# A Dog's Life
## A week with Naughty Dog

**After 25 million games sold, Naughty Dog wants to change our view of platform adventures with Jak II: Renegade. As the only journalist in the world, Thomas Wiborg got to follow their work from within the studio at the end of production. This is the story about stress, bad eating habits, and an endless passion for games.**

To me, Third Street Promenade in Santa Monica is the symbol of the wealthy, American west coast. Here, Starbucks and Fat Burger are crowded together with concept stores for Puma, Reebok and Apple. Despite the fact that people spend enormous amounts of money here every day, you count to about thirty homeless people along the neat promenade, which ends with the Santa Monica Place mall. It feels like a cross-section of Los Angeles; American fast food pretending to originate from all around the world, bored youngsters and platinum blonde mothers with acting ambitions.

In the middle of the street lies an insignificant building filled with restaurants and fast food restaurants. If you pass the sushi, the very fast Chinese gourmet food and a McDonald's that has seen better days, you get to an elevator. On the fifth floor you find the main entrance of Naughty Dog Inc., which today has more than 50 employees and spreads across two floors in the building. But just as many of the largest gaming companies of today, Naughty Dog, or Jam Software as they called themselves during the first couple of years, was for a long time literally under ground. They started out in a basement.

### The Basement Company

Jason Rubin and Andy Gavin were 16 years old when they programmed *Ski Crazed* for the home computer Apple II. The development work took place over a couple of weeks (Jason claims he coded the game over a weekend and that Andy then tidied up the code to make the game faster) in their parents' basement in Boston.

The game was supposed to be called *Ski Stud*, but the publisher, Baudville, didn't think that was a good idea. They changed the title, paid the originators 250 dollars and released the game with what might be the ugliest cover in history. The year was 1986, and Jason and Andy have worked together ever since. After another game published by Baudville, Jam Software caught the eye of Electronic Arts. They were the youngest developing team ever having signed a contract with the large publisher. The company was named Naughty Dog and their future was determined.

The adventure game *Keef The Thief* was released in 1989, and the basement company had made their way into the best room of the gaming business. Jason, Andy and their colleagues were seen (and above all heard) at Electronic Arts's developer conferences.

The honeymoon only lasted for three years. Naughty Dog's fourth game, *Rings of Power*, was half-completed and due to be released for Amiga and PC. Then Electronic Arts decided that the intended platforms were too "weak," and saw to it that the game was converted to Mega Drive. Just before the release, the role-play genre was also considered "weak," resulting in no second edition being turned out even though *Rings of Power* sold out in many places.

The fifth and last project before the success story of *Crash Bandicoot* was to begin was a two-dimensional fighting game with digitalized characters. It got the name *Way of the Warrior*, and was self-financed (read: cheap) and proved that Naughty Dog was, mildly put, better at creating real time graphics than they were recording pseudo-movies. The actors were actually no real actors, but rather friends and acquaintances of the developers' (with Jason's girlfriend as of then dressed up in leather for the role as biker chick Crimson Glory). This was about the time when people still seriously thought that *Mortal Combat* was a better game than *Virtua Fighter*, which at least in part is an explanation to why *Way of the Warrior* was actually developed, and got a publisher in Universal Interactive Studios. The game was released for 3DO when things still looked promising for Trip Hawkins's machine and sold fairly well (no 3DO games ever sold more than just that, fairly well).

**A Marsupial in our Hearts**

After that Naughty dog signed a contract with Universal for three games, allowing them to put together a team from scratch. Andy and Jason moved to Los Angeles to pursue their dreams (and surf). During the car trip there, the idea came to of a linear platform game with three-dimensional graphics and its basic game design. Once there in sunny California, the two founders of Naughty Dog shook paws with Mark Cerny, who had recently become president of Universal and is still a big name in the gaming world with strong ties to Naughty Dog and Insomniac Games among others. As soon as the game concept, which was still nameless, was approved, Jason and Andy moved into their new office and began working on the game that was to become *Crash Bandicoot*. Wisely enough they chose to develop it for PlayStation, even though no one knew very much about the machine at the time. The year was 1994, and the only hardware that Sony provided was developing kits large as refrigerators. To begin with Andy was programming, while Jason began designing the character. This was the start of a marsupial whose color, shape and movement scheme was a direct result of the graphic conditions of that time.

The first person to be hired by Naughty Dog was Dave Baggett, a programmer whom Andy had met when they studied artificial intelligence together in Boston. Two months later two concept artists were hired, Bob Rafei and Taylor Kurosaki. Bob still works there and is today a central part of Naughty Dog.

Eighteen months after the production of the game had begun, Crash had gotten his name (from his spinning movement that crushes thousands of wooden boxes throughout the levels), almost all the levels were completed and in march 1996 Sony finally signed the agreement announcing that they would publish the game. At E3 that same year *Crash Bandicoot* had its world release, and there was no end to the praise, wide eyes and backslapping. Everyone thought they knew how huge this would get. They had no idea.

*Crash Bandicoot* is a game series without precedent in American gaming history. The three linear platform adventures and the spin-off title *Crash Team Racing* have in all sold more than 22 million copies. Along the dead straight path it has beaten all kinds of records. In October 1998, *Crash Bandicoot* and *Crash Bandicoot 2: Cortex Strikes Back* were appointed the three most sold games ever in North America. The following year, *Crash 3: Warped* became the first and only foreign game to have sold over a million copies in Japan.

During the development of the *Crash* games, the yo-yo craze was morbidly huge there, so Crash got to play with a big red yo-yo in one of the animations that are played back when the

gamer is not touching the controller. Japan loved it. Of course no one is saying that the yo-yo contributed to that many sold copies, but it is an example of Naught Dog doing everything right, everywhere. They gave the PlayStation owners a much longed-for and competent alternative to Mario and Sonic, at the same time as they mastered its technique and created some of the most graphically impressive games for the machine.

**Jak, Daxter and PlayStation2**

On January 22, 2001 Sony announced that they had bought Naughty Dog, who in the future were to develop unique games exclusively for PlayStation2. At the same time the newly acquired company decided to leave Crash behind. He was a character lacking graphical details and whose surroundings were based totally on the limitations that the original PlayStation had entailed. The rights to the marsupial were sold to the previous collaborator whose name had been shortened to Universal Interactive. A new hero started to emerge on the drawing tables in the Santa Monica based offices where Naughty Dog had been working since May 1998. His name was Jak and he was a young man with a big yellow hair-do and a heavy responsibility resting on his shoulders – because he had to save the world occasionally of course, but also because his transformed friend Daxter was there. A hand's breadth tall, shaggy and full to the bursting point with attitude he delivered comments that irritated the life out of those around him and made me laugh.

I had a wonderful time in Jak's big, beautiful and sleepless world, as full with fresh ideas as with classic reliable platform magic. To me Jak and Daxter, along with Insomniac's Ratchet and Clank, represented the platform games of the new generation. Super Mario Sunshine felt totally dull when Naughty Dog had already created a far more beautiful and more entertaining island world the year before. I gave it our second highest grade and named it best platform game of the year in December 2001.

Unfortunately the rest of the world did not agree with me, and Jak and Dexter did not sell nearly as well as the last Crash games had done. With its slightly more than 3 million copies it is more in line with the first game of that series. 3 million is of course not a bad number – very few game manufacturers sell that many copies – but the expectations on the company had become so much higher. At the same time in Japan, Ken Kutaragi got hooked on Ratchet & Clank, and decided that it should be packed with PlayStation2, a contributory cause to why that game sold approximately 2 million copies world wide – a smaller number, but a greater success due to moderate expectations.

It is hard to pinpoint the reason behind Naughty Dog's small decline. On one hand, there is a significantly larger potential to sell many games today than back in 1995. On the other hand, the platform genre has faded considerably over the last couple of years, owing to free, heavy action games like Grand Theft Auto.

With recent events fresh in our minds it is not hard to figure out why Jak II: Renegade is a darker, more free and more mature game than its forerunner. It is many times larger than its forerunner, entirely free and driven by a logical plot, centered on Jak's vindictiveness.

Personally I belong to the small group of people who are very fond of the colorful platform design of the old school, meaning that in my book it is a pity that Jak II: Renegade is somewhat less colourful and somewhat less a platform game than its forerunners. In return it is impossible not to be fascinated by how much larger, better-made and technically advanced

Jak's world has become since last time. This is one of the topics that Jason Rubin and I discuss when I visit Naughty Dog in Santa Monica to follow their work during a week in the final stages of the production.

**Welcome to Naughty Dog**

I've been here before, but I haven't noticed the doorbell that utters an almost parodic sound when I press it. Inside the door awaits a large glass case full of stuff connected to Naughty Dog. Most of it was manufactured for marketing purposes and is decorated with the orange marsupial that made the company world-famous. Here are small plastic figures, somewhat bigger figures with fur, promotion games, breakfast cereals, stickers, awards, strategy guides, newspaper covers, collector's cards, key-rings, candy, wrist-watches, fake tattoos, and a radio-controlled car based on the Crash Team Racing license, to name some of the things. Nearly half of all the things in the showcase come from Japan, a reminder of how successful Crash was there.

Just to the left of the small exhibition is the Monkey Room. It is actually just an ordinary room, but when I was shown around the rooms during my first day there, everybody kept calling it that due to the sound level and general level of the discussions. In here, about ten graphic designers and hundreds of toys share the floor area. Closest to the door sits Bruce Strahley, who for the time being applies himself to going through each level in pursuit of floors and walls that won't catch the player. He is not experiencing his most inspiring day ever, but what he does makes sure that you and I won't have to fall right into empty nothingness if we should get the idea to jump against certain hard-to-reach walls in some of the levels that he is in charge of.

Bruce talks a lot, loudly and for a long time. He makes fun of the animators, says that he hates them all and that they don't contribute with anything. He is wearing a worn T-shirt with a text that reads, "Sex with a teacher is a learning experience" and listens to Turbonegro, The Jesus & Mary Chain, along with Pavarotti. Bruce is my idol.

Along one of the long-sides of the room, across from the Darth Vader masks and all the tank models, sits Andrew Gilmore. He plays on a small monitor, looking for bugs and answering my questions with a British accent.  Andrew was born and raised in Great Britain, but moved to the U.S. to start working in the gaming business. Before being hired by Naughty Dog he developed several Army Men games for 3DO, among others one of those that got the subheading Air Attack. He tells me that the toy war games never were any personal favourites, but that several of them nevertheless got some undeserved bad criticism. I mention Army Men: Sarge's Heroes, which I actually never fell asleep in front of, and he nods assentingly. Then he admits that Trip Hawkins is indeed completely mad, just as I had suspected after meeting him in a toy store in San Francisco.

Andrew is totally into first person games and still plays Quake III. We talk about the genre on PC and then follows a 20 minute persuasion campaign on my behalf which ends up with him considering going to Electronics Boutique and buy himself an Xbox with Halo.

Outside the monkey room the calm is apparent. The sunlight finds its way through skylight windows and slits in the Venetian blinds. There are about two weeks left of the development of Jak II: Renegade, and the programmers downstairs have about half the time they would need. However, on the top floor there are only graphic designers, animators and concept

artists. They are all done with their main tasks and therefore spend their days searching for bugs, riding a mountain bike down the hallways and longing for vacation. If you were ever part of the IT bubble that burst, there is a homelike feeling to it.

Jason is out on a promotion trip in North America during my first two days with Naughty Dog. Usually he sits in an office made up of a computer on a desk, a small refrigerator filled with protein drinks and the world's biggest brown leather armchair. The last mentioned is there mostly due to the fact that he is presently testing the game for bugs rather than writing new code.

**From paper to Playstation2**

Today Bob Rafei is art director of Naughty Dog and also the one who has designed the majority of the characters in most of the games that the company has released, including Jak.

It is enough to look at all the illustrations that hang like wallpaper around Bob's working place to understand how much work he puts into a character before he and the rest of Naughty Dog are satisfied. I see at least ten variations of Jak's looks. Different hair-dos, facial expressions, clothes and sets of weapons that have been rejected in favor of what we see in the finished game today. Some of them were created with a different gaming technique in mind. Jak II: Renegade was for a long time based on time manipulation, just like about four out of every five other games are today. The plans were put on ice when they felt more like a gimmick than a tool to thrill the gamer, and Blinx: The Time Sweeper, which was disclosed for the first time at E3 shortly thereafter, cemented that decision.

On the desk lie old outlines of guards, them too in several different variations. Some indicate inspiration from Final Fantasy, others have gotten many features that are characteristic in northern mythology and yet another has a countenance reminding of Indian genies in bottles.

Bob's outlines are among the most impressive things I see along the lines of artwork at Naughty Dog. His work is incredibly detailed and full of life, especially the parts of the city in Jak II: Renegade that he has drawn. Before Bob, as the second person, was hired by Naughty Dog he studied at an art school in New York. One day he saw a flyer for a small company seeking creative people. The gaming business was already then substantially expansive, and like many others Bob wanted to go to Hollywood. Unlike most other people he stayed there, with a fantastic job at one of the most successful development houses in the country.

I'm about to ask him from where he gets his inspiration, but then I catch sight of a bookshelf that provides me with all the answers. Here I find books about rain forests, Los Angeles houses, animals in motion and old convertible cars. The last-mentioned provided models for many of the 50's-scented, but still futuristic, vehicles that tear through the city in Jak II.

**Stress and imbalance**

When you see more than 50 people involved with different tasks, you understand how hard it must be to balance a project that runs across two years so that everyone has just the right amount of work to do all the time.

Most game developments suffer from some degree of imbalance, and Jak II: Renegade is no exception. Some missions were removed at the very last minute in order for the programmers

to be ready on time. It is nothing that you and I will think of, or even notice, but the game could have been an hour or two longer than it will be now.

Simon in the Monkey Room, who most recently comes from Electronic Arts and has developed practically every Need For Speed game that exists and some James Bond adventures, tells me that this development period has felt different from how they usually feel.

– Usually you really struggle up to the very last days, but this time around we finished quite a while back. Naughty Dog is without a doubt the most well organized company I have ever worked for. It is small compared to EA in Canada, where we were more than 800 people when I quit, but at the same time we have Sony backing us up. That is a good starting position.

**The Leader-Dog is Back**

As soon as Jason Rubin is back from his promotion trip, on which he has tried to convince American gaming magazines and IGN.com that Jak II: Renegade is actually the best thing ever since sliced bread, we continue to talk about the company's relative littleness.

– We are more than 50 people now, and will probably be 70 by the end of next game. We might even grow to nearly 80. I don't like expanding, not one bit, it only involves logistical problems. To me, every person we hire is a shit-hole – certainly not because I have something against them personally, but because the company becomes more difficult to handle. One thing that has changed, for example, is that I don't go out to have lunch with people from the company in the same way I used to, not even with those who are my personal friends. I don't want those who choose to eat in here to feel that they have to go out just because their boss does, and that they miss out on perks for not hanging out with me. You never had to think about stuff like that before.

Even if the rules of the game have changed now, doesn't he still take pride in what they have created, that Naughty Dog is a multi million-dollar industry?

– I am proud of our products, not the company. If we could create same games being only eight people I would be just as proud. Some people think that a big company is a measure of success, but I disagree. For just how long has for example Crystal Dynamics trudged on without making anything great? Naughty Dog is one of the companies that have accomplished the most over the last couple of years. I saw a sales list for North America where we were on fourth place after three major publishers. We have sold 25 million copies to date. That's what makes me proud. That the company expands is necessary to create modern games. We have an employee who has been working for months organizing sound files. Since Jak II: Renegade is translated into French, German, Italian, Spanish, Japanese and Korean we have more than 28,000 lines of dialogue to keep under control. This means that there is more work to do for all the bug testers, since every little variation can result in a new bug. Therefore we have to play all the levels in all the languages with different graphic settings. That takes a while.

I ask him how it was in the good old days, with fewer people and less proceeds.

– When we were about ten people here everything was so crazy. One day when I walked out the front door I stumbled over a box of live ammunition. I went back in and asked who had put ammunition outside our only escape route in case of fire. Someone collecting guns – we

are genuine Americans here – answered that they didn't want to order the bullets to their place, so they had them sent to the company instead. Those kind of things happened all the time. You may have noticed that a little girl called Rowan has spent some time here the last couple of days? She grew up here, he says, making a gesture around in his temporary office with his hand.

Rowan is five years old and the daughter of Charlotte Francis, who draws high-resolution textures for the middle sequences of the game. She has a sore throat and gets to spend her time on mom's working place instead of the summer camp where she was supposed to be. They sit together and play, at the same time as Charlotte improves the textures of some of the icons that will be in the game. Rowan adds to my prejudices that girls play in a different way than boys do. She treads carefully through the streets and stays clear of all the armed guards that menacingly patrol around her.

– I won't touch them mom. I don't want to mess with them!

– Try not to walk around in circles, Francis instructs her daughter when she gets lost among the buildings. It's a very big city.

Jason continues to tell me about the growing pains in the company.

– It was OK that Charlotte worked here and always brought Rowan with her, but nine kids were born within Naughty Dog during this production alone.

And now the premises on Third Street Promenade have become too crowded.

– It will be a relief to get out of here, he says and hands me a rendered concept image of the new premises four blocks away.

– No offence, but all the tourists moving up and down this street become trying in the long run, and we have quite big problems with homeless people taking the elevator up here in the middle of the night, acting threateningly. And you can imagine how you feel as a female employee, if you have to walk alone to the parking lot in the middle of the night, and are being left alone.

The new rooms are decorated in a minimalist manner in the company colors. I tell him that I could imagine moving into Insomniac's offices in Burbank.

– Yes, Ted, [Price, founder of Insomniac and a good friend of Jason's] moved first. It was a smart move. We were able to use another floor on the same address, but as you see, that is not enough either. The stuff reaches floor to ceiling.

**One PR Journey Succeeds Another**

As Naughty Dog expands, Jason's own role changes. During this production he has turned over much of the creative responsibility to his colleague, Evan Wells. It was he who demonstrated the game when Europe's assembled gaming press (including myself) visited the offices for a quick round-tour a couple of weeks earlier. This does not happen without discussions on behalf of the publisher. Sony thinks it's a bad idea to have someone other than the person that the gaming press has gotten to know over a period of ten years to promote the

game. It might also have something to do with the fact that Jason is better at promoting his own games than any out-and-out promoter I have met. Tons of knowledge, an endless commitment and a great deal of charisma make him a perfect collaboration partner for Sony.

Just in time for the next game, Jason will take over the overall responsibility for production again. This time Evan controls that part while Jason is out on a PR tour in Europe just weeks before the game is completed. In his room he has large sheaves of paper with programs for the different countries, all labeled with the Sony logotype.

– I never manage to read them. Luckily I get help with going through all documents, and only sign those that are necessary.

He shows me some of them. They contain all possible kinds of questions and answers, the names of the journalists he shall meet and hotels he will be staying at, along with detailed traveling directions. I ask him if it is absolutely necessary for him to know that he is to make a left turn at a certain statue in Zürich.

– No, of course not. Not which people I am to meet either. They tell me everything I need to know in the cab on the way over there. And yet Sony spends a lot of money on this.

Jason talks a lot, but is evidently modest about his own contributions in Jak II: Renegade. Still almost all particle effects in the game are his doing. They are incredibly well-made, from rain, fog, and puffs of flame and smoke, to a scene where an old fortune-teller juggles the classic PlayStation geometry. The circle, square, cross and triangle sparkle as if someone emptied the entire contents of a teenage girl's make-up kit over them. It is really beautiful, and the fact that a business executive devotes so much time and care to details as Jason does is unique. One evening during my visit he sits alone in his office, drinking protein drinks and working on a fireworks effect that will be used at the end of the game.

**A Modest Legend**

To Jason Rubin creating games is more than a job, an opinion he shares with the gentleman in the room next to his. His name is Hirokazu Yasuhara and he has a past at Sega. As a matter of fact, along with Yuji Naka and Naoto Oshima he made Sonic The Hedgehog one of the best platform games in the world. Hence he is incredibly talented, one of the reasons why I love console games, and ought in reason to be greeted as a legend in gaming situations. Unfortunately he has not received the appreciation and acknowledgement he deserves, much due to him, even according to Japanese standards, being unobtrusive.

At least I am clear in stating that it is an honor to meet him to talk about platform games now and then, the 3D revolution and about the brilliance in the level design of the Sonic games, as Yasuhara is in charge of it. Judging from his drawings, I assume that Yasuhara thinks two-dimensionally, and ask him if it's not hard to convert the drawings into three dimensions.

– Actually I have always been thinking the other way around, even as I was drawing the levels for Sonic. When I saw the loops in front of me I saw them with depth, even though they were to be flat in the game.

He asks me what I play right now, and when I truthfully tell him Sonic Mega Collection his face shines up and he tells me a little about his ambitions with those games.

– I wanted the gamer to feel joy and adrenaline in every new situation, a feeling that transfers directly from the hands to the brain. If you visit an amusement park you'll know exactly what I mean.

Certainly, Six Flags Magic Mountain is just a bus trip away, but anyway I understand exactly what he means after having run through Marble Hill Zone a couple of hundred times. We talk some more about Sega and about how the company is developing, and about the new Sonic games. He hasn't had the chance to try Sonic Heroes, so I have to give him a brief run-through of my impressions after E3.

Yasuhara came to Naughty Dog just when the company had started to develop Jak II: Renegade. That the hero was to hold a gun and be out on a fifteen-hour shooting spree was a surprise for the newly arrived level designer.

– My face looked like a question mark when they told me that Jak was going to shoot his enemies. But it's also a challenge for me. Personally I like traditional platform and action elements better.

Yasuhara takes a couple of sips of coffee from a paper cup that stands on his very tidy desk. It is his fourth cup today.

He brings out a black container filled with large, rolled up maps of the world. They have difference in altitude, enemy placements and pre-programmed events marked. What fascinates me the most is the pad where he draws simplified images of Daxter in all kinds of situations and outlines gaming action in the shape of floating blocks, enemies and traps. Yasuhara manages to get between seven and eight pages done in his idea pad during a workday.

– The people at Naught Dog work very hard, it reminds me a little of how it was at Sega in the beginning. Yesterday I was here from half past ten to one thirty in the morning. The last couple of hours I was on the phone with Sony in Japan, telling them about some bugs I had found in the Japanese translation of the game. I hope to be able to take a vacation soon.

**"I Blow Things Up"**

Across the hall from the Monkey Room on the top floor sits Michael Fadollone, a rather quiet fellow who blows things up during his working-hours. He is an animator and is responsible for all the explosions throughout the whole game. Since an explosion without particle effects is nothing much to write home about, he works closely with Jason. Michael shows a large tank being destroyed, at the same time as junk flies through the air in all directions.

– I made this, he says and adds some characters in an open text document on the computer next to him.

I ask him if it does not become monotonous to create every little explosion in an entire game.

– No, not necessarily. Of course it gets tedious sometimes, but it doesn't really work in the way that I get orders for 20 average-sized explosions a day. In most cases they are of varying size and types, and then it's quite all right.

I spend a working week with Naughty Dog. Over the first couple of days the upper floor feels busy, yet relaxed. As the days go by the bugs become less numerous, along with the co-workers. Most go on vacation, others temporarily move downstairs to help the programmers. On the Friday, my last but one day, most of the working staff has received Egyptian masks made out of genuine cardboard by representatives of the Discovery Channel down in the street. They ride around on the little bicycle, shoot karate chops with digital video cameras and play the game they are starting to know by heart by now.

Someone comes up with a freshly burned version of the game from downstairs, and three to four people gather around one of several identical Sony screens to try it out. Apparently the games rewards have just been put in, and every one wants to see how Jak looks with twisted proportions. His head is first made bigger, then smaller, and everybody laugh so hard they can barely stand up. He who laughs the loudest, and most frequently, on the upper floor is named Reuben Shah. He makes sure the characters that Bob draw on paper look just as good on the screen. Since his work with Jak II: Renegade is over he picks characters from the screen and pulls them out with high resolution, via a Tool machine, to his computer. Here he saves them in the correct file format and sends them to Sony. Eventually they will end up in the official strategy guide for the game.

**Ratchet Comes To Visit**

Suddenly Jason comes in with an early version of Ratchet & Clank 2: Going Commando – the competitors' game.

– If anyone's interested, just to come over to my room, he yells down the hall.

15 seconds later the big room is empty. Everyone gathers around Jason's armchair where he sits playing, barefoot. The analysis starts immediately, and the people around me notice things that I would never think of.

– He doesn't move when the boat rotates, that must be temporary.

– Ratchet sticks his chest out much more now, he's a proud fellow.

Jason shoots off a shiny, orange laser beam, one of the weapons that came with the demo version of the game.

– Ohh, that is real-time, someone says.

Jason suddenly notes that Clank does not keep up with the hero.

– Actually, I don't mind, he says, grinning.

– Do they have 60 frames? Bob asks, referring to the screen update frequency.

– Forward and backwards, Jason answers.

Ratchet jumps between the over-sized frog leaves that float around in the pale-yellow water on the Swamp level. Frogs cut off his escape route and throw up green phlegm.

– Do they throw up?!

– They throw up on you!

– Come on, shoot them, don't chicken out, someone says from behind the armchair.

– It costs money to waste the ammo, and I'm a Jew, so it just doesn't work, Jason laughs.

He does that quite a lot, jokes disarmingly about things that are a bit sensitive. I like it. Political correctness is boring.

It is a group of rock-hard critics that have gathered to judge the game that they are competing with this fall. Small graphic misses, some interrupted dialogue, and a very local rainy weather get some crushing remarks. At the same time they are good at spotting the positive improvements.

– They have upgraded the sound, haven't they? The dialogue sounds better and the weapons much heavier.

Jason imitates the dialogue that is just read with the heaviest radio voice ever.

– Secondary action? I don't want no secondary action, beeeatch!

Suddenly someone realizes the absurd in my witnessing new levels from Insomniac's forthcoming game at Naughty Dog.

– Does Ted know that a journalist sees this? The good cooperation between Naughty Dog and Insomniac ends here and now!

Everybody laughs.

**Down Since Day One**

Justin Monast stands on the terrace facing Third Street. It is warmer and brighter out here than inside, even though it is approaching eight o'clock in the evening. Down in the street I see well-lit trees and a young fellow with an electric guitar playing covers for those passing by. Royal Elastics are about to have some kind of fashion show, but they are running late.

Justin has worked at Naughty Dog since March 1995, and originally did a little of everything. Today he is in charge of IT. We talk about his collection of old arcade machines, the pride he takes in the company and his colleagues. Justin is just one of many who mention that Jason creates particle effects even though he is running the company, and that it is as rare as it is positive.

The pride in the games that come from this company is something that he shares with most of the ones I meet during my week at Naughty Dog. For instance I got to read a number of e-mails that Jason had gotten from a young kid who had bought Crash Bandicoot: The Wrath of Cortex for PlayStation2 thinking that it had been developed by the same people who developed the first four games. He was disappointed, to put it mildly, and in his e-mail took

the game apart and explained exactly why it really sucked. Jason agreed, but tried to explain to him that Naughty Dog no longer had any say regarding Crash, just like Steven Spielberg had nothing to do with Jurassic Park III, despite him having created the series. Furthermore he was not the least proud of what had happened to Crash and offered to send a copy of Jak and Daxter instead, a game that Naughty Dog indeed had developed and thought that he would like better.

Jason and the kid had a long correspondence that ended up with Naughty Dog sending him the game, at the same time as all the e-mails were forwarded to Jon Burton, president of Traveller's Tales. They are the ones who developed Crash Bandicoot: The Wrath of Cortex and thereby sent the old platform hero off to bargain sale shelves across the world. Jon replied that he did not understand why the e-mails were forwarded to him, and a little discussion about quality followed. Jon conceded that Traveller's Tales sold most copies of Crash Bandicoot: The Wrath of Cortex based on the character's good name rather than on the quality of the game. Then Jon brought Haven: Call of The King into the discussion and commented on how well Naughty Dog and Traveller's Tales had dealt with various graphic effects, but that is really beside the point. The point is that I find it very hard to see Jason doing something that he does not believe in to 100 percent, unlike those who keep Crash, Spyro and all other previous, fantastic characters alive, instead of letting them rest in peace.

**The Other Half of Naughty Dog**

If Jason in some way runs the show on the fifth floor, Andy Gavin is at the center of what is going on downstairs. He has created the major part of the game engine in Jak & Daxter and Jak II: Renegade, but no documentation of the code. This means that much of the information that the programmers need to do their job is in Andy's head, and that a vacation seems pretty far-off to him. Three hours of sleep a night is standard during the final weeks before the game is finalized and gets pressed at Sony's plants.

Andy's office is a proof of him having some intense months behind him. The desk is clustered up with documents that look important, magazines of various kinds and emptied soda cans. On the wall hangs a swordfish made out of rigid plastic and odd press clippings from the early years of his career along with old game covers. The back of Ski Crazed with a picture of the 16-year-old wonder kids Jason and Andy is terrific. The floor is decorated with a gigantic can of dog food for Andy's dog Osiris, who is also responsible for all the upholstery that has been torn out across the wall-to-wall carpet in the programmers' room.

-He does that sometimes, Andy says and nods at the dog, which is busy tearing up a napkin with a Subway logo.

It is nearly nine o'clock in the evening and it is time for Osiris's evening walk. No matter how busy Andy is he always walks his dog every night. I join him and we talk about California's ridiculous laws, old European cities and girls. My most common question over the last couple of days has been how it feels to build something from scratch, watch it sell millions of copies and be appreciated by people all around the globe. Even if every one of those working on the two floors can answer that question I am most interested in what Andy has to say, partly because he in fact founded Jam software, and partly because it is always Jason who represents Naughty Dog.

– I don't think so much about what the gamers actually experience, but of course I have thought about how many copies of Crash that are running around on TV screens across the world at any given time. It is quite a fascinating thought.

Andy's list of favorite games differs a great deal from what I had expected. He mentions titles like Ultima, Castlevania and Super Ghouls when we talk about games in general and platform games in particular.

Suddenly Osiris runs up to a stall on wheels down on Third Street. I assume that the vendor will be scared to death, but he looks happy and takes out some sweets from one of the doors at the foot of the cart. Andy says that the dog must have cost the poor stall-owner a minor fortune over the years. We stroll on towards Wolfgang Puck, the healthiest fast food I manage to find in Los Angeles.

**Musical Problems**

With about a week to go of the production, Jason and Evan look for bugs in a new version of the game in Andy's office. Suddenly it turns out that the city contains the wrong music. Andy is of the opinion that the scores that should have been used did not fit in.

– We tried to use them, but they didn't sound good. As a matter of fact they sounded like crap.

Jason who has been out of town and does not have the same insight into the final production as Andy and Evan do does not agree.

– We decided to use three normal, three intense and three extremely intense scores. I promise I can find 20 places where we can use the extreme songs. The game will be worse if we don't use them, believe me!

Jason and Evan go through the game's levels in pursuit of places suitable for the music at the same time as Andy is on the phone with the musician at Sony who is composing the songs especially for the game. They misunderstand each other and Jason throws himself over the speakerphone and over-explicitly explains which categories they need music scores in. The atmosphere is irritated, but finally Jason gets his way and the musician is called up again. He is instructed to get ready with the converting of his songs into the format used in the game before the last bugs are taken care of. They are pressed for time, but everything will be ready on time.

This discussion is the closest I get to any kind of drama during my week with the well-oiled developing machine that Naughty Dog has become over 10 years as an operator in the gaming world. Andy tells me that the music is the very thing that is always the most difficult to agree on.

– Most of us can tell the difference between good and bad game design by now. You can even judge the graphics objectively to some extent. Music is more difficult, it is so very subjective, and we all have different opinions.

Jason agrees, gives a crooked smile and adds,

– Besides, I listen to heavy metal, so who am I to say what is good music?

**The Test Room**

On the third floor, at the very back, lies the excessively air-conditioned test room. It is the hub of Naughty Dog right now. From here, reports go out to various parts of the company about what is not working and has to be fixed.

The room is full of screens of different shapes and sizes. On the wall hangs a large plasma screen and on a table in the middle of the room stand VCR's, empty water bottles and Diet Coke cans. The walls are embellished with framed Crash Bandicoot posters and a weird Japanese advertising bill where the marsupial is dressed up in a full Santa costume holding the Japanese edition of Crash Bandicoot: Cortex Strikes Back. Nine people work in here, and they are all wearing headphones. A T-shirt with a product logo and cargo pants are the standard uniform, and place the testers far from the strict dress code that prevails at many American gaming companies.

The testers look bored. They have indifferent facial expressions after having played through the adventure between 500 and 600 times. Somehow the gaming style reminds me of people who have played too much Quake and get paid to do it. Every one in the room stress their way through the game by cheating. Since they know how everything works it takes them between four and five hours to run through all the missions. It doesn't always look very pretty when they skip ahead and use all the shortcuts, but it is ridiculously efficient. Exactly everything that is shown on the screens is recorded on VCR so that there is something to show the programmers if a problem cannot be recreated, and of course to prove that you have gotten an unbeatable high score.

Along a wall in the room stands a couch that looks very IKEA. Here one of the testers fell asleep the night before I landed in Los Angeles, exhausted after too many hours of non-stop playing. I look for drool spots to no avail.

Sam Thompson, a producer from Sony who has stepped in at the final stages to help tidy up among the bugs, sits in front of a big TV surrounded by THX classified speakers. Another 40 people send daily bug reports from Sony's own offices. Sam and his colleagues write down all serious problems on a white board and go through their degree of priority. A couple of times a day Andy comes in to find out how things are going and to discuss what things have to be attended to with Sam.

The day I spend down here they try to figure out what sound bugs to deal with. Hearing the testers describe to Andy what happens in a certain situation is great humor, and according to some conversations, "Iiieeeeehhh!" is a common sound bug. Hopefully we are spared from that one in the finished game.

**Goodbye Naughty Dog**

A week as a guest at one of the Western World's most talented development studios in sunny California makes the dull workday in Stockholm seem just as distant as it seems uninspiring. As usual time passes far too quickly, and after seven short days I sit in a yellow cab on my way to LAX and then further on across the Atlantic.

With the sound of the split-up Los Angeles band Naked in my headphones and a screaming four-year-old French kid in the seat next to me, I spend the fifteen hour long flight dreaming my way back there. To the palm trees and warmth of course, but perhaps more to the future of the platform genre. To the Monkey Room, Hirokazu, Jason, Andy and the rowdy dog Osiris who ate everything he could get his paws on. To stress, creativity and a collected concentration you could almost touch. To Naughty Dog, that along with Insomniac fulfils all the promises Nintendo has not been able to keep since 1996.

**Thomas Wiborgh**