

# Beinecke Rare Book and Manuscript Library

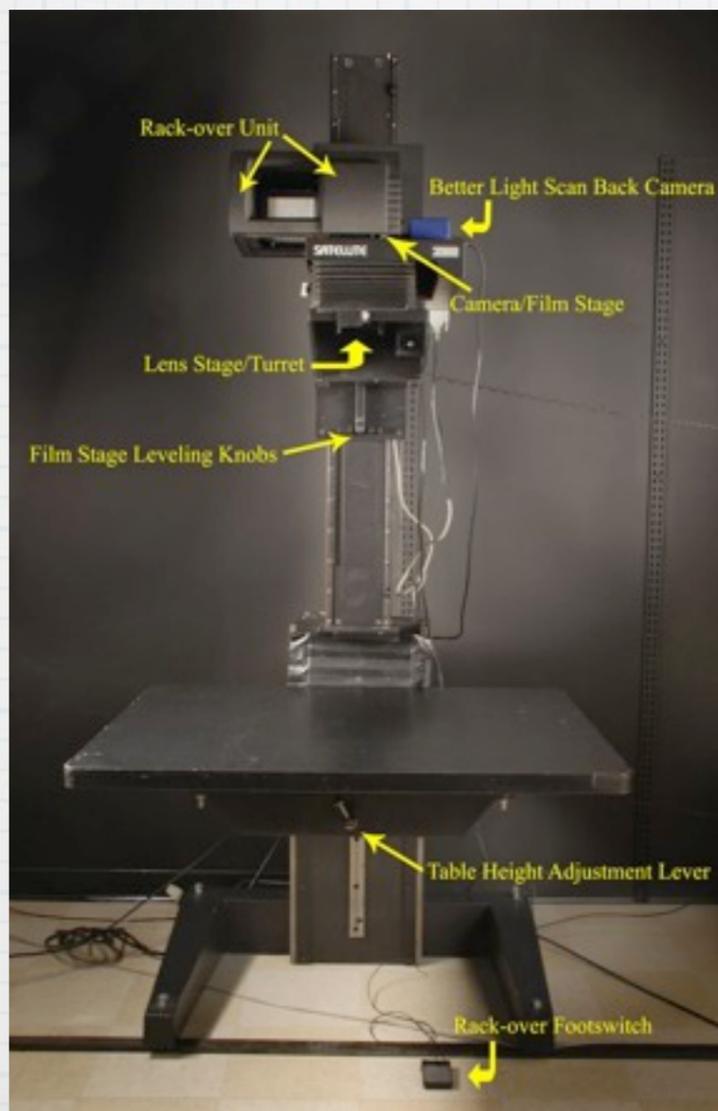
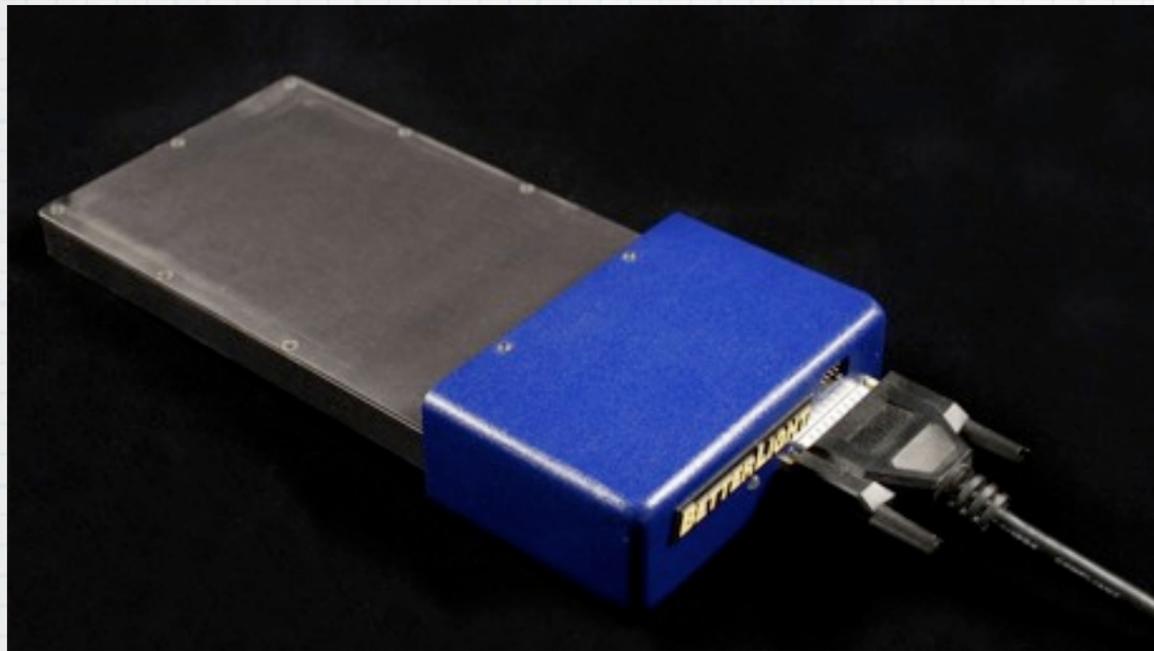


The Beinecke Rare Book and Manuscript Library was built in 1963, houses several million volumes and is the largest collection of Rare Books and Manuscripts in the Americas and one of the largest in the world.

In addition to its general collection of rare books and manuscripts, the library houses the Yale Collection of American Literature, German Literature, Western Americana, and the Osborn Collection a collection of British literature written between the 16th and 19th century. We have been digitizing in-house since 1998, with current, more modern version of the Digital Studio at the Beinecke in operation since January, 2002.

Since you have already heard about the 2 common high end cameras I'll be focusing more on the mid range and low end of digital input devices.

# Our Roots: Original Studio Equipment



When the studio started in 2002, we had 3 photographers and 2 input devices, a scan back (originally a powerphase and now a betterlight Super 8K) on a Satellite ZBE stand and an Epson 10000XL

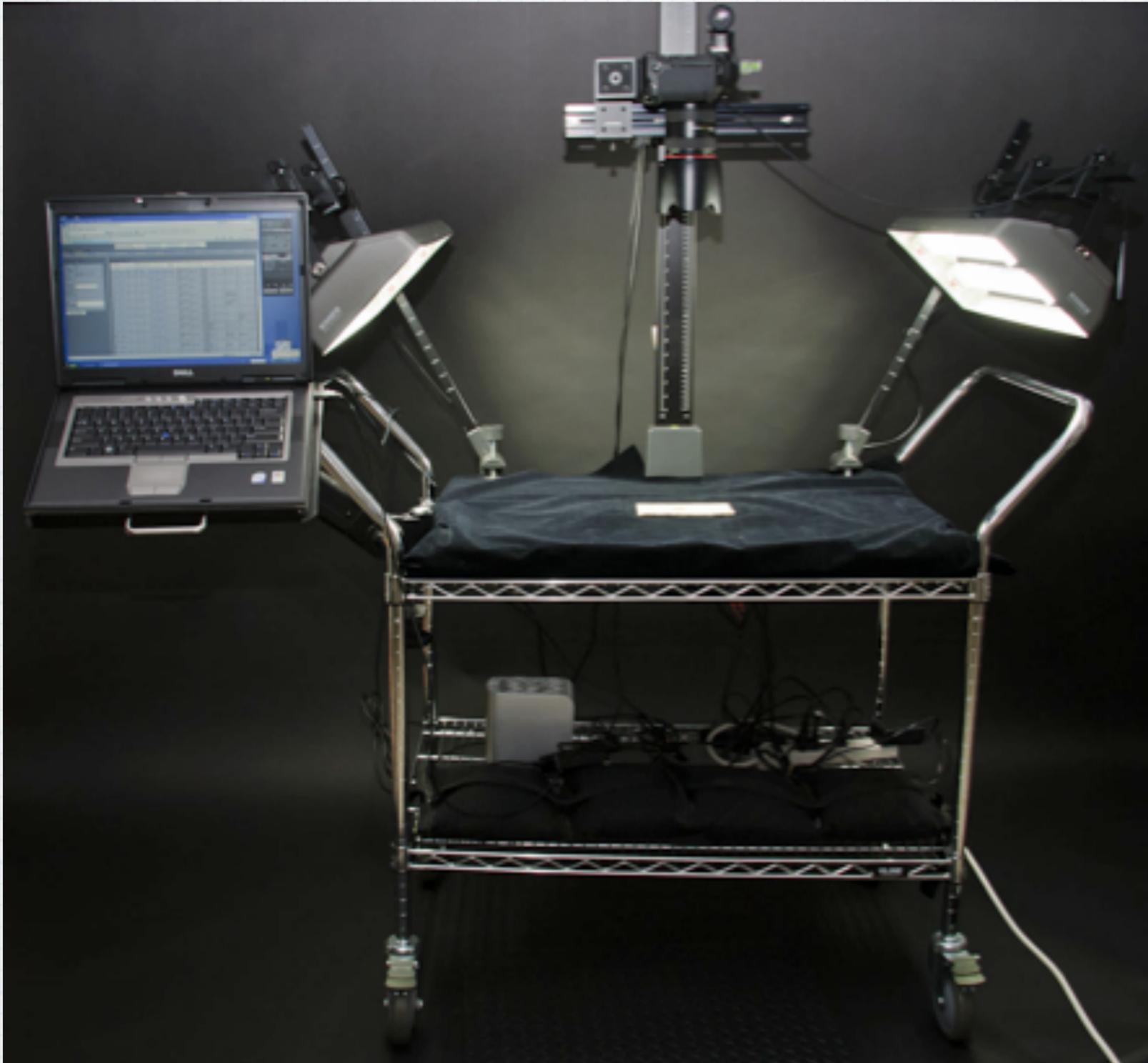
# Rapid Imaging Project (RIP)

## Hardware

- Canon EOS 1-DS Mark III
- Canon EF 24-70 f 2.8 Lens
- Kaiser R1 System
- Dell Latitude D830 Core 2 Duo
- LaCie 2 Terabyte External Hard Drive w/USB 2.0
- Uline Wire Utility Cart, 36w x 24d x 39h

## Software

- Canon EOS Utility
- Adobe CS5 w/Bridge and Camera RAW 6.1
- Adobe Digital Negative Converter



In September of 2008 we incorporated a DSLR into our workflow, we call this the Rapid Imaging Project.

Speak to tech on screen



How did we know we needed a custom and Rapid Imaging Solution

**High demand for digital surrogates of materials for research purposes** – since 2005 when we began specifically tracking Patron orders, the studio has created 68,000 scans specifically in response to patron requests. 45,000 of those were created on the RIP in the last 2 years.

**Rare Books and Manuscripts are generally too fragile or valuable for traditional Mass Digitization** – This is largely self-explanatory, the Beinecke does not participate in any of the traditional mass digitization initiatives on campus but still has a need for a high level of digitization.

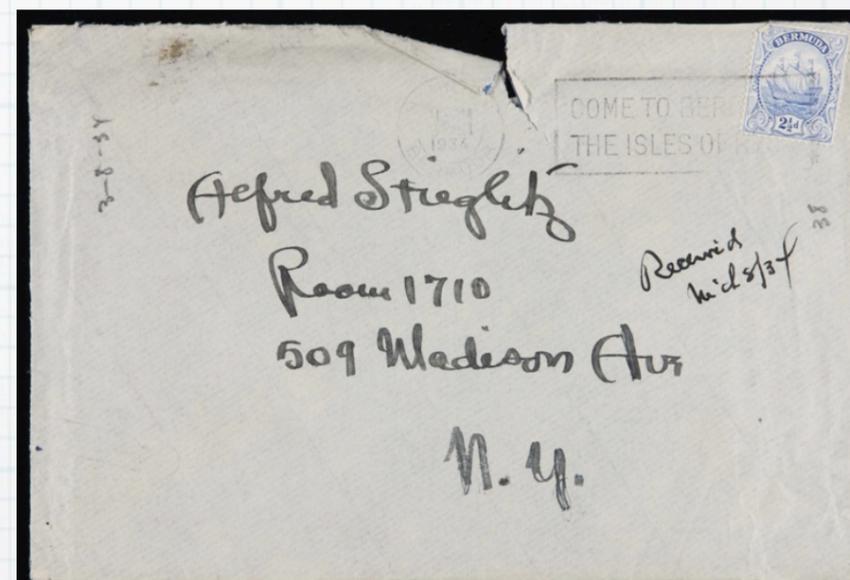
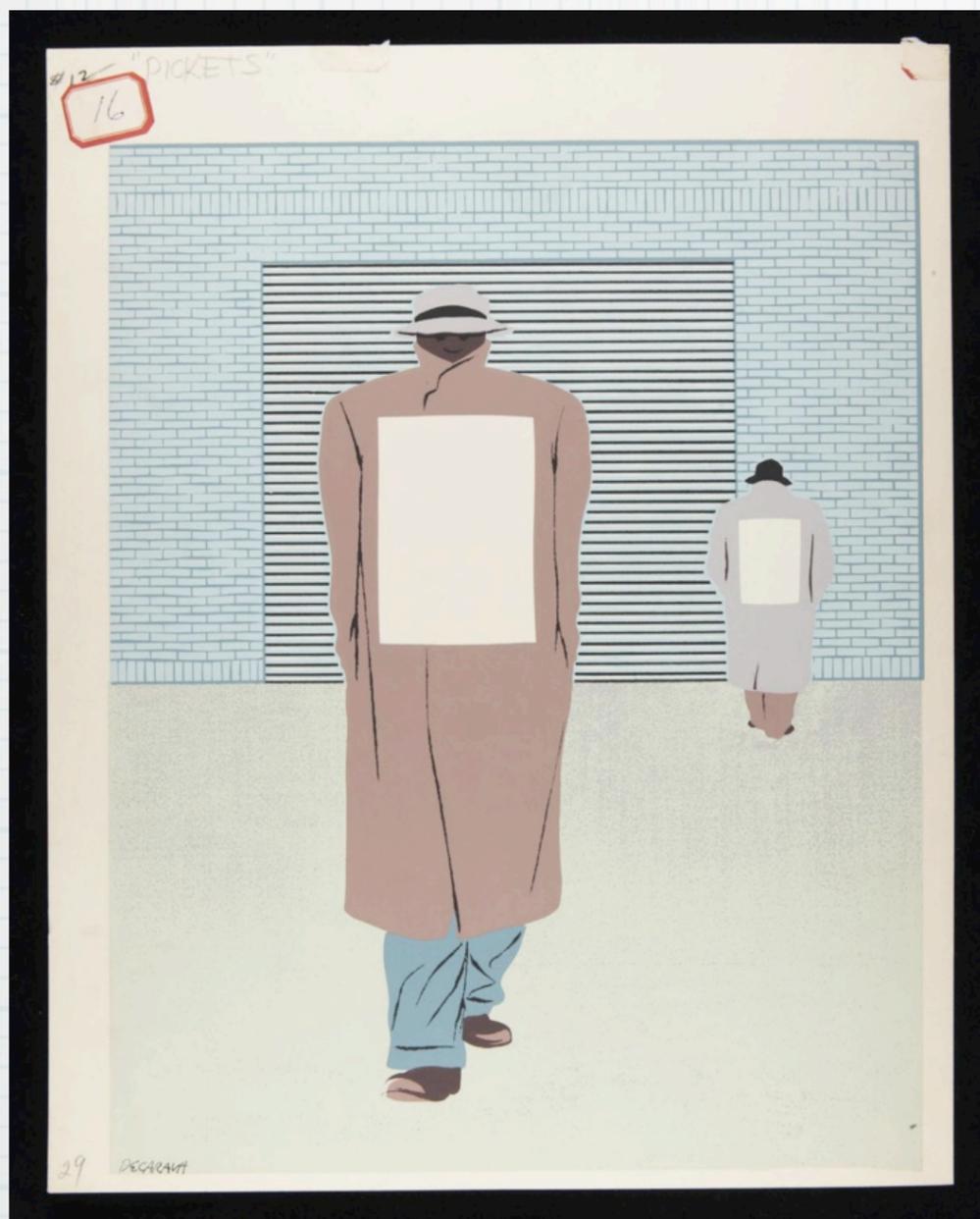
**Limited (expensive) digitization choices offered to Patrons, faculty and staff** – Prior to our Rapid Imaging initiative, Beinecke only offered photocopies of selected material for 35 cents or high resolution images for \$15 per scan. Your choice was one or the other.

**High amount of handling of popular items** – In 2006 the personal correspondence between Alfred Stieglitz and Georgia Okeefe were unsealed and became available for study. These were and are wildly popular but the popularity came at a price. Material was quickly damaged or misfiled. For most researchers, A digital discovery quality surrogate would suffice for their purposes.

**Several large collections in the cue for digitization** - stieglitz okeefe correspondence 29000 scans, Erdoes slide collection 35,000 scans

**Economic Climate** – The Beinecke saw this as an opportunity to provide more research material online and to provide more material to researchers who were less likely to be able to visit the Beinecke in person.

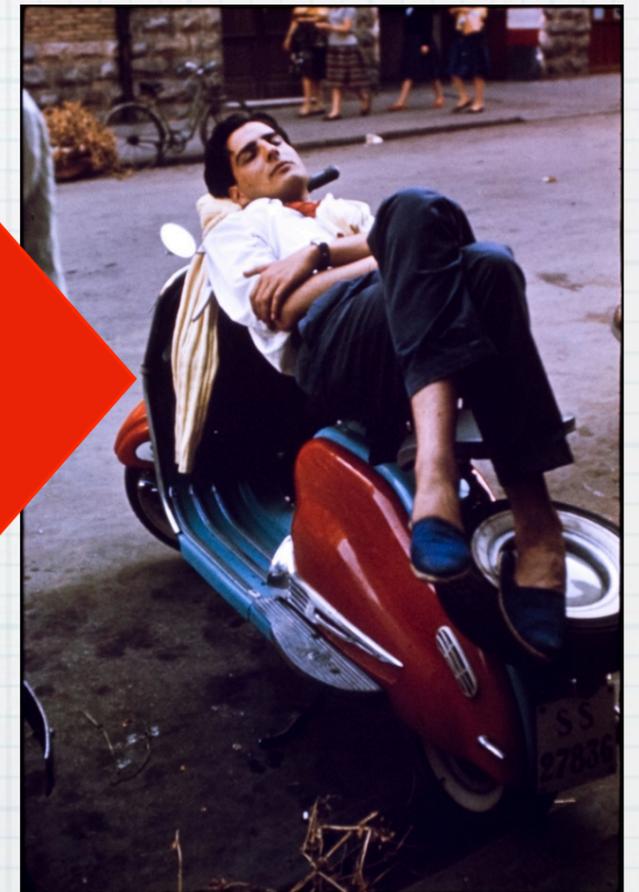
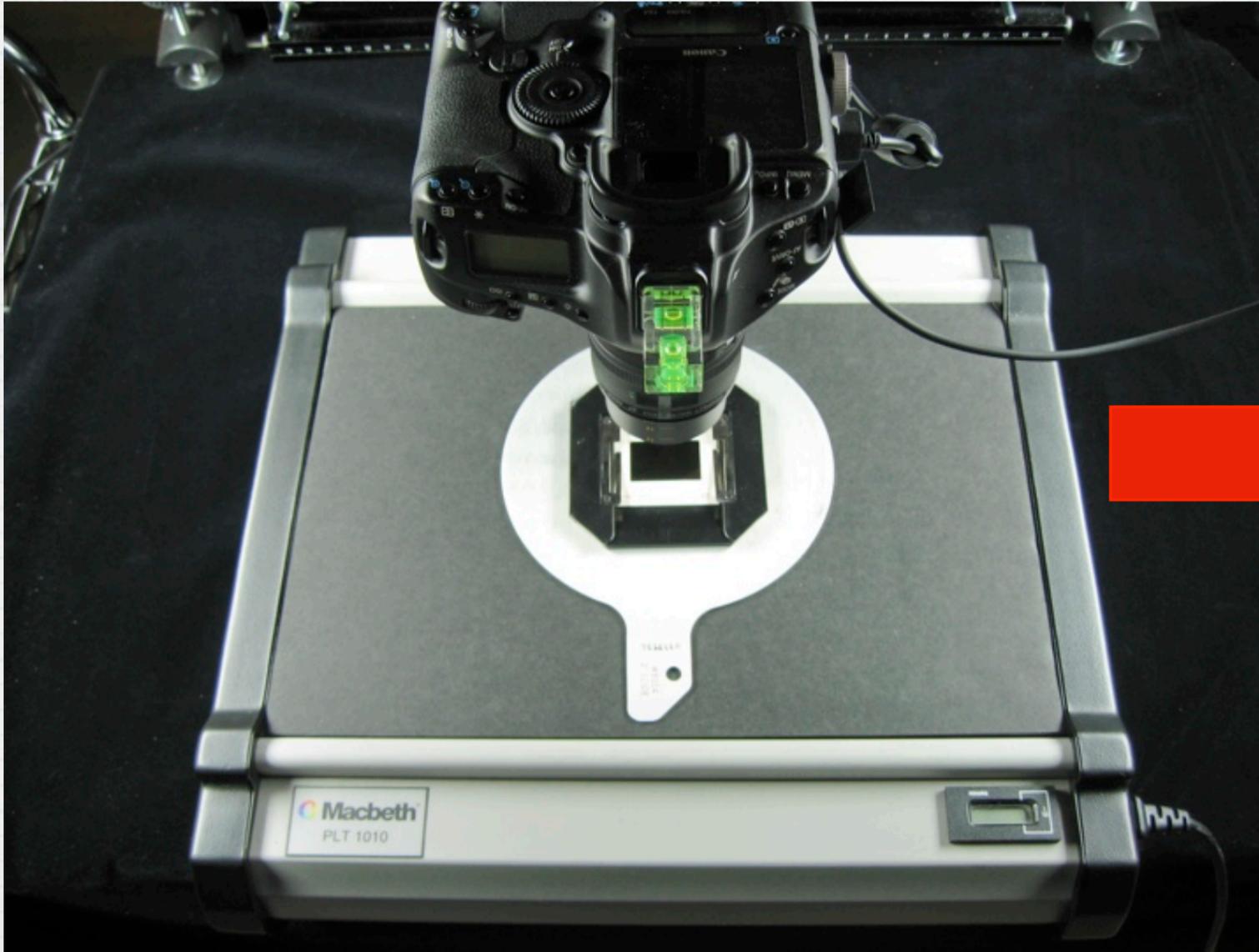
# Examples of the Canon 1Ds Mark III using our rapid capture workflow



To date we have produced 123165 RIP scans in comparison we have created 151204 high res scans since 2002

RIP imaging which began solely for patron requests or large curatorial projects has begun to seep into almost every other classification of material. Projects like exhibition support which has only ever been digitized at a high level even when only used online are now being sent to the RIP when appropriate. When high resolution scanning was the only option in the studio, all material was scanned at a high resolution. Now curators have a choice, it frees them up to expose large areas of their collection to discovery by routing that material to the RIP instead of being held to our normal slower high resolution scan workflow. They are now empowered to consider the ultimate use of the material and make the decisions of where the efforts of digitizing their collection should go.

# New Direction



We began to explore the possibility of using the RIP to digitize negatives and transparencies when we started to consider several large projects.

Upcoming projects for this style of RIP:

35000 piece Richard Erdoes Collection – Images of the Native American Rights Movement

7000 120mm transparency collection of Black Hills poet portraits

5000 35mm and 120 portraits of Jazz musicians by Lee Friedlander

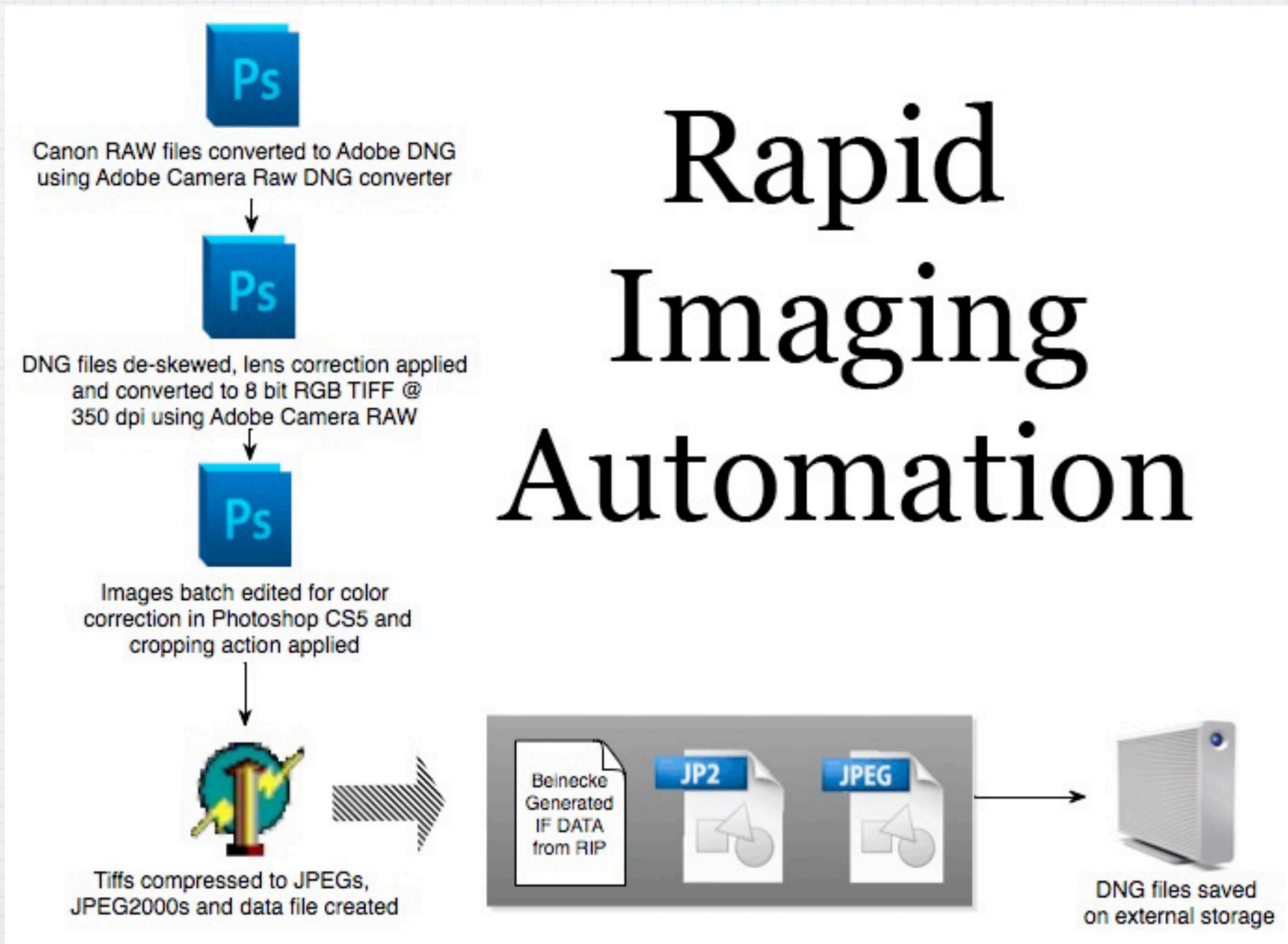
purchased 35mm, 120 and mounted 2x2 slide carriers for a beseler enlarger from ebay for a few dollars apiece

Uses an extension tube on a 50mm lens allowing us to use the full frame to capture 35mm slides

creates a 4500 pixel image in a fraction of a second vs our dedicated slide scanner which takes several minutes to make the same image

Cheaper to scan internally than to outsource, estimated cost of 14–20 cents apiece \*scanning only, not cataloging\* vs. \$1–\$2 for a vendor to scan.

# Rapid Imaging Automation



The image on the screen is just a small section of a complete workflow diagram that you will find in a total workflow document that provided on the Beinecke studio's website. We are relying heavily on Adobe Camera RAW and Adobe Photoshop to provide automated correction to image files allowing the photographers to start a process and walk away to work on other projects.

Auto file naming in canon software combined with all the cataloging being done ahead of time is a key to speed for us

Shooting RAW and converting to DNG

Capturing color bar at beginning of day/project to allow for batch editing

Using Adobe Camera Raw, we apply lens correction (!!!) and convert to Tiff

Rotate and inspect in Bridge

Auto Cropping action crops to image (one reason we shoot on a black bkgnd)

Custom software creates multiple sizes of Jpegs and JP2

Save the DNG files internally

# The Low End Contestants



Olympus Stylus Tough 8000 (12 Mega Pixel)



Canon Powershot G10 (14.7 Mega Pixel)



Panasonic Lumix LX3 (10 Mega Pixel)



iPhone 4 (5 Mega Pixel)

In addition to the high end cameras you have seen already, we decided to add some more commonly accessible cameras into the mix. Cameras like this are likely in your department already and may be used by you for a reference photograph, quick fulfillment of a patron order or used by a curator to post an image to their blog. This purpose of this part of the test was to show the results of a commonly available camera is now that you have seen the high end.

# Olympus Stylus Tough 8000

# Canon G10



# Panasonic LX3

# iPhone

I decided to focus on color and clarity with the low end cameras since it is unlikely that anyone will be using these capture devices to send a file to print.

# Olympus Stylus Tough 8000

# Canon G10

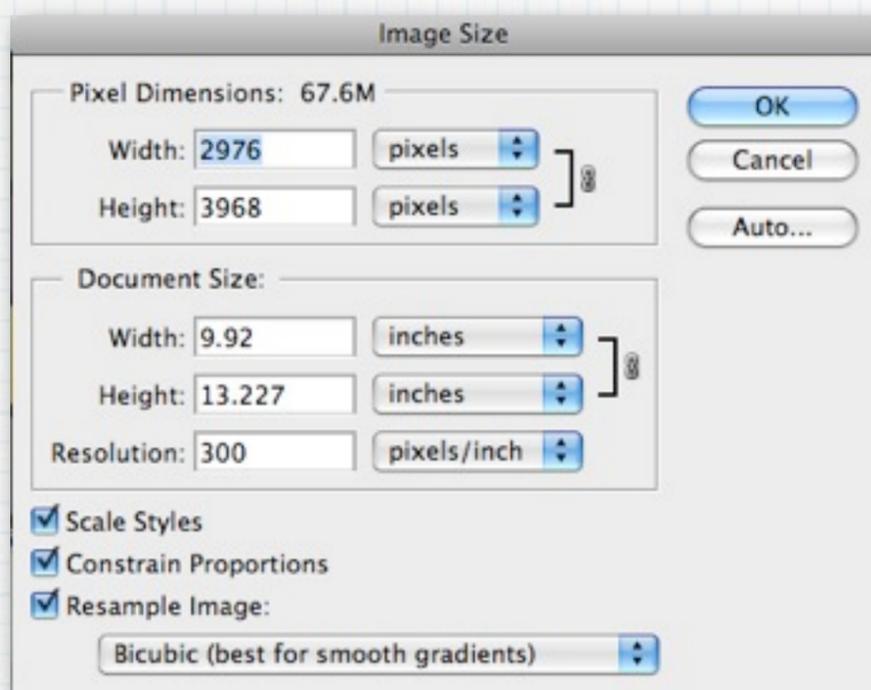


# Panasonic LX3

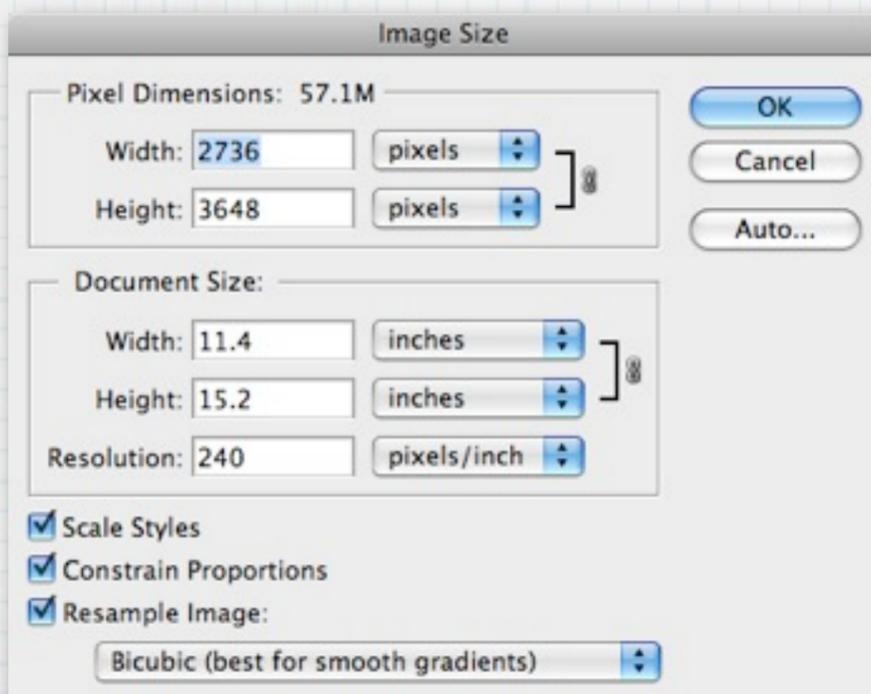
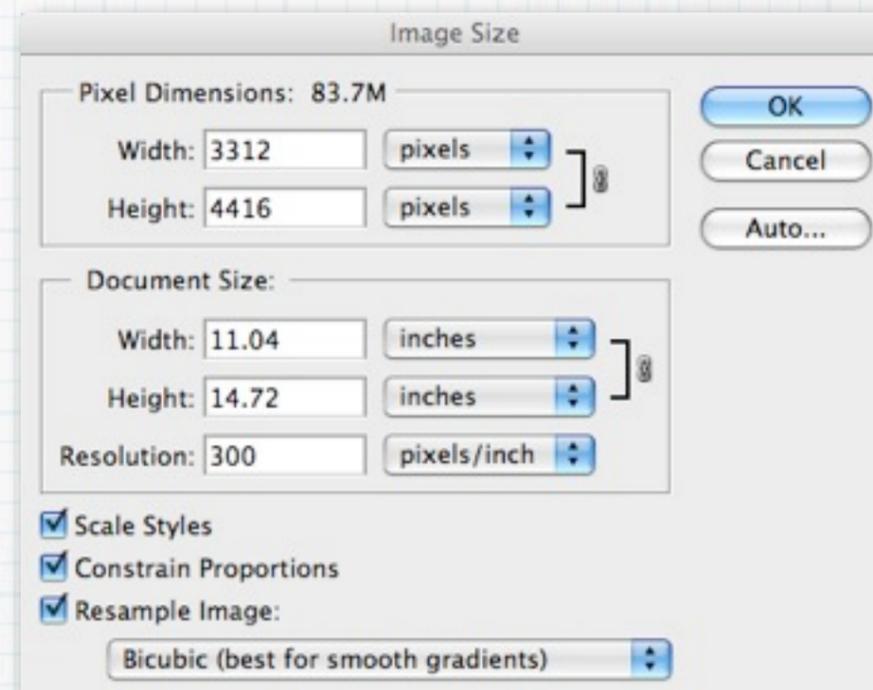
# iPhone

I found that there is little difference between these point and shoot cameras, some are softer some are flatter but all will get the job done if your aim is fast representation of the object. I did find the punchiness of the iphone's color interesting.

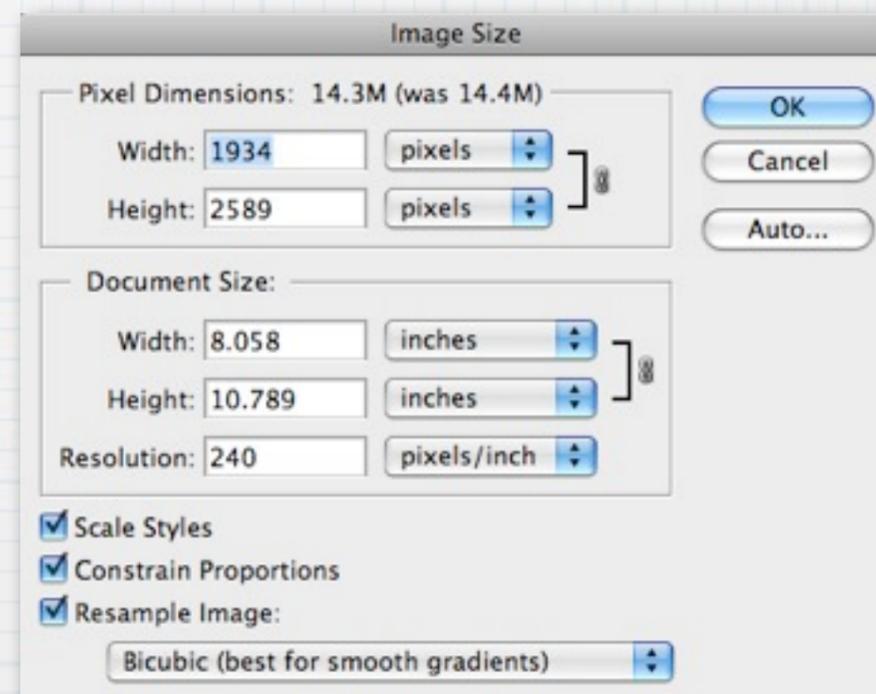
# Olympus Stylus Tough 8000



# Canon G10



# Panasonic LX3



# iPhone

Any modern point and shoot camera will deliver file sizes that are capable of being used for web purposes, even the iPhone.



# Contact Info and Links:

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Beinecke Digital Studio Website  
<http://beinecke.library.yale.edu/brbltda>

Yale Digital Coffee  
<http://www.yale.edu/digitalcoffee>