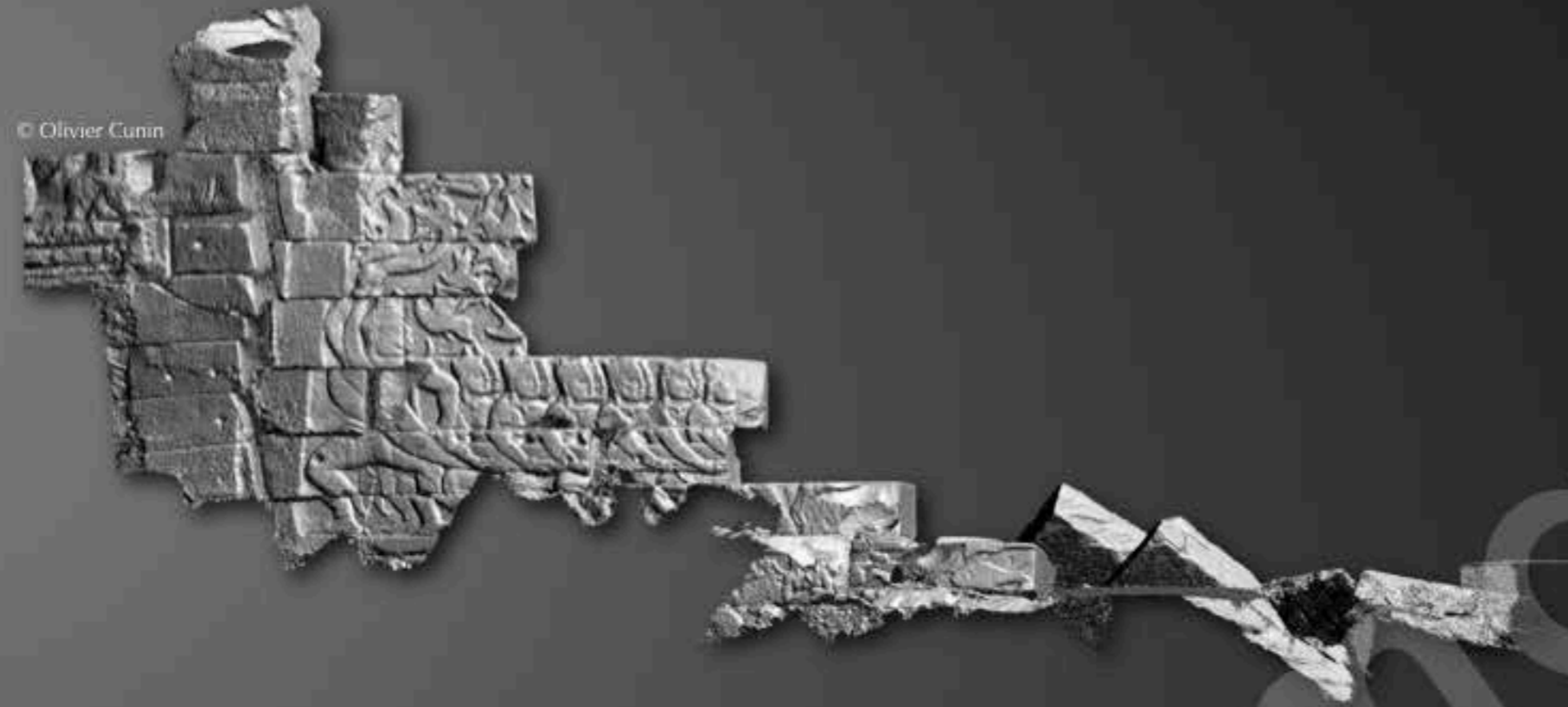


The 3rd enclosure - Western gallery - North wing



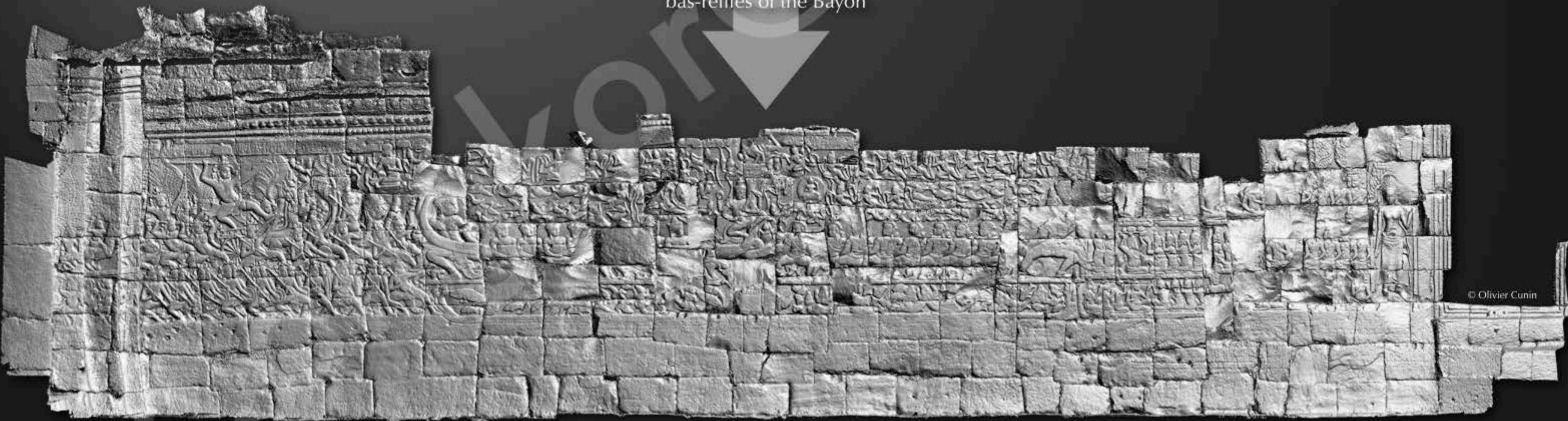
Example of blocks of the bas-reliefs fallen before 1909 behind the North wing of the Western gallery

The 3rd enclosure - Western gallery - North wing



3D scanning by photogrammetry of the North end of the North wing of the Western gallery of the third enclosure of Banteay Chhmar depicted the Churning of the Ocean of Milk
(These bas-reliefs are not documented at the photos archives of EFEO)

Correspondance with the
bas-relifes of the Bayon



3D scanning by photogrammetry of the North wing of the Western inner gallery of the Bayon depicted the Churning of the Ocean of Milk

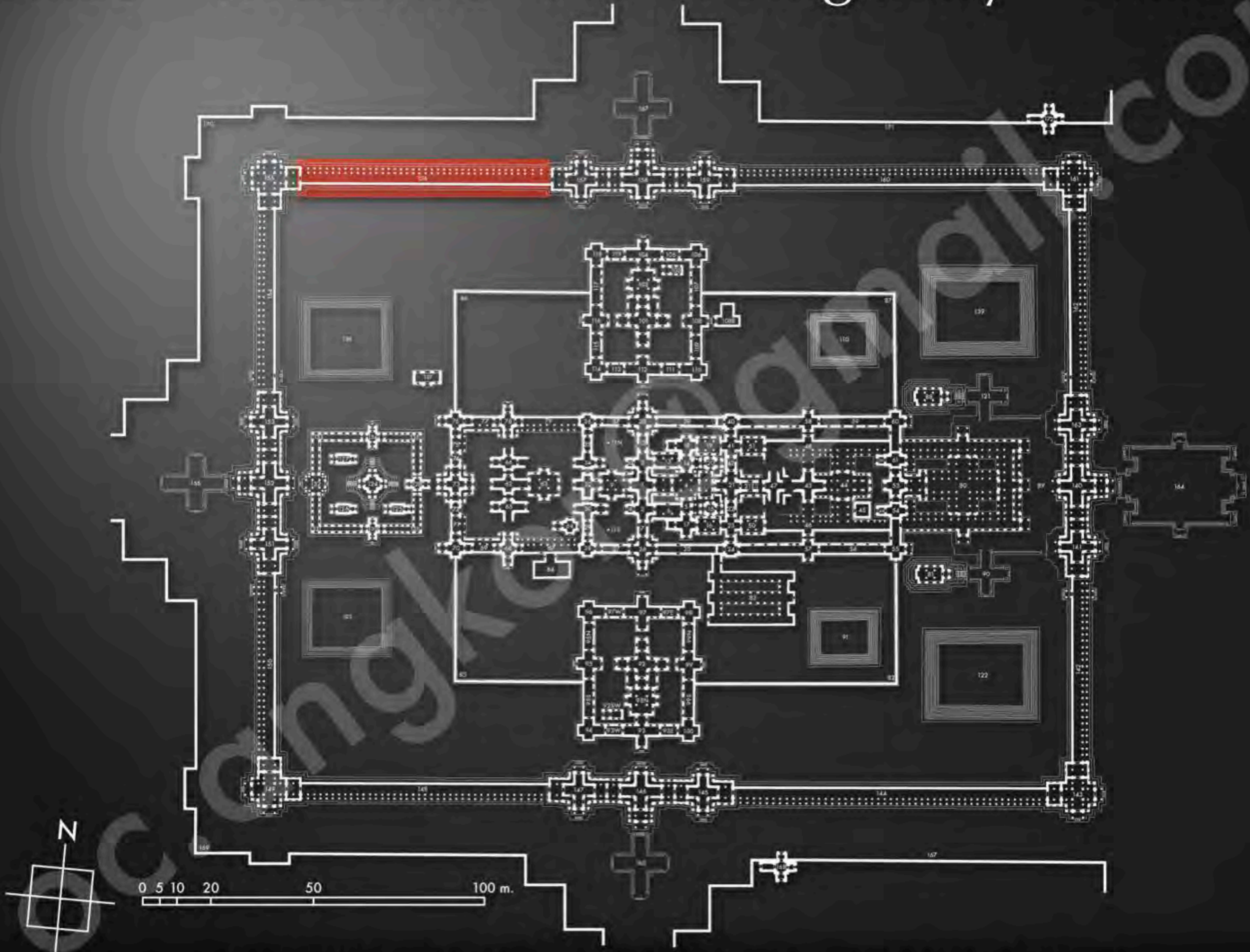
Correspondance between the bas-reliefs of the Bayon and Prasat Bantheay Chhmar

The 3rd enclosure - Western gallery - North wing



- 50% of surface of the masonry of the wall of the bas-reliefs are currently collapsed
- 67% of surface of the narrative are unknown and not documented
- Unsafe access for the tourists

The 3rd enclosure - Northern gallery - West wing



General layout of the temple complex of Prasat Banteay Chhmar

The 3rd enclosure - Northern gallery - West wing



Current condition of the West wing of the Northern gallery
View from West to East (September 2015)



Current condition of the West wing of the Northern gallery
View from East to West (September 2015)

The 3rd enclosure - Northern gallery - West wing



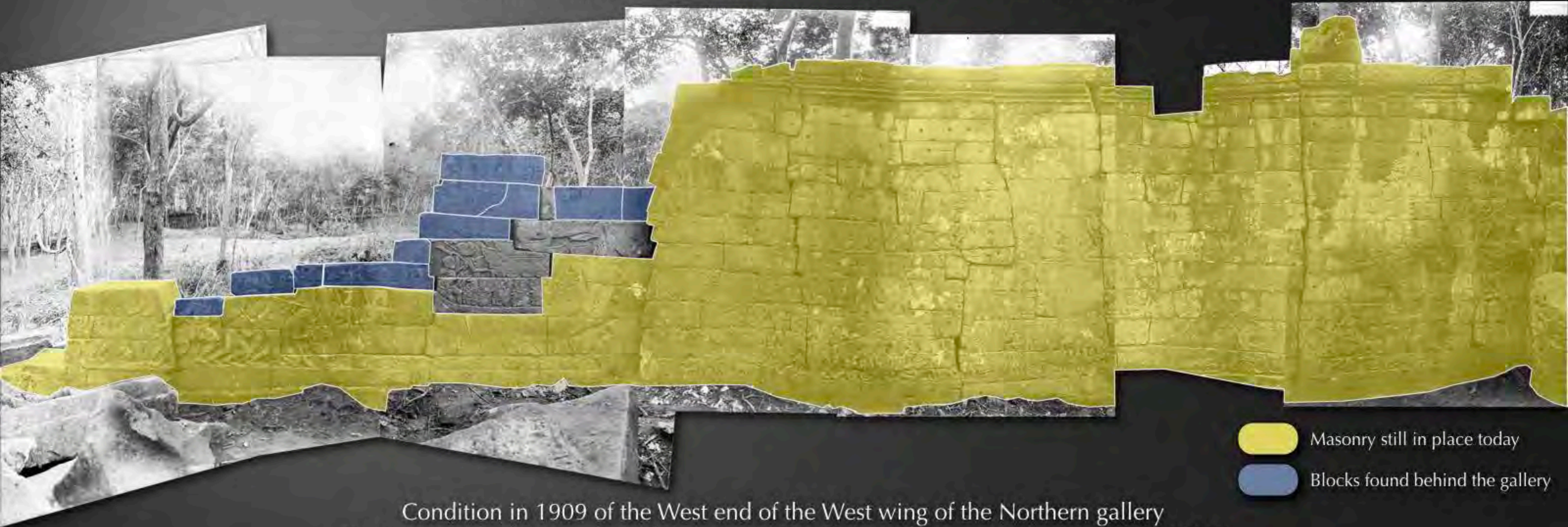
Condition in 1909 of the West end of the West wing of the Northern gallery
(Photomontage of the photos of General de Beylié from the photos archives of the EFEO)



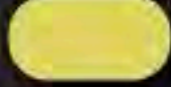

3D scanning by photogrammetry of the current condition of the West end of the West wing of the Northern gallery

The 3rd enclosure - Northern gallery - West wing

Preliminary inventory of the blocks fallen behind the gallery



Condition in 1909 of the West end of the West wing of the Northern gallery
(Photomontage of the photos of General de Beylié from the photos archives of the EFEO)

-  Masonry still in place today
-  Blocks found behind the gallery



3D scanning by photogrammetry of the current condition of the West end of the West wing of the Northern gallery

The 3rd enclosure - Northern gallery - West wing



Example of blocks of the bas-reliefs fallen before 1909 behind the West wing of the Northern gallery

The 3rd enclosure - Northern gallery - West wing



Example of blocks of the bas-reliefs fallen before 1909 behind the West wing of the Northern gallery

The 3rd enclosure - Northern gallery - West wing

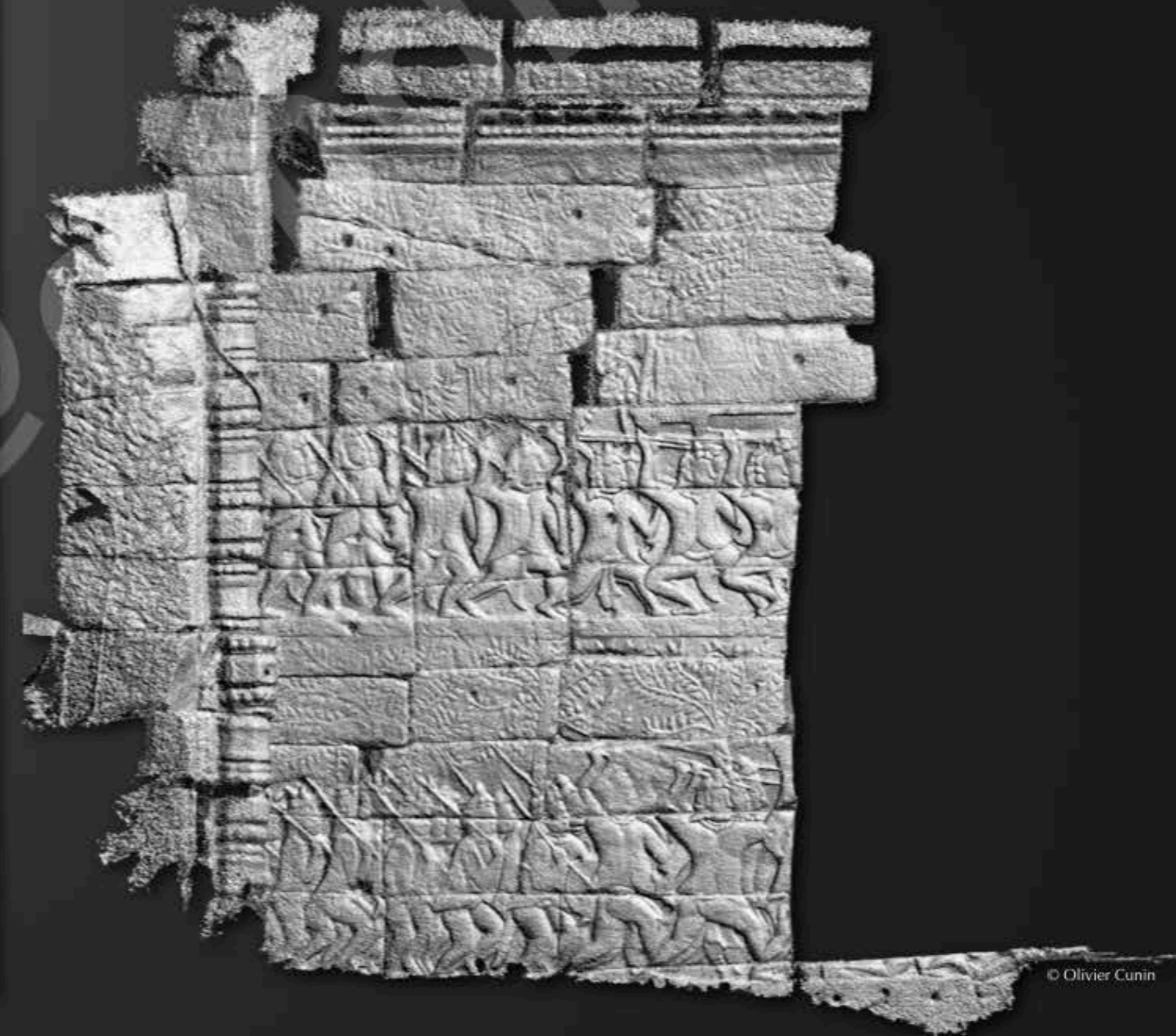


Example of blocks of the bas-reliefs fallen before 1909 behind the West wing of the Northern gallery

The 3rd enclosure - Northern gallery - West wing



Condition in 1909 of the East end of the West wing of the Northern gallery
(Photomontage of the photos of General de Beylié from the photos archives of the EFEO)



3D scanning by photogrammetry of the current condition of the
East end of the West wing of the Northern gallery

The 3rd enclosure - Northern gallery - West wing


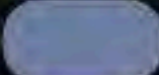
Preliminary inventory of the blocks fallen behind the gallery



Condition in 1909 of the East end of the West wing of the Northern gallery
(Photomontage of the photos of General de Beylié from the photos archives of the EFE0)



3D scanning by photogrammetry of the current condition of the
East end of the West wing of the Northern gallery

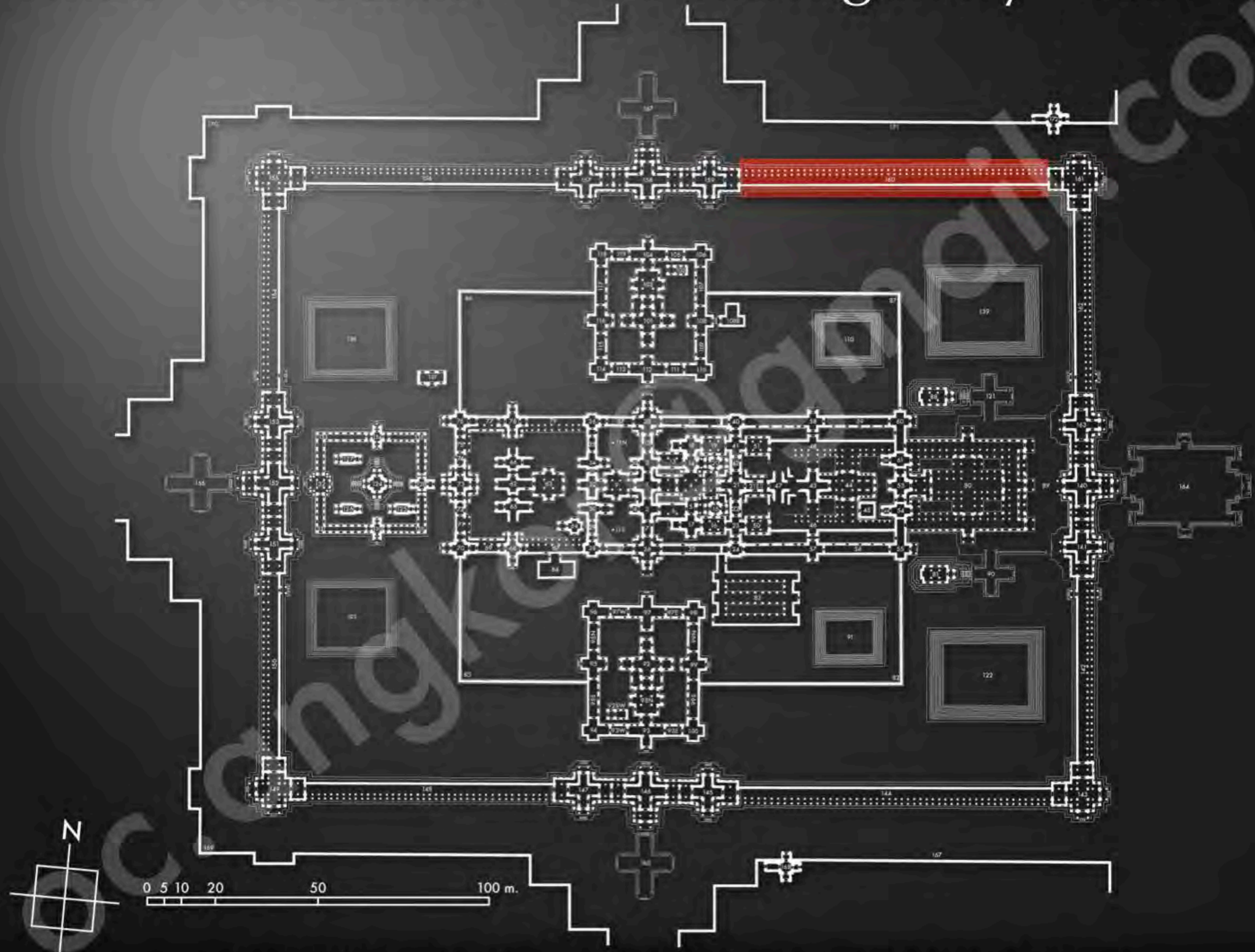
-  Masonry still in place today
-  Blocks found behind the gallery

The 3rd enclosure - Northern gallery - West wing



- 56% of surface of the masonry of the wall of the bas-reliefs are currently collapsed
- 81% of surface of the narrative are unknown and not documented
- Unsafe access for the tourists

The 3rd enclosure - Northern gallery - East wing



General layout of the temple complex of Prasat Banteay Chhmar

The 3rd enclosure - Northern gallery - East wing



Current condition of the East wing of the Northern gallery
View from West to East (September 2015)



Current condition of the East wing of the Northern gallery
View from East to West (September 2015)

The 3rd enclosure - Northern gallery - East wing

EFE0-CAM16010-1 EFE0-CAM16010-2 EFE0-CAM16011-1 EFE0-CAM16011-2 EFE0-CAM16012-1 EFE0-CAM16012-3 EFE0-CAM16013-1 EFE0-CAM16013-2 EFE0-CAM16014-1 EFE0-CAM16014-3 EFE0-CAM16015-2 EFE0-CAM16016-1 EFE0-CAM16016-2 EFE0-CAM16017-1 EFE0-CAM16017-2

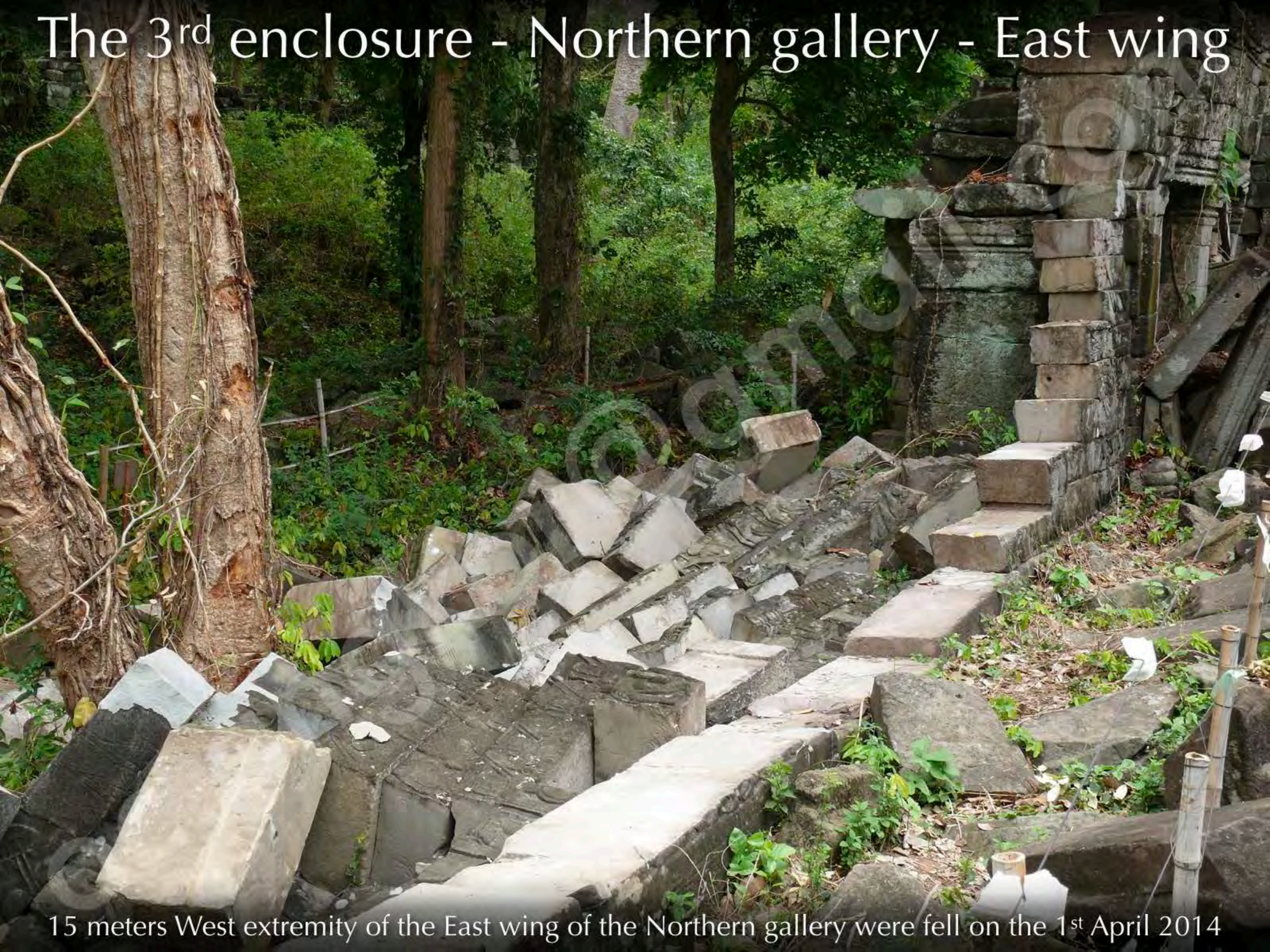
Condition in 1909 of the West side of the East wing of the Northern gallery
(Photomontage of the photos of General de Beylié from the photos archives of the EFEO)

Orthophoto (2002)

214 blocs + one fragment of blocs
fallen in the 1st April 2014

3D scanning by photogrammatry of the current condition of the West side of the East wing of the Northern gallery

The 3rd enclosure - Northern gallery - East wing



15 meters West extremity of the East wing of the Northern gallery were fell on the 1st April 2014

The 3rd enclosure - Northern gallery - East wing



Storehouse built by GHF behind the East wing of the Northern gallery with the stone blocks fallen in April 2014

The 3rd enclosure - Northern gallery - East wing

Photogrammetric survey example for the studies of the bas-reliefs of Banteay Chhmar

Around 90 meters lengthwise



Orthophotography of the East wing of the Northern gallery resulting of the photos taken on the 11th April 2014



Orthophotography of the East wing of the Northern gallery resulting of the photos taken on the 11th April 2014



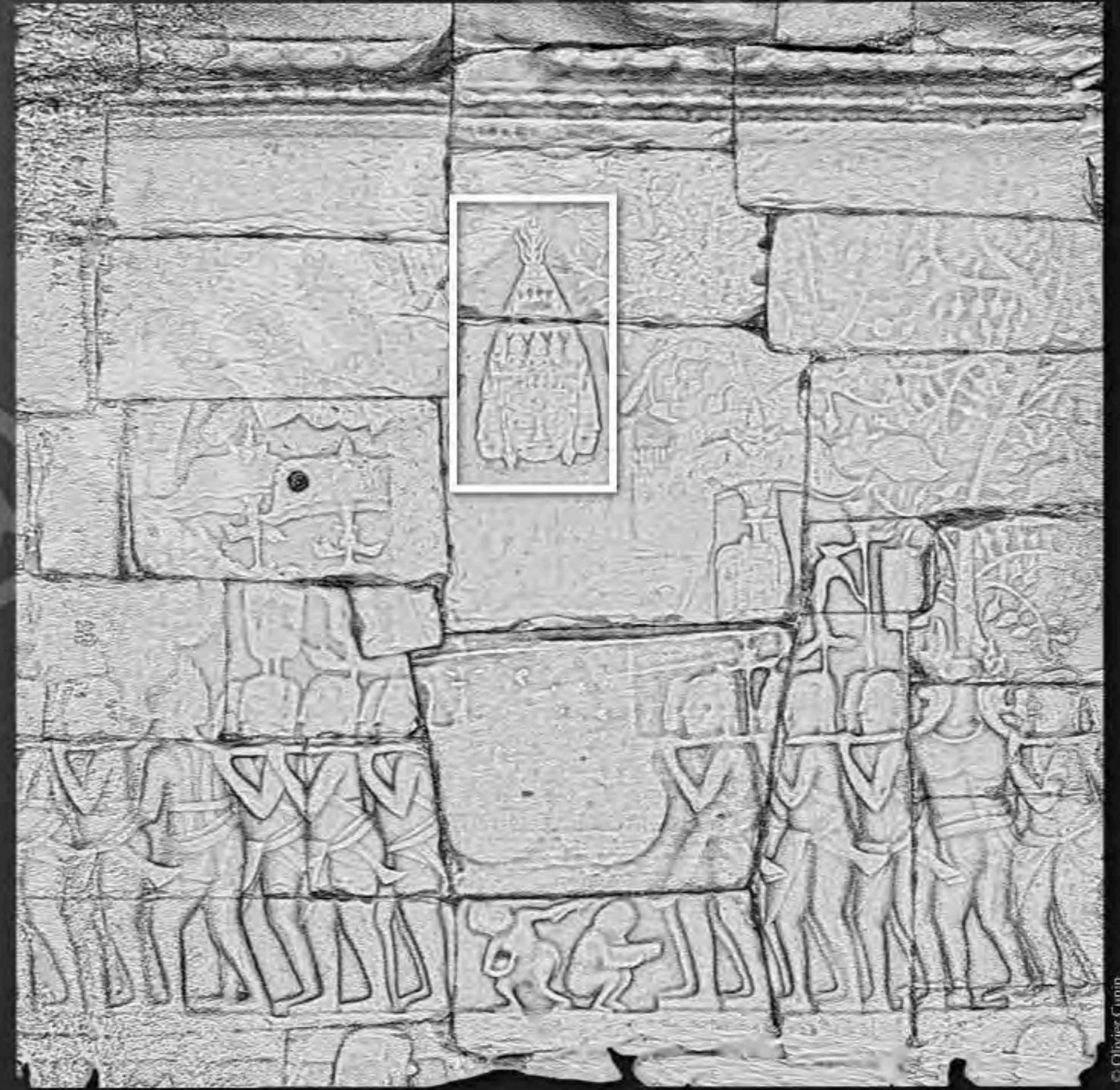
3D scanning by photogrammetry of the portion of the bas-reliefs with of the processional chariots

The 3rd enclosure - Northern gallery - East wing

Photogrammetric survey example for the studies of the bas-reliefs of Banteay Chhmar



3D scanning by photogrammetry of the processional chariot with face tower at the East wing of the Northern gallery



3D scanning photogrammetry in radiance scaling of the processional chariot with face tower at the East wing of the Northern gallery

© Olivier Cumin

© Olivier Cumin

The 3rd enclosure - Northern gallery - East wing

Photogrammetric survey example for the studies of the bas-reliefs of Banteay Chhmar



Detail of the 3D scanning by photogrammetry of the processional chariot with face tower



Detail of the 3D scanning by photogrammetry of the crowning in lotus of one figured Prasat at the inner gallery of the Bayon

© Olivier Cunin

© Olivier Cunin

The 3rd enclosure - Northern gallery - East wing

Photogrammetric survey example for the studies of the bas-reliefs of Banteay Chhmar



© Olivier Cunin

Detail of the 3D scanning by photogrammetry of the processional chariot with face tower in depthmap



© Olivier Cunin

Detail of the 3D scanning by photogrammetry of the crowning in lotus of one figured Prasat at the inner gallery of the Bayon in depthmap

The 3rd enclosure - Northern gallery - East wing

Photogrammetric survey example for the studies of the bas-reliefs of Banteay Chhmar



Gilded bronze final discovered in 2011 between tower 18 and structure 13 during the restoration of tower 18 (© GHF 2011)

Detail of the 3D scanning by photogrammetry of the processional chariot with face tower in depthmap

Detail of the 3D scanning by photogrammetry of the crowning in lotus of one figured Prasat at the inner gallery of the Bayon in depthmap

© Olivier Cunin

© Olivier Cunin

The 3rd enclosure - Northern gallery - East wing

Photogrammetric survey example for the studies of the bas-reliefs of Banteay Chhmar



© Olivier Cunin

Detail of the 3D scanning by photogrammetry of the processional chariot with face tower in depthmap



Tower 64 with crowning with worshippers and angle figures (2002)

The 3rd enclosure - Northern gallery - East wing

Photogrammetric survey example for the elaboration of the risk map of the wall of the bas-reliefs of Banteay Chhmar

Black means the panel inclines inward the gallery

White means the panel inclines outward of the gallery



© Olivier Cunin

3D scanning in depthmap resulting of the photos taken in 2002

Lean forwards



Lean backwards

The 3rd enclosure - Northern gallery - East wing

Photogrammetric survey example for the elaboration of the risk map of the wall of the bas-reliefs of Banteay Chhmar

Worrying
portion



Worrying
portion



Worrying
portion



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3D scanning in depth map of the East segment of the Northern gallery resulting of the photos taken on the 11th April 2014

Worrying
portion



Worrying
portion



© Olivier Cunin

Lean forwards



Lean backwards

The 3rd enclosure - Northern gallery - East wing

Photogrammetric survey example for the elaboration of the risk map of the wall of the bas-reliefs of Banteay Chhmar

Worrying
portion



Worrying
portion



Worrying
portion



© Olivier Cunin

3D scanning in depth map of the East segment of the Northern gallery resulting of the photos taken on the 11th April 2014

Worrying
portion



© Olivier Cunin

Lean forwards



Lean backwards

The 3rd enclosure - Northern gallery - East wing



Example of block of the bas-reliefs fallen before 1909 behind the East wing of the Northern gallery