

## **Optical 3D-sensors in Cultural Heritage - potentials and limits.**

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Optical 3D-sensors promise to acquire the shape (and texture) of object surfaces, which makes them an exceedingly useful tool for documentation of cultural heritage. Today, this promise is indeed satisfied, to a certain extent, for certain applications. But the list of wishes is not yet fulfilled. We will discuss fundamental difficulties introduced by physics and information theory and future potentials of optical 3D-sensors for applications such as cultural heritage.