

University of Massachusetts Amherst

From the Selected Works of Charles Kay Smith

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Suncircles: A Prose/Poem 12/18/2014

Charles Kay Smith



Available at: <https://works.bepress.com/charleskaysmith/140/>



Suncircles photographed by Cameen Kettanun, faculty member at University of Bangkok

Our eyes have seen suncircles, as in the splendid photograph above, many times, yet few of us are aware that images of the sun are always projected through chinks between close-together leaves as circular images of the sun. Why do most of us, even most artists who observe nature closely, perceive “splotches,” “dapples,” or “patches” of light, but not suncircles, under trees?

Suncircles

**I saw suncircles for the first time
in middle age, reading in the shade
beneath a birch. A sprightly breeze
shimmied leaves inviting
suncircles to dance across
my open book and over
the bare level ground around.
Nature choreographed a ballet
I could not overlook
as I had for half my life.
What led bright circles to frolic
at noon in the shade? Was it the leaves
of that particular birch? No!
I saw the circles tripping lightly
within the shade of pine needles
and a blueberry bush. Why
had I never noticed suncircles,
before now, ever?**

**When leaves of any shape are bathed in sun,
the chinks between act as lenses.
Each pin hole is an aperture,
reversing an image of the sun
and projecting it to ground.
At edges of the foliage, gaps between
leaves are too wide to be lenses.
If foliage is dense, suncircles
may undergo diffraction,
display interference patterns,
and superimpose fuzzily.
Suncircles are round on ground
with the sun directly over head.
At other times, the circles glow
as bright ovals rather than as round.
In a riffing breeze, circles will prance.
Were you to observe suncircles
during a solar eclipse, they'd appear**

as fat or slim crescents of light,
depending on the eclipse's phase of progress.
So suncircles were known to science,
if not to me and most others.

After reading this, you, too,
If you haven't experienced them already,
may begin to see suncircles.'
The shape of leaves doesn't matter.
All light projected through
pin holes between leaves
projects the form of the sun's image,
but brush and ground are seldom level,
or the sun is not overhead,
so its image is an oval not a circle.
You may view circles much more easily
on a blank sheet of white paper
(or even a white posterboard)
held under small trees
or bushes at a right angle to the sun.
The higher the leaf canopies
the larger will be the circles.
When you notice suncircles,
Ask yourself why you,
And so many others in our culture,
could not see them earlier,
Since they've always been there.

From Renaissance to 18th century,
aesthetics favored balanced symmetry
in art, music, architecture and gardens.
Could artists then see suncircles?

More recently, the aesthetic paradigm has shifted.
For the last two centuries we've been persuaded
by the aesthetics of music, paintings and gardens
that nature is not formal and symmetric.

As an obtuse creature of my culture,
I presumed Nature was asymmetric,
that irregular dapples were the only light
filtering through the leaves of trees.
This conventional frame limited my perception.
My eyes wide open could not see
the symmetric splendor in front of me.

But after I saw I realized,
that my unconscious mind,
prevented me from seeing the circles
and made it almost impossible
to recognize easily
any evidence contrary
to my habitual beliefs.
I'd considered myself just,
until blindness to suncircles
taught me that I would not
tend to perceive clear evidence
counter to what I'd preconceived,
even when that bias was more
consequential than light and shade.
I understood the root of bias
the trap of social bigotry:
why we don't re-think
mistaken stereotypes.

Each culture is a set of frames
that compel partial views of what's real.
In differing frames are misunderstandings
that tend never to be amended.
Each mind, too, is organized in frames
that focus always on restricted assessments,
rendering the common sense distinction
between concrete
and abstract illusory.
Maybe it was adaptive for ancestral survival,
for swift reaction free from distraction?
I am now more humble in my judgments.

Rare it is that we see beyond our frames.
Only two Impressionists,
Of those who strove to see nature
clearly in every splendor, have
showed suncircles in their paintings:
Renoir, in *Dance at the Mill*,*
and Monet in *Alice in the Garden*.**

Our eyes are not cameras
that record a scene with unerring fidelity.
Eyes tend to look for what the brain expects
and blinker what we don't already know.

**Pondering our frame may teach more than looking.
Best escape from stereotyped perception
is to study the frames of other times and cultures.
Seeing is an intellect's adventure?**

Charles Kay Smith

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Pierre-Auguste Renoir, Bal du moulin de la Galette, 1876

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Claude Monet's Alice Hoschede in the Garden, 1881