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Protection of Digital Heritage Database

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Abstract. The main objective of this paper is to look at protection of database involving digital heritage materials in Malaysia. This is done by looking at the definition of relevant key terms, the significance criteria and problems of database protection in the copyright regime. This paper argues that not only copyright regime fails to give adequate protection for database and heritage database materials, that heritage law also does not correspond well to copyright issues.

Keywords: Digital heritage, database, protection.

1. Introduction

Cultural heritage law is increasingly making its mark in various legal regimes including the law of environment, development law, intellectual property, law of the sea and others. Within these legal regimes, there exist mechanism designed for the protection of subject matter of concern, but none are designed for the protection of heritage matters. Thus, there exists a need to have specific law dealing with various aspects of cultural heritage issues. In Malaysia, this need is addressed by National Heritage Act 2005, which came into force in 2006. However, does heritage law correspond well to other regimes? The main purpose of this paper is to look at the protection of digital heritage database. To recall the work done at UNESCO, that UNESCO has placed the need for preservation of digital heritage within the context of common heritage of mankind. The UNESCO's 'Memory of the World' Programme for example, which aims to ensure the preservation, by the most appropriate means, of the world's documentary heritage. In sum, the idea is to make this heritage as accessible as possible to people of the world by using the most appropriate technology. However, there is limit to what heritage laws can do. Beyond its reach, other regimes would apply.

2. Key Concepts and Terms

2.1 Heritage

Defining 'heritage' is a laborious task for the term 'heritage' is susceptible to subjective interpretation. For the purpose of this paper, 'heritage' may be broadly termed as 'our legacy from the past, what we live with today, and what we pass on to future generations.' There are two main domains of cultural heritage law; tangible and intangible heritage. The tangible heritage includes but not limited to the protection of historical or cultural buildings, sites, monuments and even moveable objects. Tangible heritage may also be further divided into underwater and terrestrial heritage. Intangible heritage refers to various forms of expressions and practices. Under the National Heritage Act 2005 (NHA 2005), intangible heritage is defined as: 'any form of expressions, languages, lingual utterances, sayings, musically produced tunes, notes, audible lyrics, songs, folk songs, oral traditions, poetry, music, dances as produced by the performing arts, theatrical plays audible compositions of sounds and music, martial arts that may have existed or exist in relation to the

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heritage of Malaysia or in relation to the heritage of a Malaysian community.' In this paper, we make no attempt to classify 'digital heritage' as tangible or intangible.

2.2 Digital Heritage

NHA 2005 does not define 'digital heritage' but we propose that it relates to those made up of computer-based materials, which are of certain 'heritage' value to mankind. However, not all digital materials are of enduring value, therefore, some preservationists argued that those that are require active preservation approaches if continuity of digital heritage is to be maintained. The UNESCO Charter on the Preservation of Digital Heritage defines 'digital heritage' as comprising of 'documents converted into digital form from existing materials in any language and area of human knowledge or expression, or, increasingly, "born digital" where there is no other format but the digital original.' This definition is wide and it includes 'linear text, databases, still and moving images, audio and graphics, as well as related software'. Furthermore, the materials may have 'originated on-line or off-line, in all parts of the world.'

2.3 Protection and Preservation

In the heritage law discipline, the term 'protection' has several connotations. It may refer to conservation, reconstruction, rehabilitation, preservation as well as protection from elements or unlawful human interferences and activities. In the context of the protection of digital heritage, the term 'preservation' for example, connotes the processes involved in maintaining information relating to the heritage matter that exist in the digital form. Thus preservation of digital materials may involve question of access and reproduction of these materials as well as the preservation of authenticity and their essential elements. For the purpose of this paper, discussion will focus on protection issue mention below at 2.4.

2.4 Database

Databases are collection of works, data and other materials arranged in a systematic or methodical way, which are individually accessible by electronic or other means. They are beneficial and useful compilation of materials. Each of the content is valuable and ultimately the combinations of all the items have great value independently of their several item of content. The advancement of technology is the major cause of exploitation on the database . The digital technology has rendered such compilations susceptible to copying.

2. Scope of Protection and the 'Significance' Criteria

A blanket protection covering all sorts of digital materials will not be effective for administrative convenience due to the large number. In addition, there is rising global understanding that, as seen in various international agreements, reliance on 'significance' criteria rather than giving blanket protection is much more prudent in heritage matters. Thus, many heritage legislation establish significance criteria.

Generally, such criteria would include; aethetics, cultural, historical, archaeological, technological and other relevant values. In Malaysia, the National Heritage Act 2005 defines 'cultural heritage significance' as 'cultural heritage having aesthetic, archaeological, architectural, cultural, historical, scientific, social, spriritual, linguistic or technological value.' Beyond this provision, we find no useful guidance for the purpose of application of the 'significance' criteria in relation to items, which are to be regarded as 'digital heritage since further regulations or guidelines have yet to be published in this matter. Some practical guidelines are found in the Australian Guidelines on the Preservation of Digital Heritage. The Guidelines document suggests several specific criteria for selecting digital heritage. They are:

"(a) Decisions should be based primarily on the value of material in supporting the mission of the organisation taking preservation responsibility.

(b) the value be weighed against the likely cost and difficulties of preservation and the expected availability of resources...

(c) where preservation programmes are unable to manage material they believe should be chosen for preservation.. [this] should be indicated...

(d) the total effect of all collecting and preservation efforts will preserve at least a sample of all kinds of digital materials..."

In Malaysia, the Heritage Commissioner and the Heritage Council have wide powers in this regard because they may advise Minister on whether an item should regarded as heritage object or matter. However, due to the interplay between the technological and heritage-value aspects of digital heritage evaluation, selection process should include consultation with respective producers of digital materials, expertise and

industries. In addition, more studies need to be undertaken in this respect to determine whether there exists understanding of the isssues involved amongsts all interested parties.

4. Copyright Protection of Database

In Malaysia, several laws are available to protect database work, for example, copyright law. Even though, these laws are not enacted to administer issues arising from the database, they provide solution to database related problems. Since these laws are not specifically enacted to cater for database problems, the provisions in these laws are too general, hence vague and incomplete. Furthermore, heritage issues are also not within the purview of these laws.

Under the Malaysian Copyright Act 1987, database is not a categorized "work." Nevertheless, database protection can be inferred from the protection given to derivative work under section 8(1) (b) of the Copyright Act 1987, whereby a phrase in that section mentions, " a collection of mere data…." may include database work. This section was amended in year 2000 to comply with the TRIP's Agreement. Prior to that the provision in that section only referred to "compilation of works" without mentioning the word data or database. To date, only the Malaysian Copyright Act 1987 seems to offer a "shield" on the database works. Certain categories of work are protected under it. However, there are several requirements to be fulfilled before copyright protection is granted to the author or the owner of the database. Firstly, the database has to be categorized as a work listed in the Copyright Act 1987. As a matter of fact, database can be regarded as collection of data as mentioned in section 8 of the Act. Therefore, it fulfils the first requirement. Secondly, the database must be original. The element of originality under the Act means sufficient effort has been expended to make the work original in character. Decided cases have also established the test of originality as a minimal investment of skill, labour and judgment. This test is differs from the test used in EU countries, which stresses on the intellectual creation of the author of the database work. Thirdly, the work must be reduced into material form and lastly, the author must be a qualified person.

Based on the discussions above, database work can either be protected as literary work, as tables and compilations, or derivative work as a collection of mere data. However, arguments above have proven that the provision of section 8(1)(b) of the Copyright Act 1987 is ambiguous and vague. The amendment of section 8(1)(b) in 2000 was to give protection to database work, in accordance with the provision of Article 10(2) of the TRIPs Agreement. The amendment was however not done cautiously. The major setback of the amended provision is that the ambiguity of some of the terms used. Firstly, the use of the terms "*mere data*" instead of "*data*" as required by Article 10(2) of the TRIPs Agreement has caused complexity. The word "mere" implies that it would allow trivial and frivolous type of data, which usually have been denied copyright protection under the law of copyright. The legislator should have adopted the term "data" in the TRIPs Agreement to avoid the said difficulty as "data" would be broader which would cover all sorts of data. Secondly, with reference to the question of eligibility of copyright protection, the section requires that the database work must be something that initially has gained copyright protection. This appears from the phrase " *collection of works or collections of mere data…, eligible for copyright*" . However, mere data is not protected under copyright as it is not stated anywhere in the meaning of literary work as well as its insignificant nature which deprived it from copyright protection. How can a work, which is initially not entitled to protection be eligible for copyright as required in section 8(1)(b) of the Copyright Act 1987? Therefore, it is suggested that the wordings of that section be amended to *" collection of works or collection of mere data ,……., **is** eligible for copyright which by reason of the selection and arrangement of their contents, constitute intellectual creation."* The use of the verb "is" would change the meaning of the section. It will include other works or particularly the work of mere data, which is not protected as works under the meaning of literary work, because the requirement of eligibility under section 8(1)(b) of the Copyright Act 1987 would be independent from section 7.

However, the word "*mere*" may be purposely incorporated by the legislator to show that even a worthless data or information may be protected under section 8(1)(b) as long as the selection or arrangement of compilations of those data were a result of intellectual creation. Regardless of the works involved, they are protected on the ground of intellectual creation. This would highlight the difference between section 7 and section 8. The former, even though require only minimum skill, labour and judgment, it must not be so trifle. On the contrary, the latter, although, necessitate stringent principle of intellectual creation, is made to offer a shield to even a "*mere data*". This position actually compliment each other.

Another unsettled question is how to differentiate between "*tables or compilations*" under literary work and "*collections of works*" under section 8(1)(b) of the Copyright Act 1987. Perhaps, the obvious

difference is "tables or compilations" would only cover literary type of works, where as "collection of works might extend to a larger scale of works, which is also included as literary work. Again, the next issue to answer is if a database consist of literary works, what kind of protection should the owner of the database choose from. In the eye of the owner, he might opt for protection under section 7 of the Copyright Act 1987 or in other words, protected as a literary work. This is due to the leniency of the requirement of originality in that section as opposed to the one in section 8. This will render section 8 impractical. It is question begging for what purpose in providing different kind of originality requirement to the same nature of work.

Another issue is if "*collections of works*" only caters for database other than literary work, this would lead to unfairness. Because a database of artistic or musical works as well as sound recordings, films and broadcasting would be treated differently from literary database, they have to fulfill a more stringent test of originality of intellectual creation compared to the latter. What is the justification behind this dissimilar treatment then?

The final question is what happens to valueless or common data of a database, which do not suffice the requirement of intellectual creation? They will neither be protected under tables or compilations as a literary work, nor as collections of works or collections of data as a derivative work. In these particular circumstances, perhaps the alien principle of sui generis or database right might play a role in resolving the situations.

5. Conclusion

In this paper, we have attempted to highlight some of the problems relating to the protection of digital heritage database particularly those involving literary work. It is not clear how is database protected under the law. Furthermore, heritage issues are also not within the purview of copyright laws, thus, compounding the matter. In addition, although the NHA 2005 is designed to deal with heritage issues, there are no specific mechanism copyright issues are not dealt with. There is an obvious need for further study on the relationship between the two areas of laws and the mechanism needed to satisfy the concerns of both.

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