

An Interview with Brenda Laurel (Purple Moon)



Brenda Laurel brings a theater and acting background to computer software design. She earned an M.F.A. and Ph.D. in theater from Ohio State University, and her dissertation was titled "Toward the Design of a Computer-Based Interactive Fantasy System." Laurel designed and programmed computer games at Cybervision, and in 1980 was the director of software marketing for the home computer division at Atari. She worked at Atari Research laboratory in the early 1980s, where she explored artificial intelligence as a means of creating theatrical plots and characters in interactive media. Her research in areas such as human-computer interface design, virtual reality, computer-based agents, and interactive fiction led her to start Telepresence Research in 1990 with Scott Fisher. In 1992 Laurel joined Interval Research, where she was a member of the research staff until 1996, when she cofounded Purple Moon, a software company dedicated to producing games for girls, and a spin-off from Interval Research Corporation. Laurel has consulted on interactive media for Apple Computer, Citibank, Fujitsu Laboratories, Lucasfilm Games, the "Oz" Project at Carnegie-Mellon University, Sony Pictures, and Paramount New Media. Laurel is the author of *Computers as Theatre* (1991); and she edited *The Art of Human-Computer Interface Design* (1990). Her online collection of essays is entitled *Severed Heads: Notes on Computers, Art, and Nature*.

Q: How did you end up where you are now?

A: I got involved in computer games by accident in 1976. I was finishing an M.F.A. in theater and starting a Ph.D. and working part-time in a modeling agency, looking for something interesting to do, when a friend showed me a computer lab where he was working. Shortly thereafter he started a computer

software company—actually, they were building educational software for mainframes, but somebody walked in the door in 1977 with a little personal computer based on an 1802 chip, and it had four colors, you know, low resolution. And he called me and said, “Well, you’re a theater person, how about if you help us design some interactive fairy tales?” And that just seemed totally normal, so I said, “Of course.” So without knowing it was hard, I guess I learned how to write code, and did everything from graphic design to programming to making coffee, and then I was hooked. When that company folded because there was this little upstart called Atari starting to rise up on the West Coast, we said, “Gee, maybe we ought to go check that out!” I’d never seen the Pacific Ocean, living in Ohio—we were doing computer software in 1977 in Columbus. Anyway, I went to Atari, and for a while I was doing marketing—product-planning sorts of things—but then I had the opportunity to move to research. By that time, it had finally occurred to me that the connection between theater and computers was not intuitive to everyone, and that if I really wanted to be able to explain that and understand it well myself, I needed to put some time and energy into actually being scholarly about it. Alan Kay was my boss in those days, and he was really encouraging me to do that, so I was able to get my head out of day-to-day production in the crazed world of Atari and look at the relationships between computers and theater and think about interactive design and character in a pretty disciplined way. In fact, that ended up being my dissertation. So that’s how I got started in the business. I kind of tumbled into it, and it’s never felt like a split-brain experiment, although everybody else always says, “How weird! What a strange combination.” It seems perfectly natural to me.

We got to here, to Purple Moon, really because of the job I had at Interval Research starting in 1992. I knew I wanted to turn my attention away from VR and look at gender and technology. Actually, it was kind of an extension of the VR work, because in the process of working in virtual reality I discovered a lot of what I thought were pretty striking differences between the way men and women experience VR—the body-centric nature of women’s experience as opposed to the sort of disembodied stuff that you hear about from men when they talk about virtual reality, for example, and the use of narrative in VR, which in those days was not done much. We discovered when we were doing virtual reality, for example with the Placeholder project up at the Banff Center, that our most enthusiastic users were twelve-year-old girls, and that was unprecedented for virtual reality as a medium.

Brenda Laurel

I'm not working in VR anymore; I've tried to take technology innovation off my plate and focus entirely on content and interactivity design as the things I wanted to work on, because I've learned that if you try to solve six problems at once, you don't do a very good job at any of them. So I got back to the little screen and the keyboard, and I think we do have a pretty immersive bunch of products here, but it's not VR. The things that did come through were interest in folklore and narrative, interest in place, interest in embodiment—embodied points of view and rich characters. So you'll see some similarities to that work. Anyway, we were just going to go build Placeholder at Banff when I started at Interval (Interval actually cosponsored the Banff project). David Liddle, who is the CEO of Interval, and I agreed that my major job at Interval would be to look at gender-and-technology issues. So while Banff was going on, we were also starting the research at Interval that led to this project. That's how we got here to Purple Moon.

Q: What was your personal motivation for getting involved with design technology for girls?

A: In terms of our motivation for this project, David and I agreed at Interval that boys tend to have an advantage with computers because they achieve a certain comfort level with the technology by virtue of being motivated by video games to put their hands on it. This is not even about content now; we're just talking about thinking of the computer as an appliance, not being afraid of it, being comfortable with it, and maybe even thinking of it as a medium you might want to author in. Girls weren't getting that chance to the same degree because they didn't have things that motivated them in the way that video games motivated boys. When we started our research, we had the simple goal of asking, "What would it take to design something on a computer that would be as engaging and enjoyable to a girl as a video game is to a boy and would therefore motivate her to get her hands on the computer, feel comfortable with it, and start to think about it as a tool or an appliance, or to have it become transparent?" That little-bitty step doesn't sound like much, especially when you put it in the context of the rhetoric of "computer literacy" and "engineering" and all the other issues that come up for us, but in fact without that first little step none of the other stuff happens. And if we don't get to them by sixth grade, we run a very high risk of losing them. So what's the right question? Well, we decided the right question was, "How does play get influenced by age and gender?" Let's start there. We know that we're trying to do something interactive, so entertainment isn't the right model. Play is much closer to be-

ing the right model because play is more interactive, at least in the way we define it.

Strategically, we made a conscious decision to make our products specifically for girls. If boys think that a product is for them, and they play it and don't understand it, then they trash it. I can imagine a boy opening "Rockett's New School" and saying, "What's going on here? There's all these girls talking, you know, and they're fighting and writing in journals and worrying about who to sit with at lunch, and this is stupid! This is awful!" Then the girls can't really enjoy it or feel proud of it because it's been trashed. So we decided that we wanted to send the message, without beating people over the head with it, that this is really for girls. We basically said, "Boys, you need not apply," because we wanted to protect the experience as being something girls could own, something that could be theirs, so that they could say, "This is mine, this is for me. I own this and you don't get to make fun of it." Boys may make fun of it—although we did quite a bit of research to make sure that our name, for example, was one they had trouble thinking of bad jokes about—but what they can't do is pronounce it lame in the sense of, "This is a failed game, this is not a good game." What they can say is, "This is really dumb girls' stuff," but that's a different critique.

Q: Can you talk a bit more about the research behind the project and what you learned from it?

A: First we did a comprehensive literature survey in all the academic and scientific disciplines that we thought might have some useful information for us. Then we interviewed people in academia and industry and ran focus groups with adults who spend time on the ground with kids in play situations—playground and computer lab supervisors, teachers, scout leaders, coaches. But the biggest and most intensive part was actually talking to kids and parents. We did in-depth interviews with over a thousand children, and eventually narrowed the conversation to just seven- to twelve-year-old girls. We talked to them a lot about technology and learned, for example, that in general both girls and boys believe that video game machines are "boy things" and that computers are gender-neutral. This is contrary to Sherry Turkle's finding, and that was the main reason why we decided to make computer games as opposed to video games, at least for starters, because, again, you don't want to fight two battles at once. You want to be clear about what it is you're trying to do and not make it harder on yourself.

Brenda Laurel

We started talking to girls about computer games and got lots of information about what they hate. Now let me back up and say that they will play boys' games if there's nothing else to do, and they even like some of them, like "Sonic the Hedgehog" or "Super Mario" or "Ecco the Dolphin." But they never become maniacal about it in the way that boys do. (For this we should be grateful!) But they don't even get enthusiastic most of the time; it's not over the threshold. And there are a lot of things they actively dislike and get angry about. For example, they hate to die and start over. That is, like, way stupid and intolerable. They are not interested in climbing a real steep learning curve just to be able to say they've achieved mastery of something. Mastery for its own sake is not very good social currency for a girl. They demand an experiential path, and something has to happen right away. It can't be that you die in the first five seconds and you have to keep hammering at it day after day, like the old action games used to be. They hate being stuck behind an obstacle or a puzzle that you must solve in order to move forward. They're also not interested very much in beating the clock, which was a surprise to me. It's just sort of orthogonal for them to the enjoyment of a puzzle or a game. Another kind of surprising thing is that girls will play games together whether or not the games are designed for multiple players. Looking back you can say, "Oh, of course, that's a no-brainer," but I was actually surprised when I first discovered that they have no trouble at all playing what's obviously a single-player game in a collaborative way.

The industry typically has believed that girls don't like computer games, and when they've tried on those few lame occasions to build computer games for girls, they've assumed that the games are too hard, so their solution is to make the projectiles move more slowly. It's the computer game equivalent of pink Legos. But they're not understanding the play pattern here, so they haven't asked the right question. The one huge thing that the game industry has missed is the tremendous attraction for girls of complex characters and narratives and materials for narrative construction. I mean, it's not only that the characters are lame in most boys' games, it's that they're so lame you can't even make up an interesting story about them. You can't even do projection on it. That was not a surprise to me, but it would be a surprise to a lot of people in the business, I think. The overwhelming importance of relationships was stunning, if not surprising. It was stunning to see how very important that is and how much more fond girls are of an activity that has more than one character in it, or characters with whom you can form relationships, than of an activity where there's "girl against the world" or an individual character doing this

Interviews

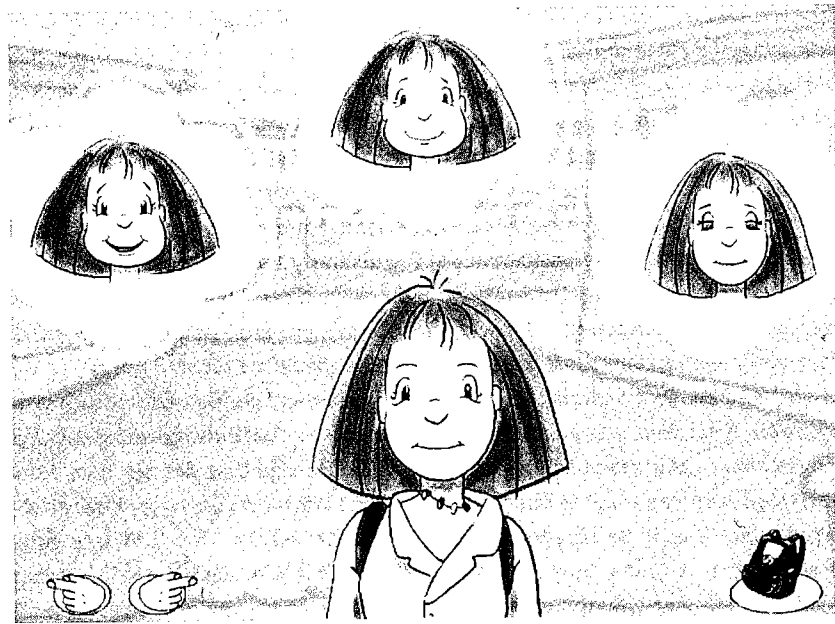


Figure 5.1: The decision screen in "Rockett's World" allows players to rehearse different emotional responses to social situations and their consequences. Reprinted with permission of Purple Moon. Copyright 1997.

or that. It's just a major difference. When you ask a girl what an adventure is, well, it's about exploration, and it's all about relationship. She'll say, "I go on a quest with my friend or for my friend or to find my . . ." The relationship is there all the time. There were very few exceptions to that in the fantasies that girls played back to us. An adventure is something where you have to figure out what the right thing to do is, as opposed to overcoming an obstacle that someone else put in your path. Anyway, that whole elaborate thing—complex emotional navigation of social space is the subject of a lot of play, a lot of fantasy play. There's a lot of emotional rehearsal that goes on there.

So we have tried to make that an area of expertise for ourselves, and the "Rockett" series is really about that kind of play. The premise of "Rockett's New School," the first title in the series, is that you're a brand-new kid in eighth grade, you don't know anybody, clean slate, and you've got to navigate your way to the end of the day. It's just that. And then there'll be another day and another, and when you get tired of looking at the action, you can go behind the action. You can see what Rockett's written in her journal and what pictures

she's taken, and depending on who showed up in the scene, you can visit other characters' lockers and see what's in there and discover things about them, like, "Oh, I know why Cleve's so mean! Because his father is never home. Look at this note! Dad's missing his birthday party!" This is material for narrative construction. It's also material about relationships, and it's emotional rehearsal for social navigation. And, by the way, we've designed a cast of very diverse characters to carry that play pattern forward, and when we tested those characters with kids, they felt very positive about the diversity. So you'll see a lot of different kinds of groups, a lot of different kinds of individuals, a lot of different relationship patterns, but a lot of really recognizable stuff going on in terms of social navigation and those kinds of fantasies. (See Plate 2.)

And also, just to finish the rap on that, at this age, the eight- to twelve-year-old age is really the time of self-construction. That's the project that's going on there, very explicitly so. It's one of the things that defines that break between seven and eight, where it's not about kings and queens and baby dolls anymore; it's now starting to be about my persona—"Who am I? What's going on with me?"—and acting out some of that stuff in a much more relevant and close-to-home way. So the other play pattern that we wanted to focus on, which is also related to this business of self-construction, is much more about the inner world. Its setting tends to be in nature, and it tends to be a romanticized view of nature, where, for example, there are magical properties. Animals may speak, and there may be fairies. Girls will tell you, "We're too old for fairies," but if you show them one, they're really into it, so you have to be careful. You can show them but not talk about them, or you can call them something else—if you call them "magical creatures," it's OK. They're very sensitive about how mature they are at this age, which I totally respect. But this is fantasy, and this is where the flying stuff might happen, for example. But it's very much about the inner self, constructing the inner self: "What's beautiful, what's really beautiful?" Well, flying is really beautiful. Love is really beautiful. Stories of certain kinds are really beautiful. Caring for each other is really beautiful. You get lots of nurturing behavior over here in the inner world. Whereas in the social world, you're looking at a lot of exclusion and affiliation and staying on top of it, over here in the inner world you've got a much more embracing emotional tone to that kind of play.

We thought we understood both of these things pretty well, so in the last phase of the research, after we'd gotten it clear—well, in the second-to-last phase, I guess—we built paper dolls and props and stuff, and sent them to girls about a week ahead of time and said, "OK, you guys, work up something, and

Interviews

we'd like you to do some improv for us, or a show." And they'd come back and do stuff. Well, the kids who got the "Rockett's World" characters and desks and school things did what we expected them to do. I mean, yup, it was right on the money. The only thing I can remember that was a huge surprise was that we didn't have a school principal in the characters that we sent out, and a whole bunch of kids made a principal. And the office was very important—it wasn't just where boys got sent when they were bad, it was also where you could call your mom. Another thing that actually surprised me was that the adult characters they would play back to us were much more exaggerated and cartoony than the kid characters. I mean, Charles Schulz (creator of Charlie Brown, Snoopy, et al.) knows this, but I hadn't figured it out. Then we went over here to this other kind of fantasy space, the inner world, and we sent them little animals and fairies and flowers and trees and paths and said, "OK, you guys, work up something," and was expecting that they would take care of the plants and flowers and nurture the little birdies and make the garden beautiful and that sort of thing. Instead they came back and said, "Well, I come here when I'm sad, I come here to be alone, I come here to find out stuff about myself, I come here to think. I sit under the tree and dream. MAYBE my friend comes. There are no boys here. There are no grownups here." Suddenly we got a very different picture. I get goose bumps thinking about it because it was just so radical when it happened. I mean, these little people were totally contemplative in this spot.

It was very interesting, a different picture of the world than we'd had before, and it really guided us in developing the "Secret Paths" series in a different direction than it would have gone. In both cases, in both worlds—I know I've said this before, but I'll reinforce it—relevance, personal relevance, is incredibly important to them. It's so strong. And that was a surprise to me, I think, because you traditionally think about fantasy as being off somewhere—you know, Cinderella, folk tales, fairy tales, superhero stuff. I mean, I watched *Superman* when I was a kid. So I was really struck by the demand for personal relevance and the way they'd take even a fantastical scenario and turn it around until it was, "MY heart, MY life, MY values, the things I'm worried about, what comes up for me." Those things just kept getting worked into the play, and I think that we learned a lot from that and took our cue from that.

We also were able to flesh out a pretty good map of the social structures that exist for girls in their peer groups: what kinds of groups tend to appear, what the differences are among those groups, what kinds of relationships happen among those groups, how they compete with each other, and strategies

that girls have for figuring out where they belong. This turns out to be the quest in the "Rockett" series: "Where do I fit in this social scenario? Who is my friend, who are my friends, whom do I want as my friends? Who am I, whom do I affiliate with? How do I decide?" The cool thing about it is that if you don't like what happens you can back up and do it again, unlike in life. This is why I think we'll have a strong secondary market in adult women who really want to go back and do junior high right. I should add that there isn't a right way to navigate through Rockett's day; there are just a lot of different ways, different things that can happen, and the way you make choices in that series is to decide, "Well, how is she feeling now, after this thing that just happened?"

Q: In the games, do the girls play themselves or do they play other characters?

A: We decided to have the girl take the point of view of the second person. The first-person point of view was a little too much of a blank page. We fooled around with it, but you spend so much time constructing yourself that it's more problematic in terms of constructing a character. So then we thought, well, let's give the girls a choice of different protagonists they can help through their first day, thinking that there'd be a lot of differences and that girls would gravitate to different characters. But it turns out that Rockett has enough characteristics that are aspirational for almost all girls that, when we tested it, it became clear we didn't need multiple protagonists. She's a very flexible character, she can go in a lot of directions. And what group she's going to end up belonging to is really up for grabs because she's so flexible. In a funny way, she's the least fleshed-out character because she has a lot of range. She's kind of Everygirl, I guess. And I know that there are issues there about race and size and things, but the thing to remember is that the cast itself is extremely diverse in that way. But the interface is second person in the sense that you're helping Rockett, you're deciding, "Go with your feeling about this guy. Don't sit down with him at lunch." So there is this aspect of guiding another person.

In "Secret Paths" the scenario is that you enter the product in a treehouse, (see Plate 3) and it's just you and the treehouse, and you can customize it and change how it looks and change what you see outside and what time it is and what you hear and stuff. And then you learn through the Book of the Secret Paths, this very old journal you find in the treehouse, that you can invite girls to come in and talk to you about what's going on with them. The girls are in this magic box you open. There's one of those friendship chains—remember those paper-doll chains?—and if you click on those girls, they get invited. It turns out that those girls are the girls you met over in Rockett's world, except

they look a little younger, because when kids are in that headspace they're not older, they're eight, ten, twelve, you know? So you'll see Whitney, whom you've met over here in Rockett's world in the eighth grade and over here in "Secret Paths" when you invite her to your treehouse. When these girls come in, they tell you what's going on with them, and you get to decide if you're going to help one of them find insight by going on a vision quest into the forest on that girl's own Secret Path. So little Whitney, who in the social world is a crabcake and a snob, over here—in the inner world—is distraught because her parents are divorced and her stepmother's trying to throw her a birthday party, and it doesn't feel OK to her, and she's got all these issues about it. So another opportunity for narrative construction between the titles is to say, "I know why she's like that: because of this," or, "It's interesting that she's going to turn out like that." You start managing and thinking about constructing the lines of causality and the relationships of the characters because you have this other way to look at them.

If I decide to help Whitney, she tells me a little more about what's going on with her in a kind of animated flashback, and if I commit to her—you have to commit—then I go on to her Secret Path in the forest. (This is the first title in the Secret Paths series. The second title will be "Secret Paths to the Sea.") And on that path, my goal is to find magical stones—story stones—hidden there. The stones are for her, they have information for her. Your job is to find them, and of course there are puzzles involved with finding them, and there are lots of other cool things that just happen, because these are interesting environments to poke around in. (See Plate 4.) If you don't find a stone on this part of the path, you can go on the next part, and if you don't find all of them in one day, the program will put away the stones you've found in the magic box, and they'll be there when you come back, and you know how many you have to look for. It's very forgiving.

With many of the puzzles, once you've solved the puzzle and you've found the stone, you can actually dial up the level of difficulty, if you want to go back and play it as a game. We learned that girls love to do that; they love to challenge themselves. This is another strong way that they act out their competitive impulses. And they'll work a very long time to figure out a hard puzzle. We tested a help agent at one point. We had this little bear character whom you could call if you needed help, and we couldn't get a single girl to call the bear. It was like, "Please ask for help." But the girls would say, "I'm not going to. Get that bear out of here! I don't want to talk to the bear! Leave me alone, I'm working on this."

Brenda Laurel

If you succeed in collecting all of that girl's secret stones in your Purple Pouch, you're transported back to the treehouse. The pouch is wiggling, you open it, and you find that the stones have transformed themselves into this garland necklace that's just for that girl. You have to open the pouch, you have to take the necklace out, and you have to put it on her, if you want to give it to her. It doesn't just automatically go there. Again, there's this business of taking the action, making the commitment, giving the gift. This is about giving a gift, this is about taking care, right? So if you do give her the necklace, what emanates from the magic necklace then is a story, a tale from somewhere in the world that gives that girl another way to look at what's going on with her. So at the end of the journey is a tale. In the case of Whitney it's "The Snow Daughter," from Middle Europe. In the case of Jessie, who's afraid of going to camp, there's a story called "The Fearful Rabbit," from India. Viva, who has issues about her appearance, gets an Uncle Remus tale called "The Bird Who Couldn't Sing."

Q: Can you talk about the business end of things? Do you see these products being advertised and marketed with other products for girls?

A: We've developed three businesses simultaneously, and part of that is because we know that girls love stuff showing up in different media at the same time. There's something magical about that. That's the secret, in a way, of the American Girl doll thing, where she's in a book but here she is, you know? The book extruded this thing. And that is intrinsically more attractive to girls than a Pocahontas doll that comes with the movie, because it's clear that they don't have parity. I don't know how to say this, I've always had trouble explaining this one, but these girls have little detectors that know when merchandise is derivative as opposed to intrinsic in some way. It's hard to articulate because it was a kind of a funny finding and I can't do science on it, but I heard enough about it from girls that I kind of believe it's true. It's about transformation. That's what I think.

So we brought up all three media types together—we were working on *tchotchkes*, which we now call "merchandise," at the same time we were working on the CD-ROM games and thinking about the Web. And you hope that eventually the CD-ROM and the Web businesses will merge. Right now only about one in ten of our potential users has Internet access. The website (see Plate 1) is very aggressive and very rich, and it's something that's owned and operated by the characters. You won't go there and see pictures of me, because that's not

what anybody wants. People don't go to the Paramount site to see pictures of Paramount executives. They go to see characters that they love. That's the point. We tried to take that to heart. And we tried to extend the play beyond the computer with the objects that we've made, including things called "adventure cards." This speaks to a play pattern about collecting but also to a play pattern as in board games or card play, so we had a board-game designer design these things so that they were not just pictures of the game. There are strategies for playing several different kinds of games with these cards. Some of them come in a box, and you can order more for a dollar a pack, so it's kid-affordable. You can take them anywhere and a lot of it is projective. There are story stones on the CD-ROM and there are story stones in the box. The stones move across different types of media and they're always the same thing. They're just going through these magic transformations.

As far as where we are in the girls' market, it helps to be near first in breaking into a market, but the guy who's first is often in the role of being the crash dummy, you know? I was the crash dummy in VR. My little company just ran smack into the wall. We were three years ahead of the market, and we were three years ahead of technology that was affordable. I'm glad I did it, but I would never make a business decision like that again. So I'm perfectly happy to come out after "Barbie," because I don't have to kick the hole in the wall. We still have a lot of work to do in raising the consciousness of the retail community, convincing people that there really is a market here. We've made the strategic decision to devote a lot of our efforts to getting our partners to create girls' sections in the stores, where everybody's products can live together, because what's good for one is good for all in a market this small.

Q: Do you consider yourself an entrepreneurial feminist? Do you feel that the goal of your company affects the choice of employees, the way the company is run, interactions within the company?

A: You know, I have trouble with the "f" word because it's so wildly—well, there are so many interpretations of it now. When I was a feminist in the sixties, we all knew what that meant, we thought. Now we're not so sure. I was reviewing Christina Hoff-Summers' book, *Who Stole Feminism?*—it's about the schism in feminism—and she identifies what she calls "equity feminists," which is what I think of myself as, somebody who's really saying, "Diversity is fine, and we are different in some ways, so let's honor that and lift it up, but in any case we should have equal opportunity to actualize ourselves." Then she

Brenda Laurel

identifies another flavor that she calls “gender feminism”—I would tend to call it “dominator feminism”—which really says that women are superior and that, furthermore, there’s only one way to be a true-blue, card-carrying feminist, and here is the following list. That rubs me the wrong way, and I think it’s a lot of what has given feminism a bad rap among younger women. So I don’t think we can go into that rhetoric without getting all tangled up.

I’d rather frame the question as, “How does our corporate culture reflect the fact that we’re doing work for girls?” And I think, first of all, there’s a natural attraction—because of our mission—for professional women in the business, in the industry, to want to work here, and I think that that goes a long way in explaining why there are more women than men in the company. Although there are a lot of men who are strong contributors here, we’re about 75 percent female. It’s not because we say, “Men need not apply.” It’s because there are a lot of women in this business who just couldn’t wait to be working on something that they felt was relevant and that they buy into. Sexism is not an appropriate aspect of feminism, and we try very hard not to give that any face around here. So we don’t trash men, we don’t trash boys, and we don’t make jokes about difference, at least not insensitive ones. I think our national sales director does have a sign on his door that says, “Token Male, Do Not Taunt or Tap on Glass,” or something like that—but he’s an incredibly good sport about it. We’ve been misunderstood in the press; we’ve had press reports that say, “It’s an all-female company.” Well, it’s not, and it makes the men who work here feel pretty crappy. So we’re strong and outspoken about the fact that this is not about sexism. *Au contraire*. I think that’s something that can happen in a business environment or any kind of team—a theatrical performance, for example—that’s dominated by women or that is all women. Then the thing to be wary of is reaction formation. They say, “Oh, man, it feels so good to be all girls, we’re not going to do anything the way boys do it.” You know? “No meetings, man! No titles! No interoffice memos!” or whatever it is. And pretty soon the baby is hitting the parking lot as you throw the bath water out.

Q: What about content and philosophy? It seems that the games you’ve described do in some ways play out traditional girl narratives. Does getting girls to use the technology, helping them gain access and empowerment, take priority over new representations of gender, software that isn’t designed along traditional gender definition?

A: Well, as always, there is not an easy answer, but I’ll see if I can make it clear. First of all, I think we are doing some stereotype busting that I’m proud

of. Rockett is a resilient woman. She speaks her mind. I should call her a girl, because she is a girl. She speaks the truth. She's got a remarkable amount of insight in terms of understanding herself and what she's feeling. She's recognizably a little girl, but she has some qualities that I feel are off-stereotype in terms of outspokenness, self-awareness, and clarity. There's another character, Jessie, who's a very shy, childish girl, but when somebody starts to trip on her she'll say, "You know what? This is making me feel bad. I don't need to stay here. I'm leaving now," or, "I'm sorry, I was feeling really good when I sat down with you, but I'm feeling sad now, so I think I'll go." This is not exactly behavior that we learn is gender-appropriate, but it's really good survival stuff. So in subtle ways, in the form of characters that are familiar and recognizable, safe both for parents and girls, we're representing some qualities that we think are healthy and that are against type.

There are girl narratives here, but some of them are girl narratives that we don't hear very much in other places, like, "I've lost something that's important to me and I can't even tell you what it is." That's a girl narrative, an all too common girl narrative, and we're taking it up—we're going to go there to the extent that we can. Another girl narrative that you don't hear much about is, "I don't have any time." That was a big issue in our interviews. There are stories about it that girls tell, and there's cultural mythology about it. Adults say to them, "Of course you have time! You're a kid," or, "Well, how can you say you don't have time? You spend all that time on the phone and watching television." So too often you just erase the kid's experience; you deny it by telling them that what they just told you they're experiencing isn't true. That's typically the way adults handle it. In these products, we honor it, we listen to it, we treat it like it's a real issue, we try to give some insight, and we let girls do that for each other. So it may not look edgy—if it did, we'd only sell two hundred of them. My position is that if you want to make a difference in a major way, you have to do it at the level of popular culture. I believe that. At least that's what I'm about. It's about making an intervention at the level of popular culture. I could build great radical stuff for PBS parents, but it wouldn't change the culture, it wouldn't change the things that are currently marginalized and make them more mainstream. There are ways to do that, but it means that you have to listen hard, do the dance, and figure out how to insert new genetic material into the culture without activating its immune system. That's the hardest thing in the world, but luckily that's not only good humanism, that's good business. And in a way, as a parent of preadolescent kids, I've got to say that their biggest issues are that they're not seen and that they don't know who they are—this

identity-construction stuff again. We construct ourselves out of the materials at hand, and the materials provided for girls in this culture are not very exciting and I'm not real proud of them. They're a hyphenated age. You're not a kid and you're not a teen. You're a preadolescent. What a horrible thing! It's like, you're nowhere, you're between here and there, you don't have an identity. Nobody says, "Oh, you're a preteen! Welcome to preteen! Here's what this means. Here are all the products that you can buy, here are the stories about you, here are the movies about you." No. You're in transit, you're on Ellis Island. It's not fun. I've watched a lot of kids go through it. And when we can make an intervention into that reality saying, "Yeah, we see you, we hear you, this is what your life is like, we'll play it back to you. Are we getting it right?," that's so validating that maybe you go into adolescence with your feet on the ground a little better.

But I need to say that we're not putting this out in the world as, "This is good for you or good for your daughter." We're not selling it as social-skill enhancement or lifelong learning. We ran so far away from that so fast. It's the Mikey problem, right? You know, "This is good for you," so you won't eat it. "Oh, great, that's all I need, another agenda," you know? And we didn't want schools to say, "Oh, let's evaluate this in terms of its psychological correctness so we can decide if we want to introduce it into our curriculum." We don't want to go there either, because that isn't our mission. Our mission is to have this relationship with girls and to keep understanding them and to keep putting interesting things out there for them. So we've been very consciously positioning ourselves as fun, engaging, and entertaining, as opposed to enriching, empowering, enlightening, uplifting, and all those other words that we hope are true about our products, because that's not how we're going to leverage popular culture.

Q: These seem like very private issues. Since girls like to use the computer socially, will they be embarrassed to play these games with others?

A: The play pattern here is, I invite girls into my treehouse, they tell me what's going on with them, and I decide to help them by going on a quest. Now it may be that I choose the girl who has an issue with divorced parents because I have divorced parents, but I'm not ID'd, you know? There's a certain anonymity there. It would be different if the product said, "Enter your issue," or "From this menu, select the thing that bothers you most." Then we would have the problem that you're describing. But that's not how the game works, and in fact when we tested "Secret Paths" with girls, they would go down a path that really wasn't about them at all. Using the divorce example, kids would take that path or be

interested in that path even though they had parents that had never divorced, and what they'd say is, "This is for Jenny. I have to get Jenny to see this. This is about her!" They recognize their friends, and they want to give their friends the gift of the product. That's exactly what we want. That's exactly the outcome that we want.

Here is an agenda. I will tell you how I'm breaking my own rule. I'm chagrined at the way storytelling has lost ground in our culture and has been replaced by mass media. I think we've done awful things to ourselves without meaning to in the last fifty years. One of the things about storytelling that makes it so important is that it is a gift, it's a healing. A story is a healing. Storytelling is relationship. "It's the relationship, stupid!" It's not the content so much as it is the relationship. A good storyteller sees what's going on with you and gives you a tale. And this is still true with a good rabbi, or a good parent who will say, "Honey, I know it seems terrible, but let me tell you about when that happened to me." We don't do that as much as we used to as a culture, and frankly I do have a little agenda going here. Stories are wonderful gifts. They're empowering for the teller and the hearer. They're tried-and-true, wonderful ways of taking care of each other and exploring ourselves in the context of our world and our relationships. So stories are really explicitly there in that product as an object.

Q: Which brings us back to the idea of computers and empowerment.

A: To me, true computer literacy means that we start to own this technology as individuals and as a gender when we see it as an empowering device that makes representations. It's not enough to say, "This is an empowering device." Well, yeah, right, we know that. It can add numbers. It can help me type. That's not the end product. In its guise as a tool, that's what a computer does, but at the end of the day what a computer is for is making a representation of just about anything—a representation of how a cell works or what a star looks like or what life is like or what a fantasy world is like. The particular representation doesn't matter, but it is a representation-making device, and that is the reason to be interested in it as a technology because it's capable of that. When a person—boy or girl, but especially a girl—sees that possibility, it pulls her through the kind of learning about the technology that she'll need to become an author of it. But you don't get there unless you've got good examples that make you redefine the computer as a representation device and not a computation device. I'm hoping that these examples, at least for some girls, will get them to see the

technology as having capabilities that they didn't think about before, and that these are things that they're really interested in doing. An example of this is how girls have appropriated video technology.

Q: Could you talk a little bit more about the pragmatics of selling these products?

A: Some percentage of products will be bought by parents who see them and think, "Oh, I bet my daughter would like this." But by far the strongest way to move our culture into girls' lives is to get them to be aware of it and to ask for it. How do we do that? Well, one thing we've done is made comarketing deals with a couple of companies. For example, we made a co-marketing arrangement with a girls' clothing manufacturer, Jonathan Martin Girls. They make these outrageously wonderful funky shoes and nice clothing, and they distribute their clothing in department stores. Typically, you don't do well if you try to put software in a place so unlike where somebody would look for it, so putting the software there probably doesn't make sense—except there are, I think, a few Macy's stores that actually have software sections. But we made this deal where Jonathan Martin has a hang tag on their clothing that says, "Purple Moon," blah-di-blah, "...and here's where you can get it." Then we have a promotion for our products in which the software is packaged with Rockett's backpack, which you'll see in the product, and inside the backpack is a Jonathan Martin baby-T that points the girl back at them.

We've had to be very aggressive about advertising, so we're advertising in girl publications, in parent publications. We've also been really aggressive about PR, getting coverage from places like the *Ladies' Home Journal*. I told our PR manager, "I will die and go to heaven if you can get me into *Ladies' Home Journal*," because my mother always read that magazine and it came to symbolize some things for me when I was young. That was our first interview on a press tour in New York. It was just amazing. I thought, "I can't believe I am doing this." But, it was great.

In our interviews with fathers, we found they're just as bullish about getting stuff for their daughters as mothers are, but they feel less secure about making the right decision, which is why you have to get the girl to ask the father and say, "I want this one," as opposed to that one. But fathers are generally pretty highly motivated. Among dads there's still a lot of, "Well, my daughter plays 'Doom,'" or, "None of that sissy stuff. None of this Barbie stuff. She plays real games. She does Microsoft 'Flight Simulator.'" And there are some girls out there who do that, and their dads are very proud of them. We had to

be very careful with our positioning because one of the things parents are afraid of, especially fathers, is that if they get something that's just for girls, either their daughter is going to be crippled by it or it is going to be dumbed down. Because that's what they've seen before: the game's easy and stupid and it's talking down to her. And she's not getting an equal opportunity, because she's not doing "the real thing," she's not cutting her teeth on "Duke Nukem"—which of course, as we all know, is a tremendously educational product. But there is this prejudice that, "If it's not a 'real' game, it's not good for my daughter," so we've had to do a lot of work in terms of how we position the product and talk about it and where we advertise and what we say to make sure that people don't end up with that misconception.

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