I saw of him. He turned me over to Ed Bernstein, who set me up at a desk and took me around and introduced me to everybody.

The major people:

Rey, my Product Manager. I didn't see a whole lot of him today, but I've been led to believe he'll be my major contact.

Ed, who's in charge of Product Development. I saw less of him after the initial tour/orientation. He seemed to be a very busy man. I was kind of honored by the time he took to show me around.

Ken Bull, a brand-new programmer, fresh out of college, who just arrived yesterday. He has the desk across from mine. He's working on a computer version of "What Color is Your Parachute?"

Glenn Axworthy, a friendly, fun programmer who took Ken and me to lunch at Back Alley Burger.

Scott Shumway, another programmer, nice guy.

Dane Bigham, whiz kid who got himself hired without a college education or any computer experience, simply by wanting the job so much and trying so hard to get it. He's 19 and a very likeable guy. Some say he's the best programmer they have. (Glenn, Scott and Dane all live together.)

Kazue, Japanese ambassador. Her English isn't too good, but she's very friendly and incredibly enthusiastic about *Karateka*.

Roy, whom I finally met, and didn't see much of.

Alan Weiss, chief playtester, nice guy. I talked to him a lot about *Karateka*.

Gary, Doug's brother, Ed's boss, but more on the philosophical, creative side. Very easy-going and friendly. He took me under his wing — he seems to be interested in my social integration and well-being — and took me to the softball game after work; we went for pizza afterwards; I talked mostly with Gary and Dane. Actually, what I mostly did is listen. Gary drove me back here to Doug's afterwards.

I can't believe this was only one day. I'm looking forward to spending two months here. Broderbund is a great place; nearly everyone I met was friendly and easy to get along with, as well as being creative and talented. A good group of people.

I've learned a lot in the last day and a half about the software industry, and Broderbund in particular. I'm very optimistic about *Karateka*. These people are inspiring to be around. The trick will be to rein in my creative dreams and bring it in on time.

My main problem is: Where will I live? I really don't think this is the best solution, because Doug's house is pretty isolated, he's getting married in a month and needs to spend time with his fiancée, and I don't drive. Ideally, I should find a more centrally located place that puts me more in the mainstream of Broderbund social life. Someplace I can go home to alone late at night, someplace I won't feel in the way, which I kind of do here.

Anyway: so far, so good.

June 20, 1984

Drove in with Doug, killed time at my desk until lunch time (I went to Eduardo's with Dave and Marty, the authors of Print Shop) and then until the 4 pm. *Karateka* story meeting.

Everybody is so uniformly enthusiastic about *Karateka*, I've begun to take it for granted that every new person I meet will spend at least thirty seconds complimenting me on it. It's a kind of personal capital — everyone is happy to meet me and predisposed to like me — and I sort of worry I'm squandering it by not living up to their expectations. Actually, I'm beginning to mellow out and feel more comfortable with various people. I'm starting to behave a little more like myself.

The story meeting was OK. After it broke up I hung around talking to Gene Portwood for a while, then I went over to talk to Rey. On the way home I talked about it to Doug.

Rey and Gene are presumably the people I'll be working most closely with, and they seem to be on my wavelength. Gene has many good ideas and a clear vision of what the game is and should be; Rey just seems generally happy and easy to convince. Gary is more of a visionary — he wants excellence and doesn't care about time, plus he's not a programmer. Several people have assured me that as the author I can do anything I want. I certainly won't agree to do anything I'm not crazy about, but so far it looks as if no one will ask me to. There's going to be another meeting Friday, at which I'll present a detailed storyboard which I'll work out tomorrow with input from Gene. I don't really expect any problems.

All in all, things look great for Karateka. It should be a real winner.

Financially, a lot depends on the vagaries of the industry; I could make fifty thousand, or two hundred thousand, or I could be set for life. It's certainly worth making it as good as I possibly can.

A C-64 version would be extremely advisable; it'd probably make more money than the Apple version. The Atari market isn't what it used to be, and IBM'ers don't play games. Dane has offhandedly expressed interest in converting it for the C-64. Could it be out by Christmas?

It's all pretty exciting.

I'm home alone now. Doug's at a meeting in SF. I went for a walk and explored downtown Fairfax. There is a bus stop.

June 21, 1984

Spent much of the day in Gene's office watching him draw pictures. Storyboarded a really good prologue.

After work Rey gave me a lift to the Broderbund volleyball game. I played. It was fun. We lost.

I met Danny Gorlin, who seemed just as happy to meet me as I was to meet him. We flattered each other.

Afterwards Danny, Rey, Gary, Carol and I went out for beer and pizza. I'm a much better conversationalist after a beer. Danny and I talked about computer games and movies. It was the same sort of conversation I've often had before with Ben and other people, except that this time I was having it with the author of *Choplifter*.

That's what really weirds me out about this place. I keep meeting — and hearing the names of — people who formerly existed for me only on title screens: Paul (Lutus). Bruce (Tognazzini.) Bill (Budge.) Danny (Gorlin.) Yow. And Lucasfilm is right around the corner. Rey says he'll try to get me in there for a visit, though Gary is afraid I may be seduced away from the fold.

Gary gave me and Danny lifts home. We sat around here for a while with Doug, watching him demonstrate *Championship Lode Runner*.

I like nearly everybody I've met. This place is great.

June 22, 1984

Drove in with Doug for the last time in a while; he's gone away for the weekend and I'm here alone again.

Lunch at Confucius (in downtown San Rafael) with Scott, Glenn, Marty, Carol, and Ken.

Got a small amount of "work" (i.e. storyboarding) done. Came up with the spikes puzzle, which I really like.

After the "Happy Hour" I left with Gary, who drove me all over Marin showing me the beautiful scenery. Then we went for sushi (the best I've had. I didn't know you were supposed to eat it with your fingers) and Gary dropped me back here. Nice of him to be devoting so much attention to my socialization.

The real work starts Monday. Well, Tuesday.

June 23, 1984

Played all Doug's games. I'm quite psyched for *Karateka*, and (right now) for another game after that. I'd want it to be a Marvel comic, with 16 fps animation. It'd need fast graphics routines; the price, of course, would be no scrolling, no figures overlapping with the background, and probably no bit-shifting. But it'd look like a comic book, with a pulp-heroic plotline, and plenty of sex and violence.

June 25, 1984

Storyconferencetoday. Reyand Gary both said its ounded good to them. Lauren Elliottis working (in Gene's absence) on the princess's animation. I hit the code for the first time since March. (Three months... Wow.) My present goal is to have Level 1 working perfectly by Friday. Rey is encouraging me to provide input on documentation, packaging, marketing, etc. I'm psyched.

We went to Chuck E. Cheese for lunch.

June 26, 1984

Caught a ride in with Kim. It was a long day of work, about 8 to 8, though I goofed off a lot. I finally got rid of all the discrepancies between the source code and object code, which shouldn't have existed in the first place. Tomorrow I can really pitch into adding features to Level 1 (as opposed to removing them, which is what I did today.)

The coin-op version of *Lode Runner* arrived in the lunchroom today. Boy, is it exciting.

June 27, 1984

Another fairly long day of work. I put in the new strength system. My goal for tomorrow is to move everything around in memory so that all the level-dependent stuff is in one place where it can be easily loaded in.

Then, Friday, I'll get rid of the old glitches and bugs, so that Level 1 will be perfect. I'll skip the tree for now — I'll add it later, if there's memory and time. As for the title, prelude, and interlude, Gene and Lauren will be working on the graphics; I'll just leave tabs so they can be put in easily later.

And, oh yes — the different guard heads. Also maybe keyboard controls. I'll give myself the weekend to polish it all up. By Monday, then, Level 1 will be ready to give to the C-64 programmer (who won't be appointed till Tuesday) and I can start on... (drum roll) Level 2.

Lunch with Rey. We went to the library to get books on Japanese castles and costumes.

Doug's out with Mary. I'm up to Level 20 on Lode Runner.

Rey and Ed seem tremendously impressed with the work I've done so far. Just let them wait until I get into Working Mode.

Everyone's more than pleased with the direction the game is taking. No problem there. The only problem is for me to finish in time. Gary would say: Don't worry about deadlines. A good principle in general, but in this case the deadline is for real: Missing it would se-

verely mess up my life, and probably cost both me and Broderbund a lot of money by missing Christmas. I need to be careful about the order in which I do things, keeping the low-priority changes for last, and be ready to revise my plans downward if I can't meet my timetable.

June 28, 1984

Well, I moved everything around, but the bugs aren't all out yet.

Lunch with Ken, Rey, Glenn, Louis, and Sadato at a neato Moroccan restaurant. Talked to Sadato about doing the C-64 conversion. He said he's burned out. Pity; he'd be ideal.

Gene drew a Japanese castle.

June 29, 1984

Worked 8 to 8, getting out bugs. The worst is over. The weekend should be a little more fun. Then I get to start on the new levels.

Ed decided to give the C-64 conversion job to Bill, a friend of Dane's. He'll start on Monday. I'm glad.

The first of the new-style packages have come out: *Bungeling Bay, Dr. Creep, Spelunker*. They look OK. Am I ever going to be excited when the *Karateka* packaging starts to get under way.

Started using the RAM disk today. It's changed my life.

June 30, 1984

[Midnight] Caught a ride in with Doug this morning and took the bus back after work. The bus journey lasted an hour and a half, door to door. It was an experience. At last I saw the seedy side of Marin.

In between, I put in around twelve hours at Broderbund. Bugs upon bugs. Some of them are old bugs that have been hiding. It's hard to believe I've already put in five days of work with so little visible result. I'll feel better when I'm working on Level 2 and Bill is working on Level 1. Till then, I'll keep on at this ridiculous pace.

It was fun being the only one at Broderbund tonight. Rey dropped in for a few hours and we went to Shakey's for pizza. Rey is always saying flattering things like how great *Karateka* is and what a hard worker I am and what a mature attitude I have. He says *Karateka* will be a big hit and I'll become rich and famous and it'll change my life. He's probably right, but I'd rather not think about it. I have two months — er, seven weeks — of hard work ahead of me.

July 1, 1984

Slept late (8:30); caught a ride with Mary to 101, on the assumption there'd be a bus stop nearby. It took me three-quarters of an hour of walking along, over, and under the freeway, in places where pedestrians aren't supposed to go, to find the Lucky Drive bus pad. I got there just as the bus was pulling out. By then it had assumed the proportions of a nightmarish Quest; I was talking to myself, swearing, almost crying.

The funny thing was, because it was so emotionally intense, it became in a weird sort of way an experience to be treasured. When I

got to Broderbund (around noon), it felt unreal. For three hours I'd been a stranger with no money, no friends, no escape hatch. My personality, my sense of myself, was stripped away. I was Man, waiting for Bus. It was primal.

So my workday was five hours, basically. Got out the last-but-one of the bugs (the last one is a "hider" — it crops up one game in twenty). I left with Ed around five, then came back here to sit in (for fun) on a Doug-Ed-Gary brainstorming meeting about Broderbund's projected self-help product line. I suggested the name "Inner Directions"; they may actually end up using it. Eventually the meeting disintegrated into dinner, and then an Apple nostalgia session (Doug booted up a bunch of old games and we all reminisced about the old days).

I'm gonna read The Dark is Rising.

July 2, 1984

Level 1 is basically finished. Lauren did a beautiful animation of a leaping leopard, straight out of Muybridge.

After work Gary took me up to Point Reyes in his new Saab Turbo 900 and we had Mexican food.

July 3, 1984

Dane's friend Bill, the C-64 Converter, arrived today. We spent the morning working out a battle plan for the mammoth task of converting *Karateka* to the Commodore. He seems enthusiastic and willing to work hard. I liked him (he kind of reminds me of Mark

Irish). We'll see how it goes.

Kazue and I kibitzed while Gene worked on the castle. I've almost got the villain to dispatch a new guard. Tomorrow Gene and Lauren should have the princess's trudging and down-flinging animations done, and I can put those in.

July 4, 1984

Worked a few hours today. Walked into San Anselmo (it turned out to be surprisingly close), saw *The Karate Kid*, and walked back.

For three days I've been trying to remember the Indian music from *Indiana Jones and the Temple of Doom*. It's been driving me crazy. Then, on the news tonight, they played it over a tennis match. Hooray! Now I can sleep soundly.

Finished *The Dark is Rising* this morning.

July 8, 1984

Friday: Went out with Corey Kosak and friends.

Saturday: Shopping with Doug. Mary and her seafaring friends came over for a barbecue and to watch *Mutiny on the Bounty*.

Today: Baseball game (Giants vs. Cubs) in Candlestick Stadium with Gary, Debbie, Bill and Susan. Went back to Gary's for a barbecue including Danny & Nancy, and Gary's young, cute potential girlfriend Nancy. All played guitar and piano and sang mellow rock.

July 9, 1984

Scott and Dane came over and we talked about the good old days. All the programmers seem to have this feeling that the Golden Age is past, can't be recaptured, that Broderbund has turned into a Company, that nobody cares about quality, just deadlines, and the programmers all feel powerless and ignored.

This is probably true of the whole industry; I have the impression that if anything, Broderbund has been less corrupted than the rest of the companies, and it's still a great place to work. Still, the magic is gone. Dane and Scott are genuinely grieved. Dane remembers when he'd have done anything to make money for Broderbund, stay up days on end. Now he just cares about making money for himself. The programmers resent Doug and Gary and Ed. It's sad. But inevitable, I guess. Computers aren't for hackers and hobbyists any more. They're for the mass market.

It seems there's not as much money to be made, either. Royalties were 30% in Doug Smith and Danny Gorlin's day; now they're down to 15%. *Lode Runner* may have been the last big hit. *Karateka* might take off and make me hundreds of thousands of dollars; or it might just pay for the two years I've spent on it, with, say, fifty thousand. I'm optimistic, but cautious. It sure would be nice to get rich.

Ray, Jeff, and Scott have to finish the *Championship Lode Runner* instruction book tonight. Dave, Glenn and I stayed to keep them company, and we all went out for pizza at Round Table.

I didn't accomplish much today. I'm in a mellow, melancholy mood. It's time to sleep.

July 10, 1984

[12:30 am] Just got back from Danny Gorlin's. It was one of the more inspiring things I've done this summer. He showed me Airheart, I showed him Karateka, we exchanged ideas. We seem to be thinking along the same lines about the future of computer entertainment; we had some good conversation over burgers and ice cream. I like Danny. Also, I admire him a lot.

He's got an awesome setup: a big house with an inner sanctum (which his wife stays out of) with enough space to contain Broderbund's entire PD department, and a dream computer room. Everything a programmer could need.

He told me about his plan to hire Dane and Scott to help him develop software, to be distributed by Broderbund. As we were leaving, he casually invited me to join them when I'm finished with school. This is exactly the sort of thing I've vaguely fantasized about in the past, trying to come up with possible scenarios for the Future.

It feels great to be told you're good at something. Especially by the biggest name in your field who you've admired for years. Danny says I have The Eye for seeing how things look on a screen; so do David Snider and Robert Cook. He used to think he had it, but doesn't any more. He says I remind him of Dane.

I'd love to work with Danny. I'm not so sure I'd want to work *for* him. But we'll see how things go.

Danny says Broderbund may take their in-house programmers for granted, but they treat freelancers like him and me with a fairness bordering on self-effacing. He told me a couple of stories about how

ridiculously fair Doug and Gary were.

I'm glad to be here. I'm ready to make *Karateka* faster, smoother, better. I'm happy.

July 12, 1984

Doug introduced me to Robert Cook, and we had a conversation about film and "interactive entertainment" similar to the one I had with Danny the other night. After work Robert drove me back here (he's staying with Stu in San Anselmo) and we had pizza and saw *Top Secret*.

What I did today: Got the princess's fainting perfect. Then the RAM disk blew and I had to do it all over again, a task I didn't get to finish today. Bill finally got the Commodore DRAW routine working, with lots of help from me and Dane. I'm worried he may be in over his head.

I just realized I've been here 25 days already. A reminder that my time is limited. Tomorrow is the Picnic, and I may give Leif a call this weekend, so let's say I have one day out of the next three to get the dungeon animation PERFECT. Then, Level 2, for my morale, on Monday.

July 13, 1984

The Broderbund Picnic.

It was fun. I played frisbee, volleyball, tennis, swam, did all the California beach activities. Everyone from Broderbund was there.

I got sunburnt.

I met Doug (*Lode Runner*) Smith and his cute girlfriend Cheryl. Doug drove us to Danny Gorlin's in his new Porsche, at over 100mph. I hate to say it, but it was fun.

It was funny seeing Doug and Danny together — the two game programmers Broderbund has set for life. They're total opposites. The only way you can tell Danny is rich is by his house; he dresses and acts like any computer programmer pulling down \$30,000. He showed Doug around his mansion with a minimum of flair, once going so far as to admit that the place was "swell."

Doug, by contrast, keeps talking about how much his car cost, how much money he's making, etc. But you have to like the guy, because he's honestly enjoying himself. He wants to enjoy his money while it lasts. He just kicked a coke addiction.

Danny showed us *Airheart*. The poor guy really seems burned out. It could be a great game. It's already a great effect. We tried to reinspire him. Then Danny gave us all a blackboard lecture on elementary theory of harmony.

On the way back here Dane asked me what I was getting on the C-64 conversion. I told him 10%. Dane admitted that Bill was muffing it and said if I wanted to do it myself, he'd be willing to help me.

I offered him five percent to do the conversion himself. He instantly said "I'll do it." But will Broderbund go for it, seeing that (a) I've already passed on my first refusal option, and (b) Dane is a Broderbund employee? I'd be so much happier if Dane were doing

it instead of Bill. It's a shame, because he's a nice guy, but maybe we should cut our losses.

My social life is pretty good nowadays. I had a better time at the Broderbund picnic than at any Calhoun picnic. It's easy to make friends here because *Karateka* preceded me, unlike college, where nobody notices you unless you make an effort to sell yourself.

Ed commented, on the way to the beach this morning, that out here it's easier to make friends than to keep them.

July 14, 1984

Took the bus to and from Broderbund. I think I spent more time on the bus today than at work.

Dinner here with Doug, Mary, Erin, Tim and Cathy. I got an invitation to Doug & Mary's wedding in the mail. I sealed the RSVP and handed it back to them.

July 15, 1984

Spent the day with Robert Cook. We had brunch at IHOP, played tennis, swam at Gary's, saw *The Last Starfighter* (with *Dune* preview) and fooled around with Gene & Lauren's graphics tablets at Broderbund.

July 17, 1984

Yesterday as soon as we got out of the building Dane put his hands to his head and screamed "Aarrgggh! He's got to go!" No five words could have made me gladder.

Robert and Dane had already spoken to Ed. My friends are looking out for me. Ed called Dane and me into his office and we decided that Ed should approach Sadato about doing the conversion. It was a weight off my shoulders. I'm grateful to Dane for everything but recommending Bill in the first place.

When Robert and I got back from lunch at Back Alley, Ken told us that Rey Montez had been fired. Sure enough, he'd had an argument with Ed, and Ed had fired him on the spot. Rey was cleaning out his desk when he got upstairs.

It was the Day of the Long Knives.

Faces were grim around PD for a couple of hours. Ed called a meeting — everyone sat in the conference room with arms folded in stony silence — and explained what had happened. Eventually the mood lightened enough for the meeting to break up. Ed isn't the most popular guy in PD.

Dealing with Bill for the rest of the day was awkward.

Bill: "You're doing preshifting? Will I have to worry about that?" Me: "No."

Later, in private, Ed told me he wants to wait a few days before giving Bill the ax, for general morale reasons. I insisted that he tell Bill immediately. He agreed to tell him tomorrow morning.

I feel terrible about the whole thing. How am I supposed to behave

with Bill in the meantime?

Rey wished me the best of luck when he left. "You're very talented and you have a great future," or something like that. (Mental note: Send Rey a copy of the game when it's finished and thank him for his contributions.)

So I'll be getting a new product manager and a new Commodore converter. If Sadato doesn't do it, it'll probably be Robert (who doesn't know the Commodore, but has The Eye).

And Bill still doesn't know. Aaarrggh!

July 18, 1984

I overslept this morning, perhaps not completely by accident. When I got to work Bill was already gone. Dane had prepared him the night before; Bill accepted Ed's verdict readily, admitting that he was in over his head.

Unfortunately, Sadato isn't interested.

Fortunately, Robert is the next candidate.

Unfortunately, Robert left for L.A. (where he lives) this morning.

I really hope he does it.

Lauren Elliott agreed to be my new product manager. I'm very happy about that. We'll meet tomorrow to discuss documentation and packaging.

Now, how is the *game* going?

Things don't seem to be moving very fast. I haven't been putting in as many hours, for one thing. Yesterday and today I set up the disk access structure, with guidance from Roland Gustafsson; it will be easy for him to do his super-speed copy protection.

Goal: Level 2 by Friday, as close to completion as Level 1 is now. Then a week for Level 3; a week for demo mode; a week to go back and fix and polish stuff.

Time is getting short. This "Goal" is for real. If Level 2's not done by Friday, I'll sleep at the office and finish it over the weekend. If I'm going to overdo it, better now than in the last three days before I have to go home.

Ed drove me home and we had dinner at Sizzler. He said if I ever want a job, to let him know. I said I might look him up when I get out of school a year from now.

July 19, 1984

Level 2 is coming along. I spent a fair amount of time today brainstorming with Gene and Lauren about packaging and documentation. Also, I talked to Robert. He's torn, but I'm 99% sure he'll do it.

Volleyball, beer and pizza with Carol, Dane, Scott, Lauren and Gary. We got three free pizzas because they kept making mistakes.

July 22, 1984

Gary hosted a barbecue for PD after work on Friday. I scored a lot at ping-pong with my "cheating, Eastern" serve. Scott gave me a ride home, but I forgot my keys, so I slept on the floor at their place again.

Saturday Steve drove me to Broderbund and I worked all day and night. I slept on the couch. The air conditioning made it freezing cold, and the windowless walls kept the morning sun out. I was shocked when I saw it was already nine o'clock and I'd missed the sunrise.

Ken and Doug showed up for lunch and Ken drove me home. I watched *Shogun* (the confusing 2-hour version) on TV. It turns out I'll have to move out of Doug's house sooner than I'd thought; his college roommate Lenny is arriving tomorrow.

It was an extremely disorienting weekend. I don't want to do that again.

What I did was rework the outdoor background stuff to be smarter and more efficient. The results are terrific — the running, scrolling, and crosscutting are as fast as I could hope for — but the gate is still as slow as ever, unfortunately. Still, it was a worthwhile weekend. I have a day's worth of debugging left to do.

Shogun inspired me to get as Japanese as possible. I'd like some authentically Japanese-sounding music. And I'll definitely use Gene's castle; only the cliff needs work. I'm starting to think about box copy.

"Medieval Japan. You are a karateka, one trained in the Way of Karate. You return to your village one morning and find only smoldering ashes:

huts charred, the bodies of your friends and relatives strewn about, your beautiful fiancée gone without a trace. The hoofprints in the dust tell the story.

High atop a craggy cliff, looming over the village, stands the palace of Kratang, the warlord who has held the village in the shadow of fear for so many years. It is the horned warriors of Kratang who came in the night and stole your beloved away.

Now all your training will be put to the test. Alone, armed only with your bare hands, you must brave impossible odds and fight your way into Kratang's fortress. There you must face the evil warlord himself in hand-to-hand combat.

Focus your will on your purpose. Put fear and self-concern behind you and accept the possibility of death. There is no turning back: success and death are the only honorable options. This is the way of the Karateka."

Or something like that.

This may work.

It's all starting to come together.

I'm getting excited.

July 24, 1984

[Excerpts from a letter to Dad and David]

I definitely made the right decision coming to Broderbund instead of Electronic Arts. No company could sell more copies of *Karateka*.

It's a tough time for the software industry, especially for companies that specialize in games. Broderbund is remarkably healthy. Doug credits this to the fact that they've been in business a long time and made all their mistakes early, and to their frugality. His brother Gary, on the other hand, attributes their health to *Lode Runner* and *Choplifter*, their big hits of 1982 and '83, and admits to having occasional moments of panic when he realizes just how dependent they are on complete strangers sending in their programs. (Their in-house programming staff is as good as they come, but without the incentive of big royalties, they haven't produced any big hits yet.)

It's possible that *Karateka* could be a success on the *Choplifter/Lode Runner* scale, but everyone keeps telling me not to count on it: the market's half what it used to be and so are the royalty rates. Anyway, we'll see.

The game is much better than when last you saw it. The game play and graphics haven't changed much, but it's structured better, so that it builds toward the ending rather than repeating the same episode over and over. Gene Portwood, the ex-Disney animator, has made some excellent contributions to the villain and princess scenes, which you'll see in a month or so.

It's hard to overstate everyone's enthusiasm for *Karateka*. The question is not "Is *Karateka* good enough?" but "Do people want games of this type?" The feeling seems to be that the game is as well done as it could be.

They especially love it in Japan. According to Gary, it's got the key elements that appeal to the Japanese market: sex, violence, and (ironically) a blond hero and heroine. And a "Made in the USA" tag.

July 26, 1984

Monday I moved out of Doug's place and into Ed's, where I am now.

Robert arrived yesterday. After work we went to Gary's and played with his synthesizers, had Swiss pizza, and watched *Gremlins*. (What a great movie!)

Today I accomplished nothing, but did get some ideas talking to Gene and Kazue. Kazue wants to do an article for a Japanese magazine about the making of *Karateka*.

July 27, 1984

Another basically unproductive day. Aargh! All these people hanging around work! Maybe this weekend I can actually finish Levels 1 and 2.

Robert's already doing a great job. He converted me to the new S-C Assembler, which is ten times faster than the old one I've been using for five years.

We played tennis in the wind, ate at Zim's, saw *The Neverending Story*, and had ice cream at Gelato's.

July 28, 1984

Went into San Rafael with Robert for breakfast; we got to Broderbund around 11:30 and I put in a leisurely day of work. I set up Level 0 (the opening credits and title).

In the evening Corey came and we ate at Peppermill. Then Robert

and I rented *Lolita* at Record Factory and watched it at Gary's. Still a great movie.

I'm taking it too easy. My work habits are starting to get more like college.

July 29, 1984

Late start: a few hours' work at Broderbund. Levels 0, 1 and 2, buggy as they are, are now together on one disk. They should be thoroughly debugged by the end of the week.

Idea for next game: You control a *Karateka*-sized hero. Computer controls your female sidekick. One possibility is for her to fall in love with you over the course of the game, depending on what you do. The key is that you can interact with her, like with the hostages in *Choplifter*, only to a far greater degree. You can cover her, she can save your life, etc.

July 30, 1984

A better workday, though still subpar. I did the impalement and bleeding. Ate with Robert and Corey at Acapulco in Larkspur Landing.

July 31, 1984

A semi-solid day of work. Getting back into the swing of things.

Went with Robert and Ed to see a house. It looks great. We'll prob-

ably move in on Thursday. Dinner with Robert at Carlos & Pancho's in Fairfax.

August 1, 1984

A solid day of work.

Home alone while Ed went out to dinner, I listened to Rachmaninoff's 2nd Piano Concerto — my first serious music fix in weeks. Now I'm listening to a spazzed-out version of the *Carmen* suite on my Walkman.

August 2, 1984

Moved into new apartment. Solid day's work.

August 3, 1984

Got out the bugs I'd put into Level 1 yesterday while speeding it up. Dinner at Zim's with Robert. *The Philadelphia Experiment*.

August 4, 1984

Doug's wedding day.

In the morning Robert and I went on a shopping expedition to get Doug a present. At the Northgate mall we ran into first Gary, then Stu & Jane Risser, all of whom were looking for presents.

Robert and I got dressed up — me in my new suit — and we went to the reception in Sausalito. It was a big crowd. I talked to Steve Patrick and his fiancée Tomi Pierce — they're the educational-software hopefuls, both went to Yale, lived in Japan for a while. Henry Yamamoto gave me his card and told me to visit him if I go to Japan. I'm getting gradually less socially inept over the years, but I still haven't learned how to enjoy myself at parties.

August 7, 1984

Started on Level 3 Monday. Saw *Indiana Jones* on Tuesday.

August 9, 1984

I showed the game to Ed, Richard and Doug when they were hanging around. They seemed fairly impressed.

The new issue of *Softalk* has an article about Broderbund. It mentions *Karateka* as an example of an independent game, quoting Doug as saying that it attracted more attention at CES than any of their other products.

Ed told me that the ad agency had submitted a terrible draft of box copy for *Karateka* and asked if I could write one. I did; we brought it over to Ed's house, and had leftover pizza while Ed and Richard worked. They liked it. "Now you can have either of two jobs," Ed said. "Programmer or copy writer."

Robert bought a rowing machine.

Called Kevin [Burget] and George [Hickenlooper] and learned that they'd moved out because they didn't want to pay the rent.

I'm getting up to speed, but I'll have to really start cooking now if I'm to finish in time.

August 11, 1984

Yesterday was a good day. I jogged in the morning, worked steadily, and was happy. Robert, Corey, and I saw *Red Dawn*, which was pretty bad. I went to sleep feeling optimistic about the game as a whole. This morning I jogged again, Robert and I went shopping and cleaned the place up. When we got into work, around 2 p.m., I suddenly realized I have only two weeks left to do a whole mess of stuff. I panicked. I was fretting so much, I couldn't focus on debugging. So instead, I turned to the soothing task of animating the princess's standing-up.

Tomorrow we'll leave by 7:45. I hope to finish Levels 1 & 2 completely; Robert hopes to get the Commodore shapes up on the screen. If we do that I'll be happy.

My mood is really separate from my rational assessment of the situation. Some days things look great, some days things look dire indeed. Today was a bad day. May tomorrow be better. And may I finish in time and return home happy, healthy, and with a light heart.

August 12, 1984

Got up at 7 and jogged; we got to work at 8:30. I worked straight through till 9:30. Thirteen hours. Not bad. Early mornings are definitely the way to go.

August 13, 1984

I got a letter from Ben that really made me look forward to going back to Yale. That messed me up. It's a distraction I can't afford right now.

August 14, 1984

Tami called. Another shock out of the past, out of my other life. I told her I was too busy to see her, but since then I've realized I have to, if only for a few hours. I can't *not* see her.

Since Tami called, *Karateka* seems a million miles away. I feel like I'm locked up. I've got to finish this project so I can be free!

Two more weeks.

I got the bird exploding today. I think that I shall finish in time.

Meeting with David Kessler, Lauren, Loren, and Pascal from the ad agency. I'm a little worried that the ad agency guy isn't listening to anything we say.

August 15, 1984

Late to work because we had to pick up Corey at the Porshop. Still, got a fair amount done. The villain now fights. Tomorrow I'll get his shadows and dying in.

Ate with Robert at Zim's. We talked about Our Next Games.

August 16, 1984

Worked some more on the princess end animation. It's getting there. By tomorrow the princess and villain should be graphically perfect.

Dinner with Robert at Chuck E. Cheese.

Lauren and I planned out the Cat sequence.

August 17, 1984

Got nearly nothing done today. Major lunch at Hilltop Cafe in Novato, about 20 Broderbunders at a farewell party for Mary Ann.

Danny came by and was really enthusiastic about *Karateka*. He said all the little things that had been annoying are gone, and that it has the makings of a real "classic," which seems to be the highest accolade around here.

Gene (on vacation) came back for a day.

Lauren and I spent some time discussing the cat. It looks great. Lauren is a perfectionist; he doesn't mind spending long hours moving pixels around. Right now I can't see any reason why I won't put the cat in the game.

I watched Bill Holt play for a while and got a pretty good overview of what the game is like to play.

I showed Doug the upside-down-and-backwards version, explaining that it's to go on the flip side of the disk. He loved it and seemed not to consider it out of the question, which surprised me.

Basically, I got a lot of positive reactions from a lot of people today: Doug, Bill, Danny, Chris. I'm feeling good about the game; it seems to be coming together.

Thursday I promised to Lauren and Loren as Unification Day.

August 19, 1984

Tami surprised me by showing up at work. Boy, was I stunned.

I showed her *Karateka* and we went out for dinner in her VW hippie van. Afterwards we went for a drive to Point Reyes and lay in a grassy field for an hour or so, just talking. On the way back we picked up a group of teenybopper hitchhikers and dropped them off elsewhere in the middle of nowhere.

When I got back to Broderbund, Robert had left a "note" on Ken's Apple (it beeped every ten minutes until I hit control-C, at which point it printed out "Hey Jordo! Gone to Berkeley!") I went back to work.

Danny came by. He repeated his invitation to come work for him. It's tempting. But it's a *job*, and I'm not sure that's what I want. He explained how he's trying to pattern himself after Walt Disney. I'd like to pattern myself after Disney, too.

He says he feels good about *Airheart* now. He regards the turning point as my visit (when I suggested the colored border and that he keep the action at sea level). He also thanked me for getting people at Broderbund excited about *Airheart* again. Of course I was pleased to hear that. Even a little overwhelmed.

August 20, 1984

The ad agency delivered their box copy, which Lauren, Loren and I agreed was lousy. I spent an hour or so working it over. It's so dumb: I could do a better job, but I'm supposed to stick as close as possible to their copy so as not to offend them.

Only ten days left. Time for some serious buckling down.

August 21, 1984

Finished agonizing over the box copy and gave it to Loren. His reaction took me aback: "Your writing astounds me as much as your programming." He'll try to sell it to David Kessler tomorrow.

Got a meager amount of work done. It seems like I haven't done anything major in days. Then again, there's not much major stuff left to do.

August 22, 1984

Loren showed my copy to David K. this morning. David staunchly defended the agency's version. Loren staunchly stuck to his position that it was a piece of crap.

Lauren says David doesn't know or care which version is better; he just knows how to defend the ad agency. So the conflict is being passed up the ladder. We'll see what Jane and Ed think.

It was a productive day. I got the villain dying, and revamped the guards' fighting strategy, which I'm excited about. It vastly improves the game. It's a miracle I never got around to it before.

August 24, 1984

Corey and Jim came over and sprayed our apartment full of Black Flag. I can't believe those guys.

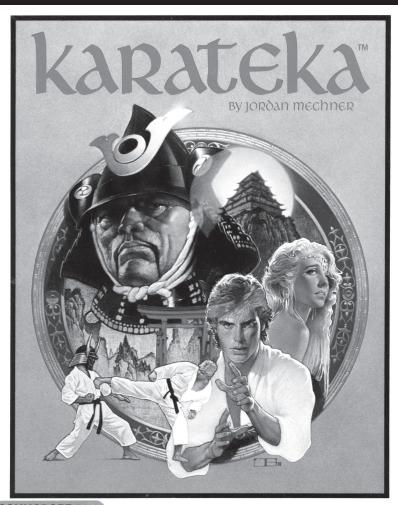
Yesterday I got the whole thing on one disk. I've been fixing various little things since yesterday. Hoping to finish it this weekend.

August 25, 1984

I'm happy with the game. The new guard fighting makes it tons better. It's actually fun now. I'm psyched.

I called home yesterday and Ben was there. I'm really looking forward to going home. My two worlds are about to merge.

Part 6: Billboard



COMMODORE 64

by Robert Cook

Disk

Joystick or Keyboard

ARCADE ACTION



August 26, 1984

Spent a long time on the phone with Dad transcribing the new music he's composed. Also spent a while with Dane trying to write a decent music routine. I ended up sticking with the one I had, but speeding it up.

Demo mode is running fine now.

Ed dropped by; I showed him the game. He's in love with the princess.

Five more days.

August 27, 1984

Robert is happy. He's decided to use grey on the C-64 to anti-alias the white fringes, and it looks good.

I'm getting frantic.

AAARRRRGGGHHHHH!!!

August 28, 1984

Got it ready for play-testing. Still a few bugs. Major work remaining:

- Panther
- Villain masking
- Music

Gene got back from Boston and did great work on the castle, made it really sinister-looking. I'm finally pleased with it, though it still needs cleaning up.

Dinner with Gene and Robert at Roast Haus. The humorous owner responded to my request for a roast beef sandwich without gravy by begging me to try at least a little gravy. I acquiesced, whereupon he proceeded to pour ladleful after ladleful of gravy on the bread, then the potatoes, then the meat, then all over everything until the plate was brimming with gravy. When I took out my wallet to pay, he could no longer contain his mirth and asked me if I wanted him to do it over. I shook my head and ate the gravy-sodden sandwich. It was actually quite good.

Today about twenty people congregated around my desk to comment on *Karateka*. It was pretty gratifying. Judging by everyone's reactions, it's going to be a hit.

Three more days.

I may end up having to do the music at home, with Dad. I have enough to keep me busy for the next three days, and doing the music over the phone is tough.

Goal for tomorrow: Panther OR ((villain masking) AND (some other stuff)).

August 29, 1984

Alan got his play-testing copy today. I watched him play for a while. It's a funny sight: a room full of teenagers, all slouched down playing video games and looking colossally bored, and Alan in his Hawaiian shirt, a head taller than any of them, like a summer camp counselor. Got out a bunch of little bugs today. Tomorrow: Panther.

Pizza with Robert, Doug and Ed. Doug read from his advance copy of *Hackers*, an "exposé" of the microcomputer industry. The chapter he read was all about Ken Williams trying to get one of his programmers laid. It was hilarious.

Two more workdays. I've got a ten o'clock flight Saturday night.

August 30, 1984

I got the villain masking done. No cat.

I mentioned to various people that I may bag the panther. They all said: "Oh no, the panther's great!"

I finally decided they were right. As Robert said, it makes the game cross the line from not-quite-deep-enough to plenty-deep-enough.

It's just that it'll be a pain in the ass. I'll have to do it back at school.

Argh!

I guess today is the day I realized I won't finish it here.

Lunch at Back Alley with Richard Whittaker, Robert, Ken, and Bill Holt. Bill is constantly breaking us up with one-liners. I like him a lot. He brings out the wit in me, and just generally puts me in a good mood. It rained today for the first time all summer.

August 31, 1984

My last day at Broderbund. Everyone sang "Happy Birthday" and wished me "Bon Voyage and Good Luck with *Karateka*" with a Print Shop banner. We broke out the champagne and I said goodbye to nearly everybody I know on the West Coast in the space of an hour. They want me to come back at Christmas.

All these people. I'll miss them.

Everything works except for the panther, the music, and the title. Not bad.

I can't believe the summer's over.

SEPTEMBER 3, 1984

[Chappaqua] Guess who was supposed to take the train to New Haven this morning and didn't.

It was a good day's work. The villain, hero, princess, and death themes are in and sound pretty decent. I rewrote and generalized the music routine, and figured out the note values for a four-octave range.

I'll go in tomorrow, in time for registration.

SEPTEMBER 4, 1984

[New Haven] Boy, it's good to be back. I'm constantly amazed at how easy it is to change worlds. I'm really looking forward to classes, movies, dinners, all the little pleasures of college life.

Well, here's to senior year. (Clink!)

SEPTEMBER 9, 1984

[Chappaqua] We finished the music. I'm quite pleased with it. Dad wrote a great Bach-like epilogue which runs endlessly. I'll spend the next couple of days integrating the new music into the game.

Talked to Loren. Broke the news about the fate of the leopard.

SEPTEMBER 12, 1984

Saw [Paul Verhoeven's] *The Fourth Man* at York Square. I liked it a lot – it had an undeniably cosmic feel to it. It almost makes me wish I were Catholic.

I got the ad agency's new copy in the mail. I called Loren and expressed extreme displeasure. I asked: "Why does the final copy need

to come from the agency, since ours is better?" His response was, basically: "Politics."

Loren is sympathetic; he even came right out and said that he agrees with my assessment of their copy, that he's pissed off at the agency and the elements within Broderbund that honor it, and that he respects me for putting up a fight. That's pretty strong support.

I wish I'd never mentioned the goddamn panther idea. Now I feel like I've let everybody down. Grrrr.

I filled out an application for an American Express Card.

September 14, 1984

Today was an oppressive grey day of the kind that makes easterners complain about the weather. It was hot, muggy, and it rained.

Oh, and yesterday I talked to Diane Schank – Roger's wife, and the temporary head of CompuTeach. Jim left, and ABsCenes won a Parents' Choice award, or something like that. Yippee skippee.

September 16, 1984

Went with Kevin, Robert, Burk [Bilger], and Emily to the gala premiere of *Amadeus* at Showcase. We had to endure an hour of uncertainty (tickets cost \$100, free for Yale students), but we got good seats in the end.

SEPTEMBER 19, 1984

Got the first two drafts of the box art FedEx. They look good. I'm relieved and pleased. I talked to Loren and he was relieved and pleased that I'm satisfied.

Main problem remaining: Box copy. The release date has been pushed back to 10/22.

September 20, 1984

Hammered out the box copy with Loren by phone. The draft we arrived at is pretty close to my original draft, oddly enough. Why all that hassle?

Dad walked into a Computerland in New York and asked for *Karateka*. The guy said: "Oh, *Karateka*! We'll have it in a week. Great game!" I guess that's what they teach you to say at salesman school.

SEPTEMBER 24, 1984

Put in the big red Libra title "Karateka."

September 25, 1984

Talked to Robert. He's got *Karateka* up and running on the Commodore. Buggy, but running. Wow; it's real.

Spoke to Loren. Two Commodores are on the way, one to me and one to Dad.

September 29, 1984

It's taken me a while to discover this about myself: I'm not a loner. I get lonely and depressed when I'm by myself. I like being around people.

Made friends with Burk and his sister Andrea. It's funny, but I think *Karateka* is largely what impressed Burk about me. It's actually turning out to be a social asset.

Ben and I played *Breakout*, still the best computer game ever devised.

OCTOBER 1, 1984

Finished *Karateka*, FedExed it out. Whew! There's a big gap in my life now. What will I fill it with? Schoolwork, maybe.

OCTOBER 3, 1984

Spent much of the day on the phone with FedEx, tracking down the package. They aren't picking up from that drop box because of the strike. My fault; I should have thought of that. They said they'll pick it up tomorrow morning before the strikers arrive; Broderbund should get it by Friday.

American Express turned down my credit card application because they couldn't verify that I had any income.

OCTOBER 4, 1984

Another day on the phone with Federal Express. The package is still in the drop box. This is ridiculous, farcical. I'll just remake the

package and mail it.

OCTOBER 5, 1984

[Chappaqua] Been working on the Commodore music. So far, it's been hellish.

We stood around the piano and sang Schubert Lieder. Emily's turned into a fantastic singer.

OCTOBER 6, 1984

Loren thinks the music has "too many notes." Straight out of *Amadeus*. Robert says it's growing on him. I don't think I'll change it much.

OCTOBER 16, 1984

Loren appears to feel quite strongly about the music. He really thinks it has too many notes.

Jeez! *Karateka*'s supposed to ship on Monday. Yet... there's something fishy about this. I have yet to send them the final version. I haven't seen the box art, or the layout, or anything. Nobody's mentioned copy protection. Play-testing hasn't found any bugs and we've received no feedback from them. It's weird.

OCTOBER 17, 1984

Loren says the box will be printed by Wednesday. When pressed, he conceded that this means the product will not be shipped on Monday. He's trying to get me a copy of the box art from a

recalcitrant David K. The bottleneck, it appears, is copy protection; Roland is tied up with *Dazzle Draw* at the moment.

OCTOBER 18, 1984

Loren, Richard, Ed and Robert all love the Commodore music. That made Dad happy, and me too – I'd been fearing another battle. The only problem now is Robert's deadline.

I changed the Apple music, after talking to Dad. Basically, I simplified the chords, shortened the arpeggios, and tightened up the rhythm. So it has fewer notes.

I just finished making duplicate copies of the new and improved, final-final version that just may end up under a thousand Christmas trees across America. Yow!

Two years and two thousand hours since the idea for *Karateka* first crossed my mind, what's on the disk in Drive 1 is it.

It's strange. Playing the game, I suddenly feel as if it had been written by someone else.

OCTOBER 20, 1984

Not only did Roland get the disk I sent yesterday, he's already *copy-protected* it. Amazing. It's done. He says it boots in six seconds. He's sending me a copy.

Now I'm *really* excited. It's like seeing your painting framed, or your book in galleys. It makes it a finished product rather than a work in progress.

By the end of next week, I should have a boxed, shrink-wrapped copy of Apple *Karateka* in my hands.

DECEMBER 6, 1984

Got the sneak preview of *Karateka* in the mail. It exists; it's official.

DECEMBER 10, 1984

Frank Sherwood from HRM Software (the company that picked up ABsCenes from CompuTeach) mentioned he'd seen *Karateka*. Not the Broderbund version, but the one I showed to CompuTeach back in March. Apparently it got copied and spread throughout the company. That's disillusioning. I asked him to destroy any copies he knows of

Played Castles of Dr. Creep till 4 a.m.

DECEMBER 13, 1984

Dad and David went into a computer store in New York and asked for *Karateka*. They were sold out. The guy said they could sell a hundred if they could get them. "*Karateka* and Print Shop," he said. "Those are the two big sellers."

I can't quite believe it.

Real people are paying real money for this game I spent two years making. People I don't know, will never meet, are playing it.

I feel like I've created a monster.

Frank at Software City liked it too. First they ordered two, then they ordered 20.

DECEMBER 24, 1984

[Chappaqua] Stopped in at Software City, where I was warmly greeted by Frank and the boys as "the new superstar." I bought a joystick for the Seniors, to give them along with a copy of Karateka.

JANUARY 2, 1985

Spoke to Ed. The news isn't great: *Karateka* sales are off to a slow start. There's still hope. *Choplifter* and *Lode Runner* were slow starters too.

Robert says the Commodore version is *almost* ready.

I mentioned to Ed that I might want to do another game. He didn't drool at the mouth, but he did allow as to how the Apple is still the best machine to develop for. Apple, IBM, and Mac.

JANUARY 6, 1985

Frank from Software City called to tell me *Karateka* is number one on First's chart, but *Softsel* doesn't have it yet. That's encouraging. *Softsel* accounts for something like 50% of software sales, so if they haven't started selling it yet, that explains the slow start.

JANUARY 11, 1985

Dinner with Dad at Takezushi; walked with him to Grand Central.

I think I will:

- 1. Graduate
- 2. Write a screenplay
- 3. Start a new game.

Sound good?

JANUARY 14, 1985

Ordered a Fat Mac (512K RAM) from YMCSC. The biggest spur-of-the-moment spending decision I've ever made: \$1,960.

Got my first royalty statement from Broderbund. They sold one copy in November at \$34.95. I hope business picks up in December. Started writing up a treatment for the screenplay.

JANUARY 18, 1985

Saw the Psychology DUS, Bill Kessen, in the morning. (When I'd called and told him I didn't have an adviser yet, he'd said – no kidding – "Oh my God.") He recommended a Prof. John Black, whom I called; we have an appointment for Monday.

I'm really uncomfortable dealing with faculty members. I always feel like I come off sounding like a smartass or a dweeb or something.

JANUARY 20, 1985

Dinner with George. We always encourage each other about our chances of succeeding in the Film Biz.

George: "You're lucky you've got this computer thing to fall back on."

Me: "You're lucky you know for sure you want to direct films. That means you'll be doing it in a few years."

George: "Nahh, you'll probably make it before I will."

JANUARY 23, 1985

It looks like sales are shaping up to be around 1,000 units a month. That's \$30,000/year. That kind of income sure would make life easier for the next year or two.

(But... Doug Smith and Danny Gorlin made \$30,000 a *month*.)

Oh well, the reviews should be coming out soon. Cathy read me a nice positive one over the phone. Maybe that'll stir things up a bit.

Print Shop, by the way, is going great guns. It seems games for games' sake are on the way out. People want programs they can *make* things with.

JANUARY 24, 1985

Got my Mac.

It's amazing. Now that I have it, I'm hooked. I won't even try to begin to describe all its nifty features. It's my new electronic friend.

It's exciting, having a new computer and learning all about it and looking forward to coming home at the end of the day and playing

with it. I've been jaded for too long.

FEBRUARY 5, 1985

Robert sent Commodore *Karateka* FedEx, without the music and with plenty of minor bugs. It looks pretty good.

Got Music Shop in the mail. I wish I'd had it for writing the *Ka-rateka* music: 8 presets, changeable in mid-song, vibrato, a bigger range. Sigh.

FEBRUARY 8, 1985

Went to Showcase with Kevin and George. Saw *Witness* (it was great – eerie and suspenseful and just so cool) and *Falcon and the Snowman* (good too, in a bizarre, comic sort of way. Sean Penn as Dalton Lee was amazing; he somehow reminded me of both Doug Smith and Danny Gorlin.) Afterwards, we went to Mike Saltzman's and played Silver Screen Trivial Pursuit with Jeff Kleeman and David Kipen.

FEBRUARY 12, 1985

I told Ben my screenplay idea.

"I think you've seen the critical number of movies," he said. "Six or seven hundred."

FEBRUARY 25, 1985

Less than three months of Yale remaining.

Dad read me a review of *Karateka* from *Micro Times* over the phone. Jordan Rosenberg had sent it to him.

They shipped 1,500 units in January. Extrapolating, I guess I can expect an income of at least \$50,000 this year. That's CRAZY! That's so much money!

I gotta come up with a really good next game idea. Medieval setting? I thought a lot about Broderbund today. I'm pretty sure this is how I want to spend the year after I graduate: at the Apple keyboard, doing what I do best, in league with Broderbund in one way or another.

While simultaneously writing a screenplay or two at the Macintosh keyboard.

FEBRUARY 26, 1985

David Pogue sat with us at dinner. When he found out I have a Fat Mac he got all excited. He came up to the room and I showed him the Mac (and *Karateka*; he was impressed). Then I went over to his room and copied three disks: Fonts 1, SmoothTalker, and Music-Works.

I made Tom jump: When he walked in, a deep computer voice said "Greetings, Thomas. Would you like to play a game?" But the novelty wore off fairly quickly.

March 20, 1985

OK, so in the transition from adolescence to adulthood, I've already

pushed a few of the markers over to the other side of the line: Financially independent. College diploma, coming up. Career opportunities, plenty.

Still on this side of the line: No driver's license. No girl. Still live at home.

My scenarios for the post-Commencement future all have one thing in common: They're gutless. No major changes.

- Try my hand at screenwriting but without abandoning game making.
- Go to California but only for a little while.
- Live at home but not indefinitely.

Always the safe road, the non-choice.

That way lies stagnation.

I don't get these impulses very often, so I better make the most of this one:

Do. Something. Now.

I'm living my life like someone trying to run without ever taking both feet off the ground at the same time. Always trying to come up with the best answer, the thing to do, without ever just letting go and saying "What the fuck!" and making something up and running with it and seeing where it takes me.

Once, just once, let's look at all the things I could do:

• Move to Manhattan or Seattle. Rent an apartment. Write screen-

plays.

- Meet a girl at Yale. Go to Europe with her this summer.
- Move to California. Find a place near Broderbund. Make a new game.
- Move to L.A. Try to break into the movie biz while waiting on tables or something.
- Go fish-canning in Alaska with George.
- Join the CIA.
- Apply to medical school.
- Apply to film school.

Screenplay writing: What is it, exactly? Is it a dream? An ambition? A plan? Something I'm going to keep telling myself I'll do "someday" for the rest of my life? Or something I'm *really* going to do?

If I'm always afraid of doing the wrong thing, making a second-best move, I'll never get *anywhere*.

Some people *sabotage* their projects whenever they approach success. (I fought that demon and won.) Some people have unrealistically high hopes and keep crashing and burning.

My demon is timidity. Chickenshithood, first degree.

Do yourself a favor, J. Next time it occurs to you to do something scary, something that makes you quake in your boots – just fucking *do it*.

March 24, 1985

Just added a new gumball to the gumball machine of Life After Yale:

Join Ben in Europe for a summer of backpacking and Eurailpassing.

March 26, 1985

Been trying to come up with video game ideas.

It's just not possible to come up with a design that will please a theoretical target audience, like "If they liked *Star Wars*, they'll love this." As Gary aptly said once, almost angrily, when I remarked (about some proposed flaw in *Karateka*) something like "Oh, they won't mind":

"Who are they? It's us."

You can't do good work in an art form you don't love yourself. I still do, sometimes, really get into a video game – *Lode Runner*, *Dr. Creep* – and it's that part of *me* that I've got to aim at pleasing. If I can't satisfy myself, I won't satisfy anyone else.

March 27, 1985

Got my first "fan" letter. Guy says the game's too easy.

Only sold 866 units in February. Almost a 50% drop from January. Pity.

Oh well, we'll see; there's still time.

- Boy, aren't you ashamed of yourself? Here you are, a rip-roaring success at 20, and you're wishing you were a *crazy insane* success. If you were, you'd probably wish you were a *whacko-socko* success.

There's just no satisfying some people.

March 30, 1985

"Wow," Ben just said. "We did two major Yale things tonight that we've never done before." (The BD Jamboree and a dance party in Calhoun.)

Doing new things is really important. That party did me a lot of good. It's stuff like this that shakes me out of my rut.

March 31, 1985

Mom called to relay a call from one Steve Robertson of Sierra On-Line, inquiring about "*Karateka* 2."

Is he for real? How did he get my home phone number?

APRIL 3, 1985

This afternoon, while I was DRAXing computer-game ideas, Ben suggested a little guy, like in *Lode Runner* or *Choplifter*, as opposed to the big people in *Karateka*.

I quickly warmed to that idea: A little guy, digitized, amazingly animated, with amazing joystick control, and a nice big screen to run around in. The big figures just make it too claustrophobic, unless it's a straight-line, scrolling game like *Karateka*.

APRIL 4, 1985

Spent the evening on DRAX. More design decisions:

- 1) A puzzle-game, like *Lode Runner* and *Dr. Creep*. The kind where you start out on a new level and say "Okay, what am I gonna have to do here?" The kind with 50 levels and 5 different games and a "builder mode" where you make your own games. Only with great graphics.
- 2) Real perspective. This will be a bitch, but, I think, worth it.
- 3) A Karateka-type storyline: Get to the end and rescue the girl. Large-figure Karateka-style animated sequences at the beginning and end. A human interest to complement the cool logic of the game play.
- 4) Lots of ways of getting squashed, impaled, crushed, and otherwise destroyed. Basically *Indiana Jones*, in spirit if not in details. Plenty of narrow escapes, split-second timing, hair-raising brushes with death.

Big questions remaining: Where? When? Who is the villain? What's the MacGuffin? Are you in ancient Greece, medieval Europe, a remote planet, a futuristic metropolis? Are your enemies Rovers (that could be cool; a big bouncing spheroid), robots, guards with crossbows, or what? What's the Theme? The Setting?

APRIL 5, 1985

Too many irons in the fire. My five classes. My senior project. New game ideas. Two screenplays.

Be smart, Mechner. Take care of the first two first. The rest can wait until classes end.

APRIL 8, 1985

Showed *Karateka* to Ruth and her two roommates who were visiting to check out our suite for next year's room draw. Other people came by and I ended up with a crowd of about ten people, all terribly impressed.

"I can't believe how quiet you've kept this," Ruth said. It was fun and kind of gratifying.

Grandpa said David Isaac called it the best game he'd seen.

Got a glowing fan letter from a would-be programmer in England. Wrote back.

Maybe I'm starting to get famous.

APRIL 9, 1985

Did some good work on the technical design of the new game. It'll work. It'll be great, I know it. I just need a theme.

Mayan temple?

Egyptian pyramid?

Greek temple?

Futuristic spaceport?

Medieval dungeons?

Ruins of a 20th century metropolis?

Not only should it provide a compelling background and excuse for all the Rube Goldberg gadgets (like *Dr. Creep*), but it should *look* good, like *Karateka* – not with a lot of crap all over the place so you can't see what's going on (like *Dr. Creep*).

I'm psyched to go live in Marin and work at Broderbund. If they want me. Ha ha.

Christ. I should be working on my senior project.

APRIL 10, 1985

I was playing Gumball, for old times' sake, when Liz Armstrong called.

"Good news," she said. "*Karateka* is #15 on the *Softsel* chart!" Of course I was happy and excited. Then she mentioned that Commodore *Karateka* is set for release in two weeks.

I listened while she explained to me how important it is to get it out, to increase visibility and help Apple sales and maintain Broderbund's credibility and all that. And how Robert is working around the clock to get it MSD compatible and copy-protected and so forth.

In other words, reading between the lines: They're so panicked about the C-64 conversion being six months late that they're going to ship it the second it's bug-free, *before* I get a chance to see it, rather than risk holding it up longer to accommodate all the nit-picky mistakes I might find, like wrong notes and ragged edges and that other last

one percent of subtle stuff.

[7:30 pm] Just got off the phone with Robert. I told him my fears. It sounds like he'll be able to fix most of it, with the major exceptions of the drumbeats and missing notes in the music.

He's going to Japan in a week, so he's got a major incentive to finish it.

Other news: Gary's getting married (!) to Nancy.

Dane, possibly, will be leaving Broderbund to work for Danny. I told Robert I might be going out in July to kick around new game ideas.

(Sigh)

Here comes the crunch.

I'm supposed to be worrying about my senior project.

[11:30 pm] I told Dad the news.

"But they *can't* release it," he said. "The music isn't right. We've just got to spend a weekend and fix it."

Alarmed, I said: "But I've got my senior project."

Dad convinced me to call Ed tomorrow and make my case in the strongest terms. It's our names that are going out on that game. I don't want to have to cringe every time I see it.

I feel sick at heart.

APRIL 11, 1985

I called Liz and (deep breath) asked her to FedEx the latest version so I could go over it with Dad this weekend. To my relief, she agreed instantly. It should get here tomorrow morning. I'll go out to Chappaqua and come back Sunday. Maybe it will be OK after all.

Dinner with Kevin. Got my mind off my immediate troubles by talking about filmmaking and the future. Kevin suggested I go to film school – not necessarily graduate, but go at least for a year.

APRIL 12, 1985

[Chappaqua] A beautiful sunny spring day. Came in on the two o'clock train, took a cab from Rye. When I arrived the woods were on fire.

Mom ran into the house and called the police. We went back outside and watched it burn. A circle of flames, maybe fifty feet in diameter. The wind was blowing away from the house, and the fire was roaring up toward the top of the hill. The fire truck arrived within five or ten minutes and they took an hour or so to put it out.

A forest fire is an awesome thing. I watched with a kind of peaceful wonder, knowing that nothing I could do would change the outcome. With the setting sun's rays streaking through the cloud of smoke, the bright orange of the flames, and the blue sky, the sight alone was worth the trip to Chappaqua.

Dad and I went through the game (it arrived FedEx this morning) finding the mistakes in the music. Overall, it actually looked and sounded pretty good. If Robert fixes everything we found (and he seemed agreeable, though dispirited, when I called), it'll be fine.

APRIL 15, 1985

Cathy Carlston called to tell me that Roe Adams – author of the *Computer Entertainment* review of *Karateka* – wants to interview me for an article called "Favorite Programmers' Favorite Games." Adams was surprised to hear that I'd done the graphics for *Karateka* myself.

APRIL 16, 1985

Yesterday's version of *Karateka* arrived this morning. Robert called while I was playing it and I gave him my feedback. He's fixed *nearly* everything, with the major exception of the rests in the hero and victory themes. God, I hope he can get it in.

Got a 98/100 on my Astro midterm. No more need to worry about flunking out of that class. And 101/104 and 87/90 on the two Psych tests. My only worry now is my senior project.

APRIL 17, 1985

#14 on *Billboard*. It's so much fun having the new *Billboard* to look forward to every week. And a glowing review in *InCider*.

APRIL 18, 1985

Robert delivered the final disk of C-64 *Karateka*. He's leaving for Japan at 7:30 tomorrow morning. It's out of my hands.

Liz told me Apple *Karateka* is now #8 on the *Softsel* chart. Wow. *That* impressed me.

Went to hear Mike Nichols interviewed by Nora Ephron (the "Libby Zion Lecture"). I left inspired to grow up and do something. Like make movies.

Nichols: "If you get the jokes right, everything else will fall into place naturally." And:

"What is it *really* like?' If you can make it true for *you*, everyone else will say 'Oh yes, that's true for me, too.'"

The Two Questions a filmmaker should keep asking himself, at every moment: "What is this *really* like in life?" and "What happens next?"

When I came back here, Tom was watching Warren play *Karateka*. Ben said they'd been there all evening. "I'm flattered," I said. "Mystified, but flattered."

APRIL 26, 1985

Tom woke me at 9:30. "Get up!" he said. "It's a beautiful day! It's eighty degrees!" It was. I did. We flipped disc on Old Campus and Cross Campus until it was time for the last class of my Yale career (Music).

Got a fan letter from a kid in Texas who wanted my autograph. I replied.

Read an article in the *Daily* about a girl who writes screenplays. I called her up and made a brunch date for tomorrow to ask her advice.

Senior Cocktail Party, followed by Senior Dinner. Got all dressed up in suit and tie. Sat with The Gang – Ward, Ben Voyles, Mark Jones, Larry Goon, Tom, Ben, etc. It was pretty enjoyable. They showed slides, read the "results" of the Senior Poll ("First to be exposed by Mike Wallace: JOHN BOYLE, making him the eighth person to be turned in by... JEREMY KING.") I remained safely anonymous, as did Ben and Tom.

Afterwards I went over to A&A (still in my suit and tie) for Kevin's Surprise 21st Birthday Party with George, Kevin, and Mike Malecek, then to a Chinese/Polynesian restaurant near the Med School with a group of five girls including Amanda Barhite from HGHS.

Mike went home. Kevin and I found George with Lucie, Toad and Liesl, picked up Trevor and went to the Go Code dance at Morse. George was drunkenly friendly, putting his arms around me and Kevin: "I love your whole family, Jordan," he'd say. And: "I'm such an asshole."

Drink, dancing, friends, girls. Yeah! I'm converted to this new (for me) way of spending a Friday night.

APRIL 28, 1985

Long lunch with Eve Rose Maremont, the girl who writes screenplays. It turned out I'd already been introduced to her (at *Lady-hawke*) through David Kipen, Mike Saltzman, and Jeff Kleeman.

Her main advice to me was "Get an agent" and "Don't take no for an answer."

APRIL 29, 1985

Liz Armstrong called this afternoon. "Are you sitting down?" she asked.

It seems they get Billboard a couple of weeks in advance. This week *Karateka* was number 8; next week it'll be number 6; and the week after that –

- are you sitting down? -
- number one.

Mom got pretty excited. Dad got really excited. I'm so placid myself, I'm glad I have all these other people to tell good news to. Otherwise it'd never sink in.

"You'll find that you have the *Midas* touch for a couple of years now," Dad said. "Everybody will want you. You can afford to be selective."

It hasn't really sunk in. I still have to pull an all-nighter tonight to get my senior project in on time.

Yow! Am I rich and famous yet?

I told Dad what Mike Nichols had said: "Virginia Woolf got

nominated for an Oscar but didn't win, which I thought was kind of irritating. Then *The Graduate* cleaned up, which seemed to me just about right. Imagine my surprise when – that was it! It never happened again!"

"I think you can do it again," Dad said. "You've got the right combination of skills. Your programming, your drawing, your writing, your dramatic sense, your *Sitzfleisch*." By the end of that catalogue I felt pretty good. This was, after all, my Dad speaking.

Postscript

JORDAN HERE. Thanks for reading *The Making of* Karateka *Journals*. I hope you've enjoyed my manic teenage ramblings about breaking into the game industry in the 1980s.

If you're curious about what happened next, I've published my next batch of journals under the title *The Making of* Prince of Persia *Journals*. That book (and ebook) covers the period from 1985 to 1993. It's available at jordanmechner.com/ebook and amazon.com.

This self-published book depends on readers like you to spread the word to others who might be interested. So if you enjoyed it, please tell a friend! Tweet it, share it on Facebook, or post a review on amazon.com.

As always, I welcome your comments at jordanmechner.com and on Twitter at @jmechner.

Many thanks for your time and support! *Jordan Mechner*

About the Author

JORDAN MECHNER is a game designer, screenwriter, filmmaker, and graphic novelist. He created *Prince of Persia*, *Karateka*, and *The Last Express*.

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