

Multiview NLV vs. Single-Image NLV

In Multiview the images are modified consistently, hence, the corresponding 3D structure is also modified appropriately.

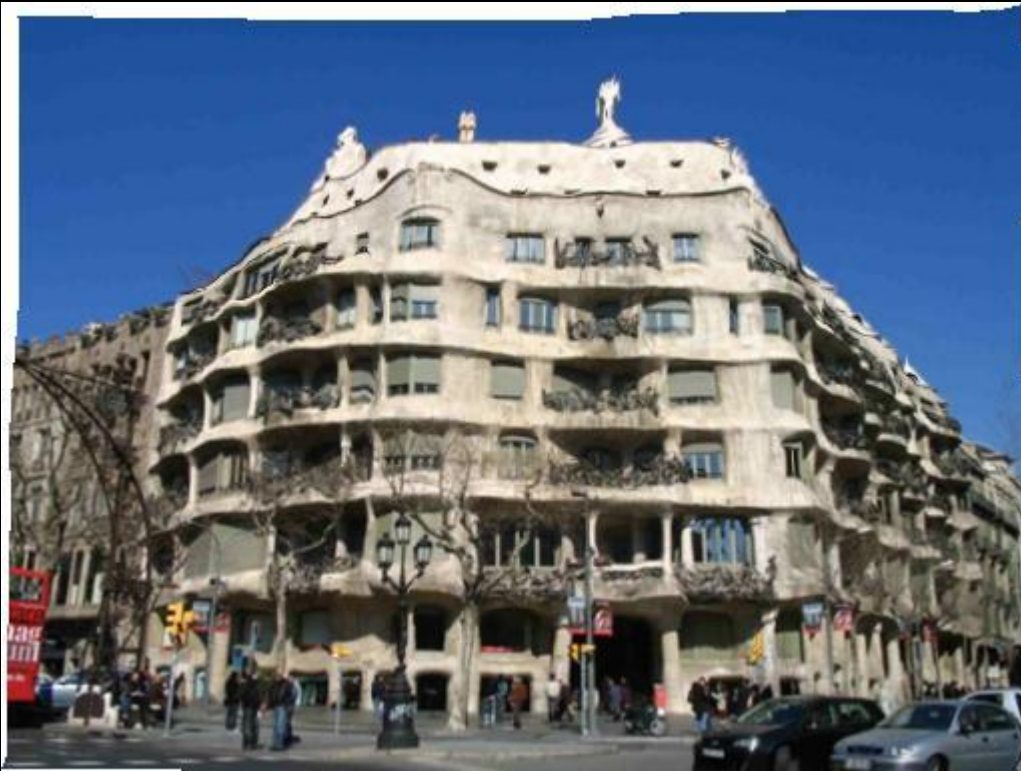
In Single-Image NLV each image is corrected independently, ruining the 3D geometry.

INPUT



SINGLE Image NLV

Inconsistent building shapes



No correspondence – 3D ruined



INPUT



MV-NLV, corrected



Consistent building shapes



Corrected 3D



INPUT



SINGLE Image NLV

Inconsistent shapes



No correspondence – 3D ruined



INPUT



MV-NLV, corrected

Consistent shapes



Corrected 3D



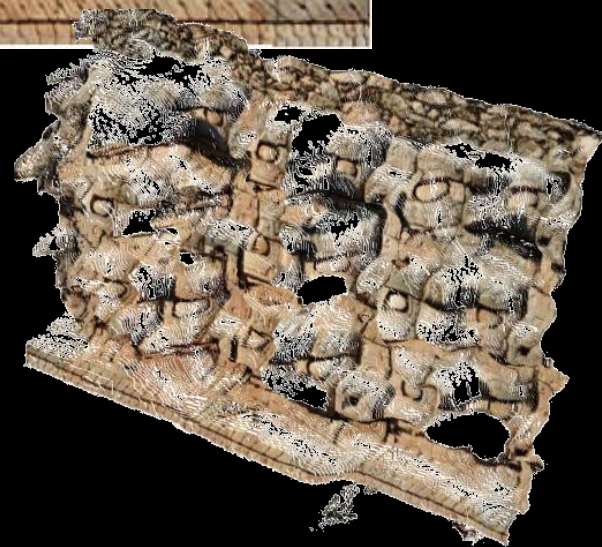
INPUT



SINGLE Image NLV



No correspondence – 3D ruined



INPUT



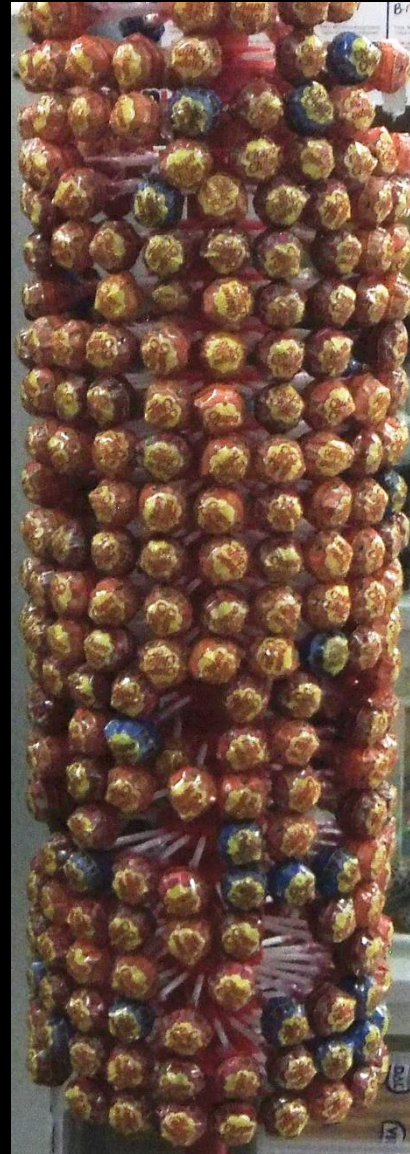
MV-NLV, corrected



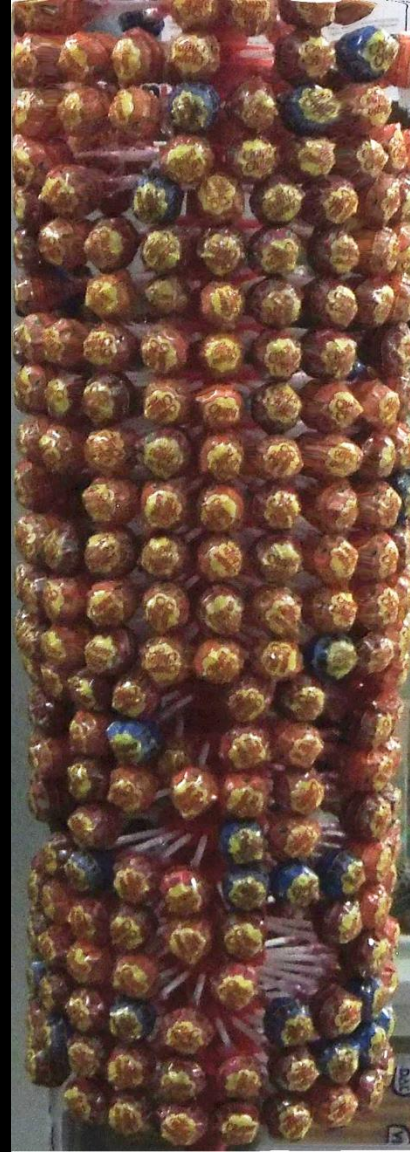
Corrected 3D



INPUT



SINGLE Image NLV



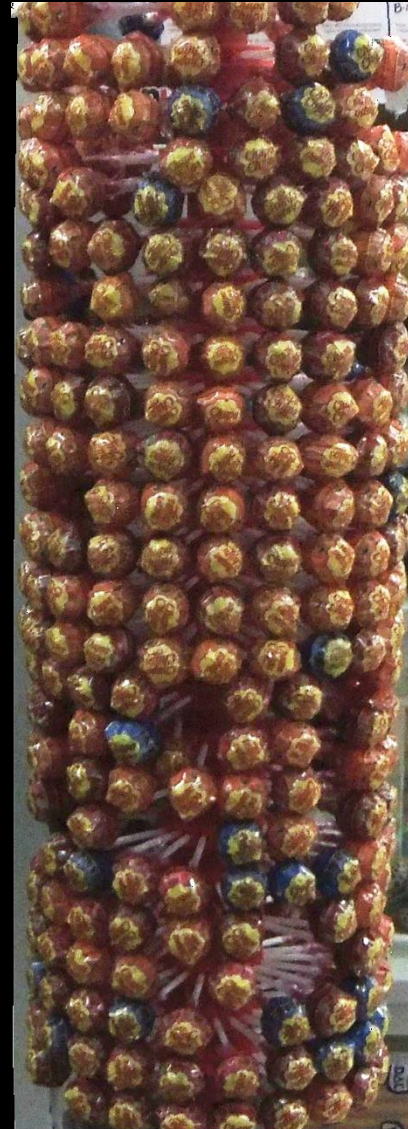
No correspondence
– 3D ruined



INPUT



MV-NLV, corrected



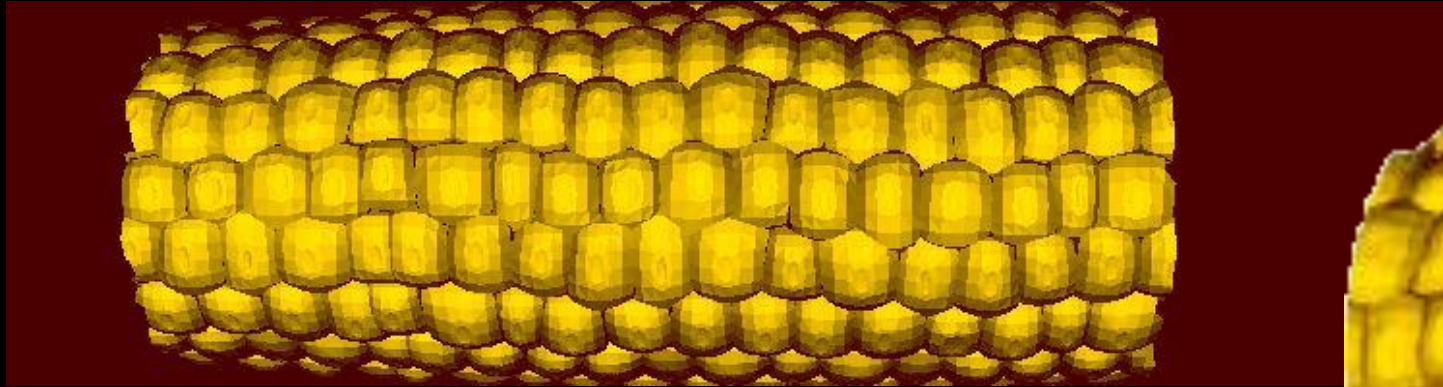
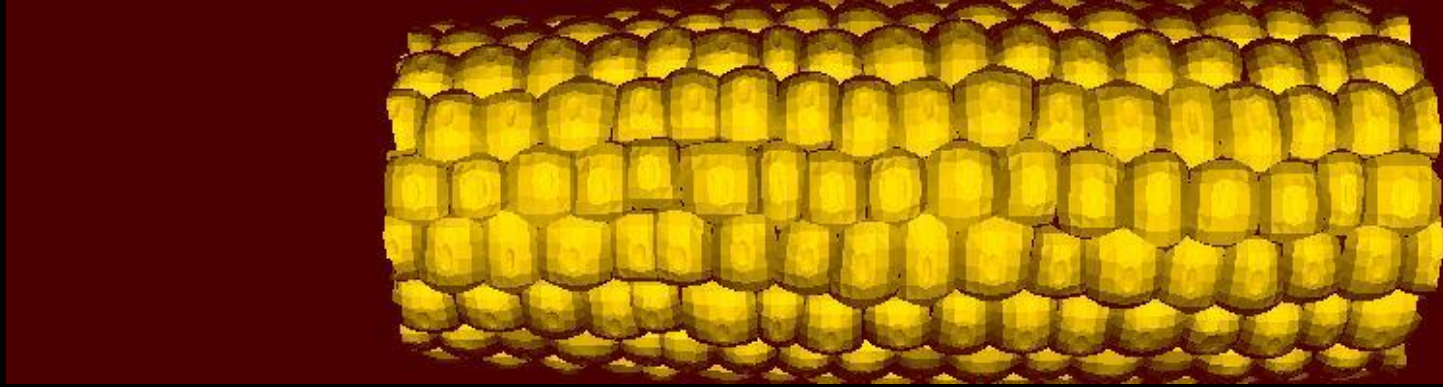
Corrected 3D



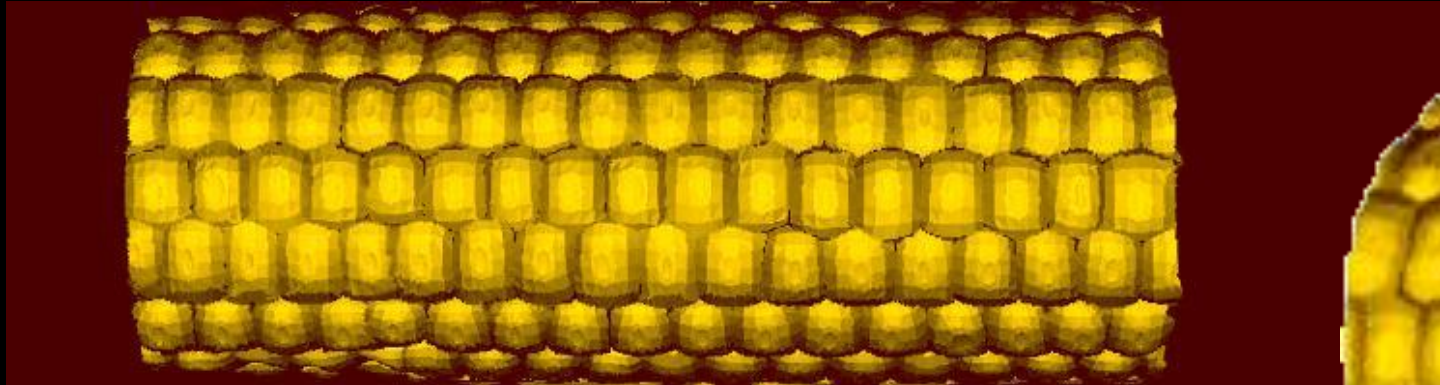
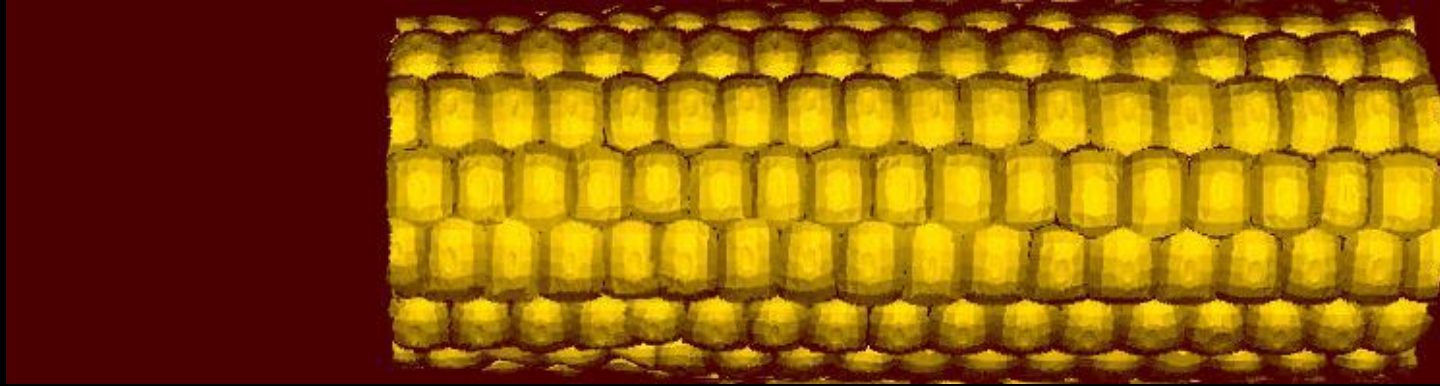
Multiview NLV

Correction vs. Exaggeration

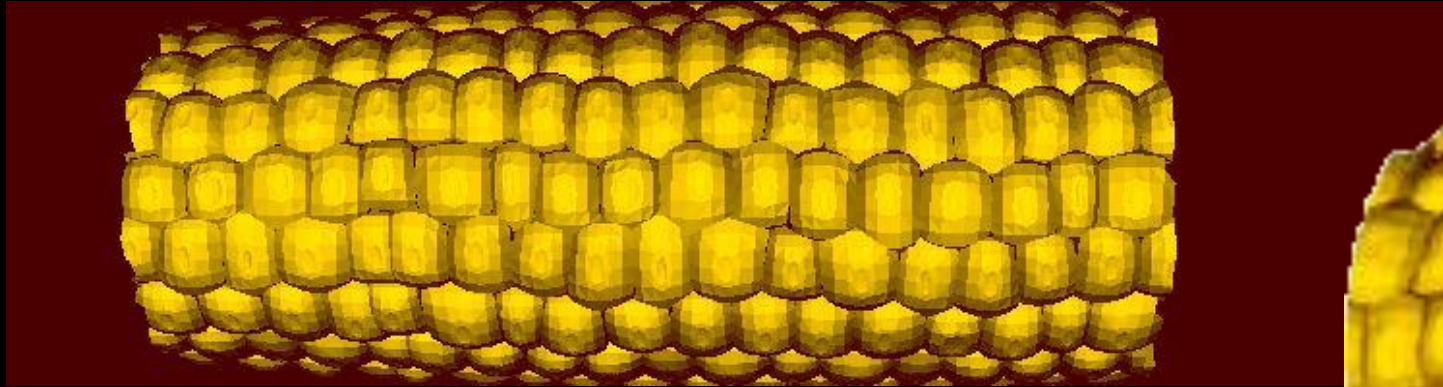
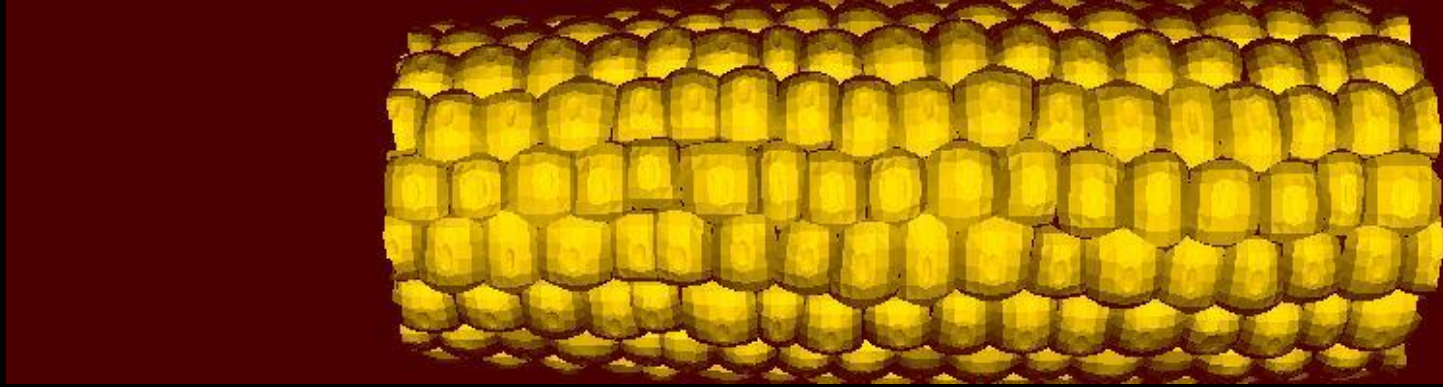
INPUT



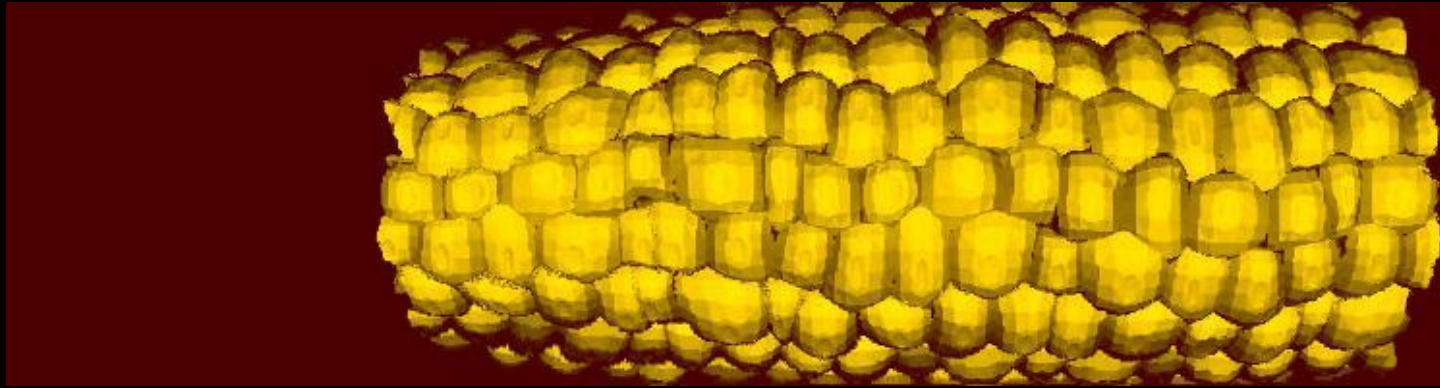
MV-NLV, corrected



INPUT



MV-NLV, exaggerated



INPUT



MV-NLV, corrected



INPUT



MV-NLV, exaggerated



INPUT



MV-NLV, corrected



INPUT



MV-NLV, exaggerated



INPUT



MV-NLV, corrected



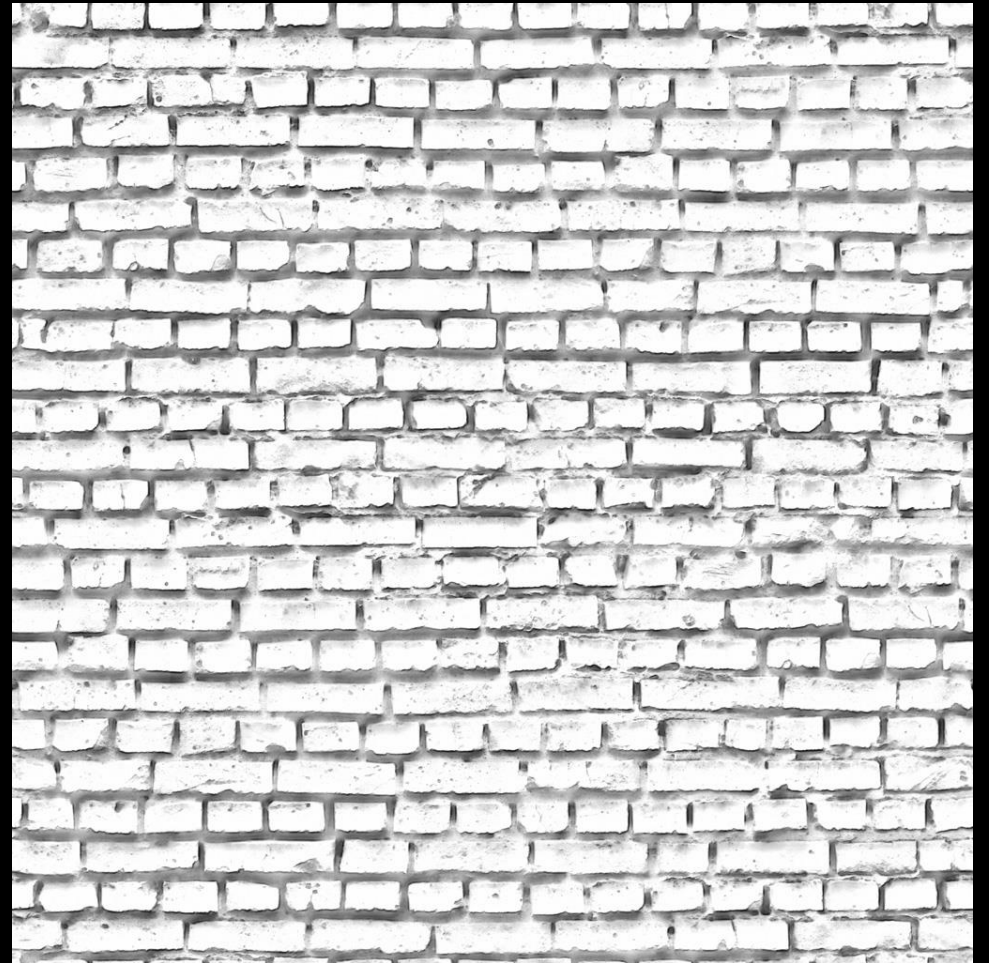
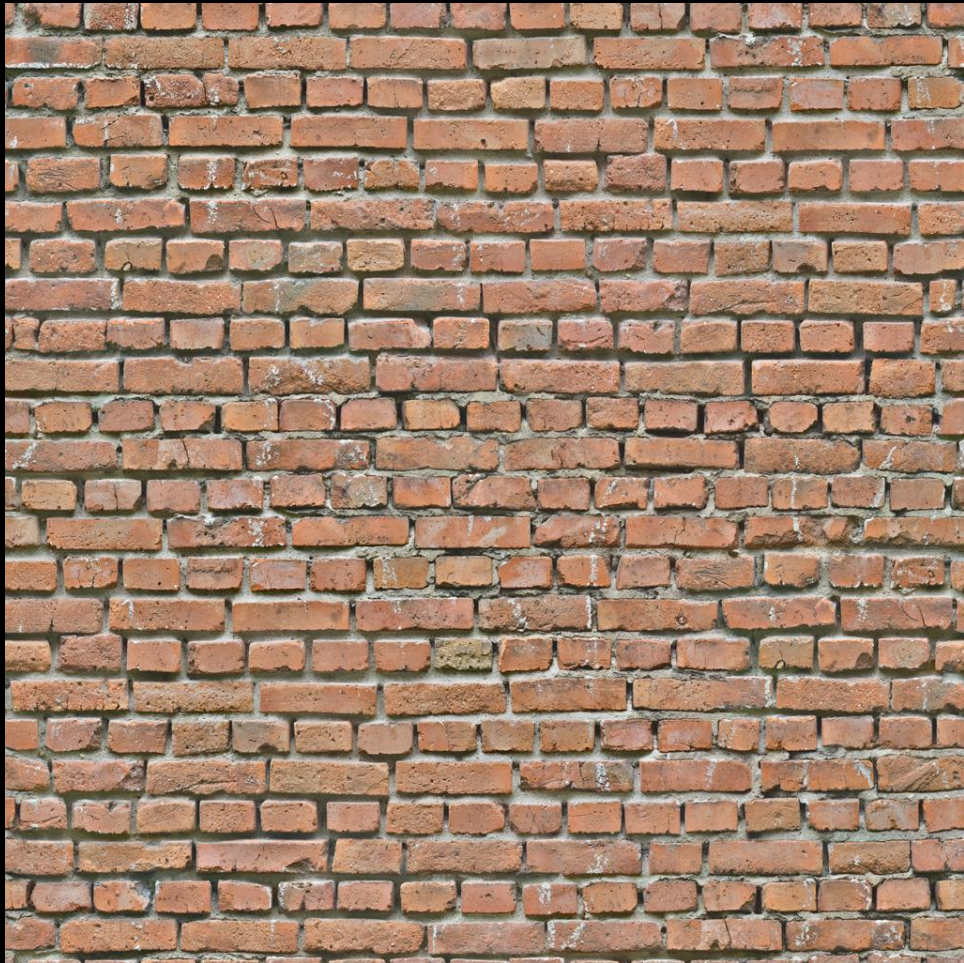
INPUT



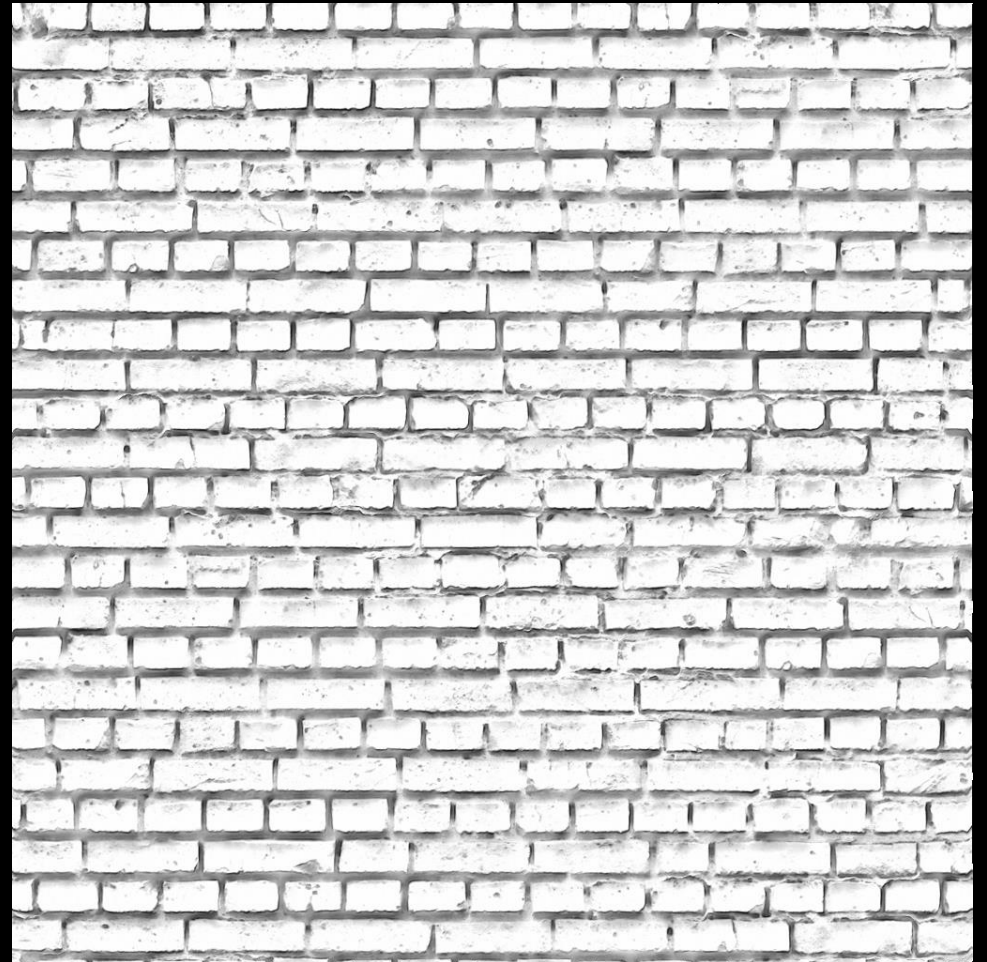
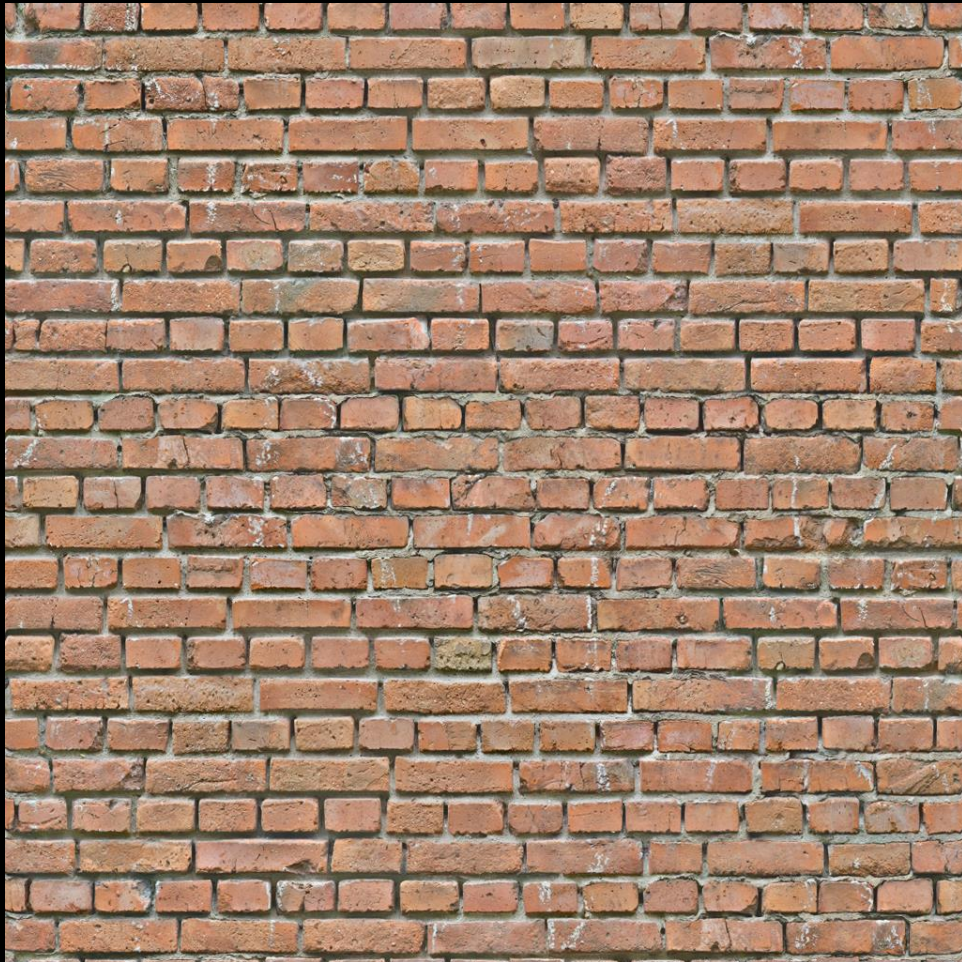
MV-NLV, exaggerated



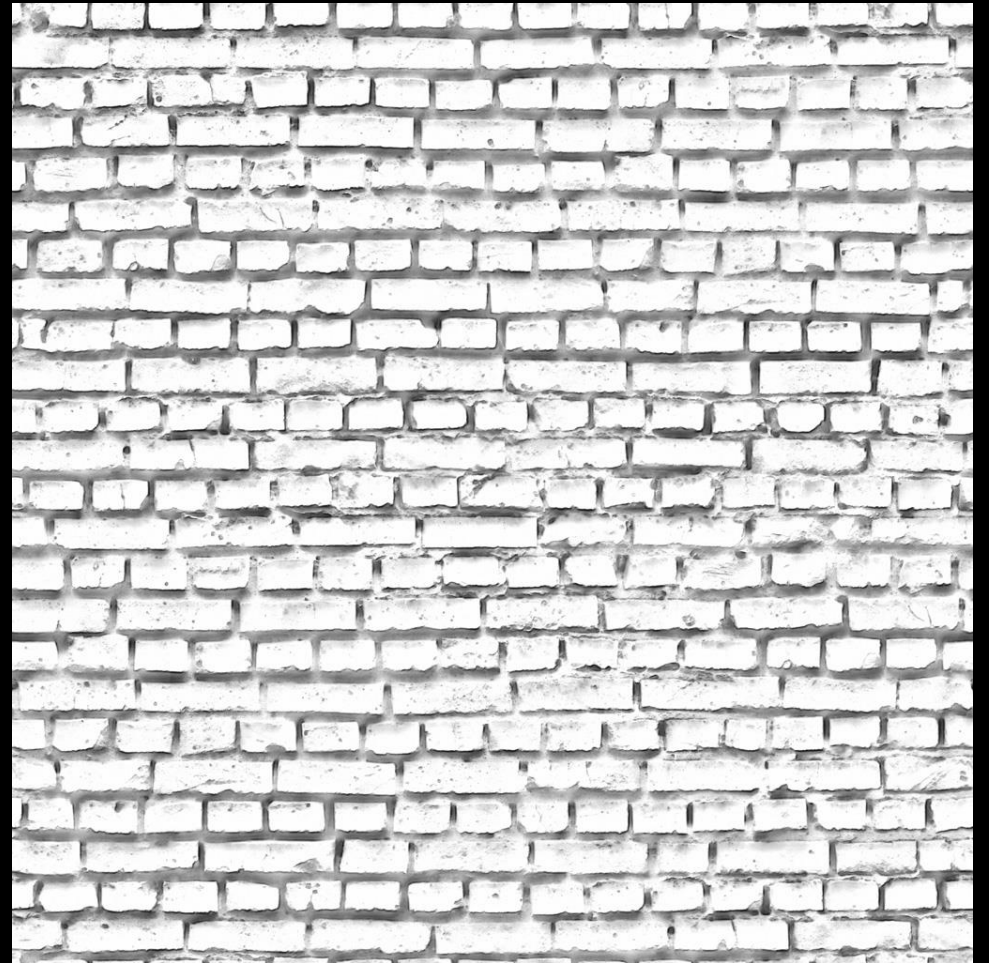
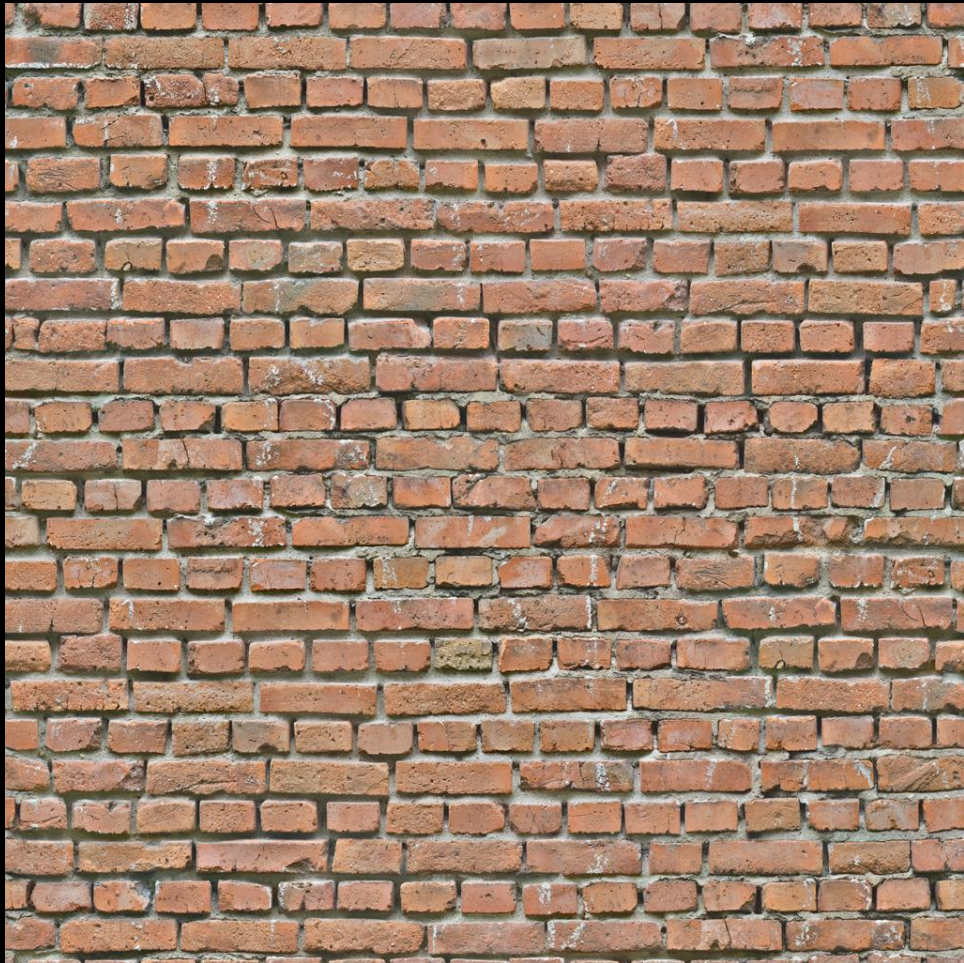
INPUT



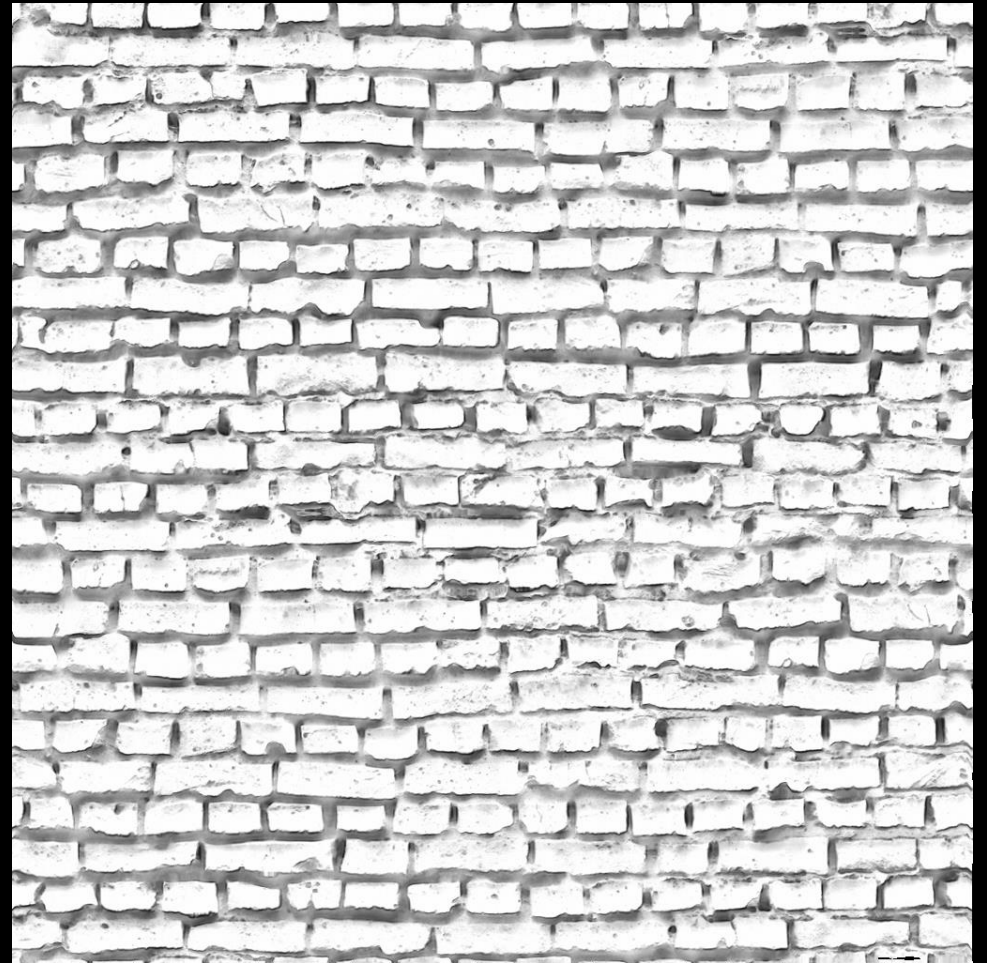
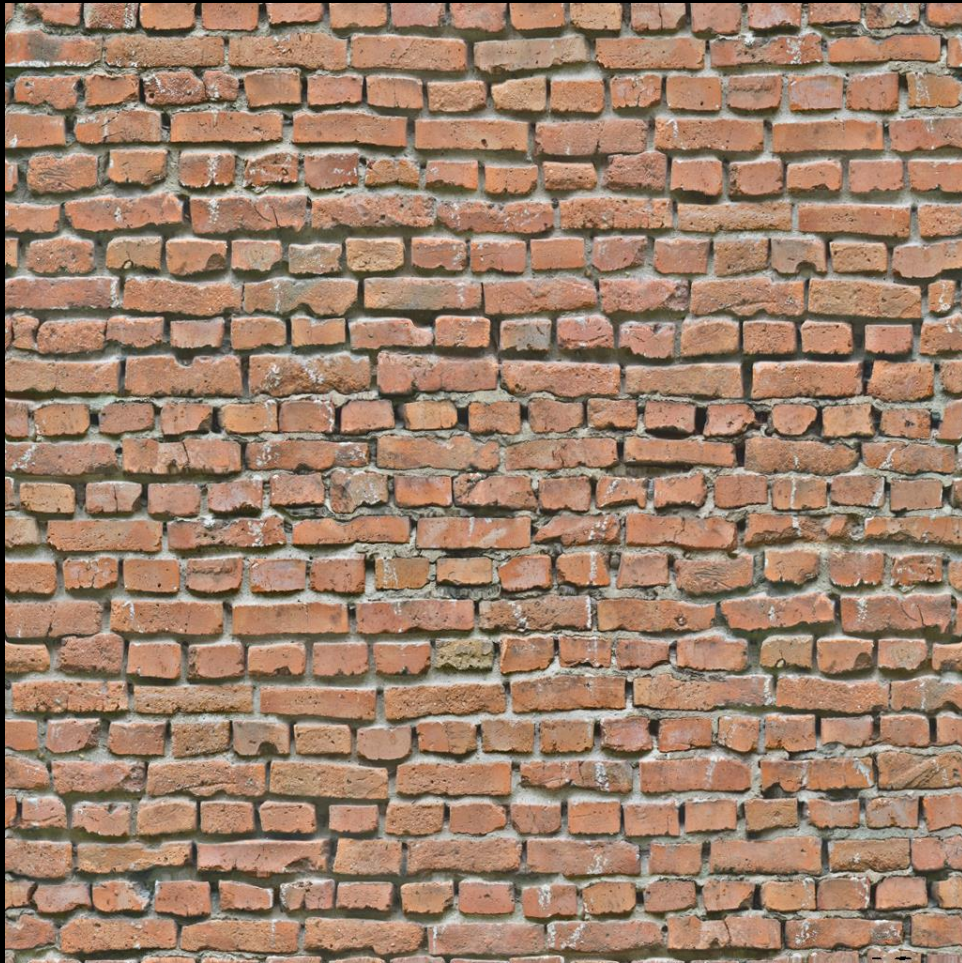
MV-NLV, corrected



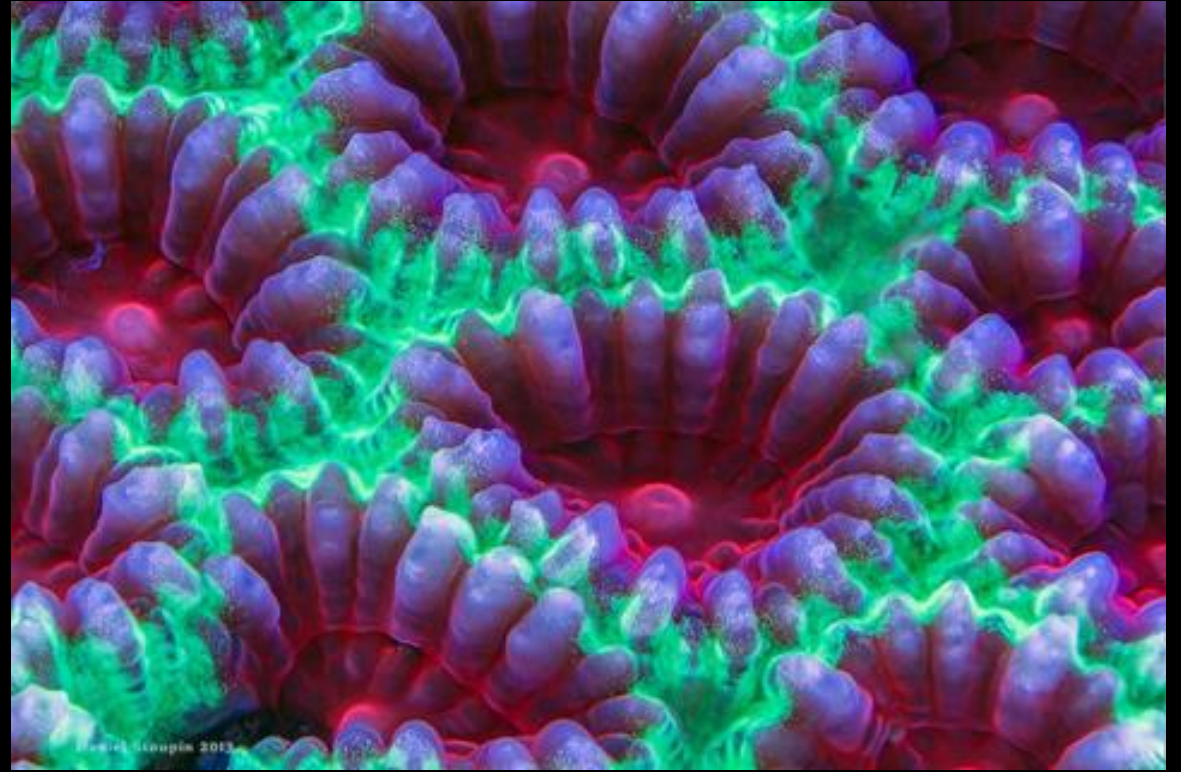
INPUT



MV-NLV, exaggerated



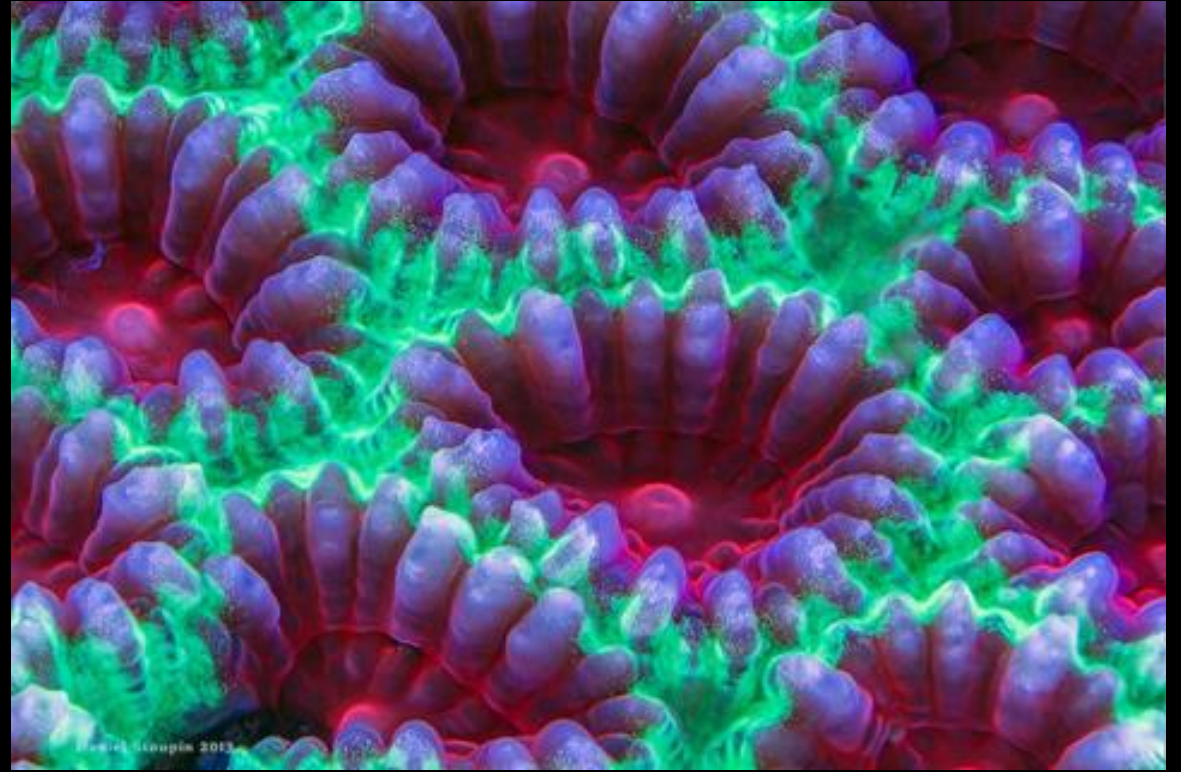
INPUT



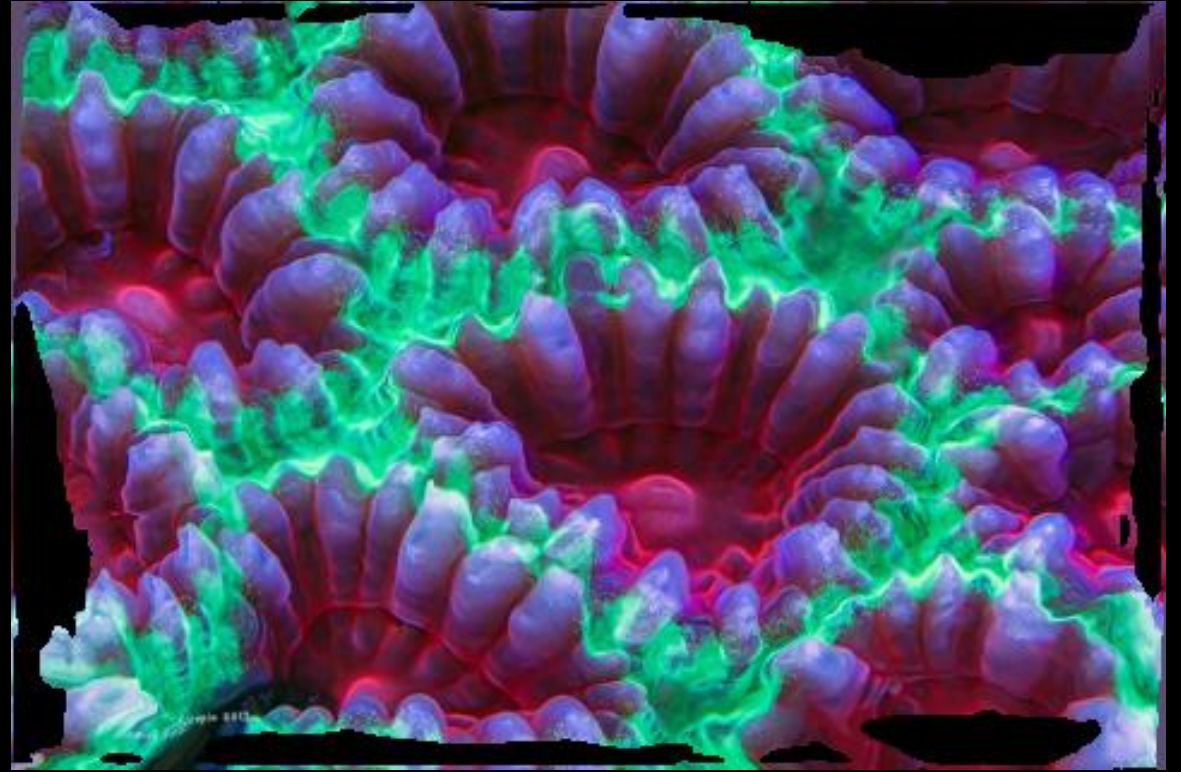
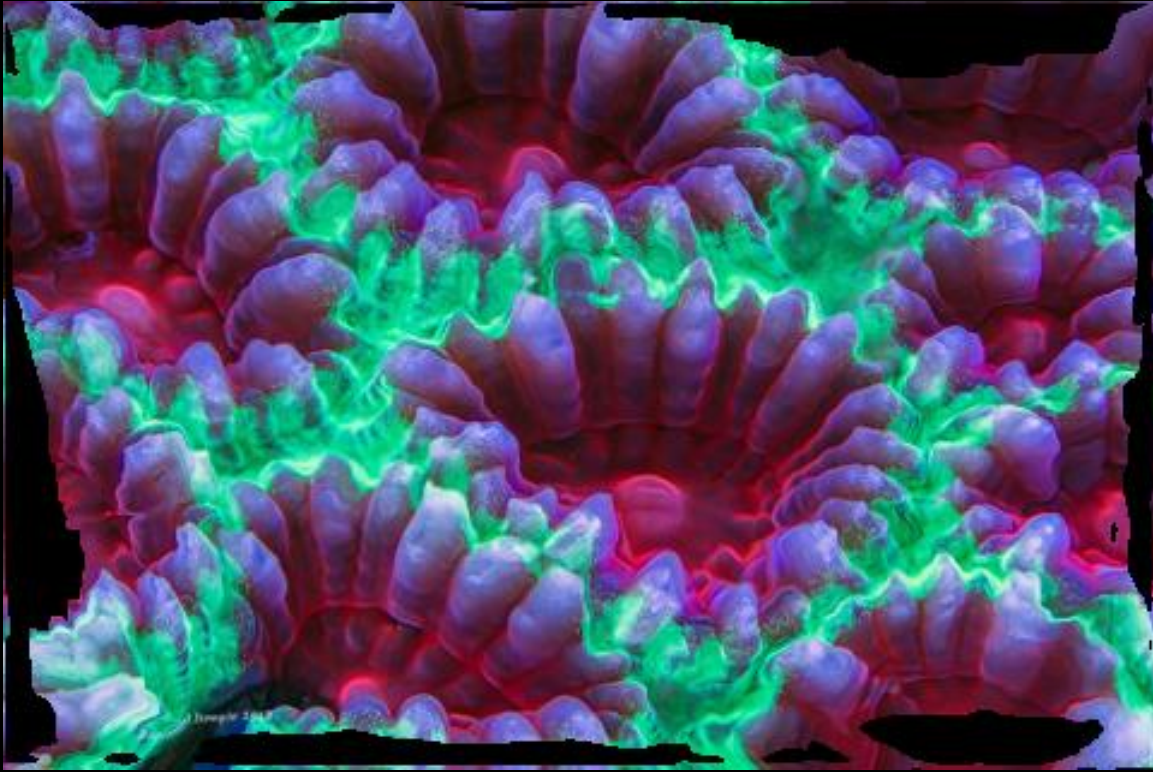
MV-NLV, corrected



INPUT



MV-NLV, exaggerated



INPUT



MV-NLV, corrected



INPUT



MV-NLV, corrected



INPUT



MV-NLV, exaggerated



INPUT



MV-NLV, corrected



INPUT



MV-NLV, exaggerated



INPUT



MV-NLV, corrected



INPUT



MV-NLV, exaggerated



INPUT



MV-NLV, corrected



INPUT



MV-NLV, exaggerated



INPUT



MV-NLV, corrected



INPUT



MV-NLV, exaggerated



INPUT



MV-NLV, corrected



INPUT



MV-NLV, exaggerated



INPUT



MV-NLV, corrected



INPUT



MV-NLV, exaggerated



INPUT



MV-NLV, corrected



INPUT



MV-NLV, exaggerated



INPUT



MV-NLV, corrected



INPUT



MV-NLV, exaggerated



INPUT



MV-NLV, corrected



INPUT



MV-NLV, exaggerated



INPUT



MV-NLV, corrected



INPUT



MV-NLV, exaggerated



INPUT



MV-NLV, corrected



INPUT



MV-NLV, exaggerated



Multiview NLV vs. Single-Image NLV

A few more examples

In Multiview the images are modified consistently, maintaining consistent shapes across views.

In Single-Image NLV each image is corrected independently, ruining the correspondence.

INPUT



SINGLE Image NLV

Inconsistent shapes



INPUT



MV-NLV, corrected

Consistent shapes



INPUT



SINGLE Image NLV

Inconsistent shapes



INPUT



MV-NLV, corrected

Consistent shapes



INPUT



SINGLE Image NLV

Inconsistent shapes



INPUT



MV-NLV, corrected

Consistent shapes



INPUT



SINGLE Image NLV

Inconsistent shapes



INPUT



MV-NLV, corrected

Consistent shapes



Multiview NLV - Limitations

When the two images are very different from one another, the initial correspondence computation can fail, in which case the entire algorithm fails.

INPUT 1



OUTPUT 1



**Problematic
correspondence**



INPUT 2



OUTPUT 2

