VideometerLab for Heritage Imaging

Papyrus roll fragments

We measure what you see – and beyond

ABOUT US

Videometer

- Spectral imaging company
- Founded 1999
- Products
  - Lab instruments,
  - Turn-key in-line systems, and
  - R&D projects
- App. 700 imaging R&D projects since 2000
- In-line 24/7 spectral imaging since 2002
- Based in Copenhagen, Denmark
- Partnerships worldwide

OUR LEGACY

1999

The beginnings

Videometer was co-founded by Jens Michael Carstensen and 7-Technologies in 1999, as a spin-off from the Technical University of Denmark. The first patent application was filed.

2000

Project-based

In 2000, Videometer began its project-based activity. During these years, the company's main focus was set on custom-made vision systems for in-line and on-line quality control.

2018

A new era

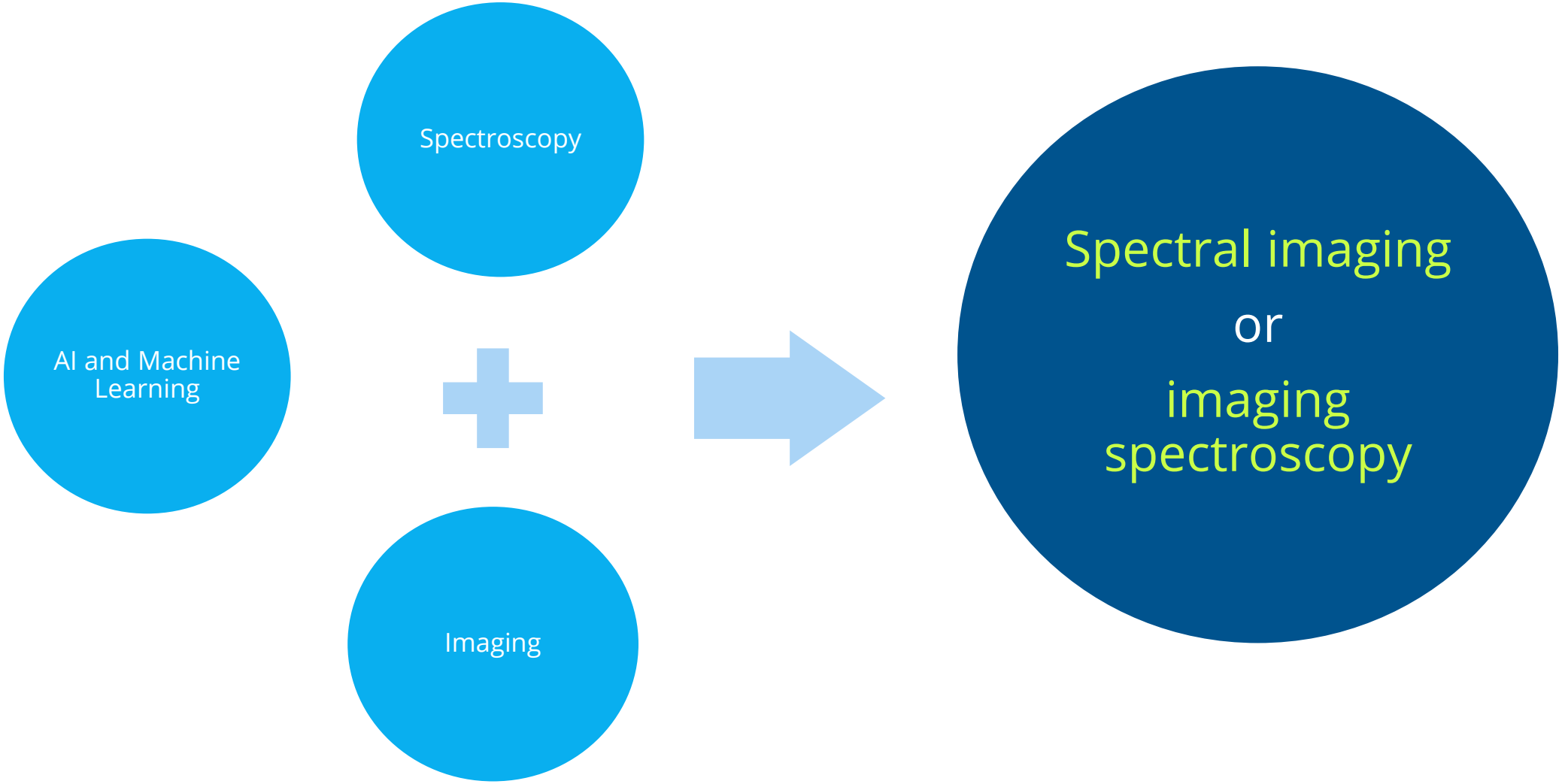
In 2018, Videometer's structure underwent new developments both in terms of strategy and structure. This year marked the beginning of a new era for the company, in terms of focus on instruments.

2020s

Today

Today, Videometer is a leading provider of spectral imaging solutions worldwide, selling both spectral imaging instruments and custom-made vision systems. Videometer is synonym of excellence and innovation in its field.

SPECTRAL IMAGING



WHAT COLOR IS THE CAR?

APPEARANCE

=

CHEMISTRY

X

PHYSICS

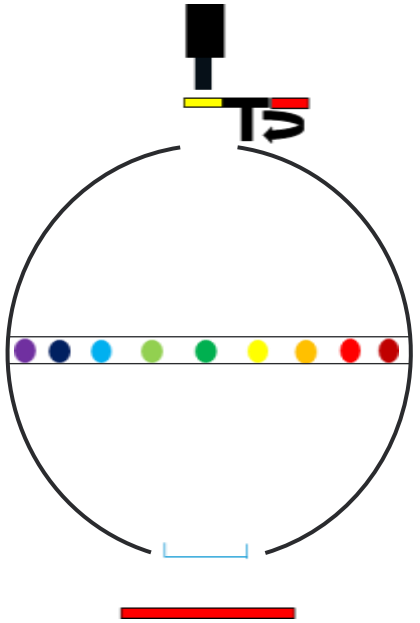
X

ENVIRONMENT

X

ILLUMINATION

LED BAND SEQUENTIAL SPECTRAL IMAGING



Camera and lens

Emission filter changer

Integrating sphere

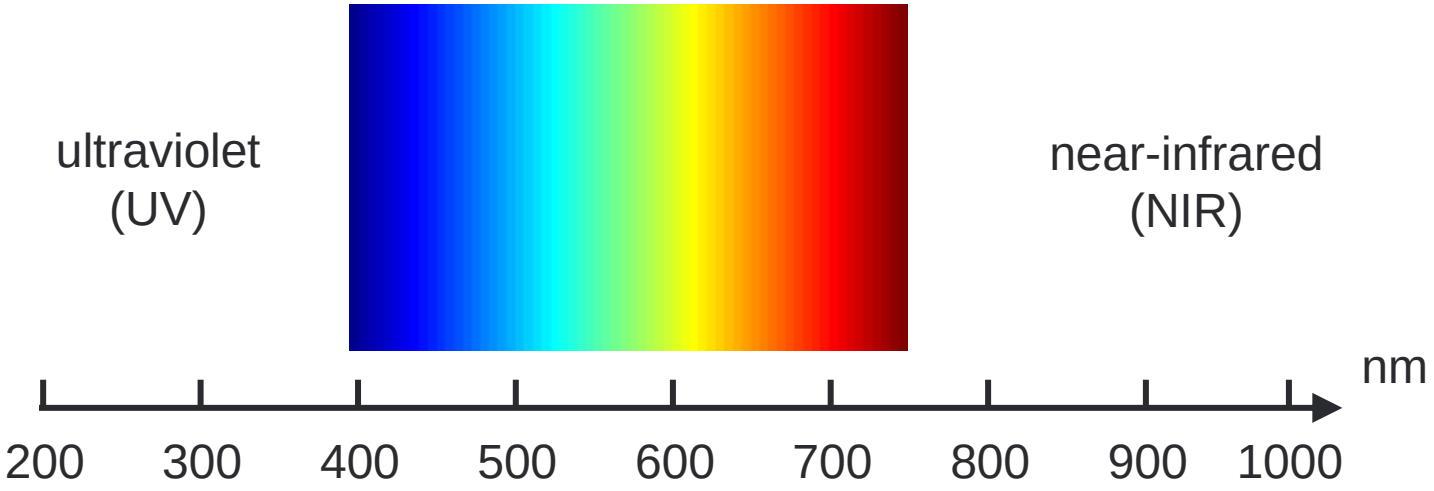
LEDs of multiple wavelengths

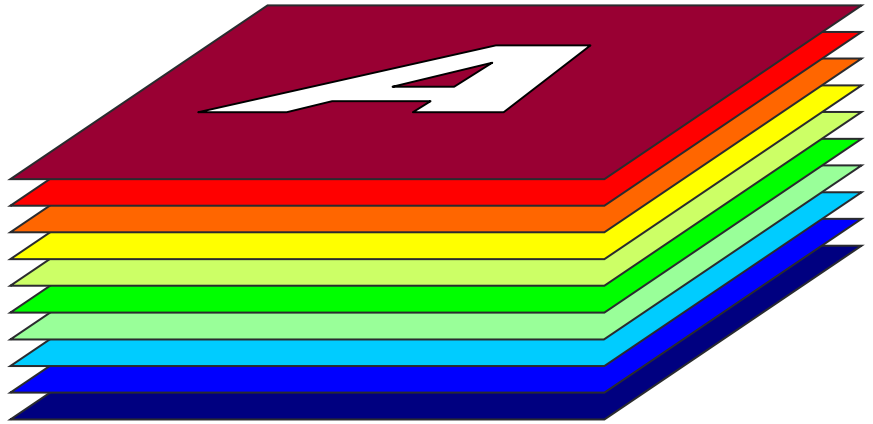
Sample is placed in target opening

Backlight or background

- LEDs: Stable, durable, large selection, rapidly developing technology
- Up to 20 different high-resolution bands acquired sequentially in 0.5-1.0 seconds
- May be combined with emission filters, backlight, and darkfield illuminant
- Combined reflectance spectral imaging and fluorescence spectral imaging possible!

SPECTRAL IMAGE





N images obtained at N wavelengths

Microbial and plant metabolites	Accurate color assessment and pigment concentration	Pigment baseline, moisture, fat, etc.	Spectral image is typically a large data structure of 100 MB to 10 GB

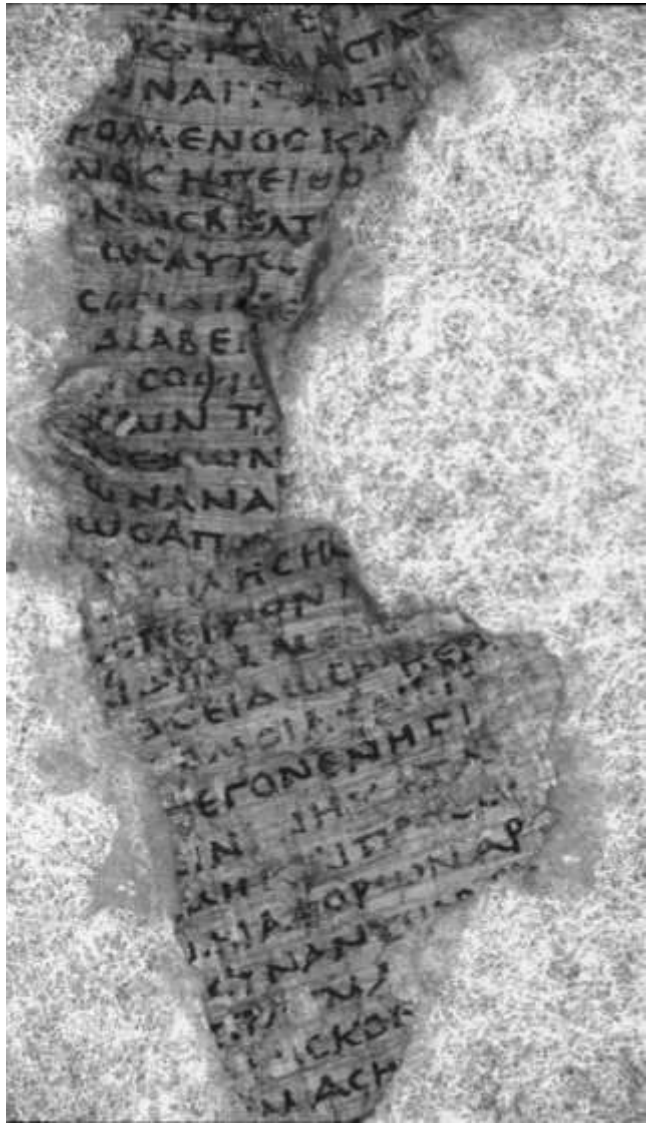
PAPYRUS PIECE 165

The papyrus pieces studied are very hard or impossible to read by the naked eye.

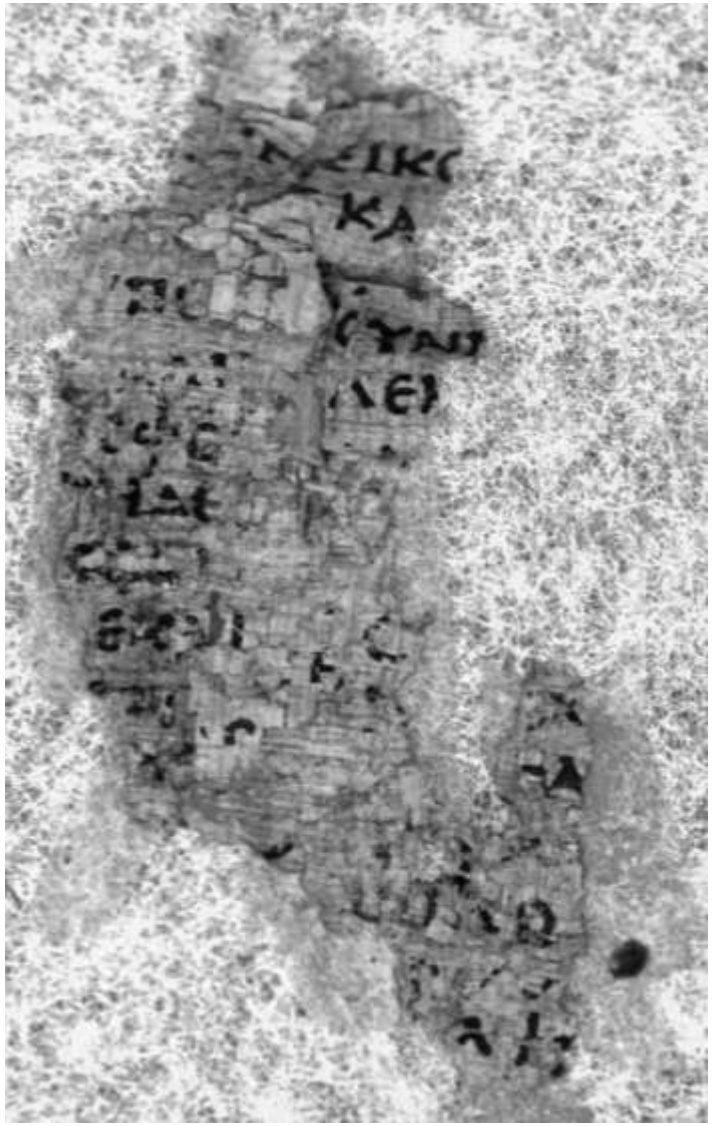
In the following the left image is contrast enhanced sRGB, and the right is made using NIR.

No other processing has been done, but a lot is possible.

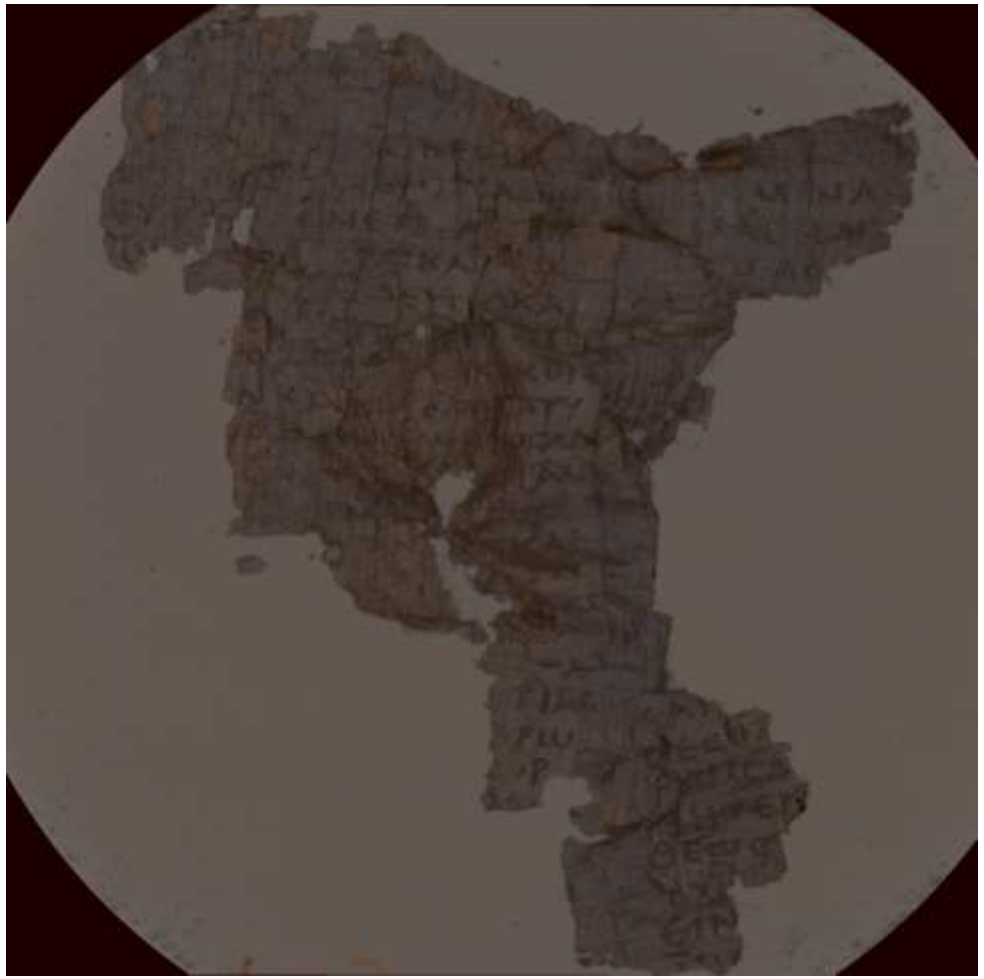
PIECE 165



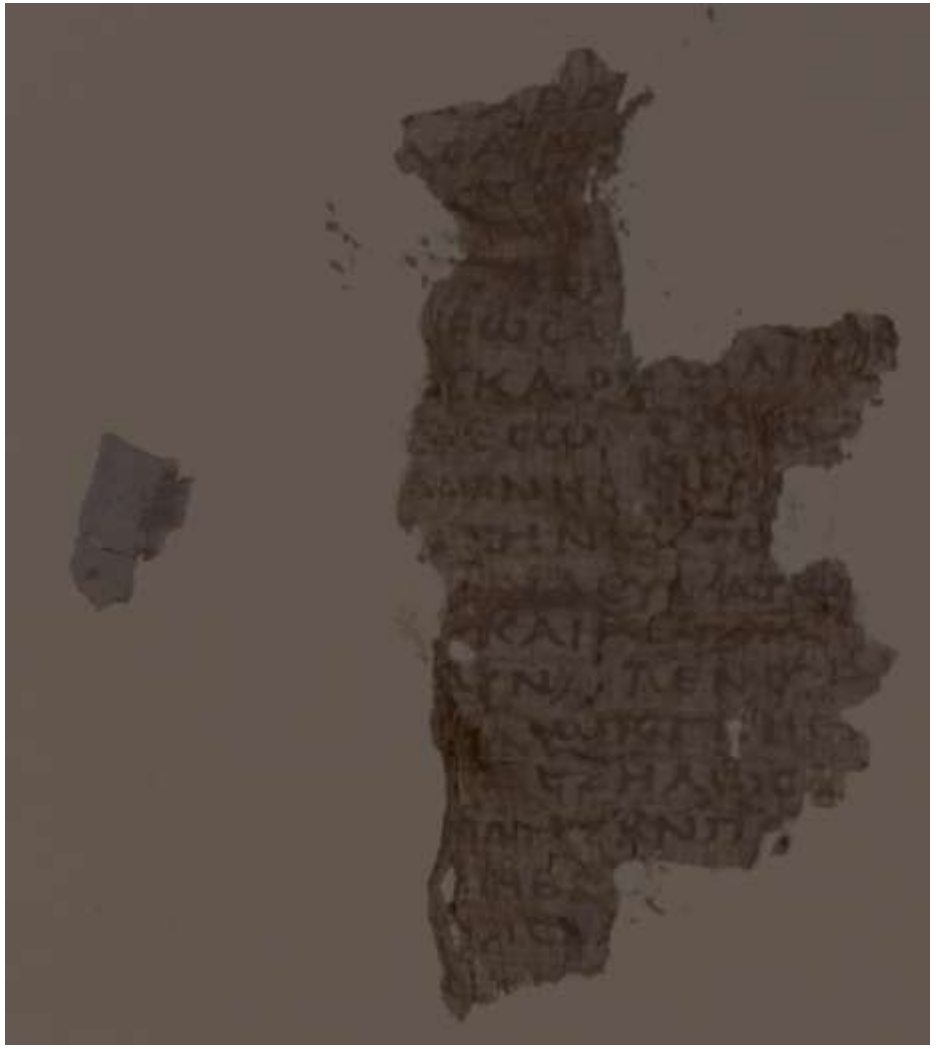
PIECE 162

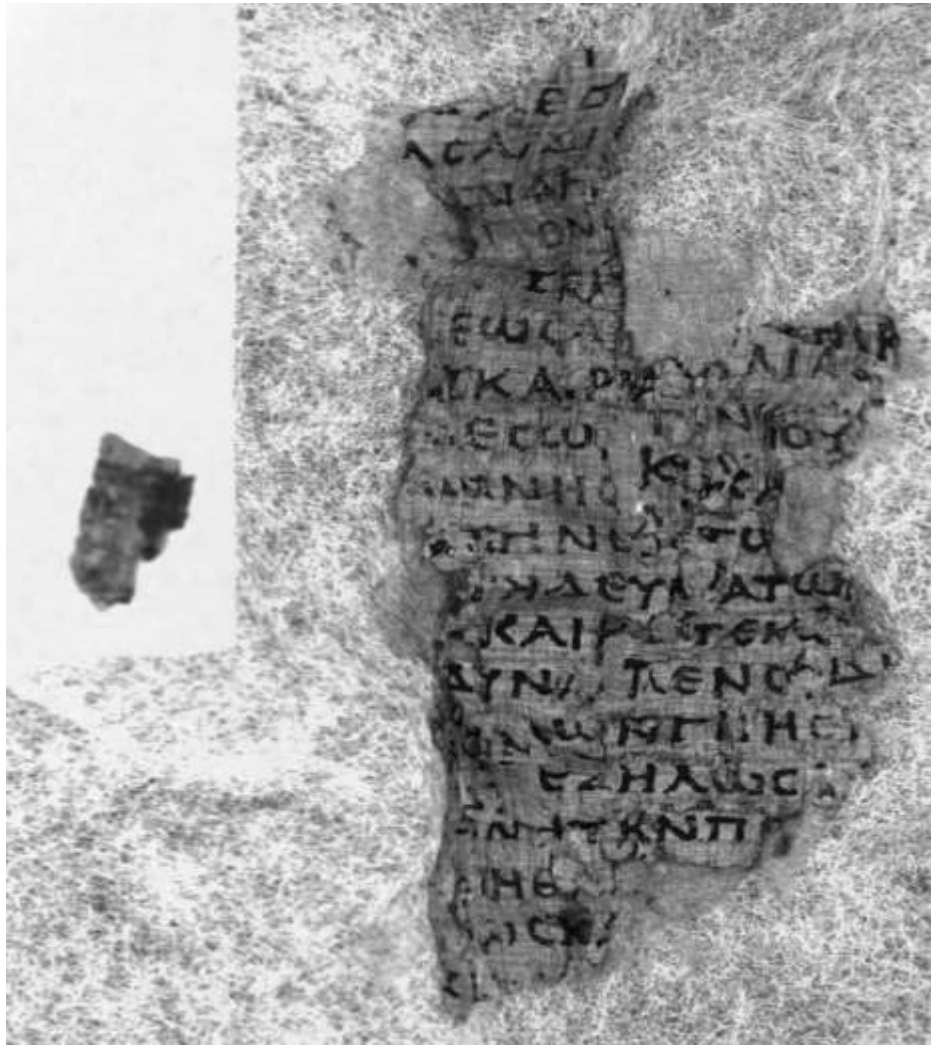


PIECE 163



PIECE 182 2





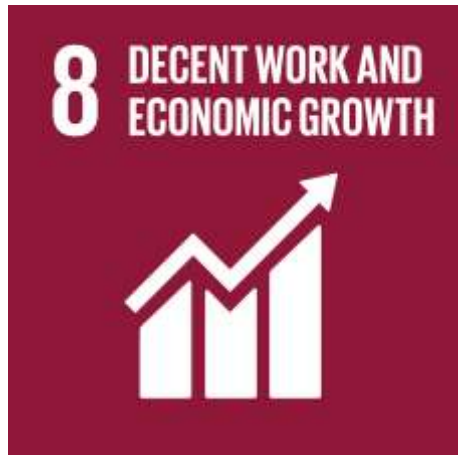
PIECE 171 sv

PIECE 183 3

OUR VALUES

Zero Hunger and Food Security

Good Health and Well-Being



Decent Work and Economic Growth

Responsible Consumption and Production

Life Below Water

Partnership for the Goals

THANK YOU!

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