

# Gravity wins, Entropy rules

Al Razutis

*Let us then go, you and I,  
When the evening is spread out against the universe sky  
Like a patient who trembles and quivers with energy  
Upon a table, which is a gallery  
Where we can sing such songs of infinite light  
(T.S. Eliot paraphrased by A.R.)*

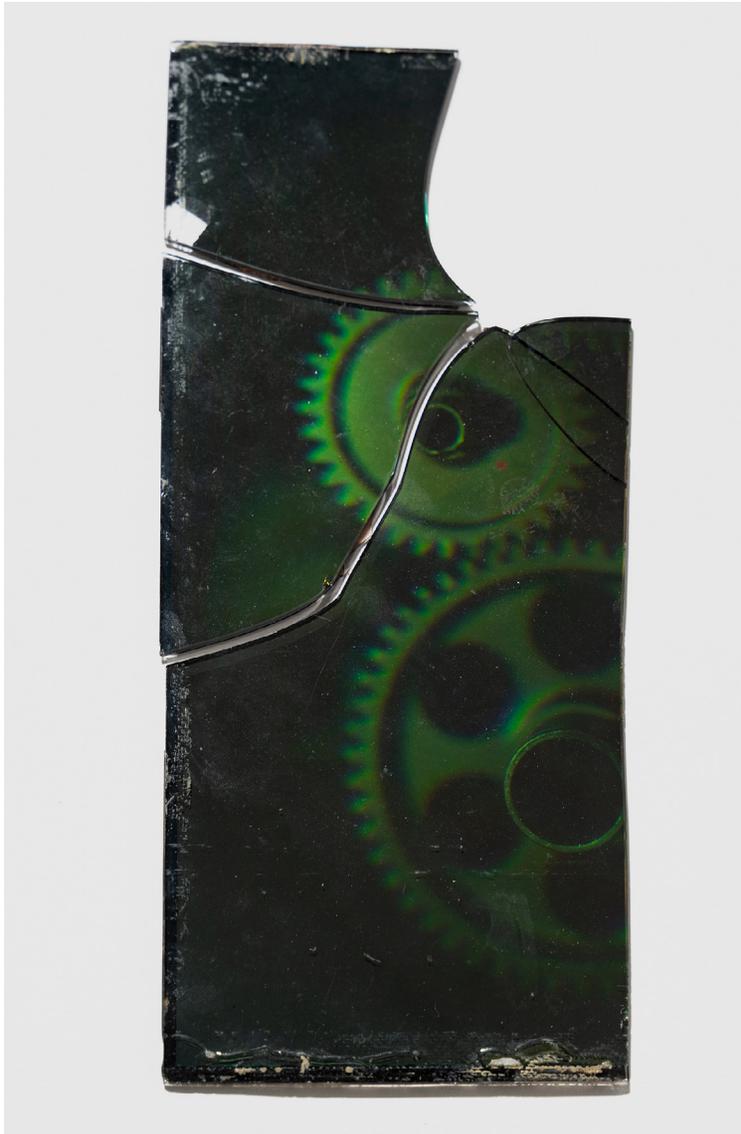
The universe is one of electromagnetic radiation and force, which we perceive as light, magnetism, fields of energy and from which we derive our tools to harness such radiations and force. It is electromagnetic force that creates our notions of solidity and mass. It is electromagnetic radiation, in the visible spectrum that gives us a sense of things and their place.

It is gravity and magnetism which bends all force to collect as what we understand as 'mass', something we can measure and touch, and it is gravity that spells the end of stars, and the end of it all, as they implode and go to where chaos and entropy reign as unbridled energy set loose from the constraints of any 'one'.

If we are going to create, recreate, or imagine, then show some proof. We resort to images, and accept the fact that all that we call real succumbs to gravity and then is erased from sight and order by entropy, which always rules, and without which the universe would be 'dead' and still.

## Origins of Visual Alchemy

The history page [https://www.alchemists.com/visual\\_alchemy/history.html](https://www.alchemists.com/visual_alchemy/history.html) reads as follows:



Broken silver halide hologram. Photo by Felix Rapp.

“VISUAL ALCHEMY was created in 1972 (& expanded onwards), in Vancouver, Canada by Al Razutis to function as a personal and services-for-hire multi-media innovations studio for the production of experimental art work in the various emerging medias of the time: experimental/avant-garde film, video art, and holography. The cross-disciplinary activities at this new studio continued some of the “Intermedia” inspired activities which Razutis had participated in the late 1960’s. Initially several artists from ‘the Grange’ (which had occupied a similar location) thought of it as a ‘co-op’, but after the first phone bills were paid by Razutis, that idea was discouraged and never re-appeared.”

That’s hardly the whole story, and leaves out all of the ‘intentions’...

**So, let’s examine the ‘alchemy’, in ‘visual alchemy’ and see what it meant.**

If there was one source of inspirations that was present at my Visual Alchemy Vancouver studio in the 1970’s it was the book *Psychology and Alchemy* by CG Jung.

I acknowledge this fact because I will make references to alchemy, alchemical works or symbolism from time to time and because this text is available on the web for anyone to read.

It is useful to recall what CG Jung said in referring to the Opus, alchemy, and the projection of psychological characteristics onto the work and the transformation.

“The alchemical opus deals in the main not just with chemical experiments as such, but with something resembling psychic processes expressed in pseudochemical language. The ancients knew more or less what chemical processes were; therefore they must have known that the thing they practised was, to say the least of it, no ordinary chemistry.” [342]

“...The real nature of matter was unknown to the alchemist: he knew it only in hints. In seeking to explore it he projected the unconscious into the darkness of matter in order to illuminate it. In order to explain the mystery of matter he projected yet another mystery - his own unknown psychic background - into what was to be explained: *Obscurum per obscurius, ignotum per ignotius!* This procedure was not, of course, intentional; it was an involuntary occurrence.” [345]

For our reference (26 mB free download):  
[https://www.jungiananalysts.org.uk/wp-content/uploads/2018/07/C.-G.-Jung-Collected-Works-Volume-12\\_-Psychology-and-Alchemy.pdf](https://www.jungiananalysts.org.uk/wp-content/uploads/2018/07/C.-G.-Jung-Collected-Works-Volume-12_-Psychology-and-Alchemy.pdf)

**The OPUS So what is the ‘work’? How does it start?**

The psychic nature of the alchemical theatre and works -- the projection of psychic contents.

**To give form to the formless, to animate the inanimate, to give it spirit**

To reiterate how psyche is projected into matter to arrive at an image, a sculpture, a moment of theatre: a psychic projection of human (anthropomorphic) qualities into inanimate matter - to ‘animate’, to give it ‘form’, to give it ‘spirit’

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**Terms and poesis**

Holographic ‘hybrids’ is a term used by Al Razutis starting in the 1970s 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 those who pursue the surrealisms of ‘phantasmic objects’ and the ‘marvellous’, or

kitsch and post-modern commentary/construction. In other words, these works are not about parlour 'magic' illusions but a 'dance with phantasms' and memory, cultural and personal.

This seemingly 'illogical' condition (an object floating, free from gravity) has been inspirational to generations of holographic artists. It is of course related to a fascination with 'magic' (illusions, levitations) and of course has been trivialized by some trinket manufacturers to entice a audience interested in buying novelties ('how did they do that?'). It is also related to the 'marvellous' contained in surrealist works, but this relation is also a point of departure.

It is no longer that the holographic 'image' is complete in and of itself, but that the work refers to the holographic 'image' in relation to its 'container' or physical counterpart (the sculpture, or installation).

"In Razutis' works, the holographic hybrids can be allegorical, narrative, surrealist, didactic or metaphysical and alchemical notations. In his early essay, *Some Notes on the Art of Holography* (1979, Franklin Institute Press), Razutis provides a lengthy description of 'hybrid' holography in terms of didacticism, surrealism and the limitations of 'mimetic' or 'display' holographic aesthetics."

### Enigmas and 'effigies':

The holographic image is part enigma, part physical science. It is enigmatic to artists who, upon discovering a effigy of an object suspended behind the plate, or projecting in front of the plate, in space, are dissatisfied with mere 'physical' explanations (diffraction, geometric optics) and wish to participate in the creations of a 'marvellous' alternative to physical representation.

Just think: to 'refashion the real' in ways that were previously impossible. In ways that combines traces of 'both real and unreal'. And some of the works arising from these impulses are didactic: they comment on 'the real' by creating 'unreal containers for the real', or conversely 'the unreal contained within the real'.

### Surrealist 'marvellous' caught in the reflection

Andre Breton's essay *Crisis of the Object* (1936) drew analogies between 'concrete irrationality' in art with qualities of 'mathematical objects', 'poetic objects' and objects appearing in dreams. The surrealist war against surface representation was an attempt to liberate the imagination from habit and convention, to encourage one to seek meaning beneath the surface. Breton's convictions were that 'there is more to be found in the hidden real than in the immediate known quantity'. To attack the habitual is to 'make it strange'. To revitalize our sense of life and the 'real' is to employ 'poetic displacement of subject and object'.

The holographic image is 'unreal' - you can't touch, smell, taste or hear it. It's a visual ghost of a recording stage or object. It exhibits no gravity, only focal properties. It is created in light and with light, yet it refers to 'reality', a reality of objects and their place in representation. In combination with the world of objects, sculptures, frames, planes and reflections, it can occupy what I termed 'hybrid' status. It confounds the mirror of reality with a 'marvellous' that strays from literal interpretation of reality."

A video on all the hybrids:

<https://www.youtube.com/watch?v=6D4NwMsgaoQ>

You can clearly see demonstrated the capacity of an image (and its 'space', or the space it occupies) be inverted, pulled 'inside out', where a concave image becomes convex, where background becomes foreground. A similar thing happens in stereoscopic photography or painting when the eye-wear glasses are reversed with the right eye and left eye changing places.

You can also see in the making of holograms, in the copying of holograms, the use of inverting the space again from 'pseudoscopic' to 'orthoscopic' to restore original parallax, or to project the images in space.

It is clear our perceptions (as in stereoscopic binocular viewing) and the conjugate images of 'holographic space' have a direct relationship and that they are malleable and in the hands of artists represent an aesthetic 'space'. It is also

clear that the human psychology and perceptions are directly dependent on natural laws which govern the physics of this universe. Something acting completely 'against the natural laws' risks extinction in more ways than one.

So, is holographic space an illusion?

Holographic space is merely the recorded, encoded version of properties of four-dimensional space-time. What is recorded is the amplitude and phase of any object within this 4D space. Its only limitation comes from the means of recording, encoding ('the measuring of') this space, using either (and preferably) analog methods or digital sampling and re-creations. Its 'reality' comes about when one properly illuminates the hologram' (either by laser, or white or filtered light, as is appropriate to the specific hologram) to recreate this space.

Therefore, the permanence of this space is entirely dependent on the 'recording and preserving medium'.

One can also conclude that holographic space only comes about (is manifested, rendered) under the right 'conditions', and it's appropriate here that these conditions involve electro-magnetic radiation (such as light) whose 'electro-magnetic force' (one of the four basic universal 'forces') underpin the 'existence of all matter'.

Now that's a concept to think about.

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Reference / extracts from web essays: "Visual Alchemy in theory and practice and as holographic art" by Al Razutis (alchemists.com)

### Visual Alchemy as alchemical theatre and Artaud

It is useful to recall what Antonin Artaud said about the Alchemical Theatre:

"All true alchemists know that the alchemical symbol is a mirage as the theatre is a mirage. And this perpetual allusion to the

materials. and the principle of the theatre found in almost all alchemical books should be understood as the expression of an identity (of which alchemists are extremely aware) existing between the world in which the characters, objects, images, and in a general way all that constitutes the virtual reality of the theatre develops, and the purely fictitious and illusory world in which the Symbols of alchemy are evolved."

"These symbols, which indicate what might be called philosophical states of matter, already start the mind on its way toward that fiery purification, that unification and that emaciation (in a horribly simplified and pure sense) of the natural molecules; on its way toward that operation which permits, by sheer force of destructive analysis, the reconception and re constitution of solids according that equilibrium of spiritual descent by which they ultimately become gold again."

CG Jung:

[http://www.alchemists.com/fb/psychology\\_alchemy\\_jung.pdf](http://www.alchemists.com/fb/psychology_alchemy_jung.pdf)

Antonin Artaud:

<http://www.alchemists.com/fb/theatre-its-double.pdf>

### PARADOX QUIZ

The paradox of a still, 'static' image, comprised only of focused light, looking like an 'object' with 'no mass', a ephemeral object, an 'effigy' that belongs not in this world, but another, is but a beginning of our interest which will ultimately be called 'Visual Alchemy' to include the viewers, artist's, creators interests and reasoning.

### The 'paradox of the holographic image' as described by Gregory Moynahan:

"The uncanniness of the hologram suggests a new level to this problem... If the mind feels that perceived reality doesn't match the physical effect, it occasionally assumes that it is hallucinating and provokes the body to become physically sick. The static

hologram, particularly in its more technically convincing forms, seems to approach a similar but less visceral 'unreality' precisely in its approach to a veridical three - dimensional form."

"Despite problems with the quality, particularly the transparency, of the holographic image, the hologram does appear to exist 'on its own' in a singular manner that allows it to take on a form of reality somehow distinct from 'normal' reality. ( ... ) the image appears to 'stand on its own' in such a way that it is at once independent from any staging and from any framing of our perceptual apparatus."

"If we compare these popular images with artistic holography of the last few decades, some of the newer possibilities of the medium become apparent. The first is in redefining the meaning of holography itself, not in terms of the history of optics or vision, where it is only imprecisely able to find its ground, but in terms of information technology and meaning. At the broadest scale, some potential for this is found in recent claims in physics that the world itself is a 'hologram' created from a more basic fund of information, so that within the 'holograph principle,' the three-dimensional world is, in fact, the product of two-dimensional surfaces called 'light sheets.'"

"...the relation of holography to information is found in the new possibilities of digital holography, which allows the artist to transform the holographic image internally in a manner not earlier allowed by optical laser technology. Secondly, there is the possibility for a turn towards the quality of light and space intrinsic to the medium itself, aside from its quality as 'replication' ( ... ) in the parody or intentional use of the stereoscope effect and other 'uncanny' aspects of the medium we find a further creative use of the form, ( ... ) With time, holographic imagery, much like photographic imagery, becomes intrinsically interesting in itself due to its relation to a present moment and, particularly for early holograms, the relation of this present to a claim to futurity. Indeed, in its claims to hyperreality the result sometimes appears as a past promise of the future itself caught in amber, in a manner alternately fascinating and melancholic. In time, it is not infeasible that, within the realm of either moving holography or projection holography (the 'holodeck'), a great deal of art and reality will be experienced through holographic

media. The earlier technology and limitations of static laser holography will then perhaps appear as early daguerreotypes do to us now, as the record of both a peculiarly limited technological era of reproduction and a circumscribed yet powerful means of interacting with time and reality."

— *Holography and the Aesthetics of the "Hyperreal"*, Gregory Moynahan, 2012

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### **The paradox of what the public thinks:**

"If it isn't interesting in real life," wrote a Vancouver Sun reviewer, "it isn't interesting as a hologram."

"Another generation later, that dualism doesn't apply. Holograms return not because they are the future, as they seemed in the sixties, and maybe even the eighties, but because they're a way to resurrect the past and reify the present. There's now – as Net theorist Nathan Jurgenson has pointed out – a yen to touch and feel the Internet, to do with our virtual experience what Surrealists did with their dreams, instead of just fetishizing the already real."

— *After the Summer of the Hologram, what's next?* Sarah Nicole Prickett, Globe and Mail, August 24, 2012

**TO RE-STATE** what I contend is now obvious:

**Holography is a circumscribed yet powerful means of interacting with time and reality**, and it requires art to articulate the means of this interaction. I hope this introduction has provided you with some insights on how that can be accomplished.

So, let us familiarize ourselves with some 'craft', the craft of 'visual alchemy' and what it took to get here. Present this to minds that have the advantage of retrospect.

## WORK BY WORK:

### PRIMA MATERIA (INVISIBLE SECTION) — 1974-75



Reflection hologram collage on film, resin, glass, brass  
36" x 36" x 4".

Text etched on glass (1975) will appear in 1979 *Notes on the Art of Holography* by Ruzutis for Franklin Institute catalog 'New Spaces' exhibition.

Of particular importance in this work is the presence of multiple submerged (in epoxy) layers of holograms / images, as in one case chains submerged with other artifacts, or a face submerged, with gears, as if to say there are many realities that can coexist / superposed 'in each slice' and 'submerged within' this *materia*.

This work was severely damaged when returned in transit, after being on-loan to a new Montreal Canada association and gallery in 1985 -- it was returned uninsured, damaged with no remedy from them! It is currently located at Visual Alchemy studio, Saturna Island, BC, Canada.

And the evidence is... CN Rail Settlement (of damage) Letter

Let's talk some basics.

"prima materia = light" -- for a visual alchemist, or a electromagnetic wave (not a mechanical wave like sound) in a universe of 'ether', which is of course a metaphor not a sci fact, like the interferometers of Michaelson & Morley having confirmed that light speed is constant and propagated in a vacuum without ether. Einstein of course famously related matter and energy and that speed of light in a simple equation. But paradoxes abound, like entanglement, like action at a distance. The twin slit experiment of Young confirmed the twin nature of photons, electrons, and all wave energy to contain its particle twin. And then there is something called quantum connectedness / 'entanglement' and a new holography dedicated to that...

What is a hologram? Well it's a recording of such facts as the ones cited above. We cover this subject by description, example and photos, videos so there is no need to repeat it here.

What does Jung say about *prima materia* and medieval alchemists? See if you can read between the lines and apply it to here, and apply it to now.

### THE PRIMA MATERIA -- SYNONYMS FOR THE MATERIA

"The basis of the opus, the prima materia, is one of the most famous secrets of alchemy. This is hardly surprising, since it represents the unknown substance that carries the projection of the autonomous psychic content. It was of course impossible to specify such a substance, because the projection emanates from the individual and is consequently different in each case. For this reason it is incorrect to maintain that the alchemists never said what the prima materia was; on

the contrary, they gave all too many definitions and so were everlastingly contradicting themselves. For one alchemist the prima materia was quicksilver, for others it was ore, iron, gold, lead, salt, sulphur, vinegar, water, air, fire, earth, blood, water of life, lapis, poison, spirit, cloud, sky, dew, shadow, sea, mother, moon, dragon, Venus, chaos, microcosm (fig. 162). Ruland's Lexicon gives no less than fifty synonyms, and a great many more could be added." [425]

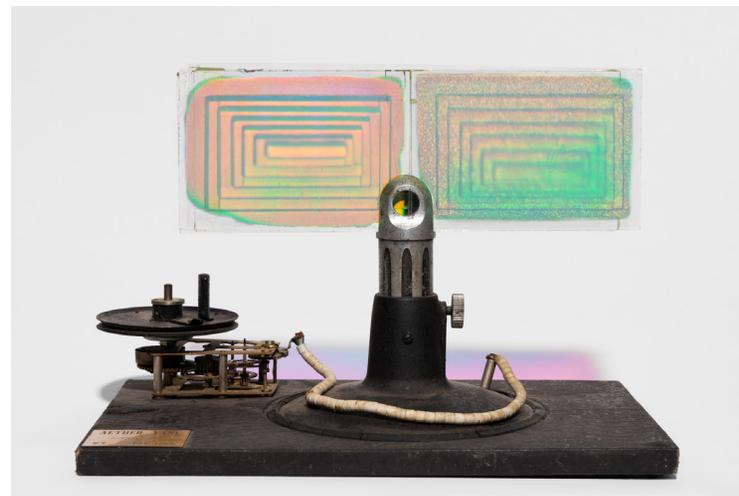
"Besides these half chemical, half mythological definitions there are also some philosophical ones which have a deeper meaning." [426]

— *Psychology And Alchemy*, C.G. Jung

If we consider 'light' as *prima materia*, then it can be decomposed, re-presented, as both a 'solid' (particle) and a 'phantom' (wave). The range of subject matter to accomplish these experiments and expressions are like the range of food one wants to serve at a banquet.

[https://www.alchemists.com/visual\\_alchemy/alchemy\\_visual.html#primamateria](https://www.alchemists.com/visual_alchemy/alchemy_visual.html#primamateria)

## AETHER VANE 2 – 2010



Dichromate holographic assemblage, 15" x 12" x 12".

The 'before':

## AETHER VANE I - 1974

White-light reflection holograms (silver halide), mechanical parts, glass cube, cobwebs

Reconstruction of a turn of the last century primitive device for measuring universal Ether, with a nod to Michaelson & Morley.

Original 1974 holograms (which had been 'erased' by Burnaby Art Gallery in the intervening years) were replaced in 1984 with Dichromate Gelatin (DCG) versions produced with Gary Cullen at Holocrafts, Canada

The 'after':

## AETHER VANE 2 – 1984

AETHER VANE (restored 2010) is in the collection of the artist and located in Saturna Island, BC, Canada.

Complete credits and Exhibitions list for this work:  
[https://www.chemists.com/visual\\_alchemy/raz-holo.html#aether](https://www.chemists.com/visual_alchemy/raz-holo.html#aether)

### **Conjugates: 'The mirrored twins of holographic space'**

The best demonstration of 'holographic space' is a 'hologram' upon which such spatial information has been 'written' (exposed/developed, encoded, engraved), and in this presentation show directly the two mirrored elements of what are called 'conjugate images' (that are inverse of each other) named the 'orthoscopic' (virtual, but normal perspective) and 'pseudoscopic' (real, projecting, inverse perspective) images, the paired twins in this nursery, this space.

The following video should do the trick to illustrate this:  
<https://youtu.be/Ywg43rhLFig>

### **BACKSTORY Destruction of the original work by the gallery to whom it was gifted**

In the early 1980's I inquired at the Burnaby Art Gallery, the original host of the Visual Alchemy show and patron of the traveling national exhibition of the same name, about "Aether Vane", I did so out of natural curiosity. This work of two reflection hologram 'vaness' on a 'antiquated measuring device' in a glass cube (originally exhibited with cobwebs!) had been gifted by me to the Burnaby Art Gallery in perpetuity in appreciation for their sponsorship and work on exhibiting and later nationally touring my solo holography exhibition "Visual Alchemy".

I wasn't expecting to be told that they didn't know what to do with it, that it now featured "clear glass" with "nothing on it"... in other words, it has been 'erased'...

I therefore concluded that 'someone had erased the emulsion' containing the hologram by cleaning it with a solvent, not knowing what the hell they were doing, or perhaps not caring.

I quickly retrieved this work as 'destroyed', and returned it to my custody, and to further 'rehabilitation' (replacement not restoration!). I made arrangements with Gary Cullen, friend and owner / holographer at 'Holocrafts' a world recognized

facility as creators of superior "DCG holograms" (using his proprietary dichromated gelatin formula and production techniques which would be quickly imitated) to make replacement "vaness" for the now erased original silver halide reflection hologram vaness which were now 'gone'...

### **What it was:**

The original (1974) holo pair was silver halide reflection holograms; the construction-machine sat in a box surrounded by synthetic 'cobwebs'. (This installation had to be re-constructed every time it was exhibited, much to the 'chagrin' of the exhibitors, but they did it anyways.) The cobwebs alluded to the 'antiquity' of the machine/idea (ether).

The 'themes': 'Aether' (old English) refers to 'ether' — the medium once-thought as necessary for the propagation of electro-magnetic waves. The notion of ether was held on to by Maxwell (and by Tesla) and 'disproven' by Michelson-Morley (Albert Michelson won a Nobel Prize for his work in measurement of speed of light) and later by Einstein. What was 'disproven' was the 'mechanical' model of propagation of e-m energy through a 'medium' - e.g. like ripples in water or acoustical energy.

'Aether Vane' is a 'machine' - frozen in cobwebs - revealing wind-vane like socks (orthoscopic and pseudoscopic images) and gears and pedestal. The machine appears to 'not to be functioning', but 'how else to explain the presence of luminous receptacles' which have 'caught light' in a peculiar way.... so maybe the 'functioning' is not in the 'movement' (of a machine turning) but in the 'revelation' of 'light occupying space'.

If, as the classic interpretation of ether would have it, this ('ether') medium is all-pervasive ('universal') then why could it not be 'revealed' (as present) in the holographic metaphor of images (spatial constructs) occupying a fleeting space? If the medium (of 'ether') does not exist, then 'explain the presence of that which 'appears to have captured light'.... (questions that invoke humour and paradox). A similar question to the viewer was: does the presence of seemingly-solid vaness (wind 'socks') allude to a medium (ether) by which these images are 'transported'? And, how does a

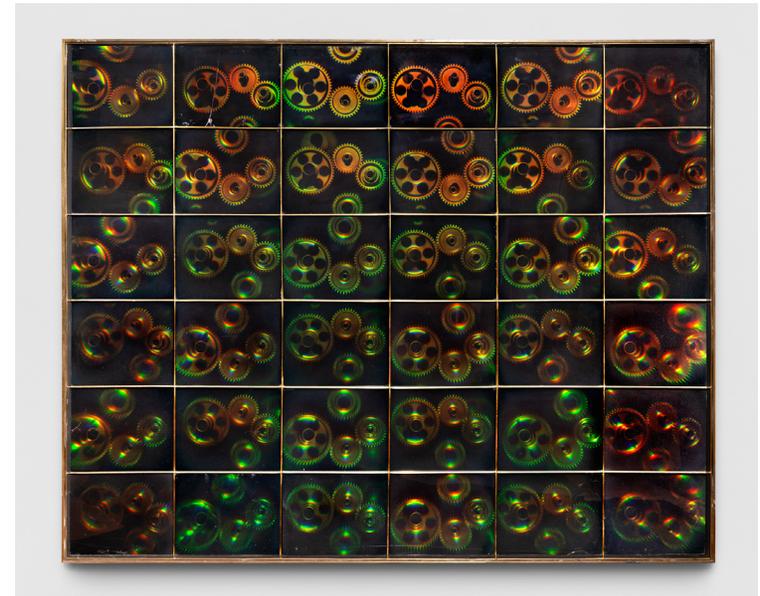
effigy/image occupy 'space' if there is 'nothing' for it to 'hang on' (i.e. 'space is empty').

So, in a way, this piece 'Aether Vane' was a comment on the idea that perhaps the 'mechanical model of ether as a medium for the propagation of light/energy' may have been disproven, but the 'metaphysical model' (alchemical model) of 'space containing substance and creative 'mind' ' (a vehicle for 'imagination') could never be 'disproven'.

Aside from the obvious humour and my propensities for 'surrealist' stratagems of 'making strange', invoking 'the marvellous' and the 'chance meeting of....', and these propensities were visible in other works ('Collapsed Staircase', 'Venetian Blind', 'Window', etc.), I viewed the task of making sculptural 'hybrids' that featured holographic and sculptural elements as something that could present paradoxical situations, comment on perception, on science, on knowledge, and comment on 'art'.

Razutis letter to Anna MacArthur on the meanings of the work (1998) : [https://www.alchemists.com/visual\\_alchemy/correspt.html](https://www.alchemists.com/visual_alchemy/correspt.html)

## NEWTONIAN GALACTIC ASSEMBLY LINE – 1974-76



36 silver halide holograms in brass welded frame, 48" x 60" x 4".

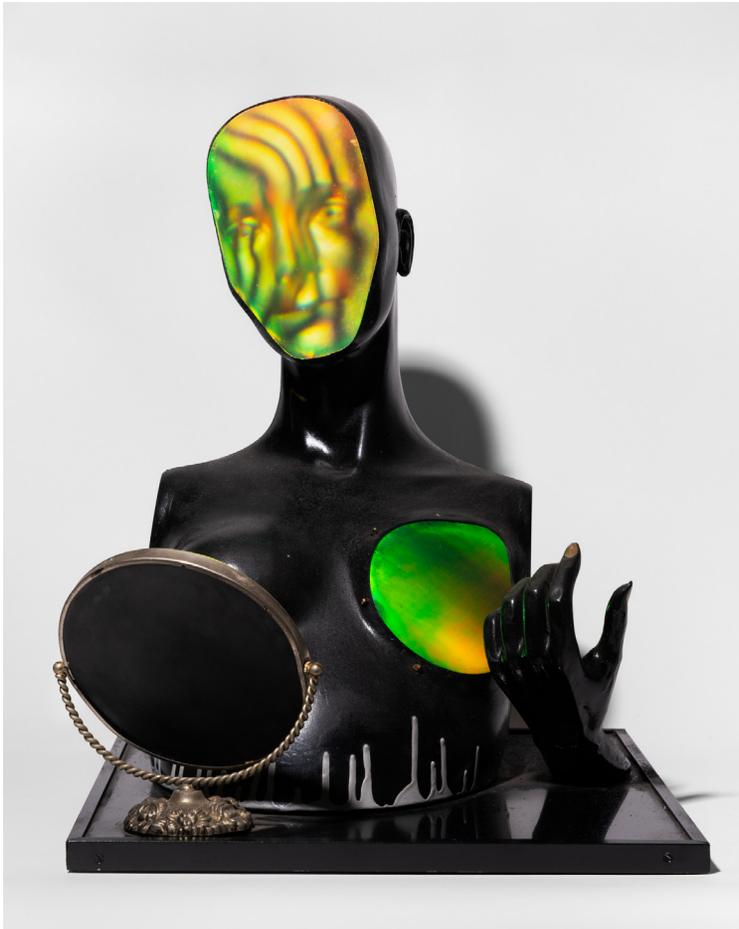
One of the works from the original Visual Alchemy traveling exhibitions (1976-78) was *Newtonian Galactic Assembly Line*, a 4 ft x 5 ft mosaic panel of reflection holograms which displayed alternating orthoscopic and pseudoscopic (virtual and real, respectively) images of 'interlocking gears' as a wall piece, ideally illuminated by a 'moving light source' to display an sea anemone-like movement.

This piece was originally envisioned as a much larger floor piece over which the visitor would enter the exhibit. But this idea proved too expensive, too impractical. Although it remains on the books...

### To the museum and back:

During an exhibition of holograms at the Science Museum in London, England, in 1989-1990, the curator Eve Ritscher succeeded in 'selling this hologram to a client in Kuwait'. After the invasion of Kuwait by Iraqi forces, that deal fell through... So here it is! A prominent part of this show.

## SURROGATE DRESSED FOR ART NEW VOGUE – 1984



Dichromate holographic assemblage.

### Holographic Technique Employed:

Double-exposed (in two states superimposed) interferograms in dichromate produced with double-exposed CW laser illumination.

Two distinct states in time recorded as induced contour patterns of interference fringes of surface displacement on model.

### Background:

The 1984 interferometric dichromate holograms (face, breast) replaced the original silver halide reflection holograms created in 1974-76 by Al Razutis at Visual Alchemy, Vancouver. Both the mannequin and recording process were 'dressed up' for 'art in the 80's': Make-up with stress lines for Art New Vogue and the latest styles of fashionable virtual reality & holography.

### Original "SURROGATE" (1974)

A multi-media sculpture featuring silver halide holographic elements. A work combining a 'holographic face' (and reflection in a mirror), holographic 'breasts', and a vanity mirror replaying mortality for the classic '*vanitas*'.

This work was re-done in 1984 when the original silver halide holograms (face, breast) were "sawn off with a band-saw" (by A.R.) and new holograms produced at Holocrafts Delta, BC as "dichromate holograms" were made to include interferometric double-exposure effects to provide the 'new vogue' make-up...

The original silver halide reflection holograms and colour tones (processed to ambers and greens) were replaced with dichromate hologram plates in 1984 to comment on the 'new tech' fascinations that the art world had with 'technique' and style. These new dichromate holographic plates (face, breasts) were shot in the interferometric double-exposure manner that Razutis had used in his previous works ('Stress Topography'). The contour lines were generated to be a 'new vogue' makeup application, for holography and po-mo art.

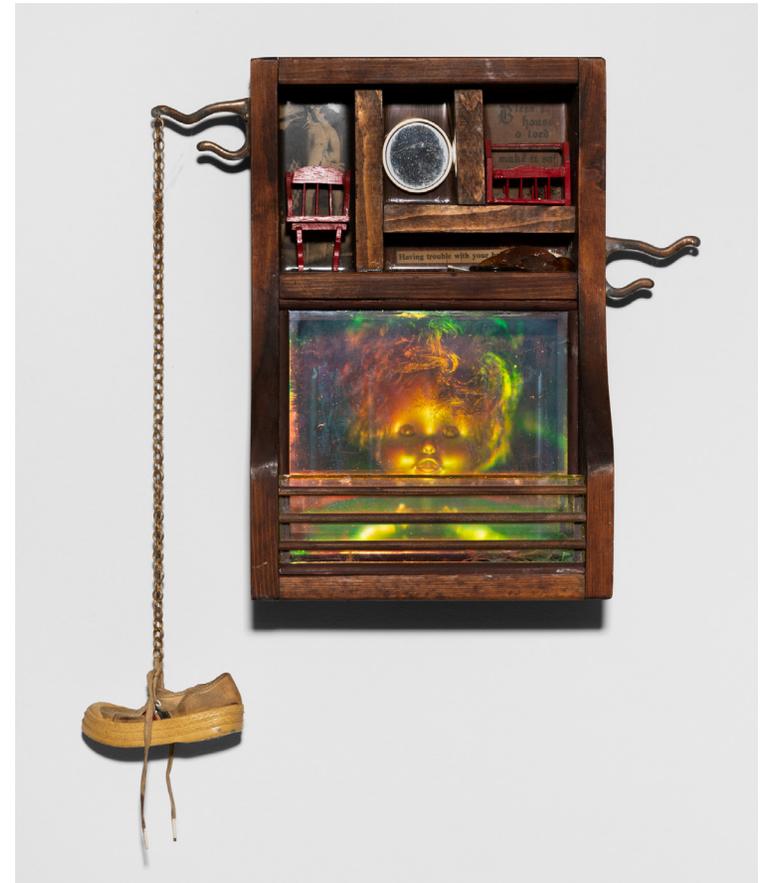
The 'new vogue' interferometric dichromates were produced with the expert collaboration of Gary Cullen, at Holocrafts, B.C., Canada.

"As a hybrid form of holography it combined the holographic image with sculptural motifs, with the holographic image substituting for the physical body ...and you can see that I hinged open the face...hinged open the breast to reveal both a concave and convex shape..."

“The holographic body in this piece was referring to the idea of a ‘virtual body’, something akin to what would happen in Virtual Reality where the virtual body of the person would seem to replace the physical body, and that is in fact what is occurring in Virtual Reality simulations today...and there is an image that the ‘Surrogate’, that is, a stand-in for a physical person, is looking at ...”

— *Virtual Imaging*, Al Razutis, Stereoscopic 3D Video, 1996-7

### DADDY'S SPICE CABINET I (Angel Baby) – 1985



Dichromate holographic assemblage, 16” x 28”.

Exhibited at:

*NSA 3D-Con 2012*, 3D Gallery, Costa Mesa, CA, USA

*Deja Vu*, 2010, Vancouver, Canada

*Images in Time and Space*, 1987-2002 (traveling exhibition - Montreal, Ottawa, San Francisco, Los Angeles)

*Classic Suite and Other Stories...*, 1987 (Vancouver, Canada)

[https://www.alchemists.com/visual\\_alchemy/hybrids.html#spice](https://www.alchemists.com/visual_alchemy/hybrids.html#spice)

DADDY'S SPICE CABINET 2 – 1985



Dichromate holographic assemblage, 10" x 18" x 6".

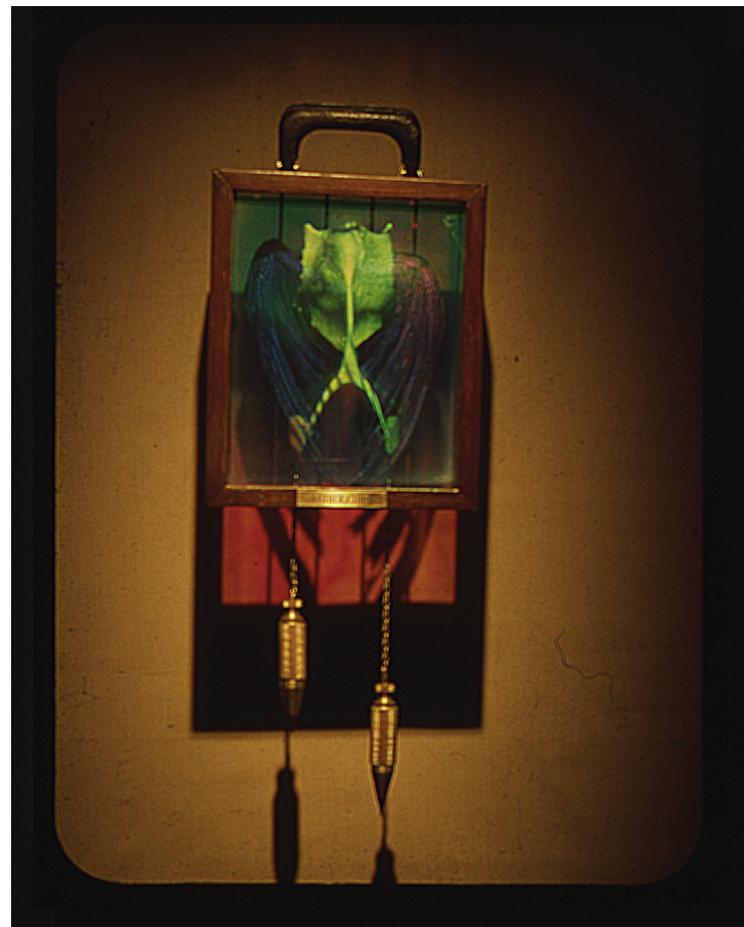
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[https://www.alchemists.com/visual\\_alchemy/hybrids.html#spice](https://www.alchemists.com/visual_alchemy/hybrids.html#spice)

SUBJECT TO TIME – 1984-85



Dichromate holographic assemblage , 10" x 12" x 4".

Interferogram created with Gary Cullen in DCG form at Holocrafts

Exhibited at:

*Classic Suite and Other Stories...*, 1987 (Vancouver, Canada)

*Art of Holography*, 1985 (Vancouver, Canada )

[https://www.alchemists.com/visual\\_alchemy/holo\\_visual2.html#time](https://www.alchemists.com/visual_alchemy/holo_visual2.html#time)

What remains: "Stand-in for Subject to Time"



3D viewer mounted on stand, 56" tall.

### The Dissection of 'Subject to Time'

"If you're selling time travel, never leave your samples with those who won't"

"Won't?"

"Won't tell the truth" "Won't believe in the marvellous."

"Won't is a word you need to know so you don't revert to can't, when everything is destroyed. Or absurd."

And to comment:

Does "time heal?" Don't be absurd!

Photos of original and stand-in, including anaglyph 3D from [https://www.alchemists.com/visual\\_alchemy/3d\\_dali.html#dissection](https://www.alchemists.com/visual_alchemy/3d_dali.html#dissection)

### BACKSTORY:

"Gifted to an "ex"... and you know where that went, don't you?"

Nowhere, but the garbage bin.

And that's how almost three decades later... one must conclude that "the work is lost!"

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'Subject To Time' is a creation of several components, an important aspect of which is the illumination (light) that reveals the presence and absence of object, subject, materia, while the wings around it slowly rot and decay...

### Meaning what?

Meaning, we have a 'chance encounter' here, even if displayed publicly, or in an art gallery, or on a surrealist operating table, in a 'space' not a surface and not to exclude any dreams. It's very clear that the shimmering (gold) dichromate hologram

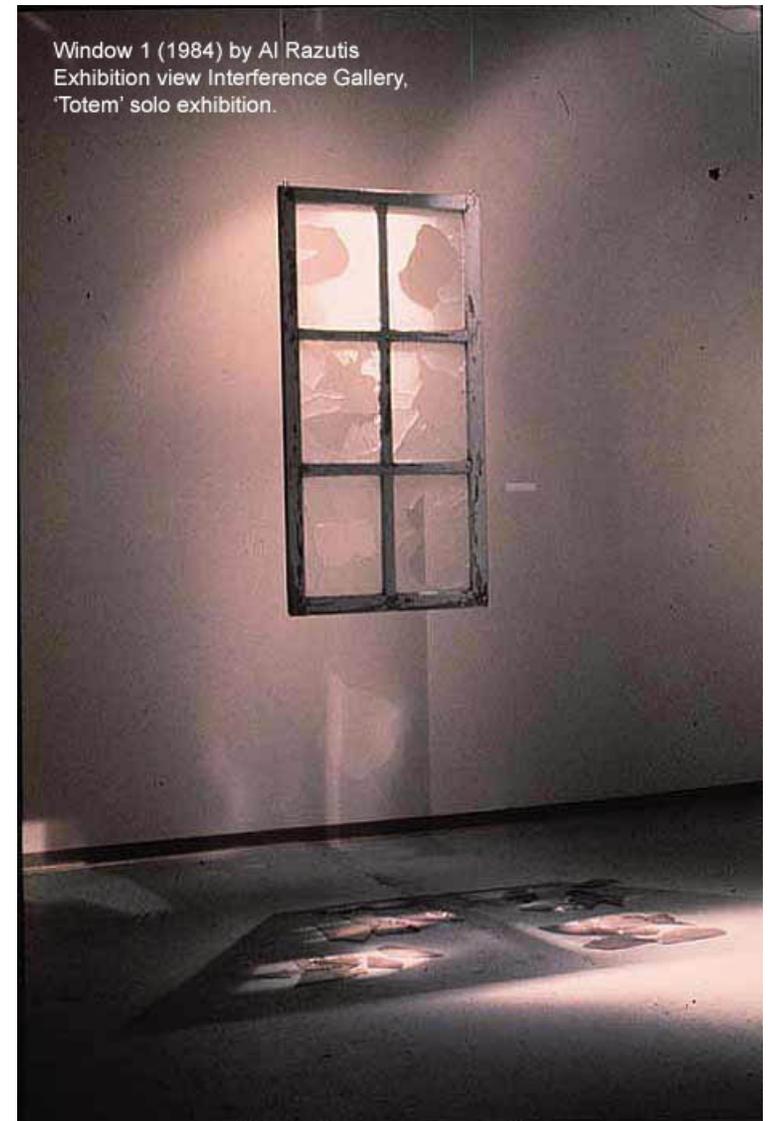
contains a 'virtual image' of a 'bone-like object', resembling a 'bird breastplate', upon which are inscribed interference lines (interferometric contours) which clearly (clearly!) show that this breastplate was captured 'in movement', in the interference between 'before' and 'after' (the interferometric contour lines) suggesting that this bird was once living and 'alive'...

Meaning also that we're doing art here, not just science. And certainly our 'biology dissection lab' course here has taken a surrealist turn.

What must be pointed out, without a technical explanation, is that the 'shadow of the bird wings' are clearly depicted on the back wall, while there is 'no shadow cast by the breastplate'... Yes, a solid looking image, created by reflection holography 'casts no shadow'.

And that is something to give pause, to think about.

## WINDOW I - 1984



Original installation piece with silver halide WLR holograms (on floor) exhibited in *Totem* exhibition in Toronto.

“What happens when the imagination collides with ignorance?”  
The windows separating both get broken.  
As if the cosmic angels got tired of everyone pretending.  
But then the janitors of ‘good taste’  
and ‘generally accepted behaviour’  
come and sweep it all away.  
And everyone pretends ‘they didn’t see it!’  
even though later, they are imitating it  
like no one else, still.

Floor pieces were stolen while on exhibit at LICHT-BLICHE, Frankfurt, Germany 1984. The curators Walter Klassen and Katharina Voss did not insure the works. Their explanation was incomplete. After a while they stopped answering my queries. The apathy of the other holo artists was appalling! What a self-serving scene! Yes, that was my conclusion. It’s not ‘worth’ sending your works out to people that self-serving.

This theft of the holograms / floor pieces in Germany followed the Toronto *Totem* exhibition at Interference Gallery 1984 and exhibition at the Display Holography Symposium at Lake Forest College also in 1984.

A ‘replacement’ followed with Window 2 (dichromate holograms - produced with Gary Cullen / Holocrafts, Canada) in 1985. But the images were different, the colour was different, it was a ‘different replacement’, never the original would be seen again.

#### Installation description:

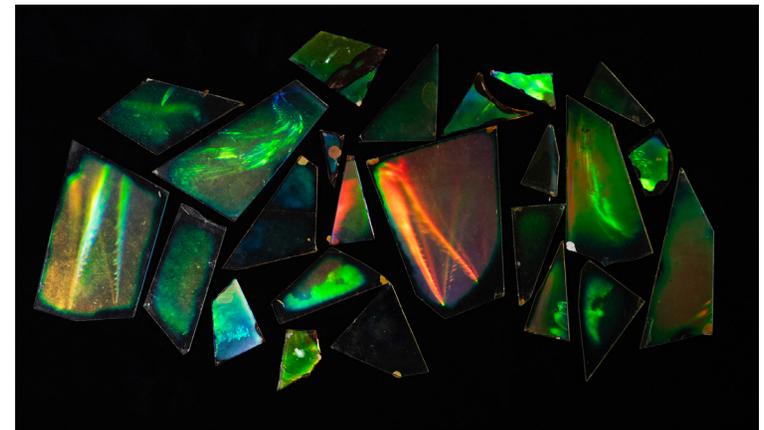
This work is presented as an ‘installation’, meaning the various components (window frame, single light source, shadows on the floor, pieces of holograms, holograms) must be arrayed as pictured, and in accordance to both the technical requirements (since source white light, angle of illumination, viewing angles) and the aesthetic requirements that the ‘holograms must be arrayed in every frame of the window in a manner of broken glass on the floor’. Not complicated if one refers to the pictures.

**Hologram description:** White-Light Reflection Holograms (silver halide emulsion, Denisyuk single beam white

light reflection bleached holograms (the ‘window pieces’) lying on the floor in designated (illuminated) locations. The holograms were cut from 8” x 10” AGFA silver halide emulsion glass plates which were exposed individually as separate and unique H1 holograms. The subject matter in each hologram is a animal bone or part of a bone.

**According to the maker:** “WINDOW I captures the frozen moment after impact of the holographic real, as a version of surrealist real, on the physical real, by way of metaphor and implied allegory. I prefer the allegory to include bone objects, like animals in flight, crashing through the-two dimensional window panes that are suspended in light. The allegory needs ‘meat’ but only gets glass and bones. The results of the impact are quite visible on the floor.”

#### WINDOW 2 – 1985



The theft of the holograms of Window 1 in Germany was followed with Window 2 (with dichromate holograms - produced with Gary Cullen / Holocrafts, Canada) in 1985.

[https://www.alchemists.com/visual\\_alchemy/holo\\_visual2.html#window](https://www.alchemists.com/visual_alchemy/holo_visual2.html#window)

VENETIAN BLIND – 1974



Silver halide hologram with image of cherub, made into venetian blind, box, backlight, image of Venice, hand written letter, wooden frame with glass.

(This work is lost, except for photo documentation)

“What happened to this work? How about some facts?”  
This piece was gifted to someone who would become a vengeful ‘ex’...  
I was told it was “thrown into a dumpster”  
(a metal container, on its way to the dump)

I was told by the ex, in a taunt, in a cursed way.  
I never saw this work again.

VENETIAN BLIND II —1986



Assemblage, brick wallpaper, metal vase with paper flowers, glove nailed to the wall, venetian blind made of slats of dichromate holograms.

Made at Holocrafts, Delta with Gary Cullen.

This work was purchased for permanent collection by Associates of Science and Technology for the international traveling holography exhibition *Images in Time and Space*.

This piece is presumed lost.

CATCH ME I'M FALLING — 1985



Silver halide holographic assemblage, 16" x 22".

Exhibited at:

*NSA 3D-Con 2012*, 3D Gallery, Costa Mesa, CA, USA

*Deja Vu*, 2010, Vancouver, Canada

*Images in Time and Space*, 1987-2002 (traveling exhibition - Montreal, Ottawa, San Francisco, Los Angeles)

*Classic Suite and Other Stories...*, 1987 (Vancouver, Canada)

“Catch me I’m falling”? What is it?

A metal serving tray provides some of this ‘feast’.  
Two baby hands, protruding, suggest ‘baby wants to play catch’.  
When baby grows up, baby throws things.

A projected holographic image of a ‘flat X’  
suggests this is “two dee to three dee” deal,  
the standard come-on of some folks in the ‘holo industry,  
who themselves don’t know how to play real “three D”,  
or how to play catch.  
Or what they are doing here.

This is a really simple hologram.  
White-light silver halide white-light reflection hologram.  
Shot with a CW He-Ne laser, Denisyuk method style.

Shot on a glass plate, which was then ‘reversed’ so the image  
is projecting (6” out in ‘holo space’).

“What is the reason for the X?”  
“Is that a signature? Or a reason?”

“What are those squiggles around it?”  
“Oh, that’s TWO DEE clouds!” the clubhouse reacts.

How can I leave this place, and forget it?  
Why should I forget it?

Because we all know: (Loud music!)

“GRAVITY WINS, and ENTROPY RULES, baby!”

Al Razutis, 2024

A version with all images can be found at:  
[https://www.chemists.com/visual\\_alchemy/gravity\\_wins\\_entropy\\_rules2024.html](https://www.chemists.com/visual_alchemy/gravity_wins_entropy_rules2024.html)