

# Author's Statement

by Kai Krause

Montecito 1995

I often get shoe horned.

And there is nothing wrong with that.

It's just that, in typical "tortured-artist" fashion, I would like to feel at least understood to the degree that one doesn't approach the images with gross misconceptions.

For one, I would rarely put The Big Claim ( 'it's ART') on many of the creations.

All too often I have critics focus so much on the computer part that they lose sight of the basic tenet I see for all images: each piece has to have an aesthetic value somehow, evoking a reaction of some kind with the viewer, tickling him or her to say " you know, this has got something...", with the technique being a complete secondary 'oh by the way, how DID you do that ?' afterthought.

The digital processing itself can not be the soul of a picture and is merely the means, not the goal. I would defend strongly that each image is very much the result of the creator and that I feel they represent me and my aesthetic interests. They fail, it's my fault. But, if hey do tickle you, thats me, too, then....

One can argue with that style, one can find issue with it on taste or beauty in a

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personal view, but I do resent the implication, particularly by naive traditional art critics, that the computer itself is somehow the creator and a mere button was pushed and the picture gets 'computed'.

This is an absurd notion.

Clearly even Shakespeare could be viewed as 'merely re-arranging 26 little building blocks' in his works, with the untenable idea that the beauty is already implied in the letters or the system of writing. It is no more than it is in the pixels, or the bits, or the programs.

The creator remains one made of highly analog mushy gray matter.

The other difference between this and a traditional portfolio of works lies in the fact that it's not only about the images but the design of the tools the create the images!

I regard this as the "Meta-Artform" in itself and I delight in the creation of these tools and not merely writing software for my own proprietary use, but at a price point for wide distribution to hundreds of thousands of users, and with a user-interface that makes it easy enough for even children to participate.

This is no mean feat and what was initially an enterprise of handful of people had to grow to over 100 to deal with the complications of that process, international sales and distribution, marketing, technical support,

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multiple platform development etc.

Often the images can tend to become mere demonstrations of the latest features in the most recent set of software and it is to that end that I would like to show a few more works of a wider range. Specifically pictures that do not use any one tool in any obvious fashion but rather return to the aesthetic search in and for itself.

This is not say that commercial art is to be denigrated automatically by pure nature. As someone posted in our online area once, "The Sistine Chapel was a work for hire!"

I regard the challenge of creating a cover or a logo or a poster as no less worthy than being part of a one man show at a high brow art establishment, possibly even more challenging to unite the needs of the parties involved and not merely slapping together anything at will in an ivory tower and redefining it as meaningful after the fact.

That in fact seems almost too trivially easy now, to make a series of obscure pictorials laden with concepts and themes is almost like playing pool after learning on a snooker table.

The concepts that have always fascinated me from the beginning are "newness" and "virgin snow".

Let me muse for a moment:

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Rembrandt played with light and shadow.  
Durer with fine detail  
Brunelleschi explored perspective  
Seurat blew it all apart to dots  
Picasso messed with angles  
Dadaists toyed with meaning  
Dali with visual cues  
Duchamps left visible shadow trails  
Escher played with recursive loops  
Magritte with ambiguity  
and on and on and on

Each and every one of them all the way back to the first finger painters at Lacroix were simply after one thing only: in the quest for beauty, something NEW. The road not found. Hey, check THIS out..!

And probably each of them had to endure the snickers of the critics, one can just picture them lamenting “that newfangled lighting thingamajig from that Rembrandt fellow.... “

In that process of searching for the little bit of newness it gives me great

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pleasure to not only create such images with some secret set of techniques, but to supply the very tools themselves... and then have some 15 year old in Scotland be the very first of 6 billion little ants to make the first footprints in exactly that 'virgin snow'....

Given the extraordinary tenacity of the human spirit much of the ground had been covered already.

Much of the conceivable set of combinations, shapes, colors has been explored. So now the computer steps in merely as an extension of the brushes and canvas to do what could not have been done even by the most patient of hands. When Escher drew a photorealistic globe refracting it's surroundings, it was a great feat of imagination and perseverance. But the Homage to Escher image here has several hundred of such hands holding globes, mapped in correct perspective into a vortex tunnel shape, leaving even an army of Eschers behind. When I first showed such a filter as a mathematical helper to achieve such an image I mentioned smirkingly that Escher would have killed for such an enabling device. A British journalist wryly heckled from the audience "no, he would have killed you..." Ha!

In many of the pictures one can find the newness in these areas beyond human

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stamina, such as meticulous precision (hundreds of exact spirals tear apart the Absolut bottle...) or infinite recursion (tiling the plane with endless spirals in the Macworld Tokyo poster), specific mathematical mappings (the Escher hands and globes), multiple instantiation (the Mona Lisa made from tens of thousands of tiny micro Mona faces), sheer amount of detail ( the Playboy logo with a texture of hundreds of thousands of tiny bunny shapes) or otherwise the perfection of a true-to-physics computation beyond the abilities of manual dexterity (such as the correct extrusion into a 3-D height field of the Mona as a mountain). I find it very enjoyable to frolic in those areas of virgin snow and cannot even conceive why anyone would not see the value of such explorations or belie the creators value in the process.

Of course good old simple aesthetics come into play just as well, such as shapes (the Pi Swirl watch) and forms (the TED-6 brittle aluminum pillow tuboid logo) and harmony (the Soft IV curves reminiscent of eroded canyons in Utah) and playing with visual cues (the arch of a terrain shape becoming a reflective silver object on second glance).

And then there is the plain old just kinda-cute little cartoon figure...

With a pencil on paper, infinite resolution and multiple Undo.

life is good

Kai

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## “Absolut Kai”

Absolut Vodka, Wired Magazine

Full page back cover 9” x 12” and poster 22” x 30”

©1994-95 Original in private collection

Medium: digital Size: high resolution

This image was made in 1994 and got to Absolut via Wired. For a long time it was turned down because it did not look like a bottle. True enough, but also precisely the point of the image- to make you look 5 times before the mess of little swirls is recognized as the Absolut bottle. I have rarely got as much mail on a single image as I did with this one. In particular people want to know just how it was made and I can only explain part of it at this point (eek...) It's not a fractal and it's not the Twirl filter... there are liberal uses of KPT in there, among them Vortex Tiling, especially for the soft background. I like the oxydized copper like textures in the edges, especially in high resolution.





### “Bunny Scintilla”

Annual Report Cover, Playboy Enterprises

Cover 8.5” x 11” and poster 46”

©1995 Originals in private collection and Hugh M.Hefner

Medium: digital Size: high resolution

The annual report to investors of Playboy has often had a commissioned cover illustration by artists like Andy Warhol. I received merely a tiny file via modem of the font including a bunny symbol in Postscript. I started playing with first dozens then hundreds of replications of the tiny bunny head shape, swirling about via Vortex Tiling use recursively on portions of a huge file. After many steps a series of logo treatments came to life ( I can never do just one...) using literally hundreds of thousands of tiny bunnies as the texture for the large scintillating shape. The colors came mostly from channel operations and then brought out in Convolver. The original Iris print looks very cool and as I had hoped: iridescent and scintillating.

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## “Spiralling Ever Upwards”

MacWorld Tokyo official show poster, IDG International  
Cover 9” x 12” and poster 48”

©1994 Originals in private collection and Michael Spindler

Medium: digital Size: high resolution

This was commissioned by IDG International for the gigantic Macworld Tokyo trade show and conference and an incredible number of them were plastered all over Tokyo in early 1995. I chose as a theme that ‘after 10 years the Macintosh is still climbing ever higher in a spiral’. The flat spiral image repeated at the edges of the poster ( not shown here) came from KPT, a small Julia set fractal. The orange to green colors augmented in the poster with japanese pearl sheen. The 2-D spiral was then drawn on an infinite plane towards a horizon in Bryce and one main spiral isolated was extruded as a 3-D terrain shape. I tried to guess ahead on some trends with both letterforms: they have overlapping characters with the intersections as negative shapes, in layers with shadows. One large Iris print was signed and given by request to Michael Spindler, another was auctioned off in Tokyo for a Kobe relief fund.





### “Unidentified Arched Object”

Bryce Scenes, HSC Software

16” x 9” wide format

©1994 Originals in private collection

Medium: digital      Size: medium resolution

This is a fairly simple medium res scene in Bryce. Two noteworthy aspects: what at first glance is one of the arches typical of canyons in Utah and Arizona is actually in front of the mountains. If you look closely you can make out that it's a carefully positioned spherical blob with a shiny reflective mirror surface. By reflecting sky behind the viewer the illusion of looking through the arch is created and as with many perspective puzzles one can flip back and forth to see it either way.

The other detail: the mountain shapes are in fact true real NASA spatial data sets from satellite shots, downloaded from the web as Digital Elevation Maps ( DEM ) and inserted via a utility into Bryce to make a ‘real’ mountain. The surface texture was created procedurally within Bryce, derived from Eric Wengers ‘Colorado’ surface collection.

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“Monascape”

Cover image tbd

14” x 11”

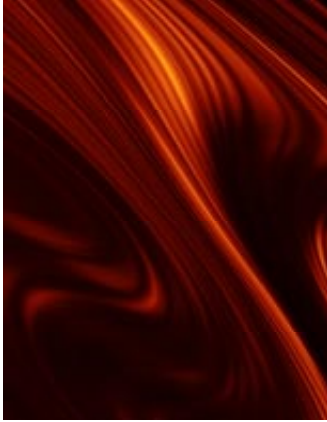
©1994 Original in private collection

Medium: digital Size: high resolution

This was one of the very first steps into a vast area of surprises : height extrusion of images. The eerie desert scene upon closer inspection inside the top silver sphere reveals a clearly identifiable Mona Lisa, reflected on what then becomes apparent as an infinite plane of hundreds of giant Monas on the floor towards the horizon, a feat Christo would love to get funding for. a further level of inspection sees a light sandy hill rising from the desert floor and then out of the sphere at left a shape emerges that clearly can only be the hands of our mysterious beauty. In correct mathematical scale thats roughly a 400 foot Mona Lisa built up reflected in 100 foot silver spheres. Technically the grayscale image yields height by luminance in KPT Bryce and then the color image is mapped on top aligned automatically It's eerie. Someone had to make this picture and I though it might as well be me then.



Notes from Kai



### “Likely Forms: Soft IV”

Research images, HSC Software  
48” or more

©1995 Original in private collection

Medium: digital      Size: ultra high resolution (380 Megs)

This one is a wondrous image whose real impact I cannot easily describe. For one, it is originally nearly 400 Megabytes in size and the amount of tiny detail is by definition completely wiped out in these microscopic sizes. The flow of the form in its graceful curves continues just as it would in nature with ever smaller scales of micro curves. The other part of not being able to adequately explain lies in the fact that it was not created with anything known to man at this point (a rare case of my using things long before they are given to the general public) and not even something I can easily talk about.

That's not like me ( I very often get in trouble by showing code while the bits are still warm right off the compiler... ; ) and is a bit annoying. Still, the shapes remind me a lot of carved curved canyons in Zion, Utah although the scale is not clear and could just as well be a galactic cloud as it could be the walls of a virus cell. Isn't nature staggeringly wonderful?

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## “TED-6 Logoforms”

conference material, Ted Richard Saul Wurman

4 x 3 format

©1995 Original in private collection

Medium: digital Size: low resolution



This one I don't even know if it was used...since I missed the actual event in Monterey in March by the birth of our third child.

It is one of about 30 “TED” treatments I did, uncommissioned for the pure fun of it, since I had a very lovely time at TED 3, 4 and 5 .

It is an example of something I have been writing about for many years: “Algorithmic Painting”. The idea is that rather than manual dexterity in using brushes and smear tools the image gets created by a controlled process instead. Copies of a shape such as the logo here are layered with the original and component after component is added, isolating areas, edges, colors and textures. Here around 20 steps are involved to arrive at the contorted tubes and in combination with Convolver the brittle metallic look is added.

The tips for many of these techniques are available for free in our website and much to my own amazement have been downloaded literally hundreds of thousands of times worldwide from universities and BBS nets. Neat...

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### “NanoMona”

Poster for 5th Annual Digital Art Be-In, Verbum  
32” vertical, Iris print by Graham Nash, Nash Editions  
©1993 Originals in private collection  
Medium: digital Size: medium resolution

## Zoom In!!

A very old image predating KPT, exploring the then completely new and unpublished technique I dubbed PixnPix, where a large image is created from thousands of modulated small versions of a second image. A manual version of this is the famous Lincoln in Dalivision for instance. I have since made many versions of such illusions. This as one of the very first attempts used a stylized small Mona Lisa face to tile into the large original image. The way this is achieved ( again available as a free tip on the web ) is to essentially create a custom halftoning screen which consists of thresholded variations of a small custom pattern image. For each shade of gray in the large image a patterned bitmap small image is substituted. It takes patience and experience to achieve a smooth combination, but the results can be quite amazing. I have for instance an image of Jay Leno created out of literally 81,000 tiny Dave Lettermans, each one recognizable! and then zooming into one of the, it in turn consists of 81,000 Jays (!) fun bits

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## “Escheria Colii”

Homage to Maurits Escher

4 x 3 format

©1995 Original in private collection and the Escher Foundation

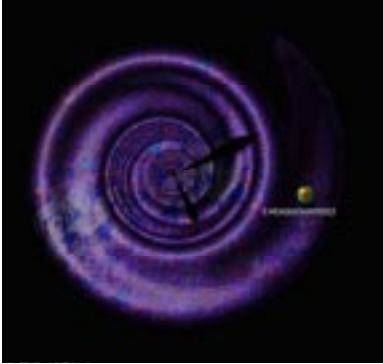
Medium: digital Size: medium resolution



Notes from Kai

This is a contribution to the Escher tribute conducted as a collaboration by artists worldwide. I always had a great affinity for MC Escher. The reference image to the homage was his “Hand holding a Globe” and fractions of it are left to be shining through the centers of the new globes, which were done with KPT. The main technique here was Vortex Tiling, applied recursively on a large image with copies of the hand, and then only a small section was cropped out honing in on the ‘tree’ like look. The colors and slight texture were added in Convolver. It’s a lovely end of a long night to come out with the result exactly as one had hoped. That doesn’t happen all that often. I would in fact love to animate the sequence, alas there are just not enough months in the day to do it all

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### “Pi Twirl Watch”

Objets d’Art Portfolio

1.6” round format

©19955 Original in private collection

Medium: digital Size: medium resolution

This was an exercise on another front, which I love but had to de-emphasize so far: design of actual shapes and forms. I always greatly enjoyed Roger Dean doing architectural sketches or Luigi Colani making a tea pot. A series of watches and other precision instruments came out of a long serendipitous meandering design night...this being one example. The idea here was a non congruous shape ( a spiral corneus shell ), an unusual texture ( done in layers and glue modes in KPT ) and a tongue in cheek visual joke: instead of digits, or even markings at digits there is merely one single Movadoesque spot and even that is just off: it's not at “3” but at the highly improbably and perfectly pointless location of 3.14159265358979323.... which is of course “pi” (and on the web site that links to a page with a million digits of pi, just in case you need that)

Another watch has on it “one two three ahh who cares....” Time is like that

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