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If 3D printing and CG graphics meet the historical heritage...

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3D printing and graphics play a crucial role in the conservation and dissemination of historical and museum assets in the astronomical field. Indeed, these technologies make it possible to make usable instruments and places of historical interest that would otherwise be inaccessible. Examples of the potential of these technologies are the three-dimensional reconstruction of the Paduan observatory and the animation of the meridian room.

The three-dimensional reconstruction of the observatory, based on the original projects, was made possible thanks to 3D printing, which faithfully reproduced the eighteenth-century architectural structure. The animation of the meridian hall showed that it is not only a building but also a complex astronomical instrument. These visual representations help viewers better understand the functionality and use of the building in the astronomical context.

3D printing and graphics also offer the opportunity to make the museum experience inclusive. For example, original instruments replicated with 3D printing can be explored and touched by blind visitors, offering them sensory engagement. Additionally, 3D printing and graphics are indispensable for visualizing past, present, and future astronomical concepts. In fact, these technologies make it possible to create three-dimensional models of celestial bodies, planetary systems, and complex astronomical phenomena, facilitating their understanding by the non-expert public and stimulating interest and curiosity in the astronomical field.

In conclusion, if properly directed, 3D printing and graphics can play a strategic role in the conservation and enhancement of historical and museum heritage.

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