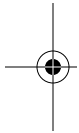CHAPTER THREE

Mark Healey on Building Video Games

LittleBigPlanet has been one of the most hotly anticipated games of 2008 for the PlayStation 3, and by all accounts it's one of the best games of the year. Not only is it a ridiculously addictive platformer, but it's also a creative tool that lets gamers build and share their own levels. The combination of great game play and social networking is a winner for the game's creator, Media Molecule, which was founded a few years ago by Mark Healey. We wanted to know what it was like working on a game like this, so we sat down with Mark.

Andrew: Jenny's been utterly addicted to LittleBigPlanet, and I love it. You guys just did a phenomenal job.

Mark: Well, thank you very much. I've actually been quite addicted to it myself.

Jenny: It's a great game. It really, really is. That's what made us want to talk to you. We wanted to hear the story behind how this game came about. Since this book is really focused on teams and how they come about we'd love to kind of hear the story of how you guys came together to build this.

Mark: OK, let me think. I'm going to have to use my memory, which is normally a bit of a disaster....

The company was founded by me, Alex Evans, Dave Smith, and Kareem Ettouney, with a lot of help from a guy called Chris Lee, who's the business-minded person.

Apart from Chris, all of us had worked together and been friends at our previous company, Lionhead Studios.

We were always working together on various things, and one day I decided that I was going to make a silly kung fu film over a weekend, for no other reason than to have a laugh, really. So I borrowed a video camera from Lionhead and we spent about £50 on some costumes and things. We went into the park behind my house and made an incredibly stupid kung fu film, without a script or plan; we didn't know who was going to turn up, so we just winged it on the day. I then started editing it and making it into a little film—at the same time, I was teaching myself to program C++, because I actually used to work as a programmer in the industry many, many years ago, before I became an artist. Back then I used assembler (6510), but chose to concentrate more on art because it's less of a headache.

So I was making this film and learning C++, when I put two and two together and I thought, "OK. Well, if I'm going to learn C++ I need to have a little project, so I'll make a simple little fighting game, a bit like Street Fighter, and use the kung fu film as cut scenes." So that was what became Rag Doll Kung Fu, a little indie game that eventually became the first third-party game released by Valve over their digital distribution engine, Steam. It was before Media Molecule was ever thought about.

I was working on that in my spare time, and because I knew Alex and Dave, I would often rope them into helping me with some of the more complicated stuff I needed help on. Programming is one thing, but programming a PC is a whole world of pain. It just seems incredibly complicated to me; reading Direct X documentation is ridiculous—every other word is a link to another page! Luckily for me, Alex and Dave are very brainy and technical, and can do things in 10 minutes that would take me 10 years….

…I had met Kareem a couple of days before I asked him to come join in the kung fu fun in the park—we soon became the best of friends, and he ended up being involved with lots of Rag Doll Kung Fu: he starred as the evil boss in the filming, helped out with some of the art, we made the music together on a four-track in my front room, and we even sat down

A screenshot from Rag Doll Kung Fu, the game that first brought the team together

and dubbed over ridiculous voices with another friend of mine, Barry, whose girlfriend, Siobhan, would later become a vital addition to the Media Molecule team as we started to grow, as executive producer.

So you see we formed an ad hoc team through Rag Doll Kung Fu. And in terms of indie games, it was quite successful, really. It got a lot of attention for a game of its size, and more importantly gave us a taste for doing something bigger. We've always worked for other companies, and doing that small indie game ended up being a crash course, if you like, in the whole process from design through to production, through to localization and publishing…

Andrew: So Rag Doll Kung Fu was the project where it all started for you?

Mark: Rag Doll Kung Fu brought us together as a team. Then, through a friend of a friend, we got in touch with Chris who has past experience running businesses (he ran Renderware) and he told us X, Y, and Z, things that we need to think about, things that we need to do. It just so happened that within a very short space of time, through a mutual friend, we got the opportunity to pitch to Phil Harrison—he was the man at Sony at the time—but the catch was we didn't have long to prepare! It was exactly in one week that this meeting would happen. We had nothing to show, so we had to put together an idea very quickly!

Mark in a live-action cut scene from Rag Doll Kung Fu

Andrew: That had to be a rush—in every sense of the word.

Mark: It was very exciting, and I suppose it was stressful. But we always thrived off that in the past, you know, when we're given a tight deadline.

Jenny: Is that something that brought you guys together when you'd worked together at Lionhead?

Mark: Yeah. I mean, I think certainly towards the end of our time at Lionhead, people like me, Alex, Kareem, and Dave were quite often brought in to resolve some problems, but when we weren't firefighting, we had free rein to do what we wanted, really. We were put in a room and just told to make something cool. R&D is the technical term for that, I believe.

Andrew: Do you thrive in that kind of environment? Because a lot of people would find that sort of lack of direction almost intimidating, and definitely hard to work in.

Mark: I love that personally, but obviously it requires a certain amount of self-motivation. You have to come up with at least a rough plan or idea for where you want to head; otherwise, it's easy to sit down and just twiddle your thumbs or surf the Net. We were working on a project called The Room. I think there might be a video of it somewhere on the Internet.

Jenny: So other than the three of you, how many are there on the team at Media Molecule?

Mark: Well, now we're about thirty people.

Jenny: And did it take that many people to build the first version of LittleBigPlanet? How did you plan for the project?

Mark: When we knew that we were going to do this pitch for Phil Harrison, we talked roughly about what we all wanted to be doing. The ideas were very blue sky, really, and slightly vague, so one of our main strategies for the pitch was to pitch ourselves as being incredibly creative and skillful, and that if Sony gave us some cash, then surely we'd make something awesome…

...Dave had a lot of experience with physics, for example, and he made this 2D physics engine that was very cool, so we knew we wanted to use that somehow. And with the Rag Doll Kung Fu game, although it was a very small indie game, there were certain aspects of that that we knew people really got excited about; in particular, the fact that you could easily make your own characters and put them in the game, and that you could act. So we had this idea of user-created content and self-expression, if you like, coming into the mix.

So you could say, in a way, that I brought in the Rag Doll Kung Fu, and Dave brought in the physics element, and then Alex was very keen to show off his technical skills—his graphics coding (he made the rendering engine) is second to none! He was also down with the kids more than the rest of us, I think, and threw in the YouTube/MySpace element. We managed to munge all of this together somehow into a small, hands-on demo and presentation, which ended up being very cool. Try searching YouTube for "Yellow Head" and you can see what the playable part of the presentation was like. That was all put together in less than a week, thanks to some ninja physics coding from Dave.

So this meeting was as much a pitch of talent than of a very specific idea, and thankfully, Chris had armed himself with a strange magical spell called a "business plan," which told Sony how much cash and how many people we needed to make a more fleshed-out demo … Phil Harrison was suitably impressed with everything, and gave in to our demands, which started the ball rolling.

Following the Sony meeting, Kareem was rapidly signed up as the art director and we started to look at what and who we needed to build the team, and we quickly found some more arty people, and some more cody people, most of which were friends (all very talented). Siobhan joined to help organize us, and Mags (who had helped me deal with tax stuff related to Rag Doll Kung Fu earnings) joined as our bookkeeper, to make sure everyone got paid and that we paid the various things that a company needs to pay when employing people!

The design process was basically an open discussion followed up with something to play or look at on screen/paper or the other way around. My main role was always pulling together all these ideas into a single document and trying to make them make sense in relation to each other so that it could be shared with everyone. This made it clear what we were all doing/where we were heading, and became a kind of evolving design document.

Six months soon passed, and we had a very nice demo to show Sony (they had been looking at it every month to make sure we weren't just drinking the money). This is a fairly

formal and pretty intimidating meeting known as a "greenlight," and is where the decision is made to continue into full production, or can it! Thankfully, Sony were very happy with it—so happy, in fact, that they decided to show it at GDC in Phil's keynote speech, in front of the world media, and well over 5,000 people!

Jenny: One of the things that's so amazing about the game to me is the level creator and the user interface for it. How did you guys come about that?

Mark: That evolved over time, really. When we first pitched the game it was very much "OK, here's a 2D physics platform game and we want to put some user-created content in there." That was effectively what we pitched to Sony. And they were actually most excited about the user-created content side, which surprised us a little bit because we thought they'd be scared about that. But once we knew they were into that, we really ran with it.

One of our big strengths is that when we went for that first pitch we actually had a playable demo, and I think that made a huge difference to getting them excited, because there was something that they could actually feel and play. I think a lot of publishers get so bored looking at PowerPoint presentations.

Andrew: You're talking about getting the people you're pitching it to excited. Were you able to keep that kind of level of excitement up, first between just the core of you guys, and then once you started expanding the team? That has to be a big motivator for all of you guys. Did that have any impact on how you come up with ideas? How you build the software in general?

Mark: Yeah. This is the way we've always worked, really—we wouldn't tend to make a big design document upfront saying, "This is what we're going to make." It's very vague early on: "OK. We want it to be a 2D kind of physics platform thing with some user-created content." Just the act of doing stuff is what stirs up the ideas, and then it's like, "Oh, cool. That just gave me an idea to do this. Check this out." And we can really feed off each other. So it's very much a sort of jamming type environment, if that makes sense, which is only possible when you're just a few people. Once you get beyond even six or seven people, you have to start being more structured. It just descends into chaos otherwise. The way we dealt with this as the team got larger was to create "molecules," which are small teams of people working on a particular area. This gives people the opportunity to still work in a jamming style.

The GDC demo was almost identical to the demo we presented at our greenlight meeting. It looked really nice, and we actually had some creative tools in there. The creative tools that we had at that time were completely irrelevant to what we've got now, but it was enough to put the seed in there. And it wasn't really until we showed the game at GDC to the public for the first time that we realized how excited by the idea of being able to create your own levels and games that people really were. It was getting that reaction that really cemented what we were making, I think.

And that made me very happy, because I'd personally always been into the idea of making something that allows people to make games easily. It's been my hobby since I was at

school, and since then I was always in search of the perfect tool that makes it really easy to make games.

A thing to remember is that everyone who joined in on the adventure, particularly before GDC, took a big gamble, leaving well-paid jobs to come join a bunch of clowns! And despite various hard times (we had some hideous arguments), it's not been that hard to maintain excitement. The reaction we got at GDC gave us all a boost in confidence and then we received a lot of great support from the games dev community and the press, which was really lucky for us. Kareem also really shone as a people person, and was very good at keeping everybody's spirits up, which has been very valuable, as I can be quite introverted sometimes.

Andrew: You mentioned that once your team gets a little bit too big, you "descend into chaos." Help us understand what it means to descend into chaos, and how you get around that.

Mark: You start getting things happening on the screen and something that's playable, and then everybody throws out other ideas for where you can go with that thing. If you don't sit down and actually agree on a direction between you, then people will just kind of go off on their own tangents and start working on ideas that conflict with each other, and suddenly things don't hold together as a complete whole anymore.

I think what we've managed to do is strike a good balance there—officially, me and Dave were the lead designers of the project, but really the game was designed by everyone here. And certainly, what my role ended up more becoming was kind of absorbing other people's ideas, taking them and molding them into something that's coherent, if that makes sense, and sometimes having to say, "No, we can't do it like that because that just doesn't make sense with what we're trying to achieve here now." It was just like trying to hold a vision while dealing with an ever-evolving design, I suppose, if that makes sense.

Andrew: That makes a lot of sense, and it really jibes with what a lot of people have been telling us: that you need to write something down to keep a vision. When you say "evolving design," what do you mean? Did it evolve steadily? Was there any sort of iterative thing that you had going?

Mark: Yeah, iteration is the right word, I think. Because certainly, some people might be of the illusion that you can design a game on a piece of paper, like a blueprint, and then send it to the factory and get it made. For some games that's probably possible. But in my experience it just never works like that, certainly on the games that I've worked on. It's more that you have this high concept—it's like having an indistinct wire mesh of a statue that everyone's chucking clay at, and as you're there just trying to sort of smooth it out, it starts to present itself to you. It's not that you design it beforehand. You just work at it, and it starts to show itself, if that makes sense, and then you kind of mold it.

Jenny: Are you the one who does the molding, or is it more of a team effort? How do you keep it on vision? And how much freedom does everybody else feel to change that vision partway through?

Mark: What I've found myself doing at the end of the day was very much trying to hold that top vision: "OK. This is going to be a creative tool that allows people to make things." And to me, that's essentially what it is. Any ideas that came into the mix, I would always be looking at them in that context.

Jenny: Was there a time when someone had wanted to take the game in a different direction than you did?

Mark: There were definitely a lot of things that we would try that we would then decide, "That's just not working," so we'd go back and try something else. Because we're quite a small team, we are agile enough, if you will, to suddenly change direction. The perfect analogy is the difference between steering a speedboat and a supertanker. With the speedboat you can flick the handle and change direction. The supertanker takes ages to turn.

Early on we kind of had a bit of an internal argument, if you like, as to whether what we were making was more towards a platform game or whether it was more towards a creative tool. Some thought making a platform game was more important than the creative tools and others vice versa—I think we ended up in the middle, which was good. We made an awesome creative tool, and just so happened to make a great platformer that served as an example of what was possible with the tool!

I must confess, I would often get my way just by becoming in a very bad mood and becoming intolerable in the office, which sounds terrible, but sometimes it was like that. There were definitely some painful moments. I think at any one time all of the directors have completely hated each other and wanted to kill each other, which sounds bad, but it's good, I think. It shows that we actually care about what we're doing. There's definitely a lot of passion in there. And I think often we ended up with the best resolution.

Sackboy and sackgirl, the characters from LittleBigPlanet

Jenny: It's interesting you're talking about passion for the product and the end goal, because it sounds like you guys were really focused on building the right game. How do you keep track of the quality of what you're building as you're building it, especially as the vision's evolving?

Mark: Just play it all the time. I mean, I think that's one of the most important things you can do when you're making a game: just play it often. A lot of people forget that. You can sit down and you just play it and think things like, "Am I enjoying this? Am I into this? Does this feel good or is this really irritating? Is this boring? Ooh, I wish I could do this!" I think your target audience has to be yourself, initially. You have to make something that meets your own standards of something that you want to play. And then, if you're lucky, it'll be something that other people like, too. But I think if you set out to make something that's going to be impressive to other people, then you're kind of doomed to failure, really. So I think that's probably the way to do it.

It's also always important to test it on people that know nothing about it, which can often be quite a painful eye-opener because you can become quite self-absorbed in a particular detail. You could end up getting really, really obsessed about one particular point in the game, and then you show it to somebody else that's never played the game, and what you worried about doesn't even come into their radar. Suddenly some other obvious point is really brought out into the open. I guess it's a good mixture of constantly playing it yourself, but also getting the opinions of other people. Testing, testing, testing is the bottom line!

Another important factor as well in terms of quality is having quality people. Because we're a small team and we knew from the beginning that we wanted to stay a small team, we were very careful about who we hired, and we've hired some incredibly talented people; that allows you to put trust in people. In my experience, once you get big, over 100 people, for example, it's just inevitable that you start getting deadwood, people that aren't really there to do something that they're proud of; they can be there just to get a salary. There's none of that here. Everyone here is really dedicated and proud of their work.

Andrew: How do you attract the right people? Because it's got to be more than just getting smart people or even people who have done video game programming before. They have to be right for the team, too, especially if it's a small team.

Mark: It's not easy, actually. I mean, initially in our first year, because the game wasn't announced publicly or anything like that and we were a new company, it was 10 times as hard, because you want people that have got experience, people that are good at this kind of thing. And we were expecting them to leave a well-paid job to come and join a start-up with people that they don't know, which can be quite risky.

The first six months was hard, finding good people; it was basically people that already knew us and were interested in what we were doing. But once the game was announced at GDC and it got a really good response that for us was the perfect recruitment drive.

Suddenly people are really excited by this thing, and were approaching us left, right, and center—but we had a very strict hiring process. Depending on the particular role, we'd have different practical tests that we would give to people.

Interestingly, for the level design, for example, most of the people that we took on actually had no games industry experience whatsoever. The test we designed for that role was more to test their thinking and their creativity. For the programming, it's obviously much more technical-based, so we'd give them a broken space invaders-type game and ask them to fix the bugs and improve it, make it cool.

We would also get any potential new hire to talk to other people in the team. You can quite quickly get a feel for whether you're going to get on with someone or not. And luckily, we chose pretty well. I think we've had four people that we ended up not keeping on, because we do a probation period. So we did all right, really.

Once we found someone that we really did want, it was a case of making the proposition attractive to them. We have got a nice family atmosphere here; everybody matters. There's no small cogs. Everyone is really an important part of the team. And we've also got a very good bonus scheme! Everyone that's contributing towards this game, assuming that the game makes a lot of money, will make a lot of money, too. It's very fair like that, which is not a lot of people's experience in the games industry. Quite often, people are kind of worked to the bone and then don't really get to see a lot of the rewards, which is a depressing fact, but it's true.

Andrew: It sounds like having respect for the people on your team is really important to you.

Mark: It's essential, because I've been a member on many teams before in the past, and I've had good and bad. And when it's bad, it's terrible, really. These people are investing their life and their skills in this thing, so they need to get the just desserts from that, too.

Andrew: Hey, I had a question. It's a little bit of a jump, but I love the music. I'm a musician and I've been really impressed with the choices—they're really perfect for the game.

Mark: Oh, yeah. There's some great tunes in there!

Andrew: I've really never heard anything like it in a video game. How did that soundtrack come about? Is there a story behind that? How did it happen?

Mark: With our initial pitch to Sony, and in our monthly "show them what we're up to" meetings, we tended to use that kind of music with any videos that we presented. It helped to create a nice vibe. And it was a progression from that, I suppose. Once we started making the game, we'd set the tone with those videos. Now we had a major publisher financing the game, and suddenly they'd start telling us things like, "Well, we can license these tracks. You can use them in the game."

So literally everyone on the team just started putting forward ideas for songs and things that they liked, and we kind of gave that to Sony and they found out whether they could get the licensing or not. That was it, really.

The original interactive music was written as a collaboration. We started working with another friend, Mat, who has a studio and access to lots of real musicians. He wrote some music for us, and then when Kenny Young joined us just after GDC, he collaborated with Mat to write all of the original interactive tracks. Kenny also managed the process of going back and forth on the licensed tracks and creating all the sound effects—quite a guy!!

Jenny: And the tutorials in the game, you got Steven Fry to do the voice?

Mark: Yes!

Jenny: That's really cool. How did you swing that?

Mark: It was me who really wanted that, because with the whole creative tool and the interface, we really needed some tutorials, so I prototyped these as videos, and I kind of had in mind, "If I'm going to have someone teaching me about things, they need to sound interesting, and funny. *The Hitchhiker's Guide to the Galaxy* immediately sprung to mind. I don't know if you've seen that film or read the books, but Steven Fry did the voice of *The Hitchhiker's Guide to the Galaxy* book in the film. And I was just like, "It would be so perfect if we could get him," not really thinking that it's a possibility. But someone in Sony heard me say that, and the next thing I know, it's like, "OK. We've got Steven Fry. He's into it."

The next thing I know, I'm in a studio, watching this huge character of a man read through the scripts to the game! I got to meet a hero! So that's definitely one of the cool things about working with a big publisher. They can make things like that happen. And we were lucky he was really excited and into the whole game. That was a dream come true, really. I do think his voice is perfect for it.

Jenny: A few times now you've said, "I wanted that and I got it." So clearly you were leading this. As much as there were various factions within the team, groups of people who wanted to take it in different directions—creative tool versus straight-ahead platformer—you were pushing it. Do you consider yourself sort of a leader? What do you think characterizes a good leader?

Mark: I think there's a few leaders here. I'm just one of them. And at any one time one of us will shout louder than the others if we feel more passionate about it. So certainly, there were some things where I would just get incredibly moody and just make everyone's life hell until I got my way. But then with other things it would be Alex, Dave, or Kareem (or someone else) passionately wanting to take something in a certain direction. We'd go into a room and argue about it, and quite often someone would have a much better point than somebody else, so they would win…

….so I would never say that I was the lead in here, but I think I'm probably the person that's capable of getting in the worst mood. It's a bit of a sad tactic, but it works. Most of the time.

In terms of what makes a good leader, it depends what you're leading, really. Someone like Kareem who leads the artists is a very good people person; he never resorts to the iron fist, and is also a damn good artist, so he is always able to lead by hands-on example. But I think the best skill a leader can have is to choose the right team in the first place, and let them lead themselves as much as possible.

Jenny: So if there are several leaders, if it's more of a team effort, what makes for a good team? If you were trying to put together, say, a dream team for building a game, or any piece of software, what would you look for? Not just for the people on the team, but for the team itself?

Mark: You need people that are actually very skilled in particular areas. Dave, he's incredibly good at physics and maths, for example, and Alex is very good at graphics programming (and maths and graphic design, actually!). My real hardcore skill is technical art. Kareem is less technical than I am, but is much better at drawing and painting than I am; he spends every spare second he has painting naked bodies. There are lots of other essential people I haven't mentioned: a good HR person is pretty essential, and you need someone to look after the working environment (water plants, feed people working late, etc.). So you need people that are very good and specialized in their particular areas, but that are also interested in the other areas and can contribute to those as well. People are very responsible for owning certain parts of the game/company, but there's that wide enough interest so that they can contribute to everything else. And last of all, but probably the most important, is chemistry. Matching the right people with each other is essential; having two geniuses work together that get on each other's nerves is disastrous!

Andrew: A lot of people, myself included, dream of one day doing what you've done: building a great video game that a lot of people love. Do you have any advice for them?

Mark: All I can say is that it's been a painful process, but incredibly rewarding. And it's definitely taught me a lot about myself as a person, I think. I wouldn't underestimate how much hard work it is to do something like this, but also that it is completely possible, and if you don't have a go, it will never happen. If you really want to do it, you've just got to make a start, go and do it, see what happens, roll with it, and not give up when things get tough.