RECORDING LANDSCAPE: The Panorama
DOVERODDE BOOK ARTS FESTIVAL

Photography notes for the demonstration by Paul Laidler

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JEFF WALL, RESTORATION, 1993

KEY WORDS: binocular, monocular, panning, spatial, sublime,

When we think of landscape within western art one generally recalls billboard size paintings on canvas that describe vast romantic scenes of nature. These pictorial views have alluded to nature's heavenly creator and our witnessing of Gods sublime forces withih a two dimensional picture plane.

Real nature can only be experienced partially, but in the panorama vast expanses of space are surveyed with the all-seeing eye of God.

Grunenberg. Christopher. The whole wide world: Expanded Painting. Glen Brown, Tate Publishing 2009 p.19

Grunenberg describes the idea of expanded views in relation to human perception and our binocular sighted field of view. Here the panorama presents the possibility of creating two dimensional representations toward the appearance and spatial appearance of a three-dimensional world.

The creation of a photographic panorama loan's itself to both paintings scale and our visual experience of three dimensional space.This demonstration will use photography to show how to take a series of digital recordings prior to merging the individual files within Adobe Photoshop CS3. The demonstration will also cover different panoramic recording and construction methods as a means to consider the appearance of space in the final two dimensional printed image.

BARRY FRYDLENDER, SHIRAT HAYAM 2005

1.THE FIXED MULTI-WINDOW PERSPECTIVE
Frydlender's image is composed of multiple photographic images. Here the top and bottom of each photo remains constant so that the multiple recordings create a linear perspective (a panoramic format). Collectively the recordings create a seamless panning effect that is achieved from a fixed pivoting position or by moving the camera parallel to the field of view.

DAVID HOCKNET,PEARLBLOSOM HIGHWAY, 1986

2.THE MULTI-WINDOW PERSPECTIVE
Unlike Frydender's linear construction method the multi-window perspective (see above image) resembles the appearance of a collage. Constructed by a less rigid linear method the collective reconstruction of the view (using a series of monocular views) invokes an eye movement associated with binocular vision. And like our eyes the image is always in focus inducing movement through and over the image surface, or as Hockney describes, *'it is a still picture that moves in your head as we move to get multiple perspectives'.*

David Hockney's Secret Knowledge, Channel 4, Oct 2008

Considerations for the process:
Both compact and digital SLR cameras can be used, as can a range of camera lenses. Although it is probably best not to use a wide angle lens as the process will create a wide angle for you.
A tripod is not essential although the device maybe useful in some circumstances i.e. Long exposures
The individual sequence of photos that are used to produce the panorama can be recorded from left to right or right to left. The stitch program works sequentially matching the overlapping edges of each photograph in a sequence.

Both horizontal and vertical orientations of the camera can be used but best not to change the orientation during a single sequence of recordings.

Camera set up:
The sequence of photos can be recorded using the cameras automated or manual functions. However the manual option will give you more control over how your photos will look: i.e.
Changing the cameras shutter speed will give you more control over image exposure - and therefore consistent tonal information.
Setting the camera aperture will determine the depth of field in the image – how much of the image remains in focus.

As mentioned previously the panning process can be performed using automatic settings. However there are some pre-determined camera operations that you should consider before taking any photographs.

File selection:
There are number of digital file considerations concerning colour spaces and image quality. In this instance I would suggest you think about image quality and the files relationship to printable scale. If your not sure always choose the highest quality setting. Opting for a high quality file will provide you with more scaling options. Scaling digital images down enables you to retain good image quality, scaling images up can make images become pixilated. Therefore the larger the files image quality the more printable scales will be available to you.

Quick setup note:
Colour balance can be adjusted in post processing and it is not essential to the panoramic process. However common sense will save you making adjustments later, when in daylight use a daylight colour setting.

Taking the Photographs: Pivoting panoramic method
The panoramic process can be produced from a single pivoting position and also from a sequence of adjacent positions that run parallel to the subject.

Take lens cap off, turn camera on and look through the viewfinder to work out which bit of the landscape you want to record. Consider where you might want to start and finish the panorama.

Through the viewfinder see what falls within the top and bottom edges of the frame - as this will be cropped later. When creating the sequence of images make sure you hold the camera steady and that each recording overlaps a portion of the next one (see bottom diagram).
The overlapping will help the stitch program match the duplicated sections existing within the sequences of recordings.

Looking through the view finder pan the camera about quarter of the frame size, the stitch program should have enough to work with when merging the sequence of images.
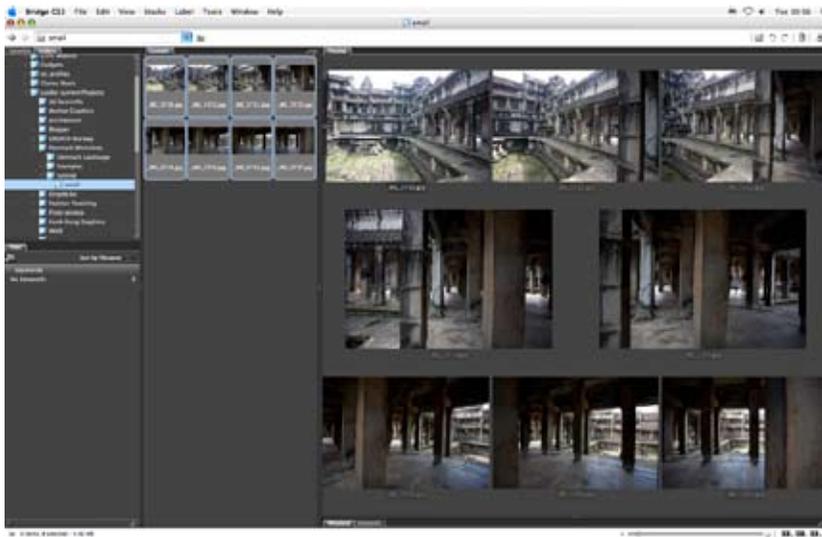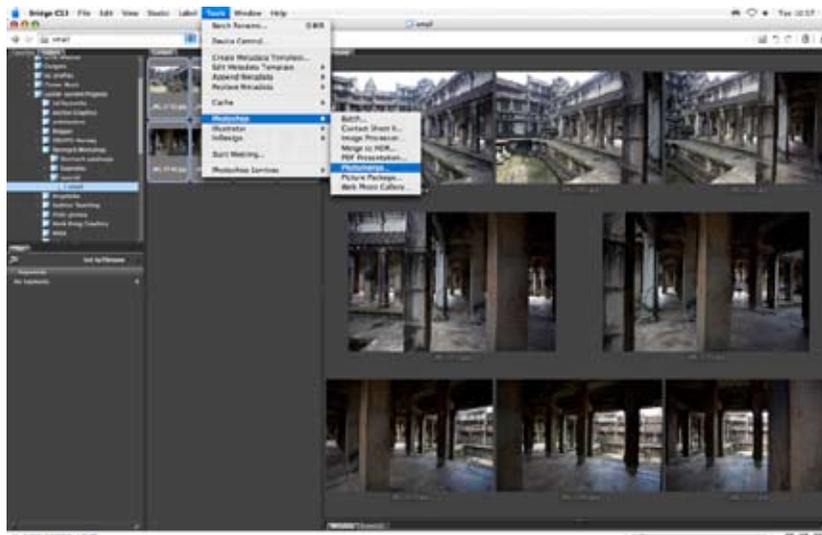

Moving from left to right method:
Here you can see the distance moved between each frame

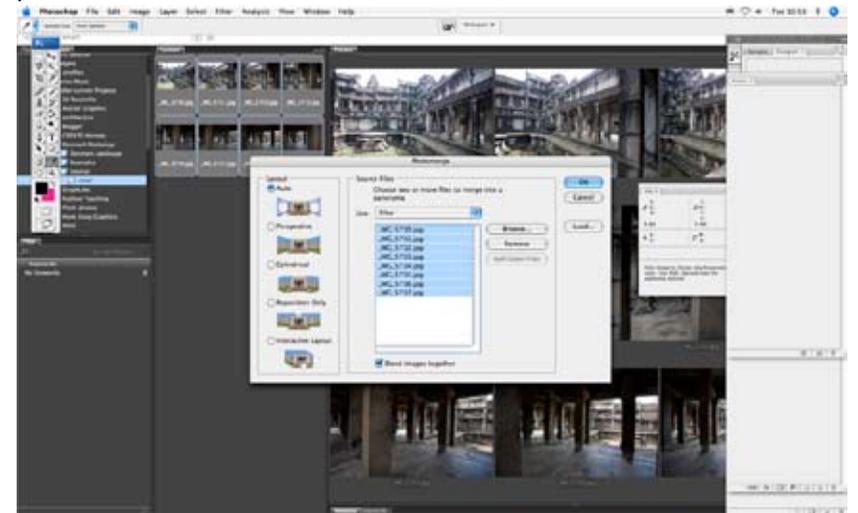1.Launch the **Adobe Bridge** program, navigate to your folder and select all of the images in the folder

3. The Photomerge dialogue box will open, in the **Layout section > Choose Auto**. In the source file section check the **blend images together** box and select all the files then press OK.
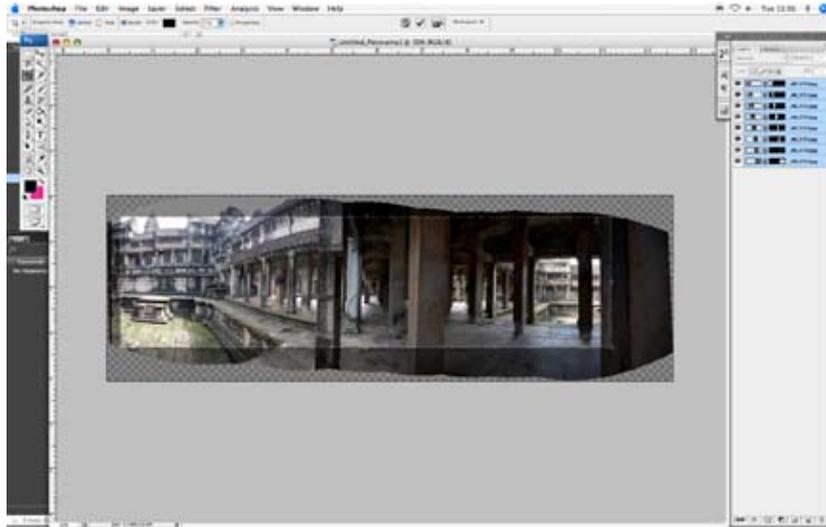
2.Go to **Tools > Photoshop > Photomerge**.

4. The **Photomerge** tool will open the files fully merged in **Photoshop** as a single image file. Each of the merged files will be separate within the layers palate.
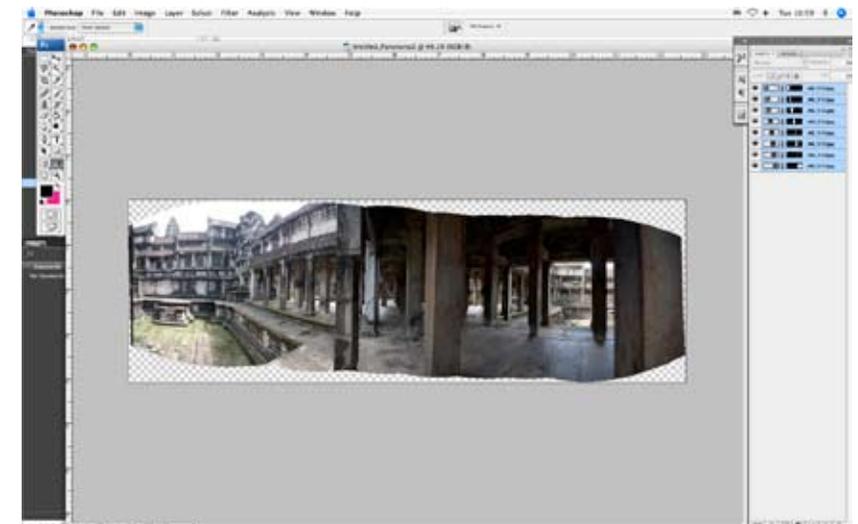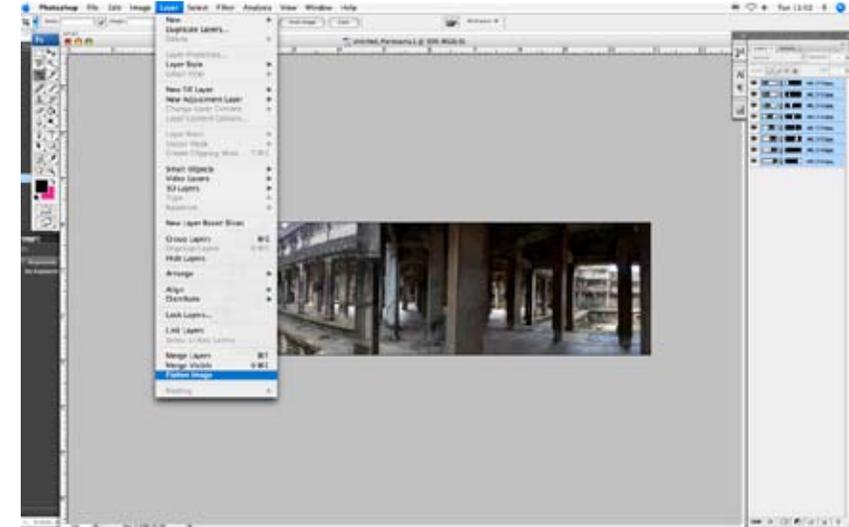
5. To make the image a uniform rectangle use the **Crop tool.** In the **tools palate** and crop off the outer image edges produced by the photomerge process.

6. In Photoshop go the **layers menu** and select **flatten image**.

7. Completed image - photographed - photomerged - flattened and cropped.

Printing and alternative construction methods
Today the average pixel size of most affordable digital cameras is
around ten mega pixels. The standard printable resolution of a ten-
mega pixel image will produce a photographic print slightly larger
than A3 scale. By joining a series of ten mega pixel size images to-
gether (in a panoramic fashion) the potential to produce large-scale or
life size prints equivalent to a large format camera becomes possible.
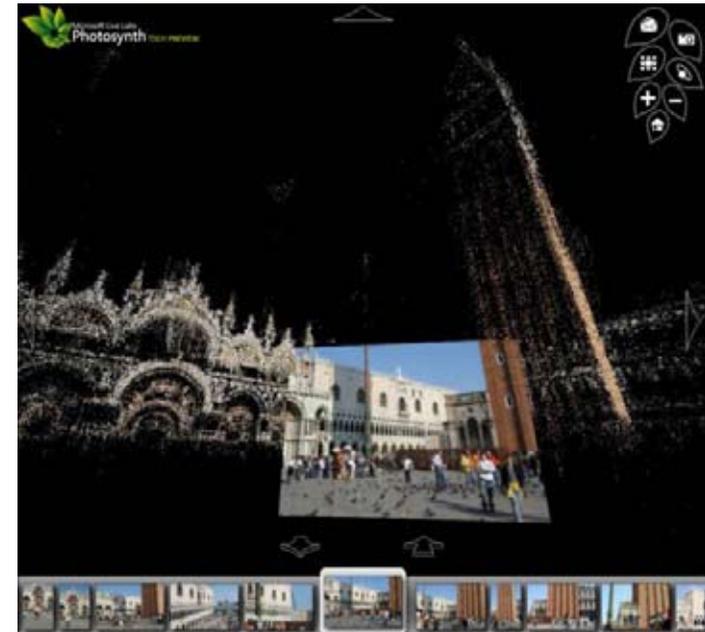See following examples:

Isidro Blasco
http://www.isidroblasco.com/
Isidro Blasco combines architecture, photography and installation to
explore themes of vision and perception in relation to physical ex-
perience. Blasco normally begins by selecting one angle in a room
or outdoors and then constructs a new space from the perspective of
that vantage point.

Eric Testroete uses multiple photographic recordings of his head to
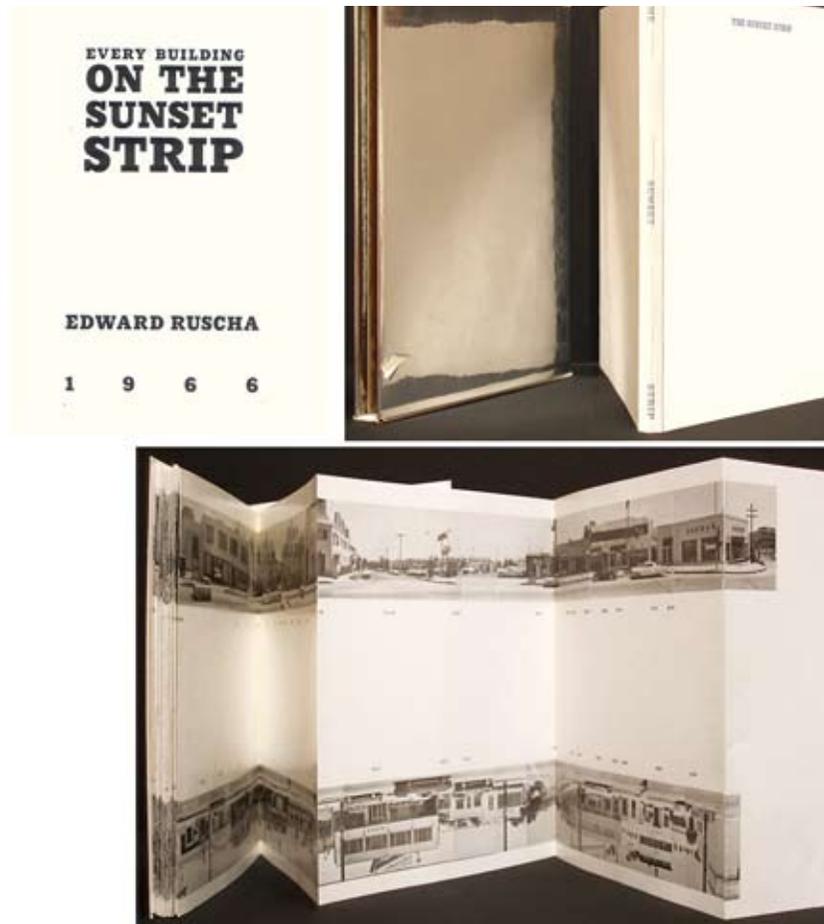construct a printed three dimensional avatar version of himself: see
http://testroete.com/index.php?location=head

Also see similar 'multi-user' photoconstruction methods in Photosynth
software: http://photosynth.net/
http://www.youtube.com/watch?v=y9zF97JL30A&feature=related

Book format
The linear form of the panoramic image also loans its self to the se-
quential format of the book. Here are some examples.

Ken Leslie, Space and Time

Edward Ruscha, On the Sunset Strip, 1966

Helen Douglas & Zoe Irvine, Illiers Combray, 2004

David Faithfull, East looking West / West looking East

Ahlrich Van Ohlen, Doverodde Panorama 2010

Some Vocabulary

Binocular
Involving both eyes: binocular vision.

Monocular
Having only one eye: a monocular instrument or device that uses only one field of view

Panning
Shortening of panorama: to photograph while rotating a camera on its vertical or horizontal axis

Spatial
Pertaining to space, existing or occurring in space; having extension in space.

Sublime:
Impressing the mind with a sense of grandeur or power; inspiring awe, veneration, etc

Tools Vocabulary

Pixelated:
A printed image which has been digitized; visible as a pattern of pixels

Crop tool:
Cropping is the process of removing portions of an image to create focus or strengthen the composition. You can crop an image using the Crop tool and the Crop command.

Adobe Bridge:
Adobe® Bridge is a cross-platform application included with Adobe Creative Suite® 3 components that helps you locate, organize, and browse the assets you need to create print, web, video, and audio content. You can start Bridge from any Creative Suite component, and use it to access both Adobe and non-Adobe assets.

Photomerge:
The Photomerge™ command combines several photographs into one continuous image. For example, you can take five overlapping photographs of a city skyline, and then assemble them into a panorama.

The Photomerge command can assemble photos that are tiled horizontally as well as vertically.