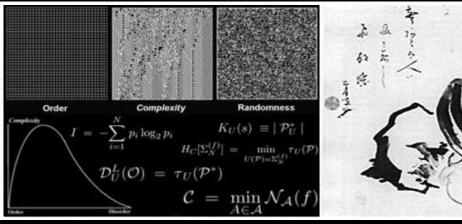
Physics, Tao, and Fine-Art Photography

Churchville Photography Club, June 2011







...with just a little bit of complexity sprinkled in

Andy Ilachinski andy.ilachinski@gmail.com

http://www.sudden-stillness.com http://tao-of-digital-photography.blogspot.com

Let's cut right to the chase

Physics and photography both define and revel in categories, divisions, groupings, labels, orders, and partitions;

Tao reminds us of the fundamental absurdity of doing so!



In a certain Chinese encyclopedia called the Heavenly Emporium of Benevolent Knowledge, (perhaps imagined, perhaps real), Jorge Luis Borges writes that

- "...animals are divided into:
- (a) those that belong to the emperor;
- (b) embalmed ones; (c) those that are trained;
 - (d) suckling pigs; (e) mermaids;
 - (f) fabulous ones; (g) stray dogs;
- (h) those that are included in this classification;
 - (i) those that tremble as if they were mad;
 - (j) innumerable ones;
- (k) those drawn with a very fine camel's-hair brush;
- (l) etcetera; (m) those that have just broken the flower vase; (n) those that at a distance resemble flies."

Let's cut right to the chase

Physics and photography both define and revel in categories, divisions, groupings, labels, orders, and partitions; Tao reminds us of the fundamental absurdity of doing so!

An artist is a *meta*-pattern of subjective order

Art is the transcendence of objective categories

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- Who am I?
- My approach to photography
 - Physics / complexity / Tao / photographyStrange bedfellows... what do they have in common? ☺
 - My blog public dialectic on physics and photography
- A sampling of portfolios

Examples of how one "photographic eye" is informed / guided by physics and Tao

- Chaos, Order, Complexity, Entropy ("Sudden Stillness" book)
- Micro Worlds
- Abstract Glyphs
- Swirls, Whorls, and Tendrils
- Tao
- "As Above; so Below" (latest project: Luray caverns, VA)
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If time and interest warrants

- East & West aesthetic lessons
- Parts & wholes insights from complexity
- Search for meaning *universal grammars*

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Timeline / Bio

Whatever I may know about light, tone, texture, form, and composition I learned by watching my dad

He was not a photographer,
But was an artist par excellence

- 1960: Born / Glen Cove, Long Island, NY
- 1970: First camera

Polaroid instamatic / Christmas gift
First picture: (abstract?) closeup of my right toe

- 1978: First encounter with Tao Chuang-Tzu: Inner Chapters
- 1982: First "serious" camera Canon AE-1
- 1988: Ph.D. / theoretical physics

 Discrete Complex Systems
- 1998: First digital camera
 Nikon Coolpix 950
- 2001: First published book Cellular Automata (physics)
- 2002: First "serious" DSLR

 Canon D60
- 2007: First Solo Show
 Coral Gables, Florida
 First Lenswork portfolio

DVD Edition #71 / July-August

2008: First self-published book
 Hawaii, Blurb.com (photography)

First art co-op

One of 14 founding members of *Lorton Arts*, Occoquan, VA

B&W / Darkroom

Photography: Everything (that catches the eye)

Transition #1

Color Slides

Transition #2

B&W / Photoshop "Serious" printing: *outsourced* Photography: *Things* / *Places*

Transition #3

B&W / Photoshop "Serious" printing: own

Photography: Feelings / Projects

Started entering juried contests



My creative process is very simple: I take pictures of what calms my soul.

There may be other, more poetic words that may be used to define the "pattern" that connects my images, but the simplest meta-pattern is this:

I capture moments in time and space in which a peace washes gently over me, and during which I sense a deep interconnectedness between my soul and the world.

Not Cartier-Bresson's "Decisive Moment," but rather a...

Sudden Stillness

Recent Photo Vitae

- Spotlight Award Winner
 B&W Magazine Portfolio Contest, Issue TBD, 2011-2012
- Merit Awards (Animals & Pattern/Texture)
 B&W Magazine Single Image Contest, Issue #80, 2011
- Juried on-line exhibit F-Stop Magazine, Abstraction, Issue #45, Feb 2011
- Featured photo on music CD 16:9, Stuart Sweeney, debut album, 2011
- Solo show, Hyatt Regency Hotel
 Sponsored by the Greater Reston Arts Center, 2010
- Curated Group Exhibit (1 of 3 artists)
 American Center for Physics, College Park, MD, 2009/10
- Small works exhibit , Belnavis Art Gallery Springfield, VA, 2009
- 1st Prize, Juried photo exhibit RoHo Photo Gallery, Cincinnati, OH, 2009
- Photography Workhouse Society Lorton Arts, VA, 2008/09
- Finalist (Architecture) B&W Spider Awards, 2009
- Wall calendar and datebook
 Change Your Mind, Change Your Life
 by Wayne Dyer (Amber Lotus Publishing, 2010)
- Featured Artist / After Words
 Northern Virginia magazine, August 2009
- "Micro Worlds" portfolio
 Lenswork magazine, Print & Extended Edition
 Issue #76 (May-June, 2008)
- Merit award, single-image contest Black & White magazine, 2008

- Merit Award (Abstraction)
 B&W Magazine Single Image Contest, Issue #56, 2008
- Semi-finalist, *Photographer's Forum* magazine Annual Contest, 2008
- Honorable mention
 Photo Techniques, portfolio contest, 2008
- Solo Exhibit (32 Photographs, 2007)
 Books & Books / Gallery, Coral Gables, FL
- Honorable Mention
 Photo Techniques, Portfolio Contest, 2007
- "Spirit & Light" portfolio
 Lenswork magazine, Extended Edition
 Issue #71 (July-August, 2007)
- Winner of book contest
 U.K. B&W magazine and Envisage Books, 2007
- "Entropic Melodies Series" portfolio Focus Magazine, April 2006
- Merit of Excellence (Abstracts)
 2007 B&W Spider Awards
- Portfolio contest winner
 Black & White magazine, Feb 2006
- Merit award, Abstract Exposure
 Oct 2006 juried on-line exhibit
- Finalist, *Photographer's Forum* magazine Annual Contest , 2005
- Third Place, photo contest Sybex Publishing gallery contest, 2005

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A Lesson from a *Physicist*

"Thought creates the world, and then says, 'I didn't do it."

— DAVID BOHM *Physicist* (1917 - 1992)



A Lesson from a Photographer



"There is no closed figure in nature Every shape participates with another. No one thing is independent of another, and one thing rhymes with another, and light gives them shape."

— HENRI CARTIER-BRESSON, Photographer / Artist (1908 - 2004)

A Lesson from Taoist Master



"Before I had studied Zen for thirty years, I saw mountains as mountains, and waters as waters...

When I arrived at a more intimate knowledge, I came to the point where I saw that mountains are not mountains, and waters are not waters.

But now that I have got its very substance I am at rest. For it's just that I see mountains once again as mountains, and waters once again as waters."

— Ching-te Ch'uan Teng-lu ("Transmission of the Lamp")

Takeaway #1 All partitions are arbitrary

"The division of the perceived universe into parts and wholes is convenient and may be necessary, but no necessity determines how it shall be done."

— GREGORY BATESON (Anthropologist, 1904 – 1980)



Takeaway #2 There are no things, just processes



"All is process. That is to say, there is 'no thing' in the universe.

Things, objects, entities, are abstractions of what is relatively constant from a process of movement and transformation.

They are like the shapes that children like to see in clouds.."

— DAVID BOHM (*Physicist*, 1917 – 1992)

Takeaway #3 All is organized energy

"Science shows us that
the visible world is
neither matter nor spirit;
the visible world is the
invisible organization of energy."

HEINZ PAGELS(Physicist, 1939 – 1988)



At first, the *photographer* finds the *picture*...

Something about the *photographer* draws him to it



At first, the *photographer* finds the *picture*...

Something about the photographer draws him to it

Physicist

Light, Entropy, Geometry

Poet

Romance, History, Culture



Photographer A

Textures, Landscape

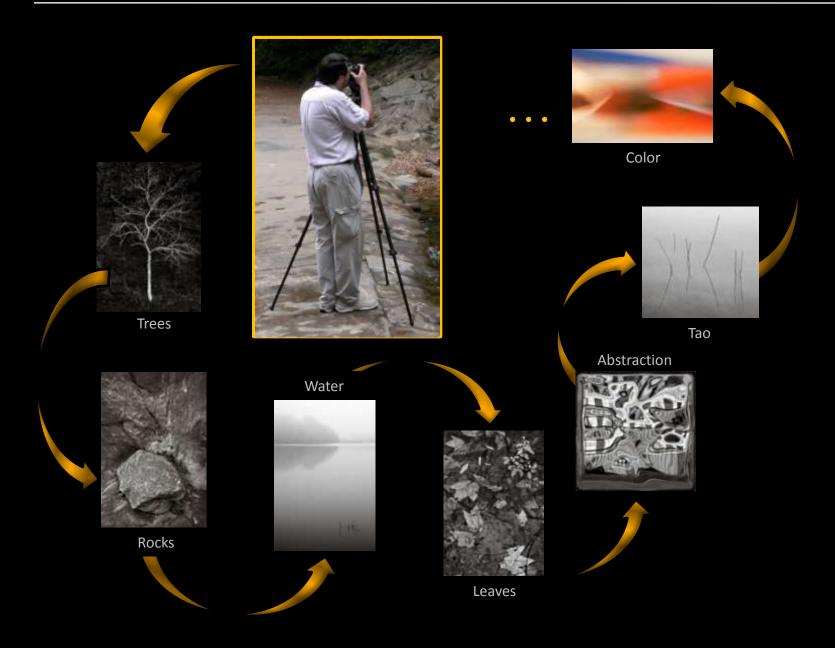
Photographer B

Dilapidated door, Contrast

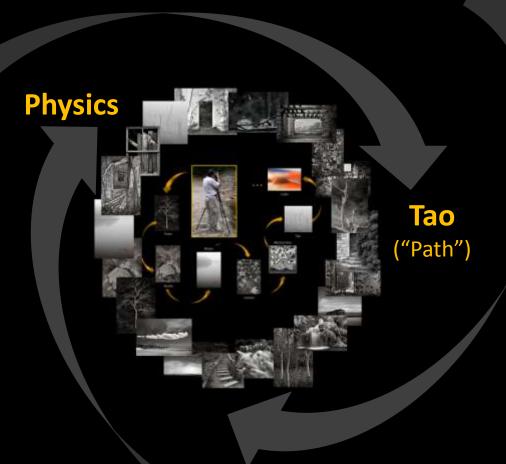
Photographer C

Tones, Forms

...the *pictures* discover a *path*...



...the path assembles itself...



Photography

Common Theme

Relationship between the Whole and its Parts

Physics

 $Micro \leftrightarrow Macro$

Tao

"I" \leftrightarrow Cosmos

Photography

 $\begin{array}{c} \textit{Compositional} \\ \textit{Elements} \end{array} \longleftrightarrow \begin{array}{c} \textit{Image /} \\ \textit{Meaning} \end{array}$

Emergence, Transcendence

Eventually, the path defines the photographer



"Through the years, a man peoples a space with images of provinces, kingdoms, mountains, bays, ships, islands, fishes, rooms, tools, stars, horses and people.

Shortly before his death, he discovers that the patient labyrinth of lines traces the image of his own face."

Jorge Luis Borges (1899-1986)



Tao of Photography by Andy Ilachinski

STOGRAPHY, SCIENCE, ART, AND THE CREATIVE PROCESS

Luray Caverns Portfolio



his is a short note to announce the availability of my soilfollo of 66 duotoned black and white images from a photo-shoot at Lurey Coverns (In Virginia's Shanend Volley). I have written about my adventure there in posts a couple of weeks ago: here are links to part 1, part 2, and part 3. A mini on-line portfolio of 16 select images is also available.

I will always remember my experience in Luray as (the title of my first blog entry about it suggests was) a joyous meditation in a subterranean cosmos. Euray is truly an otherwordly place, particularly so when (as I was privileged to be, by the generosity of the Luray staff, to whom the book is dedicated). one is an almost lone observer, displaced and cocooned in time and space. Motion and sound are nonexistent, except for the earle echoes of the "pilo-plops" of water droplets slowly, ever so slowly, adding to Luray's vast storehouse of stalactite / "life on the outside." Alone, wandering around Lurays preternaturally beautiful underground vistas of rock and space, it is easy to forget one's normal bearings in space and time. It is, in the end, a timeless void of invistery and wonder,

Thank you, Luray, for your kind hospitality in welcoming this awed photographer (and amateur philosopher of life):

It's Not About the Images



photograph can tell us nothing more than what we see with our own eyes,

(1895 - 1965)

Writing is not about words. Painting is not about pigments is about photographs. the art is limited and self-containing.

(Issue 18, Summer 1997)

Quiet Mind





Autumn Blurb Books Book Review Borges Cameras Calerns Sessoapes sum Spirit Still Lifes seums Story Behind Photo



Seeing is Forgetting the

- ➤ April (10)
- March (8)
- ► 2010 (45)

- ▶ 2005 (1)

➤ 2004 (2)

Luray Caverns (As Above, So

Strigationy (Flash) Fortfolio

http://tao-of-digital-photography.blogspot.com

Most popular entries...

- Ergodicity and (Abstract) Art May 2006
- Learning to See from the Blind January 2009
- Unconscious Influence and the Creative Process February 2009
- Sting, Goethe, and the Creative Process August 2010
- Implicate Order, Enfolded Centers January 2011
- Toward an Aesthetic Grammar April 2007
- Traversing an N-Dimensional Aesthetic Space March 2009
- The Click of the Shutter Button... and A Deep Mystery November 2008

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Sudden Stillness / U.K. Black & White Magazine Book Contest (2007)









Chaos

Order

Complexity

Entropy

The book is a meditation on using photographs as tokens of a visual grammar to communicate one photographer's fragmentary impressions of some of nature's basic patterns; partly as a physicist (with a physicist's eye and understanding of chaos, order, complexity and entropy), and partly as an artist (with an appreciation of the subjective character of each of these four rhythms).

I am hoping that the book can also serve as a palimpsest of the author's – and reader's – process of self discovery: as nature is quietly revealed, through four "movements" of snapshots of its timeless rhythms, the reader will discover visual echoes of herself experiencing nature, as *sudden stillness*.



http://web.mac.com/ephraums/Whats_your_book/Home.html

Chaos

"To divine the significance of pattern is the same as to understand beauty itself."

— Yanagi Soetsu, Philosopher (1889 – 1961)











Order

"We have to remember that what we observe is not nature in itself but nature exposed to our method of questioning." — W. Heisenberg, *Physicist* (1901 – 1976)

















Complexity

"I've always been fascinated with the idea that complexity can come out of such simplicity."

— Will Wright, Game Designer / Systems Theorist (1960 –)















Entropy

"Only entropy comes easy." — Anton Chekov, Author (1860 – 1904)















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A "planned" day of rocks & water variety



Came home from a long photo-safari at Great Falls, during which I took many soon-to-be-forgotten photos of the usual rocks-and-water variety

Sat down to dinner with my family

As my fork was about to pierce the skin of a potato, my wife nonchalantly placed two small acrylic candle holders with *trapped air bubbles inside* on the table

My "eye" was consumed for the next 4 months

"Micro Worlds" portfolio Lenswork, Issue #76 (May-June , 2008)











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Abstract Glyphs



"Everything in the world has a hidden meaning. . .. Men, animals, trees, stars, they are all hieroglyphics.

When you see them you do not understand them. You think they are really men, animals, trees, stars.

It is only years later that you understand."

— NIKOS KAZANTZAKIS (1883 - 1957)











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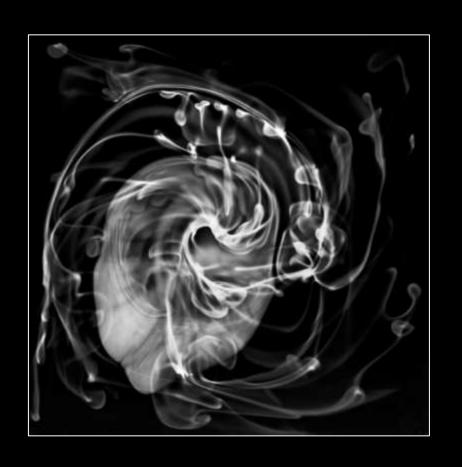
"Swirls, Whorls, and Tendrils"



My younger son (Josh, 7) accidentally dropped a newspaper that I had written something on with a fountain pen into the sink

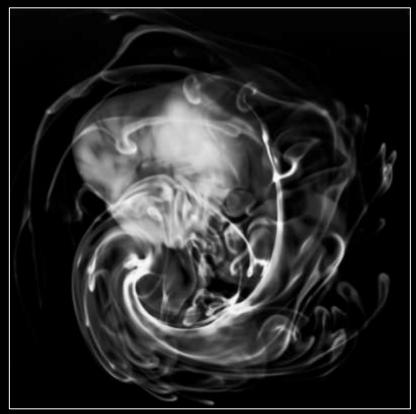
I noticed an interesting pattern ...

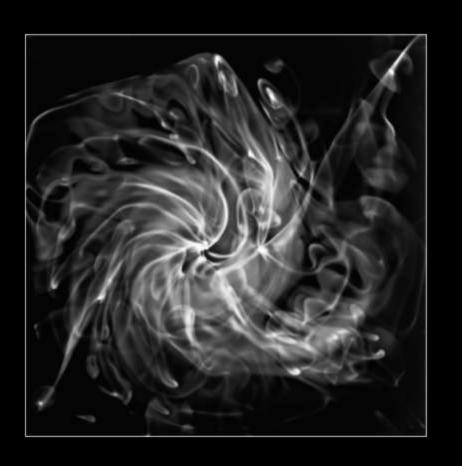
"Swirls, Whorls, and Tendrils" portfolio (March 2009)





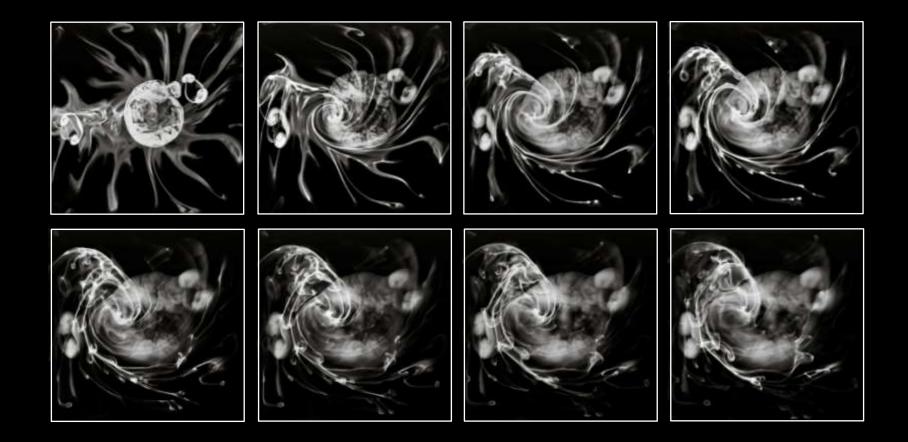












"Swirls, Whorls, and Tendrils"

Swirls, Whorls, and Tendrils

Ephemeral Unfoldin

Andy Ilachinski



http://www.blurb.com/my/book/detail/874142

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Tao

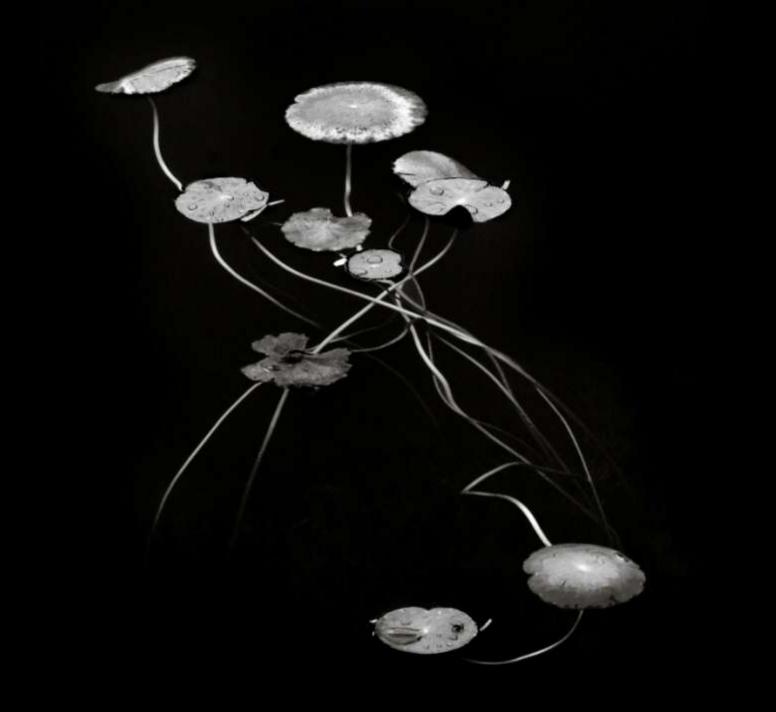


"The use the order of words to try to explain life is really as clumsy an operation as trying to drink water with a fork."

— ALAN WATTS, Philosopher (1915 – 1973)













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"As Above, So Below"



Despite having visited *Luray Caverns* countless times...

I never took anything other than a small "point and shoot" camera, relegating family picture taking chores to my wife.

Until earlier this year, when I finally got the nerve to ask (and be granted!) a full day in the caverns!

Will appear in *Lenswork*

(Issue #95, July / August 2011) Print & Extended DVD Editions











Sneak Peek: Work in Progress ...



Synesthetic Landscapes

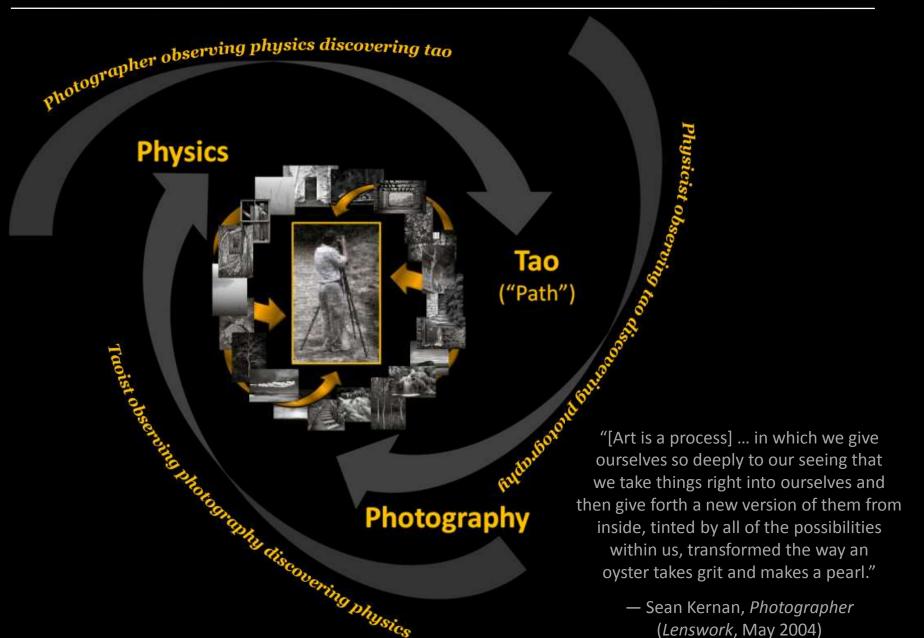
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"Whether you are going or staying or sitting or lying down, the whole world is your own self.

You must find out whether the mountains, rivers, grass, and forests exist in your own mind or exist outside it.

Analyze the ten thousand things,
dissect them minutely,
and when you take this to the limit
you will come to the limitless,
when you search into it you come to the end of search,
where thinking goes no further and distinctions vanish.

When you smash the citadel of doubt, then the Buddha is simply yourself."

— DAIKAKUZen Master (1213 – 1278)

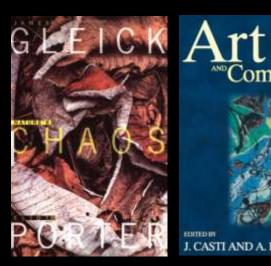


"When words become unclear,
I shall focus with photographs.
When images become inadequate,
I shall be content with silence."

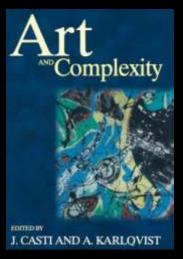
— ANSEL ADAMS

References

Some books on physics / complexity / tao / photography / art



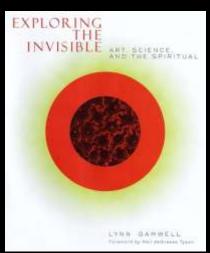
Nature's Chaos J. Gleick, Eliot Porter



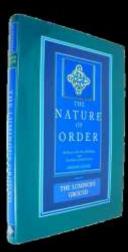
Art & Complexity J. Casti, A. Karlqvist (editors)



The Great Image Has No Form Francois Jullien



Exploring the Invisible Lynn Gamwell



Nature of Order Christopher Alexander

Please visit my website...

http://www.sudden-stillness.com

home

gallery

older portfolios

books

links

a bout

contact

Sudden Stillness

Fine-Art Photography by Andy Ilachinski





















PORTFOLIOS | FEATURED PORTFOLIO | BLOG | SOUND

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