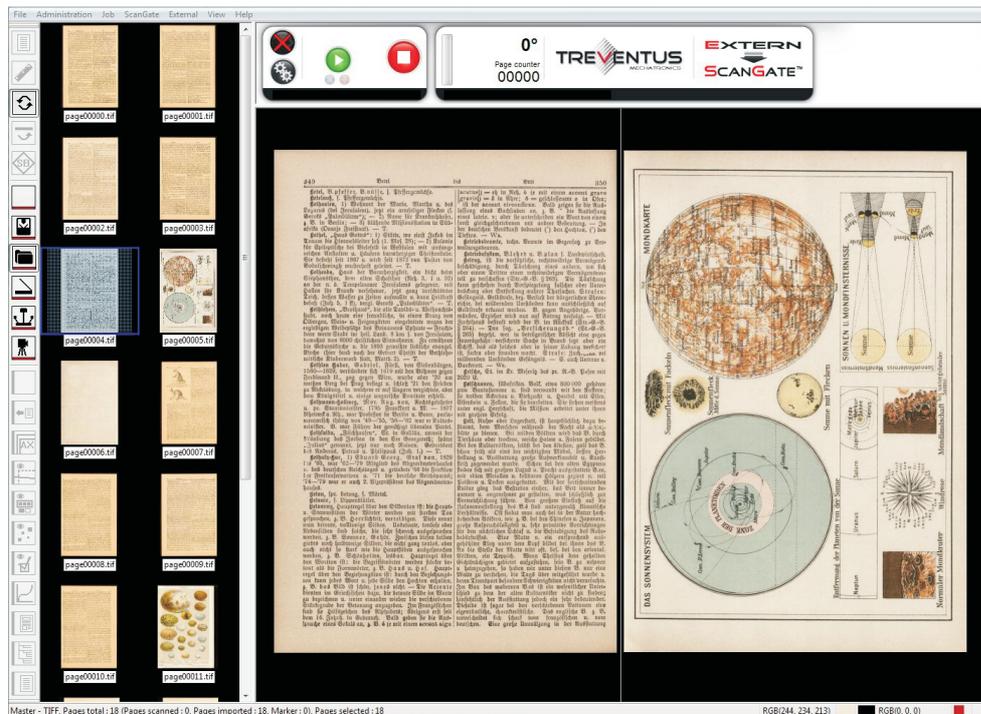


SCANGATE™

Capturing, Processing & Management Software

Advantages

- Easy and intuitive
- Meta data interface
- Applicable for different scanner hardware
- Real-time preview for fast quality control
- Comprehensive image processing functions



... with integrated workflow module

BENEFITS

ScanGate™

... the most powerful software **to accelerate** your mass digitization projects.

- Easy integration in existing digitization environments
- Applicable for different scanner hardware
- Meta data editor
- OCR interface
- Available in different languages

Efficient & Economic / High productivity

... especially developed for **mass digitization**.

- Fully automatic and fast image processing functions
- Real-time preview
- Reprint functions
- Efficient and simple job administration



Integrated workflow module

... **to automate** local image processing, user and system tasks exact to your needs.

- Create your own individual workflows
- Automated batch processing & image treatment
- Comprehensive image import functions
- Fully compatible with the **ScanFlow™ Professional*** software environment

* for more information visit www.treventus.com

BENEFITS

ScanGate™ user interface

Scanning interfaces
(optional)



- ScanRobot®
- Hotfolder interface
- TWAIN-interface
- Bookeye scanners
- Canon-digicams

Meta data panel

Control panel

Process state

The screenshot displays the ScanGate software interface. On the left is a 'Meta data panel' with a grid of thumbnails labeled 'page0000.tif' through 'page0011.tif'. The top center features a 'Control panel' with buttons for scan, stop, and refresh, along with a 'Page counter' showing '0°' and '0000'. The top right shows the 'Process state' with logos for TREVENTUS, EXTERN, and SCANGATE. The main window displays two pages of a scanned document, including a globe and technical diagrams. At the bottom, status bars show 'Master - TIFF, Pages total : 18 (Pages scanned : 0, Pages imported : 18, Marker : 0), Pages selected : 18' and 'RGB(244, 224, 213) RGB(0, 0, 0)'.

Process panels

Thumbnails

Main window

I. META DATA HANDLING

Bibliographic meta data

Bibliographic metadata	
DUBLIN CORE	
TITLE	ScanRobot Manual
CREATOR	Christoph Bacher
SUBJECT	About an automatic book scanner
DESCRIPTION	Explains the function and hardware of the ScanRobot..
PUBLISHER	TreVentus Mechatronics
CONTRIBUTOR	
DATE	2012.05.01
TYPE	Paperback
...	Your variable

- Dublin core
- Unlimited input fields
- All fields customizable

DATE	2012.05.01
TYPE	Paperback
...	Your variable

Workflow control - meta data

Bibliographic metadata	
PROJECT NAME	Project2
ORDER NAME	Order 123
JOB ID	JOB_012345
BOOK ID	ISBN1234567890
COLOR DEPTH CONVERSION	Original
OUTPUT IMAGE FORMATS	<input type="radio"/> Jpeg <input checked="" type="radio"/> Tif <input type="radio"/> Png
OCR	<input checked="" type="checkbox"/> OCR
OCR LANGUAGES	Deutsch English العربية Español

- Project metadata
- Several Id's
- Colour depth conversion
- Image output formats
- OCR settings

PROJECT NAME	Project2
ORDER NAME	Order 123
JOB ID	JOB_012345
BOOK ID	ISBN1234567890

Document delivery - meta data

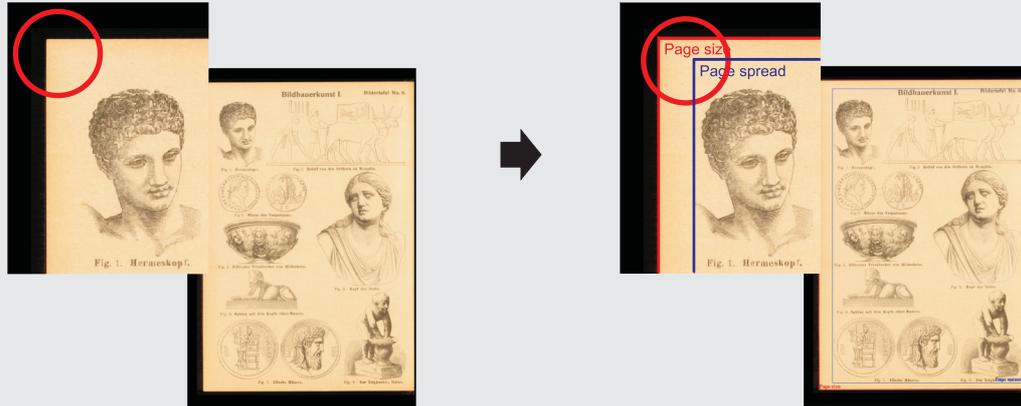
Bibliographic metadata	
JOB_012345	
BOOK ID	
CUSTOMER ID	ID012345
CUSTOMER NAME	Hans Meier
CUSTOMER EMAIL	Hans.Meier@biabla.com
FTP SERVER UPLOAD	<input checked="" type="checkbox"/> FTP Server Upload
FTP SERVER	ftp.treventus.com
CUSTOMER EMAIL NOTIFICATION	<input checked="" type="checkbox"/> Customer email notification
REMOVE DOCUMENTS FROM FTP SERVER AFTER	2 weeks

- Individual barcode support
- Customer information
- Server upload support
- Automatic backup strategy
- Input fields customizable

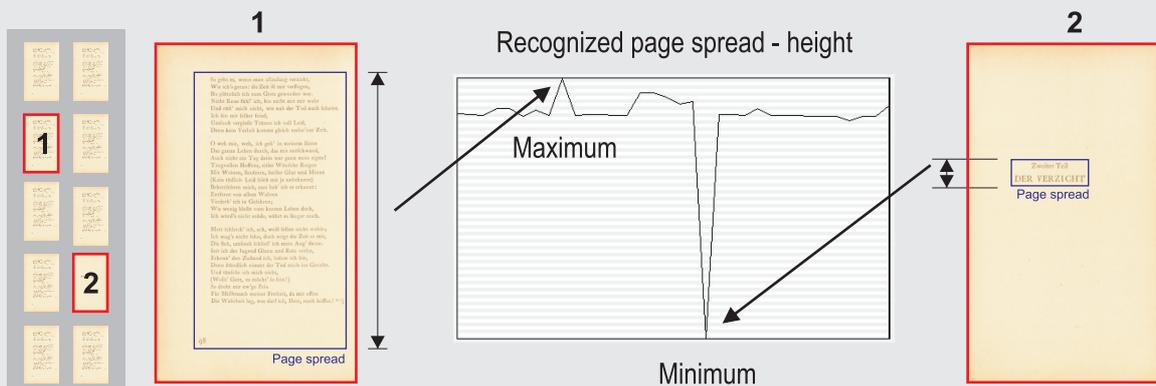
Bibliographic metadata	
JOB_012345	
BOOK ID	
CUSTOMER ID	ID012345

II. RECOGNITION FUNCTIONS

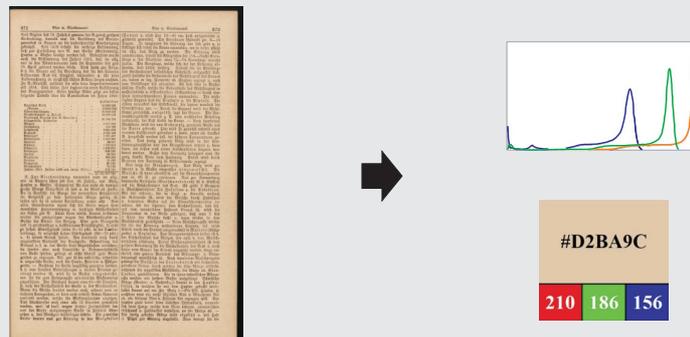
Automatic border recognition



Border evaluation - e.g. page spread etc.



Automatic background color recognition

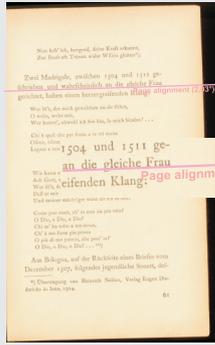


III. IMAGE SHAPE FUNCTIONS

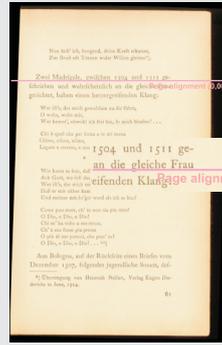
Deskewing



Skew not calculated



Page skew = 2.03°



Page deskewed → 0.00°

Cropping



Page spread recognized



Cropping rectangle
5mm safety margin added



Cropped

Extrapolation



No extrapolation



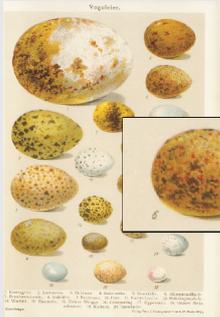
Extrapolation preview



Extrapolation with
background color

IV. IMAGE OPTIMIZATION FUNCTIONS

Automatic background removing

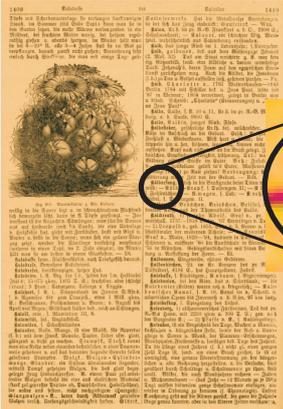


Original



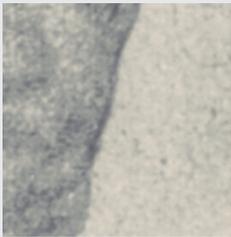
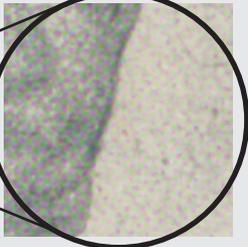
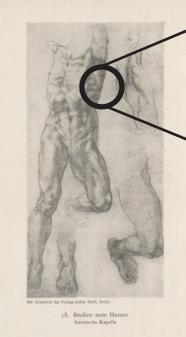
- Image is unchanged
- only background is removed

Automatic achromatism reducing



Achromatism is removed

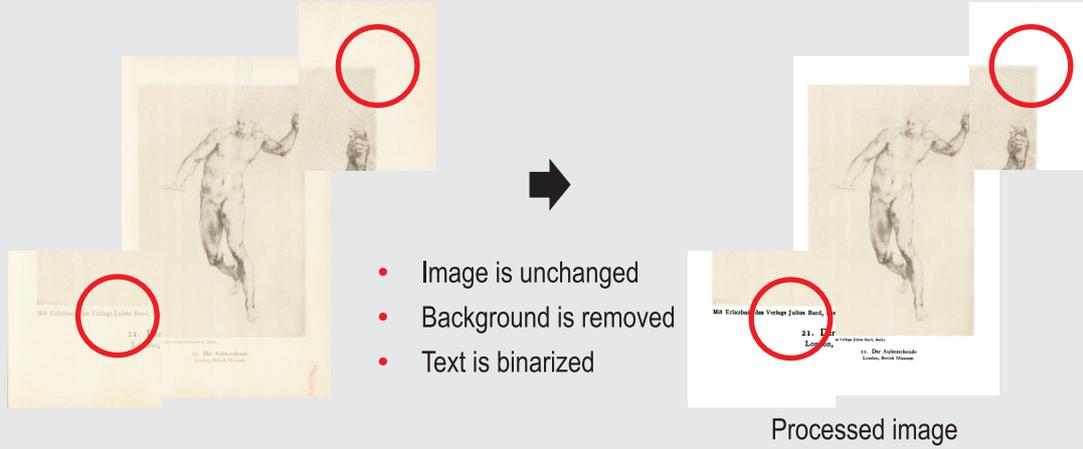
Automatic Moiré effect removing



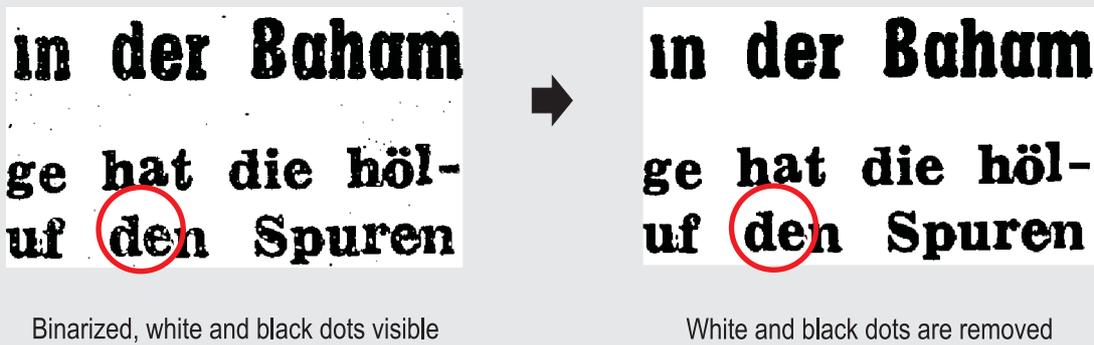
Moiré effect is removed

V. REPRINT FUNCTIONS

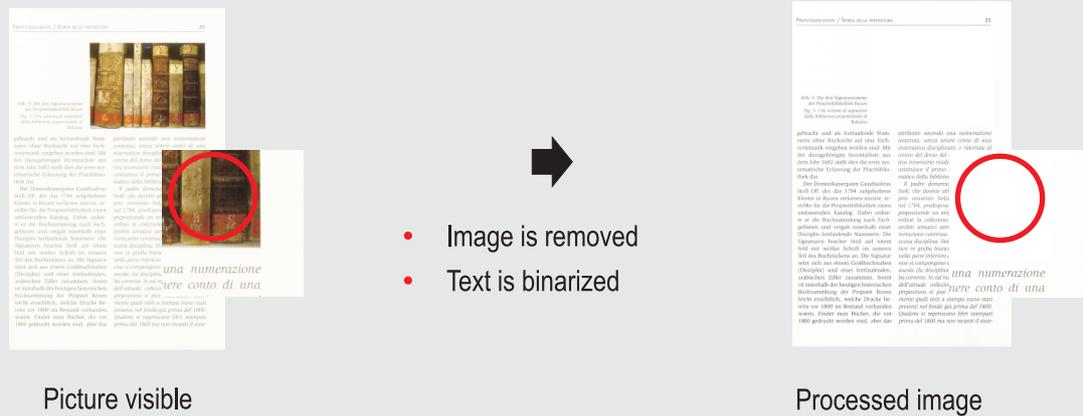
Area protection



Automatic despeckling



Area removing (Copyright issue)



VI. IMAGE OVERLAY FUNCTIONS

Adding ruler



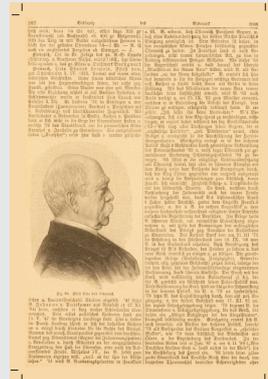
Ruler added

Adding watermark



Watermark added

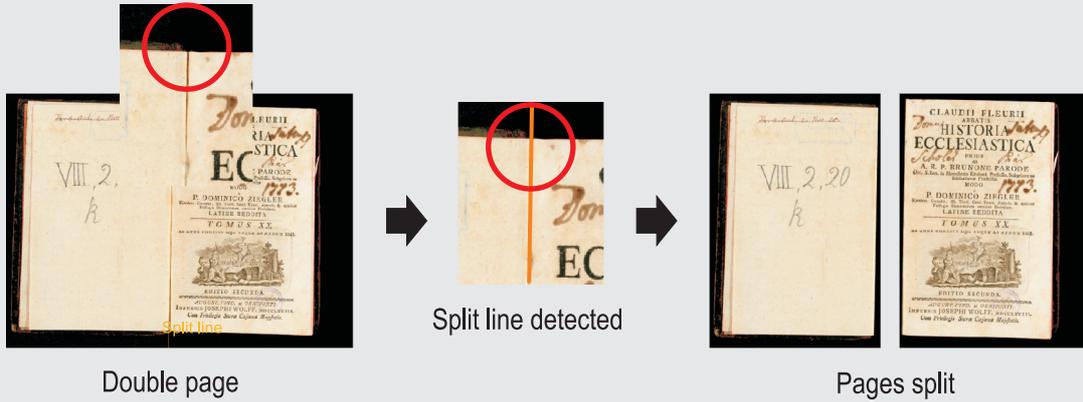
Adding trim mark



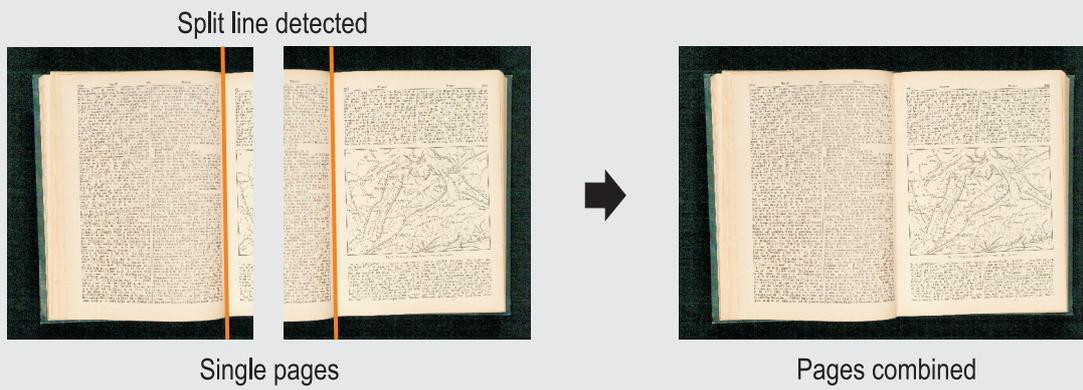
Trim marks added

VII. PLANETARY SCANNER FUNCTIONS

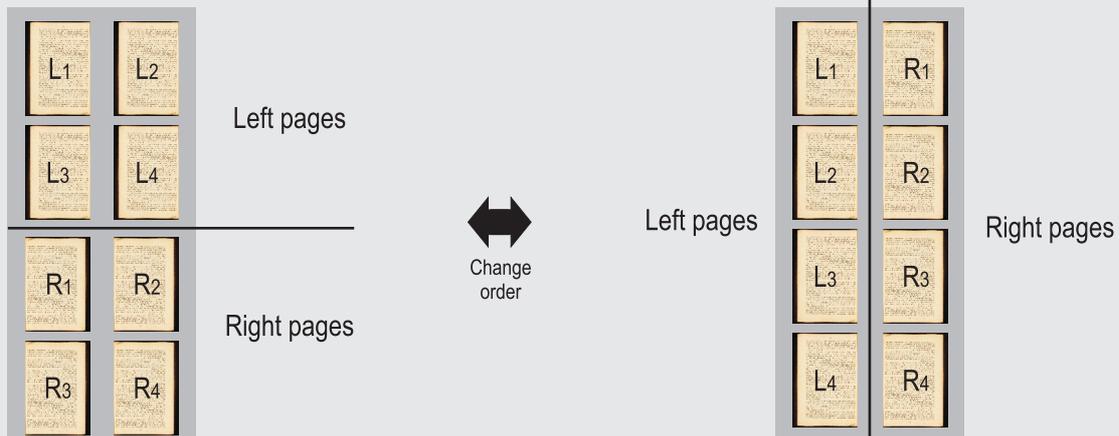
Automatic split line detection and page splitting



Page combining



Interlink & re-interlink pages ...for scanners that scan only single pages



VIII. GENERAL FUNCTIONS

Image scaling

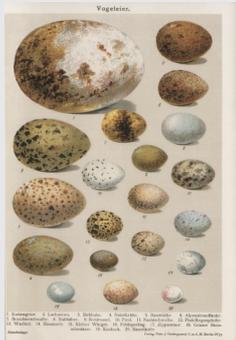


Scaled to predefined height



Scaled to predefined width

Color management - ICC profile handling

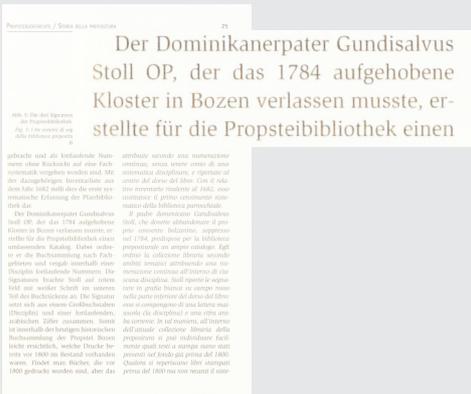


No ICC profile



ICC profile embedded

OCR* - searchable pdf



*Optical Character Recognition (optional third party product)

Searchable text

IMAGE PROCESSING EXAMPLE 1

Used hardware: ScanRobot®

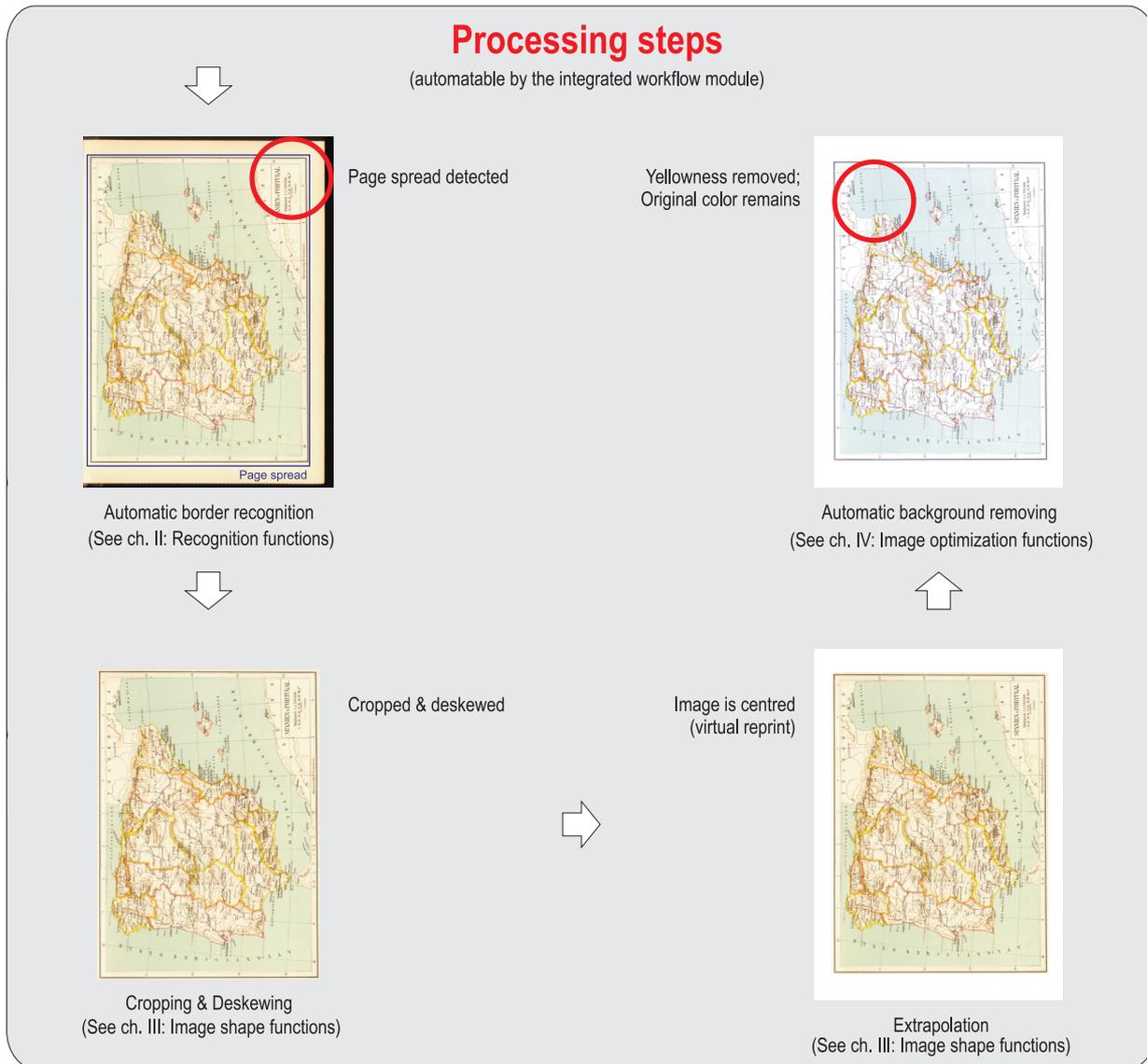
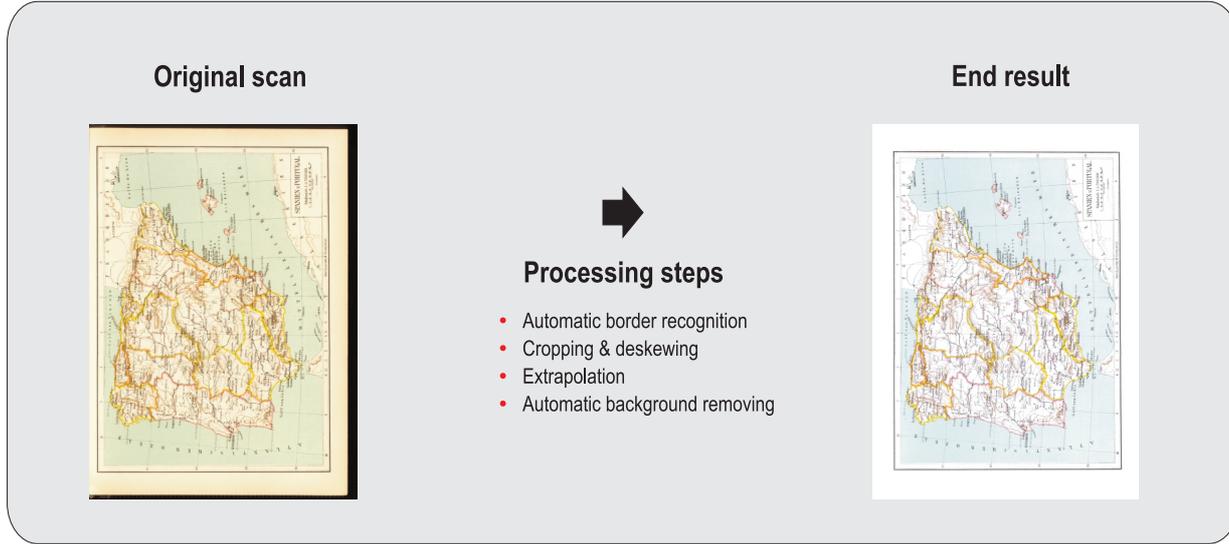


IMAGE PROCESSING EXAMPLE 2

Used hardware: planetary scanner

Original scan



End result



➔

Processing steps

- Page splitting
- Automatic border recognition
- Cropping & deskewing
- Automatic background removing

Processing steps
(automatable by the integrated workflow module)

Pages split



Page splitting
(See ch. VII: Planetary scanner functions)

Dark area removed



Yellowness removed
Original color remains



Automatic background removing
(See ch. IV: Image optimization functions)

Page spread detected
Book block excluded



Automatic border recognition
(See ch. II: Recognition functions)

Cropped & deskewed



Cropped & deskewed



Cropping & deskewing
(See ch. III: Image shape functions)

SPECIFICATIONS

I. Meta data handling

- Bibliographic meta data*
- Work flow meta data*
- Meta data for document delivery*

*customizable

II. Recognition functions

- Automatic border recognition
- Border evaluation (e.g. Page size, page spread, page alignment, distances,...)
- Automatic background color recognition

III. Image shape functions

- Deskewing
- Cropping
- Extrapolation

IV. Image optimization functions

- Automatic background removing
- Automatic achromatism reducing
- Automatic Moiré effect removing

V. Reprint functions

- Area protection
- Automatic despeckling
- Area removing

VI. Image overlay functions

- Adding rule
- Adding watermark
- Adding trim mark

VII. Planetary scanner functions

- Automatic split line detection
- Page splitting
- Page combining
- Interlink & re-interlink pages

VIII. General functions

- Image scaling
- Color management - ICC profiles
- OCR interface (optional)

IX. Standard image functions

- Format conversion
- Resizing
- Binarization
- Brightness / contrast adaption
- Unsharp masking
- Page rotation / flipping

X. Structure functions

- One dimensional structuring of the pages (groups)
- Group naming

XI. Optionals

- Scanner interfaces
- ScanFlow™ PROFESSIONAL

XII. Copy & uploading functions

- Image copying / uploading
- Copying / uploading of pdf/a², DjVu, pdf (incl. OCR layer)², XML, doc², rtf², csv², plain text files²
- Meta data copying / uploading

XIII. Storage formats¹

- jpg, jpg2000, tiff, tiff G4, png, gif, bmp,
- pdf/a², DjVu, pdf (incl. OCR layer)², XML, doc², rtf², csv², plain text²

¹ All formats can be stored simultaneously.

² In combination with the OCR software (third party product).

SCANGATE™

World Wide References



Don Juan Archiv Wien, AUSTRIA
Brazilian Institute of Agronomic Research, BRAZIL
University of Prince Edward Island, CANADA
AGN, National Archives of COLOMBIA
NKP, National Library of CZECH REPUBLIC
Bavarian State Library, GERMANY
National University of Educational Planning & Administration, INDIA
Trinity College Library, IRELAND
Meteo Operation Center, JAPAN
Nazarbaev University, KAZAKHSTAN
Ministry of Awqaf and Islamic Affairs, KUWAIT
LNB, National Library of LATVIA
Mongol-Korea Technical College, MONGOLIA
GMS Digitaliseert Service Provider, NETHERLANDS
Nasjonalbiblioteket, National Library of NORWAY
Academy of Science Library, POLAND
Siberian Federal University, RUSSIA
King Fahd Private Library, SAUDIA ARABIA
Slovak National Library, SLOVAKIA
Kungliga biblioteket, National Library of SWEDEN
ETH Library of Zürich, SWITZERLAND
Ukrainian Institute of Industrial Property, UKRAINE
Archive Quest Service Provider, UNITED KINGDOM
The Getty Research Institute, UNITED STATES
Vietnam Institute of Social Sciences Information, VIETNAM

... and many more ...

Alphabetical order by countries.

PRODUCT FAMILY

SCANROBOT® 2.0 MDS
MASS DIGITIZATION SYSTEM

Automatic scanning
fast and gentle up to 2.500 pages / hour
Semi-automatic scanning
for most gentle scanning of fragile books
Manual scanning
covers, spine, fold outs, ...



UNIQUE PATENTED PRISM TECHNOLOGY

TREVENTUS

SCANGATE™
Capturing, Processing & Management Software

Advantages

- Easy and intuitive
- Step size reduction
- Applicable for different scanner hardware
- Real time preview for fast quality control
- Comprehensive processing functions



... with integrated workflow module

TREVENTUS

SCANFLOW™
Professional
Workflow & Management Software



Advantages

- Increasing the throughput & output quality
- Efficient organization of staff, scanning hardware, data and books
- Minimization of human interaction and errors
- Fast quality control functions

... let the software work

TREVENTUS

NAINUWA™
open your Mind

Dynamic Digital Collection Viewer

Advantages

- Innovative image stitching
- Flexible search and sort functions
- Fast and efficient image loading
- Adaptive scanning
- Ergonomic view handling
- Browser based application



TREVENTUS

CONSULTING SERVICE
support at any stage

TREVENTUS, your...

- Checklist sites for your digitization project
- Tailor made software used for your needs
- Tailor made software used for your needs
- Equipment and software purchase assistance
- Step by step on-site help

BUILD YOUR DIGITAL LIBRARY!

Digital Library System	Storage
Analysis	Documentation
OCR	Processing
Quality check	Scanner hardware
Backup	Workflow management
Book labels	Scanning
Plan	Organize

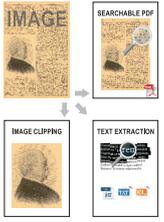
... ask us for advice

TREVENTUS

TREVENTUS
OCRSOLUTIONS
Software for automated text recognition

Advantages

- Highly automated: no operator interaction needed
- Direct integration into digitization workflow
- Various OCR packages for individual project sizes and requirements
- Entire solution from one supplier



TREVENTUS

MARCH 2015
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Awards for TREVENTUS

Winner of the European ICT Grand Prize
Innovation prize of the Theodor Kery foundation
1st place in Genius Innovation Award

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