## Image Scale and/or Page Numbering Script Instructions

## Operating instructions and assumptions about images were scanned

scriptVersion = "Book Scanner Images: Scaling and Numbering -- V2.4"
; AutoHotkey script using GraphicsMagick library
; Rescale images book page images scanned with single camera or dual camera book scanners.
,
Downscale images to match the smallest image or upscale to match the largest image.
; Optional calibration pages are automatically skipped during processing.
; Original images are untouched and new, rescaled/renumbered images are placed in subdirectories.
; Number filenames of right-hand (odd) and left-hand (even) pages so they interleave correctly, in reading order. Maximum number of total pages (left+right) is 9998.
;
; Process only left hand or only right hand pages if needed.
;
$\qquad$
; INSTRUCTIONS
;

1) Double click to start the script.
; 2) If the script reports an error, that the "GraphicsMagick's gm.exe file could not be found automatically ..." then edit the script in Notepad, or other text editor, and set the path to gm.exe below.
; 3) Set the processing options and click the "Start" button. For "Page numbering only" scaling pixel counts are not needed.
;
$\qquad$
; ASSUMPTIONS FOR ALL BOOK SCANNERS
; 1) The file modified date and time of each image increase from first to last page scanned on each side for single page scanners, or for each spread with dual camera scanners.
; 2) ALL pages must be scanned (including blank) with equal number of pages in separate directories for left and right hand pages.
; 3) Zoom is unchanged while scanning any one side of the book, but zoom amount for left and right hand cameras/pages does not have to be identical.
; 4) The same number of files in left and right directories (if both are specified).
; 5) Number of pixels 6" on the ruler uses on the calibrations page has been measured in an image editor (Irfanview, Photoshop, etc.).
;
$\qquad$
; ASSUMPTIONS ABOUT IMAGES CREATED WITH SINGLE CAMERA BOOK SCANNERS (TIFLIC STYLE WITH VARIABLE PLATEN/CAMERA DISTANCES)
; 1) Pages have been scanned as follows:
; a) All right hand pages (odd numbered) are scanned first in reading order (1, 3, 5, ... $x$; i.e. from start of the book to the end, up to a maximum of 9997),
; so the largest and first scanned page should be page 1 and smallest and last scanned should be page x .
; b) All left hand pages (even numbered) are scanned second, in reverse reading order (x+1, ... 6, 4, 2; i.e from the end of the book to the start)
; by turning the book upside down and starting at the end, so largest and first scanned page should be page $x+1$ and smallest and last scanned should be page 2 .
;
; c) Using the book's printed page numbers (starting on page 1) and the image files' numbers, double check the quantity of left and right image files is the same as there are numbered pages in the book (i.e. that no pages were missed by mistake, even if the number of files in the left and right directories are the same).
;
; d) Then check all left and right un-numbered pages, typically found at the start and end of books (copyright pages, title pages, dedications, etc.), were scanned.
;
; e) If any pages are missing, scan them, and copy their image files to the correct directory (left or right).
; f) Rename the image files so the missing images drop into sequence. So, for example, if the image file names are:
,
; IMG_1416.jpg
; IMG_1417.jpg
; IMG_1418.jpg
; IMG_1419.jpg
; and one page was missed after 1417 and another missed after 1418 then, after scanning the missing pages, rename them as follows so they drop into sequence:
```
; IMG_1416.jpg
; IMG_1417.jpg
; IMG_1417a.jpg
; IMG_1418.jpg
```

; IMG_1418a.jpg
; IMG_1419.jpg
; 2) Camera/platen distance is not fixed, and the difference in distance from camera to first page and last page scanned is thickness of
; book so first page scanned is larger than last page scanned. The script will rescale the images so the content on each page is same as first page (i.e. last page is scaled the ; most amount).
; 3) If calibration images are provided, 4 calibration pages are scanned as follows:
; a) Before scanning page 1 and page $x+1$ (i.e. the first pages scanned on each side of the book), an extra scan of page 1 and $x+1$ is made with a ruler on it.
;
; b) After scanning page $x$ and page 2 (i.e. the last pages of scanned on each side of the book, an extra scan of page $x$ and page 2 is made with a ruler on it.
;
$\qquad$
; ASSUMPTIONS ABOUT IMAGES CREATED WITH DUAL CAMERA BOOK SCANNERS (WITH FIXED PLATEN/CAMERA DISTANCES)
; 1) Pages have been scanned as follows:
; a) All pages are scanned in sequence from the start of the book to the end as spreads. After page numbering, first right hand image will be numbered as page 1 , the first left hand image as page 0.

$$
\cdot b
$$

; b) Using the book's printed page numbers (starting on page 1) and the image files' numbers, double check total number of left and right image files is the same as there are numbered pages in the book (i.e. that no page spreads were missed by mistake).
;
; d) Then check page spreads for all un-numbered pages, typically found at the start and end of books (copyright pages, title pages, dedications, etc.), were scanned.
; e) If any page spreads are missing, scan them and copy the image files to the left and right directories.
; f) Rename the images in both directories so the missing spreads drop into sequence. So, for example, if the image file names for the left-hand pages are:
; IMG_1416.jpg
; IMG_1417.jpg
; IMG_1418.jpg
; IMG_1419.jpg
; and one spread was missed after 1417 and another missed after 1418 then, after scanning the spreads, rename them as follows so they drop into sequence in the left-hand page directory: ;
; IMG_1416.jpg

```
; IMG_1417.jpg
; IMG_1417a.jpg
; IMG_1418.jpg
; IMG_1418a.jpg
; IMG_1419.jpg
```

; Repeat the process for the new page in the right-hand page directory.
; 2) If calibration images are provided, before scanning the first page spread (i.e. pages 0 and 1 ) an extra scan of the spread is made with a ruler on it.
;
$\qquad$
; Change log:
;
; V1.3
-- New -- Insert page numbering of right-hand (odd) and left-hand (even) pages into file name
; V1.3.1
-- Changed -- Updated above documentation.
V2.0
; -- Bug fix -- Scaling between first and last page was adjusting the scaling spread over 1 step to many pages.
; -- Changed -- New user interface.
-- New -- Option to process images produced by single or dual camera scanners.
-- New -- Option to choose page numbering and scaling, or just page numbering.
; -- New -- Option to normalise zoom of between the left and right pages if camera zoom settings are/were not identical for both sides.
-- New -- Option to upscale or downscale images.
-- New -- Option to indicate if have or don't have calibration images.
-- New -- Update page numbering to process left hand pages for dual camera scanners.
v2.1
; -- Changed -- Add progress bar to application window.
; V2.2
-- Bug fix -- Properly sequence missed pages scanned later
V2.3
-- New -- Option to use multi-processors
V2.4
-- Changed -- Try and automatically find path to GraphicsMagick executable

## Download and install GraphicsMagick

http://www.graphicsmagick.org/


## Download and install AutoHotkey

https://www.autohotkey.com/


## Save the script you need from the PDF



## Double click to run the script and test it starts without errors. If it reports the GraphicsMagick executable (gm.exe) could not be found follow these instructions.

a) Check if you've got a 64 bit installation or 32 bit installation of GraphicsMagick.

A 64 bit installation will be found under: C:\Program Files $\backslash$
A 32 bit installation wil be found under: C:\Program Files (x86)\}
b) Open the script in NotePad and, at the location shown by the arrow below, replace the path shown (in yellow highlight) with the path where GraphicsMagick is installed on your computer. The gm.exe should be in that directory.

```
B/ Image scaling and left+right page numbering script - 2.3.ahk - SciTE4AutoHotkey
                    \square)回 x
File Edit Search View Tools Options Language Tabs Help
```



```
    148 ; V2.4
    150 #singleinstance, force
    gmPath := ""
    gmPath := getGmPath()
    G if !FileExist(gmPath) {
        ; Could not find gmpath so use hard coded path
    ;
    ; EDIT FOLLOWING IF UNABLE TO FIND GM.EXE AUTOMATICALLY
    ; Example: C:\Program Files\GraphicsMagick-1.3.25-Q8\gm.exe
    gmPath := "C:\Program Files (x86)\GraphicsMagick-1.3.25-Q16\gm.exe"
    <}
    if !FileExist(gmPath) {
    MsgBox ,,ERROR,GraphicsMagick's gm.exe file could not be found automatically nor found at the hard coded path, here:`n`n%gmPath%
    exitapp
    }
    rightOutput := "\right-adjusted"
    leftOutput := "\left-adjusted"
    OkToProcessDocs := False
    leftImagesFolder := ""
    rightImagesFolder := ""
    leftImageSize := ""
    rightImageSize := ""
```

Line: 183 | Column: 80 |INS | (CR+LF) |

## Right－hand page images

SINGLE \＆DUAL CAMERA SCANNERS：Notice，if provided，the first image is the calibration page （i．e．page 1 with a ruler on it before page 1 itself is scanned）．

| 43 D：\Scale test\Right－XYplorer＠XYplorer．ini－v11．50－（Academic） |  |  |  | －目 $x^{\text {a }}$ |
| :---: | :---: | :---: | :---: | :---: |
| Eile Edit View Go Favorites User Scripting Iools Panes Tabsets Window Help <br> D：｜Scale test｜Right\} <br>  |  |  |  |  |
|  |  |  |  |  |
|  | D D：\Scale test $\backslash$ Right |  |  |  |
|  | ```# Name 三 1. P000001 (calibration ruler).jpg``` | Ext | Type | ＊ |
|  |  | jpg | IrfanView JPG File | 1，36 |
|  | $2 \text { 据 P000002.JPG }$ <br> 3 准：P000003．JPG | jpg | IrfanView JPG File | 1，6： |
|  |  | jpg | IrfanView JPG File | 1，6： |
|  | 4 数，P000004．JPG | jpg | IffanView JPG File | 1，4：$\equiv$ |
|  | 5 产P000005．JPG | jpg | IrfanView JPG File | 1，36 |
|  | 5 䉼 P P000006．JPG | jpg | IrfanView JPG File | 1，35 |
|  | 7 荧P000007．JPG | jpg | IrfanView JPG File | 1，3： |
|  | 8 瑗P000008．JPG | jpg | IffanView JPG File | 1，35 |
|  | 9 \％P000009．JPG | jpg | IrfanView JPG File | 1，38 |
|  | 10＊＊P000010．JPG | jpg | IrfanView JPG File | 1，38 |
|  | 11 受：P000011．JPG | jpg | IrfanView JPG File | 1，3； |
|  | 12.14 P000012．JPG | jpg | IffanView JPG File | 1，3¢ |
|  | 13 \％P000013．JPG | jpg | IrfanView JPG File | 1，46 |
|  | 14 ＊P000014．JPG | jpg | IrfanView JPG File | 1，4： |
|  | 15 \％P000015．JPG | jpg | IrfanView JPG File | 1，3！ |
|  | 16 衰 P000016．JPG | jpg | IrfanView JPG File | 1，3： |
|  | 17 415 P000017．JPG | jpg | IrfanView JPG File | 1，4． |
|  | 18 te P000018．JPG | jpg | IrfanView JPG File | 1，4 |
|  | 19 ＊14．P000019．JPG | jpg | IrfanView JPG File | 1，4！ |
|  | 20.4 | jpg | IrfanView JPG File | 1，4： |
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|  | 22 \％P000022．JPG | jpg | IrfanView JPG File | 1，4！ |
|  | 23.2 | jpg | IrfanView JPG File | 1，45 |
|  | 24.4 P000024．JPG | jpg | IrfanView JPG File | 1，4！ |
|  | 25 \％P000025．JPG | jpg | IrfanView JPG File | 1，4： |
|  | 36 栲 P P000026．JPG | jpg | IrfanView JPG File | 1，4 |
|  | 27 数 P000027．JPG | jpg | IrfanView JPG File | 1，48 |
|  | 28.4 | jpg | IrfanView JPG File | 1，38 |
|  | 29 相P P000029．JPG | jpg | IrfanView JPG File | 1，4； |
|  | 30 \％P000030．JPG | jpg | IrfanView JPG File | 1，48 |
|  | 31.15 P000031．JPG | jpg | IrfanView JPG File | 1，4t． |
|  | 1 III |  |  | ， |
|  | 130 items（99．72 GB free）tot | total：182．32 MB（ $191,173,196$ bytes） |  | ［adi（1）区 |

## SINGLE \& DUAL CAMERA SCANNERS: Starting calibration image (first page with a ruler placed on it)



## Right-hand page images

SINGLE CAMERA SCANNERS ONLY: Notice, if provided, the last image is the ending calibration page (i.e. page $x$ rescanned with a ruler on it after page x was scanned).


## SINGLE CAMERA SCANNERS ONLY: Ending calibration image



## Left-hand page images

SINGLE \& DUAL CAMERA SCANNERS: Notice, if provided, the first image is the calibration page (i.e. page 1 with a ruler on it before page 1 itself is scanned).

For single camera scanners this is the last page of the book with a ruler on it before the last page itself is scanned.


## Left-hand page images

SINGLE CAMERA SCANNERS ONLY: Notice, if provided, the last image is the ending calibration page (i.e. page 2 rescanned with a ruler on it after page 2 was scanned).


## Double click on script to launch it and show its window, set the processing options and click "Start."

"Single camera" and "Dual camera" affects how page numbering is performed and which scaling options are available.

Choose "Single camera" if you use a single camera scanner and scan the left hand pages by turning the book upside down and starting at the last page.

Choose "Page numbering only" if you only want to number the left hand and right hand image files so they interleave correctly.

Choose "Have calibration images" if you scanned them (as above: 4 calibration images for camera scanners; 2 calibration images for dual cameras scanners.

Choose "Downscale to smallest image" or "Upscale to largest image" to downscale or upscale images to match the smallest or largest image respectively.

Choose "Multi-processor" for faster processing. Note, with multi-processing your computer response may slow down during processing.

Click "Choose left directory" and "Choose right directory" to indicate where the image files are located. Generated output will be created under subfolders of each. Set only one directory to process images from one side of the book.

Scaling options available for "Single camera" scanners or "Dual camera" scanners are explained below. Pixel counts are the number of pixels 6 " the ruler takes on the various calibration pages measured in an image editor (Irfanview, Photoshop, etc.).

Once the options are set, click "Start" and you can monitor the processing in the "Progress" area.

Image Scale and/or Page Numbering Script Instructions

Book Scanner Images: Scaling and Numbering -- V2.3
( Single camera

- Dual camera

Pixel counts for first//ast page scaling for single camera scanners (i.e. TIFLIC style scanners with variable platen/camera distance)

- Downscale to smallest image

Upscale to largest image

- Single processor

Multi-processor

First page pixel count Last page pixel count

## Progress

Choose left directory
-
(O) Scaling and page numbering

Page numbering only

## No cabran

No calibration imagesChoose right directory

Pixel counts for left/right hand zoom scaling adjustment

Left hand pages pixel count
Right hand pages pixel count


## "Single Camera" allows one or both scaling options

- Use first/last page scaling if your scanner does not have a fixed platen/camera distance, but it varies by the thickness of the book, from start to finish (i.e. like TIFLIC style scanners). The pixel count for first page (closest to the camera and the largest scale) must be greater than the pixel count for the last image (furthest away from the camera and the smallest scale).
- Use left/right hand zoom scaling if the camera's zoom setting for left hand pages does not exactly match the zoom setting for the right hand pages.

Book Scanner Images: Scaling and Numbering -- V2.3


Progress

## "Dual Camera" only allows left/right scaling

- Use left/right hand zoom scaling if the camera's zoom setting for left hand pages does not exactly match the zoom setting for the right hand pages.
(H) Book Scanner Images: Scaling and Numbering -- V2.3
(O) Single camera:
- Dual camera
- Scaling and page numbering
( Have calibration images
- Downscale to smallest image
- Single processor

O No calibration images
Upscale to largest image
Multi-processor


Progress

## Processing right-hand pages

(H) Book Scanner Images: Scaling and Numbering -- V2.3

- Single camera
- Scaling and page numbering
- Have calibration images
- Downscale to smallest image
( Single processor
Dual camera
Page numbering only
No calibration images
Upscale to largest image
- Multi-processor


## Choose left directory

$\mathrm{E}: \backslash z$-Large Data $\backslash$ Scans $\backslash$ Scale test $\backslash$ Left

Pixel counts for first/ast page scaling for single camera scanners (i.e. TIFLIC style scanners with variable platen/camera distance)

```
First page pixel count
Last page pixel count
```



```
1792
```

Choose right directory
$\mathrm{E}: \ \mathrm{z}$-Large Data $\backslash$ Scans $\backslash$ Scale test \Right

Pixel counts for left/ight hand zoom scaling adjustment
Left hand pages pixel count Right hand pages pixel count

## Progress

PROCESSING RIGHT HAND PAGES - PRESS ESCAPE TO ABORT

Processed: 30/128 - Scale: 97.580762 - PAGE\#0059 - P000031.JPG

## Processing left-hand pages

H Book Scanner Images: Scaling and Numbering -- V2.3

## - 回 <br> $-x$

- Single camera
- Scaling and page numbering
( Have calibration images
- Downscale to smallest image
- Single processor

Dual camera

- Page numbering only

O No calibration images
Opscale to largest image
O Multi-processor

```
Choose left directory
\(\mathrm{E}: \backslash z\)-Large Data \(\backslash\) Scans \(\backslash\) Scale test \(\backslash\) Left
```

Pixel counts for first/ast page scaling for single camera scanners (i.e. TIFLIC style scanners with variable platen/camera distance)

| First page pixel count | 1850 |
| :--- | :--- |
| Last page pixel count | 1792 |

Last page pixel count
1792

Choose right directory
$\mathrm{E}: \ \mathrm{z}$-Large Data $\backslash$ Scans $\backslash$ Scale test \Right

Pixel counts for left/right hand zoom scaling adjustment
Left hand pages pixel count
Right hand pages pixel count

## Progress

PROCESSING LEFT HAND PAGES - PRESS ESCAPE TO ABORT

Processed: 97/128 - Scale: 99.234731 - PAGE\#0064 - P000228.JPG

## SAMPLE SINGLE CAMERA OUTPUT：Starting right－hand pages，renumbered and scaled．Note the ODD page numbers pre－pended to start of file name

|  |  |  |  | 43 D：1Scale test\Right\right－adjusted－XYplorer＠XYplorer．ini－v11．50－（Academic） |
| :---: | :---: | :---: | :---: | :---: |
| Eile Edit View Go Favorites User Scripting Iools Panes Tabsets Window Help |  |  |  |  |
| D： 1 Scale test｜RightVight－adjusted \} |  |  |  |  |
|  | Did D：\Scale test\Right\right－adjusted |  |  |  |
|  | \＃Name | Ext | Type | ＊ |
|  | 1 参PPAGE\＃0001－P000002．JPG | jpg | Irfanview JPG File | 1，6： |
|  | 2 \％ 4 PAGE\＃0003－P000003．JPG | jpg | IrfanView JPG File | 2，0¢ |
|  | 3 ＊12PAGE\＃0005－－P000004．JPG | jpg | IrfanView JPG File | 1，95 |
| $\square$ Data（D：） | 4 ＊PAGE\＃0007－P000005．JPG | jpg | Iffanview JPG File | 2，1i引 |
| \＄RECYCLE．BIN | 5 ＊PAGE\＃0009－P000006．JPG | jpg | Irfanview JPG File | 2，2 |
| 1 Data | 5 ＊／PAGE\＃00 1－－Poood 7, JPG | jpg | IrfanView JPG File | 2，3： |
| －3．Junk |  | jpg | Irfanview JPG File | 2，3： |
| Scale test |  | jpg | Irfanview JPG File | 2，3： |
| Left | 9 ＊PAGE \＃0017－Pdp0010．JPG | jpg | Irfanview JPG File | 2，3： |
| 15 left－ad | 10 ＊＇PAGE\＃0019－P000011．JPG | jpg | IrfanView JPG File | 2，3： |
| Right | 11 爰 PAGE\＃0021－P000012．JPG | jpg | IrfanView JPG File | 2，3： |
| right－adjusted | 12.4 PPAGE\＃0023－P000013．JPG | jpg | Irfanview JPG File | 2，3： |
| stem Volume Information | 13.14 PAGE\＃0025－P000014．JPG | jpg | Irfanview JPG File | 2，36 |
| ${ }^{+}{ }^{\text {a }}$ Reference（E：） | 14 4e PAGE\＃0027－P000015．JPG | jpg | IrfanView JPG File | 2，3： |
| ＋${ }^{\text {a }}$ DVD Drive（ F ： | 15.1 PAGE\＃0029－－P000016．JPG | jpg | Irfanview JPG File | 2，3： |
| ${ }^{ \pm} \pm$DVD Drive（G：） | 16 樓PPAGE\＃0031－P000017．JPG | jpg | Irfanview JPG File | 2，35 |
| ${ }^{+1}$ Local Disk（ $\mathrm{N}:$ ） | 17.4 PAGE\＃0033－P0000 18．JPG | jpg | Irfanview JPG File | 2，36 |
| ¢ ¢ Network | 18＊${ }^{\text {U }}$ PAGE\＃0035－P000019．JPG | jpg | IrfanView JPG File | 2，3！ |
| 9．Recyde Bin | 19.1 PAGE\＃0037－P000020．JPG | jpg | Irfanview JPG File | 2，3： |
|  | 20.14 PAGE\＃0039－－P000021．JPG | jpg | Irfanview JPG File | 2，3： |
|  | 21.2 PAGE\＃0041－P000022．JPG | jpg | IrfanView JPG File | 2，46 |
|  | 22.1 PAGE\＃0043－P000023．JPG | jpg | IrfanView JPG File | 2，46 |
|  | 23.4 PAGE\＃0045－－P000024．JPG | jpg | IrfanView JPG File | 2，46 |
|  | 24 址 PAGE\＃0047－P000025．JPG | jpg | IrfanView JPG File | 2，3： |
|  | 25.4 PAGE\＃0049－．P000026．JPG | jpg | IrfanView JPG File | 2，38 |
|  | 26 ＊PAGE\＃0051－P000027．JPG | jpg | IrfanView JPG File | 2，4\％ |
|  | 27 \％PAGE\＃0053－－P000028．JPG | jpg | IrfanView JPG File | 2，3＊ |
|  | 26.14 | jpg | IrfanView JPG File | 2，4： |
|  | 29.1 PAGE\＃0057－P000030．JPG | jpg | IrfanView JPG File | 2，4： |
|  | 30 ＊PAGE\＃0059－P000031．JPG | jpg | IrfanView JPG File | 2，4： |
|  | 31 ¢PAGE\＃0061－－P000032．JPG | jpg | Irfanview JPG File | 2，4： |
|  | 1 $\square$ III | － |  | ， |
|  | 128 items（ 99.13 GB free）total： 300 | MB（31 | 28 bytes） | Lad ${ }^{\text {d }}$－ |

## SAMPLE SINGLE CAMERA OUTPUT: Ending right-hand pages, renumbered and scaled. Note the ODD page numbers pre-pended to start of file name



## SAMPLE SINGLE CAMERA OUTPUT：Starting right－hand pages，renumbered and scaled．Note the EVEN page numbers pre－pended to start of file name．

| 4 D：\Scale test\Left\left－adjusted－XYplorer＠XYplorer．ini－v11．50－（Academic） |  |  |  | $\square$－国 |
| :---: | :---: | :---: | :---: | :---: |
| Eile Edit View Go Favorites User Scripting Iools Panes Tabsets Window Help |  |  |  |  |
|  |  |  |  |  |
|  | Did D：｜Scale test\Left\left－adjusted $+\ldots$ |  |  |  |
|  | \＃Name 引 Ext Type A |  |  |  |
|  |  | jpg | IrfanView JPG File | 2，2： |
|  |  | jpg | IffanView JPG File | 2，35 |
|  | 3 参PAGE\＃0006－P0002J／JPG | jpg | IrfanView JPG File | 2，1c |
|  | 4 the PAGE\＃0008－P000256．JHG | jpg | Iffanview JPG File | 2，2：$\equiv$ |
|  | 5 参PPAGE\＃0010－－P4p0255．JPG | jpg | Irfanview JPG File | 2，4 |
|  | 5． 4 \％PAGE\＃0012－P000254．JPG | jpg | IrfanView JPG File | 2，45： |
|  | 7 参 PAGE\＃0014－P000253．JPG | jpg | IrfanView JPG File | 2，4： |
|  | 8＊1／PAGE\＃0016－P000252．JPG | jpg | Irfanview JPG File | 2，5： |
|  | 9 ＊1／PAGE\＃0018－－P000251．JPG | jpg | Irfanview JPG File | 2，4； |
|  | 10 ＊${ }^{\text {\％}}$ PAGE\＃0020－P000250．JPG | jpg | IrfanView JPG File | 2，56 |
|  | 11 椇PAGE\＃0022－P000249．JPG | jpg | IrfanView JPG File | 2，46 |
|  | 12 㭳PPAGE\＃0024－P000248．JPG | jpg | IrfanView JPG File | 2，45 |
|  | 13 ＊1．PAGE\＃0026－－P000247．JPG | jpg | IrfanView JPG File | 2，4 |
|  | 14 ＊／PPAGE\＃0028－P000246．JPG | jpg | Irfanview JPG File | 2，3： |
|  | 15.1 PAGE\＃0030－－P000245．JPG | jpg | IrfanView JPG File | 2，56 |
|  | 16 址PAGE\＃0032－P000244．JPG | jpg | IrfanView JPG File | 2，45 |
|  | 17.1 PAGE\＃0034－－P000243．JPG | jpg | IrfanView JPG File | 2，5 |
|  | 18＊PAGE\＃0036－P000242．JPG | jpg | IrfanView JPG File | 2，5： |
|  | 19 KPAGE\＃0038－－P000241．JPG | jpg | IrfanView JPG File | 2，46 |
|  | 20.4 PAGE\＃0040－P000240．JPG | jpg | IrfanView JPG File | 2，5\％ |
|  | 21.15 PAGE\＃0042－P000239．JPG | jpg | Irfanview JPG File | 2，4； |
|  | 22.4 PAGE\＃0044－P000238．JPG | jpg | IrfanView JPG File | 2，45 |
|  | 23.14 PAGE\＃0046－P000237．JPG | jpg | IrfanView JPG File | 2，5 |
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|  | 27 ＊PAGE\＃0054－P000233．JPG | jpg | IrfanView JPG File | 2，48 |
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|  | 30 ＊PAGE\＃0060－P000230．JPG | jpg | IrfanView JPG File | 2，5： |
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|  | 128 items（99．13 GB free）total： | tal： 298.84 MB （ $313,360,381$ bytes） |  |  |

## SAMPLE SINGLE CAMERA OUTPUT: Ending right-hand pages, renumbered and scaled. Note the EVEN page numbers pre-pended to start of file name



# SAMPLE SINGLE CAMERA OUTPUT: All scaled and renumbered pages moved to a single directory with right (odd) and left (even) pages interleaved correctly. 



## SAMPLE SINGLE CAMERA OUTPUT: Comparison of facing pages at one end of book BEFORE first/last image scaling

Page 2 was one of the LAST even pages scanned, so was the furthest from the camera and thus appears small.

Page 3 was one of the FIRST odd pages scanned, so was closest to the camera and thus appears large.


## A SHORT HISTORY OF THE ISM

Ismailism /named after al-Sadiq's eldest son 1 much popular support among different social st The carly success of the Ismaili da'wa or m 297/909 in the establishment of an Ismaili Fatimid caliphate, in North Africa. The Ismaih new phase of their history. The revolutionary : ismailis, directed by a hereditary line of central in the foundation of a state, in which the Ismail as caliph, rivalling the Abbasid caliph in Baghda of this first Shi't caliphate represented a seri authority of the Abbasid caliph, the official Islam, and the position of the Sunni 'ulama' Abbasids' authority and defined Sunnism as the Islam. The Ismailis, who as Imami Shri Muslim own interpretation of the Islamic message, had n vable alternative to Sunni "orthodoxy"
The Fatimid period was the "golden age" of ismaini imam ruled over a vast empire and ismal ture atained therr summit. The recovery of ismail Farimid phase of their history it was also dur century, designated as the "Ismaili century" Massignon | $1888_{3-1962)}$ that the Ismails con (Brethren of Purityl produced their encyclupate reflecting the contemporary state of knowledgi and a pluralistic perception of religion and phil time, dd'ts of the Iranian lands synthesised their ent philosophical traditions, giving rise to a di tradition labelled as "philosophical Ismailism Other da'is, living in Arab lands and within Fat duced treatises on a variety of exoteric and e: developing the science of ta'wil or esoteric ext the hallmark of Ismaili thought. By the second century, the Ismailis had indeed made import Islamic thought and culture.

A new phase in Ismail history was initiate Fatimid cahph-imam al-Mustansir in $487 /$ Io Nizan-Mustali schism in ismailism, The succe was disputed between his eldest son and heir-ded youngest son Ahmad who was acrually installed he rite of al-Musta in billah by the all-power Add. Subsequently, Nizar rose in revolt to ass was defeated and executed in $488 / 1095$. As a It
the an community of the gergnanently split into two The Myya.

The Mustali ler tha themselves arn alter the death of al- M Amir in 524/1i30. The Hafizi isma Fatimids as their imams, disappeare dynasty in $567 / 1171$. The Tayyibl is est imam atter al-Amir, found ap The Tayyibis were henceforth led by century, the Tayyibis the Dadr and Sulaymanr factions over ion the office of the dal. By that ti locally as Bohras and belonging main greatly outnumbered their Sulayman Tayyibis in general maintained the in the fatimid ismallis, as well as a g of that period. The leamed Tayyibt do ated a considerable volume of Ismai subdivisions in their community an Tayyibis account for a minority of the In contrast to the Tayyibi ismail political prominence within Saljuq where they had a state of their own. mountain fortress of Alamut in non years unbl it collapsed under the ons 55/1256. Hasan \$abbah (d. 518/112 evolutionary stratcgy against the Sal political objective, but he did succeed ing the independent Nizărì da'wa scattered from Syria to eastern Persia After Hasan Sabbah and his next da'is and huijas, the imams' chief rep hemselves emerged at Alamūt to leac The Nizari state of the Alamut perio and five imams, generally referred to Persian sources. Preoccupied with rev tantly living in hostile surroundings substantial literature. Their do'is we ommanders and governors of fortres ians. Nevertheless, the Nizarís did m laborating their teachings in respons he Alamat period.

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# SAMPLE SINGLE CAMERA OUTPUT: Comparison of facing pages at one end of book AFTER first/last image scaling. Both pages have the same scale. 



Ismailism inamed after al-\$adiq's eldest son年h popular support among ditferent social s The early success of the Ismaili da'wa or I Fatimid caliphate, in Nort Africa The Ismai new phase of their history. The revolutionary Ismailis, directed by a hereditary line of centra in the foundation of a state, in which the Isma保, rivalling the Abhasid caliph in Baghd this first Shi'I caliphate represented a ser Abbasids' authority and defined Sunnism as thc The ismallis, who as imami Shir Mustin wn interpretation of the Islamic message, had viable alternative to Sunni "orthodoxy".

Therimid penod was che golden age o smaili imam ruled over a vast empire and Isme ather summie. herecovery of of Fais atests to the nich Therary hertage of to century, designated as the "Ismaili century Massignon (t883-t962),' that the ismaili-conn |Brethren of Purity) produced their encyclopat ang contemporary state of kowled and a pluralisuc perception of religion and phi time, $d a^{\prime}$ is of the Iranian lands synthesised thei phiosophical traditions, giving rise do a d radition labelled as "philosophical Ismallist duced treatises on a variety of exoteric and developing the science of ta'wil or esoteric ex the the or deed made impor slamic thought and culture

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The Musta'lt Ismailis themselves split
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Hasan Sabbah and his next two $d^{\prime}$ 's and hullas, the imams chief represen themselves emerged at Alamut to lead their The Nizari state of the Alamut period was and five imams, generally referred to as th Persily livine in hostile sumoundings, the i rantly hiving in hosule surroundings, the mmanders and governors of fortresses ra gians. Nevertheless, the Nizaris did maintai the Alamut period.


[^0]:    $575 \times 907 \times 8 \mathrm{BPP} \quad 2 / 11 \quad 100 \% \quad 390.28 \mathrm{~KB} / 51123 \mathrm{~KB} \quad 4 / 7 / 2014 / 16: 06: 14$

