

ANAMOR

'Pavement picasso' Julian Beever explains to Colin Foster

Anamorphism

During the seventeenth century, Baroque decoration used anamorphism to combine actual architectural elements with illusionistic painting. When viewed from a particular point in space the architecture blends with the painting to form a combined image. Kurt Wenner's anamorphic paintings are based on this principle; however, he had to create a special pictorial geometry that would correct the distortion caused by viewing his large images on the pavement from an oblique angle. His paintings are therefore drawn with a mathematically consistent distortion that corrects the problems associated with viewing the pictures obliquely.

Due to the wide viewing angle of Wenner's anamorphic pictures, they are designed to be recorded through a fisheye camera lens mounted at a fixed point. The resulting image combines the painted surface and its surroundings into a single composition.

With thanks to Kurt Wenner for permission to reproduce the above explanation: www.kurtwenner.com.

"I hate maths; I was never any good at maths!" says leading anamorphic pavement artist Julian Beever. As you can see from the pictures on this page,¹ Julian's anamorphic art appears astonishingly three-dimensional when viewed from the correct position. It's hard to believe that the pictures are genuine, but they are.

I have been an admirer of Julian Beever's work since I first saw his website,² so it was thrilling to discover him at work in Birmingham city centre while I was in between trains on my way back from January GC. He was putting the finishing touches to three days' work on his latest design, a giant dragon covering nine square metres of Chinatown in celebration of Chinese New Year.³

"I don't use maths, but I do use perspective," he explained. He begins with detailed pencil sketches and once on the scene immediately sets up a

camera at the exact viewing position. Throughout the project he continually moves back and forth between the pavement and the camera (he claims this keeps him warm!), checking virtually every mark. Sometimes, as part of his preparation, he draws the design he wants, projects it onto an inclined screen and traces the resulting image, but there is a problem with this method: he has to keep adjusting the focus to make different parts of the image crisp, and that affects the size, so the process is inexact.

This week I showed these pictures to most of my classes; a few pupils had seen them before, but most hadn't. After the initial cries of disbelief and amazement we have inevitably found ourselves discussing how they are produced. One possible task that could arise from looking at these would be to use the edges of the paving slabs to help you to sketch what you think a



from the correct position ↑

from the wrong position ↓



PHIC ART

the principles behind his extraordinary deceptive drawings.

bird's-eye view (plan view) of one of the drawings would look like.

Another idea would be to attempt your own anamorphic drawing. One way of doing that is to begin with a blank drawing of tiles (representing the paving slabs), viewed from an angle, and to draw over the top of them (ignoring the lines) the design as you want it to look (*figure 1*).⁴ You then take an ordinary square grid and match onto it the positions of the lines as carefully as possible, looking to see where they appear on the original sketch (*figure 2*).

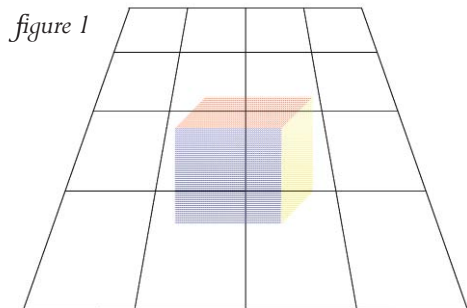


figure 1

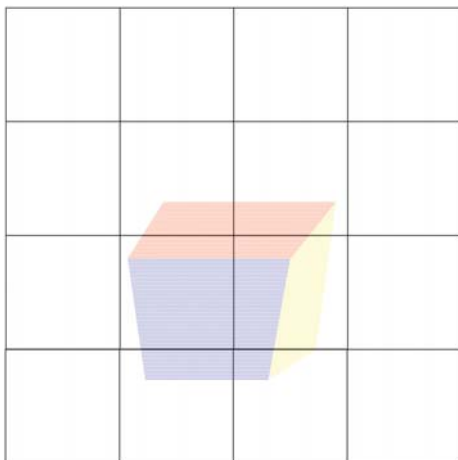


figure 2

When you view your finished artwork from the right angle (you have to get up quite close to the paper) it really does work!⁵

As he packed away his chalks, I asked Julian about his future plans. Julian's next commission is in Australia and he is hoping to produce a book of photographs of his work so far.



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Notes

- 1 We are indebted to Julian Beever for permission to reproduce these images.
- 2 <http://users.skynet.be/J.Beever/index.html>
- 3 You can read about Julian's Birmingham project and see dozens of pictures of the work at various stages by visiting www.bbc.co.uk/birmingham/content/articles/2006/01/27/pavement_picasso_feature.shtml
- 4 For details of how to produce a grid of tiles like this, and an interesting discussion of perspective in art, see Johnston-Wilder, S. and Mason, J. (2005) *Developing Thinking in Geometry*, OUP, 65-70.
- 5 For a blank grid of both of these, as Word files, together with a file showing how the grid in figure 1 was made, go to www.atm.org.uk/mt/.



Cover picture of *MT199*: *Dies Irae* by master painter Kurt Wenner. Kurt Wenner (www.kurtwenner.com) was the first artist to bring the technique of anamorphism to the art of street painting. Every artist attempting this perspective technique on the street today can trace it back to Kurt. Kurt's work was first documented in the late 1970s in a *National Geographic Explorer* Documentary.