



## Al Razutis

holographic art and technologies  
 Location: British Columbia, Canada  
[alchemists.com](http://alchemists.com)

Interview

Watch: [The Holography of Al Razutis - 3D video](#)

*"When you see a hologram for the first time, you will either get hooked by what you are looking at, or not. For me the enchantment was instantaneous. I could see the future clearly in what holography was. It was the future of 'imaging' and within it was a remarkable capacity for art."*

—Al Razutis

Get **FREE 3D Glasses** and become part of Al Razutis' virtual world of holography. *While supplies last!*

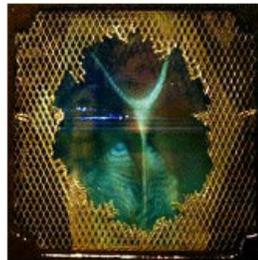
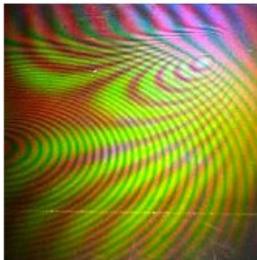
Nov-Dec 2017

## In the Spotlight: An Interview with Al Razutis

### Hooked on Holograms!

Area of Design was honored to interview the brilliant and iconic holographic artist, [Al Razutis](#). With an impressive background in physics and chemistry to film and 3D, we encourage you to dive deeper into his virtual world of holographic art and fantasy.

[Click here to read the full interview with Al Razutis and signup to get FREE 3D Glasses!](#)



October 17, 2017

Interview Questions for Mr. Razutis:

### **Who were your main influences growing up? Any master artists that inspired you?**

I was headed for a career in science when I bumped into art in a library in university. The art was represented in a book with large illustrations of something called “modern art”. Up to that point in life I had no idea that modern art existed. I was in University to study sciences on a basketball scholarship, not studying art. On the table was a large book with big colour plates of all the great paintings of the 20<sup>th</sup> century. As soon as I opened to these images I was spellbound, hooked on making art. And that very afternoon I bought oil paints, watercolours, acrylics, canvases paper and brushes and began to try making art. It has been an adventure leading me into technical art fields and through time and the history of art ever since.

### **How did you get into the realm of holograms?**

After working in film and 3D I stumbled upon one example, a small hologram by accident. This happened at a science open house at a university, they were showing a small clear plastic item illuminated by a pure red (laser) light and the image was in space, clearly visible! I was astounded, enchanted, asked 'how was this done?' The person attending said it was called “holography”, a new form of 3D scientific imaging, using newly invented lasers, and for more information I would have to go to the library, which I did, and from which I taught myself holography, the science and techniques required to make holograms. And then I built a studio and decided that my interest would be to “make holographic art”.

It certainly helped me to have a physics and chemistry background from university studies. But some artists that have approached this medium came from photography, some from film, some from unrelated fields to this. The different backgrounds for each person creating with holograms results in a diversity of expressions which is a great thing when a medium is just being born.

When you see a hologram for the first time, you will either get hooked by what you are looking at, or not. For me the enchantment was instantaneous. I could see the future clearly in what holography was. It was the future of 'imaging' and within it was a remarkable capacity for art.

### **Mimetic holograms – *the basic laser transmission holograms.***

*“The creation of image-objects floating in space, with whatever contained field of view, and free from contextual confines, is, to say the least, unnatural. In that it does not readily conform with our everyday experiences (where we touch solid things), it is 'extraordinary'. Hence, the pursuit of (heightened) realism in holography reaches its apex of expression in the creation of (impossible image) surrealism.” - (A. Razutis, **New Spaces: The Holographer's Vision**, Franklin Institute Press, 1979)*

My recent “*Apsara Series*” of large pulsed-laser life-sized “transmission holograms” of a female 'flying' through space are examples of mimetic holography (the faithful reproduction of a spatial scene and object) which are then subject to holographic motion-picture techniques and image projection.



## Reflection holograms with sculpture/installation/multi-media

Creating holographic images to be viewed in white light (rather than dark rooms with laser illuminations) normalizes the image as being 'real', giving it 'solidity' and the wonderful potentials of turning it inside out (as in the doll-face of “Spice Cabinet”), or submitting it to impossible solidity as in my work “Subject to Time”. This form of holography is called “Reflection Holograms” because they are illuminated by light to be 'reflected' to the viewer.



## What is Hybrid Holography?

**Holographic 'hybrids'** is a term used by me to identify the combination of sculpture (original or found-object assemblage) and holograms/holographic images

and their resulting 'hybrid' aesthetics (holographic, post-modern, modern, classical).

The sculptural nature of the holographic (virtual or real) image, the fact that it occupies 'space' and displays 'object' characteristics (size, proportion, perspective, depth), the fact that the holographic image 'floats' and is free from 'gravity' are paradoxical and poetic to me and resembles the surrealism of 'phantasmic objects' and its 'marvelous'.

To *'refashion the real'* in images and in ways that were previously impossible, to combine traces of 'real' and 'unreal' is precisely the art which I pursue in my holographics. In this work I create *'unreal containers for the real'*, or conversely *'the unreal contained within the real'*.

### **The didactics of hybrid holography**

The combination of the surreal and the real creates a dialogue about what is 'real', how images occupy memory, how solid and immaterial exchange places. The framed, installed, sculpted results of these 'hybrids' are one of the early accomplishments of a new art medium like holography asserting its place beyond its predecessor art forms.

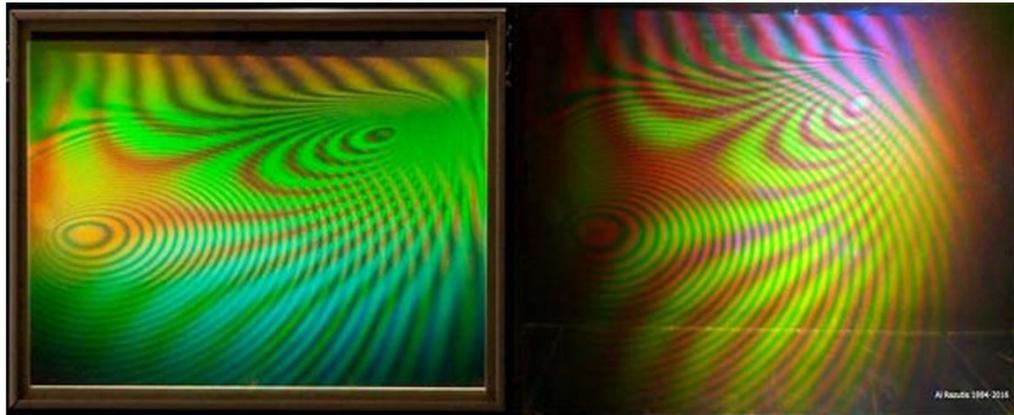
A full web-page with pictures and text on what I term "hybrid" holography is here: [http://www.alchemists.com/visual\\_alchemy/hybrids.html](http://www.alchemists.com/visual_alchemy/hybrids.html)

### **How did you come up with interferometric holograms as medium for art?**

In the early 70's I explored all the forms of holography that interested me, from replicating scenes in 3D to projecting those scene in space. When I saw examples of interferometric testing using holography I suddenly realized what I was looking at was what I termed 'disturbances in space-time'. I immediately saw this as "visual music", a topic related to my other experiments with analog video bio-feedback and synthesis. I recognized one could 'tune' the image, as is visible in the holographic interferogram of mine titled "Field".

What is tuned in this hologram is the degree of distortion of a rest state. Think of it as propagating 'waves of disturbances' in space due to an action on a plane type surface. If this works for light waves it should work for 'gravitational waves' too (!) says the genie inside me.

FIELD



More information/examples about interferometry and art at [http://www.alchemists.com/visual\\_alchemy/interfer.html](http://www.alchemists.com/visual_alchemy/interfer.html)

### **How did you figure out the process of creating holographic art?**

There was no category of 'holographic art' to guide me in the 70's. Various people had exhibited in group shows, even in galleries but no-one had a critical handle on holography as an art form. So I invented several versions of holographic art, as a visual artist whose work was internationally exhibited in Europe, the UK, the USA and Canada.

Importantly, I also developed theories and critical models about "holographic art" which I published in periodicals, or academic papers presented at conferences. I felt it important for holographic art to be understood both on its own merits and on the merits of its relationship to other contemporary art forms.

My holographic art is therefore a proposition to the viewer to enjoy; my critical writings on holographic art are a challenge to scholars and critics of both holography and art to debate or develop. Both aspects, the making and the theorizing/critical statements are intrinsically related in my mind and my works.

### **Describe a real-life situation that inspired you to be the first at creating holograms?**

In 1972, as a young underground film-maker who has just finished teaching a year in Washington State at Evergreen State College where I and my students ran wild with experimentation in analog video and film... I am informed that I have just received a "Senior Arts Grant" from the Canada Council for my proposal to create "holographic art" (from nothing but a few precedent examples) !

I return to Vancouver, Canada, build a studio, stop teaching and proceed to create a major travelling exhibition for the 1970's called "Visual Alchemy". This exhibition would be opened on Canada Day by the Prime Minister of Canada. Now that was a 'real life situation' that produced 'the goods' - even if I left for a year to 'write novels in the South Pacific', novels which nobody would publish, and these early

holographic efforts I saw inspire other generations to explore “holographic art” and its potentials . Other people chose to 'make money' with holography as a new exotic sci-fi type of technology (they created millions of 'novelties') but my focus then and now is on 'holographic art'. And of course this includes all the 'holographic image designers' because the question of “what is holographic art” versus “what is holographic design” remains unanswered.

### **What do you dislike about the art world?**

Petty jealousies, setting up fiefdoms and protected turf 'styles' or 'aesthetics' and the rarity of generosity when it comes down to the arts, to history, to expression and scholarship. The generosity and intermedia of the 60's underground and experimental arts in which I was involved as my formative years became overly professionalized and academicized in the 80's and beyond. We lost the diversity of expressions in exchange for marketing and acceptance in 'art world'. I refuse to accept this as a consequence of 'getting old' or 'mature'.

### **What is your dream project?**

To create true motion picture holograms as an art form at a holographic art center whose mission includes preservation, curating, and archiving the histories of West-Coast (USA and Canada) holographic arts and crafts. I got close in 2014 in China with this dream project, but politics interfered and it never got off the ground. I would like to see this project done this decade or next. I feel it is that important.

### **What's the best piece of advise you can give others?**

Be courageous with your ideas and efforts – don't quit, but don't avoid criticism either.

### **Can you tell us about your most recent work? Any upcoming shows?**

Sharon McCormack collection and archives is my biggest challenge right now. This collection and archives I was given by her shortly before her death. It contains the histories of San Francisco holography from the 1960's to 1990's. Its survival and archiving and exhibition is of paramount importance to me (as curator, preservationist and archivist) because of its historical and cultural value.

Certainly these works need to be seen world-wide and seen now before VR and AR and Pepper's Ghost fake holography wrecks it for our audience and saturates world culture with fakes.

I would like to curate and partner with organizations (museums, galleries) exhibits of all of the holographic works under my custodianship.

The total west-coast holography story includes my own historical and contemporary works in holographic art – a place which define how this art was born in BC Canada by an American expatriate who won't leave the coast.

I will continue making my own holographic art works and seek support from where ever I can get it for this. There is no quitting for me, life is too short as it is.

A page dedicated to the McCormack collection and archives is:

[http://www.alchemists.com/visual\\_alchemy/holo\\_sharon.html](http://www.alchemists.com/visual_alchemy/holo_sharon.html)

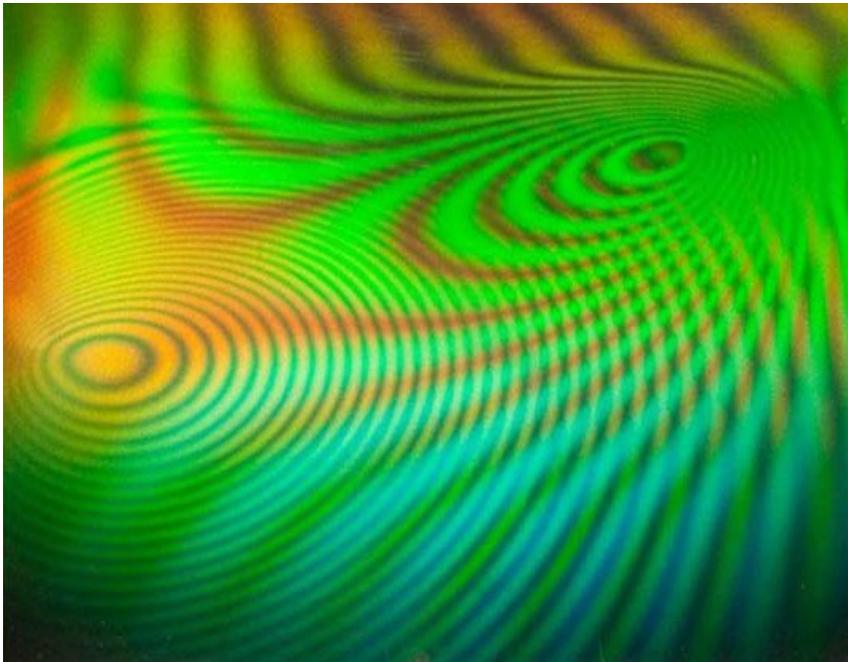
and a page of my works for exhibition or sales is at

[http://www.alchemists.com/visual\\_alchemy/holo\\_price.html](http://www.alchemists.com/visual_alchemy/holo_price.html)

ADDENDUM – IMAGES:

**FIELD** (1983) 12" x 16" Rainbow transmission hologram on glass plate.

Exhibition: A glass plate 12" x 16" in frame, or in glass cube installation, depicts a volume in space of interfering contour lines rendered as holographic-interferometric ribbon-like images.



Illumination: Broad-spectrum point-source while light at a (approx.. 45 degrees) angle to the plate normal, illuminating the clear plate or glass cube with plate from behind, at a sufficient distance to illuminate the entire plate or cube.

### DREAMTIME IN THE RUINS



'Dreamtime" installation - 2015 photos

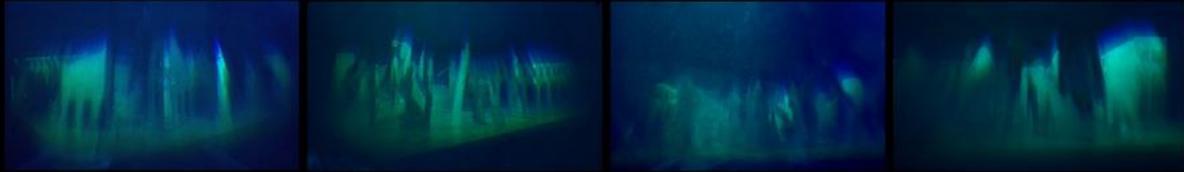
With mixed white-light illumination

View 1: 'Via de Chirico'

View 2: 'Dalland'

View 3: 'Urbanopolis University DC'

View 4: 'Shadows of light remain'



Norw. exhibition illumination features mixed laser and white-light filtered illumination

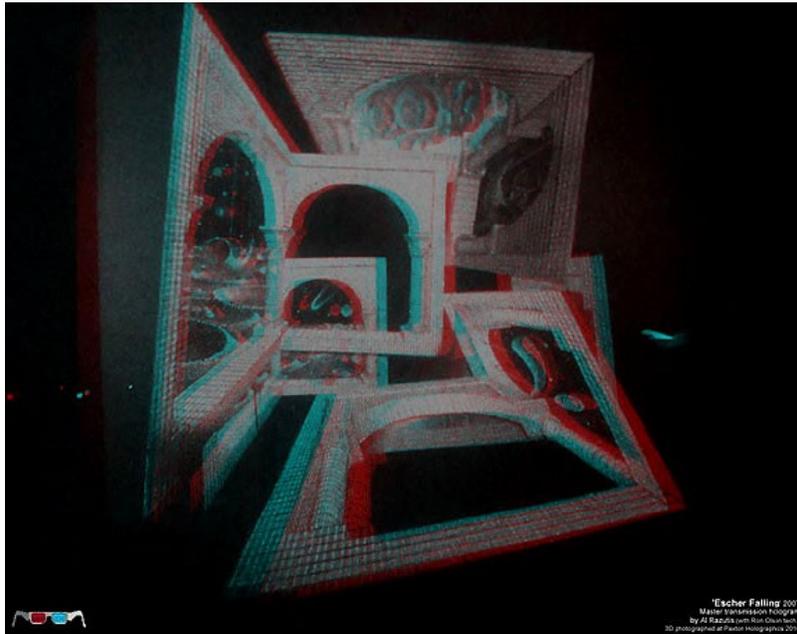
'Dreamtime' in exhibition featuring **View 2** & **View 3** illuminated by mixed laser and (light blue) filtered white-light - sample:

View 2

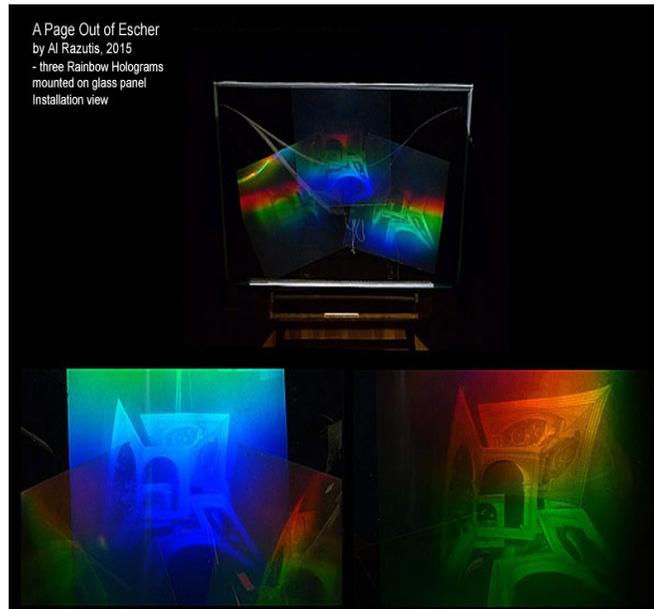
View 3



ESCHER FALLING



## A PAGE OUT OF ESCHER



## ASSEMBLAGE HOLOGRAMS – REFLECTIONS



**APSARAS** (2013) A series of 16 keyframes in a motion picture sequence - 16" x 24" Master transmission holograms on film for exhibition between glass..

Exhibition: A moving line or a turning circle (enclosure) of holographic film frames (the holograms) suspended at viewer eye level. Holographic images are 1:1 life-size and appear as virtual images. They form relationship as frames of sequences in time.

Illumination: > 100 mW Diode green or other monochromatic color laser for illumination of each panel at eye level, light incident from overhead 45 deg. angle with sufficient height and depth of exhibition space to illuminate each panel individually.



Additional documentation on these works are found on-line  
[http://www.alchemists.com/visual\\_alchemy/interfer.html#field](http://www.alchemists.com/visual_alchemy/interfer.html#field)

[http://www.alchemists.com/visual\\_alchemy/apsaras.html](http://www.alchemists.com/visual_alchemy/apsaras.html)

My biographical information with links to selected topics including these is at

<http://www.alchemists.com/razutis-brief.html>

Sincerely,

Al Razutis

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