



The FCDCC Video SIG Presents...



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*That Other Thing
You Can Do
With Your Camera*



A Short “History” of Photography:



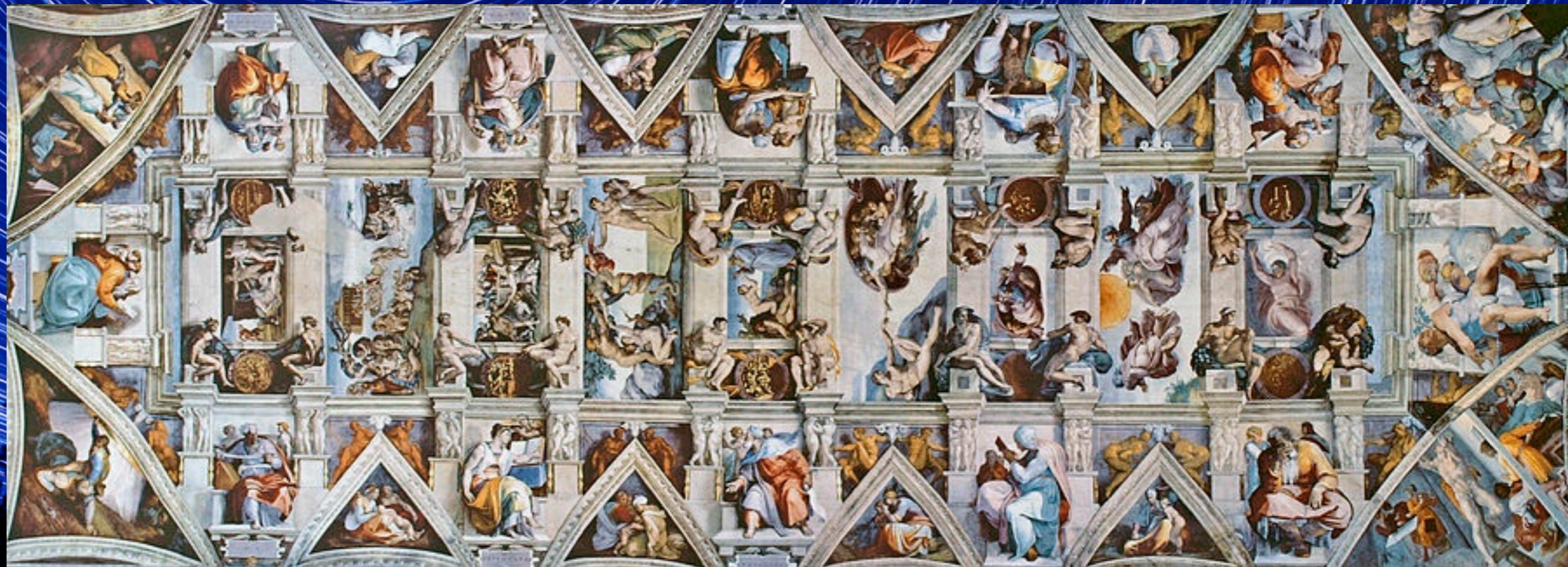
A Short “History” of Photography:



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A Short “History” of Photography:



Camera Obscura

~ 1800: Thomas Wedgwood attempted to project onto light sensitive material



A Short “History” of Photography:



Nicéphore
Niépce



1826 or 1827: The oldest known photo?



A Short "History" of Photography:



PUBLIC DOMAIN VIA WIKIPEDIA

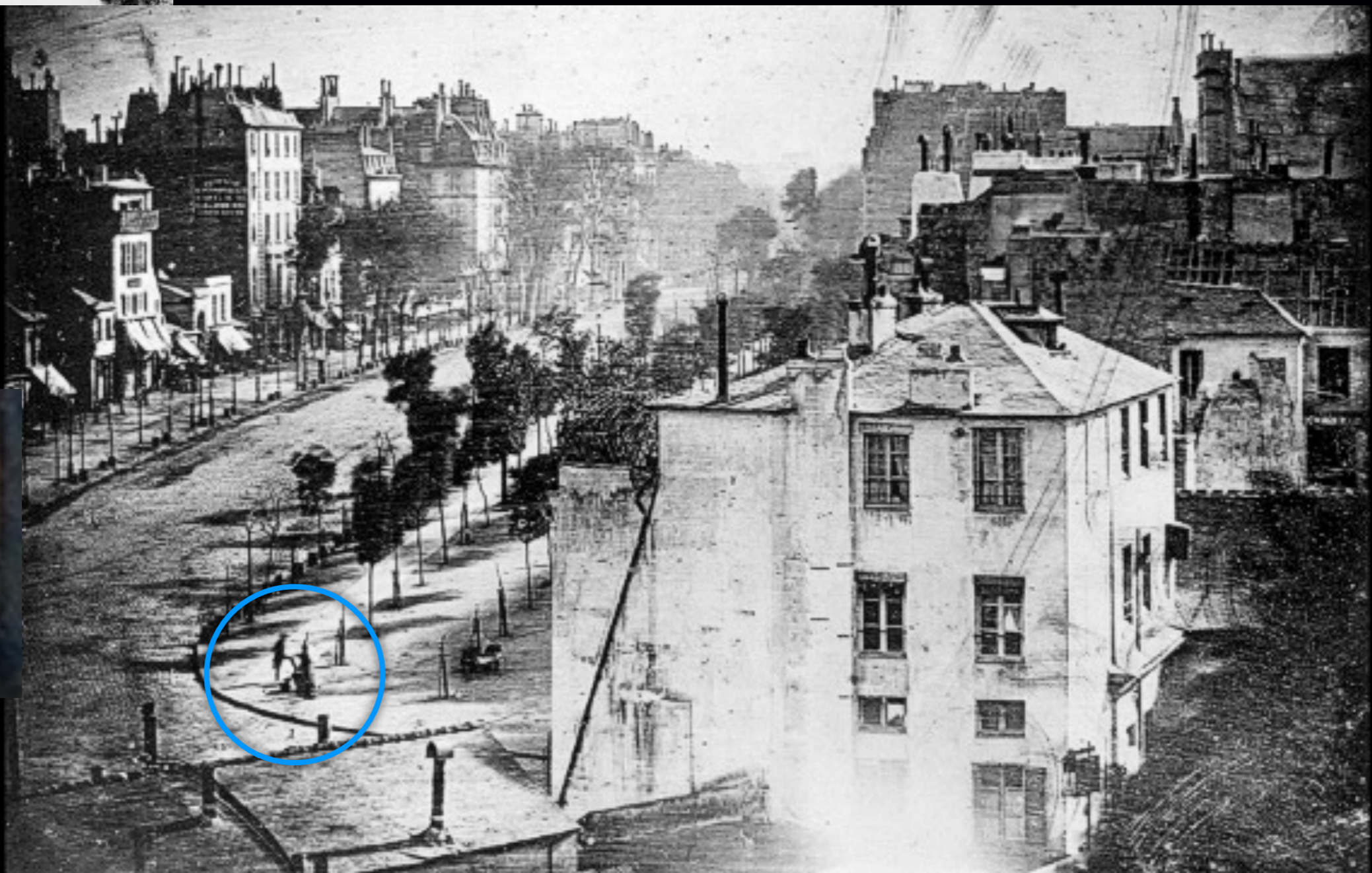


Louis
Daguerre

1838-39: Earliest Daguerreotype?



A Short "History" of Photography:



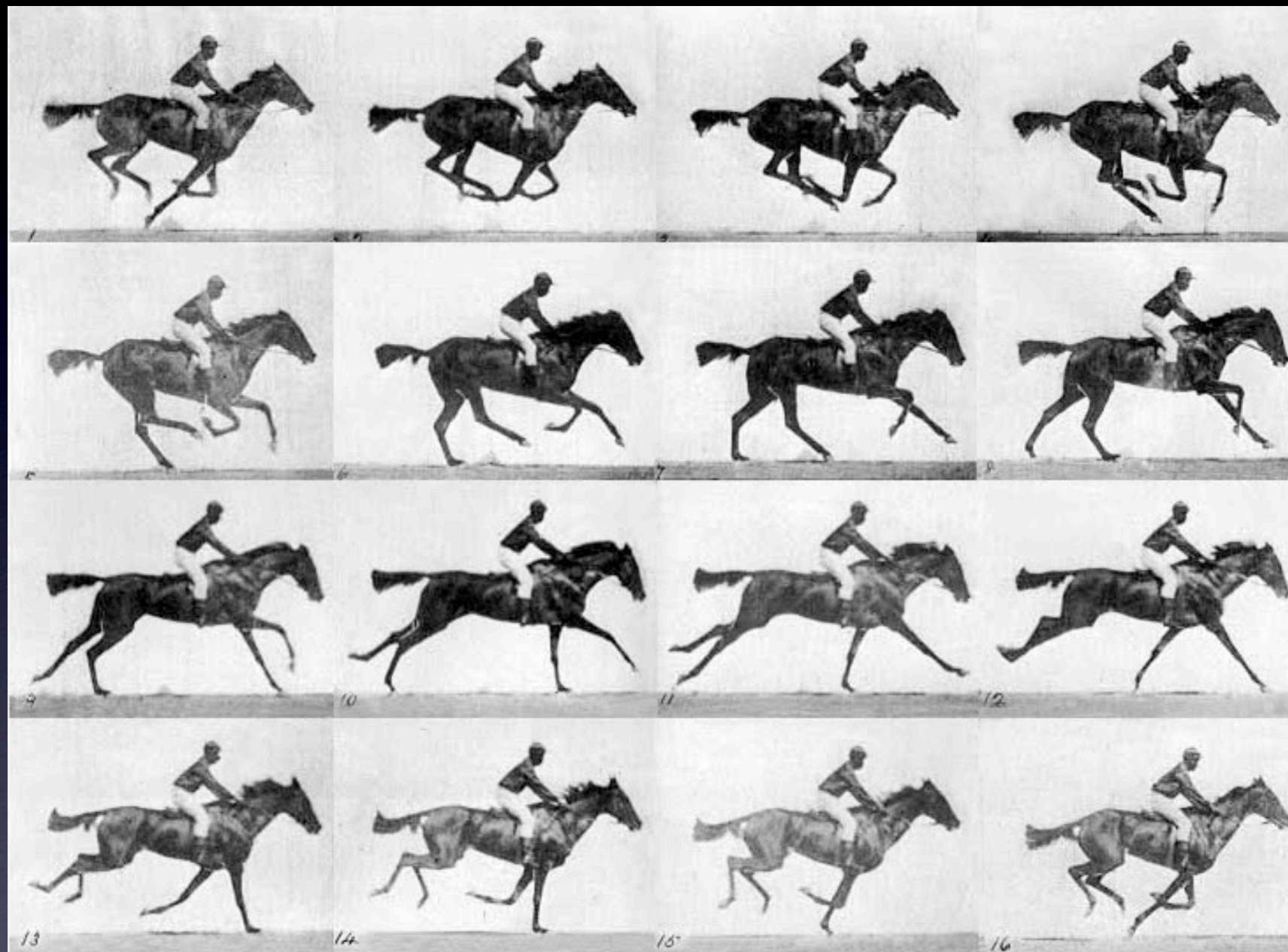
PUBLIC DOMAIN VIA WIKIPEDIA



Each day 350 million photos are uploaded onto Facebook



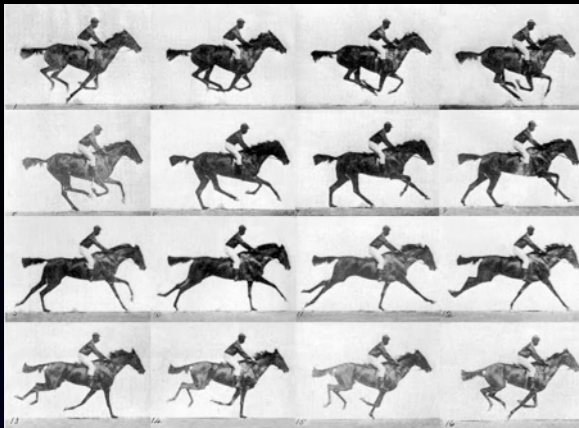
A Short “History” of Photography/Cinematography:



1878: Eadweard Muybridge - The Horse in Motion Question
Multiple cameras triggered as horse runs by.



A Short “History” of Photography/Cinematography:

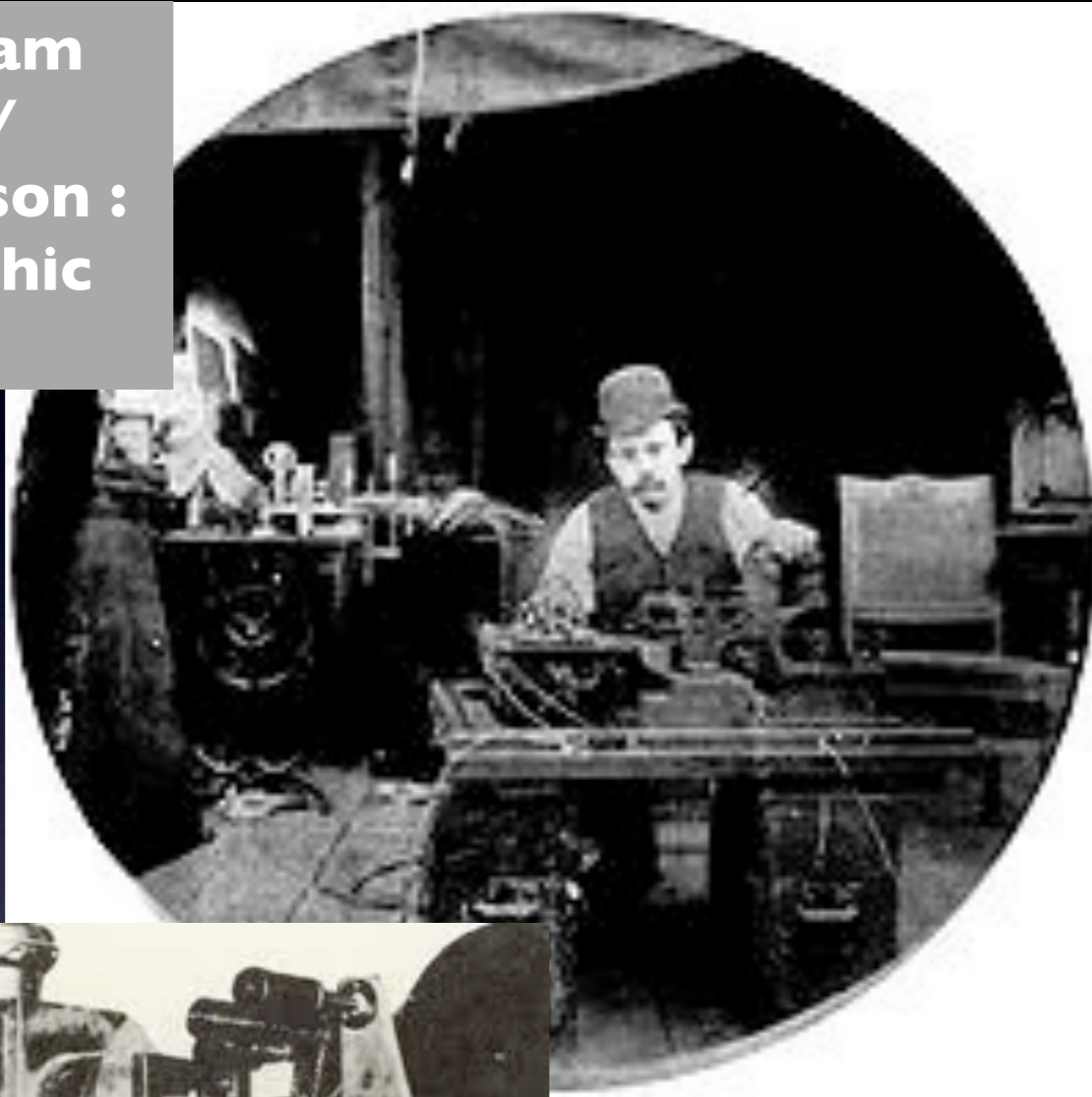


1878-79: The first animation with a Zoopraxiscope?

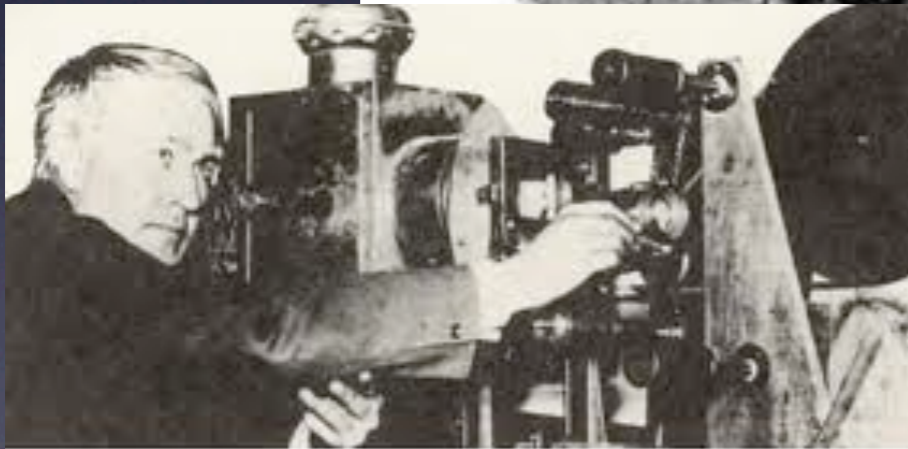


A Short "History" of Photography/Cinematography:

**1891: William
Dickson /
Thomas Edison :
Kinetographic
camera**



**1888: first patented film camera,
Louis Le Prince**



Edison adjusts the lens on an early motion picture projector. He invented the motion picture camera "to do for the eye what his phonograph did for the ear".



A Short “History” of Photography/Cinematography:



1888: The Roundhay Garden Scene...earliest surviving movie?
(Le Prince)



A Short “History” of Photography/Cinematography:

ARRIVAL OF A TRAIN
AT LA CIOTAT

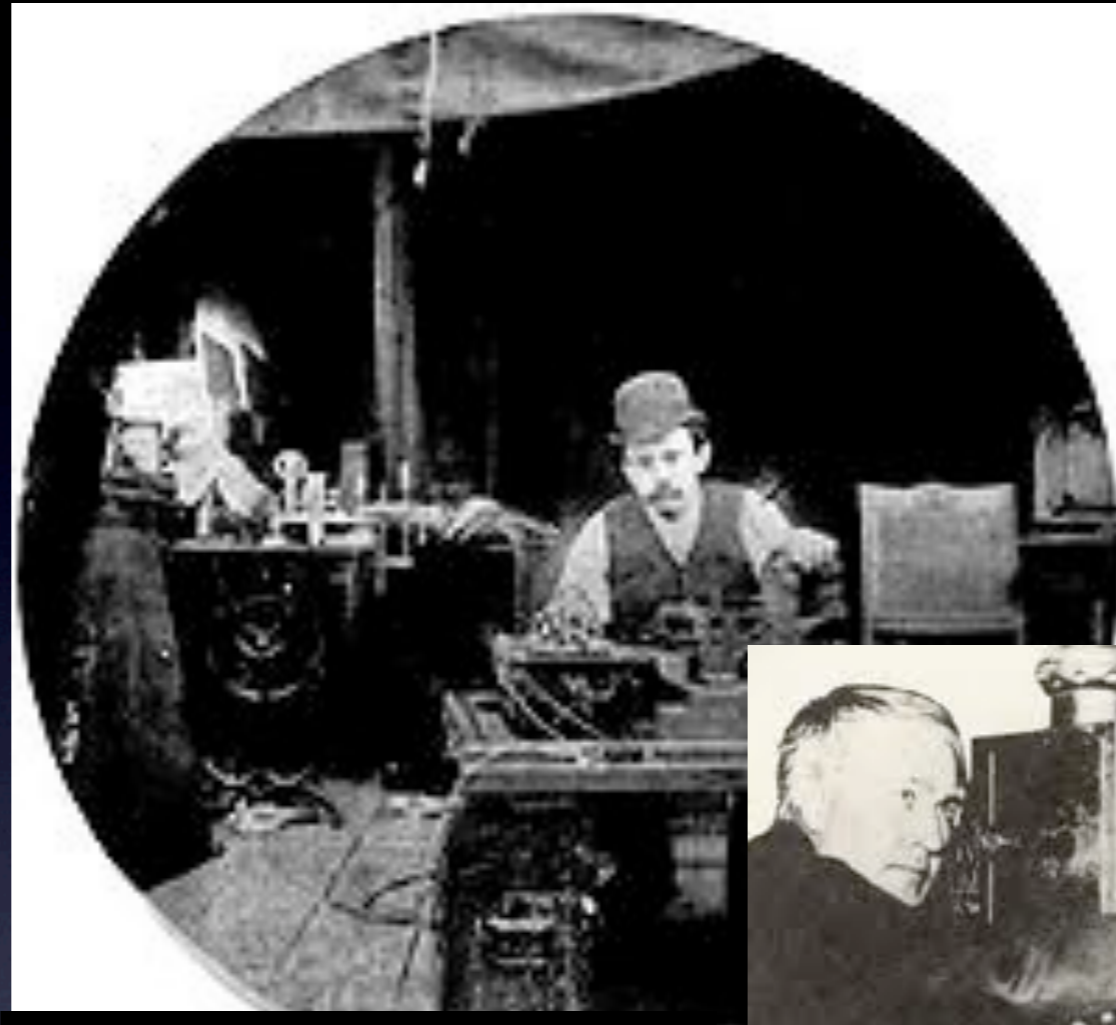
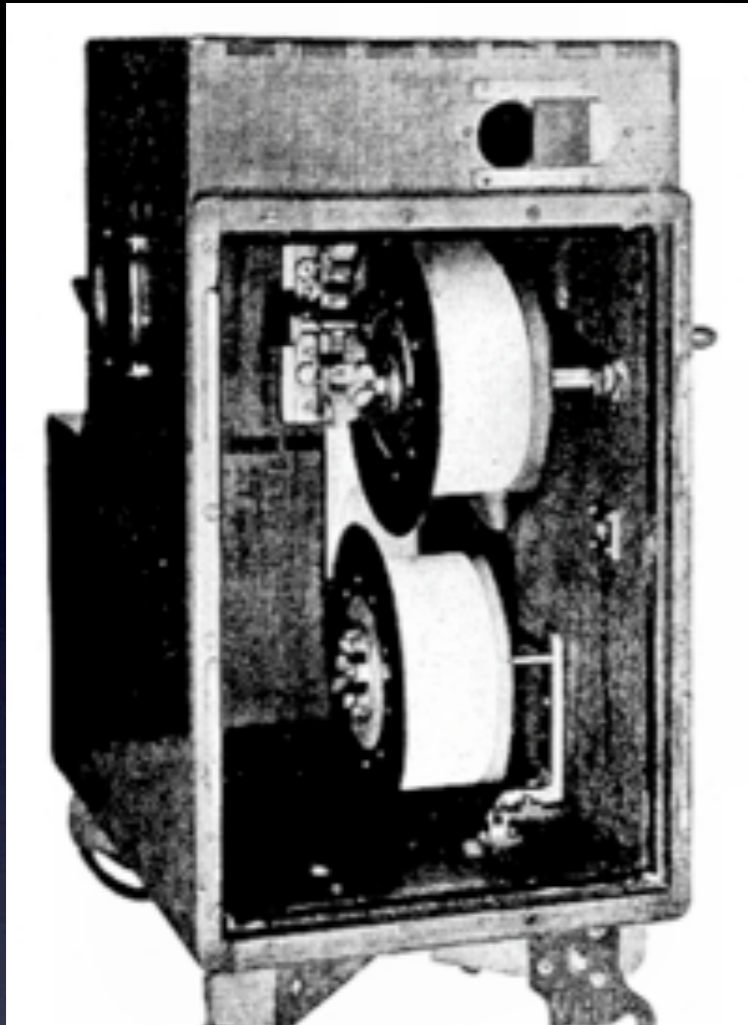
Lumière No. 653

1895: Lumiere Brothers, first movie projection to a paying audience?

"The cinema is an invention without a future" - Louis Lumière



A Short "History" of Photography/Cinematography:



**1890s:
the "movies"
foundation
is poured**



A Short “History” of Videography - Starts with This Guy:



A Short “History” of Videography:



**Philo Farnsworth:
1927
First working
television system
1928
WRGB on “the air”**



The Two Species: Photo People and Video People



The Two Species: Photo People and Video People



Then, A Second Big Bang:



It All Started with This Guy:



It All Started with This Guy:



2009: National Medal of Technology & Innovation



This Guy: Steve Sasson and the first digital camera



Date: 1975

Weight: 3.6 kg

Sensor: 0.01 megapixels

Exposure: 23 seconds

black and white

Output: cassette tape



Fast Forward to This Guy:



Vincent Laforet Makes Canon Angry - then Very Happy:



Vincent Laforet Makes Canon Angry - then Very Happy:



Reverie

from **Vincent Laforet** PRO 5 years ago NOT YET RATED

Director/DP - This was the first 1080p video widely released that was shot with the Canon 5D MKII. It was viewed more than 2 million times in the first week of its release.



Vincent Laforet Makes Canon Angry - then Very Happy:



Reverie

from **Vincent Laforet** PRO 5 years ago NOT YET RATED

Director/DP - This was the first 1080p video widely released that was shot with a Canon 5D Mark II and has been viewed over 1 million times in the first week of its release.



October, 2008: Attitudes start to change



All of Which Brings Us To Our Program:



Tonight, we present for your viewing pleasure:

* Judy Canon: *Newfoundland Birds*

* Stephanie Cox: *Up With People Reunion*

* Monique Rodriguez & Steve Finnestead:

Business Promo / Grandsons

* Walt Lyons: *Say Hey, It's 4K!*

* Panel: Judy, Stephanie, Monique, Steve, Bob G., Walt



* Judy Canon: *Newfoundland Birds*



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*Stephanie Cox: *Up With People Reunion*

1965



* Monique Rodriguez & Steve Finnestead: *Business Promo*



* Monique Rodriguez & Steve Finnestead: *Grandsons*



Video is different!

- * Files are LARGE
- * Video editing software required
- * Computer requirements are higher
- * Codecs can drive you crazy
- * Audio can be the most important part!
- * Must have rights to music!
- * Things move!



YouTube Audio Library

<https://www.youtube.com/audiolibrary/music>

Cost of License: Free - You can select music by genre, mood, duration and instrumentation. If you monetize a video you must provide proof of license agreement.

Triple Scoop Music

<http://triplescoopmusic.com/>

Traditional no-attribution licenses: \$60 and up Fee depends on usage

Friendly Music

<http://friendlymusic.com/>

Traditional no-attribution licenses: \$1.99 to \$125

Shutterstock Music

<http://www.shutterstock.com/music>

Traditional no-attribution licenses: \$49 to \$499 depends on usage

Incompetech

<http://incompetech.com/music/>

Creative Commons License and no-attribution license

Bensound

<http://www.bensound.com/>

Creative Commons License and no-attribution license

Josh Woodward

<http://www.joshwoodward.com/>

Cost of License: \$1 plus provide attribution. He also provides traditional no-attribution licenses.

Free Soundtrack Music

<http://www.freesoundtrackmusic.com/>

Cost of License: Some Free

MagnaTune

<http://www.magnatune.com>

Vast collection of albums for long form production

Shockwave Sound

<http://www.Shockwave-Sound.com>

Huge collection of downloadable music in all genres, easy licensing

Sources for Royalty Free Music

Royalty Free does not mean free music!

Royalty-free refers to the right to use copyrighted material or intellectual property without the need to pay royalties or license fees for each use or per volume sold, or some time period of use or sales. You can either license usage under a attribution agreement or pay for have to follow the requirements of the Creative Commons attribution agreement or pay for a traditional no-attribution license.



Ready for a Third Big Bang?



4K ULTRA HD



Is 4K the wave of the Future?

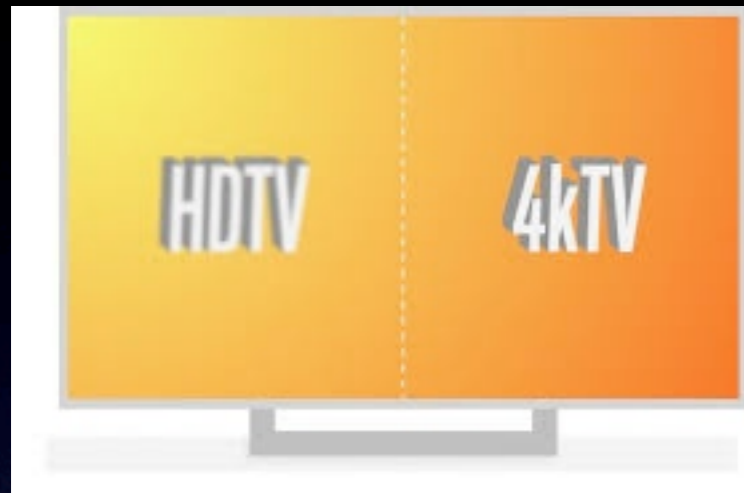


Just walk into Best Buy....

30-35% home penetration expected in 5 years



Yes - Once The Terminology is Cleared Up!



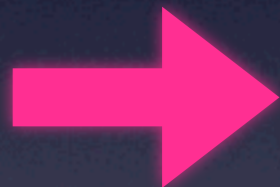
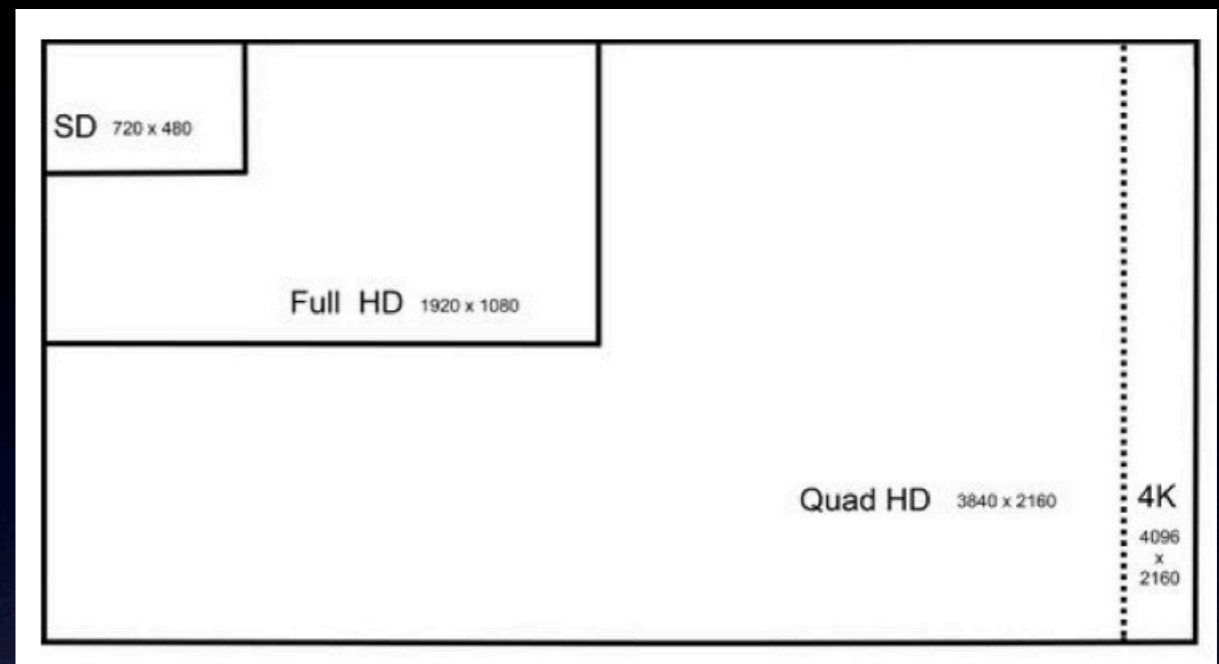
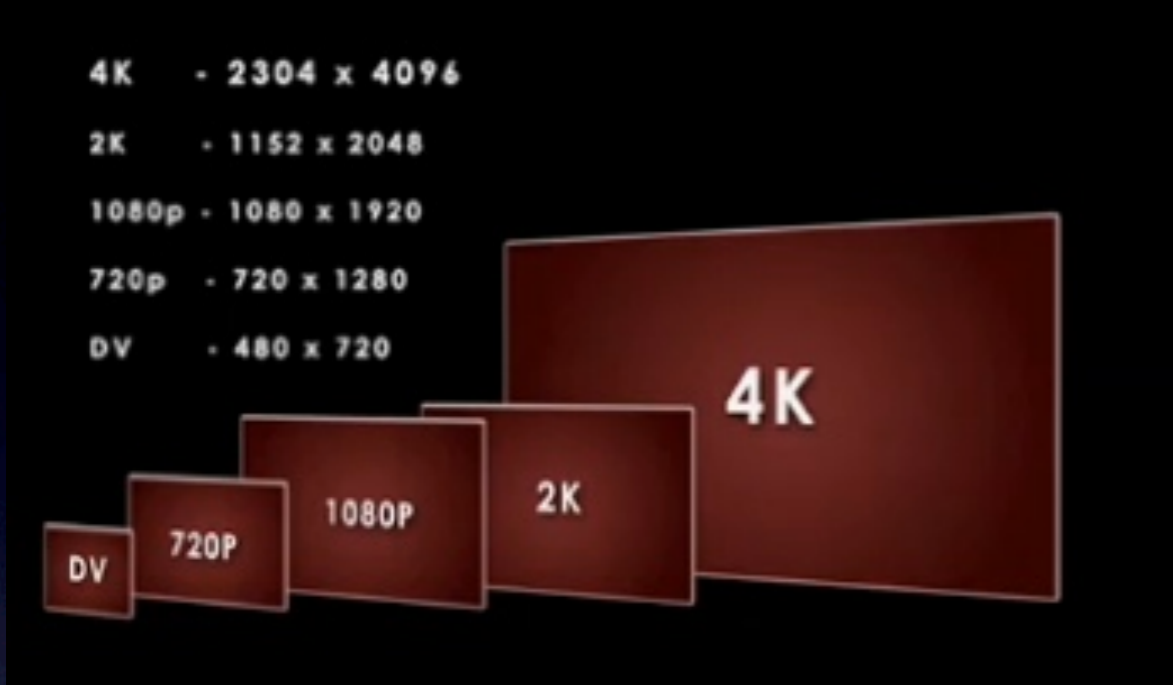
ULTRA HD
Ultra High Definition



UltraHD TV
UHD
4K TV
2160p
4K2K
Quad HD
Cine 4K



Exactly What is 4K?



Format	Resolution	Display aspect ratio	Pixels
Ultra high definition television	3840 x 2160	1.78:1 (16:9)	8,294,400
Ultra wide television	5120 x 2160	2.37:1 (21:9)	11,059,200
WHXGA	5120 x 3200	1.60:1 (16:10, 8:5)	16,384,000
DCI 4K (native resolution)	4096 x 2160	1.90:1 (19:10)	8,847,360
DCI 4K (CinemaScope cropped)	4096 x 1716	2.39:1	7,028,736
DCI 4K (flat cropped)	3996 x 2160	1.85:1	8,631,360



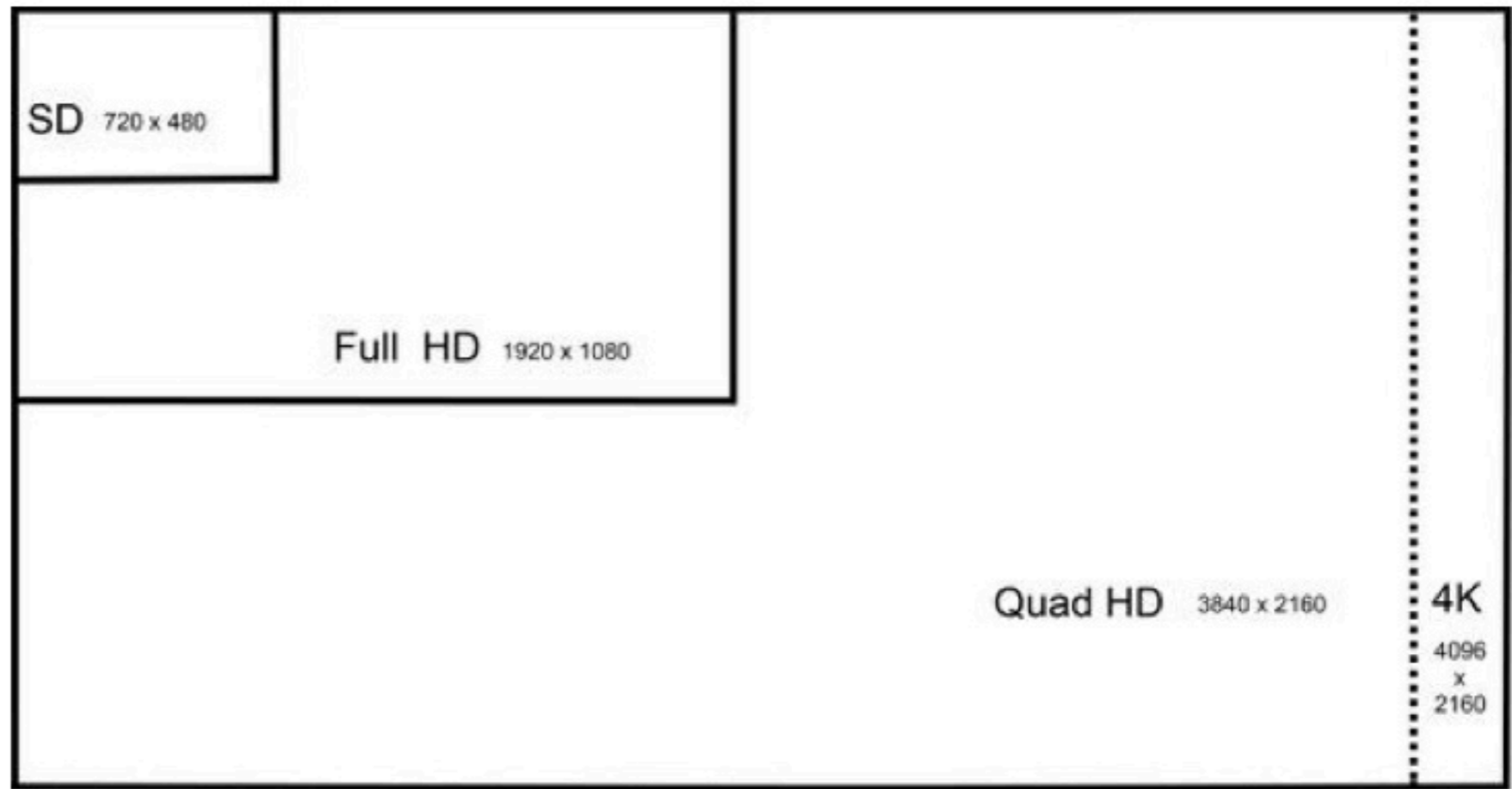
Yes - Once The Terminology is Cleared Up!



UHD is
not
true 4K!

ULTRA HD
Ultra High Definition

UHD = 3840 x 2160
aka 2160p
~ 8 megapixels
16:9



Minor Problem: No one “broadcasts” 4K (yet)



A NETFLIX ORIGINAL SERIES
HOUSE of CARDS

★★★★★ 2013 18 2 Seasons **ULTRA HD 4K 5.1**

Sharks gliding ominously beneath the water's surface, hunting for their prey? This Congressman can relate.

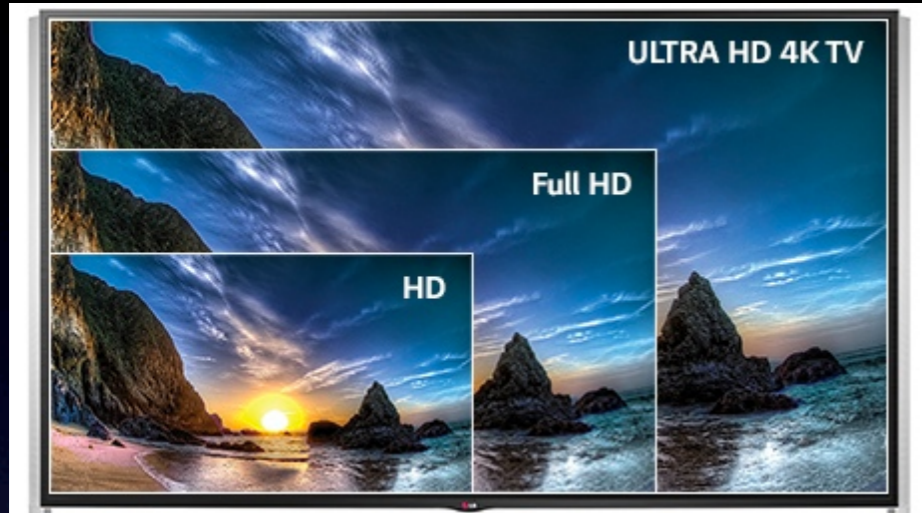
 Kevin Spacey stars with Best Actress Golden Globe winner Robin Wright for David Fincher, who won an Emmy for directing.

- * FHD is upscaled
- * Show your own (HDMI)
- * Netflix 4K
- * Direct TV (2015-2016)
- * You Tube
- * Vimeo (waiting)
- * 4K Blu-Ray (2015)
- * Sony/Samsung services
- * UltraFlix UHD (streaming)

Most movie theaters are projecting Cine4K Video



So, What Does One Buy?



- UHD = 3840 x 2160
- >55 inch screen
- Has FHD to 4K upscaling
- Has HDMI 2.0 (for 60 fps)
- HEVC (H.265) capable*
- Broadband 15-25 mbps down



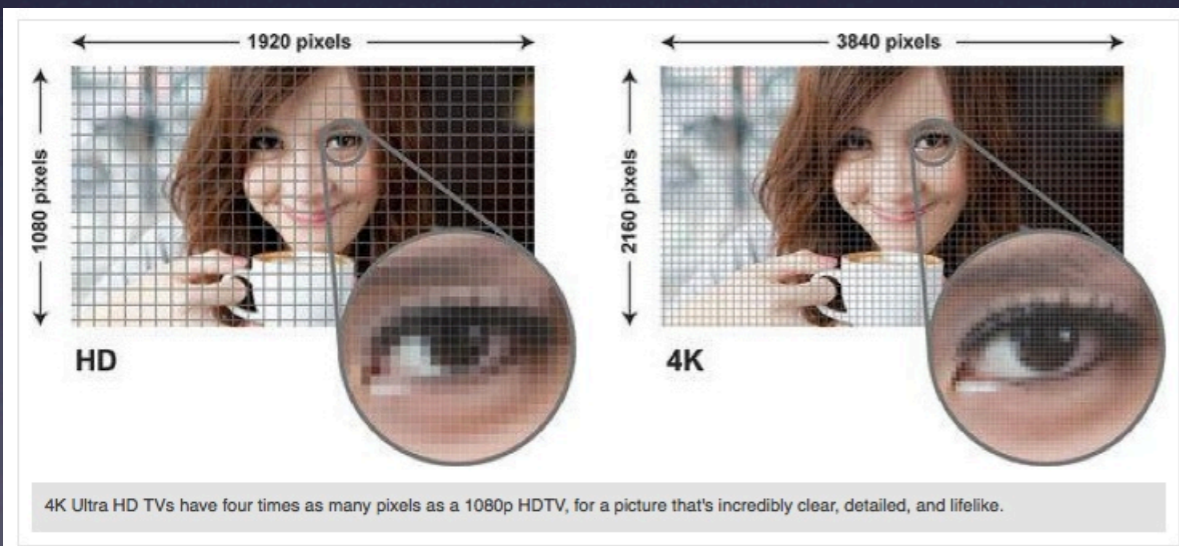
* High efficiency video codec



But, What If You Want To Shoot 4K?



- Red Scarlet Dragon \$14,500+
- Sony PMWF5 \$19,400+
- Canon C500 \$19,999+
- Blackmagic URSA \$6000+
- Blackmagic Production \$2999+
- Sony a7S \$2500++
- Panasonic GH-4 \$1695+
- Samsung NX1 \$1499+
- GoPro Hero4 Black \$499
- EOS 5D Mark III, etc.*
- Many Smart Phones!



*Time lapse from still frames



OK...You Shoot 4K,Then What? Why?



- 4K - capable NLE
- “Modern” Computer
- 4K monitor? Nice, not needed
- Can shown on UHD TV, too
- Ginormous files = more drives
- Good glass even more important



WeatherVideoHD.TV
Royalty free stock video

- Future proofing!
- Editing Edge: crops, zooms, “Ken Burns”
- If output HD, it just looks better!
- You can make movies!
- It’s gorgeous!



All I Want for Christmas is a Canon 5D Mark IV
Meanwhile...

*Pour Down
Thy Weather*

4K Acquisition to FHD: Tom Warner/WeatherVideoHD.TV



QUESTIONS*?

*Yes, 8K is being developed!

