



Oral History of Douglas Carlston

Interviewed by:
Tim Bergin

Recorded: November 19, 2004
Mountain View, California

CHM Reference number: X3007.2005

© 2004 Computer History Museum

Table of Contents

BACKGROUND AND EDUCATION	3
STARTING A COMPUTER SOFTWARE BUSINESS	6
SELLING BRØDERBUND PRODUCTS	8
BROADENING THE PRODUCT LINE	11
MANAGEMENT ROLES	14
KEY EMPLOYEES.....	16
SUPPORTING MULTIPLE PLATFORMS.....	18
QUALITY CONTROL AND MANUFACTURING	20
COMPETITIVE COMPANIES	21
BRØDERBUND HISTORY	22

Douglas Carlston

Conducted by Software History Center—Oral History Project

Abstract: Douglas Carlston (commonly known as Doug Carlston) describes his education in different fields including getting a law degree from Harvard Law School, building houses (on spec), and becoming an ad hoc programmer. He began writing games programs to run on his TRS-80 and Apple II and then his brother and he started selling these programs to retail computer stores around the country. He called his company Brøderbund (which is sort of a faux Scandinavian name) and then signed a deal with SoftSell to distribute the programs on a much broader basis. Brøderbund became very successful, first with the games programs and then with a wide range of small business and personal programs for accounting and word processing. He describes how the company was a family business (with a number of his relatives involved) and how he maintained this style of operation. The company later marketed some high volume products like Print Shop and various add-ons and derivatives. He closes with reference to taking the company public in 1991.

Tim Bergin: This is an oral history of Doug Carlston, founder of Brøderbund Software. The interview was part of the Software History Center's PC Software oral history program, and took place in Mountain View, California on November 19, 2004 at the Computer History Museum. I am Tim Bergin of the American University in Washington, D.C. We want to go back in time and figure out how you got started in this software business and where you were at the time. Where were you born and where did you grow up?

Background and Education

Douglas Carlston: Well, I can give you a quick snapshot on that if it helps to get it going. I was born in Boston. My dad had served three years in the Army and was doing one of these quick catch-ups on his college career, i.e., doing the whole four years in 18 months at Harvard. He was from Minneapolis, MN.

Bergin: You were born in what year?

Carlston: I was born in 1947. My Dad became a theologian and after a couple years in the seminary in Pasadena, California, he went back to Harvard for his Ph. D. When I was about 5, we moved to Iowa which is where I lived until I went off to college. We lived mostly in a town called Dubuque, Iowa, on the Mississippi River at the intersection of Illinois and Wisconsin.

Between my junior and senior years of high school, I went to a summer National Science Foundation program at Northwestern University in Evanston, Illinois. This program was for people who thought they might want to be engineers. So it gave you a short introduction to a whole range of subjects, mechanical and electrical engineering, and analog and digital computing, which were certainly of equal weight back then. One project was to learn a little bit of the FORTRAN computer language, design a project, write a program of reasonable complexity and have it evaluated at the end of the summer.

Bergin: This was about 1964?

Carlston: This was 1964. I fell in love with it, I enjoyed it, it was fun. By now, my family had moved down to Iowa City, where my father was teaching at the University of Iowa. That summer, I got a job at the University Computer Center, which was, I think, the only air-conditioned building in Iowa City and it was therefore a highly coveted position. Sweeping the floors was my job, but they gave everybody who worked there a computer account, so I was allowed to do some programming. Before the summer was over, I was asked to do some coding for the Computer Center which included writing and re-writing the payroll program for the university.

When I went off to college that fall, I went east to Harvard. As a scholarship kid, I needed a job. Originally, I got the jobs they give you when you go there, cleaning toilets and cleaning other students' rooms and stuff, so I didn't enjoy that very much. I went up to the Computer Center and talked myself into a job as what they called a "programming assistant," which meant you sat at a desk in the Aiken Lab, and people who couldn't figure out why their code wasn't working would come and hand it to you and ask you to figure out what they were doing wrong. I did that much of my college career, as a way of both keeping my hand in and paying for school. That was really the only exposure I had to computers at Harvard. I learned some additional languages because the different departments had different needs. One used COBOL; the guys in social psychology used one called Datatext; and other people used SNOBOL for string manipulations. So you kind of learned the languages as you needed them -- to help people out with their various projects -- but I never took it as anything other than just a job. I eventually went on to grad school.

Bergin: What did you major in?

Carlston: Social psychology. It was called social relations. It was really a catch-all major for people who didn't know what they wanted to do when they grew up and had taken too many courses that were unrelated to one another. So I was all over the place. I took game theory and math and economics and lots of foreign languages because I loved languages, and by the time I got to be a senior there was nothing to put it all together,

I went to grad school in Washington, D.C., at the Johns Hopkins School of Advanced International Studies (SAIS) and studied international economics. I got about a year and a half into it when the Ford Foundation grant to sustain my fellowship ran out, catching both the university, me, and I think nine other students by surprise. So I quit and went to work. Eventually, I went back to Harvard to law school, got my law degree and went off to Chicago and started practicing law. During most of this time, I hadn't had anything to do with computers but about this time microcomputers were showing up in popular magazines and they intrigued me. I thought about getting an Ohio Scientific machine but I ended up getting a TRS-80 Model I for \$400 just to play around with. One of the things junior lawyers do at law firms is the kind of work nobody else wants to do such as take filled-in questionnaires and crank out the wills and trusts that the trust department needs. I had the rules to do it, so I programmed it.

Bergin: What firm did you work for?

Carlston: A firm called Price, Keck, Cushman, Mahin and Cate. It was one that hadn't locked the name yet so it changed every couple of years.

Bergin: Was that a general firm or did it have specialties?

Carlston: It was a large, downtown firm --what they called a LaSalle Street firm. It was on the 83rd floor of the Sears tower (in Chicago) and it did general law for hundreds of different kinds of clients. Young associates were bounced among the various departments to try things out. I found that in the tax and the trust departments it was easier for me to take the work home and run it on my TRS-80. I would crunch the numbers and come back rather than doing it at the office where you were expected to do everything using dictation. Nobody had typewriters in their office; that was secretarial work. It was a very inefficient process but I liked things that other people didn't like because I liked things that were computation intensive rather than research intensive and so I did that. I eventually decided I didn't want to work at a large firm.

I also built houses in my spare time to help pay for school. In fact, when I was in law school, that was all I did summers, I built houses on speculation up in Maine and sold them and that was how I paid for school.

Bergin: Did you do that by yourself?

Carlston: I hired my siblings and friends.

Bergin: In other words, it was entrepreneurial. No one else hired you; you decided you would do this.

Carlston: I was an undergraduate at Harvard and because of the Kent State killings they let us out five weeks early. My folks were having a house built, a vacation house, up in Maine, so rather than sit on my hands for five weeks, I went up there and apprenticed to the builder. So I got six weeks of training, at the end of which I figured any damn fool could do this. I so much enjoyed living up in the woods and being out in the woods -- it's a wonderful, beautiful place if you don't mind black flies and mosquitoes. My parents had enough land for a second vacation house and the following summer I asked if I could build a house on it, sell it, and then pay them for the lot.

Bergin: Was this was about 1969?

Carlston: No, it was 1970 I guess. The summer after that I got a friend essentially to let me build three houses on a piece of land he owned and pay him for it once I sold the houses. I got a lumber company up there to supply all the lumber with the understanding that I'd pay them on the other side once I sold the houses -- and I enjoyed that. I learned that I wasn't very good at bookkeeping. I had no idea whether I'd made or lost money at the end of it, but I really liked hammering things together and I liked most of all designing the houses and just sort of laying them out and trying different things. I never did any two the same, just trying to make them a little different and so on: little chalets, two- and three-bedroom kind of things for fun and I did it with my brothers and my sister or one of my sisters and one of my brothers, or other friends from school who wanted to live out in the woods and earn a little money. So that had basically nothing to do with computers and that was kind of how things went along.

So I came back to Maine in 1977 or 1978 I guess, because I still had a bunch of land up there that I had since bought or had an option on, and I wanted to both practice law and build houses. I thought it'd be more fun. I had shot up 20 pounds since I went to Chicago and had to sit at a desk, and it was driving me bananas. I was feeling fat and slow and I wanted to get outdoors. So I thought I could set up a law practice, do real-estate law, build houses, and maybe fiddle with computers on the side -- since I took my computer with me. And then the computer rapidly took over everything else.

Starting a Computer Software Business

I found coding was addictive, especially when you didn't have to wait five hours for batch turnaround times. I did more of it, sent some things off to new publishers setting up in various places, and started getting royalty checks that were in many cases hundreds of dollars a week at the time. It was only maybe \$1,000 a month, but still enough to get your attention. I resolved that I would close up the law practice and devote myself to programming. Just then, the second oil shock hit and I couldn't sell houses to save my life. Fortunately, I only had one on my hands and I eventually got rid of it at cost. So, for a bunch reasons, I decided to go out to visit my brother, Gary, who was living in Eugene, Oregon, where he was running the local March of Dimes -- setting up walk-a-thons and so forth. I drove my old Chevy Impala across the country

with my 220-pound mastiff sharing the front seat with me and the computer in the back. The car fell apart, I think, just outside Yellowstone going up a long grade. Something went out with the transmission. It started throwing out smoke. Fortunately, by the time I got into western Oregon it was mostly downhill to Eugene because I had the windows rolled down so we could breathe because the smoke was coming up through the transmission. I couldn't go more than 15 miles an hour and the windshield wipers wouldn't work and it was a blizzard outside. I was out there kind of working the wipers by hand going downhill. Finally, we got down into Pendleton, which was just a lot lower than Walla Walla, and we could see again. We made it to about five miles from Eugene when the car finally gave up and my brother came and got me. So at that point it seemed like a good idea to start a software company since Gary wanted to quit March of Dimes and I didn't have any gainful employment at that point. So we looked around and decided to try to sell the things that I'd written.

Bergin: Which were?

Carlston: I'd written a whole series of games just to work on my programming skills and a whole bunch of tax programs -- originally written for the law office -- but they were sort of complicated things for non-profit organizations that were trying to convince ranchers and others to essentially sell or give away the development rights on their properties while keeping the ranching rights.

Bergin: Can you give me the names of the games or at least some identifying words?

Carlston: Oh, I can tell you the games. There was something I called the *Galactic Saga* and it consisted of *Galactic Empire*, *Galactic Trader*, and *Galactic Revolution*. I think I finished all three of those before we started new ones. These ran on the TRS-80 and Apple II, which were the two computers I had access to at the time. These are still available in emulator mode on the Internet. Somebody just copied them and sent them to me just a year ago, and I turned my PC into a TRS-80 Model I and played one for a while and it was kind of fun.

Bergin: "It was a déjà vu all over again" as Yogi Berra would have said.

Carlston: I think that I probably don't have the patience to play those games any more, but I remember them. In the early days of the software industry, when we decided to start selling things, it was not clear who to sell them to or how. There was one computer magazine which was kind of a mimeographed thing called *80 Northwest*, which came out of the Northwest. I think there was one coming out of a town in New Hampshire and *Creative Computing* was coming out of New Jersey somewhere (see "Dave tells Ahl - *The History of Creative Computing: David Ahl's personal narrative*," by John J. Anderson, *Creative Computing*, Vo. 10, No. 1 (November 1984), p. 66ff.

Bergin: When would have been?

Carlston: That was in 1979. We didn't run ads, but we looked for ads of people who were selling software and then we'd pick up the phone and call them. There was one store in Washington, D.C., run by a guy named Ray Daley, who gave us our first order. Daley ordered \$300 worth of the games which he had already been selling because I'd sold the same games to three publishers who were publishing them on a non-exclusive basis. Ray said he'd always be happy to go straight to the author and buy directly from us. He bought them COD. And years later, when we brought Ray out to Brøderbund, and gave him an award as our very first customer, he handed me a telephone that he claimed he had taken the original call on. He still had it in a drawer somewhere at home I think. The initial months were involved in trying to write a fourth game in the series.

Bergin: Where was your headquarters located?

Carlston: In Eugene, Oregon.

Bergin: Was it easy to sell your games?

Carlston: In May of 1980, our sales had gone back down to zero. It wasn't taking off. There weren't a lot of places to sell our software. So we probably had about \$900 per month in sales then, which was keeping the wolves from the door but not very well. Part of it was that it's very hard to call people cold on the telephone -- even if you aren't as shy as we were -- and convince them to buy something that they've never heard of COD. So it wasn't a very successful formula for selling our software.

Before he went to Eugene, my brother Gary was a Scandinavian studies major -- in college -- and he had gone off to Stockholm where he had coached a girls' basketball team for seven years. They eventually became the national championship club team there and they were very fond of Gary and he stayed in touch with them and they had called in June and said they were coming to San Francisco and wanted to see him. He had said that we didn't have any money and he couldn't get down there. So they sent him a one way ticket.

Bergin: They sent him a *one way* ticket?

Selling Brøderbund Products

Carlston: One way, so he could come down to see them but he had to figure out how to get back. We decided the thing to do would be for him to go down with a suitcase full of software and stop at computer stores around San Francisco. Gary would see if he could sell enough to pay for his way back at which he which was very successful. He sold almost \$2,000 worth of

cassettes -- floppy disks were not yet in wide use. He saw his friends, had a good time with them and made enough to cover his ticket and then some. When he came back, it became apparent that we were going to have to go to stores in order to sell things successfully.

We had some more products coming in. We made a connection with a Japanese trading company at the West Coast Computer Faire in February, and he had brought three more products. So now we actually had nine products to sell, and at the end of July, I bought a used car, and took off across the country to try to sell the software, while Gary stayed at home and manufactured the things as I called them in -- all COD. I zigzagged all the way across the country to Boston and all the way back, met hundreds of people, and stayed at an awful lot of people's homes. You have to remember, in this era, if you ran a computer store, it was probably more of a passion than a business. Typically, I'd walk into the store and there would be nobody there, neither customers nor people working there. A bunch of computers would be turned on with just a little ">" on the screen, nothing going on. I would boot up a different program on each machine, the computers would start making noise, and somebody would come running out of the back convinced that somebody was stealing all their stuff -- their jaw would drop because they had things going on in all their computers. That was how I sold our software. I would say, "Don't you think you're going to sell them more successfully when they've got these wild, exciting games going on?" -- which was mostly what I had. They were not just my games; they were also these very good arcade games that this Japanese trading company had brought over. Again, I had no way of distributing them but I sold about \$15,000 worth of product on that one little trip. When I came back, we were still a business operating out of the living room. That fall, we switched from cassettes to floppy disks and we set up two machines in the living room. My brother would sit there, in a big Lazy Boy chair, with his headphones on, putting disks in the computers: 2 minutes and 40 seconds per disk. That was our duplication facility and then we put a little shrink-wrap machine on a ping-pong table in the garage, and shrink-wrapped them individually in the flat cardboard binders. All the printing was done by a company called InstaPrint of Eugene. We didn't have any money but told him that if he'd print all this stuff for us, when we got money we'd pay him. He said business was so bad in Eugene he thought that was a better offer than people who said they could pay him. He said he thought that people who said they couldn't pay were more likely to pay than the people who said they could pay.

Bergin: Well, at least you were honest.

Carlston: He did Brøderbund work for years. We would drive to Eugene just because we felt beholden to him and finally one day he came in and said "I can't compete with the lines you're doing. You know perfectly well that you can do this stuff locally." I said "I'm only sending you 1% of our stuff" and he said "Yes, and I love you for it, but just give it to your local people. I've got good business up there now." So we kept a relationship for five or six years with him but eventually sort of mutually we let it go.

Bergin: You just said a word, “Brøderbund.” When did you become Brøderbund? When did you stop being the Carlston family?

Carlston: Well, Brøderbund was actually a name that I used in those early games. It was one of the parts – one of the protagonists in the games -- in the story line, and when we started representing ourselves as a company, we called it Brøderbund from the start. It means ‘brotherhood.’ With respect to the company versus the Carlston family, my brother, Don, who’s a professor at Purdue, was going to join us. He didn’t, but then my sister Cathy joined us from New York; so it was kind of two brothers and a sister.

Bergin: In which game was Brøderbund a protagonist?

Carlston: Originally, in the “Galactic Empire” but later, in all of them.

Bergin: Where did you get the word from?

Carlston: Well, as I said, Gary was a Scandinavian studies major. The word is vaguely Scandinavian and means ‘brotherhood.’ In Swedish, it would be difficult, Broederverbundet, but nobody can say that. People had enough trouble saying Brøderbund. The slash through the ‘o’ was both a play on the Danish way of umlauting an ‘o’ and the computer science way of indicating a zero as opposed to an ‘o.’ So we were playing with both ideas.

[Historian’s note: Although the Brøderbund label no longer uses the slashed o (Brøderbund), it was used that way in the beginning as stated here.]

Bergin: I wondered where the name came from and whether it was it like Häagen-Dazs ice cream. Everybody thinks it’s Dutch!

Carlston: Well, Brøderbund wasn’t Swedish. They don’t do slashed characters in Swedish but they do it in Danish. It was more of a play on the computer usage than anything else -- we were fiddling around; we didn’t take ourselves too seriously. So that’s where Brøderbund came from.

Bergin: So now you’ve got a company and this morning you mentioned that you had six products.

Carlston: We launched with about six products. Well, I guess we had three in February but by the time we were doing real numbers (in the summer) we had six products to sell, three *Galactic Saga* and then three that we’ve gotten from this trader in Japan: the *Galaxy Wars*, *Hyper Head-On* and *Golden Mountain*. We also had the tax stuff but we never could sell the tax stuff so eventually we stopped trying. Then that fall, our trader from Japan brought us another game that became an enormous hit. We sold \$100,000 worth of this one game in December.

Bob Leff and Dave Wagman had opened up SoftSell, and were just getting started; SoftSell later became Merisell, the largest distributor of software in the United States. They were still operating out of Bob Leff's grandmother's garage but they didn't let anybody know this. We thought they were a big company because I kept hearing about them all across the country on my trip, ComputerLand bought from them; lots of people bought from them. Bob called when he saw one of our advertisements. When I sent him a copy of this new game, he said, "We love it and I want 5,000 copies right away." And I told him: "I'd love to do it, I don't have 5,000 disks, and I don't have enough money to buy 5,000 disks." He said: "I'll tell you what, I'll lend you the money; you buy the disks and I'll lend you the money as long as you send them all to me." I said: "OK." And he sold everything within a month.

Bergin: What was the name of that game?

Carlston: It was called "Apple Galaxian," later changed to "*Alien Rain*," and it turned out that it was an imitation of a copyrighted coin-operated game in Japan, but we didn't know that when we published it. We had gotten it from a trader so we really got our start by having somebody else's copyrighted software.

Bergin: How much of it did he sell?

Carlston: \$100,000 worth in the month of December.

Bergin: So, all of a sudden, the scales fall off your eyes, and you say: "There's big money in this industry as opposed to it being this hand-to-mouth existence you had known."

Broadening the Product Line

Carlston: I think we always hoped that it would pay the rent and that we could swap software with other people and so forth, but we weren't quite sure where to go next and how to grow the company because we'd been struggling. We were going weeks where we only ate on three days; things were that tight. We had used up all my savings from being an attorney and we were maxed out on my credit card. My parents didn't have any money. The previous October my mother lent us \$2,000 that she had inherited and her sister also lent us \$2,000. But then this new business meant that we were fine, we could repay everybody; we were in good shape, and then other things started to fall in place. A guy came in with a fully working payroll program written in Pascal for the Apple II. It was a brilliant program. It was very well done and it handled every state in the country. While we were a little worried about customer support and so on, we still rushed it out and it sold like hot cakes at \$500 a pop.

Bergin: What was it called?

Carlston: *Payroll*. That's a good name for it, huh? It was the first in this series right here. (shows a software package). This is general ledger with payables, not what Brøderbund's known for these days, but in 1981 that series was over 30% of our sales and partly that is because the price was so much higher than the games we were selling. Then a gentleman came out from Bank Street College with a word processor and said we can't give you the school rights because we're going to give those to Scholastic but we'd love somebody who could get this into consumer channels and that was *Bank Street Writer* and over the life of it sold over a million copies at about \$50 each.

Bergin: What was the name of the guy from the Bank Street School?

Carlston: Frank Smith was his name and he actually came out from Boston where he'd been hired as a consultant by the president of Bank Street College, Dick Ruopp and he was actually visiting other companies in the area and just added us to the list. I'm not quite sure where he heard our name and I think until he walked into our living room his thought was that he wouldn't be doing business with us. But he had been put off by whoever he had just been to, and we were not very pretentious. We were clearly operating out of our house, we weren't trying to be anything other than what we were, and Frank seemed to enjoy the family. In fact, he's still a good personal friend, I see him when I get to Boston, and so we ended up packaging and selling *Bank Street Writer*.

Bergin: Who wrote Bank Street Writer?

Carlston: It was originally a three-way partnership between Bank Street College of Education which decided that it wanted to do this and put up the original financing for it, a company in Boston called Intentional Education who had actually hired an individual programmer who had coded it whose name I have forgotten (and he moved to Guatemala) and Frank Smith, who was the business guy. He was the one who basically came out and drove the bargain, cut the deal and all of that -- so we paid him a royalty on it. We also took the product which was kind of kludgy and we gave it to one of our young engineers who improved it. For example, one operation originally took about a minute, but when he finished, it took 2-1/2 seconds. He integrated a million different files into a single file, cleaned up a bunch of the spaghetti code and so forth; we just sort of did this on our own to make it work better. It made it a better product and that turned into an enormously profitable and successful relationship that went on for many, many years.

So we started developing relationships with other people. We also started to have problems with being in Eugene, Oregon. We were a long way from the centers of technology. We would get fogged in and couldn't ship sometimes for a week, and people had to have stuff right away because everybody was doing just-in-time purchasing. Very few people actually went through a distribution channel. We were still shipping directly to many, many, stores and more were coming online. Magazines discovered us. There were bestseller lists starting to pop up and our

names and our products would show up on those lists. *Softalk* magazine was very influential in the Apple community at the time and we would have four or five, six products on the top 30 chart every month and that was very helpful.

At the same time, we were caught by surprise for example when Apple decided to change the disk format on its floppy disks so that none of our software worked on any of the new drives that they shipped out. They switched from version 3.2 to 3.3 (13 sector disk formatting to 16 sector formatting) It doesn't matter but suddenly everything started coming back. We fixed it as quickly as we could, but we didn't like being caught by surprise – it was harmful to our reputation. So we decided to move, either up to Seattle or down to San Francisco. We checked both out. My brother, Gary, liked Seattle but it rained the entire week we were there and neither my sister nor I liked that, so we decided to move down to the Bay area and ended up in Marin because we found a good location that looks on the peninsula and the East Bay. We weren't wedded to any one area and we moved down at the end of the summer of 1981, my brother, my sister and me. Our first employee, a guy named Brian Eheler stayed with us for another 16 years before he finally went back to Oregon. An independent programmer named Chris Jochumson, whose products we were about to publish, a games programmer who worked with us, wanted to move down at the same time with us. So we moved down and we incorporated in September, a year and a half after we'd started. For a lot of reasons, we decided that if there was any chance of success we did not want to cause conflict inside our family, so we gave shares to virtually everybody in our extended family: our aunt who had lent us money, a cousin, our brother Don, our parents and so forth. Later, when the shares turned out to be worth millions of dollars, they were very helpful in terms of making the family feel like everybody participated -- with the exception of my kid sister who was only 14 at the time we started, and was too young to own any shares. She always felt a little bit left out. Ministers don't get a great retirement income, so this became my father's retirement and my parents enjoyed themselves immensely because they don't have financial concerns now. In fact, even as we speak, and they're in their mid 80s now, they're off in Turkey doing yet another trip with friends and enjoying themselves. It was one of those very providential things that I think we did without thinking about very much, but we were very grateful that we did later. By the middle of October 1981, we were up to about 15 people, had a pretty good stable of a dozen products that were still on hand, a lot of things in the pipeline, and we were on track for a million-plus-dollar year with about a 15% after-tax return. So, as it turned out, the first six months in starting the business were very tough and then just one piece of good luck after another kept hitting us across the nose. We were actually profitable for the next 17 consecutive years.

Management Roles

Bergin: What were you personally doing in October of 1981? Were you the hands-on manager, were you the software designer, were you the programmer? In other words, when did you decide that you would be a publisher?

Carlston: Oh, from the start, from the start. Three of those six original products had been designed and programmed by me, but the other three weren't, and it was clear to me that I couldn't do the other things that needed doing and program at the same time. It takes too much concentration, and so from the start we were running ads, looking for programmers and developers -- people with a product they wanted to sell. That was a critical task early on. What wasn't as clear was who among the three Carlston family members was going to do what.

Bergin: That was my next question, what did you do? What did Gary do? And, what did Cathy do?

Carlston: It shifted all the time. It depended on when we found out that somebody couldn't do something. At first, I was going to do coding and nothing else, but then the phone was ringing all the time and it was hard to code. I did the books and then taught Cathy how to do the books. I did a lot of administrative stuff. Gary was doing most of the sales calls. We were all doing manufacturing and purchasing. It turned out that Gary was the only person who could fire people -- which is a valuable skill. He didn't like it but he was able to do it.

Bergin: You majored in whatever it was that you mentioned and then went to law school and your brother majored in Scandinavian studies and where did Cathy go to school and what did she major in?

Carlston: Cathy went to U. Mass, Amherst and majored in Fashion Marketing.

Carlston: Bergin: You had Gary handle the sales calls?

Carlston: Yes. People did what they were good at and it didn't always stay that way. Cathy eventually became our primary contact for educational sales and marketing. She also took over the bookkeeping from me for a time. We kind of just worked our way through it. There was no clear chain of command. We usually settled things by yelling and screaming at one another -- which scared everybody else but didn't bother us very much since we were kind of used to it. Cathy had a wicked temper before she had her first cup of coffee in the morning but she was pretty good after that. Gary was the most laid-back person.

Bergin: Who was the oldest?

Carlston: I'm the oldest.

Bergin: Gary was number two.

Carlston: Well, we have a brother, Don, who didn't join, so Gary is number three and then Cathy's number four and the kid sister who is 15 years younger than me is number five.

Bergin: In the business, then, Cathy was the baby of the Carlston trio?

Carlston: Yes. A little different relationship. I'd grown up with Gary; I hadn't grown up with Cathy. She joined the family when she was 6 years old, she was adopted, and I was already away at school. So I really got to know her when she was on my construction crews up in Maine. She was a hard worker and fun to be around, and so we brought her in as a partner. It wasn't a decision that we ever regretted but temperamentally she was about as different from the rest of us as can be, because of the different genetic makeup. But she was a good partner.

Bergin: Somebody graduating from a modern business school would say that, "You have to have a long-range plan. You have to have an inventory of people and equipment. And you must have job descriptions and standards and all these kinds of things." However, in all probability, the reason you were successful in that early market, was because you were totally flexible. Whatever needed to be done got done, if you had to stay until 3:00 in the morning shrink-wrapping product, you did it.

Carlston: Oh, we often did work 24-hour days. When we were on a tight deadline, we would just do shifts and we'd keep the equipment going and going. Of the main things that made it successful, first of all was luck. We were very lucky that we walked into an industry just as it was about to explode. So without that, nothing would have happened. We could have fallen on our faces and a lot of people did, but without luck, success wasn't going to happen. I think, secondly, we knew just enough to know that we needed help in all kinds of areas. This meant that people who joined us felt like they were needed, and they could easily bring things to bear that were greater than any of our skill sets. And, we were eager to get out of the way. I think we had no particular sense of a risk of failing, and part of that comes out of a successful family, although not financially successful. Preachers don't earn a lot of money, but we are comfortable with one another, comfortable with our parents. There was no real rebellion, we still like and admire them, and we see them as much as we can. They've actually now moved out to California, so I get to see them a fair amount. The same is true for my siblings. We didn't really think we had a great deal at risk. Yes, you had all of your life savings at risk but that didn't seem to be a very substantive thing compared to the kind of things people often feel they have at risk in various ventures. I wasn't wedded to a lawyer track. I'd long since decided that I didn't really care that much about it -- because a lot of people would say, "Well, how could you jump off this track? You can't get back on." I said, "Well, I tried it, I didn't think it was that wonderful, I

didn't want to end up pushing paper at the age of 85 and feeling that all I had done was shuffle a little money along among certain clients." I loved making things and we were making stuff. Even though we were publishing and not writing all the stuff, we were making things happen that weren't going to happen otherwise, and we were immensely proud of the stuff we put out. I don't think there was anything we put out that we didn't think really added a lot to our universe and it was fun, it was just fun.

Another thing is that you're building an environment and you're at a level of control over crafting your environment that is amazing when you're building your own company. We brought in people we liked because we liked them, and when we had problems with people we would just sit down and talk to them and talk about what we wanted. Even when we caught people stealing and stuff, we'd sit down and explain what we were trying to do to get it started and often that was a very effective way of dealing with things like that. If you get people to feel like you've got a vision of a way to live that you want to share with everybody, sometimes that's the single most effective thing you can do. But I think for most people it was a chance to grow. Most people were hired for positions that were beyond anything they could have attained in a more mature company. I think if they had the skill, it gave them a chance to grow.

Key Employees

Bergin: Doug, can you identify a few of these people? What did they do for you? Where did they go? Where are they now?

Carlston: Some of the big successes were people who basically were snatched very young out of something and ended up being Chief Financial Officer or Chief Technical Officer of a major public company which, as I said, would never have happened to them plying any of the other paths because they didn't understand the politics of large companies, and so on. Other people couldn't handle it over time. One of the things we were proudest about at Brøderbund was that we could, not always, but a lot of times we could go in and successfully move a person down a rung without losing them. It's really hard to do, go in and say, "We're not happy, it's not working for us, but you're a wonderful human being and it was working pretty well when you were at this level with this level of responsibility. And we want you here but we want you to be doing this job if you'd be willing to do it and we'll freeze your salary for a couple of years to get it in line with what you'll be doing. But you'll be here and you'll be part of the family going forward." That approach doesn't always work, but it's great when you can do it. It shows that there's a lot of trust among the people who work for you.

Bergin: Yes. There was an academic commentator years ago who said people are often promoted to their level of incompetence. Do you remember that?

[Historian's note: This reference is to "The Peter Principle" made famous by Laurence J. Peter in his book of that name, i.e., that people will be advanced to their highest level of competence and then be promoted to a level at which they are incompetent (William C Morrow, 1969)]

Carlston: That's a famous principle.

Bergin: Few people are able to step back and look at things clearly, so if your company gave that as an option to people, that is pretty impressive.

Carlston: We didn't always allow people to do this, but if we thought that it would fit them and it would work, then we did it.

Bergin: That's a wonderful option. I started with the US government in 1966, and I've met a number of people who took a promotion to GS-15 or 16 and just hated it. I left the government in 1983 and went to American University. All of a sudden, I realized I had to do everything myself. I didn't have a secretary, I didn't have a special assistant, I didn't have this, I didn't have that, and I was back doing it all myself. At first it was a shock but then I enjoyed doing things myself and not being in meetings all day!

Carlston: I think I mentioned another thing we did was to make sure that everybody felt that there was dignity in all of the work -- which meant that regularly, Gary and Cathy and I worked the assembly line and not just for an hour to show off. We worked full shifts and often we worked the graveyard shift (12 midnight to 8 am) or we did something that was particularly unattractive, because it was important that we make a deadline. After a while, we decided that it'd be really useful if everybody that came into the company had the same experience; some people hated it but most people actually got into it because it results in an atmosphere that is very collegial. You're working on a line with a lot of other people and you can talk. It's really your hands that are doing the work so you can sit there and you chat and try not to sniff the glue. You can put the plastic together when you're doing carts and things, and I think it's also good for morale for people to see that everybody in the organization is trying to help wherever needed all the time. It works easier when the company's smaller and more compact.

Bergin: Sure.

Carlston: Later it started to seem hokey and phony but it was real in these early years.

Bergin: When I think back to when I got into computing in 1966, you did everything. You learned to run the machine, you learned to talk to the people, you learned to write the code, debug the code, but I would say by the early 1970s there were strict demarcations between those functions and the people who did them. The operators didn't code, the coders didn't do the analysis, and I always felt it was an immense advantage for me and for other people of my

era, to understand what we were asking the next person down the line to do. One of my favorite stories is about Marie Curie. She was being interviewed by a newspaper reporter who wanted to know how she discovered radium. She had put some feldspar in a desk drawer with some unexposed radiographic plates and when she came back on Monday morning she realized that the plates had been exposed to a radioactive substance. When the newspaper reporter said that she was really lucky, she reportedly replied: "Young man, luck favors the prepared mind." Another doctor would have thrown the plates out and so, when you say you were "lucky," it seems to me that you and your brother and sister created an environment in which you recognized opportunities. And so it really wasn't luck in the sense that you're walking down the street and you found a quarter lying on the curb, it was that you were flexible, you were creative and you were willing to do what it took to get the job done.

Carlston: No, it wasn't quite that. It was luck in the sense that we did not strategically determine that this was what we wanted to do, i.e., because it was an area that was growing rapidly, one that was going to attract a lot of venture capital, and therefore it was a hot area for us to be in.

Supporting Multiple Platforms

Bergin: I am looking at one of the software packages you brought to the meeting and on the back of the package is a list of the various machines. In the early days did you have problems with all the various brands of computers and the different operating systems and environments?

Carlston: Yes, this was one of the problems back then. In fact the list changed all the time. You may notice this list is actually a sticker on the outside of the shrink-wrap because we would keep updating the software on the disks. So this package would carry both five and a quarter inch and 3.5 inch disks in it. And we would update those as new drivers came in, but the boxes may have been printed 100,000 at a time. So we would just change the little label on the back to make sure it was current. Compatibility was extremely important to the hardware manufacturers obviously.

Bergin: Sure.

Carlston: Manufacturers badly wanted to be on the list, and we tried to accommodate them as much as we could. For example, there was a software company that did a database; it was a flat file database called Memory Mate. It was very similar to things like Sherlock that Apple used to sell. It was very fast, very elegant, ran in background mode, you could call it up and paste stuff into it. This was programmed in a DOS environment, and sold very well. It's a classic example of a product that we found in the freeware-shareware community, and decided it deserved to be packaged and sold at retail. So we contacted the author who had been self-publishing it, it was a company called Presipt (???), and it was sold under the name Instant

Recall. And we signed him to a contract and resold it, and it sold extremely well, despite the fact that he'd been giving it away for a long time before. We did have him clean it up and add some features that we wanted, but essentially it was the same product. Kid Pix was another example of freeware-shareware where we contacted the person who was doing it, cleaned it up, and turned it in to a retail product.

Bergin: Well that's interesting, because I remember the whole shareware idea, and I remember I had an early graphics package for drawing things. Since it was shareware you were able to copy it for classroom use. It said right on the first screen: "Give it to your friends, give it to your neighbors." I think the author's name was Eugene Wang, and he gave an address, and said: "If you're gonna use this, send me ten dollars." And I always wanted to get in contact with Eugene and ask how many ten dollar bills he ever got. But again, you recognized that it was a useful product if you kind of polished it up, because most of these were a little ugly in a way.

Carlston: Yes, right. That wasn't the problem. The problem is that very few people sent in the money. So the author would say: "Oh, I'm satisfied, it's enough, and I don't expect anything." And we'd call and say: "Well that's fine, but this involvement with Brøderbund isn't going to cost you anything, and why don't you let us publish it. We'll help you clean it up, put it into a box, and get it on shelves. And we can promise you -- at a minimum -- your numbers are going to be 100 times what you've seen before." And they'd say, "Yes, but it's out there already." And the reality is that it just didn't matter. What I was proudest of about Brøderbund though, were products that I really thought broke new ground -- that did things that nobody had tried to do before. *Print Shop* was an example of that. We sold 15 million copies and made \$300 million on *Print Shop*. *Carmen Sandiego* is another example of that. *Living Books* is another example of that. Here's one that didn't sell very well, but I'm still very proud of it. This was *For Comment* which was a little bit outside of Brøderbund's normal activities. This essentially was similar to the track-changes feature in *Microsoft Word* today. It allowed a group of people to work on a common document and create an audit trail of who said what and when changes occurred. You could type in a date and see what the document looked like on that date -- with the revisions that had been made and so forth. You could track individual's changes. And it may not have been the right product for Brøderbund to sell, but it was one that was received very well critically.

Bergin: That is fascinating stuff!

Carlston: And also, that came out in pre-LAN times. You have to imagine how hard it is to do that sort of thing in an environment where you can't just email a copy off to the next guy. You actually had to physically duplicate the document on to a disk and then hand-carry it, to the next person. So, it may have been way before its time, but, you know, it was worth doing, it was a worthy concept brought to us by somebody whom we thought a lot of. Actually it was brought to us by a person connected to Bank Street College at the time. And I'm very proud of having put products like that out even if they weren't huge financial successes.

Quality Control and Manufacturing

Bergin: I would like to follow up on that idea for a moment. I remember the days of the “integrated packages,” and the various companies like Lotus and others, which created either software suites or the integrated package that did it all. As part of your discussion, you mentioned having a database package plus a flat file package. As a publisher, your whole approach to that scenario was somewhat different because you had multiple competing products; but it didn’t matter. You said something earlier about “Well we just put it out there, and if it stuck, it’s stuck!” meaning if it sold, fine and if not, it was no big deal.

Carlston: Well, it wasn’t that we didn’t check for quality overall, it had to be good enough that the software enhanced our reputation. But we weren’t particularly sophisticated in our marketing. I think the other difference is that we viewed consumer products as essentially consumable. And that was a little naive. Products like *Print Shop* lasted 20 years so they weren’t traditional consumable products. And because we had come out of a consumer background, our anticipation was that you gave it your best shot, and that most products would disappear within a year. And the ones that didn’t, you could then enhance to some extent. As we did with *Bank Street Writer*, you could add additional products tied to it, and that was our equivalent of a Suite. *Print Shop* had a *Print Shop Companion*, *Print Shop Graphics Library* and dozens and dozens of other products that were tied to it in one way or another. This was useful originally in retail channels because they knew where to put the packages – they put them side by side (on the shelf). Later, when direct sales became increasingly important, you couldn’t get shelf space for the follow on products. By the end of the 1980s, direct sales -- say in the Macintosh market -- was over half the market. Even in the PC market, direct sales were a very substantial part of the market,

So some people rolled everything into a single box and charged more for it. We typically took a lead product, put it in at retail, and then tried to build the follow-on sale outside of retail, directly through an Internet site or earlier through direct calls and direct mail. So that was our approach. We had some products, *Family Tree Maker*, a genealogy program, was probably the most famous. We not only had about 400 follow on products, which were typically genealogical databases, but this was about a 40 million dollar business in its best years. About 24 million dollars was from follow-on data disks, which mostly contained publicly available data -- not proprietary data. Sixteen million dollars was from the original application; we always did package five or six data disks with it.

Bergin: So some socialite or Hollywood star a 150 years from now, when everybody will know family history, might trace their history back to this software which gave people the tools to get interested and involved in such research.

Carlston: I think probably the single most successful product family, other than *Print Shop* we ever had, was the genealogy one because there's such a clear added benefit for genealogists, i.e., that they really need the tools in order to do what they want to do.

Bergin: Is *Print Shop* still being sold?

Carlston: I believe it's still being sold. It should be on its last legs by now. And it has not improved with age. What has happened is that there have been sort of reduced program sets. There's a product called *Print Shop* without any of the original *Print Shop* code base in it. I think they found a cheaper code base, and that's what they're using now. So, it reached its high point at about version six; I think it's on version 20 now, and is a shadow of what it once was.

Bergin: Well I do remember that at the university, I mean everybody used *Print Shop* to make signs and other items used all over campus. And I remember when my children were young, we had a copy of *Print Shop* at home. My children made little greeting cards, and things of that nature, and I wondered what the future of Hallmark and other manufacturers would be.

Carlston: Well, see, changes do sometimes blow products out. We had a product that sold very well for a while called *Banner Mania* and all it did was print banners (better than *Print Shop*). It did beautiful banners; it had this wonderful feature where you could just say: "This is what I want the banner to say, keep displaying banners of different styles and I'll stop you when you make the right one." And you could lock any element you wanted. If you liked the color, you could say: "Okay, lock the color, but you're changing everything else every second." And then you could say: "Okay I like the font. Hold the font and shift everything else." So you could lock it down feature by feature, until you had everything you wanted and then print the banner. It did incredibly well, and then in a very short period of time, it vanished from the market place. That period of time was the period of time that the great mass of consumers switched to sheet-fed printers.

Competitive Companies

Bergin: So the product worked as long as there were continuous form, pin-fed printers and paper stock, but there was no market once the sheet-fed printers dominated the market. No one wanted to spend their time splicing all those eight by ten sheets of paper to make a banner. Who were your principal competitors in the early days?

Carlston: We viewed ourselves as very distinct from the business software market, even though there was a lot of cross-over. As I mentioned, Microsoft was selling *Olympic Decathlon* and *Flight Simulator*, and if Bill Gates had had his way, they would have stayed in games all the way along. And they made a second try with *Age of Empires* 15 years later. But early on they

thought it was a waste of their focus and energy, so they gradually pulled away from game software.

And we did some things that could be considered productivity-like. *For Comment* certainly wasn't a consumer product, and the accounting stuff wasn't. But we saw ourselves as consumer publishers, primarily. And in that arena, the companies most similar to us were probably Sierra Online and Sirius Software which did Apple games, and for a while was the biggest games publisher. By 1984, Electronic Arts came along, again primarily with games, although they did some other things as well. In the educational arena, which starting about 1985 or 1986 became increasingly important to us, the major competitors were initially Davidson Associates and The Learning Company. That's not the one you knew later as The Learning Company, which was actually a company called Soft Key, but started by Anne Piestrup and Marsha Klein I believe, and later run by Reece Duka. Edmark joined them later. This was a highly fragmented market, especially the games market was very fragmented, and lots of little companies from Interplay, Spectrum, Holobyte to Microprose, dozens and dozens of them. And then in the education market there were a lot of smaller players, Spinnaker comes to mind, and a group of others. There weren't very many that were trying to be general purpose publishers like we were -- trying to cover productivity as well as the areas of education and entertainment. Typically, people chose one of those three areas, and I think only Sierra Online competed with us across the board.

Bergin: Okay. If somebody wanted to follow up on this interview at some time in the future, were there publications that did in-depth looks at Brøderbund at various periods of its existence?

Brøderbund History

Carlston: In the first four years, 1980 to 1985, *Softalk* did a monthly detailed review of software companies, at one time called their Exec Series which was about the executives in the corporation, and so forth. Only for Apple companies that would publish in the Apple space. But from 1980 to 1982, before the PC came out, that was almost everywhere. And so they did a good job of that.

There were a series of books that were not in-depth and didn't try to be comprehensive. Steve Levy (*Insanely Great, Hackers, Unicorn's Secret*) wrote one; there are a couple of others that sort of surveyed the whole industry fairly well. I wrote one in 1984 that I told you about, about 15 companies or so.

Bergin: That would be *Software People* (Simon & Schuster, 1985)?

Carlston: Yes. The magazines people read were *PC Computing*, *Byte*, something called *Soft Side* which came out of New Hampshire for a while, and then faded away.

Bergin: What about *PC* and *PC World*?

Carlston: Well those were a little later, the David Bunnell things. I'm not sure when they started, but I think 1984 or 1985.

Bergin: Was there a TRS-80 News?

Carlston: Yes, something like that

Bergin: These publications were very specific to the hardware, weren't they?

Carlston: That was something for the Atari, and I can't remember the name, and there something comparable for the Commodore world.

Bergin: I know when I retired, I had stacks of these various publications. The AU Library took the books, but they didn't take periodicals. So they went to the landfill because no one seemed to want those things. To go back and try to find them is next to impossible.

Carlston: Well I think I still have a complete set of the Apple II *Softalk* magazine. There are probably a few others, like *InfoWorld* which was heavily read at the time.

Bergin: Yes. I mean I used to get that too.

Carlston: I think *Dr. Dobb's Journal* went back that far, but I'm not positive.

Bergin: It seems to me that it did.

Carlston: But, that's a different universe. There are a lot of people who have kept their own private stashes of stuff from that era and never quite found a home for it. I have 50 boxes in my garage and in my barn. This is all the stuff we've ever put out, plus all of our financials going back and so forth. And I think, I've talked to Ken Williams at Sierra, and he thinks he still has that stuff, although he moved enough he's not sure. He lives down in Mexico now. But he thinks it's either up in Seattle or out in Oakhurst and he can get his hands on it. I told him to hang on to it.

Bergin: Well, you know about the Charles Babbage Institute at the University of Minnesota. There are obviously people here (the historians at this meeting) who can put you in contact with them.

Carlston: This is not in digital form. So, it would be expensive and time consuming to digitize all these files.

Bergin: I know. Jean Sammet has an attorney for her estate, but she cornered me at lunch a couple of years ago and talked me in to being her “intellectual executor.” She took me to a place in Silver Spring (Maryland) where she has two large storage areas. She has almost 80 five drawer file cabinets full of material on programming languages, all thoroughly cross indexed. When she is gone, it will be my responsibility to ship the materials to CBI; Jean has signed all the paperwork; all that is left is the physical relocation of the materials.

Let's finish with a couple of the questions that Burt (Grad) sent to you. Were there significant legal obstacles or government regulations that affected your ability (Brøderbund's) to grow?

Carlston: No.

Bergin: Okay. And the company did go public at some time?

Carlston: Yes, it went public in 1991.

Bergin: And, you were still with the company at that time?

Carlston: Yes, I was Chairman and CEO.

Bergin: Thank you for taking the time to share your experiences with me and the Software History Center. We will have the tapes transcribed and rough edited and then Burt will send them to you to review. I have enjoyed talking with you.

END OF INTERVIEW