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# How to take a Good Photo? & How not to be scared in a Modern Art Museum?

CS180: Intro to Computer Vision and Comp. Photo  
Alexei Efros, UC Berkeley, Fall 2023

# Announcements

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- Exam this Wed in class
  - Closed everything except 2-sided cheat sheet
- Project 4 winners:
  - Alec Li:  
<https://inst.eecs.berkeley.edu/~cs180/fa23/upload/files/proj4B/alec.li/>
  - Jyou12:  
<https://inst.eecs.berkeley.edu/~cs180/fa23/upload/files/proj4B/jyou12/>
  - Lance Mathias:  
<https://inst.eecs.berkeley.edu/~cs180/fa23/upload/files/proj4B/lmathias/>
- Class reviews!

# What Makes a Great Picture?

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© Robert Doisneau, 1955

*With many slides from Yan Ke and Fredo Durand,  
as annotated by Tamara Berg*

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# Photography 101: the where and when

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- Composition
  - Framing
  - Rule of Thirds
  - Leading Lines
  - Textures and Patterns
  - Simplicity
- Lighting
  - Light Direction
  - Color coordination / balance
  - Sunny vs. cloudy
  - “Golden Hour”
  - B&W to focus attention
  - (sur) realism

# Framing

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*“Photography is all about framing. We see a subject -- and we put a frame around it. Essentially, that is photography when all is said and done.”*

-- from [photo.blorge.com](http://photo.blorge.com)



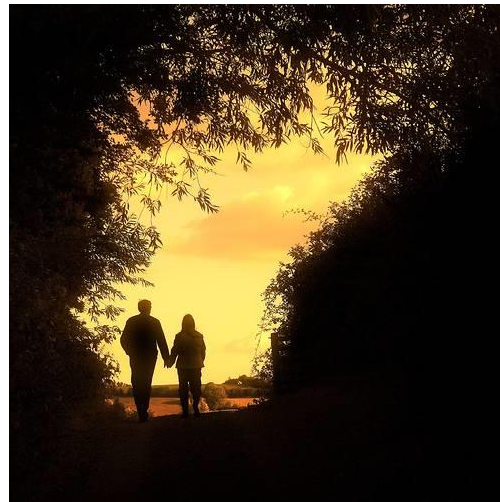
# Frame serves several purposes:

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1. It gives the image depth
2. If used correctly, framing can draw the eye of the viewer of an interest to a particular part of the scene.
3. Framing can bring a sense of organization or containment to an image.
4. Framing can add context to a shot.

# Examples of nice framing

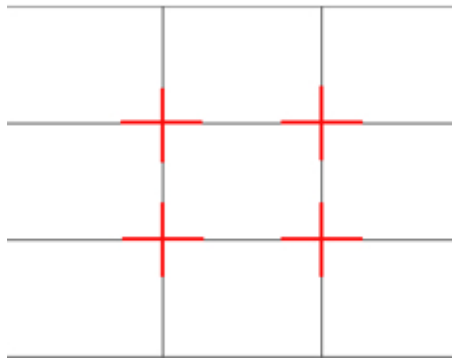
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<http://flickr.com/photos/paulosacramento/226545698/>  
<http://flickr.com/photos/chrisbeach/13868545/>  
<http://flickr.com/photos/74531485@N00/929270814/>  
<http://flickr.com/photos/freakdog/223117229/>  
<http://flickr.com/photos/cdm/253805482/>

# Rules of Thirds

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# Other examples

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# Don't center, especially for motion

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By Fredo Durand

# Don't center, especially for motion



By Fredo Durand

# ... or do center



# Leading Lines

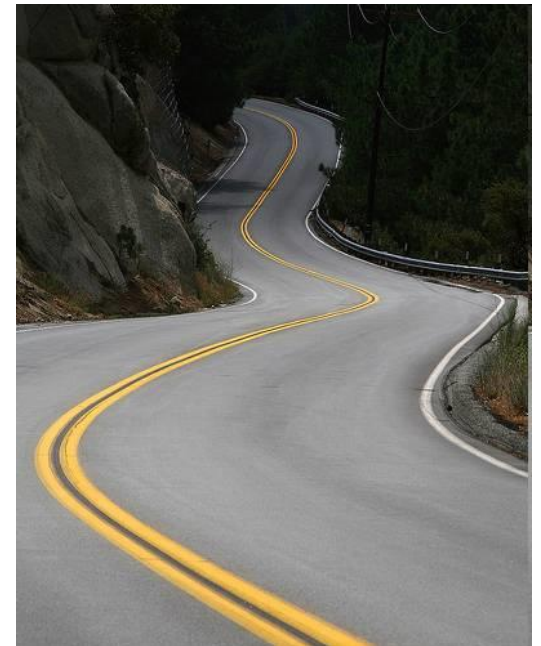




By Fredo Durand

# More examples

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# Textures and Patterns



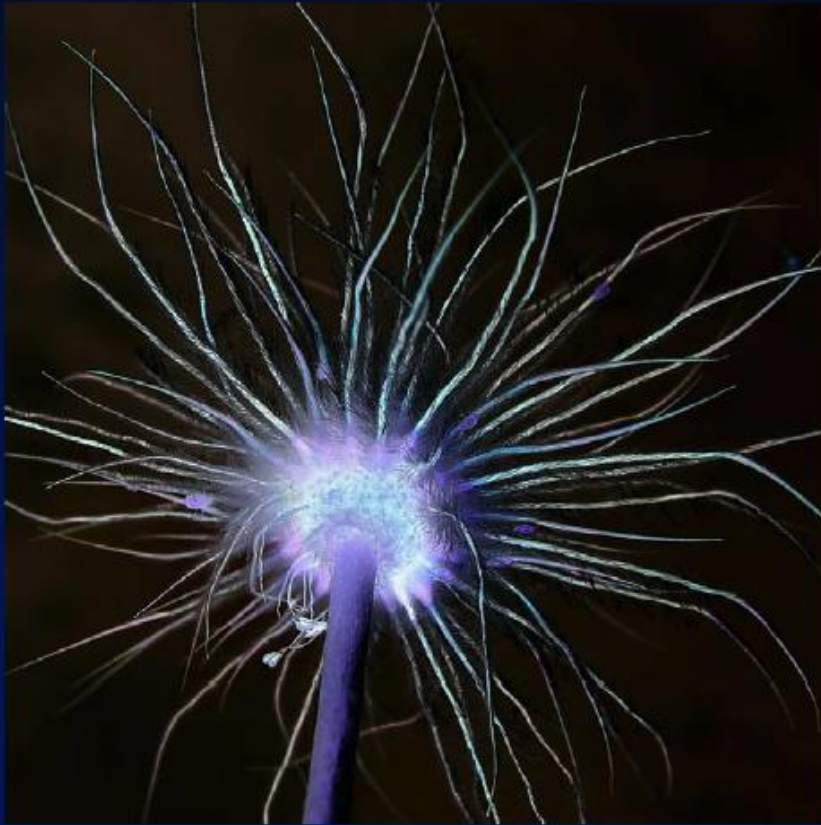


# Simplicity



Prof - Obvious what one should be looking at  
ie easy to separate subject from the  
background. Snap – unstructured, busy, filled  
with clutter.

# Simplicity



# Simplicity



# B&W for Simplicity

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# B&W for Simplicity

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Photo by A. A. Efros

# ...but not always

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...but not always

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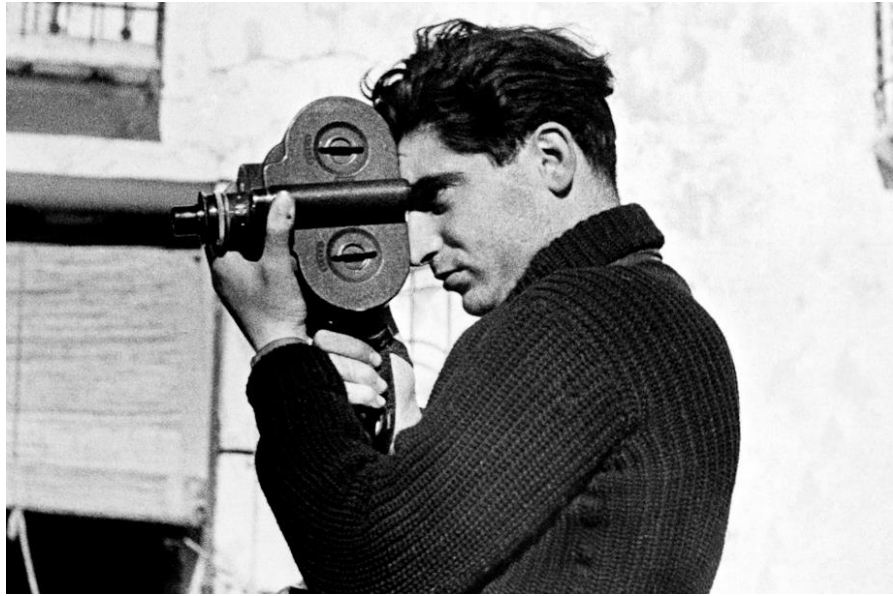


# Crop for Simplicity



By Fredo Durand

# If your pictures aren't good enough, you're not close enough" — Robert Capa



# Simplicity for Portraits – just move

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<https://vimeo.com/29722267>

# Get low

Try to be at eye level



Bad



By Fredo Durand

Better



# Bad angles

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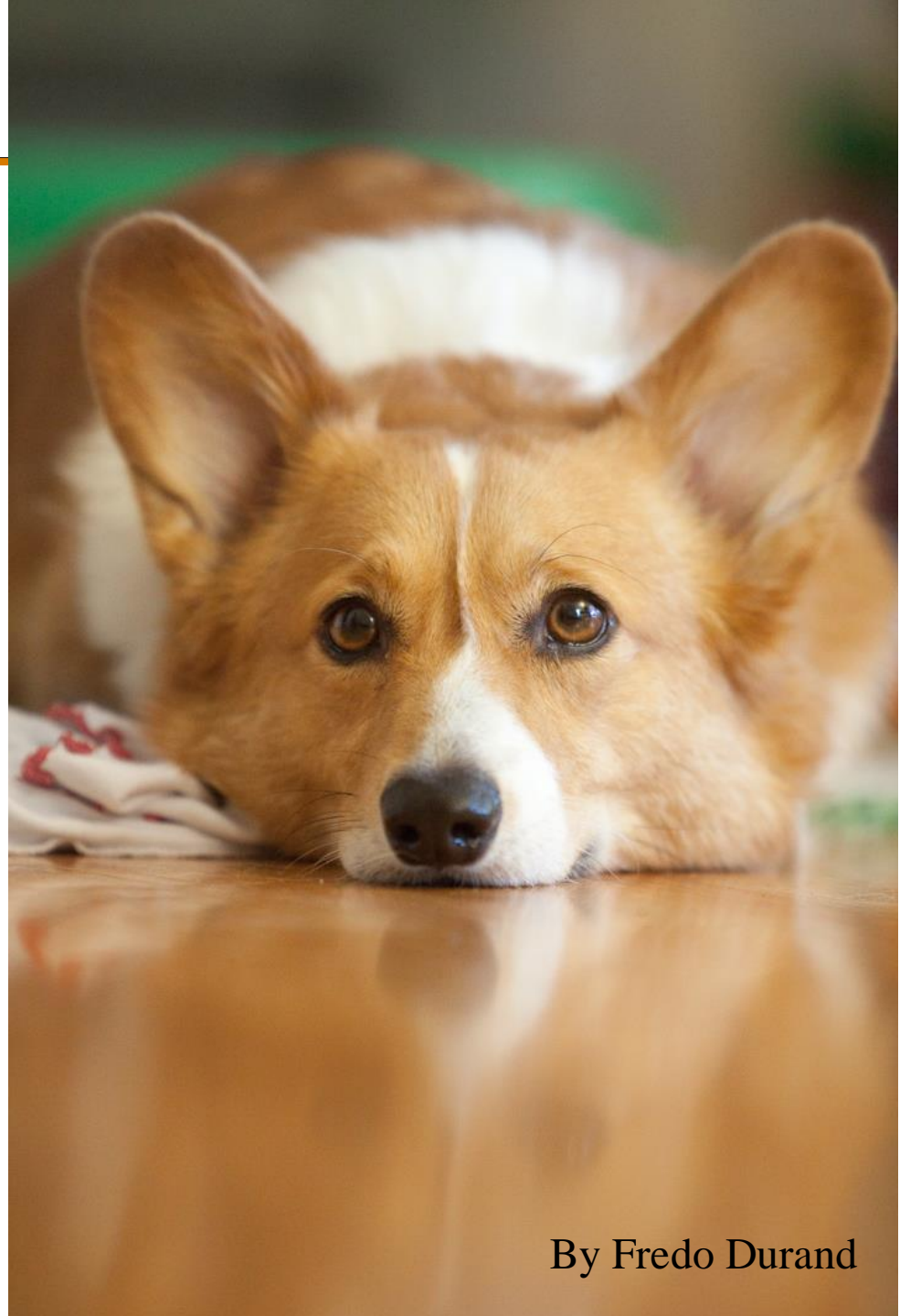
<https://www.youtube.com/watch?v=8EmRZO9fwvk&feature=youtu.be>



By Fredo Durand

# Eye level

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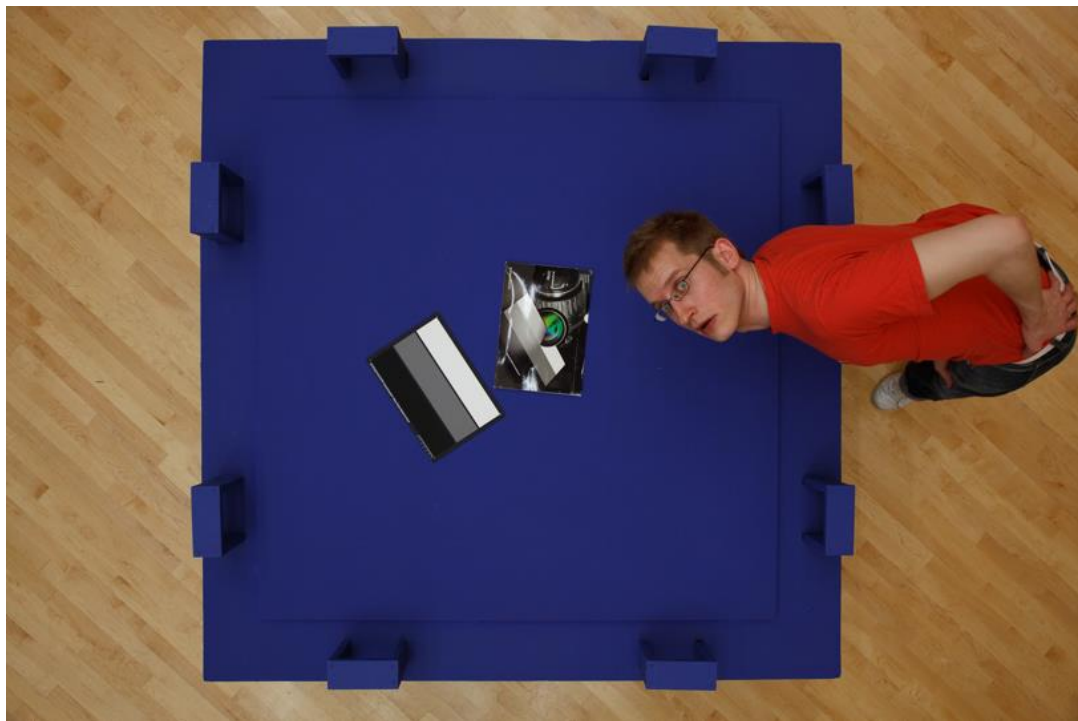


By Fredo Durand



# Or really get high

As usual, follow a rule  
or really break it.



By Fredo Durand

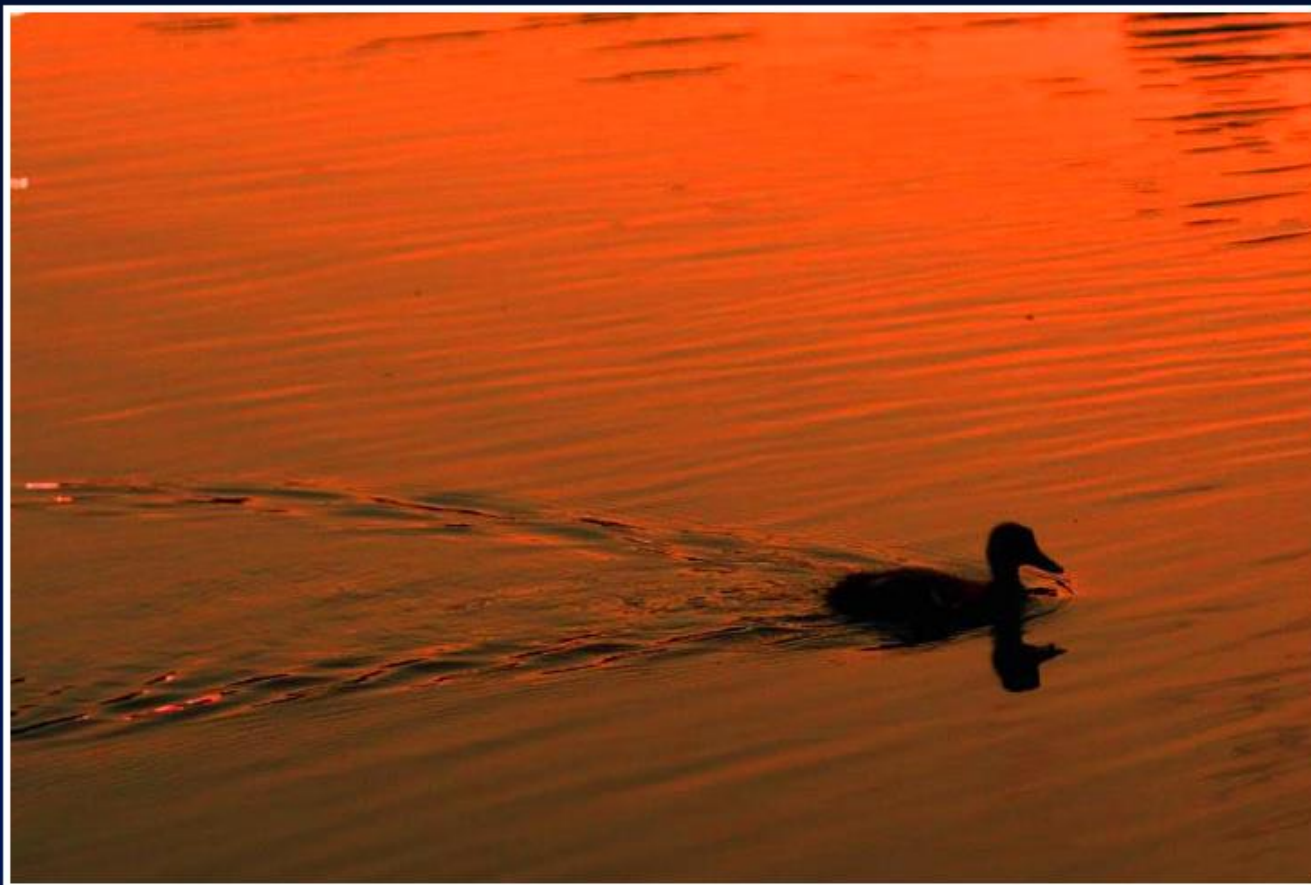
# Front Lighting



# Side Lighting



# Back Lighting



# Color Coordination



Complementary colors (of opposite hue on color wheel)



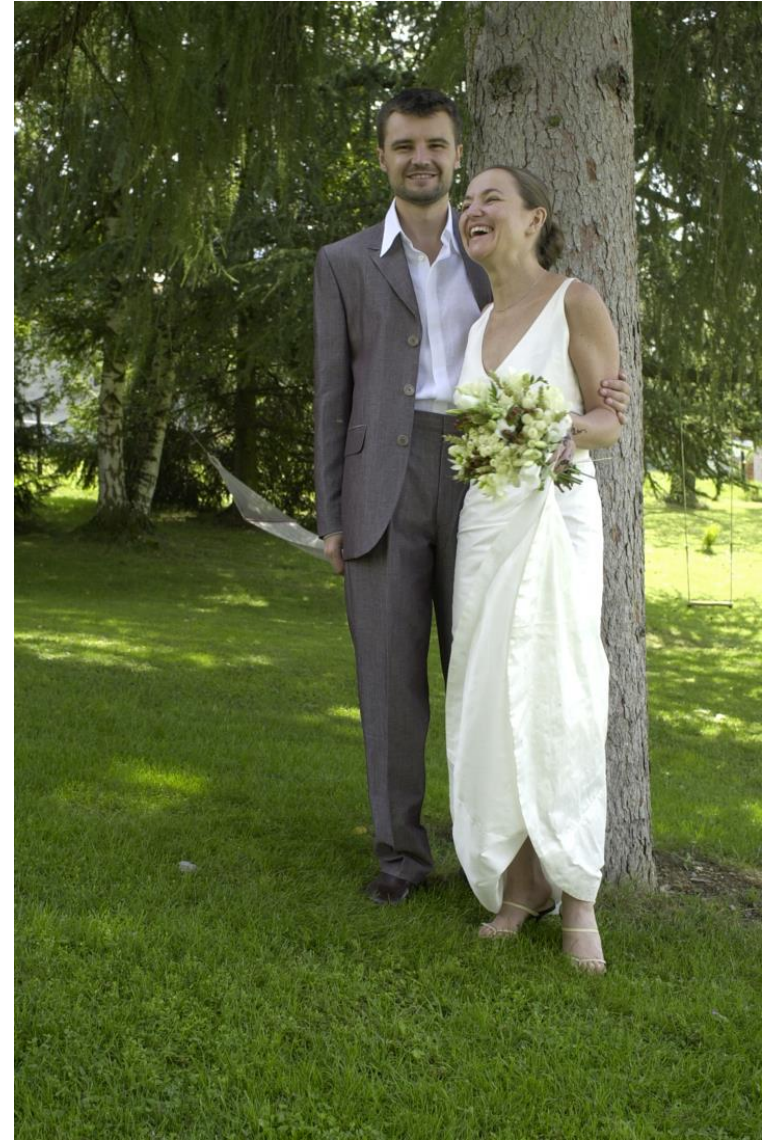
# Go in the shade

Light is more diffuse

Bad



Better



# Overcast days are the best

## Just don't put the sky in the frame

The weather conditions



The pictures



Other overcast-day pictures



By Fredo Durand

# Bottom line

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**Don't get married  
on a sunny day!**





# Cloudy day



# Best time of day: sunset & sunrise



+/- 1 hour

“Golden hours”

**Night photography: always near sunset/sunrise**

- because of nice diffuse light

Mid day:  
often not great

less than 1 hour  
after sunrise/  
before sunset

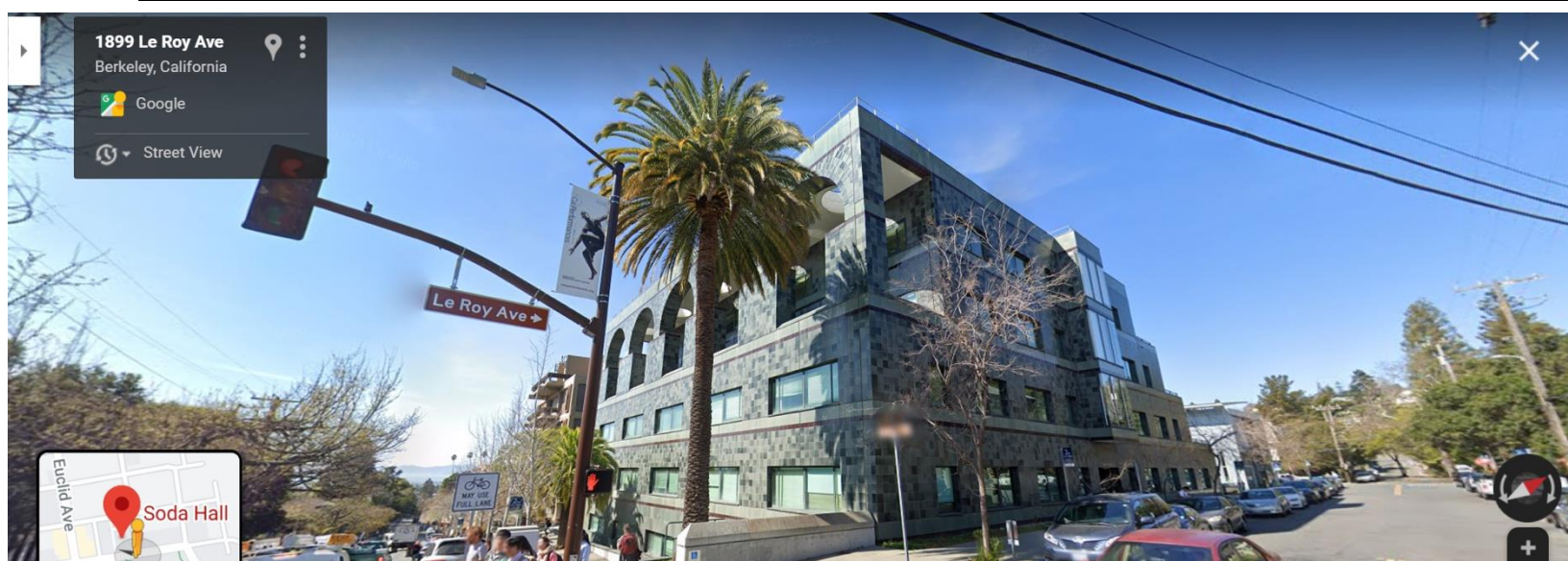
During sunset or  
sunrise

After sunset



By Fredo Durand

# “Golden Hour”



less than 1 hour  
after sunrise

During sunset/sunrise

After sunset



By Fredo Durand

# After sunset: blue hour



# Blue Hour (Russian River)

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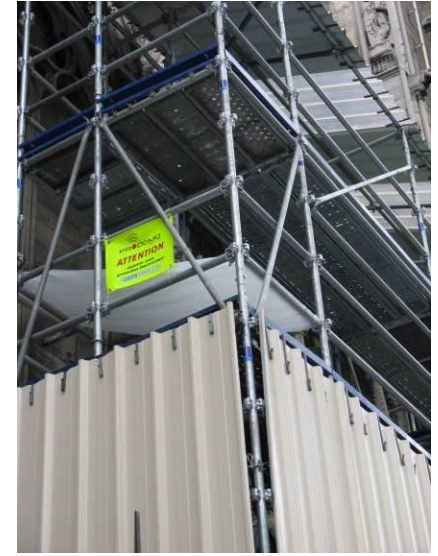
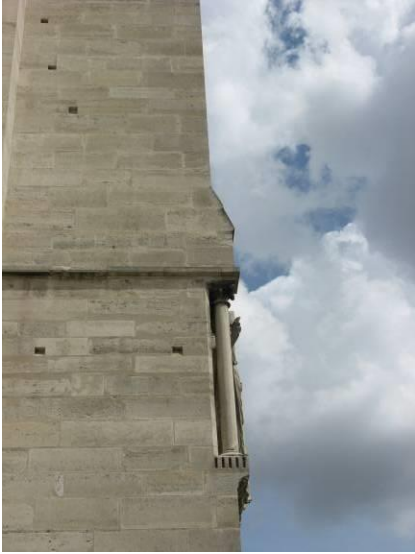


Anyone can take great pictures...



# I am a sucky photographer...

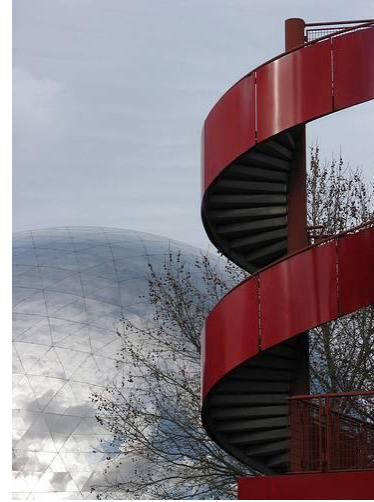
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# ...but I am a pretty good photo critic!

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<http://flickr.com/photos/aaefros/>

# of my Paris photos on Flickr: 32

Total # of my Paris photos: ~1250

~2%

# The Postmodern Photographer

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## The Old Days: a pre-process

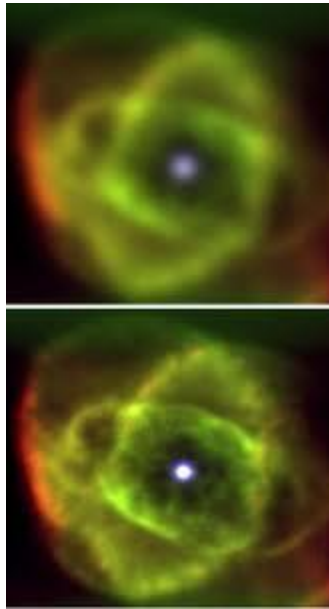
- Load film
- Find subject
- Position camera
- Set all the settings “just right”
- Take a deep breath...
- ...Press button!

## The New Digital Days: a post-process

- Get a 64 GB memory cartridge
- Take pictures like there is no tomorrow!!!
- ...
- Back home, spend hours of agony trying to find 1-2 good ones

# Lucky Imaging

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# Simplicity to Complexity

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# Enjoying your next trip to (SF)-MOMA

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*Pablo Picasso*  
The Guitar Player (1911)

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# Simplistic Art PCA

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Some “Principal Components” of Art:

- Cute ideas / illusions / clever tricks
- Direct Visceral Pleasure
- Familiarity / Nostalgia
- Art-Historical “Context”

Cute Ideas / Illusions / Clever Tricks

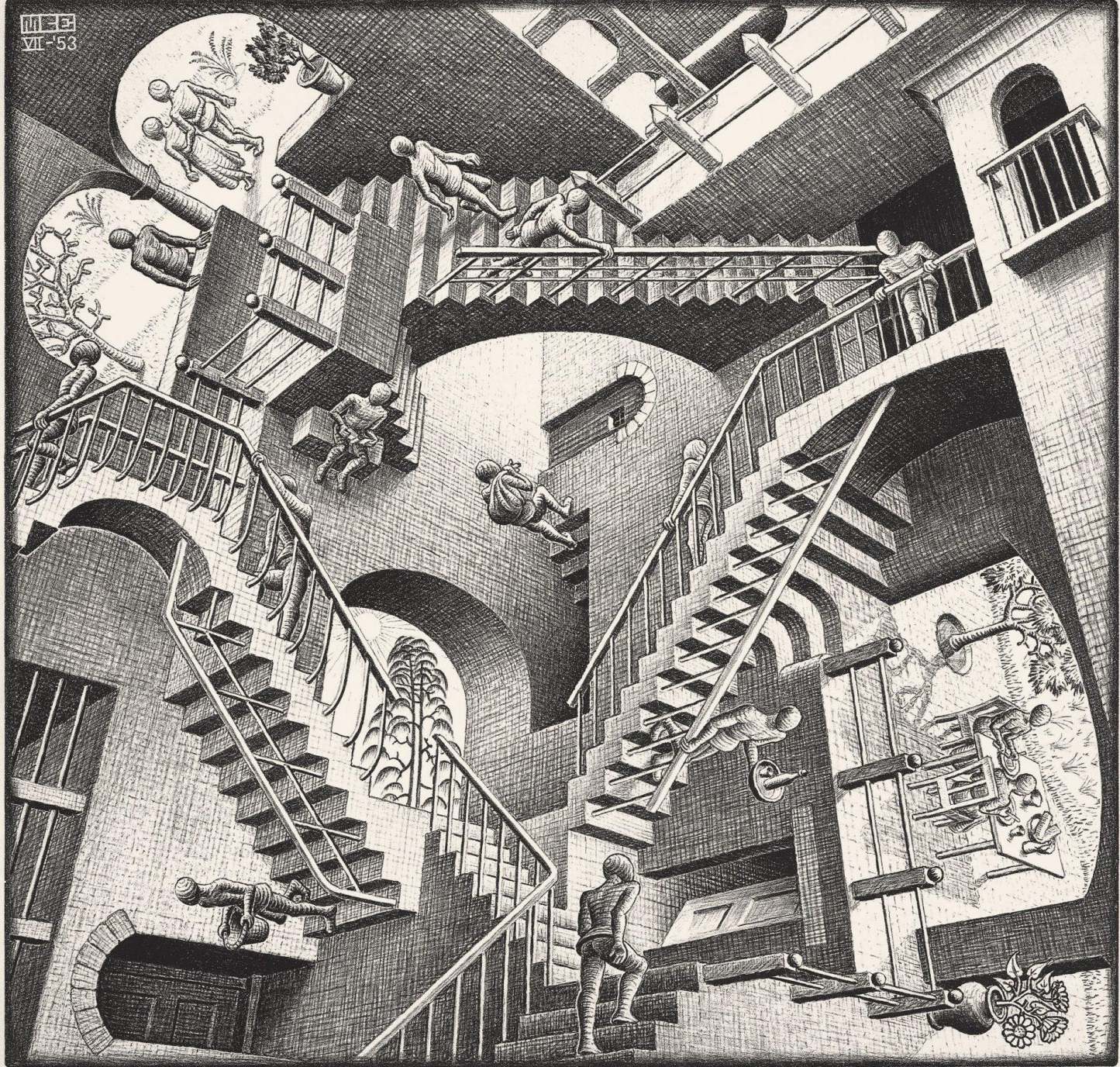


**Salvador Dalí**

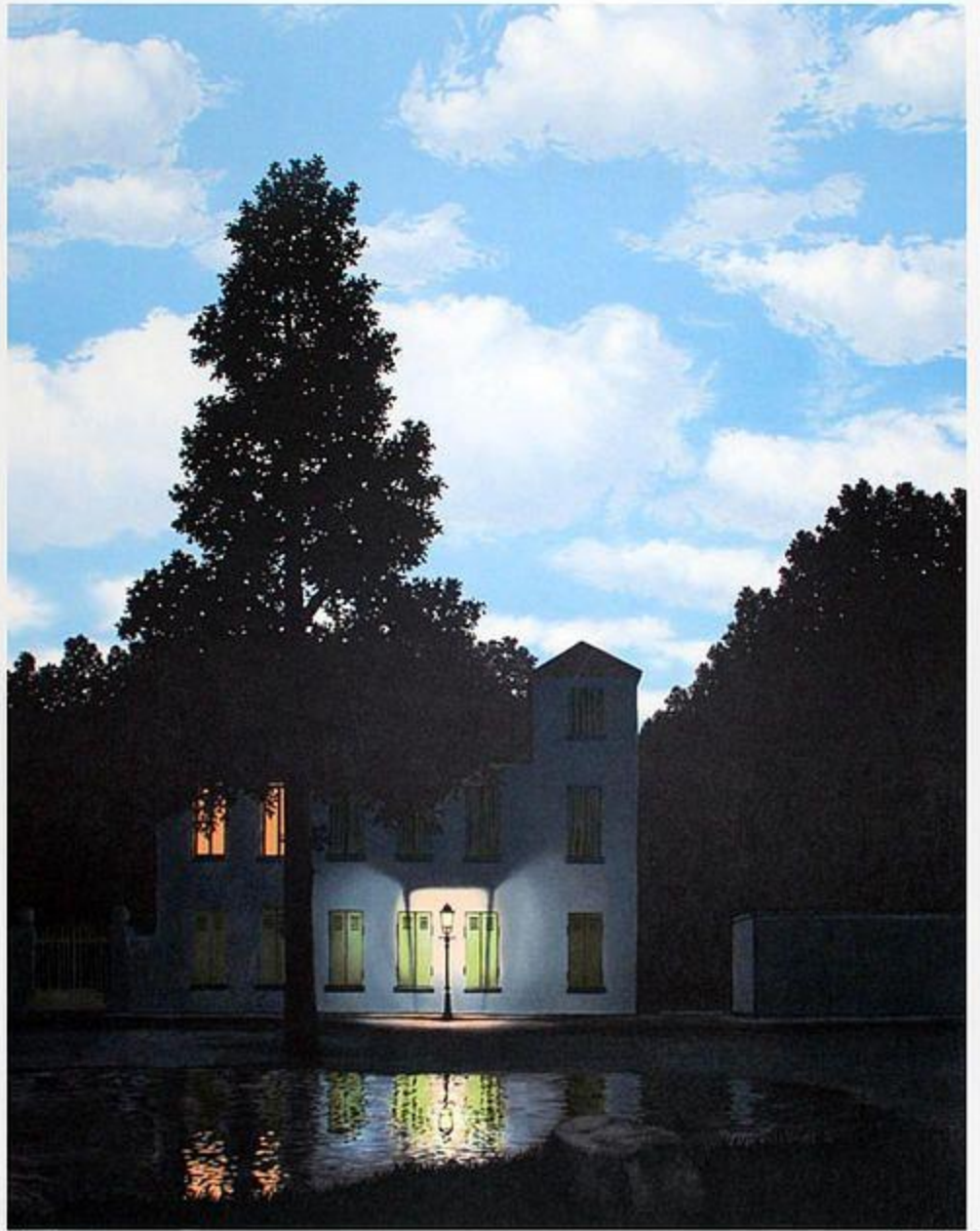
*"Gala Contemplating the Mediterranean Sea,  
which at 30 meters becomes the portrait  
of Abraham Lincoln", 1976*



VI-53



M.C. Escher



1964

Magritte

Rene Maritte

People who liked this also liked...



Whangarei Bay  
154 km East



Maranui Islands  
2430 km North



Eraser Falls  
3714 km North West

Scott Kelly and Ben Polkinghorne

**Direct Visceral Pleasure**



Jan van Eyck, *The Arnolfini Marriage* (c. 1434)



Olafur Eliasson, The Weather Project



Mark Rothko



Mark Rothko



**Familiarity / Nostalgia**



© Michael Galinsky, 1989  
(from "Malls Across America")



Edward Hopper



Alberto Giacometti

# Art-Historical “Context”

# Cultural Context

(no subject) - x HET Between Scylla x UC Berkeley - x Launch Meeti x Launch Meeti x Launch Meeti x +

higheredtoday.org/2017/02/17/scylla-charybdis-navigating-cost-college/

Apps Research Paris Stuff teaching Premium Fare Deals... Кино онлайн бесп... PI Portfolio Other bookmarks Reading list

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## Between Scylla and Charybdis: Navigating the Cost of College

February 17, 2017

By Geoffrey L. Brackett

One of my favorite episodes in Homer's *Odyssey* is one of the most fearsome. It involves the sailing between the mysterious cave-dwelling monster Scylla and the terrifying, ship-destroying whirlpool known as Charybdis. There is something about having to manage two supernatural threats at once that makes Odysseus' journey

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Windows taskbar icons: File Explorer, Google Chrome, PowerPoint, Microsoft Edge, Weather (69°F), Network, Volume, Language (ENG), Date/Time (4:41 PM 12/1/2021), Notification (5)

# Cultural Context

Browser tabs: (no subject), Still Chum, HET Between S, UC Berkel, Launch M, Launch M, Launch M. Address bar: texastribune.org/2016/01/05/cruz-trump-alliance-again-shows-signs-fraying/. Browser extensions: Apps, Research, Paris Stuff, teaching, Premium Fare Deals..., Кино онлайн бесп..., PI Portfolio, Other bookmarks, Reading list.

EXTENDED: Help us unlock \$30,000 in matching funds. Donate now to double your impact.

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## Still Chums? Cruz Says Trump Jumped the Shark

The political bromance between GOP presidential hopefuls Donald Trump and U.S. Sen. Ted Cruz appeared to be unraveling Tuesday after Trump raised the issue of Cruz's Canadian birth, and Cruz suggested his rival has jumped the shark.

BY **PATRICK SVITEK** JAN. 5, 2016 8 PM CENTRAL

Windows taskbar: Search (Type here to search), Task View, File Explorer, Chrome, PowerPoint, Photos, Weather (69°F), Network, Volume, ENG, 4:42 PM, 12/1/2021, 5 notifications.

# Cultural Context

Browser tabs: (no sub...), Red we..., Still Ch..., HET Betwe..., UC Ber..., Launch..., Launch..., Launch..., +

Address bar: thesouthafrican.com/news/red-wedding-five-killed-in-shootout-eastern-cape-manhunt-laun...

Bookmarks: Apps, Research, Paris Stuff, teaching, Premium Fare Deals..., Кино онлайн бесп..., PI Portfolio, Other bookmarks, Reading list



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& FINANCE

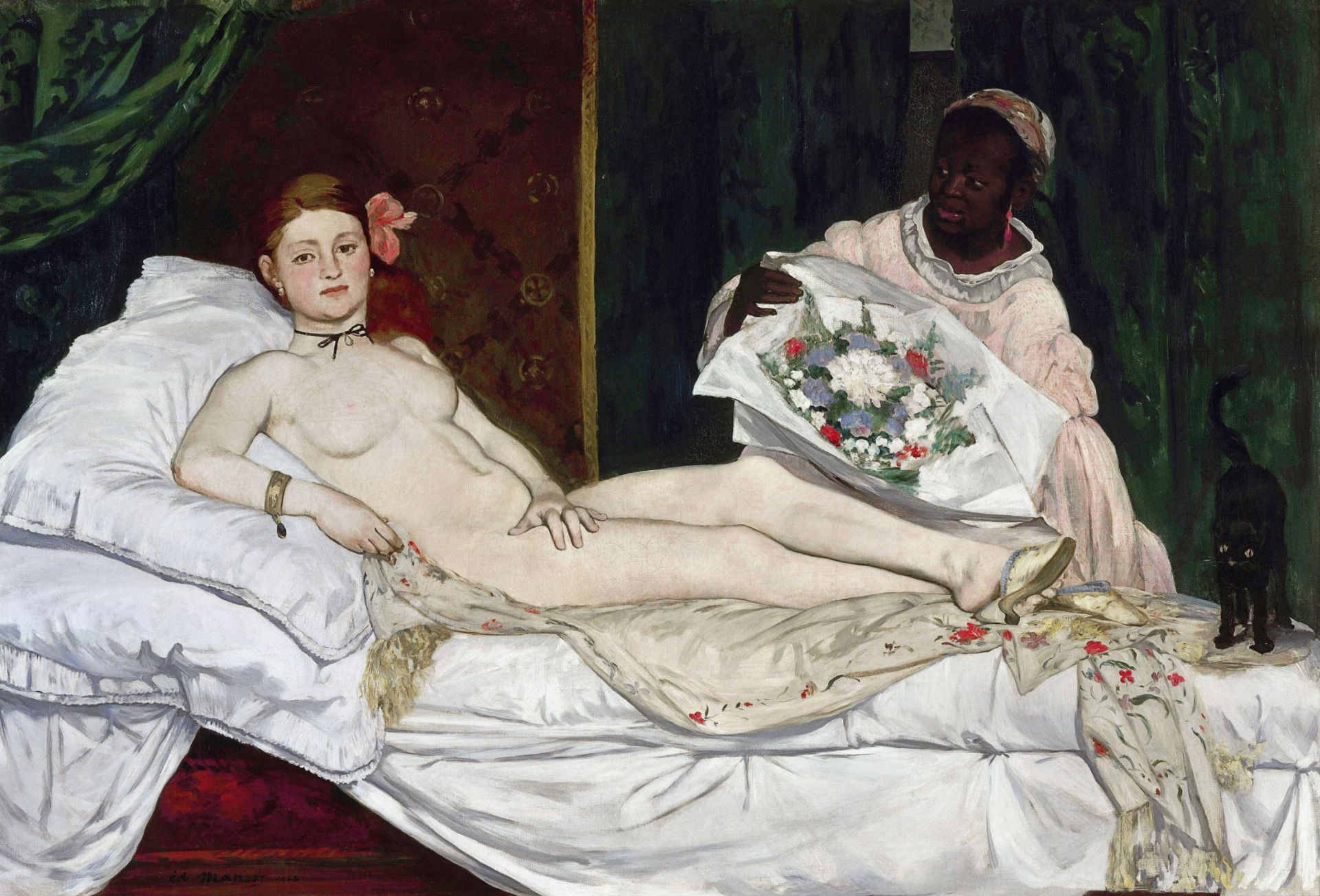
Home > News

## Red wedding: Five killed in shootout during Eastern Cape nuptials

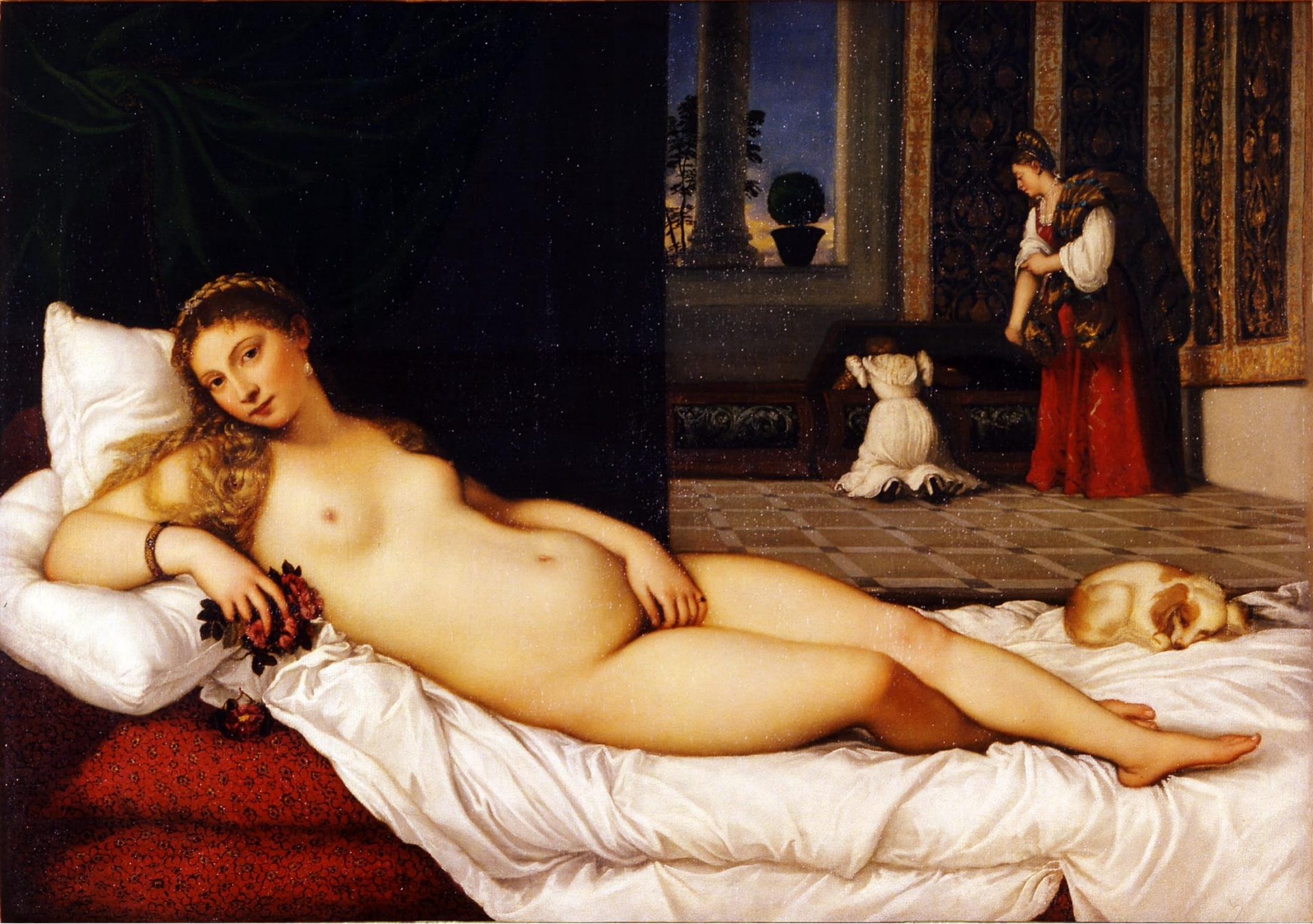
A manhunt has been launched after gunmen stormed a wedding in the Eastern Cape and opened fire on unsuspecting guests.

Windows taskbar: Search (Type here to search), Taskbar icons (File Explorer, Chrome, PowerPoint, Teams), System tray (69°F, 4:43 PM, 12/1/2021, ENG, 5 notifications)

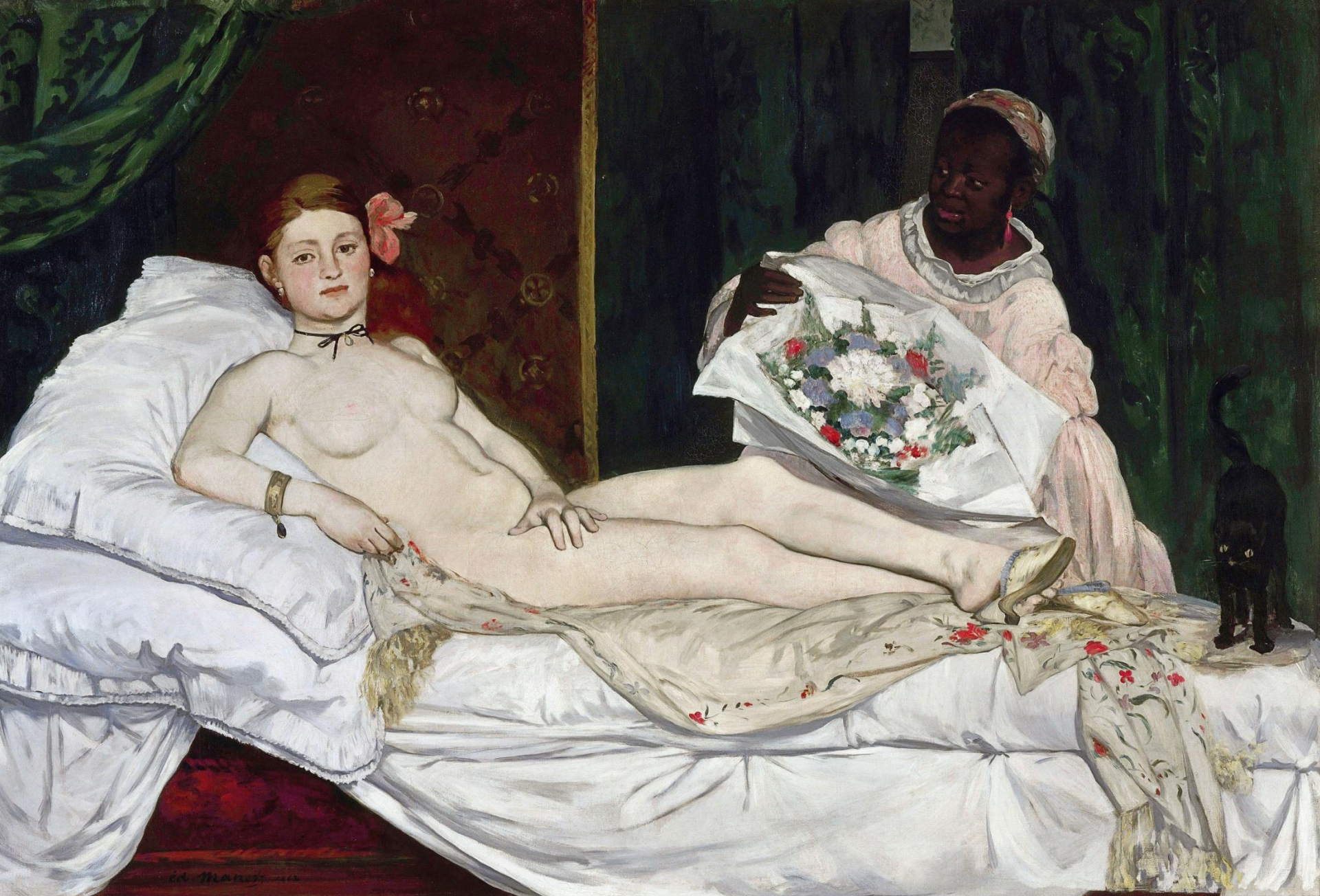




Édouard Manet, "Olympia" (1865)



Titian, "Reclining Venus" (1532)



Édouard Manet, "Olympia" (1865)



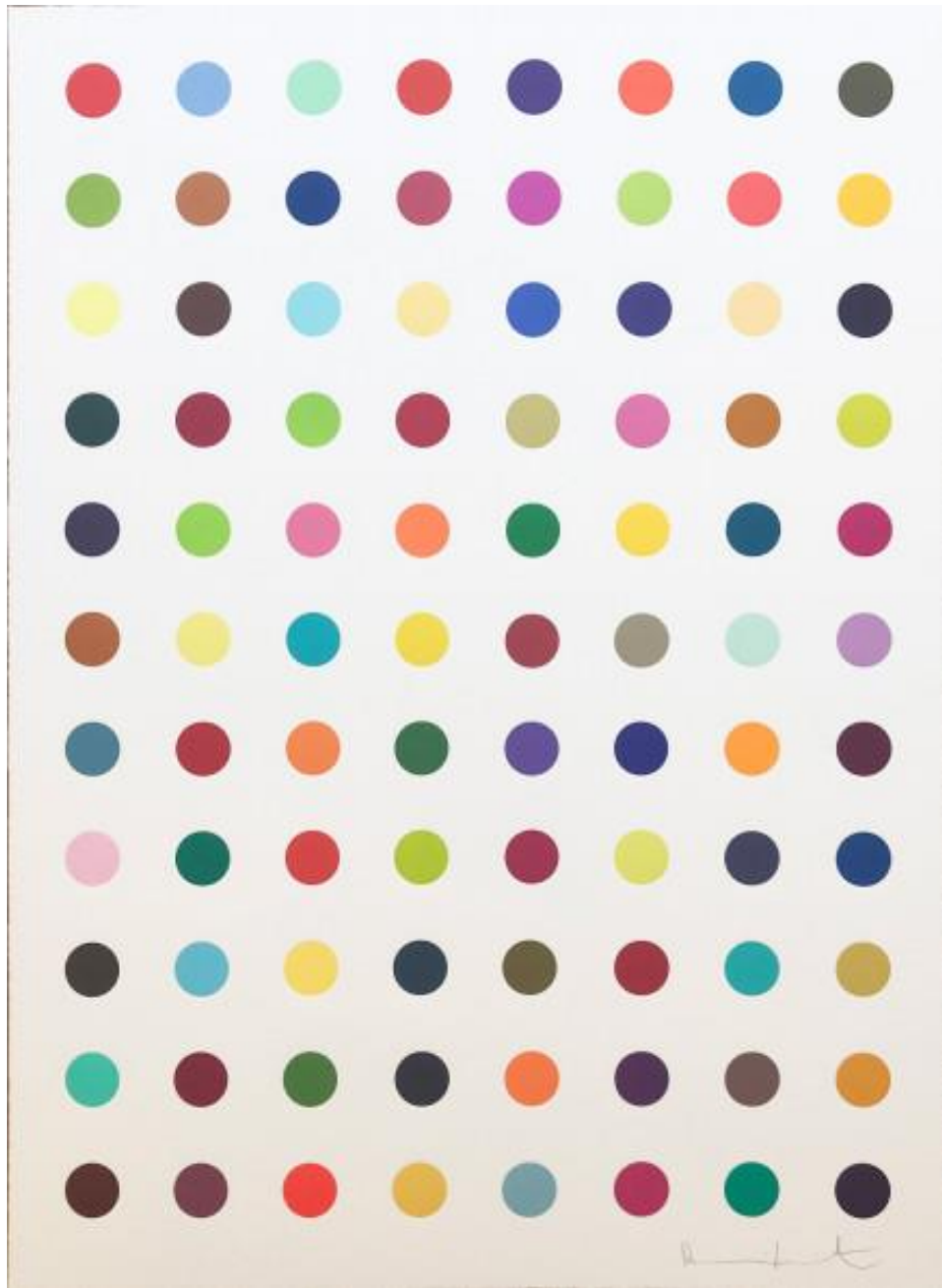
Shepherd Fairey



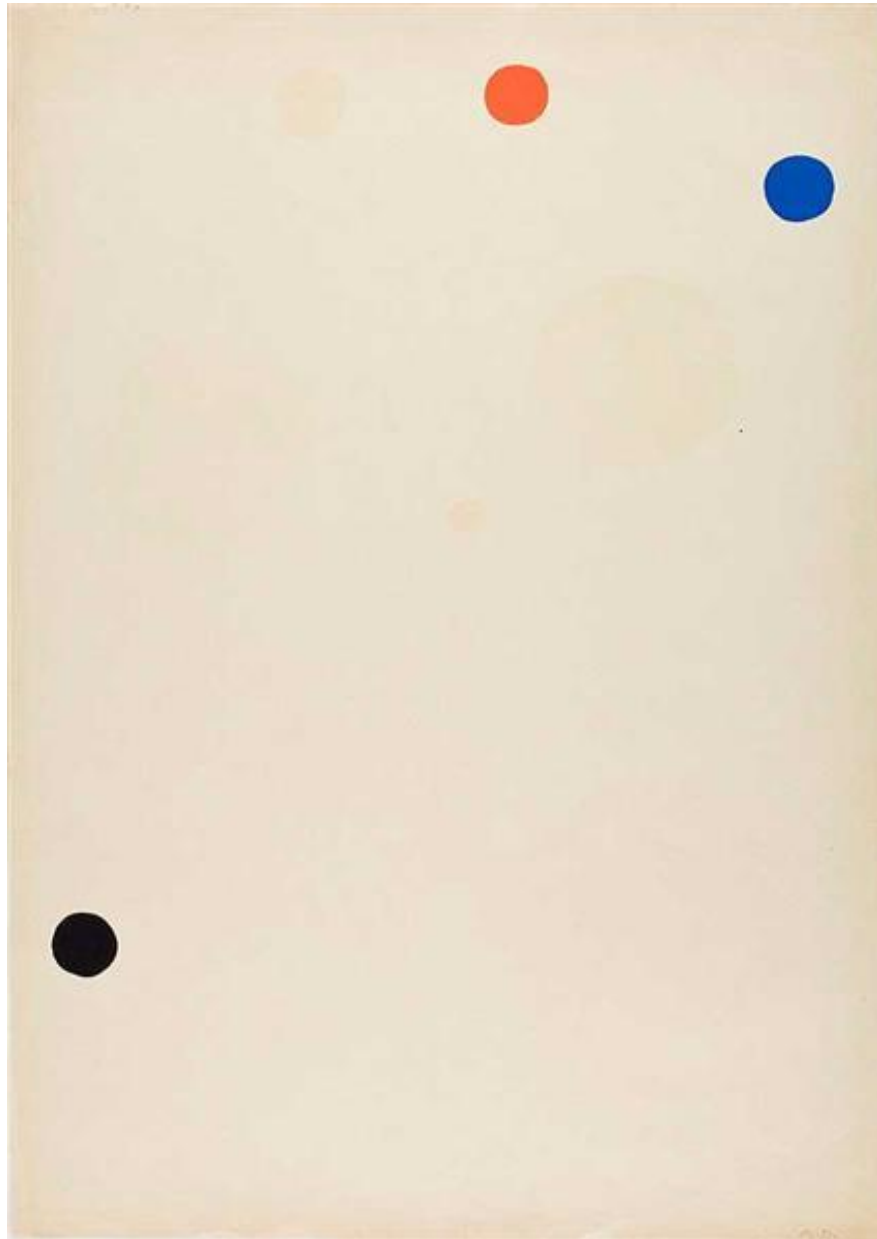
Shepherd Fairey



Banksy

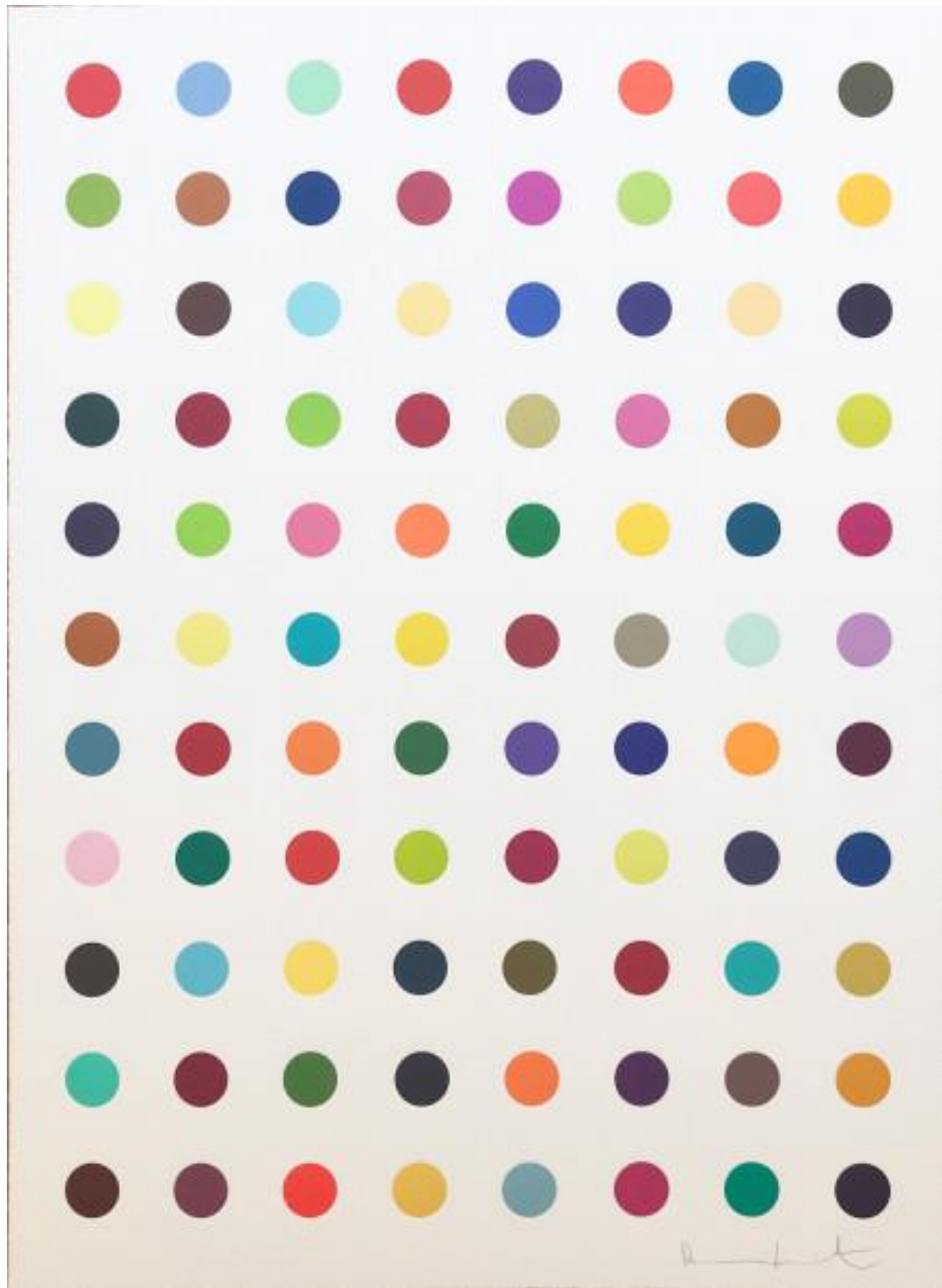


Damien Hirst, Spot Paintings (1968--)

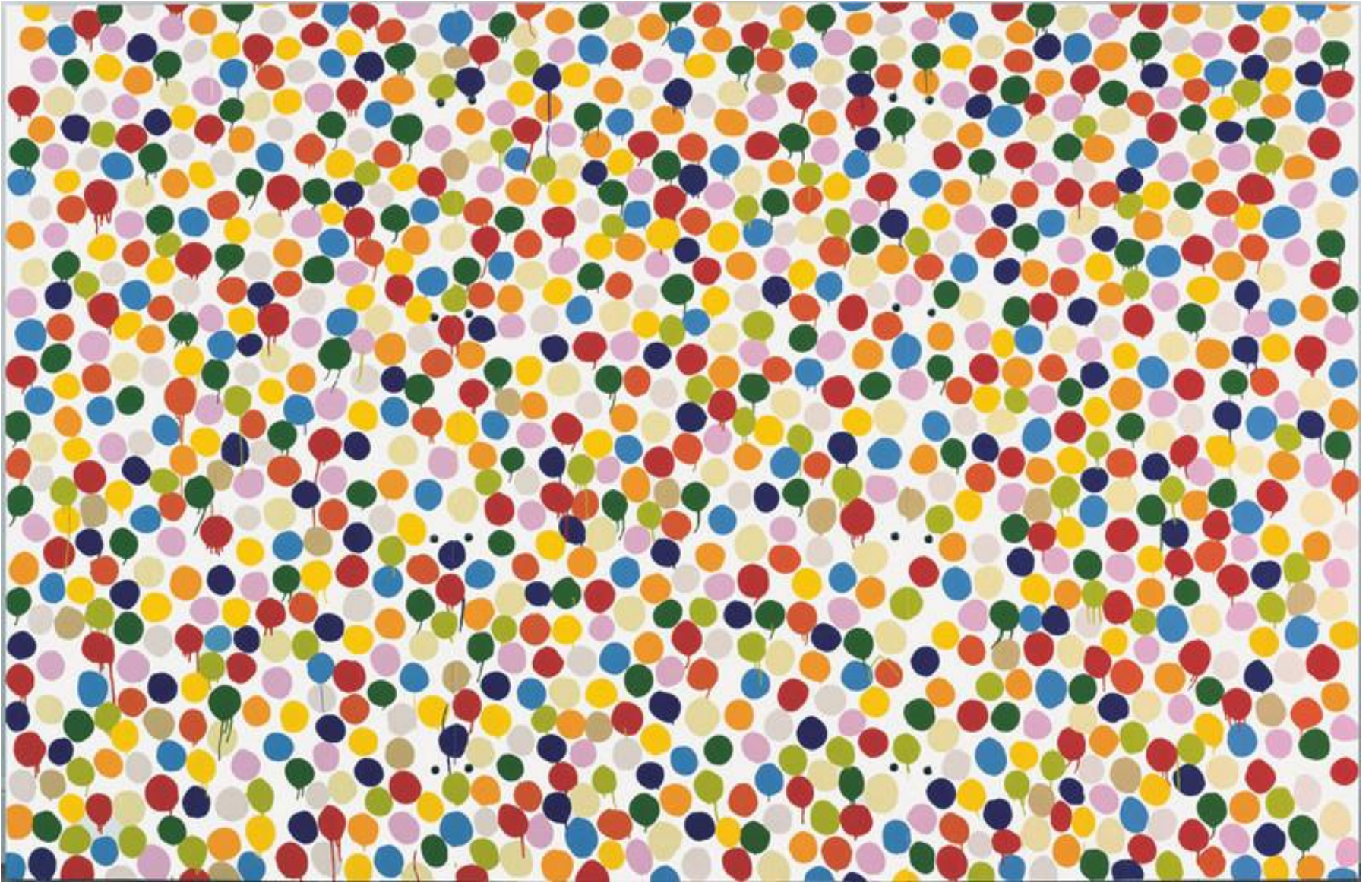


Zlotnikov, "Signals" (1965)

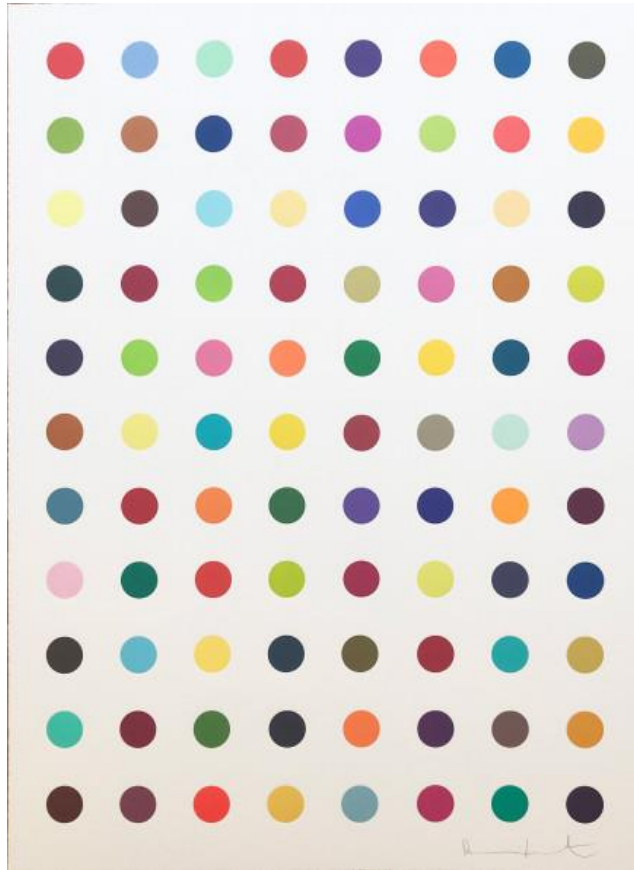
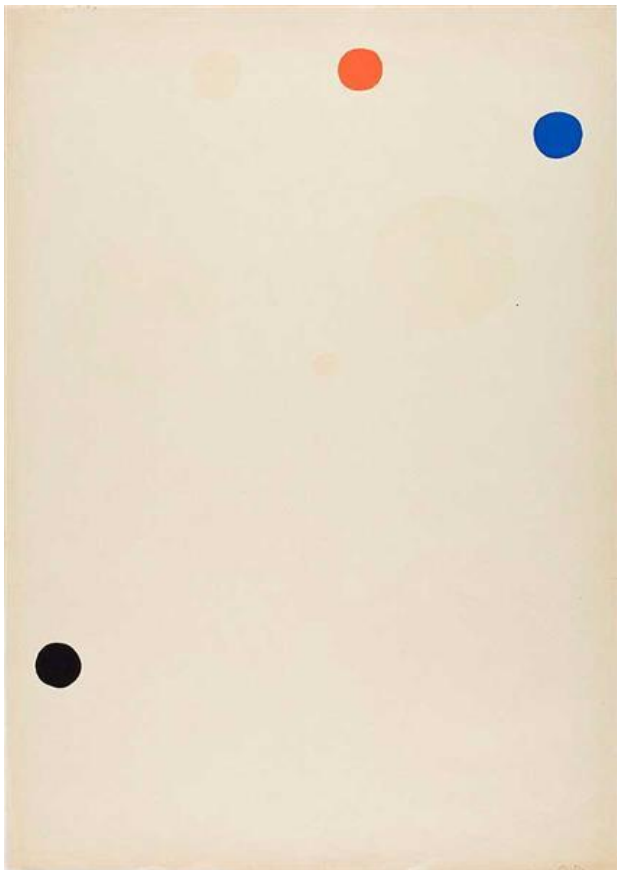




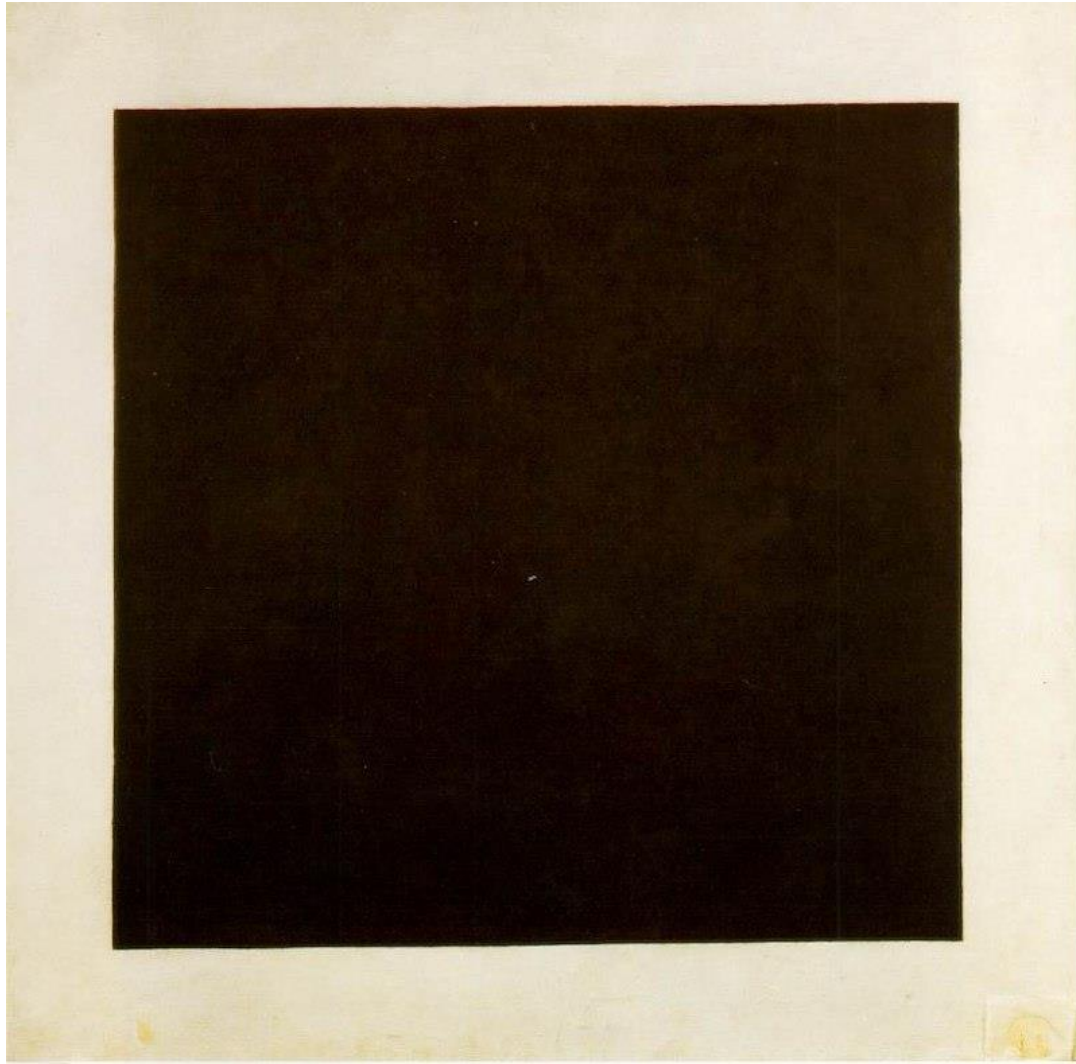
Damien Hirst, Spot Paintings (1968--)



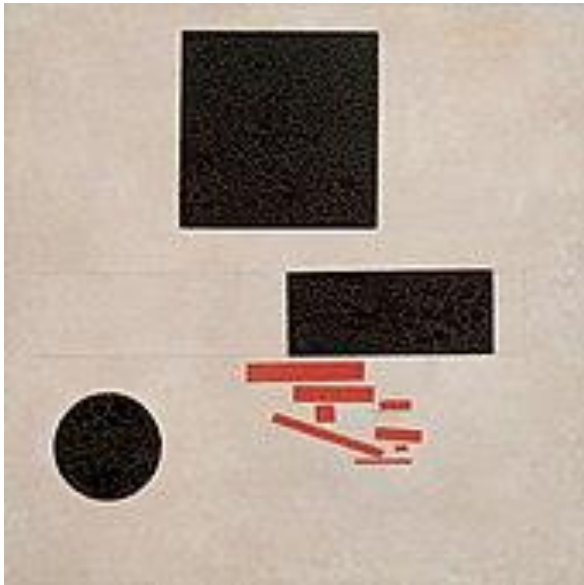
Damien Hirst



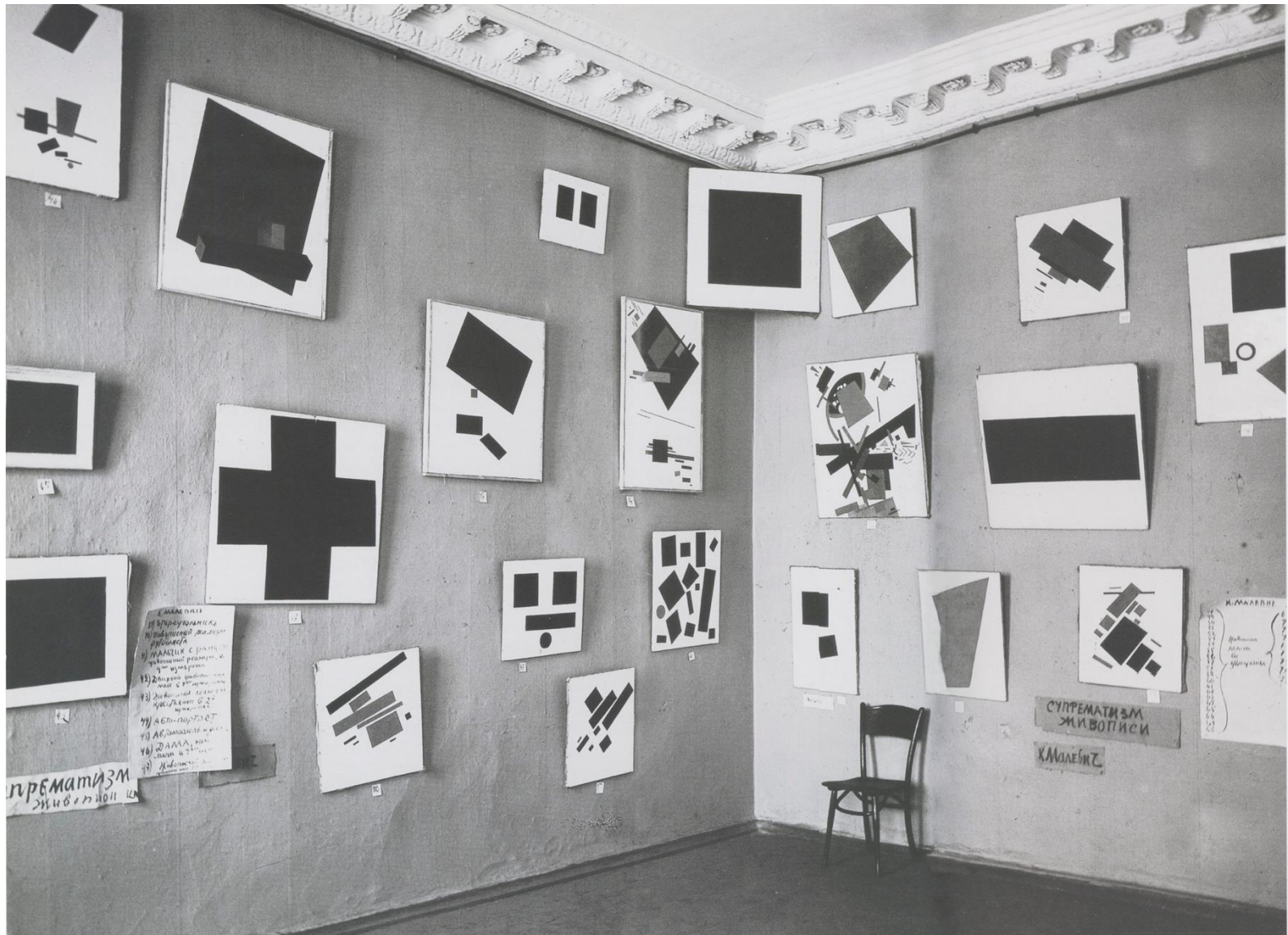
Direction of change



Malevich, "Black Square" (1915)



Malevich



“Black Square” as exhibited (1915)

# THANK YOU!

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