

2020-01-07

How Japanese copyright law can facilitate access to art for persons with a visual impairment

Schroff, Simone

<http://hdl.handle.net/10026.1/15248>

10.4324/9780429342677

Taylor and Francis

All content in PEARL is protected by copyright law. Author manuscripts are made available in accordance with publisher policies. Please cite only the published version using the details provided on the item record or document. In the absence of an open licence (e.g. Creative Commons), permissions for further reuse of content should be sought from the publisher or author.

How Japanese Copyright Law Can Facilitate Access to Art for the Visually Impaired

By Dr Simone Schroff¹

3D printing's main contribution for the visually impaired is that it allows them to perceive art in a way not previously possible. Art works rely on visual perception and therefore can be beyond the reach of the visually disabled. In the case of 2D art works such as paintings, the scene and setting of the painting is crucial, but touching the art work does not convey the content. Moreover, even if the work is three-dimensional, allowing museum visitors to touch it is usually out of question. As a result, art is often inaccessible to the visually impaired. 3D printing can bridge both of these gaps. It can turn a two-dimensional piece of art into a three-dimensional work, making the scene and setting accessible. In addition, 3D printing has advanced enough to allow for cost-effective replicas which visitors can touch. Finally, the original remains unaffected: all that is required is a detailed laser scan. However, the scanning and (3D) printing are copyright relevant activities in Japan.

The role of copyright law in facilitating the full participation of people with disabilities in society and especially its cultural life has long been recognised.² On 1 October 2018, Japan ratified the Marrakesh Treaty which entered into force on 1 January 2019.³ While the Marrakesh ratification came in the wake of a major reform package,⁴ the role of 3D printing and modern technology as

¹ Lecturer in Law, University of Plymouth.

² For example, Japan signed the Convention on the Rights of Persons with Disabilities on 20 January 2014.

³ In doing so, it is in line with the European Union (see Directive (EU) 2017/1564 of the European Parliament and of the Council of 13 September 2017 on certain permitted uses of certain works and other subject matter protected by copyright and related rights for the benefit of persons who are blind, visually impaired or otherwise print disabled and amending Directive 2001/29/EC on the harmonisation of certain aspects of copyright and related rights in the information society).

⁴ Copyright Amendment Act of 18 May 2018, effective from 1 January 2019. For a good summary, Current Awareness Portal, *Reforms for the Progress of Digital and Networks and the Broadening the Information Access Opportunities for Disabled Persons* (デジタル化・ネットワーク化の進展や障害者の情報アクセス機会の拡充等に対応した改正著作権法が成立) (23 May 2018) (<http://current.ndl.go.jp/node/36038>, accessed 19 September 2019). The copyright term was extended from 50 years after the death of the author to 70 years, catching up

such in making art works more accessible has not stirred major debates in Japan. In fact, Japan took a narrow implementation route by drawing on the treaty's article 4(4), which allows countries to apply the rules of the Marrakesh treaty only to the extent that works are not available commercially. This seems to imply that Japan's approach to the issue is narrow and limited.

This chapter examines the extent to which Japanese copyright law supports or hinders sensory art, mainly in reference to the 3D printing of art works for the visually impaired by cultural heritage institutions. It focuses on cultural heritage institutions in particular as these are, in the first instance at least, the most likely institutions carrying out this kind of project as pilots. In the first part, the basic requirements for copyright to be relevant will be outlined. The discussion will then examine 3D printing as a process from the copyright angle to identify when and how copyright law is relevant. In the third section, the 1970 Japanese Copyright Act's mandatory exceptions are analysed, focusing on the key requirements and the extent to which they cover 3D printing for the visually impaired. The conclusion then will make suggestions for reform to facilitate the use of 3D printing in the sensory art context.

The Requirements for Copyright Protection

Copyright protection is dependent on meeting certain statutory requirements. This means that copyright is relevant if, and only if, the original art work to be scanned for 3D printing meets these conditions. First, the original art work must fall within the scope of copyright law. Japanese copyright law defines copyright works as the creative expression reflecting the author's emotions, especially in the fields of literature, science and scholarship, art and music.⁵ The notion of originality is best understood in context, in particular in relation to the specific type of work.

with both the EU and the US. Amendments also focused on making new industries viable and reduce the hindering effect copyright may have on these. They address issues around the reproduction, use of databases and the storage of works for AI purposes.

⁵ Japanese Copyright Act 1970, art. 2(1)(i).

The notion of work is further clarified in the list of copyright works provided by article 10. For art works, the key provision is article 10(iv) which covers the traditional forms of artistic expression such as paintings, sculptures and engravings “*and other artistic works*”. It is an open ended definition which gives only illustrating examples, covering both 2D and 3D works. The key criterion for art works to be considered copyrightable is that they need to be perceived as primarily artistic,⁶ whereby originality is expressed as a combination of the shape and colours used.⁷ Photographs are also protected but are listed separately⁸ because they are the result of a technical process. They only benefit from protection if the author, defined as the natural person who has created the work⁹, has shown some active decision-making when the photograph was set up. In practice, photographs will be presumed to be original if they have significant economic value.¹⁰ For photographs that are part of art exhibitions, this threshold might be presumed to be met since their consideration for exhibition by itself marks them as outstanding and original within the definition of the law. However, not covered are photographs made automatically by machines without significant human intervention; as part of cinematographic works; and those purely made to reflect reality.¹¹ Taking the term ‘art’ more broadly, Japanese copyright law also includes protection for “artistic” architectural works,¹² while their blueprints and figurative works of a scientific nature such as plans, charts, and models are protected under article 10(vi). Therefore, it can be presumed from article 10 that all types of art works, their plans and models in exhibitions fall under Japanese copyright law.

⁶ M. Kato, *Copyright Law: Article by Article Analysis* (著作権法逐条講義), p. 122.

⁷ M. Kato, *Copyright Law: Article by Article Analysis* (著作権法逐条講義), p. 122.

⁸ Japanese Copyright Act 1970, art. 10(viii).

⁹ Japanese Copyright Act 1970, art. 2(1)(ii). This is subject to employment provisions under art. 15.

¹⁰ M. Kato, *Copyright Law: Article by Article Analysis* (著作権法逐条講義), p. 125.

¹¹ M. Kato, *Copyright Law: Article by Article Analysis* (著作権法逐条講義), p. 125-126.

¹² Japanese Copyright Act 1970, art. 10(v). Actually establishing the artistic character and artistic components can be difficult in practice as Sakka has pointed out. F. Sakka, *Detailed Explanation of Copyright Law* (詳解著作権法) (Tokyo: Gyousei, 5th ed., 2018), pp. 88-89.

The second requirement is that the art work in question must still be protected by copyright. The standard term of protection is 70 years after the death of the author. In cases where the author is not known (anonymous/ pseudonymous works), the relevant time point is the making public of the work or its translation. This generally refers to the publication, transmission or issuing copies to the public either by the author or with his permission.¹³ For art and photographic works, this explicitly also includes their first exhibition.¹⁴ Given the recent copyright term extension from 50 to 70 years, care needs to be taken with this requirement.¹⁵ The law does not “revive” expired rights (like the EU extension did in the 1990s), but instead it only applies to works still under protection on 30 December 2018 and thereafter. In practice, this means that the death of the author or the first act of making the work public need to have occurred after the 30 December 1968 for copyright protection to subsist.

In summary, copyright law is only a relevant consideration if two criteria are met. First, the work must be copyrightable and therefore fall within the scope of copyright works and meet the minimum originality threshold. Secondly, the term of protection cannot have expired. If these conditions are not met, then anyone is free to reproduce the original art work using 3D printing technology. If they are, then it is essential to proceed in a copyright compliant manner.

3D Scanning of Art Works

In general, the 3D printing process has three distinct stages. First, the original art work needs to be loaded into the computer-assisted design (CAD) software by scanning every detail of it. Under copyright law, authors¹⁶ have the exclusive right to control the reproduction of their work which is defined as the reproduction “*in a physical form through printing, photography, or replication,*

¹³ Japanese Copyright Act 1970, art. 4(1).

¹⁴ Japanese Copyright Act 1970, art. 4(4).

¹⁵ For an explanation of the 2018 reform package, see footnote 3.

¹⁶ The term is used broadly here and includes copyright owners who have been assigned the rights at some stage.

*by recording its sound or visuals, or in any other way...*¹⁷ The definition is technologically neutral and does include the scanning of the whole work or a significant part of it. The physical form here is the image that is created in the CAD software. It should be noted that under sub-paragraph (c) the reproduction right also includes building an architectural work based on its blueprints. There has been no case law yet on the extent to which “building” activity can be digital but given the technological neutrality of the main provision, an argument can be made that it is covered. It can therefore be concluded that the scanning process requires permission under the right to reproduction (article 21).

Once the image has been scanned and loaded into the CAD software, the latter is used to develop the model needed by the actual printing software to make the 3D model. Making changes can potentially be an issue as authors have the right to protect the integrity of their work: the author *“shall have the right to preserve the integrity of his work and its title against any distortion, mutilation or other modification against his will.”*¹⁸ However, this provision does not apply where the modifications made are required by the nature of the work and its intended use.¹⁹ Given that the purpose of the 3D printing here is to enable the visually impaired to experience the original art work as much as possible, it is most likely that the changes to be made to the scanned reproduction are limited to what is technologically necessary to enable the printing. Therefore, there are no major copyright concerns in this regard.

It can be questioned whether the image in the CAD software is sufficiently creative to give rise to a copyrightable work in its own right. In the absence of case law this remains an open question, but a few pointers can be given. First, the list of work types is illustrative and not a closed list, leaving

¹⁷ Japanese Copyright Act 1970, art. 2(15)- translation by Ministry of Justice (<http://www.japaneselawtranslation.go.jp/law/detail/?id=2506&vm=04&re=02>, accessed 19 September 2019).

¹⁸ Japanese Copyright Act 1970, art. 29- Translation by Ministry of Justice (<http://www.japaneselawtranslation.go.jp/law/detail/?id=2506&vm=04&re=02>, accessed 19 September 2019).

¹⁹ Japanese Copyright Act 1970, art. 20(iv).

room for new additions. In this sense, there is nothing that prevents CAD images from falling under copyright protection. Instead, the issue is if the originality threshold is met. As previously mentioned, Japanese copyright law requires a natural person to create a work. Based on this, meeting the originality threshold crucially depends on the extent to which the technician intervenes in or after the scanning process. One possible analogy here could be the protection of photographs. Photography is essentially a reproduction technology but photographs are copyrightable as long as the author's choices are sufficient to meet the originality requirement.²⁰ The same reasoning could justify giving protection to CAD images, depending on how much human intervention is required to turn the CAD image into a usable 3D print. While the issue remains debated in the literature, there seems to be a growing consensus in favour of copyright protection.²¹ Given Japan's general preference for stronger protection and supporting new industries,²² it seems reasonable to conclude that the CAD images are copyright works in their own right, at least until the issue is clarified by the courts or the legislature.

²⁰ This goes back to the originality standard required for photographs which is reflected in the choices the photographer makes. For a detailed discussion, see F. Sakka, *Detailed Explanation of Copyright Law (詳解著作権法)*, pp. 91- 95.

²¹ N. Kotaro, "We made a Penrose Triangle with 3D printing, but...(3D プリンターでペンローズ三角形は 作れたが ...)", *Journal of Information Processing and Management*, Vol. 56(7), 2013, pp.477-479. K. Nagai, *3D printing and creating an open creative breeding ground within current copyright law (3D プリンタと著作権の現在 — オープンな創作の土壌をつくるために*" (26 June 2014) (<https://www.kottolaw.com/column/000798.html>, accessed 19 September 2019); EC 法務, *The problems of 3D printing technology under copyright law are?! (3D プリント技術の著作権法上の問題点とは ! ?)* (19 March 2019) (<https://ec-houmu.com/right/3Dprint-copyright#3D-2>, accessed 19 September 2019); T. Ikkanda, "Can AI be the author?- Technological possibilities and their limits (?)- ?! (AI は著作者になれるのか — テクノロジーの可能性と限界 (?) — ! ?)", *Kyojo Journal of Law and Politics*, Vol. 11, 2017, pp. 40-41; For an opinion to the contrary, concerning the pure scanning of an item. M. Sudo, "Copyright Issues Surrounding Online Publication of Archaeological Site Reports and 3D Scanning of Cultural Properties (発掘調査報告書のウェブ公開と文化財の 3D データに関する著作権の諸問題)", *Nara National Research Institute for Cultural Properties*, Vol. 21, 2019, 94-95.

²² See footnote 3. Japan considers strong copyright protection essential for the creative industries. Indeed, the TRIPs negotiations were strongly shaped by the triumvirate made up of the US, EU and Japan- all arguing for stronger levels of protection. This ethos was also evident when Japan ratified the ill-fated ACTA agreement which raised not only serious concerns within the EU but led to street protests and the first successful public opposition to a copyright agreement in the West. For a historical perspective, see J. Braithwaite and Drahos, P., *Global Business Regulation* (Cambridge: Cambridge University Press), p. 66.

The discussion is important as it affects the status of the CAD scan under copyright law, especially if the CAD scan and the resulting replica have to be considered derivative works. Making adaptations and therefore derivative works is regulated by article 27: the author has the exclusive right to

*“translate, arrange musically or transform, or dramatize, cinematize, or otherwise adapt his work.”*²³

Derivative works under Japanese law are considered copyright protected works in themselves (二次的著作物), and therefore have to meet the originality threshold in order to get copyright protection.

As a result, this provision covers turning a 2D art work into a 3D one (and vice versa), but it does not include translating a work using Braille- only foreign language translations fall within this provision.²⁴

If the CAD image meets the originality threshold, then it has to be considered a derivative of the original art work which in turn makes it copyright relevant in its own right. Since scholarly opinion currently seems to favour that CAD images are copyright works, permission is required not only to reproduce the original art work, but also to make a derivative work.

Considering the CAD images as derivative works adds another layer of authorship. This is also reflected in article 28, which clarifies the rights status of the derivative work by providing the author of the original work with the same rights as the author of the derivative work.²⁵ This covers all of the rights which are available, and the rights are cumulative: both the original artwork and the derivative work are protected under copyright law, and each one has a distinct author and rights attached to it. However, the derivative work’s author cannot give permission alone for any further use of the work: she or whoever is seeking permission also needs agreement from the author of the

²³ Japanese Copyright Act 1970, art. 27, translation by Ministry of Justice (<http://www.japaneselawtranslation.go.jp/law/detail/?id=2506&vm=04&re=02>, accessed 19 September 2019).

²⁴ M. Kato, *Copyright Law: Article by Article Analysis* (著作権法逐条講義), p. 213. It should be noted though that the use of Braille would fall under article 21 and therefore the reproduction right.

²⁵ Article 28: *“The author of the original work underlying a derivative work holds exclusive rights in the same categories as the rights prescribed in this Subsection that the author of the derivative work holds in connection with the exploitation of that derivative work.”* Translation by Ministry of Justice (<http://www.japaneselawtranslation.go.jp/law/detail/?id=2506&vm=04&re=02>, accessed 19 September 2019).

original artistic work.²⁶ Kato points out that the purpose of article 28 is to give the author control over secondary (derivative) works which are directly derived from his own.²⁷ As a result, the artist and the author of the derivative work both have equal rights and need to agree on how the derivative work is to be further used. This is important in terms of long-term copyright management in the context of sensory art projects. In particular, it requires that the copyright ownership of the 3D CAD images and the replica are clarified (ideally beforehand and contractually), to ensure both can be used as intended by the cultural heritage institution.

Examining the 3D printing process from a copyright angle shows that cultural heritage institutions need up to three sets of permissions. First, they need permission to reproduce the original art by scanning it. Secondly, they also need approval to make a derivative work depending on the rights status of the adapted CAD image, which will be presumed here to be a copyright work in its own right. Finally, the cultural heritage institution will have to either acquire the copyright or get permission to use the CAD image and the 3D printed replica from the author of the CAD image. While the last part will most easily be resolved by contracts as part of the 3D printing project, the permissions from the original artist are more difficult to acquire. It is here that the copyright exceptions for the visually disabled are most important.

Limitations in the 1970 Japanese Copyright Act

Limitations in the 1970 Japanese Copyright Act can be conceptualised as four distinct situations where the public benefit outweighs the interests of the author: 1) the type of use makes the application of copyright inappropriate; 2) the public benefit involved by the use in question requires a limitation to copyright; 3) a need to coordinate copyright with other rights that may exist and 4)

²⁶ M. Kato, *Copyright Law: Article by Article Analysis* (著作権法逐条講義), p. 217.

²⁷ M. Kato, *Copyright Law: Article by Article Analysis* (著作権法逐条講義), p. 213.

customary practices which do not cause undue economic harm to the author.²⁸ The exceptions for the visually impaired (article 37) and hearing impaired (article 37*bis*) fall under the first category, because for these individuals accessing the work as such already breaches copyright in a way not faced by the non-disabled. They would be unduly affected by the law in the absence of specific exceptions.

While the general justifiability is accepted by scholars and legislators alike,²⁹ new technologies which provide novel ways of making copyright works accessible to the disabled (such as 3D printing 2D art works, as examined here) are slow to be included. First, as a member of the Berne Convention, all of the Japanese exceptions are subject to the 3 Step Test and therefore should prevent undue market harm to the rights holder. This favours narrow exceptions, covering established uses at the time of drafting. Secondly, achieving technological neutrality is difficult because of the inherent uncertainty of how future uses may relate to the law. Nonetheless, this technological neutrality is exactly what the Japanese provision for the visually impaired seeks to create.

Permission to Reproduce a Work for the Benefit of the Visually Impaired (Article 37)

The main provision for the visually impaired can be found in article 37.³⁰ Paragraphs (1) and (2) focus on the traditional view of the difficulties the visually impaired face when accessing works: they cannot see the letters. Under paragraph (1), the user is allowed to make a reproduction of the original work in Braille. Paragraph (2) then extends the provision by adding the use of computers when accessing, storing and transmitting Braille works. Both provisions are specifically limited to Braille, and while they are open to all types of works, they are largely applicable to literary works due to the nature of the activities envisaged by the legislator. More interesting for 3D printing is the

²⁸ M. Kato, *Copyright Law: Article by Article Analysis* (著作権法逐条講義), p. 277.

²⁹ This is clearly visible in practice as article 37 was first introduced in 1970 and has since been continuously expanded to meet technological changes and the opportunities these offer to the visually blind.

³⁰ A full translation of article 37 can be found in the Annex.

third and final paragraph of article 37. Article 37(3) aims to give visually impaired individuals access to all types of copyright works in whatever manner is the most suitable for them. However, the provision is complex and therefore this analysis will proceed examining its core requirements one by one.

Like paragraphs (1) and (2), paragraph (3) applies to all types of copyright works, as long as the work has been made public.³¹ The meaning of making public depends on the specific type of work in question, as discussed above in the context of the term of protection.³² The provision then narrows the scope to works *“offered or presented to the public in a rendered form that is perceived visually”*. As a result, the visual component has to be central to accessing the work, for example the information, emotions and impressions a painting gives to the audience is visual. Music, on the other hand, relies on hearing and therefore has the audio and not a visual component at its centre. However, this requirement only applies to the main work that is being reproduced: any other copyright works which are attached to the original work are still included within the scope of the provision.³³ This is necessary to ensure that combined works, such as having an image next to text, are not unduly preventing the application of the exception, rendering it ineffective in practice. Similarly, neighbouring rights (phonograms, broadcasts and performances) are covered via article 102(1) and 102(4), which extends the rules of article 37(3) to all neighbouring rights.

Differently to paragraphs (1) and (2), paragraph (3) is broader in practice because it is not limited to Braille as a method of reproduction. Paragraph (3) allows for the reproduction, transmission and automatic transmission (which, in EU countries, is the equivalent to making available) of the copyright work in whatever form is required to make it accessible. The key point for sensory art is its

³¹ It should be noted here that another widely used translation by the Copyright Research and Information Center (CRIC) contains a minor but significant error in its translations. It refers to “word, made public” rather than “work”. However, the original provision reads 公表された著作物 and therefore work.

³² See section “The Requirements for Copyright Protection”.

³³ *“including a work other than the work in question which is reproduced therein or which is offered or presented to the public in a body united with the former work”*.

openness to the techniques used: *“or in any other form that is necessary to allow the visual work to be used by persons with visual impairments.”* It is consciously technologically neutral by not prescribing any particular method. Sakka, for example, emphasises that the provision aims to be as broad as possible and does not seek to exclude anything as long as it is suitable for the overall aim.³⁴ In addition, it does not limit the senses used by the accessible copy. A standard book in this context can be made accessible by using textiles or re-designing it into a 3D book (pop-up book). While 3D printing is not mentioned in the examples listed within article 37(3), it is not excluded either. Instead, it represents a similar sensory shift from vision to touch, and therefore it is in line with other, more established methods given as illustrating examples within the provision itself. However, the scope is limited to *“within the limits that are found to be necessary in order to provide the visual work for their exclusive use.”* In other words, it depends on the specific visual impairment that the individual has, assessed on a case by case basis. The specific visual impairment will then determine if 3D printing is suitable or necessary.

Article 37 relies on a two component definition of what “visually impaired” means. The provision first refers to natural persons that have *“difficulties in the perception of visual renderings”* in combination with *“other impairments”* that affect vision. Kato highlights this needs to be interpreted broadly and includes for example blindness, developmental conditions and colour blindness,³⁵ as long as they affect the individual’s ability to visually perceive the work in question.³⁶ However, it needs to be noted that this reference to the visually impaired also forms a strict condition on the use of this exception. Under article 49(1) in combination with article 49(2)(i), it is clear that if the copies made under this provision are used for any other purpose such as loaning, selling or broadcasting the copied work to the non- visually impaired or the general public, normal copyright provisions apply. In other words, these activities constitute copyright infringement if the author has not given

³⁴ F. Sakka, *Detailed Explanation of Copyright Law* (詳解著作権法), p. 348.

³⁵ M. Kato, *Copyright Law: Article by Article Analysis* (著作権法逐条講義), p. 292.

³⁶ Article 37(3) clarifies this explicitly by stating: “having difficulty in using that visual work in its visual form”.

his/her permission. As a result, the cultural heritage institutions should clearly define which type and/ or degree of visual impairment is covered by the sensory art project (and equally important, which ones are not).

Given its broad scope in terms of aims, permitted techniques, and definition of visually impaired, it is not surprising that there are limitations in terms of who can actually rely on the provision. Article 37(3) only covers the action of certain organisations, namely *“person set forth by Cabinet Order that engages in an undertaking related to the welfare of persons who have difficulties in the perception of visual renderings due to visual impairments or other impairments”*. Under the Cabinet Order, visually-impaired specialist institutions, all schools, public libraries and similar institutions are explicitly included.³⁷ In addition, the Cabinet Order also offers any institution the option to register as a designated person as long as it meet three requirements: 1) having the technical and financial skills to support the relevant activity; 2) having employees with the necessary expertise; and 3) keeping a register of the visually impaired individuals they share information with.³⁸ The range of institutions that can apply for designated status is therefore very broad but unless they are explicitly included in the list, they need to apply for permission. The secure route would be for the cultural heritage institution to apply for recognition under the Cabinet Order. While museums and archives are not explicitly mentioned, it is likely that they would also be covered given their shared public benefit missions of providing access to culture. However, the requirement to keep a register could prove difficult in practice, especially in the context of exhibitions open to the general public. Alternatively, a cooperation between a designated institution and a cultural heritage institution may be suitable.

The other major limitation within article 37(3) refers to the market for works for the visually impaired. The legislator sees a market solution as preferable, in line with the Berne Convention’s 3

³⁷ F. Sakka, *Detailed Explanation of Copyright Law* (詳解著作権法), p. 437.

³⁸ Copyright Law Implementation Order 1970, art. 2(2).

Step Test, which requires all exceptions to not unduly affect the author's economic interests. As a result, article 37(3) explicitly states that if a work has been made available in a suitable, accessible format by the author, then the provision does not apply at all. In this way, authors are given an incentive for using market mechanisms, while the visually impaired individual receives the access this provision intends to provide. 'Suitable' here does not refer to convenient or generally affordable, though.³⁹ Instead, it has to be read from the view point of offering substitutes: since the reason for this limitation is incentivising authors to license their works in suitable formats, any competing offer that undermines this (namely offering free or lower priced substitutes) is excluded from article 37(3).

Finally, both the author and the source have to be named.⁴⁰ The author is presumed to be the person named on the work.⁴¹ This refers to the usual method by which authors are named according to the type of work in question, including for example title pages, publication data, labels or booklets, and this actually supersedes the name next to a copyright notice (if it exists).⁴² However, it does not cover implied authorship references (暗示的な表現), such as only mentioning a name in the foreword of a book.

In summary, permission to reproduce an original art work through 3D printing for the benefit of the visually impaired has to meet the following conditions:

- The art work must have been made public and offered in a way that can be perceived visually.

³⁹ F. Sakka, *Detailed Explanation of Copyright Law* (詳解著作権法), p. 350; M. Kato, *Copyright Law: Article by Article Analysis* (著作権法逐条講義), pp. 295- 296.

⁴⁰ For copyright works, see art. 48(1)(ii) and art 48(2). This is extended to neighbouring rights under art. 102(2).

⁴¹ Japanese Copyright Act 1970, art. 14.

⁴² M. Kato, *Copyright Law: Article by Article Analysis* (著作権法逐条講義) (Tokyo: Copyright Information Center, 6th ed., 2013), p. 144.

- The 3D printing has to be an effective way of giving access to the work in the context of the specific visual impairment: clear delineation is preferable here about which type/ degree of visual impairment should be covered by the 3D printing project.
- The managing institution needs to have recognised status or cooperate with one which does. If the institution does not fall under a default category, then the requirement to keep a register of visually impaired individuals benefitting from its actions will most likely prove the most difficult condition to comply with in practice.
- If an official, commercially licensed suitable alternative is available, the sensory art project cannot rely on article 37(3).
- The authors and sources of all copyright or neighbouring rights relevant parts have to be named.

Permission to Make Adaptations

As discussed previously, permission to make a derivative work may be required in addition to the permission to make a reproduction. Article 47^{Sexies}⁴³ covers the exploitation of copies made under previous exceptions, including making derivative works. As long as the conditions of the primary exception (here article 37(3)) are met, it allows for the making of translations, reformulations and adaptations. Translations refers to offering the work in other languages. Reformulations is not as clear from the English translation, but the original Japanese wording shows that it refers to changing the form (変形) while the concept of adaptations is broader altogether. As Kato points out, an adaptation uses the story, structure, main components (= interior form) to make a derivative work.⁴⁴

⁴³ This article used to be article 43 but since then shifted. Please note that older Copyright Commentaries and the CRIC translation do not reflect this shift yet.

⁴⁴ M. Kato, Copyright Law: Article by Article Analysis (著作権法逐条講義), p. 213.

Under article 47^{Sexies}(1)(v), it explicitly refers to the copies under article 37(3). For the 3D printing project, this provision means that both the CAD image and the resulting end product (the printed art) are covered by the exception. While article 47^{Sexies} does not impose any additional conditions, it should be noted that the need to name the source and author also applies to the derivative work via article 48(3).⁴⁵

Once copies have been made, the producing institution can share them with the visually impaired audience. Sakka points out that this includes (and even presumes) a transfer of copies and therefore goes beyond the lending envisaged by article 37(1) and (2).⁴⁶ This reasoning derives from article 47^{Septies}, which states that a transfer of copies is permitted as long as the transfer is for the same purpose as stated in article 37(3), in other words making works accessible for the visually impaired. In practice, therefore, cultural heritage institutions can provide the replicas to the visually impaired audience on a temporary or on a permanent basis.

Conclusion

In conclusion, making 3D copies of copyright protected art works is permitted under Japanese copyright law as long as it is for the benefit of and limited to the visually impaired. However, compliance with the rules is difficult in practice, given the large number of provisions that have to be taken into account, the diverse conditions these impose and the unclear status of 3D printing under copyright law. To facilitate the access to copyright protected art by the visually impaired, a series of recommendations can be made. They centre on the complexity of the rules, which can potentially chill sensory art projects or lead to accidental mistakes in their implementation. First, all cultural heritage museums with a public benefit mission should be explicitly included in the Cabinet Order

⁴⁵ Depending on the situation, it may be necessary for the cultural heritage institution in charge to secure the rights in the CAD reproduction of the original art work, especially if this task is not carried out in house.

⁴⁶ F. Sakka, *Detailed Explanation of Copyright Law* (詳解著作権法), p. 348.

that defines which institutions can rely on article 37(3). This would facilitate the process by not only clarifying the institutions' legal position, but also by reducing the registration- related transaction costs involved in getting sensory art projects off the ground. Secondly, the status of 3D printing (including the status of the CAD images) needs to be resolved because it is crucial to determining which rules actually apply when. Thirdly, in the absence of a specialized provision in the Copyright Act, it is necessary to provide detailed guidance to cultural heritage institutions, laying out how they can comply with the exceptions' requirements in practice.

Annex

“(1) It is permissible to reproduce in Braille a work that has been made public

(2) It is permissible to use a computerized Braille processing system to record a work that has been made public onto a recording medium or transmit to the public such a work (except in a broadcast or cablecast; however, it is permissible to make the work available for transmission, if it is to be transmitted to the public via automatic public transmission; the same applies in the next paragraph).

(3) A person set forth by Cabinet Order that engages in an undertaking related to the welfare of persons who have difficulties in the perception of visual renderings due to visual impairments or other impairments (hereinafter in this paragraph and in Article 102, paragraph (4) referred to as "persons with visual impairments, etc.") may reproduce a work that has been made public and that is offered or presented to the public in a rendered form that is perceived visually (including a work that has been made public and that is offered or presented to the public in a form that is perceived both visually and through other senses) (including a work other than the work in question which is reproduced therein or which is offered or presented to the public in a body united with the former work; hereinafter in this paragraph and in Article 102, paragraph (4) referred to as a "visual work"),

and may transmit such a visual work to the public, with the writing in the visual work changed into sound, or in any other form that is necessary to allow the visual work to be used by persons with visual impairments, etc. who have difficulty in using that visual work in its visual form, within the limits that are found to be necessary in order to provide the visual work for their exclusive use; provided, however, that this does not apply if the visual work has already been offered or presented to the public in such a form by the copyright owner, a person authorized thereby, a person in favor of whom the print rights set forth in Article 79 have been established, a person authorized thereby to reproduce the visual work, or a person authorized thereby to transmit the visual work to the public.”⁴⁷

⁴⁷ Translation by Ministry of Justice
(<http://www.japaneselawtranslation.go.jp/law/detail/?id=3259&vm=04&re=02>, accessed 19 September 2019).