Greek Copyright Law Framework for Musical Databases & Academic Research Use

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ABSTRACT

Music Information Research (MIR), although a new field, affects all music lovers as well as the rather big musical industry. Its task is to produce Information Retrieval and Data Mining methods that when applied to musical data will allow for the support of creative and consuming users' needs. Accordingly, MIR presents a number of requirements the most basic of which is the need to test its methods on real musical data, since music is highly artistic and thus synthetic data are of little use, in order to ensure their efficiency and effectiveness as well as to compare with existing methods to identify progress. Original musical works are protected under copyright law. This means, in general terms, that their creators are given several exclusive rights over the use of their works while, at the same time, third parties are excluded from engaging in unauthorised uses of these very works. Databases are also protected per se under copyright law, if original, as well as under a sui generis right ("database right") provided to their makers in exchange for the investment put into their creations. This also means that certain exclusive rights are vested upon database makers which prohibit the unauthorized utilization of these works by other users. A lawful use of a musical work or a database by a user can be achieved by either obtaining permission from the copyright owner (or the database right owner) or by having recourse to exceptions/limitation expressly provided by law. As regards to the latter, several jurisdictions including Greek legislation provide for certain exceptions/limitations that warrant the use of a work, which would otherwise be deemed copyright/database right infringing. However, it is debatable to which extent existing exceptions/limitations under Greek law can be helpful for academic research purposes focusing on using musical databases.

Keywords: musical work, database, copyright law, database right, Greek law, exceptions/limitation, academic research, music information research

SECTION 1: Introduction

i. Music information research

Music Information Research (MIR) is the research field that aims in developing methods and techniques for the purposes of both retrieval of as well as knowledge discovery and mining from musical information. Wide as these two research aims are, the MIR field is highly interdisciplinary requiring the contribution from a number of fields such as musicology, psychology, signal processing, information retrieval, machine learning, human computer interaction just to name a few.

The MIR field faces some unique challenges in relation to information retrieval of other data types. The artistic character of the musical domain with ornamentation and improvisation, to name a few, introduce variations on the subjectivity of the data. Moreover, notional entities of music are not easily defined while the phenomena of polyphony and masking disguise the low-level musical events. At the listening end, the musical cognition is highly subjective, making salient features variable on intensity, density of the pattern and even the performing instruments.

Although research in music information has began in late 1960's (Kassler, 1966), the domain only received increased attention since approximately the year 2000 when advances in audio file compression, data storage, network bandwidth, ubiquitous mobile processing infrastructure and adoption of ICT allowed for increased attention in MIR. Nowadays, all these parameters are at a level where:

- audio compression algorithms for equivalent to CD audio quality achieve more than 8-fold reduction (See Figure 1),
- local storage is at ~0.08 euro per Gibibyte while an approx. 60 USD annual subscription in one of the numerous cloud file-synchronisation services allows for virtually unlimited volume remote storage,
- home internet access bandwidth is at the range of ADSL/VDSL while for mobile is equivalently fast with 3G / 4G technologies,
- mobile devices, such as smartphones & tablets, have CPU, storage and power consumption capabilities as well as adoption rates that make these apparatuses truly ubiquitous,
- music notation software can support the professional (co-) development and communication of musical content in common Western-type musical notation (scores).

Moreover, since 2000, a very large number of academic journals and conferences has come to exist that fostered the research of theories, methods and applications for MIR. One of the most highly academically regarded of these is the International Society for Music Information Retrieval conference (http://www.ismir.net/) under the auspices of which the Music Information Retrieval Evaluation eXchange (MIREX) (http://www.music-ir.org/mirex/wiki/MIREX_HOME) is run.

Figure 1. Comparison of volumes produced by various compression types leading to audio quality equivalent to CD audio, for a 3 minutes song.

The aforementioned developments gave rise to a differentiated distribution model for the music industry, that of digital music (as files or streaming data) in contrast to physical medium (e.g. LPs, CDs, etc) as a dissemination method for music. In 2014, the IFPI report on the recording industry (http://www.ifpi.org/news/IFPI-publishes-Recording-Industry-in-Numbers-2015) indicated that "revenue from digital channels increased by 6.9 per cent in 2014 and now accounts for 46 per cent of overall industry trade revenues, on a par with physical sales for the first time" as well as that "global revenues from subscription and advertising-supported streams now account for 32 per cent of digital revenues, up from 14 per cent in 2011". It is thus, no surprise to see services such as iTunes, Spotify and Google Play Music, to name just some of the players in the market, provide digitally 43 million (http://www.apple.com/itunes/music/), 30 million (https://press.spotify.com/us/information/) and 30 million (http://time.com/3722188/google-play-music-uploads/) tracks, respectively.

The new paradigm of musical content distribution has had, apart from the aforementioned, increasing usage and revenue momentum, a profound effect on content piracy. The ease of exact duplication that is inherent on digital content, in contrast to trying to physically copy an LP disk for example, as well as the capability of worldwide dissemination of the duplicated content via the web have given rise to an unparalleled infringement of the copyrights associated with musical content.

Accordingly, the results of MIR affect a very large and diverse breadth of users ranging from everyday music listeners to the music industry professionals to the specialists of musical studies and in numerous ways. The survey of Lavranos et al. (Lavranos et al., 2015) offers a comprehensive and extensive research to the music information research field in relation to its application to musical creativity and creative activities. Whereas the arising issues on the copyright aspect of the activities and results of music information researchers remain complex, it is thus the aim of this chapter to present in a concise and easy to grasp form the Greek copyright legislation framework for musical databases and their use for academic research purposes to all interested researchers.

It should be noted that in no case do the contents of this chapter constitute formal legal advice as each real case should be properly advised for, based on its own merits. Moreover, this paper will focus mainly on the authors' rights (copyright law) and database right while a very brief reference will be made to related rights of producers of sound recordings.

ii. MIR processes in the academia

Music information research, as described above, encompasses a rather diverge set of activities. The MIREX framework and its evaluation tasks provide for an up-to-date list of tasks/processes with academically verified interest. The complexity of these tasks can vary greatly but for the scope of this work, the copyright law aspects of MIR, a high abstraction organisation of the common MIR activities is rather sufficient as in most cases the law follows rather slowly and in general terms the rapid and complex technological advances.

Accordingly, the proposed generalisation of the common rudimentary process performed in most MIR activities are the musical data collection, a pre-processing in order to cleanse and prepare/homogenise the dataset, a representation conversion in order to apply methods, the algorithm execution on the converted data and finally the results presentation.

The task of musical data collection is, in the academic framework, usually performed, whenever available, on existing datasets. The selection of using the data of a published dataset offers the ability to compare results and at the same time minimises the complexity of the data gathering sub-task that can prove to be time-consuming and tedious. In cases the existing datasets do not exist or cover the intended research direction, numerous sources can be utilised based on the nature of the experimentation.

Assuming that the data are not available by a ready-to-use existing dataset, the task of pre-processing usually includes cleaning the collected data from spurious elements, attempting to reach balanced sub-categories in terms of volume and type, normalisation of performance recordings and other such processes. The main aim is to prepare the data in order to be ready for the next step, following the requirements of the approach researched.

The next step is to convert the data into a representation that lends itself to the algorithm to be applied to the data. Common transformations include a form of feature extraction that is both suitable for the processing algorithm and at the same time as compact and concise as required in order to minimise processing & memory requirements and to discard not required and potentially confusing information.

The algorithm application process includes the execution of the algorithm on the converted representation of the musical data in addition to numerous parameters' setting. The application is usually applied with different settings in order to evaluate the settings' effect on the results.

Finally, given the academic nature of the MIR process, the results of the previous process are collected, analysed and then redistributed to the academic community. The results' dissemination can be by form of a publication in conference, journal, book, etc as well as in a web-page with (interactive) demonstrations. In some cases results are accompanied by the

code and data the code was execute on in order to foster the reproducibility of both methods and results.

iii. MIR data

One of the cornerstone requirements of MIR, in order for researchers to be able to work, is the access to real musical content. Although, in analogous cases synthetically created content could provide for methods' development and testing, the highly artistic nature of music makes such an option almost completely invalid. Thus, MIR researchers are continuously faced with the not-so-easy to address problem of access to musical content.

The notion of musical content in MIR covers a broad spectrum, the most common of which is audio files of recorded performances. These audio, or acoustic data, are usually accompanied by objective metadata describing the actual recording. Moreover, musical content can be in the form of common Western-type musical notation (scores) that describe the intention of the composer towards the performer. The lyrics of a musical piece are also another form of musical content. Finally, under the auspices of the interactive and crowdsourcing web services, the free-text tags that users assign on everything music are of great importance to MIR as the aggregation of these provides affective descriptions that are almost impossible to otherwise obtain.

A number of alternatives do exist for accessing such content, ranging from personal collections to streaming services. Nevertheless, the most common approach is the utilisation of existing ad-hoc datasets. These datasets usually include for each track of the dataset ready for use feature-sets for common MIR activities. Thus, researchers are spared the trivial and time consuming process of feature extraction. Moreover, and to mitigate copyright issues, very few datasets exist that feature actual musical content at the expense of research aiming in utilising novel features. Existing datasets (Makris et al., 2014) cover a broad range of musical content from symbolic and audio representations to user tags and lyrics.

Another very frequently utilised methodology to access musical content is via the aforementioned music distribution services (iTunes, Spotify, Google Play Music, Last.fm, etc). These services usually provide free of charge 30 second audio clips of acoustic data via documented APIs. Most of these, for a monthly subscription or a pay-per-track fee provide the full length via API as well. Although the appeal of free access is obvious, the trade-off is the partial access to content less than 1/6 of the usual full length of a track.

Finally, given all the arguments of Section 1.i on the key factors that led to the shift towards the digital musical content distribution, a privately owned musical collection appropriate to academic research on MIR can easily be assumed.

iv. Literature review

Research on the copyright aspect of the activities and results of music information researchers is scarce.

The work of Carrol (Carol, 2003) addresses to intellectual property rights with focus on MIR systems and the community that designs and implements systems under the assumption that the creators assume responsibility in choosing and controlling the music information stored in the system produced.

In (Levering, 2000), the author introduces intellectual property rights for musical works, as an invited speaker at the year 2000 International Symposium of Music Information Retrieval (ISMIR). The work is a short description of how intellectual property principles appeared in the U.S., while a discussion of some exceptions on copyright in music and digital library are also presented.

The authors of (Downie et al., 2004) present IMIRSEL (International Music Information Retrieval Systems Evaluation Laboratory): a project aiming in providing a platform for evaluation of MIR and Music Digital Library (MDL) techniques. The key characteristic of IMIRSEL that is of interest to the scope of this work is the rights management support for the protection of the intellectual property rights of content providers by means of agreements between IMIRSEL and content providers.

Moreover, the authors in (Karydi et al., 2012) present an investigation of the legal implications in using and processing musical content from two prominent sources of online content distribution (assuming persistent and streaming data), namely iTunes and YouTube.

Finally, a number of works (Futrelle & Downie, 2002, Cornelis et al. 2010 and Downie, 2003) declare the uncertain legal regulatory environment MIR operates on.

SECTION 2: The protection of musical works under Greek Copyright Law

i. Overview of the Greek Copyright Law framework

Greek Law 2121/1993 (N. 2121/1993, FEK A' 25/1993, as amended; hereinafter Greek Copyright Law/GCL), offers protection to the authors of original intellectual creations. Namely, the author (creator) of an original work, such as a literary work or a musical work, is vested with certain rights that, in principle, deter others from engaging in certain uses of that very work without the author's permission, for a defined period of time (Articles 1, 2, 3, 4, 29, GCL).

It should be noted that copyright protection is not vested in ideas but only in their original way of expression (Article 2 (1), Berne Convention for the Protection of Literary and

Artistic Works, 1886, Paris Act 1971, hereinafter Berne Convention). Greek Copyright Law, in accordance with the Berne Convention, does not require any formalities to take place for copyright to subsist in a work. This is protected from the moment it is created and embodied into a tangible or intangible medium and can be seen or heard (Tsigkou, 2008c; Stamatoudi, 2008a).

As reiterated, authors are granted copyright protection in their original works. The term 'work' refers to any original intellectual literary, artistic or scientific creation, expressed in any form (Article 2 para. 1, GCL). The Greek copyright system adopts a flexible open list of what may constitute a 'work', contrary to other legislations such as the United Kingdom's (U.K.) close list which grants protection only to the categories of works specified in the English Copyright Act (Aplin & Davis, 2009; Section 1(1), Copyright Designs and Patents Act 1988).

As regards to the term 'original', apart from certain exceptions (Article 2 para. 3, GCL; Council Directive 91/250/ECC on the legal protection of computer programs), no definition of 'originality' is provided within the Greek Copyright Law. In order to assert originality on a work, Greek legal theory and jurisprudence follow the principle of 'statistical uniqueness'. According to this, a work is original if, under similar circumstances and with similar aims, no other person could potentially create the same work or a very similar one (Despotidou, 2011; Marinos, 2000; Koriatopoulou-Angelē, 2008b; Greek Court Judgments EphAth 4793/2009, EphAth 885/2009, EphAth 5863/2008). The notion of originality also indicates that the work should at least show a minimum level of 'creative level' and a 'particular individuality', coming from the creator's intellectual effort, which differentiate it from routine, common, self-evident and similar known creations (Despotidou, 2011). Adversely, when examining the originality of a work, aesthetic merits or the aim of the work are not taken into account (Koriatopoulou-Angelē, 2008b; Greek Court Judgment MPrTrip 261/2012).

Obviously, the Greek law originality criterion does not match the English originality principle of 'skill, labour and judgment' (*Walter v. Lane*, AC 359 (1900); *Cramp v. Smythson* AC 329 (1944); *University of London Press v. University Tutorial Press* 2 Ch 601 (1916)). Nor does it resemble the United States' (U.S.) originality requirement of 'sweat of the brow' (*Jeweler's Circular Publishing Co. v. Keystone Publishing Co.*, 281 F. 83 (2d Cir.); *See* also *Feist Publications, Inc. v. Rural Telephone Service Co.*, 499 U.S. 340 (1990)). Nor does it entirely endorse the French subjective approach of originality requiring the imprint of the author's personality to be reflected in the work (Gervais, 2002; *Witt v. Pachot* (1986)). Under Greek Copyright Law, the concept of originality is a combination of the aforementioned theories requiring a minimum level of 'creative level' and a 'particular individuality' in a work (Kotsirēs, 2005; Marinos, 2000).

Accordingly, for a work to be protected under Greek Copyright Law, it has: a) to be the result of intellectual endeavour, b) to be original, c) to be expressed in any form and d) to fall within the notion of a literary, artistic or scientific creation. The Greek legislator provides for a list of protected works, such as texts, musical compositions, theatrical works, audiovisual works, that is an indicative one.

Authors of an original work are granted a set of exclusive and absolute rights, namely economic and moral rights (Articles 1, 3, 4, GCL). Economic rights are linked to the economic use of the work while moral rights refer to the special personal link between the author and his work (Dworkin, 1995; Stamatoudi, 1997; Swack, 1988). These are two independent sets of rights where moral rights remain with the author even after the transfer of the economic rights (Article 4 para. 3, GCL).

In particular, the author of an original work, or anyone authorised by the author, has a) the right to fix and reproduce the work by any means and in any form, in whole or in part, b) the right to translate the work, c) the right to make an arrangement, adaptation or other alteration of the work, d) the right to distribute the original work or its copies to the public in any form via sales or otherwise, e) the rental or public lending right, f) the public performance right, g) the broadcasting or rebroadcasting of the work to the public by any means or process, h) the right to make available the work to the public by any means of process and i) the right to import copies of the work (Article 3,GCL).

As for the moral rights conferred on the author, he has a) the right to decide the time, place and way in which the work will be made accessible to the public (publication right), b) the right to be acknowledged as the author of the work (paternity right), c) the right to prohibit any distortion, mutilation or other modification of the work including the presentation of the work in any way that prejudices the reputation of the author (integrity right) d) the right to access the work irrespective of the ownership over the physical embodiment of the work, e) the right to cancel a contract transferring the economic right or an exploitation contract or license of which his work is the object, subject to payment of material damages to the other contracting party, for the pecuniary loss he has sustained when the author considers such action to be necessary for the protection of his personality because of changes in his beliefs or in the circumstances (Article 4, GCL).

Generally speaking, copyright protection lasts for 70 years *post mortem auctoris* (Chapter 5, GCL). The author of the work is the first owner of the copyright in it, although there are provisions prescribing differently (Chapter 2, GCL).

ii. Greek Copyright Law and musical works

With regard to music, Greek Copyright Law affords protection in 'a musical composition with or without words' (Article 2 para. 1, GCL). The concept of 'musical composition' includes sound compositions, such as anthems or opera songs, as well as music scores, while it refers to any type or kind of music regardless of any aesthetic merits (Stamatoudi, 2008a). Lyrics accompanying musical works are protected separately by the GCL as a literary work.

As aforementioned, for copyright to subsist in a musical work, the latter needs to fulfil the requirement of originality. In the case of a musical work, this may be found in its melody or harmony or rhythm. The way music is produced in of no concern to GCL, meaning that it is irrelevant for the law whether music comes from a piano or from banging on glasses, as long as originality is achieved (Stamatoudi, 2008a).

By virtue of copyright law, the composer of a musical work as well as the writer of lyrics, are entitled, concerning their respective works, to do or authorise others to do the following acts (Article 3, GCL): a) fix and reproduce the work by any means and in any form, in whole or in part, b) translate the work, c) make an arrangement, adaptation or other alteration of the work, d) distribute the original work or its copies to the public in any form via sales or otherwise, e) rent or publicly lend, f) perform the work in public, g) broadcast or rebroadcast the work to the public by any means or process, h) make available the work to the public by any means of process and i) import copies of the work.

In view of the aforementioned, it is worth noticing that under Greek Copyright Law, in principle, a musical work and a sound recording enjoy separate protection which is vested in their respective owners. As regards to sound recordings of musical compositions, these are protected under the provisions for the protection of related rights included in GCL (Article 47 para. 1, GCL). In particular, producers of sound recordings, namely "any natural or legal person who initiates and bears the responsibility for the realization of a first fixation of a series of sounds only" (Article 47 para. 1, GCL), are provided with certain economic rights, whereas moral rights are not granted to them (Koriatopoulou-Angelē, 2008a).

SECTION 3: Databases protection under Greek copyright legislation

i. Copyright Law protection

Greek legislation has followed the steps put forth by the European Union (EU) legislation on the protection of databases. Particularly, in accordance with the European

Directive 96/9/EC on the legal protection of databases (hereinafter Database Directive), Greek Copyright Law affords protection to original databases, be they electronic or not (Article 2 para. 2(a), GCL).

The definition of a database refers to "a collection of independent works, data or other, materials arranged in a systematic or methodical way and individually accessible by electronic or other means". The term 'independent works' refers to conceptual or logical independence meaning that these works can retain the same meaning inside and outside the collection (Aplin, 2005; Derclaye, 2002; *Fixtures Marketing Ltd v Organismos prognostikon agonon podosfairou AE* (ECJ/C-444/02)). The concept of 'systematic or methodical arrangement' is associated with the assessment whether a database is the outcome of a random collection of material or this is the result of a system or method (Stamatoudi, 2008a). 'Individual accessibility' implies that the collection of material is searchable and the materials can be viewed distinctly (Aplin, 2005). For instance, a newspaper, a website or a magazine constitute examples of databases.

A database is protected under copyright law provided it constitutes the author's intellectual creation by reason of the selection or arrangement of its contents (Article 2 para. 2(a), GCL). Hence, the requirement of originality in a database indicates that this should be the author's own intellectual creation, by virtue of the selection or arrangement of their contents (Article 2 para. 2(a), GCL). It has also been argued (Strowel, 1991 as cited in Stamatoudi, 2008a) that the requirement of originality for databases is subject to the theory of 'variable content' ('notion a géométrie variable') which allows differentiations from the general criterion of originality depending on the nature of the work.

The contents of a database may be separately copyrightable works or mere facts not enjoying copyright protection. The creator of a database attains copyright protection for the database itself and not for the underlying material whose copyright, if this subsists, remains with their respective owners (Article 2 para. 2(a), GCL). Thus, a musical compilation (but not a CD comprising of musical performances, *see* Recital 19 Preamble of Database Directive) may constitute a database protected under copyright law as for the original selection or arrangement of the musical compositions within it. But, the musical compositions themselves are individually protected under copyright law, if original, as musical works. And in case the database includes lyrics, these are separately protected under copyright law, if original. Consequently, infringement of a copyrighted database may entail infringement of its copyrighted contents (Tsigkou, 2008a).

The initial right holder of the economic and moral rights in the database is the creator of the database, namely the person who undertakes and carries out the selection or arrangement of the database contents (Tsigkou, 2008a). The copyright holder of the database

has the exclusive right to carry out or to authorize: a) temporary or permanent reproduction by any means and in any form, in whole or in part, b) translation, adaptation, arrangement and any other alteration, c) any form of distribution to the public of the database or of copies thereof, d) any communication, display or performance to the public, e) any reproduction, distribution, communication, display or performance to the public of the results of the acts referred to in (b) (Article 3 para. 3, GCL). The aforementioned set of rights provided to the copyright holder of a database constitutes an exhaustive list. Consequently, rights not included in this list, are not conferred upon the database copyright holder and, thus, his authorization is not required (Stamatoudi, 2008b).

Regarding moral rights of the database copyright holder, it is common view (Tsigkou, 2008a; Marinos, 2000) that the latter is asserted with a bundle of moral rights prescribed by GCL, except from the right of rescission (Article 4 para. 1(e), GCL). Correspondingly, the database copyright owner has the right: a) to decide on the time, place and manner in which the work shall be made accessible to the public, b) to demand that his status as the author of the work be acknowledged, c) to prohibit any distortion, mutilation or other modification of his work and any offence to the author due to the circumstances of the presentation of the work in public, d) to have access to his work, even when the economic right in the work or the physical embodiment of the work belongs to another person (Article 4 para. 1, GCL).

ii. Sui generis protection

In addition to the aforementioned copyright protection for original databases, Greek legislation, keeping in line with the EU legislation, has adopted *sui generis* protection (database right) for databases. In this case, protection is granted to the maker of a database not on the basis of the originality in selection or arrangement but due to the substantial investment put into the obtaining, verification or presentation of the contents of the database (Article 7 para. 1, Database Directive; Article 45A para. 1, GCL).

The underlying idea for offering such protection to databases points at the need to safeguard "the investment of considerable human, technical and financial resources while such databases can be copied or accessed at a fraction of the cost needed to design them independently" (Recital 7, Preamble of Database Directive). Furthermore, the investment that deserves to be protected is one that financial resources, time, effort and energy have been devoted (Recital 40, Preamble of Database Directive). As reiterated, the Database Directive excludes from its scope of protection compilations of several recordings of musical performances on a CD (Recital 19, Preamble of Database Directive).

In particular, according to GCL (Article 45A para. 1, GCL), "the maker of a database has the right, which shows that there has been qualitatively and/or quantitatively a substantial

investment in either the obtaining, verification or presentation of the contents, to prevent extraction and/or re-utilization of the whole or of a substantial part, evaluated qualitatively and/or quantitatively, of the contents of that database. The maker of a database is the individual or legal entity who takes the initiative and bears the risk of investment."

The law provides for a definition of the term 'extraction'. This is "the permanent or temporary transfer of all or a substantial part of the contents of a database to another medium by any means or in any form" (Article 45A para. 2, GCL). So, it is not permitted to reproduce the contents of a database, be it digital or not, on a new medium such as paper, a CD, a computer's permanent or transient memory or even in the cache memory of a computer (Synodinou, 2008a). More interestingly, the act of providing deep links on the Internet may constitute an unlawful act of 'extraction' (Synodinou, 2008a). A website constitutes an example of a database. Usually, there is no problem when a link provides access to the home page of a third party's website, which is considered as an act equivalent to the traditional way of referencing (Kallinikou, 2005; WIPO, 2002). Nevertheless, when a webpage is using deep links, the contents of another website (database) are used or presented as owned by the initial webpage (Synodinou, 2008a). This very act of 'placing', via deep linking, a database's contents in another database (initial webpage) is high likely to constitute an infringement of the database right (Synodinou, 2008a).

As for the meaning of 're-utilization', this refers to "any form of making available to the public all or a substantial part of the contents of a database by the distribution of copies, by renting, by on-line or other forms of transmission" (Article 45A para. 2, GCL). This definition includes acts such as making available the contents of a database through peer-to-peer networks or through a CD (Synodinou, 2008a).

With regard to 'substantiality' of the extracted and/or re-utilized parts, no definition is available neither in the GCL nor in the Database Directive, giving space for jurisprudence to formulate its meaning. In any case substantiality is assessed by quantitative and/or qualitative criteria.

By virtue of the *sui generis* protection, database makers are also protected from "repeated and systematic extraction and/or re-utilization of insubstantial parts of the contents of the database implying acts which conflict with a normal exploitation of that database or which unreasonably prejudice the legitimate interests of the maker of the database" (Article 7 para. 5, Database Directive; Article 45A para. 4, GCL). According to the European Court of Justice (ECJ) ruling in the case of *British Horseracing Board Ltd v William Hill Organisation Ltd* (Case C-203/02), the rationale for this provision is to thwart repeated and systematic extraction and/or re-utilization of insubstantial parts, which cumulatively damage the investment put in the database. Prohibited acts are those that "would lead to the reconstitution

of the database as a whole or, at the very least, of a substantial part of it, without the authorisation of the maker of the database, whether those acts were carried out with a view to the creation of another database or in the exercise of an activity other than the creation of a database". It is important to note that the scope of this provision is to be construed widely (Synodinou, 2008a). For instance, it may include the act of daily extraction and re-utilization of insubstantial parts of the contents of a newspaper website realized by a search engine (Synodinou, 2008a; *Copiepresse v. Google Inc.* (2007)).

It is irrelevant for the subsistence of database right whether the database also enjoys copyright protection or its contents are copyrightable *per se* (Article 45A para. 3, GCL). So additionally to copyright protection afforded to original databases, *sui generis* protection is offered to databases, be they original or not, in order to deter the unlawful extraction and reuse of databases contents. In principle, the duration of the database right is 15 years from the date of completion of the making of the database (Article 45A para. 7, GCL).

SECTION 4: Limitations within Greek copyright legislation

Greek Copyright legislation includes certain limitations of copyright holders' economic rights, aiming to balance the rights and interests of copyright owners and those of the public, on grounds of social policy and free flow of information (Chapter 4, GCL; Marinos, 2000). Acts falling within these limitations, albeit copyright infringing in principle, are eventually warranted without the need to obtain the author's permission or pay remuneration. However, these limitations should meet the terms of the 'three-step test', meaning that they should be applied in certain special cases which do not conflict with a normal exploitation of the work or other protected subject-matter and do not unreasonably prejudice the legitimate interests of the rightholder (Article 28C, GCL; Article 9 para. 2, Berne Convention).

Limitations to copyright are exhaustively prescribed in the Greek law and no expansive interpretation is possible lest the copyright system could be undermined (Marinos, 2000). These are (Chapter 4, GCL): a) reproduction for private use (Article 18, GCL), b) quotations of extracts (Article 19, GCL), c) school textbooks and anthologies (Article 20, GCL), d) reproduction for teaching purposes (Article 21, GCL), e) reproduction by libraries and archives (Article 22, GCL), f) reproduction of cinematographic works (Article 23, GCL), g) reproduction for judicial or administrative purposes (Article 24, GCL), h) reproduction for information purposes (Article 25, GCL), i) use of images of works sited in public places (Article 26, GCL), j) public performance or presentation on special occasions (Article 27, GCL), k) certain permitted uses of orphan works (Article 27A, GCL), l) exhibition and reproduction of fine art works (Article 28, GCL), m) reproduction for the benefit of blinds and

deaf-mute (Article 28A, GCL). It is noteworthy that these limitations constitute a defense mechanism against copyright infringement claims, meaning that in case of a lawsuit the defendant user can invoke these limitations prescribed by the law but he bears the burden of proving that his acts fall within one of them (Papadopoulou, 2008a).

i. Copyright law limitations for databases

According to Geek legal theory, the aforementioned limitations, with some exceptions (see Article 3 para. 4, GCL) apply to the rights granted to authors of original databases (Papadopoulou, 2008a; Synodinou, 2004). A concise elaboration of the more relevant to this Chapter's subject matter limitations will be provided right below. It should be stressed that when it comes to copyrighted databases and applicable limitations, both copyright in the database and copyright in its content should be taken into consideration.

Private use limitation (Article 18, GCL): One of the specified limitations, applying to original non-electronic databases (Article 3 par. 4, GCL), is the private use exception, according to which reproducing a copyrighted work, be it a non-electronic database or a musical work, is permitted when this is made for private use (Article 18, GCL). But the law is clear that this private use limitation does not apply to electronic databases (Article 2 para. 4, GCL). Nor does it permit reproducing a musical work for private use through graphical representations, i.e. reproducing scores (Article 18 para. 2, GCL). The meaning of private use refers to the copying made by the user for this own utilization or for his narrow circle of the family and his immediate social circle (Article 3, para. 2, GCL). There is no private use, and consequently copyright infringement takes place, when the reproduction of the work aims at the distribution of the copies to the public or at the public performance of the work (Tsigkou, 2008b). The exclusive purpose of the reproduction should be the private use of the copy and not the economic or commercial exploitation of the copy. Hence, it can be inferred that academic research processes which conflict with the aforementioned rationale, cannot refer to the private use limitation.

Quotations of extracts limitation (Article 19, GCL): When referring to 'quotations of extracts' (Article 19, GCL), it has been argued that this denotes not only literary works but also other kind of works protected under copyright law (Papadopoulou, 2008b). Greek jurisprudence has not yet elaborated on this issue. In any case, only short extracts of others' quotations can be used under this limitation. Moreover, the purpose of using short extracts of others' quotations should be to support or reinforce the comments or opinions of the work in which these are included, potentially within the context of scientific, research or ideological purposes (Marinos, 2000; Greek Court Judgment MPrAth 15951/1989). In other words, it is

not straightforward whether using parts of musical works for academic purposes can fit within this limitation, while it depends on the merits of the specific case.

Regarding the limitation for quotations of extracts (Article 19, GCL), this is also applicable to copyrighted databases (Papadopoulou, 2008b). It is maintained (Papadopoulou, 2008b) though that it is of little practical use to database users for the following reason. As reiterated, the author of a database is granted copyright protection on the basis of the original selection or arrangement of the database's contents. The aforementioned limitation is put forth to confine somewhat the author's exclusive rights to exploit his database by virtue of his original selection or arrangement. An extract of a database, which is permitted to be used under this limitation, is a part of the selection or arrangement of the original database, but not an extract of the content of the database. Whereas, using this extracted content may infringe the separate copyright that subsist in the original work included in the extracted content (Papadopoulou, 2008b).

Reproduction for teaching purposes (Article 21, GCL): The exception of reproduction for teaching purposes (Article 21, GCL) applies to copyrighted electronic or non-electronic databases. According to this limitation, it is permitted, without prior consent or remuneration, to copy articles lawfully published in a newspaper or periodical, short extracts of a work or parts of a short work or a lawfully published work of fine art work exclusively for teaching or examination purposes at an educational establishment. This provision refers strictly to educational purposes (Marinos, 1995), meaning that copyrighted musical works, such as scores, can be reproduced strictly for teaching purposes excluding scientific research justifications (Papadopoulou, 2008c). Nevertheless, especially for copyrighted databases, it is maintained (Tsigkou, 2008a) that this limitation can be construed to include scientific and research purposes (Article 21, GCL; Article 6 para. 2, Database Directive). But it is upheld (Papadopoulou, 2008c) that this limitation is also of little use to databases because of the reason elaborated in the previous paragraph.

Furthermore, for copyrighted databases, the law prescribes that the lawful user of a database or of a copy thereof is allowed to engage in any acts necessary for the purposes of access to the contents of the databases and normal use of the contents without the authorization of the database copyright holder. But where the lawful user is authorized to use only part of the database, this provision shall apply only to that part (Article 3 para. 3, GCL). This provision holds for a minimum set of rights in favour of the lawful user which cannot be curved by contractual agreements (Synodinou, 2004).

The term 'lawful user' is not defined neither in GCL nor in the Database Directive. The meaning is the same for both the original database and the database under *sui generis* protection. In case of a non-electronic database (i.e. a database fixed in a medium) it can be

inferred to mean the buyer of a database, the licensee, the lessee or anyone authorised by the aforementioned persons to use the database (Synodinou, 2008a). In the online world, the access and use of a database are in principle lawful acts as long as the database is freely available to the public and has no any kind of technological measures constraining access (Synodinou, 2004). Whereas the requirement of a password to access the database illustrates that only the user who holds the password by means of a contractual agreement may engage in the lawful use of this very database (Synodinou, 2004).

In all, it is not certain that the aforementioned limitations prescribed by the law to limit original database owners' economic rights can provide for a basis on which researchers may rely when using original databases for academic research purposes. However, each case is examined on its own merits.

ii. Database right limitations

According to Greek legislation, the lawful user of a database has the right to extract and/or re-use insubstantial parts of its content, being evaluated qualitatively or quantitatively, for any purpose whatsoever (Article 45A para. 5, GCL). Nevertheless, his acts should not disturb the normal exploitation of such database or unjustifiably prejudice the lawful interests of the database maker (Article 45A para. 5, GCL). According to the ECJ ruling in *British Horseracing Board Ltd v William Hill Organisation Ltd.*, a lawful user infringes the database right when acting "for the purpose of reconstituting, through the cumulative effect of acts of extraction, the whole or a substantial part of the contents of a database protected by the *sui generis* right and/or of making available to the public, through the cumulative effect of acts of re-utilisation, the whole or a substantial part of the contents of such a database, which thus seriously prejudice the investment made by the maker of the database".

Moreover, the law stipulates that "the lawful user of a database made available to the public by any means may, without the permission of the maker of the database, extract and/or re-utilize a substantial part of its content: a) when the extraction is made for educational or research purposes, provided that the source is quoted, and to the extent that it is justified by the non commercial purpose pursued, b) when the extraction and/or re-utilization is made for reasons of public safety or for purposes of administrative or judicial procedure " (Article 45A para. 6, GCL). The basis for these exceptions is the lack of competitive commercial purposes on behalf of the lawful user whose operations should not, in any case, prejudice the exclusive right of the database maker (Recital 50, Preamble of Database Directive).

Considering the aforementioned exception for educational or research purposes, the notion of research is relevant to natural sciences as much as human sciences (Recital 36,

Preamble of Database Directive) while any kind of teaching or research institution can take advantage of this exception. It is sustained (Synodinou, 2008b) that this provision, if read in combination with the Directive 2001/29/EC on the harmonisation of certain aspects of copyright and related rights in the information society (Recital 42 of the Preamble), can lead to the conclusion that each act of extraction should be examined on its own merits whereas an extraction will be considered an unlawful operation in case it fulfils commercial purposes even if realised by non-profit institutions.

Nevertheless, this exception refers only to the act of extracting a material part of a database's contents whereas it does not include the act of re-utilizing the extracted part which remains an act not permitted for educational or scientific purposes. Thus, a professor is allowed to extract a material part of a database for his research purposes but he is not allowed to distribute the extracted part to his students since this constitutes re-utilization (Synodinou, 2008a). Nor is he allowed to make available to the public in any way, namely through the Internet or in hard copies, a material part of a database (Kanellopoulou-Botti, 2006). This confinement has created much criticism on the basis that researchers are not interested only in extracting parts of databases but also to be able to re-utilize them (Kanellopoulou-Botti, 2006). Thus, it seems that the limitations provided in favour of the lawful user of a database under *sui generis* protection are not of great use to academic researchers.

SECTION 5: Conclusion

In this work we present, in a concise form, the copyright and *sui generis* protection framework for musical databases and their contents on which music information research processes, with verified academic interest, mostly perform their activities. The possibility for MIR academic researchers to rely on limitations provided by this legal framework is also examined.

Future directions of this work could include the extended examination of the matter on both U.S. and U.K. copyright law legislations as well as the introduction of amelioration proposals to all copyright law legislations examined, in order to underpin relevant MIR academic research processes, of course, without disturbing the incentive of the right owners to create.

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