

# Generating Art from a Computer Game: An Interview with Alison Mealey

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## Abstract

Many artists use various types of processes, events, social patterns etc. as controlling or contributing factors in the creation of artworks. Alison Mealey has chosen to base her art on the computer game Unreal Tournament. More precisely, she lets a number of virtual players play the game for approximately 30 minutes at a time and uses the data from the games to produce complex drawings. These drawings are also based on photographic portraits. Thomas Petersen, co-editor of [artificial.dk](http://artificial.dk) asked Alison some questions about her art and the processes behind it. Check out [Unrealart](http://Unrealart) and Alison Mealey's [blog](#).



Alison Mealey: *Unrealart, Jake*, 2005.

**TP:** Tell me a bit about the basic ideas and the artistic motivation behind the *Unrealart* project. What is it all about?

**AM:** Well, it began as my final project for my MA in 3D Digital Design at Huddersfield University. I had previously been exploring using games for artistic means, looking at the interactions between players and attempting to take the 'game' aspect away from the gameplay, creating something that couldn't be considered a game but was fun to play with nonetheless.

But I really wanted to use the game as a way of creating art, more specifically my art, something that I could have great sway over and control to a certain degree... I didn't want to be left out of the process while the game produced randomly generated art. I wanted the game to work for me.

I have always produced portraiture and have enjoyed some success in the past as an illustrator. I wanted to combine all of my interests and have the game create portraits using a very simple form of representation akin to my illustrative style. My main aim was to create something beautiful (from something far attached from beauty). Unreal Tournament was used because I found it the most approachable game to modify, with a well laid out editor, and plenty of information of how to use it on the internet.



Alison Mealey: *Unrealart, Yvonne*, 2005. Based on photo by Claire Pilcher.

**TP:** It seems that you have a fair amount of control over the rendering of the image. What is the artistic point of using autonomous/generative strategies in your work?

**AM:** I do have a certain amount of control, but I like to think of it more as persuasion. I'm trying to persuade the bots that these paths are a good direction in which to walk. It's up to them and the decisions they make based on the game's stimulus whether they stick to my preplanned routes or not. The images themselves would be very boring if the bots didn't deviate at all from the paths, this is the reason I only use large numbers of godlike bots to create the images. The godlike bots are more likely to change their path in order to give themselves an advantage during game play, novice bots barely deviate at all. At the end of the day it's the game and the activity that's taken place within it that draws the image, over this I have no real control, only the power of suggestion.



Alison Mealey: *Unrealart*, 30 mins, 2005.

**TP:** You use photos as a structuring element. What's the story behind the photos, and how are they used in the process?

**AM:** Photographs of a subject are an important part of the process. Just as any artist might use a photograph to base a painting on, I use a photograph of a subject as a starting point. The photographs are used in two important ways. Firstly I base

the AI pathing in UnrealEd around the features of the face in the photo, creating an in essence a simple illustration of what I feel are the most important areas of the face in the photograph that will need to be defined.

The second important (though not always used) influence the photograph has is on the colour of the final image. Though a fair amount of randomness of colour is produced in the final artwork, the colour's base value is taken from the photograph. Not all the artworks I create rely on this stage, some of them are specifically tailored toward a certain colour, some are random and some use a death as a marker for changing colour.

**TP:** I'd like to learn a bit more about the relations between the data from the game and the visual output. How are the characteristics of the lines and circles determined from the game data?

**AM:** Only two types of data are taken from the game. The position of every player (taken every second), and the acknowledgement of a death. As the data from the game is coming in 1 second chunks, Processing takes every seconds chunk and produces a drawing from it, these drawings are built up over time to produce the final images.

The circles represent the positions of the players. The X and Y positions taken from the players are drawn as-is, producing a top down 2D view of 'the field of play'/canvas. The Y values from the players alter the size of the circles, if a bot is mid jump they are therefore closer to the camera and the circles will be bigger, if they are crouching the circles will be smaller. The Y values have been greatly exaggerated in some of the more recent works, to produce (in my opinion) more beautiful images. The lines simply connect every second's points to produce separate drawings from every second.

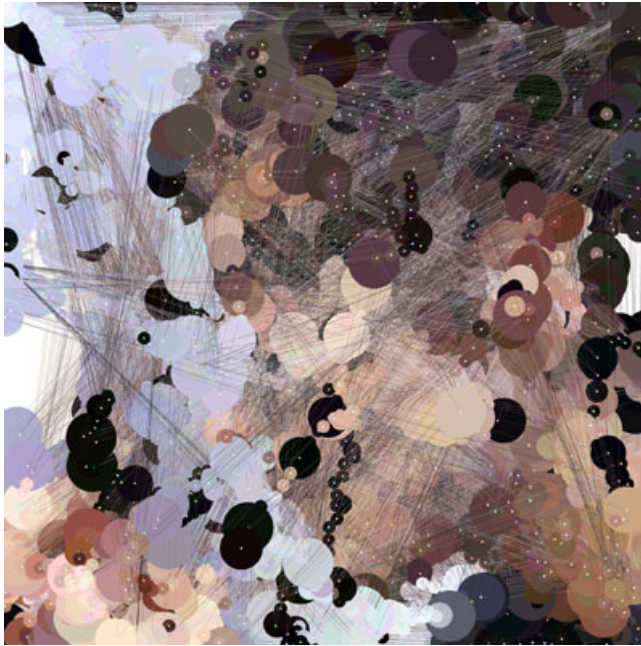
The death data is used in some of the images as a big black circle, indicating where a death took place. In some of the other works the death data forces a global colour change.

**TP:** You mention the visualization of deaths in the final images. In which other ways are the thematic characteristics of the game are visible in the final images?

**AM:** In a way no other characteristics of the game are present other than the death positions. No other 'statistics' of the game are logged. However in another way the entire game itself is visualised in the final images. The map played is shown in its entirety, as is the movements of every player on that map over the total time span the map was played for.

When watching the game and visuals take place live its possible to follow a single bot's track in the drawing, and watch the drawing build up over time and see the image slowly reveal itself.

I suppose it's the maps themselves that are the main game characteristic present in the final images.



Alison Mealey: *Unrealart, The Profile, 2005.*

**TP:** Tell me about how you prefer to exhibit the piece, and if you have any plans of exhibiting it in the near future.

**AM:** I would prefer to exhibit the piece in two sections. One area where the finished pictures can be viewed printed out quite large. And one area where the live version would be running, I would prefer to have both UT and the drawing as its being created to be projected side by side. It's important that people understand the correlation between the two. At the moment there are no definite plans to exhibit the work; there are a few sketchy ideas, but nothing definite yet. Though I would love to exhibit this work on a larger scale!

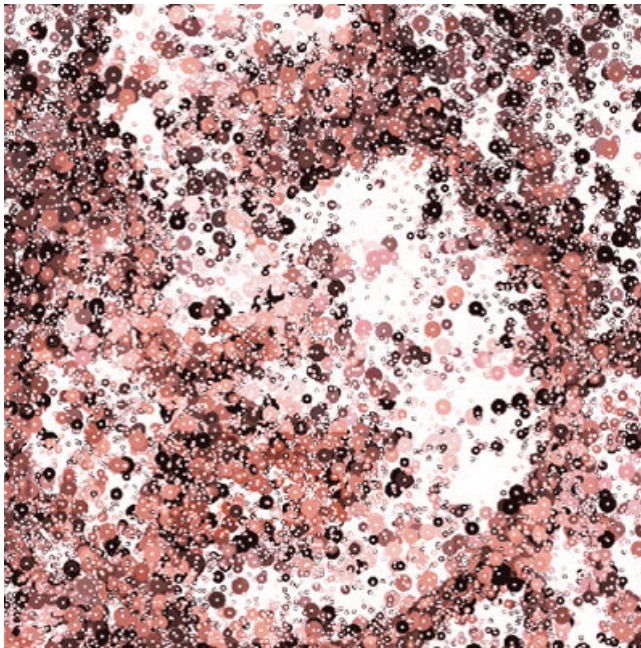
**TP:** Do you have any links to other game art works that you'd like to share?

**AM:** Tom Betts and his work (<http://www.nullpointer.co.uk/-/home.htm>) has been an influence to my work, specifically *QQQ*. I saw *QQQ* quite a while ago but still think it's a very nice work. Tom has messed with the Quake code enough to force it to produce very beautiful and quite abstract graphics. Tom was excellent at providing advice for me during the whole process.



*Spring Alpha* has also influenced me <http://www.spring-alpha.org/>. Here a game is being created from a series of drawings produced by artist Chad McCail. I have strong views about the game and its merits (that are best unspoken), despite this however it's hard not to see basic similarities between this work and my own. I have created a series of drawings from a game, whereas they have created a game from a series of drawings.

The other work that isn't game related but has been important to me is *Surface Patterns: Walking Tours*. I took part in a walking tour with Jen Southern in which I lead her on a walk around Huddersfield and spoke about my memories and feelings towards the places we were going (*Audio Tour 7*). This GPS related artwork strongly influenced my work, not only because of its use of positional data but also because of something I said which Jen kindly documented during our tour, *Audio Tour 7* and if you open the PDF you can see something I said a over a year ago relating to paths, choosing paths and creating paths. This is one of the most important elements of Unreal Art, choosing a path then marking that path (along with forced pathing).



Alison Mealey: *Unrealart, Every Man for Himself*, 2005.