Appendix A

Artist Interviews

I feel that this book wouldn't be complete without getting other computer artists' perspectives on game art and computer graphics design in general.

For this section, I've been fortunate to speak to two very talented individuals. I asked each artist a series of questions divided into three parts: *personal*, *design*, and *technical*. The personal questions probe into the artist's background and experience in game and computer artwork. The design-oriented questions examine the artist's feelings and approach towards arcade game graphics design and 2D-computer artwork in general. The technical questions explore the artist's opinions on different software and tools.

Karl Maritaud (nickname: X-Man)

The first person I interviewed was Karl Maritaud. Karl is a part-time demo *graphician*, or graphic artist, who specializes in creating artwork for the PC demo scene in France. He has also dabbled quite a bit in computer game graphics design, and is an extremely talented artist as shown by Figures A-1 and A-2.

FIGURE A-1: Example of Karl's Artistic Ability (and done with less than 256 colors!)

FIGURE A-2: Example of Karl's Game Artwork

Personal Questions

1. **What is your background and how did you get started in computer artwork?**

   I'm currently a computer scientist who is doing a Ph.D. thesis in image synthesis. So, you can see that my passion for pixels has influenced my studies. This interest in computer graphics started when I got my first paint program on my first computer. It was *The OCP Art Studio* on an Amstrad CPC 6128.

2. **How long have you been creating computer artwork?**

   Since the day mentioned above. I've been doing it for about 11 or 12 years now. But it became "serious" when I got involved in the "demo scene" five years ago.

3. **Do you think 2D artwork is dead or does it have a future given the interest in 3D graphics?**

   Well, it's true that 3D has invaded the computer graphics domain. But 2D skills are still needed to draw textures and retouch rendered scenes, etc. Anyway, even if 2D artwork really died, I'd continue to draw in 2D, because I like it! I don't live from my pictures; it's just for my pleasure, so I don't really care about what is the standard in game companies.

   All I can say is that I loooooove the low-res 2D landscapes in the game *Simon the Sorcerer*, and I really cannot imagine them in 3D.

4. **What's your favorite platform for creating computer artwork—Mac, PC, Amiga, Falcon, etc.?**

   The PC, definitely.

Design Questions

1. **How do you approach a project? Is there a certain procedure you follow? Do you just start drawing or do you take the time to plan your artwork out?**

   It's really variable. For some pictures, I know exactly what I want to draw before starting (especially when I just want to copy from a model). Sometimes, I start from a model but then I decide to add things that I didn't think of in the beginning. And sometimes, I make a whole picture without knowing what it will exactly look like at the end; just from an idea that become clearer or can totally change while I'm drawing. It's like writing a book. You've got the main idea that makes you start to write, and then your imagination finds ways to link and enhance these ideas.

2. **What inspires you creatively?**

Everything. Photography, sci-fi, heroic fantasy, movies… But anyway, I've got to be more creative. In the "demo scene," we use the label "no copy" when a picture was built from imagination. I mostly used to draw copies or half-copies, but now I want to be able to stamp the "no copy" label on my pictures.

3. **What's your favorite type of computer artwork? Do you like doing stills for demos better or do you prefer doing game-oriented artwork?**

Well, I've done graphics for a few little non-commercial games and I've also worked on a bigger project that was unfortunately aborted. It was interesting, but I prefer drawing for my pleasure, because I don't have to fear whether the result will be good or bad. When I am more confident in my skills, maybe I'll start to enjoy drawing for commercial projects.

4. **What's the best way to develop your overall artistic techniques?**

Looking at others' work! One has much to learn from others. It's very interesting to try to figure out how your favorite computer graphics artists draw. By trying to do like someone else, you can find new techniques, even different from the one you originally tried to copy. Another very interesting way is to read tutorials from others. There are plenty of them on the Web.

5. **How do you approach different types of artwork? In other words, how would you approach doing a demo screen versus sprite artwork for a game, etc.?**

The only difference for me is freedom. For a demo screen, the only restraints are your imagination and your talent (and the competition rules, but they are not very restrictive, except for "old-school" competitions). But for a game, you have to respect its overall mood. But the techniques, for me, are about the same. I have something to draw, so I draw it. Actually, I'm quite attached to details, so a picture is kind of a huge set of sprites that must all be drawn with precision.

6. **What's the most difficult part of designing game graphics?**

From my experience in this domain, I'd say that the most difficult thing is to define the global aspect of the game, and to keep close to it. The best is when you can hardly tell who drew what. You know, when several artists work on a game, they must try to adapt their style to others' and that is not easy.

Technical Questions

1. **What are your favorite painting tools/image editors for 8-bit artwork and why? What's your favorite true color image editor and why?**

For 8-bit drawing, my favorite program is *GrafX2*. Why? Well… because I'm one of its two creators! But more seriously, because it does almost all that I want for 8-bit artwork. And what has not been done yet will be, if we find time

and motivation. Another reason is simply because there are not many good 8-bit paint programs on PC, and then I objectively think that *GrafX2* is one of the best, if not the best. It's really user friendly once you become familiar to the keyboard shortcuts.

For true color, my favorite one is *Photoshop 5*. The word "photo" in its name does not mean that you can't draw with. It's really powerful and I seldom use more than 10% of its power. There are many other programs for true color painting, but *Photoshop* does all that I want, and it does it well.

2. **What are the most important features for a drawing tool to have and why?**

Well, it really depends if it is for 8-bit or true color drawing. For 8-bit, a good program requires, in my opinion, the following features: the basic tools: free-hand drawing, lines, polygons, rectangles, circles, flood-fill, etc.; the basic effects: shade (change to the next color in a color range), smooth (blur), colorize, etc., and the possibility to control which colors must be used when the effect looks for the nearest color in the palette to the one it has computed; and the possibility to arrange your palette as you wish: for example, allowing the user to insert a color into a gradient without shifting the correspondence between the colors in the palette and the pixels in the image.

For true color, I need the basic tools: the same as for 8-bit and a few others that were effects in 8-bit programs like blur and smudge; effects: darken, lighten, colorize; filters: the most basic ones and the "HSB noise" from Eye Candy; layers; and color adjustments (gamma, contrast, and color balance).

I could do with less, but I have greatly needed all the mentioned features at least once.

3. **What other graphics tools (i.e., image viewers, converters, etc.) do you use and why?**

Viewers: *ACDSee* for fast viewing, *SEA* for full-screen viewing true color pictures, and *GrafX2* for full-screen viewing 8-bit pictures.

Converters: I rarely convert images, but when I do, I use either *Photoshop* or *Paint Shop Pro*.

4. **Do you have a specific file format preference (i.e., .PCX, .BMP, etc.) and why?**

GIF for 8-bit images, and PNG or TGA for true color. These are for artwork, of course, because JPEG is good enough for the rest. But I couldn't use lossy compression for images drawn with a computer; that's out of the question.

5. **How do you go about defining your color palettes?**

I define the main color gradients and a few others that are close to the first ones. The main gradients will be used for the main shapes of the image, and the others will "break" the main gradients because images with only one color

gradient per shape are really ugly. In my opinion, a good picture requires color variations.

6. **What are some of the issues to watch out for and consider when constructing a color palette?**

   There shouldn't be any important problems if the palette editors were perfect. In most paint programs, it is not possible to move colors in the palette without destroying the picture. This is not a problem in *GrafX2* thanks to its X-swap option. This option allows the user to insert colors in a gradient, to delete unused colors without letting "holes" in the palette, etc.

   On the other hand, *GrafX2* does not offer yet all the interesting features from most true color programs where you can adjust colors, contrast, gamma correction, or simply edit them in the hue-saturation-brightness color space.

   Now, apart from the limitations of the palette editor, it is better not to use all the 256 colors in the beginning because you might need extra colors later. For example, if you had a rather pink face to draw and want to anti-alias the neck with a green pullover (just an example), you'll first define pink gradients (more than one!) and green gradients. But you'll also need a few colors between green and pink for anti-aliasing. And you can't define these colors while you haven't (more or less roughly) drawn the neck and the pullover.

7. **What is your favorite screen resolution to draw in and why?**

   In 8-bit, my favorite resolution is 320x240. It's a low resolution because pixeling requires a lot of work in order to get a good picture. And it's got square pixels.

   In true color, I don't really have a favorite resolution because you don't work on each pixel separately. But I generally draw 640x480 or 800x600 pictures. And, since most true color picture editors work in a windowed environment, I think it's interesting to speak about the chosen resolution. I personally configured Windows in 1152x864 because it's the biggest resolution supported by my monitor that offers square pixels. Indeed, 1280x1024 has an aspect ratio of 5/4 instead of the standard 4/3 for monitors.

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Neil Shepard (nickname: The Neil)

Neil Shepard is an experienced arcade game artist from the United Kingdom. To date, he has created the artwork and animation for over a dozen well-received arcade games. Figures A-3 and A-4 demonstrate Neil's impressive work.
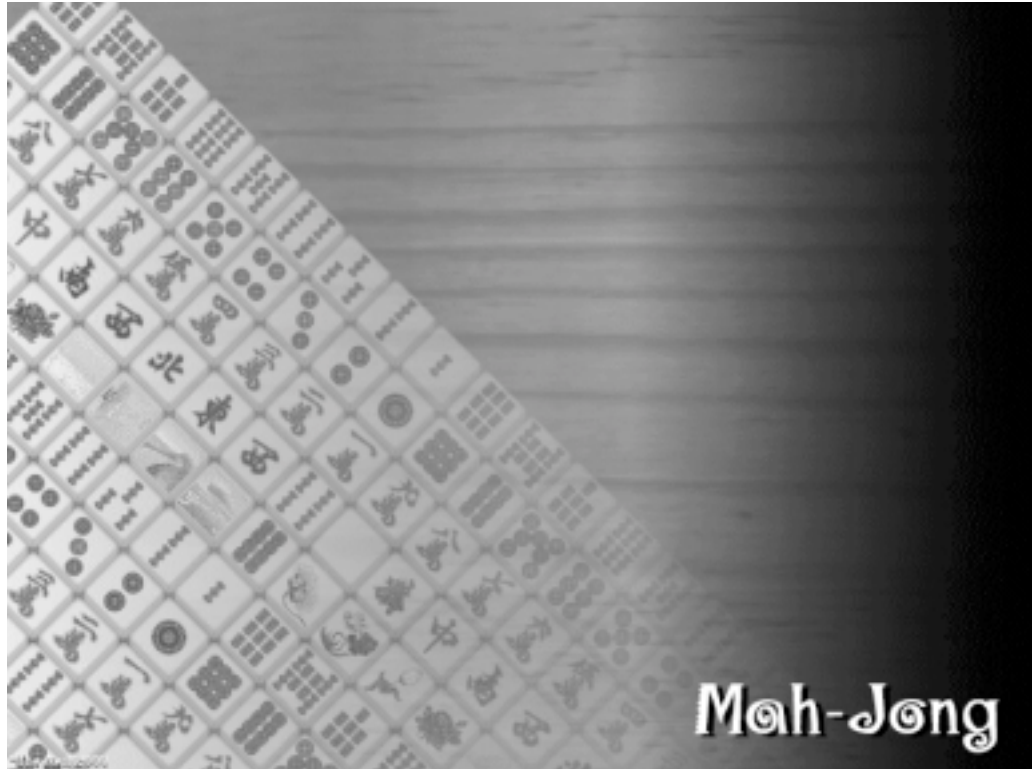
FIGURE A-3: Example of Neil's Title Screen Artwork

FIGURE A-4: Example of Neil's Game Sprites

Personal Questions

1. **What is your background and how did you get started in computer artwork?**

   I'm a 25-year-old UK software developer by profession and I develop game graphics as part of the DP team outside of work. I got hooked up with my partner (in a game sense) Del Dixon while I was at a university. He was developing games and needed an artist. I'd been playing around with doing artwork (not game graphics) as a kind of hobby (I'd studied art at school and at that time home computing was just starting to allow decent artwork to be developed). He showed me what he'd done and I said I could give them an overhaul.

Apparently, I did a good job, and we've been working together on games for about five or six years now. So, now I develop graphics for the team in my spare time and work as a Delphi developer during the day. This allows me to understand hardware, pixels, color depths, etc., but I can also bring my art experience to the programming side of things.

2. **How long have you been creating computer artwork?**

   Game graphics for about five or six years and computer artwork in general for maybe six or seven. As for anything that I'd actually be prepared to release into the public domain then maybe one or two years.

3. **Do you think 2D artwork is dead or does it have a future given the interest in 3D graphics?**

   Three-dimensional graphics are great and all the rage right now but 2D graphics do have their place. Three-dimensional graphics are only really going to work when you create a 3D environment for the player to operate in. As soon as you jump to 2D environments then you're going to have to bring an element of 2D into the equation. There are also practical considerations—maybe you could create everything in *3D Studio* (for example), but actually manually drawing your graphics gives you an extra level of control.

4. **What's your favorite platform for creating computer artwork—Mac, PC, Amiga, Falcon, etc.?**

   I originally started way back in the dim distant past using a BBC B, then jumped up to the Acorn A3000. Finally, I moved over to the PC and everything I've ever done for games and release has been on the PC. Of course, if anyone wants to lose a Silicon Graphics machine in my direction, then I'm sure I could find space on my desk.

Design Questions

1. **How do you approach a project? Is there a certain procedure you follow? Do you just start drawing or do you take the time to plan your artwork out?**

   I never just jump into artwork. If you jump into drawing straight away or before the whole thing is agreed upon then you'll hit problems and end up having to do an awful lot of work. Personally I'll try to get the theme for an entire set of graphics before I start thinking about specifics. This can often dictate how the rest of the graphics are going to go (e.g., if a game requires realistic graphics, then characters like cats wearing denim jackets and giant boots are generally out). Another thing that I try to insist on is having a complete list of the graphics needed before I get started. Not only does this give you a better idea of time scale, but it's easier to work out that if sprite A is thing X then sprite B can be thing Y.

I'm very much a sketch artist. I make page after page of sketches and let ideas work their way through my head for a few days before I start creating anything on the machine. General artwork in itself is difficult but in game graphics there is the added problem of making graphics that have to be modular (e.g., pipes), functional (e.g., lifts, ladders), etc. Certain game styles really do create nightmares—isometric games, games where there is an element of sprites being overlaid, etc.

2. **What inspires you creatively?**

Life! It might sound a bit glib but we do live a world full of ideas. Personally I'm a sci-fi and film fan so I simply take all that I see and use bits and pieces all over the place. It sometimes takes one thought to lead to another, sometimes it can take days of getting nothing and then suddenly get inspired by the most unlikely things.

3. **What's your favorite type of computer artwork? Do you like doing stills for demos better or do you prefer doing game-oriented artwork?**

Each brings its own rewards. Game graphics really give me a buzz when it all comes together and the various aspects all fit in, but on the other hand static screen artwork looks fabulous and when done properly can have such impact. If push came to shove then I would have to go for static artwork (even though I do create 90% of mine in *3D Studio*).

4. **What's the best way to develop your overall artistic techniques?**

Practice, study other people's work, and keep things simple. I don't mean rip their work off, but see how they light things, how they shade things—Do sprites look better with a black/dark surround? Do they look better anti-aliased? etc. In the field of animation then, watch how real people/things move and try to incorporate that into your animations. They'll look more realistic and natural if you do.

5. **How do you approach different types of artwork? In other words, how would you approach doing a demo screen versus sprite artwork for a game, etc.?**

Designing a sprite means a lot more work basically. I tend to think about how the sprite is going to move, how it's going to interact with other graphics, etc. A screen, on the other hand, is totally static (obviously) but you can make it far more dramatic, light it more stylistically, etc.

6. **What's the most difficult part of designing game graphics?**

For actual type of graphics it would have to be animation, closely followed by modular graphics. The biggest pain, however, is coming up with an idea and then being able to apply that idea to all of the various elements. This can often be very difficult.

7. **Do you have any pointers or tips on creating sprites and backgrounds for games?**

    As with everything it all depends on what you're trying to create but there are several things that I always keep in mind:

    The graphics are what generally sell your game to the user (game play is important but the graphics are what are going to grab people's attention in the first place) so make them bright, colorful, and eye-catching.

    Keep things simple to start with when it comes to sprites and animation—you can always add extra bits and pieces later.

    When it comes to backdrops, try to tone them down; otherwise, they'll over-power the foreground graphics and it'll be difficult to see things.

    Pick a style and stick to it throughout your game. Don't have a mixture of styles (e.g., all rotoscoped, all cute, all photo-realistic) as it'll look messy. If it all flows together then it will look slicker and more professional.

    Think about your animations—do they have to cycle? How do they get on and off the screen? (If you can make them appear and then disappear, then they'll look far better than if they just suddenly pop up, do their thing, and then vanish).

    When you're developing cartoon-style graphics, emphasize everything—make colors brighter, movements more exaggerated, etc. It'll add impact and make the whole thing look that little bit more dynamic.

    Sprite edges can be tricky. Think about what the sprite is going to be displayed on top of. If it's a generally dark background then try to anti-alias them (by hand, sadly) slightly to a dark color (they'll look far more integrated if you do).

    When you animate objects, think about how they move in the real world. Don't go overboard (or get weighed down), but try to take things like gravity, inertia, etc., into consideration when you animate your object.

    Again with animation, <u>never</u> jump straight in and create final frames. Create a skeleton (stick) version, get that moving correctly, <u>then</u> add the body. Once this version is fine, you can then add the actual colors, shading, etc. If the basic movement is wrong, then you've got a lot of work ahead of you trying to fix it.

Technical Questions

1. **What are your favorite painting tools/image editors for 8-bit artwork and why? What's your favorite true color image editor and why?**

    I used to be a big fan of *Neopaint* (for DOS) but it's showing its age now and I've now switched to JASC's *Paint Shop Pro* for the majority of both 8- and 24-bit editing. *Neopaint* had the great advantage of being able to quickly access the palette but was let down by a general lack of features. *PSP* has the fea-

tures but not quite as quick access to the palette. It swings and roundabouts as to which one I use but *Neopaint* is becoming too long in the tooth (and won't work under Windows NT anyway). When it comes to things like splash and About screens, though, I leave 2D land and usually go straight for *3D Studio*. Yes, it's big, a bit scary (to the novice anyway), and causes all sorts of headaches when you start thinking about meshes, objects, etc., but it speeds the development process up incredibly (and you can always touch the stuff up in *PSP* anyway).

2. **What are the most important features for a drawing tool to have and why?**

Definitely the ability to operate on a pixel level and have the ability to switch anti-aliasing and other features off. Working with 2D graphics always means that you're going to want to work at the most primitive level (it offers the best control) and that means getting your hands dirty and playing around with pixels in some shape or form. I'm not saying that anti-aliasing, etc., have no place, as they most certainly do (especially as graphics are getting just too big to do completely manually nowadays), but for the basics of animation, they are just something to confuse the matter.

After that, it would be the ability to be able to work directly with palettes (switching between tools and colors really quickly is nice too).

3. **What other graphics tools (i.e., image viewers, converters, etc.) do you use and why?**

I'm also a programmer and have put together a package of my own [*Author: Tiny Animation Studio*, included on the book's accompanying CD-ROM]. Basically this does a load of the normally mundane and downright difficult tasks like merging, etc. If I find something that I can't do anywhere else (i.e., without spending cash) I just work out the steps involved and write a new function for that. Occasionally I'll go back to using Microsoft's *Paint* but usually only when I'm working out the basics of animation. It gives you quick access to the palette as well as pixel editing. As I said though, it's used only at the very start of an animation (after that it goes into *PSP*). For testing animations I use another application that I've developed myself (*Tiny Animation Studio*—TAS, available from my Web site).

4. **Do you have a specific file format preference (i.e., .PCX, .BMP, etc.) and why?**

Personally I prefer PCX for eight bit images and BMP for 24 bit. Both are non-lossy (try saving 24-bit images in JPEG and you'll see your artwork disintegrate after a while). As to why I use them...PCX is pretty small, offers fairly good compression, and, most importantly, is easy to understand if you ever need to play around with the file in code. BMP may be large and wasteful of space but again it's very easy to use in code (I use Delphi and that has explicit support for BMP). I could use BMP for both, but by storing 8-bit as

PCX, and 24-bit as BMP, I can easily see which graphics are ready to be incorporated into a game (PCX), and which are development versions (BMP).

5. **How do you go about defining your color palettes?**

    It's not something that I do very often. I've found that over time you become accustomed to just one palette that has a good spread of colors (and any shade that's missing can be achieved by dithering). Not only does it have a good spread of colors but it also allows you to be able to jump to colors within the palette almost without thinking. Being able to do this really speeds things up. In short, go for the most comprehensive range of colors possible—it'll make life so much easier.

6. **What are some of the issues to watch out for and consider when constructing a color palette?**

    Make sure you have a good range of colors! Try to have the right number of greens, blues, reds, and, most importantly grays. As I said, you tend to come up with a standard palette that you keep going back to. It might need a little tweaking now and then, but generally it covers all possibilities.

7. **What is your favorite screen resolution to draw in and why?**

    At work I use 1024x768 but at home, 800x600. Both are at 24-bit color depth though. Anything bigger and you start to lose small sprites. It's also easier to see how they'll look on a user's machine if you use something similar to what the standard user uses.

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