

Summary: Copyright aspects of the production and the use of tactile models

Background of the study

With the help of tactile models, it is possible to give blind and visually impaired people access to cultural objects. Paintings as well as museum objects are thereby translated into a form which may be experienced in haptic way and does not, as the original, only appeal to the visual sense. Tactile models have the objective to get as close as possible to the original, or at least to provide an authentic impression of the original. The objects of most tactile models are works of art, which are or have been protected by copyright. Therefore, during the production of tactile models, it is necessary to particularly pay attention to those copyrights and to guarantee that existing rights are not infringed and/or necessary approvals are obtained. Otherwise, copyright infringement may often cause significant financial consequences and in the worst case scenario can lead to the failure of a project. Copyright infringements often do not happen intentionally, but simply out of a lack of knowledge of the legal situation. In fact, for people without a legal background it can be very difficult to determine conditions as to what is permitted and what is not, whether for certain cases there are exemptions as well as to recognize at all if a certain activity is relevant in terms of copyright. Digital technologies and new possibilities of reproduction, adaption and dissemination of works of art have also raised entirely new issues in the area of copyright, which cannot be answered unambiguously to this day.

In addition to the production of tactile models by 3D technologies, another objective of the AMBAVis project was, therefore, to clarify their respective copyright conditions. With that it should be easier for museums, computer specialists, technicians, organizations for the blind people etc. to successfully carry out such projects and to take into account copyright conditions and clarify conditions associated with them from the very beginning.

Essentially the study comprises two main issues: Firstly, existing copyrights may be affected during the production process. In order to be able to successfully carry out the project, it is necessary to pay attention to conditions that need to be observed in the case of existing copyrights of the original work, so that there is no risk of infringing other copyrights. Secondly, new copyrights arise from the production of the tactile models. Therefore, the ownership of the copyrights, and the consequences this has for the

further use of the model, need to be determined beforehand. For the sake of clarity, within the study, the production process of the tactile models was divided into several sequences with respect to its essential technical implementation steps, thus enabling their detailed legal analysis. The study focuses on the specific situation of the museums and manufacturer of the tactile models and, derived from the legal analysis, it draws concrete recommendation of actions for practical use.

The study is based on the legal system of the four project-partner-countries Austria, Germany, Slovakia and the United Kingdom, as well as on the corresponding European legal framework. Selectively, the Austrian (Part I of the study is available on the AMABVis-homepage) and the British Law (Part II – also available online) have been used as the basis of the analysis. In case of divergent regulations, the specifics of the legal system were compared to the other partner countries.

Results of the study

Prior to proceeding further, it should be noted that copyright is the area of law, which aims at protecting works of art and literature. It is not the physical objects such as books or a score which are protected, but the intellectual goods such as literature or music, which are then materially fixed in the form of a book or a score.

As long as the established literature or music composition can be described as a creative invention within the context of the copyright, it is protected by copyright and may not be reproduced, adapted or made available on the internet without the consent of the original copyright holder. Therefore, in the case of a painting or a tactile model, it must be noted that not the material form of the model itself, but the intellectual creation behind it is protected by copyright. This is the underlying principle of every single copyright assessment, and also of our analysis of the production process of tactile models.

The production chain schematically comprises five steps:

- 1) **Clearance of rights:** If a painting, for instance from a museum, is used as a template for a tactile painting, it has to be investigated whether it is protected by copyright or not. If yes, attention has to be paid to the fact that a museum which is in possession of the painting, does not automatically has the right to undertake activities restricted to the copyright owner by law, for example, to copy the work or to make it available in the internet. However, some of these rights are essential to the production of a tactile painting. That is why it has to be clarified, who is the actual holder of the relevant rights of use, e.g. the painter himself/herself or the heir/heirress, in order to ask for his/her

consent. If this is not done, the whole procedure downstream, as well as the final tactile model will suffer from the fact that it has violated foreign copyright, and is thus not lawful. The careful and precise examination at this early stage has therefore highest priority. As long as a painting is not protected by copyright, no further consent is required. The following steps are, therefore, especially relevant for the production of tactile paintings which are protected by copyrights.

- 2) **Digitalization and scanning of the original work:** The digitizing of images or objects is, according to copyright law, a copy or a reproduction of the original. This kind of right is solely bestowed to the creator. Consequently, the permission from the creator or rights holder is required prior to digitizing the work. It does not matter if there is a switch from 2D to 3D within the reproduction or vice versa. It is, and will remain a copy of the original work.
- 3) **Data modelling/ design of the model:** The digital version serves as a template for the modelling of the tactile model. The data-file is processed in a way that it can be transformed into a haptic model at a later stage, with the help of 3D printers or milling machines. This adaption has now twofold significance in the perspective of copyright: Firstly, the right of adapting the work is solely entitled to the copyright owner. That is why consent is required. Secondly, the adaption itself is a creative invention in terms of copyright, which leads to the fact that the adaption itself (also the processed 3D file, which is transformed into a tactile model later on) is protected by copyright as well. However, the creator of the tactile model requires the consent of the copyright owner of the original work to use the model.
- 4) **Production of the tactile object:** The computer edited painting or object is transformed into a tactually perceivable form by using 3D printers or milling machines. At this stage, the final product, the three-dimensional model is produced. This process is again relevant in the perspective of copyright, since it includes the reproduction which describes a right solely entitled to the creator. The right to copy a work comprises the right to reproduce the work in any possible mode of procedure, therefore also the 3D print. This implies that for this step not only the consent of the creator is required, but also that of the creator of the already processed work.
- 5) **Use by the museum:** Ideally, at the end of the process, the tactile model is used by a museum or it can be used in other public locations. However, it should be noted that a museum which acquires a tactile model or orders one, does not automatically also acquire the rights of use for all purposes. In case of doubt, the museum has acquired the right to use the purchased model that means to display it, but not more. If the museum wants to use the tactile model also for other purposes, for example,

to make it available online, a contractual agreement should be provided, which transfers the possession of the tactile model as well as the corresponding rights to use.

In addition to the copyright-assessment of the relevant production steps of tactile models, some other relevant topics were thoroughly examined. Among them, for example, the questions, under which conditions the use of 3D file templates of the internet is allowed, as well as the legal qualification of virtual tactile models. Furthermore, whether international exemptions from copyright law regarding the production of fully accessible books for blind and visually impaired people are transferable to the area of tactile images, was also discussed. The latter one is not the case, because tactile models regularly fulfil not only the purpose of being used by blind and visually impaired people, but also by other visitors of the museum. However, the exclusiveness of the users would be a prerequisite to think of an analogous regulation.

Conclusion: The copyright regulations may be complex, but in principle, they are not a barrier for the production of tactile models. Indeed, it is advisable to seek clarification in an early stage, to include the copyright owner from the start, and to ask for required consent beforehand, to guarantee a smooth process of the project.

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