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MUSICAL PLAGIARISM: A TRUE CHALLENGE FOR THE COPYRIGHT LAW

Iyar Stav*

ABSTRACT

The interface of law and music has always appeared unnatural. While the law aims to provide certainty and order, music is more often observed as a field which operates in a boundary-less sphere. For that reason, the endeavor to treat purely musical issues with clear, conclusive and predetermined legal rules has been perceived as a fairly complicated task. Nevertheless, while music has become a prospering business, and musical disputes have been revolving around growing amounts of money, the law was required to step in and provide clear standards according to which these disputes should be settled. The courts in USA and UK have established and developed several doctrines intended to set a unified framework for assessing the extent of similarities between an original work and an allegedly later infringing work. The approach presented in the notable Arnstein decision has been reviewed and developed in multiple later cases but has remained relevant even after more than 70 years since its inception. This article explores all prominent approaches evolved to deal with musical plagiarism disputes during the last century, as well as some critical views and innovative ideas in this field. In addition, a novel method for evaluating substantial similarity is suggested, incorporating the overall impression test based on a lay listener comprehension with a statistical predictability analysis, aspiring to reach more accurate, reasonable and just decisions.

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I. INTRODUCTION

A. *Music and Law*

Music and law are two distinct realms, often perceived as contradictory to one another. While the first is commonly regarded as a rule-free zone, the second is in itself the origin for rules. Nevertheless, experienced musicians are well aware that their domain is in fact restricted by rules – and no situation like those of Musical Plagiarism proves it better.

Music is restricted by rules in two aspects; First, on the internal level, as in any type of arts or crafts, there are basic principles upon which the creation process is based. These principles, especially theoretic and technical principles, although being non-obligating (in the simple meaning of the term), are still followed quite punctiliously by the vast majority of musicians. From a legal perspective, these principles could be regarded as ‘customary law’, except for the fact that the violations of which won’t entail sanctions, but, in the worst case, only a bad critique. Alternatively, on the external level, the false anarchy that prevails in the music realm cannot leak out to the normative order according to which the world is being conducted on the legal and commercial aspects. Almost paradoxically, it is usually the “anarchist” musicians themselves who turn to the law for legal aid in order to defend their rights.

Naturally, the area in law that demonstrates the widest and most natural interface with music is one that deals with abstract possessions: Intellectual Property. Under the umbrella of Intellectual Property, Copyright Law is the field that deals with the creative side of music. This article will focus on the core of the creative process and discuss the legal framework that evolved around the composition of music. This frame is revealed only when reaching the limits of legitimate similarity between musical works, when a suspicion of copyright infringement is raised. The ground rule is very simple: compose whatever you want, as long as the work is yours. Suspicions start being raised when musical similarity occurs.

B. Musical Similarity

The term “Musical Similarity” means the resemblance of one song to another, as a whole or only certain characteristics in it. It is very likely, even for the lay listener, to notice these resemblances between different songs because resemblances are very common. The reason they are so common is because musical ideas are limited resources. There are a limited number of possible combinations of chords and notes to compose a song, especially in popular music; and, when creating a “catchy” tune the variety of possible combinations decreases dramatically.¹

So, in fact, there can be three different explanations for musical similarity:

1. Coincidence
2. Influence
3. Copying/Wrongful appropriation/Plagiarism

1. Coincidence

Coincidence is likely to happen, to a reasonable extent.² As mentioned, similar chord combinations are frequently used in popular music. An example would be the “4 chords” video by *The Axis of Awesome* on YouTube³ demonstrating the predictability and repetitiveness of popular music. However, there are other dimensions to a song, and the more dimensions in one song are similar to those of another, it becomes more probable the similarity will be considered plagiarism rather than coincidental similarity.

2. Influence

Influence is the second legitimate explanation to musical similarity; and, just as in any form of artistic, technological, social, political or any other kind of expression, influence is derived from existing, older expressions. Music is never composed in a vacuum;

1. ALEXANDER LINDEY, PLAGIARISM AND ORIGINALITY 181 (1952).

2. *Id.* at 49.

3. Watch the video on the following link: <http://www.youtube.com/watch?v=oOIdewpCfZQ> (last visited Feb. 22, 2015).

rather, it is necessarily influenced by other compositions.⁴ As long as the process is based on taking fragments of ideas from many different sources, and synthesizing them with the composer's own creative perspective to form a new and original expression, than the similarity to the sources of influence is supposedly legitimate.

3. *Wrongful Appropriation*

Wrongful appropriation, or plagiarism, is the third situation of musical similarity. Unlike in the two previous situations, musical similarity loses its legitimacy once plagiarism is proven. Thus we can safely determine a certain song is clearly using recognizable parts of a different song, while its composer is claiming the credit for the whole composition for himself. As elaborated in the next part, such a situation might additionally entail economic consequences, since all tangible benefits derived from a work, such as royalties and exploitation rights of it, are exclusively attributed to its creator. This situation enters the domain of copyrights and its infringement, as the conclusion of whether wrongful appropriation has taken place is based on the copyright law and the various doctrines developed in case law to address these issues.⁵

As there is a very thin and blurred line between these three situations of musical similarity, and only one of these result in acknowledgement of copyright infringement and the subsequent granting of remedies, the most crucial question becomes how to distinguish this situation from the others. Case law in the United States and other countries has dealt, and is still dealing, with this complicated question in an effort to make just decisions. This article will discuss some of the most prominent cases of plagiarism and the various tests that evolved in Copyright case law and are used nowadays to reach decisions in these cases.

Initially, in order to understand better the legal framework around musical plagiarism, it will be essential to make some basic distinctions between the various terms commonly used in this context. The next part will clarify the basic principles related to this domain of Intellectual Property law.

4. ALEXANDER LINDEY, PLAGIARISM AND ORIGINALITY 40 (1952).

5. *Id.* at 7.

C. Basic Principles

1. Copyright

Copyright – the exclusive right given to an author of a creative work, which enables the author to use his work, gain profit from it, and be credited for it, among other derived rights. In every country, the law determines the required conditions for a work to be considered a creative original work that is entitled for a copyright protection. In most countries, the copyright consists of two types of rights: an economic right and a moral right.⁶

2. Economic Right

Economic right – the right to use the work and receive all benefits from it.⁷ Notably, this right is assignable; meaning that, in the context of music, the economic right of a song, specifically the exploitation right, is usually assigned by its composer to the record company which then publishes it and the distribution of profits from the song is settled in a contract between the parties.⁸

3. Moral Right

Moral right – the right to be credited for a work and to keep the work's integrity. Unlike economic rights, a moral right is not transferable. A composer may assign all economic rights to his song to a third party, but he will still be listed as its composer.⁹ This concept is important to creators of original works in general, and musicians in particular. A moral right basically says: "talent

6. SIMON STOKES, *ART AND COPYRIGHT* 3 (2001).

7. The exclusive rights of copyright holders are the reproduction of copies, preparation of derivative works, distribution of copies, public performance and display, as well as the transmission of their work (in case of sound recordings). Copyright Law of the United States, 17 U.S.C. §106 (2011).

8. Peter Tschmuck, *Copyright, Contracts and Music Production*, 12 INFORMATION, COMMUNICATION & SOCIETY 2 251, 259 (2009).

9. STOKES, *supra* note 6, at 69.

and especially the reputation obtained through talent are not for sale”.

4. *Plagiarism*

Plagiarism – taking the credit for someone else’s work.¹⁰ A plagiarizer attributes to himself a work he did not create. Plagiarism, a false claim of authorship, is a theft. Plagiarism occurs not only when taking a complete work, but also when using part of an existing work in a new one. Plagiarism can happen in any type of creation, from academic writing to architecture. In the context of music, given the frequency of resemblance between popular songs, the suspicion of plagiarism is often raised.

Plagiarism and copyright infringement are not the same; however, they do overlap in certain areas. Plagiarism will not necessarily result in a copyright violation, but nevertheless it will mostly be perceived as a non-ethical behavior. On one hand, plagiarism is a wider concept than copyright infringement. Plagiarism is considered infringement only when taking parts of a work that is protected by copyright. Moreover, the plagiarism requires the use of a substantial part of the original work to result in a copyright infringement. On the other hand, copyright infringement is wider than plagiarism in the sense that it also occurs when there is no plagiarism involved.¹¹ Consider pirating a copy of a music album is an infringement of its creator’s copyrights; however, it is not plagiarism provided the pirated copies are still attributed to their original creator. This situation deals with the economic rights of the copyright owner, while plagiarism concerns the creator’s moral right.

To the creator of a work, plagiarism might be considered the most harmful form of copyright infringement because, in the modern technological world, piracy and the unauthorized use of works is an inevitable phenomenon.¹² However, infringement by plagia-

10. Plagiarism is not a legal concept.

11. LINDEY, *supra* note 1, at 2.

12. With that understanding, it appears that a growing number of creators of works reconcile with the fact they can’t fully protect themselves of unauthorized use of their works, while turning to alternatively profitable exploitation options

rism is more harmful because, besides preventing the creator of a work from receiving the tangible benefits he or she deserves from the work's creation, plagiarism also deprives a creator of the credit, reputation and honor he is owed from the work's creation. As the cliché goes, money comes and goes, but reputation is eternal.

II. BASICS OF MUSICAL THEORY

A. Core Dimensions

The three most basic characteristics of a musical piece are melody, harmony and rhythm.¹³ Melody is the main theme of a song. Melody is the tune, the catch phrase, and the most prominent ingredient of a song. It is usually a repetitive sequence of notes that the song is recognized by. A melody is usually sung by a singer, or played by a leading instrument such as piano, saxophone, guitar or violin.¹⁴

Beneath the melody of a song is the Harmony. The harmony is the set of chords that accompanies the melody. Harmony turns a melody from a simplistic idea to an actual song. Harmony adds volume and depth to the basic tune of a song; it enriches the melody and determines the context in which the melody is played.

Returning to the "4 Chords" video, the common feature in all songs is the harmony, which is based on these four chords. The difference between the songs is the melody, as each song has a dif-

of their works and brand such as licensing of works to commercial productions, merchandising and endorsements. See, http://www.huffingtonpost.com/2012/07/30/musicians-income_n_1719908.html.

13. Michelle V. Francis, *Musical Copyright Infringement: The Replacement of Arnstein v. Porter - A More Comprehensive Use of Expert Testimony and the Implementation of an "Actual Audience" Test*, 17 PEPP. L. REV. 2 493, 498 (1990).

14. Further to the understanding of the part of the melody in a song, it is important to note, and especially in reference to a vocal melody, that *lyrics* in a song can be plagiarized as well. However, there is a clear distinction between the melody which the lyrics are sung to and the literal content of the lyrics. While the first instance constitutes a particular situation of musical plagiarism, the latter belongs to the field of literary plagiarism, such as occurs in books, poems and articles.

ferent one; the singer is singing a different melody in every new song while the piano continues playing the same harmony. Thus, although these songs share the same sequence of chords, most listeners likely did not find any resemblance between the four songs prior to viewing the “4 Chords” video clip. This assumption emphasizes the dominance of the melody in a song, as it takes a rather familiar harmony from a different song and changes its context beyond recognition.

Finally, Rhythm is a wholly different dimension that has no relation with music’s tonal aspects, namely melody and harmony. Rhythm is the time dimension of a song; it is the count, tempo and beat. From a language of pitch, chords and notes, found in melody and harmony, rhythm switches to a language of bars and measures. Rhythm is the frame upon which the structure of a song is built. In each of the songs we’ve heard, the time signature is 4/4;¹⁵ however, the tempo may vary, faster or slower, and so may the beat.¹⁶ While certain types of music, such as a Waltz or Tarantella, have distinct and recognizable measures, most popular music genres are based on a 4/4 count. A 4/4 count allows a song’s beat to be much more predictable; however, it also inhibits a song’s room for originality.¹⁷ Consequently, the majority of plagiarism actions are based on similarity in the most unique aspect of a song, its melody, and less on a song’s harmony, and very rarely, if ever, on its rhythm.¹⁸

15. The time signature of a musical work represents the number of beats in each bar. A bar is a segment of time in a musical work, many times representing repetitive characteristics of the work, in terms of beat, harmony and melody. A 4/4 count is a standard time signature of 4 beats per bar, commonly used in popular music.

16. Additionally, attributes related to beat such as style, genre, accent or groove.

17. Changsheng Xu, Namunu C Maddage and Mohan S Kankanhalli, *Automatic Structure Detection for Popular Music*, 13 IEEE MULTIMEDIA 1 65, 67 (2006).

18. John R. Autry, *Toward a Definition of Striking Similarity in Infringement Actions for Copyrighted Musical Works*, 10 J. INTELL. PROP. L. 113, 140 (2002).

B. Cortex Dimensions

After a composition is created, the next stage is to arrange it. Arrangement is taking a raw composition and developing it into a multilayered song. Most of this process revolves around instrumentation, the allocation of different parts of the composition to different instruments.¹⁹ However, there is an aspect of creativity and originality in this process, occasionally parts of a composition or a composition's structure are modified or new parts are added. The tone and accents of each instrument is set in arrangement and eventually a song emerges, full and rich with multiple layers of instruments.

In relation to a recorded song, the process of arrangement is combined with the process of recording and mixing, together these processes determine the shape and color of the song's final product. Arrangement affects the musical aspect of a song while recording and mixing affect the sound aspect of a song.²⁰ Sound making starts with the most technical decisions, such as which microphone to use, the angle in which it will be placed, or the volume and frequency equalization of each recorded instrument. As technical as it may seem, the infinite configurations of sound pro-

19. Francis, *supra* note 13, at 499.

20. A further distinction between the arrangement and sound aspects would be that the first deals with notes, while the second deals with frequencies. The arrangement stage precedes the recording and mixing stages: The arrangement stage focuses on the modification and assignment of particular musical parts for each instrument. Once arranged, each instrument is recorded accordingly, while the recording process in itself involves crucial technical and creative decision-making such as microphone selection and placement, acoustic environment preparation and signal-path architecture. Since recording related decisions are "documented" in real-time, they are practically irreversible. The mixing stage, on the other hand, is the ex-post treatment of the recorded parts, and therefore, it enables tremendous flexibility with no irreversible implications. The mixing stage is aimed to consolidate all individual recordings into a unified song, by means of setting the balance between the instruments and treating each instrument with various sound processing and effects mechanisms, in order to reach the desired overall sound. When comparing music creation to movie making, than arrangement is more like choosing where the actor will stand in the shooting of a scene, recording would be similar to choosing where to place the lighting, and the mixing can be compared to the post-production stage.

cessing equipment and effects as well leaves room for creativity. Both dimensions, arrangement and sound, determine the overall feel of a song; these dimensions can turn a song from warm to cold, from soft to harsh, and add a spark of originality to a banal composition.

Plagiarism suits based on similarity solely in the arrangement aspect are very rare and those based on similarity in sound hardly exist. Instead, similarity in these aspects reinforce plagiarism claims based on the core dimensions of the composition. As standalone claims, both dimensions, by themselves, are inclined to be dismissed largely because these elements usually constitute general ideas rather than original expressions.

III. FORMATION OF COPYRIGHTS

In its modern context, the legal field of musical plagiarism has developed during the last century in the United States more than in any other country. Consequently, this article will examine musical plagiarism with a focus on American case law, using, as a point of reference the American Copyright Law of 1976,²¹ and the American plagiarism related case law.

A. Basic Demands

The copyright act of the United States,²² as well as the other copyright laws,²³ mention similar basic demands for a work to get copyright protection:²⁴

1. Work of Authorship

Work of authorship – the law specifies all protected types of works, among others are: literary, dramatic and musical works.²⁵

21. Copyright Act of 1976. Commonly referred to as part of title 17 to the United States Code.

22. Copyright Law of the United States, 17 U.S.C. §102 (2011).

23. *See generally*, The Copyright Law of Israel, §4(a) and §5 (2007).

24. TONY GREENMAN, COPYRIGHTS 71 (2nd ed. 2008).

25. Copyright Act, *supra* note 22, at §102(a).

Notably, a song and its sound recording each have their own respective copyright.²⁶

2. *Original*

Original – the work must be original. An original work creates something new and has an identity of its own. An original work must be created by the person who claims authorship and demonstrate a degree of creativity to the point the work has a character distinct from the materials from which it was constructed.²⁷

3. *Fixed*

Fixed – the work must be fixed in a tangible medium.²⁸ In the context of music, a fixed work is a record, a cassette, CD, MP3 file or sheet music. If a work is not fixed in a tangible medium it is not eligible for copyright protection. This principle could be explained as means to overcome the obvious evidential difficulties of proving ownership over intangible ideas, as well as to clearly outline the border of the power to exercise the constitutional power.²⁹

4. *Expression*

Expression – a work's copyright extends only to expressions, and not to ideas, principles, methods, or discoveries. This principle is easy to comprehend on the theoretical level, but is vaguer when coming to put it into practice, since there is no clear distinction between an idea and its expression.³⁰ On the theoretical level, the

26. The copyrights of a song cover not only its music, but its lyrics as well.

27. *Bridgeman Art Library, Ltd. v. Corel Corp.*, 36 F.Supp.2d 191 (S.D.N.Y. 1999).

28. Copyright Act, *supra* note 21, at §102(a).

29. Gregory S. Donat, *Fixing Fixation: A Copyright with Teeth for Improvisational Performers*, 97 COLUM. L. REV. 5, 1363, 1369 (1997).

30. Leslie A. Kurtz, *Speaking to the Ghost: Idea and Expression in Copyright*, 47 U. MIAMI L. REV. 5 1221, 1241 (1993). For some clarification, it is important to note that since this discussion occurs after the fixation has already taken place, then unlike the clear physical difference between idea and expres-

more an idea is general and abstract, it's more likely to be considered an "idea", while the more it becomes concrete and enriched with more unique combinations of details, it's more likely to be considered an "expression".³¹ On the practical level, this distinction becomes more challenging on "grey zones" between the two concepts.

No formal requirements – there is no need for registration of any kind in order to get copyright protection for a work;³² however, failure to register a copyrightable work severely limits an author's ability to recover statutory damages and attorney's fees for any infringement of his work, since while the Copyright Act enables civil actions on grounds of moral rights violations regardless of registration, it requires registration as a precondition for any action based on infringement of one of the rights in the economic bundle of rights.³³

B. Important Principles

As concluded above, the mentioned conditions must be fulfilled in order to establish that a given work is protected by copyright. Only once established, could an owner of a copyright work claim against an allegedly infringing work. The various tests related to the complex task of determining whether an infringement did occur will be reviewed in the next part of the article, but firstly, some important principles that are frequently used in this context should be clarified.

Copyright law distinguishes between two basic concepts: Expression and Idea. Expression is the outcome of the creative process; it is the original core of the work of authorship. Yet, a work does not solely consist of expressions because expressions are based on ideas. This distinction is crucial. While expressions are copyright protected, ideas are not, meaning composer one cannot sue composer two for using the same ideas used in composer one's

sion in their literal sense, in their legal sense they are both already physically fixed.

31. *Id.* at 1244.

32. Copyright Act, *supra* note 22, at §408.

33. *Id.* at §411. See §106 for the bundle of rights.

composition. Composer one may only sue composer two for using the same expression.³⁴ Thus, the question remains, which parts of a composition are regarded as ideas? Consider the following examples: Rock music, a C major scale, song with lyrics about love, the use of a distortion effect in a guitar solo, song structure of two cycles of verse and chorus, and a duet of a male and female singer are all ideas.³⁵ Ideas can appear in countless songs and no one can claim ownership for them.

Comparatively, the chord progression of “Smoke on the Water” by Deep Purple³⁶ is an expression. Using it in another song without permission is a copyright infringement. Frustratingly, when it comes to music, the distinction between expression and idea is not always clear and sometimes cannot be defined *a-priori*. For example, the 4 chords sequence which is played repeatedly in the “4 Chords” video might have been considered an expression when the first of these songs were composed; however now the four chords are immensely common and serve as a basic and predictable chord progression that can be used in many different contexts, making it closer to an idea than an expression.

Substantial Part is a principle that is necessary to extend copyright protection for situations of plagiarism. While “classic” copyright protection deals with infringements involving the work as a whole,³⁷ the law also recognizes individual parts within the work as protectable and applies the entirety of the work’s copyright to each of the individual parts. As mentioned previously, plagiarism is a situation in which only certain parts of an existing work are used. The question integral to this article is how to determine which part of a work worthy of protection. As the term implies, a substantial part is not a matter of quantity; but rather, of quality.³⁸ The at-issue part of a work is examined within the context and cir-

34. GREENMAN, *supra* note 24, at 73.

35. Paul M. Grinvalsky, *Idea-Expression in Musical Analysis and the Role of the Intended Audience in Music Copyright Infringement*, 28 CAL. WL REV. 395, 416 (1991).

36. A video of the song is available at the following link: <http://www.youtube.com/watch?v=vczXutTD66A> (last visited Feb. 22, 2015).

37. Such infringements can be an unlawful duplication or an unauthorized broadcasting of the work.

38. GRINVALSKY, *supra* note 35, at 422.

cumstances surrounding it; and thus, a court must determine if the at-issue part is considered substantial relative to the work it originated from. For example, a thirty second long part of a song might not be considered substantial based on its context, while a different part in the same song that is only 10 seconds long, might be considered substantial.

The demand for a certain degree of originality in a work for it to be copyright protectable seems intuitive. However, the elements required to fulfill this demand have changed over time. The traditional common law approach put an emphasis on the skill and labor of the author, a doctrine known as “sweat of the brow”, as a sufficient demand for a work to be considered original.³⁹ Since *Feist v. Rural Telephone Company*, the balance has changed from an individual’s effort towards creativity. The court determined a simple compilation of facts, no matter how much effort was put into its assembling, is not original unless a minimal requirement of creativity is met.⁴⁰ In fact, effort has become a relatively negligible demand next to creativity. Today, originality consists of (1) independent creation of the author and (2) some degree of creativity.⁴¹ In the context of music, originality means that an improvised song recorded in one take meets the required demands for originality, even if it took only minimal effort to create, as long as it was created independently by its composer.

IV. COPYRIGHT INFRINGEMENT

A. How to Determine Infringement

The basic two conditions for the occurrence of copyright infringement are the plaintiff’s ownership in the complaining work and the unauthorized use of original elements contained in it by the

39. Howard B. Abrams, *Originality and Creativity in Copyright Law*. 55 LAW & CONTEMP. PROBS. 3, 10 (1992).

40. *Feist Publications, Inc. v Rural Telephone Service Co.*, 499 U.S. 340 (1991).

41. GREENMAN, *supra* note 24, at 90.

defendant.⁴² Various copyright laws define what actions are considered as infringement of copyrights. While most instances of infringement are self-explanatory, in the sense that the action in itself proves infringement without requiring judicial interpretation, when it comes to plagiarism the development of judicial tests in case law was integral to determining infringement.

1. *Similarity and Access*

Similarity and access – The most prominent case of musical plagiarism was *Arnstein v. Porter* (1946) from the Second Circuit in the United States.⁴³ Ira Arnstein was an American composer who appealed to district and circuit courts during the decade before this case no less than five times with plagiarism suits against other composers. In *Arnstein* the court took the opportunity to establish clear rules for the examination and decision in music plagiarism cases.⁴⁴ The *Arnstein* test remains the most important and widespread test in these cases. The test requires the plaintiff to show: (1) the defendant copied from his work and (2) the copying was an improper appropriation. The first demand is proven mostly through circumstantial evidence, as finding proof for the act itself of copying is highly unlikely. Therefore, to prove that copying has taken place, the plaintiff must show two elements: (1) there are similarities between his and the defendant's later work and (2) the defendant had access to his work.⁴⁵ When there's a lack in evidence of access, the plaintiff will have to show striking similarity between the works, to the extent of exclusion of the possibility of coincidence.⁴⁶ In this stage, the judge will usually be aided by a "dissection" of the works during an expert testimony. This analysis is based on the distinction between the different musical dimensions as mentioned previously, such as harmony and melody. Once cop-

42. Jeffrey Cadwell, *Expert Testimony, Scenes a Faire, and Tonal Music: A (Not So) New Test for infringement*, 46 SANTA CLARA L. REV. 137, 140 (2005).

43. *Arnstein v. Porter*, 154 F.2d 464 (2d Cir. 1946).

44. Columbia Law School's Music Copyright Infringement Resource, available at, <http://mcir.usc.edu/cases/1940-1949/Pages/arnsteinporter.html> (last visited Feb. 22, 2015).

45. Cadwell, *supra* note 42, at 140.

46. *Id.* at 142.

ying is proven, the second stage begins and determines whether there was an improper appropriation. This test is performed by the “lay listener”, the judge or jury, which represents the average person with no professional or analytic grasp of music. Only once the second test has indicated improper appropriation, is a copyright infringement determined.⁴⁷

2. *Extrinsic and Intrinsic Tests*

Extrinsic and Intrinsic Tests - *Sid & Marty Krofft Television Productions Inc. v. McDonald's Corp* (1977)⁴⁸ is another influential copyright case dealing with plagiarism. While *Sid & Marty Krofft Television Productions Inc.*, did not concern musical content, but rather characters in a television show, the tests described in the case are now widely applied in many musical plagiarism cases. The Extrinsic Test formulated in *Sid & Marty Krofft Television Productions Inc.*, examines similarity through expert testimony and focuses on criteria in works that can be objectively listed and analyzed, such as type of artwork and the materials used in the artworks (which are considered as ideas, rather than expressions) and compares these objective features between the two works. After substantial similarity between ideas is proven in the Extrinsic Test, the Intrinsic Test, which is performed by the lay listener, then serves to determine whether substantial similarity exists between the expressions of these ideas.⁴⁹ The Intrinsic Test is based on the “total concept and feel” approach.⁵⁰ The combined tests serve to clarify the distinction made in *Arnstein* between copying, that is lawful, and copying that is considered as unlawful appropriation.⁵¹

47. Francis, *supra* note 13, at 495.

48. *Sid & Marty Krofft Television Productions Inc. v. McDonald's Corp.*, 562 F.2d 1157 (9th Cir. 1977).

49. *Id.* at 1164.

50. Sarah Brashears-Macatee, *Total Concept and Feel or Dissection: Approaches to the Misappropriation Test of Substantial Similarity*, 68 CHI.-KENT L. REV. 913, 918(1992).

51. Krofft, *supra* note 48, at 1165. The lawful copying described in *Arnstein* was referred in Krofft to ideas which aren't copyright protected, while the copying which constitutes an unlawful appropriation mentioned in *Arnstein* was referred to copying of protected expressions in Krofft.

3. *Total Concept and Feel*

Total Concept and Feel was developed in *Roth Greeting Cards v. United Card Co.* (1970).⁵² Instead of analyzing and comparing between the individual components within the works, the Total Concept and Feel test suggests a broader perspective to be used by an ordinary person to prove substantial similarity. The test examines each work as a whole, ideas and expressions, to obtain the subject work's general impression without scrutinizing the work's intricate details to determine whether there is substantial similarity between the two works.⁵³

4. *The Pattern Test*

The Pattern Test is more commonly used in disputes concerning fictional works;⁵⁴ however, it is easily implemented in musical plagiarism cases as well. The Pattern Test requires the court to list the expressive elements in the work in their order, thus framing a distinct sequence of events within the work.⁵⁵ The pattern in this sequence of events, which is copyright protected, is compared with the similar pattern within the allegedly infringing work. The court then reaches a conclusion on whether or not infringement has occurred based on the similarity found between the two works' patterns.⁵⁶

5. *The Abstraction Test*

The Abstraction Test is one of the earliest tests for infringement and was formulated by Judge Learned Hand in *Nichols v. Univer-*

52. *Roth Greeting Cards v. United Card Co.*, 429 F.2d 1106 (9th Cir. 1970).

53. Cadwell, *supra* note 42, at 151.

54. Zechariah Chafee, Jr., *Reflections on the Law of Copyright: I*, 45 COLUM. L. REV. 4, 503 (1945).

55. *Id.*, at 514. The "sequence of events" refers to events in a plot of a fictional story. However, the same concept can be applied on "musical events" taking place throughout the course of a musical work.

56. Jessica E. Bergman, *No More Format Disputes: Are Reality Television Formats the Proper Subject of Federal Copyright Protection?*, 4 J. BUS. ENTREPRENEURSHIP & L. 244, 250 (2012).

sal Pictures Corp (1930).⁵⁷ The Abstraction Test requires the court to create several levels of abstractions for each work, from the fully detailed description of the work down to the most abstract and simplistic description of the work's general idea. Somewhere in between the fully detailed description of the work and the work in its most abstract form, substantial similarity between the copyrighted work and the allegedly infringing work is assumedly found. A specific point on the scale of abstractions divides infringement from lawful appropriation. Once substantial similarity between the copyrighted work and the allegedly infringing work is found beyond the given threshold of abstractions, an infringement is determined.⁵⁸

6. *The Filtration Test*

The Filtration Test was suggested as a second-stage test to the Abstraction Test, originally in the context of computer programs similarity comparison.⁵⁹ First, the court filters the ideas, the unprotected elements in the work, from expressions, the protected ones. Then the court compares the protected elements in the two works to determine if similarity exists between them to the extent the similarity caused infringement.⁶⁰

B. *Exceptions for Infringement*

While copyright law was developed as a means for authors to protect their works from unauthorized use, it appears many specific situations have fallen between the cracks and are unjustly categorized as infringement. Due to these situations, it was necessary for copyright law to establish several defenses against certain cop-

57. *Nichols v. Universal Picture Corp.*, 45 F.2d 119, 121 (2d Cir. 1930).

58. Bergman, *supra* note 56, at 249.

59. *Computer Associates International Inc. v. Altai Inc.*, 982 F. 2d 693, 707 (2d Cir. 1992). The Filtration test proposed by Melville B. Nimmer and David Nimmer was used in this case as an extension to the Abstraction test from *Nichols*, as means to detect infringement in computer programs (referred to as the Abstraction-Filtration test). Nevertheless, it seems that the Filtration test in itself can serve as an optional test for infringement in musical plagiarism disputes.

60. Bergman, *supra* note 56, at 250.

yright infringement claims to avoid the misuse of authors' rights in their works.

1. *Fair Use*

Fair Use is a widely applied flexible defense mechanism for copyright infringement claims found in the United States Copyright Act as well as in numerous other legal systems' copyright laws.⁶¹ The Copyright Act fair use article defines several kinds of uses that might be considered as fair use such as: criticism, comment, news report, teaching and others.⁶² The determination whether such a use is defined as fair use depends on four considerations: (1) the purpose and character of the use, especially whether it is commercial or not, (2) the nature of the copyrighted work, (3) the proportion between the used part and the whole work, in terms of quantity and substantiality, and (4) the effect the use has upon the potential market of the original work.⁶³ Fair use in the context of music allows uses such as creating a parody version of a successful song like the *Campbell v. Acuff-Rose Music* (1994) case in the matter of 2Live Crew's takeoff on Roy Orbison's "Pretty Woman"⁶⁴ or using a familiar song for educational purposes. Both of these examples might be considered as a fair use of the original work in accordance with the aforementioned considerations and thus immune to infringement accusations.

2. *Scènes à faire*

Scènes à faire is a defense introduced in *Cain v. Universal Pictures* (1942) and derived from the French term meaning "scenes that must be done". A defendant must claim the parts allegedly

61. Copyright Act, *supra* note 22, at §107. The United States copyright law principle has dramatically influenced parallel articles in other copyright law systems, such as the almost identical fair use mechanism found in §19 of the Israeli copyright law. Some judicial systems have different variations on the United States copyright law's fair use exception, some of which use the term "fair dealing" instead of fair use.

62. GREENMAN, *supra* note 24, at 400.

63. Copyright Act, *supra* note 22, at §107

64. *Campbell v. Acuff-Rose Music*, 510 U.S. 569 (1994).

copied from a plaintiff's work constitute key elements in works of that type and genre, and therefore new works cannot be completed without using these elements.⁶⁵ For example, an instrumental introduction in a song or the main character's last words before his death in a movie easily qualify for a Scènes à faire defense. Scènes à faire are ideas, not expressions, and consequently nobody can claim ownership in a scène à faire.

3. *De minimis*

De minimis is a concept that exists in other legal domains besides copyright law and is derived from the Latin expression meaning "the law does not concern itself with trifles."⁶⁶ In infringement cases, the de minimis doctrine allows a defendant to claim that the part taken and used in his work is too negligible or unimportant to be considered infringement of the original work's copyright.⁶⁷ In the context of music, the de minimis defense is common in situations of sampling, such as in the case of *Newton v. Diamond*.⁶⁸

65. Cadwell, *supra* note 42, at 148.

66. ANDREW ASHWORTH & JEREMY HORDER, *PRINCIPLES OF CRIMINAL LAW* 35 (2013). The concept of De Minimis originates from the domain of Criminal Law, and its purpose is to restrict the use of criminal law where it might not be effective or result in greater social harm, such as in cases of minor wrongs. This principle serves to increase the efficiency in use of enforcement resources through focusing on more severe wrongdoings, while preventing risks of delegitimization of seemingly unjust and inefficient enforcement systems.

67. Susan J. Latham, *Newton v. Diamond: Measuring the Legitimacy of Unauthorized Compositional Sampling - A Clue Illuminated and Obscured*, 26 HASTINGS COMM. & ENT. L.J. 119, 132 (2004).

68. *Newton v. Diamond*, 349 F.3d 591 (9th Cir. 2003). James Newton claimed that the use of samples from his song "Choir" in The Beastie Boys song "Pass The Mic" constitutes a copyright infringement. The court defined a de minimis use of a work as one that the average audience would not be able to detect. Since The Beastie Boys used only 3 notes long samples from Newton's song, it is too short to be recognizable by average audience, and therefore it is merely de minimis which is not actionable infringement under the copyright law.

4. Awareness

Notably, Awareness is not an exception to copyright infringement and although might be perceived as counterintuitive, a defendant's lack of awareness will not serve as a defense for the copyright infringer. Copyright law functions within the standard of strict liability; consequently, there is no significance to the extent of culpability of the infringer, as stressed by the court in *Bright Tunes Music v. Harrisongs Music*.⁶⁹ On one hand, it makes sense a defendant's intent is not relevant to the damage inflicted upon the plaintiff; however, and on the other hand, in a world of unlimited exchange of ideas and influences our subconscious can easily trick our minds into believing a given idea is genuinely ours while the idea is actually a reflection of a memory of something we were previously exposed to in the past.⁷⁰

V. COMPARATIVE VIEW: COPYRIGHT LAW & PLAGIARISM AROUND THE WORLD

A. In the United Kingdom

1. The UK Copyright Law

The United Kingdom was the first country to legislate a modern copyright law: "*The Statue of Ann*" from 1710.⁷¹ After various re-

69. *Bright Tunes Music v. Harrisongs Music*, 420 F. Supp. 177 (S.D.N.Y. 1976). In this notable case, George Harrison was accused of plagiarizing Ronald Mack's "He's So Fine" in his successful song "My Sweet Lord". Although the court accepted Harrison's claim that the copying has not taken place consciously, it stressed that this fact is irrelevant for the question of infringement, and decided that Harrison did infringe the copyright for Mack's song.

70. F.K. Taylor, *Cryptomnesia and plagiarism*, 111 BRIT. J. PSYCHIAT, 1111, 1113 (1965). This phenomenon is known as Cryptomnesia. The term Cryptomnesia describes a situation in which a person is using an idea which is stored in his subconscious memory after he was previously exposed to it, while subjectively experiencing it as his own novel, independent and original idea. This phenomenon can lead to unintentional and unconscious plagiarism.

71. STOKES, *supra* note 6, at 9.

visions, the most recent United Kingdom copyright law is the *Copyright, Designs and Patent Act of 1988 (CDPA)*.⁷²

The first part of the CDPA deals with Copyrights and is divided into several chapters: Chapter I includes basic introductory definitions and principles, such as the types of works covered by copyright,⁷³ ownership,⁷⁴ and duration of the copyright protection.⁷⁵ These principles are considerably similar in substance and extent to their parallels in the United States copyright law. Chapter II lists the rights exclusive to the copyright owner, such as the rights to copy or to perform the work. The protection applies to a complete work or any substantial part of it.⁷⁶ Chapter III deals with the permitted acts in relation to copyright works, situations of unauthorized uses that will not amount to copyright infringement. Although the term “fair dealing” is mentioned in several articles in the same context of “fair use”,⁷⁷ none of which serve as a general multipurpose fair use article such as the provision in the United States copyright act. Alternatively, Chapter III provides a considerably long and elaborated list of particular cases of permitted unauthorized uses.⁷⁸ Finally, Chapter IV extensively covers the concept of moral rights, which include the right to be identified as the creator of the work,⁷⁹ the right to object to derogatory treatment of the work,⁸⁰ and to be protected from false attribution of work.⁸¹ Notably, these

72. Copyright Design and Patents Act (1988) (Eng.).

73. *Id.*, at §1. Includes literary, dramatic, musical or artistic works.

74. *Id.*, at §9-11. §11 states that the work’s author is its natural owner, excluding employees that have created a work in the course of their employment. In such cases, the employer will be the first owner.

75. *Id.*, at §12-15. §12 states that copyright duration is 70 years from the last day of the author’s year of death.

76. *Id.*, at §16.

77. *Id.*, at §29 and 30.

78. *Id.*, at §28-76. While these articles deal with all mentioned fair uses in the United States copyright act, such as criticism or use for educational purposes, there is no one inclusive open-ended fair use article which could serve to facilitate new and unfamiliar uses that might have been entitled to the fair use defense under the United States law.

79. *Id.*, at §77.

80. *Id.*, at §80.

81. *Id.*, at §84.

rights are waivable by their owner.⁸² Interestingly, conspicuous by its absence is a section of the CPDA with a distinction between ideas and expressions.⁸³ Although the idea/expression dichotomy has appeared solely in case law,⁸⁴ it applies whenever the question of the extent of copyright protection is raised.⁸⁵

As opposed to the United Kingdom's copyright law, the original United States copyright law from 1976 did not include any manifestation of moral rights. However, the recent addition of the Visual Artists Right Act of 1990 to the United States' copyright act, as enacted in section 106A, guarantees artists the rights of attribution and integrity to their work.⁸⁶ Similar to the United Kingdom's copyright law, the integrity of an artist's work is especially important because unauthorized modifications to his work might impair the reputation of the work's author.

2. Case Law

As noted above, most of the current main principles of copyright law in the United States and in the United Kingdom are similar. Under both legal systems, the legal definition of Plagiarism is considered to be "an infringement of the exclusivity of the copyright owner's right to copy a substantial part of his work."⁸⁷ While the two legal frameworks for copyright protection have become increasingly similar to each other in the written law over the years, they have grown apart in the ways these laws are implemented in courts mainly due to the difference between the methods devel-

82. *Id.*, at §87.

83. *See*, <http://www.lawteacher.net/copyright-law/essays/idea-and-expression-dichotomy.php> (last visited Feb. 22, 2015).

84. *Hollinrake v. Truswell*, 3 Ch 420 (1894) (U.K.), and more recently on *Designers Guild Ltd v Russell Williams (Textiles) Ltd*. E.C.D.R. 10 (2001) (U.K.).

85. STOKES, *supra* note 6, at 48.

86. Copyright Act, *supra* note 22, at §106A.

87. Robert J.S. Cason & Daniel Müllensiefen, *Singing From the Same Sheet: Computational Melodic Similarity Measurement and Copyright Law*, 26 IRCTL 25, 26 (2012).

oped by each system to evaluate what constitutes a substantial similarity.

The first principle formulated in the United Kingdom's plagiarism cases is the "by the ear as well as by the eye" concept from *Austin v. Columbia Gramophone Ltd.*⁸⁸ Under this widely applied principle, the examination of similarities between two works is conducted in two parallel sensory perspectives: the eye and the ear.⁸⁹ The "by the eye" comparison relies on analytic dissection of the songs' written score done by music experts. The reduction of both songs' notes sheets to simple lines depicting each song's melody is supposed to graphically illustrate the extent of similarity between the songs' dominant features. This approach is often criticized for being simplistic and misleading.⁹⁰

The "by the ear" comparison is an aural examination of the songs that complements its visual counterpart. A judge performs this aural comparison between works. Notably, aural examination of similarities is what a plagiarism case's decision is mostly based upon.⁹¹ The standard set in *Francis Day Hunter v. Bron*⁹² is whether "an ordinary reasonably experienced listener might think that perhaps one had come from the other" in order to recognize the similarity as copying.⁹³ After showing that the extent of similarity is sufficient to establish the claim of plagiarism, the plaintiff is required to show the part copied from his work is substantial.⁹⁴ The test for substantial part is based on quality, not quantity, and is takes into consideration the amount of the original author's labor and skill that is incorporated in the specific part.⁹⁵

88. *Austin v. Columbia Gramophone Company*, 67 Solic. J. 709 (1923) (Eng.). The plaintiff, an operatic composer, claimed the defendants used the same music with some modifications in the gramophone records they sold. The court asserted that similarity between musical works is not to be determined by a note for note comparison but instead to be determined by the ear as well as by the eye.

89. *Cason & Müllensiefen*, *supra* note 87, at 27.

90. *Id.* at 28.

91. *Id.*

92. *Francis Day Hunter Ltd v Bron*, Ch. 587 (1963) (U.K.).

93. *Id.* at 596.

94. *Cason & Müllensiefen*, *supra* note 87, at 29.

95. *Id.* at 30.

In the *Francis* case, Justice Wilberforce elaborated the reasoning leading to his decision, which was then later affirmed in the Court of Appeal. First, a presumption of the defendant's access to the original song is established.⁹⁶ Next, a graphic comparison is presented in court, which is followed by an extensive structural analysis of the songs "by the ear" performed by the judge and based on the professional musicologists' dissection.⁹⁷ Judge Wilberforce stressed that even identical sequences of notes will not necessarily establish a claim of infringement if not supported by other evidence, just as much as different time measures will not overrule this claim.⁹⁸ Justice Wilberforce considered the first eight bars of the defending song as a substantial part of the original song,⁹⁹ yet the degree of similarity was only "considerable" and therefore did not result in infringement.¹⁰⁰

B. In Israel

1. The Israeli Copyright Law

As in many other fields of legislation in Israel, the first Copyright Law applied in Israel was the 1911 *British Copyright Law*, which remained valid in Israel many years after the withdrawal of the British Mandate.¹⁰¹ Over the years, many American standards and doctrines were absorbed in the domestic law,¹⁰² some of which have found their way into the new *Israeli Copyright Law* from 2007.¹⁰³

96. Francis Day, *supra* note 92, at 590.

97. *Id.* at 592.

98. *Id.* at 595.

99. *Id.* at 587.

100. *Id.* at 596.

101. Michael D. Birnhack, *Originality on Copyright Law and Cultural Control*, 2 ALEI MISHPAT 347, 386 (2002).

102. *Id.*

103. Copyright Law of Israel (2007).

Several concepts in the Israeli law, such as the fair use¹⁰⁴ or the exceptions for copyright protection¹⁰⁵ are almost identical to the corresponding articles in the American law. Nevertheless, some principles that are more dominant in the civil law tradition, such as moral rights, are incorporated more prominently in the Israeli law as well.¹⁰⁶

2. Case Law

The Israeli Supreme Court has dealt with several significant copyright disputes throughout the years; but, of these significant disputes, only a handful have been musical plagiarism cases. The most significant landmark case in this field was the *Almagor v. Godick*,¹⁰⁷ which although concerned plagiarism of songs in a musical, it actually dealt with literal, not musical, plagiarism. Nevertheless, Judge Cohen took this opportunity to adopt principles applicable to musical plagiarism as well.¹⁰⁸ Among other distinctions, Judge Cohen provided (1) copyright does not cover ideas, only the expressions of ideas, (2) in order to prove copyright infringement,

104. *Id.*, at §19: (a) Fair use of a work is permitted for purposes such as: private study, research, criticism, review, journalistic reporting, quotation, or instruction and examination by an educational institution.

(b) In determining whether a use made of a work is fair within the meaning of this section the factors to be considered shall include, inter alia, all of the following: (1) The purpose and character of the use; (2) The character of the work used; (3) The scope of the use, quantitatively and qualitatively, in relation to the work as a whole; (4) The impact of the use on the value of the work and its potential market.

105. *Id.*, at §5: Copyright in a work as stated in section 4 shall not extend to any of the following, however it shall extend to their expression: (1) Ideas; (2) Procedures and methods of operation; (3) Mathematical concepts; (4) Facts or data; (5) News of the day.

106. *Id.*, at §45-46. While §106A of the United States copyright act acknowledges moral rights only for authors of visual arts, the parallel §45 in the Israeli copyright law provides these rights for all authors, except for those of computer programs. §46 specifies the moral rights: the right for attribution and the right to maintain the integrity of the work.

107. C.A. 559/69 *Almagor v. Godick*, 24(1) P.D. 825 (1970).

108. Some of the principles were actually suggested during previous instance sitting by Tel Aviv district court president Judge Zeltner.

the plaintiff is required to show the defendant used a substantial and material part of his work, and (3) the defendant had the possibility of access to the author's work and that the similarity between the works is substantial enough to exclude coincidence. The latter is determined by an aggregation of similarities. Additionally, a comparison between the plaintiff's work and allegedly infringing work should not be technical and superficial; but rather the similarity should be substantial and based on an in-depth overview of both works. Moreover, Judge Cohen accepted the importance of a *Scène à faire* defense where the creator of the defending work is limited to narrow selection of possible expressions.¹⁰⁹

Subsequent rulings expanded the principles established in *Almagor*. In the 1971 case, *The State of Israel v. Achiman*,¹¹⁰ Judge Landoy provided that in the case of similarity points shared by two works which amount to the extent of exclusion of any other option rather than copying, the burden of proof should be transferred from the plaintiff to the defendant, which is parallel to the United States' standard of "striking similarity" and nullifies the demand for proving access.¹¹¹ While often not dealing with plagiarism litigation regularly, the Israeli Supreme Court has significantly contributed to the domain of musical copyright and its protection.¹¹² However, when focusing on the aspects related to musical plagiarism in Israel, it's equally important to understand the role of ACUM in the protection of composers' copyrights.

109. *Id.* at clause 5.

110. C.A. 136/71 *The State of Israel v. Achiman*, 26(2) P.D. 259, 262 (1971).

111. *Id.* at 262.

112. Landmark copyright infringement cases of the Israeli Supreme Court such as C.A. 559/69 *Almagor v. Godick*, 24(1) P.D. 825 (1970) or C.A. 15/81 *Goldenberg v. Bennett*, 36 (2) P.D. 813, 819 (1982), introduced new and useful doctrines to the Israeli legal system (some based on doctrines formulated in United States courts), which were implemented in lower instances and ACUM arbitration procedures.

3. ACUM

The ACUM¹¹³ is the only Israeli association that represents composers, authors and publishers.¹¹⁴ The association deals with both copyrights and the collection and distribution of royalties. The ACUM is intended to promote and protect the interests and rights of its members; therefore, the vast majority of composers and musicians have incentive to become members of the association. Members of ACUM are bound by its articles of association.¹¹⁵ This statutes document states that an arbitrator appointed by the president of the Tel Aviv district court has the exclusive jurisdiction to decide any internal dispute within the association, including plagiarism disputes between its members.¹¹⁶ Consequently, almost all musical plagiarism disputes in Israel are discussed and decided in an internal arbitration procedure in ACUM rather than the court.

Usually these procedures are carried out behind closed doors and the reasoning of ACUM decisions is not published. The ACUM's internal arbitration procedure keeps the standards the ACUM uses to decide plagiarism disputes largely ambiguous. However, in 2011 ACUM published an arbitration decision on its official website, which shed light on its internal procedures.¹¹⁷ Although the document does not disclose the names of the parties in conflict, the songs under discussion, or any other concrete detail, the decision describes an application of the United States' *Arnstein* doctrine.¹¹⁸ The arbitrator, retired Israeli Supreme Court Jus-

113. ACUM is the Israeli "Association of Composers, Authors and Publishers" (based on the Hebrew abbreviation) founded in 1936.

114. Serves a similar purpose as the American ASCAP and BMI.

115. ACUM statute document can be found at: <http://www.acum.org.il/english/acum-statutes> (last visited Feb. 22, 2015).

116. *Id.*, at §51.2.

117. Arbitration decision published on April 1th, 2011 at <http://www.acum.org.il/>. ACUM is not required to publish the contents of the arbitration procedures it performs. The published arbitration decision presents the procedure, doctrines in use and reasoning leading to the ruling of the arbitrator (last visited Feb. 22, 2015).

118. *Arnstein*, *supra* note 43. The arbitrator used the *Arnstein* test for copying, when he first established access to the plaintiff's work and substantial similarity, as a basis for his conclusion that there was an unlawful appropriation of the plaintiff's work.

tice Theodor Or, found the defending song to infringe the copyright of the complaining song, based on access the defendants had to the song¹¹⁹ and on the striking similarity between the substantial parts of the songs.¹²⁰ Judge Or's conclusions relied on expert testimony that had the two songs "dissected".¹²¹ Additionally, Judge Or found the use of the complaining song's music in a rap song accompanied with lyrics which are promoting consumption of marijuana as a violation of the complaining song's composer's moral rights.¹²²

Judge Or's approach is perhaps stretching the limits of an artist's moral rights a bit further, taking in account not only harm to the work's integrity, but also evaluating the character of the infringing use in the context of social and moral values to estimate the damage inflicted upon the composer's reputation.¹²³

119. A presumption based on its popularity.

120. ACUM arbitration, *supra* note 117, at 3rd paragraph. "His honorable Arbitrator has ruled, that the second melody line in the defendant's song constitutes an unlawful copying of a substantial part of the plaintiff's song. His conclusion was based on the proof of access to the plaintiff's work (which is popular) and on the similarity, which is close to identical, between the second melody line and a substantial part of the plaintiff's song."

121. *Id.* "The arbitrator has reviewed and accepted the expert opinion on behalf of the plaintiff, which included a diagram (comparing the songs) that leads to the impression that except for a minor rhythmical movement, the composition of the plaintiff's song is identical to the second melody line of the defendant, in all attributes, including harmony, sounds and beat."

122. *Id.*, at 4th paragraph. "In the present case, it was decided that indeed the lyrics of the defendant's song include content that cause damage to the plaintiff, since the (defendant's) song includes words praising the act of smoking drugs (referring to Marijuana)..."

123. *Id.* "The attachment of a musical composition, without the approval of its author, to lyrics that contain content with criminal character or content that contradicts acceptable moral values, might be interpreted in certain cases, as infringing the moral right of the composer in his musical composition." In the sense of reputation, the allegedly damaging elements were in the original lyrics of the defendant's song, and not in the modifications done in the plagiarized composition. Since the moral right in the Israeli copyright law is phrased as "...any harmful action will not be performed on the work, if it might damage the author's honor or reputation", it seems essential to understand whether "might damage" is referring to the author's standards (subjective) or a reasonable author (objective). In this case, Judge Or's interpretation is inclined to a more sub-

C. International Law

The 19th century's industrial revolution and trend of globalization created many situations of border-crossing copyright and other Intellectual Property disputes. Situations as such, in which the infringer and original author were not of the same nationality, required international mechanisms that would protect copyright globally and create uniformity in its protection. Consequently, the Berne Convention, which was intended to protect literary and artistic works worldwide, was formulated in 1886.¹²⁴ In 1967, the World Intellectual Property Organization (WIPO) was founded and certified to manage all aspects of the Berne Convention.¹²⁵ Currently, 166 countries are party to the convention, which together covers virtually all significant music exporters.¹²⁶ The Berne Convention applies to nationals or residents of the signatory countries or to works first published in the signatory countries.¹²⁷ Article 5 of the convention provides its basic principles, namely that (1) an author from any country, in respect to works protected in the convention, in countries party to the convention outside his own, shall enjoy the same rights granted to their nationals, as well as rights granted by the convention, (2) entitlement to these rights does not require any prior formal action, and (3) copyright protection in the country of the author's origin is governed by the author's country's domestic law.¹²⁸

In relation to musical plagiarism, this means the copyright owner of an original song may sue the plagiarizer of his song for copyright infringement even if the infringement was in a different

jective approach which appear to assess the potential damage through the author's perspective (and perhaps combined with Judge Or's own personal moral values, rather than the allegedly acceptable ones).

124. See, World Intellectual Property Organization (WIPO) Handbook on Intellectual Property, chapter 5, p.262.

125. See, <http://www.wipo.int/about-wipo/en/> (last visited Feb. 22, 2015)

126. See, http://www.wipo.int/treaties/en/ShowResults.jsp?lang=en&treaty_id=15 (last visited Feb. 22, 2015).

127. Berne Convention for the Protection of Literary and Artistic Works, Article 3, Sep. 9, 1886.

128. *Id.* at Article 5.

country, provided the author resides in a signatory country and the infringement was perpetrated in another signatory country.¹²⁹ The author will be eligible to sue even if he does not reside in a signatory country, if the work was first published in a signatory country.¹³⁰ An example of this rule is demonstrated in the Israeli case *Goldenberg v. Bennett*,¹³¹ which affirmed the district court's ruling in the question of international copyright protection. *Goldenberg* considered a suit by the renowned American director Michael Bennett against the Israeli director Michael Goldenberg for plagiarizing Bennett's successful Broadway musical *A Chorus Line* in Goldenberg's musical that was presented in Israel. Goldenberg's attempt to avoid the suit through a procedural claim that foreign works are not protected in Israel was rejected. The court stated Israel's copyright law applied to foreign authors from all signatory countries to the Berne and the Universal Copyright Conventions, both of which were ratified and incorporated into Israeli law, although only the latter was adopted by the United States at the time of the *Goldenberg* case.¹³² This rule enabled Bennett to use the copyright protection he was entitled to in Israel to sue Goldenberg for infringement in an Israeli court.¹³³

VI. VIRTUAL CASE: PUTTING THE THEORIES TO THE TEST

This article has now covered the most prevalent approaches and methods developed in a variety of courts throughout the history of modern music to deal with cases of musical plagiarism. The current chapter will bring to practice the various doctrines previously enumerated through a simulation of a copyright dispute in the field of musical plagiarism.

For that purpose, this article will examine two successful American Pop-Rock songs, which, although repeatedly claimed by

129. *Id.*, at Article 5(1).

130. WIPO Handbook, *supra* note 127, at 263.

131. C.A. 15/81 *Goldenberg v. Bennett*, 36 (2) P.D. 813 (1982).

132. *Id.*, at 819.

133. *Id.* Bennet eventually won the trial, and additionally, Goldenberg's appeal on the District Court's decision was dismissed by the Supreme Court (the case cited above).

many musicians and listeners as suspiciously similar to each other, the similarity was never tested in court.

The subject works are:

Complaining work: *Livin' on a Prayer*¹³⁴

Artist: Bon Jovi

Composer: Jon Bon Jovi, Richie Sambora and Desmond Child

Release date: October 31, 1986

Defending work: *Heaven is a Place on Earth*¹³⁵

Artist: Belinda Carlisle

Composer: Rick Nowels and Ellen Shipley

Release date: September 18, 1987

First, this article will begin with a dissection of the two songs.¹³⁶

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134. Watch video at the following link:

<http://www.youtube.com/watch?v=IDK9QqIzhwk> (last visited Feb. 22, 2015).

135. Watch video at the following link:

<https://www.youtube.com/watch?v=NOGEyBeoBGM> (last visited Feb. 22, 2015).

136. *See*, The Dave Tompkins music database at:

<http://www.cs.ubc.ca/~davet/> (last visited Feb. 22, 2015, moving to

<https://cs.uwaterloo.ca/~dtompkin/> (last visited Feb. 22, 2015)).

137. *See*, Ultimate Guitar, a Guitar tabs and chords leading website:

<http://www.ultimate-guitar.com/> (last visited Feb. 22, 2015).

A. Basic Dissection

	<i>Livin' on a Prayer</i>	<i>Heaven is a Place on Earth</i>
Runtime	4:09 min.	4:04 min.
Key	E minor	C# minor/ E major
Rhythm	Tempo: 122 BPM Time Signature: 4/4 Style: Standard Rock beat	Tempo: 123 BPM Time Signature: 4/4 Style: Standard Rock beat
Structure	Intro (4+12 bars) 1 st verse (16 bars) Bridge (8 bars) Chorus (8 bars) Pre-verse (2 bars) 2 nd verse (16 bars) Bridge (8 bars) Chorus (8 bars) Pre-solo (2 bars) Guitar solo (9 bars) Bridge and key change (3¾ bars) Chorus (16 bars + fadeout)	Intro (9½+8½+2 bars) 1 st verse (8 bars) Bridge (8 bars) Chorus (9½ bars) 2 st verse (8 bars) Bridge (8 bars) Chorus (9½ bars) C-part (16 bars) Bridge (8 bars) Pre-chorus and key change (7½ bars) Chorus (12 bars + fadeout)
Chords	Verse: Em, C, D, Em Bridge: C, D, Em Chorus: Em, C, D, G, C, D After key change: 2 semi-tones up	Verse: E, B, A, B Bridge: G, A, G, A, F#m, G, Em, F#m, G, A Chorus: C#m, A, B, C#m, E, A, B, C#m After key change: 3 semi-tones up

B. Discussion

Firstly, there is a considerable degree of proximity in the publishing dates of the two subject songs, allowing a counterclaim that the second song, *Heaven is a Place on Earth*, hereinafter referred to as “*Heaven*”, was written before the date in which first song, *Livin' on a Prayer*, hereinafter referred to as “*Prayer*”, was pub-

lished. Alternatively, an even more far-reaching counterclaim that “*Heaven*” was plagiarized by “*Prayer*” behind the scenes of the 1980’s music industry, could also be theoretically possible. However, as no evidence supports either counterclaim and neither claim was ever heard, there is a strong assumption that the composers of “*Heaven*” are indeed suspected infringers.

Thus, according to the *Arnstein* doctrine, the composers of “*Prayer*” must show that “*Heaven*”, in fact, copied parts from their song, before deciding whether it was an improper appropriation. To determine improper appropriation, the plaintiff must establish access and similarity to their song.

1. Access

Access is largely a presumption. The plaintiff does not need to prove that the defendant “accessed” their song, but only that the defendant had a reasonable opportunity to access it.¹³⁸ In the *Bright Tunes Music v. Harrisongs Music* case, access was determined by the popularity of the original song, represented by the song’s chart positions.¹³⁹ Notably, “*Prayer*” spent four weeks as number one in the USA Billboard Hot 100 Chart, as well as in many other countries around the globe.¹⁴⁰ This fact, along with “*Prayer*’s” increased rotation on MTV and radio stations, is more than enough to prove access of the composers of “*Heaven*” to Bon Jovi’s song.

2. Similarity

Similarity appears lacking in “*Heaven*”, with the exception of “*Heaven*” and “*Prayer*’s” choruses. Although this article’s dissection suggests noticeable similarity between the rhythm and structural elements of the songs, the rhythm and structure are merely ideas; therefore neither element can be determined as a convincing base for comparison, apart from the choruses of the songs.

138. Cadwell, *supra* note 42, at 140.

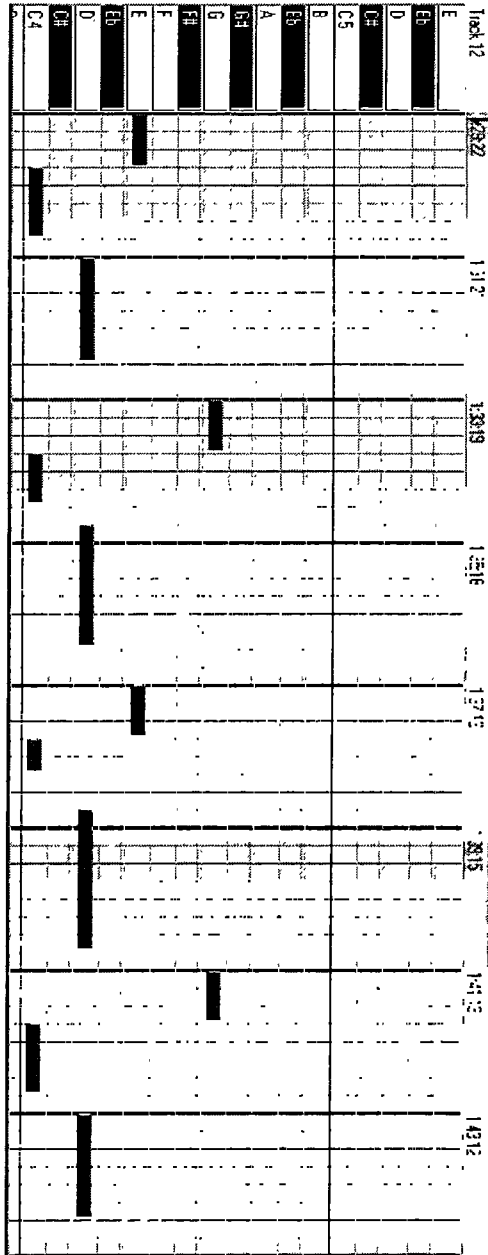
139. See Harrisongs, *supra* note 69.

140. See Livin’ on a Prayer in Wikipedia: http://en.wikipedia.org/wiki/Livin%27_on_a_Prayer (last visited Feb. 22, 2015).

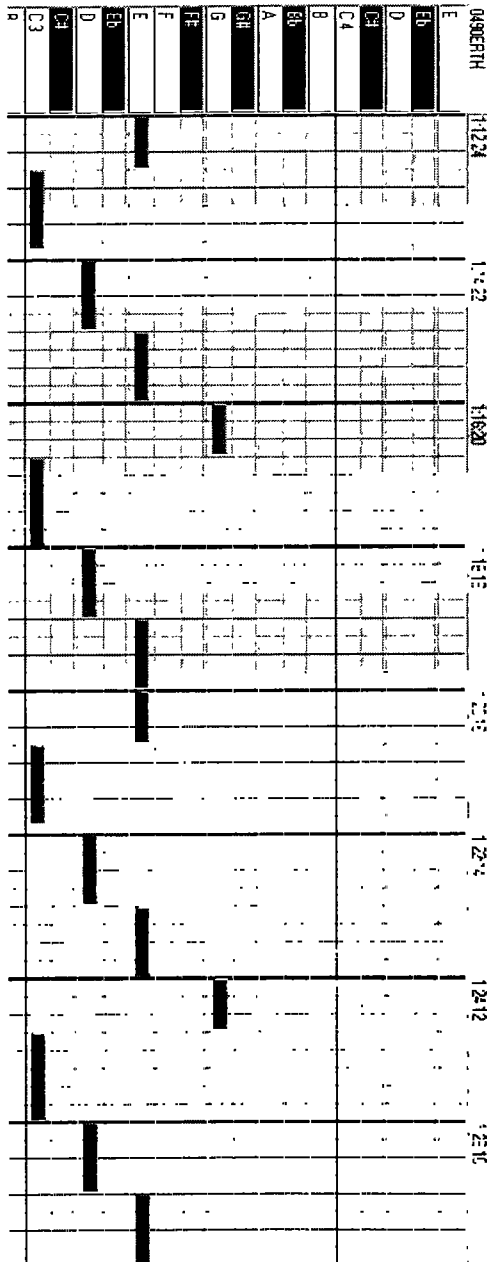
C. The Two Choruses: Further Analysis

First, for a clear comparison of the choruses' musical aspects, it is best to reduce the choruses to the same dominant key. A change to the same dominant key enables a comparison of the parts through a common frame of reference while maintaining the original interrelation between the chords in each song. Thus, this article transposes "Heaven" to the same key as "Prayer", namely from C# minor to three semitones up to E minor.

Livin' on a Prayer



Heaven is a Place on Earth



As seen above, the 8 bars of both choruses are displayed in a grid format, with the exclusion of the extra 1½ bar in the “*Heaven*” chorus which is a repetition of the last part of the chorus, making the intervals between the chords and their relative positions in the songs’ structure easy to identify. The vertical axis of the grid represents the scale of notes¹⁴¹ and the horizontal axis of the grid represents the time dimension, which is a timeframe of 8 bars of 4/4. This grid represents the most simplified, yet accurate, method to display the music and rhythm of “*Heaven*” and “*Prayer*.”

The grid display reinforces what is evident by ear. The chord progression in both songs’ choruses is almost identical. Not only is the order of the chords identical, but the chords’ timing is also similar.¹⁴² The same 4 bars structure of the chorus is played twice in a row in both songs to constitute an 8 bars chorus. The only difference in the chord progression is that while in “*Prayer*” every two bars cycle ends with a full bar of C major, “*Heaven’s*” second bar starts with C major but half way through turns back to E minor, which is “*Heaven’s*” first chord.

Further, “*Heaven’s*” melody itself is initially only quite similar to the one in “*Prayer*,” however, given the harmonic and rhythmic context, the melodies become highly similar. The vocals in both choruses start at the same timing with the same note; both are not beginning with an actual word, but with a sung vowel followed by the lyrics:

Heaven is a Place on Earth: “*Ooh, baby, do you know what that’s worth?*”

Livin’ on a Prayer: “*Whooh, we’re half way there*”

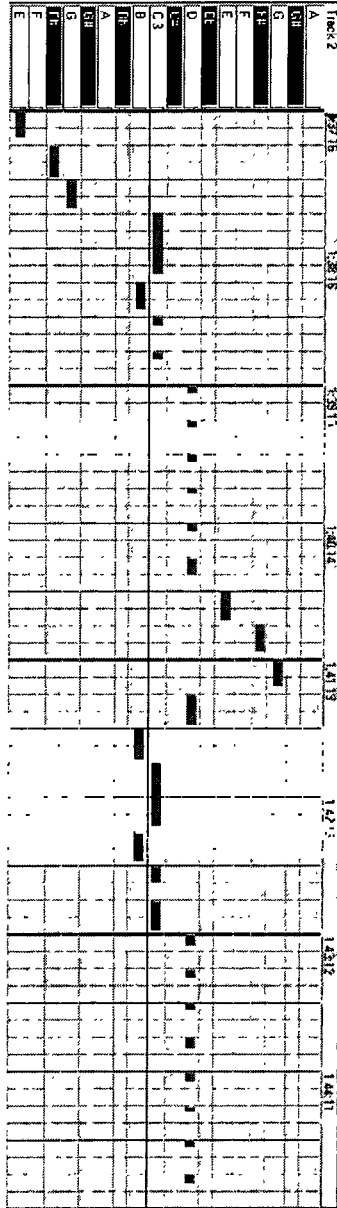
141. The scale of notes is positioned as a vertically rotated piano keyboard, where each chord is represented by its dominant key.

142. E minor sets off at the beginning of the first bar, followed by C major in the off-beat between the 2nd and 3rd beats of the bar and D major at the top of the second bar. The next two bars make the similarity between the songs even less likely to be coincidental, as the same progression from the first two bars is repeated in both songs with the same alteration of the first chord from E minor to G major. In addition to the high degree of similarity between the choruses in the qualitative aspect, the described 4 bars chord progression is the most repetitive part in both songs, thus extending also the quantitative aspect of similarity between the songs.

Moreover, in the second two bars cycle the first two notes in the vocals' melody are the same in both songs. The third and fourth bars of the choruses are, in fact, the points of climax in both songs and are probably the most memorable parts in the respective songs. Both songs start with G major, giving the chorus a sudden turnover from its "pessimistic" dominant minor key to an "optimistic" major key, which is translated into a somewhat musically cathartic moment for the listener. In both songs, this is the very point where the main phrase, the song's name, is sung.

Another characteristic causing both choruses to be even more similar is the Bass-line. While the Bass guitar is considered to be the most "modest" instrument in rock music, and consequently making it hard to notice as a distinct instrument for most average listeners, it sometimes bursts out of the background for short moments of "glory". One of its common manifestations is short fills leading from one part in a song to the next. Not only both songs' choruses are ornamented with such bass guitar fills, but as demonstrated below, both fills share multiple attributes in common.

Livin' on a Prayer



Heaven is a Place on Earth



As seen in the grids above, the first 4 bars of each song's chorus were stretched for an expanded view of the bass-line in each song. Both choruses start with a similar move of a 4 note "walking" scale, which is highlighted in red, connecting the first chord with the second. The most remarkable similarity between the bass-lines is the 5 note fill, also highlighted, connecting the second bar to the third bar. This is not only a unique musical move, but also appears in the same location in both choruses, leading both songs to their most recognizable parts.¹⁴³

The key modulation in the last chorus of each song is also a common element to both songs' choruses. This shift in key, which transposes the entire set of chords to a different dominant key, is actually a familiar "trick" in pop music intended to create an exciting climax towards the end of a song.

VII. SUMMARY

There is a considerable degree of similarity between "*Prayer*" and "*Heaven*". The important inquiry is whether the similarity between the songs is substantial. The similarities between the two songs will be examined through the variety of doctrines previously described in this article.

A. *Extrinsic and Intrinsic Tests*

Extrinsic and Intrinsic Tests, as mentioned before, is reminiscent of the *Arnstein* test. The Extrinsic Test answers the first question of copying, while the Intrinsic Test answers the question of misappropriation.¹⁴⁴ The Extrinsic Test focuses on ideas, such as type of

143. Both choruses are built in a *Question and Answer* structure, in which the first part is the Question (a sung phrase implying to the song theme) and the second is the Answer (the song theme itself – commonly, a phrase including the song's name in it). The bass-line in both songs connects the first part to the second. In "Prayer", the bass-line 5 note fill appears right before the main theme of the song, where it is sung "*Whoah, livin' on a prayer.*" Similarly, in "Heaven", the same bass-line riff appears right before the song's main theme "*Ooh heaven is a place on earth.*"

144. Sarah Brashears-Macatee, *Total Concept and Feel or Dissection?: Approaches to the Misappropriation Test of Substantial Similarity*, 68 CHI.-KENT

work and the materials utilized to create the work and is reliant on the dissection done by expert witnesses. As seen above, many of the listed similarities in both “*Prayer*” and “*Heaven*” meet this requirement. Both songs’ structure, tempo, rhythmic measure, beat style and genre are ideas that repeat in both songs. Even most of the materials used to create the songs are the same; namely, rock sounding drums, electric bass guitar, synthesizers and an electric guitar that sets in with a distortion effect at the chorus to pump it up with a power boost. Moreover, the overall sound and production style are similar and includes the typical “big” 1980’s rock sound, compressed and spiced with a long and wet reverb effect. The second stage of the comparison, the Intrinsic Test, is done through a comparison of the songs’ expressions performed by the trier of facts.¹⁴⁵ The test is based on the Total Concept and Feel Test, which as explained below, is using more abstract standards than the Extrinsic Test.¹⁴⁶

B. *The Total Concept and Feel Test*

The Total Concept and Feel Test determines whether the total feel of the two works, in their ordinary and reasonable perception, is substantially similar through the listening skills of an average listener.¹⁴⁷ For this purpose, this article asked five listeners to act as a random jury representing a wide spectrum of musical compre-

L. REV. 913, 917 (1993). The Extrinsic Test examines the extent of similarity between the ideas used in both songs. Once substantial similarity is found between the ideas, it means that the occurrence of copying was established. However, copying in itself is not unlawful but it is only a first stage to be established before proving unlawful appropriation using the Intrinsic Test. The Intrinsic Test examines the extent of similarity between the expressions in both songs. Once substantial similarity between expressions is established through the Intrinsic Test, the court will rule in favor of the plaintiff, asserting that copyright infringement was performed.

145. *Id.*

146. As its name implies, the Total Concept and Feel Test is not grounded on measurable attributes like the Extrinsic Test, but rather on a general impression of the average listener regarding the degree of similarity between both songs.

147. Sergiu Gherman, *Harmony and its Functionality: A Gloss on the Substantial Similarity Test in Music Copyrights*, 19 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 483, 485 (2009).

hension. Four individuals of the ‘jury’ are considered average listeners while the fifth is a musician. The songs were played one after the other, and the jury was asked for their general impression of the similarity between the two songs. After, the jury was presented with the dissection of the two songs’ results and played the songs’ choruses one after the other to determine their own conclusions. The results generally met the expectations, but surprisingly, in the case of the musician juror, they were rather counterintuitive:

First listening, *before* the dissection’s introduction: the four average listeners found substantial similarity, while the musician noticed only basic similarity.

Second listening, *after* the dissection’s introduction: the four average listeners found substantial similarity, while the musician was skeptical to find the songs’ similarities as a result of plagiarism.

All the average listeners reached the conclusion this article sets forth, although it was expected at least some of the average listeners would be distracted by the differences between the songs, a situation that could be regarded as “Camouflaged Plagiarism.” Contrary to this article’s expectation, the musician failed to find similarity substantial enough to conclude plagiarism.

If the **Pattern Test** considered the choruses of “*Prayer*” and “*Heaven*” as the relevant patterns in question, it becomes clear there is an almost identical sequence of events common to both songs, only slightly disrupted at several points, relatively negligent events.¹⁴⁸ On one hand, an in-depth technical inspection of the choruses’ patterns might consider these disruptions sufficient to split the chain of events in a manner that excludes substantial similarity between the patterns. Alternatively, a more general and context driven overview of the two patterns might overlook these disruptions and consider the two patterns as substantially similar, i.e. affirming the claim of copyright infringement. Interestingly, in

148. As shown earlier in the visual comparison of the songs’ choruses, the structures of both choruses are significantly similar to each other. If the Pattern Test was to be implemented in this case, the sequence of events described in the test would be paralleled to the sequences of chords (harmony) and notes (melody) in the songs. It is clearly noticeable that the both sequences of melody and harmony in both songs’ choruses are largely identical, excluding only certain chords or notes in each of the sequences.

“*Heaven*”, the chord E minor repeating in the second half of every second bar in the chorus, is arguably a pattern splitter that can raise doubts as for the conclusions of this test.

The **Abstraction Test** was developed to compare plots of plays and films¹⁴⁹ and it remains unclear how to best apply the Abstraction Test to music. A compelling approach is to “scrape off” layers of instruments from an arrangement and gradually omit notes from the melody according to their musical hierarchy until only an abstract and simple musical structure remains.¹⁵⁰ By applying this process of abstraction to “*Heaven*” and “*Prayer’s*” choruses, upon reaching a certain level of abstraction the respective choruses unify into substantially similar musical contents. Considering that above a certain level of abstractions the idea becomes an expression, the decisive factor for the finding of infringement is whether substantial similarity is found beyond that threshold,¹⁵¹ i.e. there is substantial similarity between the expressions in both songs. The results of this dissection indicate that the lowest level of abstraction¹⁵² in which the two choruses will be found substantially similar, will be beyond the threshold of expression, increasing the chances it will be considered improper appropriation. However, it will be hard to predict the court’s conclusion decisively based on this test, notwithstanding the concrete evidence of substantial similarity, concluding that the Abstraction Test is not a reliable framework to use in musical plagiarism disputes.

The **Filtration Test’s** application is far more controversial due to the equivocations relating to the distinction between ideas and expressions in music. As introduced previously in the article, the Filtration test is intended to filter out the ideas in order to focus the comparison distinctively on the expressive elements in the works.¹⁵³ In the implementation on musical works, the filtration begins with elements that are considered ideas, such as structure,

149. Nichols, *supra* note 57, at 121.

150. Aaron Keyt, *An Improved Framework for Music Plagiarism Litigation*, 76 CALIF. L. REV. 421, 436 (1988).

151. Bergman, *supra* note 56, at 250.

152. The level of abstractions which is as close as possible to the fully detailed description of the song.

153. Bergman, *supra* note 56, at 250.

tempo and time signature. Predictable chord progressions, drum beats and other musical motifs *are also* easily filtered out of the choruses. The controversy revolves around the type and length of chord progressions or melodies that should be considered expressions to base the comparison upon, or regarded as ideas and filtered out. This article asserts the chord progression and melody in the choruses of the two songs are expressive elements,¹⁵⁴ allowing them to pass to the next stage of comparison, which examines the two songs' substantial similarity and ultimately allows for a finding of plagiarism. However, since there is no unanimity regarding what kind of harmony or melody constitutes an expression, the filtering process is expected to be inconsistent and judge-dependent, resulting in under or over-filtering of crucial expressive elements. Therefore, the Filtration Test appears to be an unstable method for resolving musical plagiarism disputes.

Substantial Part – Based on the findings of the dissection elaborated at the beginning of this chapter, and considering the results of the Extrinsic and Intrinsic Tests, it is clear that there is substantial similarity between parts of “*Heaven*” and “*Prayer*”. However, the conclusion whether unlawful appropriation have taken place depends on whether the appropriated part in “*Heaven*” constitutes a substantial part of “*Prayer*”. Admittedly, although similarity to some extent exists in other parts of the songs, only the choruses were found to be substantially similar under the analysis in this article. Therefore, the choruses will be the only parts in question for the purpose of checking substantial part. As a rule, the chorus is the most prominent part of most popular songs. In each of the two songs the chorus is the most recognizable and memorable part, containing the “hook” of the song.¹⁵⁵ Here, similarity exists

154. One method suggested by this article to determine whether a given sequence of notes or chords is an idea or expression would be to base the distinction in empirical findings: a neutral/“characterless” version of a tune will be played to various average listeners (possibly the jury, before being exposed to the songs in dispute), and if a significant percentage of them will relate the tune to the same specific song, it would be considered an expression rather than an idea. However, this method is applicable only on well-known songs.

155. Masataka Goto, *A Chorus Section Detection Method for Musical Audio Signals and Its Application to a Music Listening Station*, 14 IEEE TRANSACTIONS ON AUDIO, SPEECH, AND LANGUAGE PROCESSING 5, 1783

throughout the songs' choruses, not only in specific parts; consequently, the parts of the songs concerned in this article's discussion are indeed substantial.

Decision – The current chapter was opened with a dissection of “Heaven” and “Prayer”, zooming in into their choruses. The dissection, combined with the expert's analysis of the ideas utilized in the songs, concluded the Extrinsic Test with affirmation of the suspected substantial similarity between the ideas in the songs. The Intrinsic Test, performed by the jury representing the lay listeners, affirmed the opinion suggested in the dissection, namely, that substantial similarity exists between the expressions in the songs. Given these results, in addition to the abovementioned substantial part examination, the conclusion of the case study is that “*Heaven*” is substantially similar to an integral part of “*Prayer*”. Therefore, the composers of “*Heaven*,”¹⁵⁶ if enjoined in an infringement action, likely infringed the copyright of “*Prayer*”¹⁵⁷ and are liable for any damages that may follow in relation to that infringement.¹⁵⁸

VII. FINAL CONCLUSIONS

A. Concluding the Findings

Such as in any other legal domain, the same applies to the domain of IP law: judicial decisions seek to bring justice by continuously aspiring to align with the absolute truth. Nevertheless, the difference between IP law and other domains in this aspect is that while absolute truth is investigated and hopefully revealed during

(2006). The chorus in popular songs is usually the ingredient which attracts the listener, makes her remember it, hum it to herself and want to listen to it again. In most cases, it is undeniably the most important part of the song.

156. “Heaven is a Place on Earth” was composed by Rick Nowels and Ellen Shipley.

157. “Livin’ on a Prayer” was composed by Jon Bon Jovi, Richie Sambora and Desmond Child.

158. The liability in case of infringement might have been assigned with the copyrights for the song to its publisher; therefore, the composers of the infringing work are not the ones necessarily liable to pay the damages to the plaintiff.

the trial in other domains,¹⁵⁹ in IP law an absolute truth does not necessarily exist, and therefore cannot be revealed but rather agreed upon.¹⁶⁰ This is especially true when determining infringement in plagiarism cases, and all the more forcefully in cases dealing with musical works.

A difficulty may arise when a judicial decision contradicts conceptions of common sense; consequently making the judgment appear unjust. This difficulty raises other questions: Is there an objective truth the courts aspire to reach when ruling in musical plagiarism cases? Or, perhaps, is musical plagiarism solely in the ear of the beholder? Assuming that copyright protection tries to prevent the unauthorized use of someone else's effort and to gain profit from this use, and assuming this profit depends on the willingness of the public consumers to pay for this effort, it is logical to let the public decide whether infringement is or is not present. The United State copyright system relies on this approach and leaves the decision of infringement to the public, as the jury gets the final call.

Alternatively, considering the decisive weight given to the jury of average listeners in musical plagiarism cases, musical experts might be concerned about the average listeners' ability to identify and comprehend the extent of influence some seemingly negligent elements in a song have on their minds. This situation was introduced previously in the article as "Camouflaged Plagiarism." Such a situation occurs when a substantial part of the original work is incorporated into another work, but in a certain variation: the appropriated parts are considerably altered to a degree that makes it hard to be detected by the average observer, while still leaving impact on him subconsciously. Legal systems that are more concerned of such situations might prefer to take an approach which

159. Considering criminal or tort law as typical legal domains for the purpose of this comparison: for example, whether a particular defendant is guilty of a crime of murder is a matter of absolute truth. Nevertheless, there are exceptions to this rule.

160. For example: copyright or patent alleged infringement performed not by unauthorized reproduction, but by using an idea similar and not identical to the protected idea. Such a judicial procedure will not involve revealing absolute truth, but only formulating standards that will lead to reasonably expected results.

emphasizes expert testimony instead of the lay listeners' opinion. In the Israeli system, ACUM's¹⁶¹ arbitration mechanism is inclined to apply such an approach, because the arbitrator decides infringement cases relying solely on experts' testimonies. A viable claim may be that the safest evaluation of infringement claims is to rely on experts; however, the jury's results in considering the similarities between "*Prayer*" and "*Heaven*" indicates that even two individuals with a profound grasp of music can have different opinions,¹⁶² each supported by its own reasoning. While both approaches, the one favoring the expert perspective and the second favoring the lay listener's view, have each its own share of advantages and drawbacks, perhaps the United Kingdom's "by the ear as well as by the eye" doctrine serves as a reasonable compromise between the two, as it advocates for a balanced combination of the expert and lay listener's perspectives upon reaching decision in a musical plagiarism dispute.¹⁶³

In regard to the tests themselves, this article presumes that in its simulated case there is only one possible correct decision and it is the one this article reached; namely, "*Heaven*" indeed unlawfully copied "*Prayer*." Since the Extrinsic and Intrinsic tests lead to this conclusion, it appears that they function properly. They do so by relying mainly on the average listeners' discretion while minimizing the risk of their misjudgment through the distribution of this risk between the members of the jury, but also by providing the jury a glimpse of the expert's perspective on the issue, thus assisting them to crystallize a rational decision. As mentioned above, the Extrinsic and Intrinsic tests might fail in cases of Camouflaged Plagiarism or in cases of significant expert disagreements. When considering alternative tests, the Pattern Test's result seems to be largely subject to the amount of flexibility demonstrated in its application: the more firm and technical the inspection of the patterns

161. As introduced previously in the chapter of Comparative View, ACUM is Israel's only composers, authors and publishers association, managing copyrights and royalties. Members of ACUM are required to resolve disputes between them, including cases of plagiarism, in an internal arbitration procedure.

162. In this case myself and the musician member of the jury.

163. Cason & Müllensiefen, *supra* note 87, at 27. The "by the eye" refers to a note-for-note comparison performed by an expert witness, while the "by the ear" refers to a listening session performed by the judge (as a lay listener).

is, it's less likely to reach the desired conclusion. Similarly, the Abstraction and Filtration Tests do not seem to provide definitive conclusions as well in regards to the question of substantial similarity in musical plagiarism cases, as demonstrated in their application on the comparison of "Heaven" and "Prayer".

The unpredictable and inconsistent nature of copyright law's familiar tests when applied to music led several scholars from the fields of musicology and law to attempt to formulate new methods through which they could compare musical works. Out of their attempts a different kind of test, yet to be applied in courts, have been created. As covered extensively in Cason and Müllensiefen's article,¹⁶⁴ the computational/mechanical tests that have been developed employ several technologies and concepts from computer sciences that are used to compare musical works based on mathematical algorithms. Cason and Mullensiefen's suggested system is based on the idea of perceptual weighting.¹⁶⁵ Although the system's empirical results have presented a considerably high correlation with the results of actual plagiarism cases, it still suffers a significant shortcoming: the system only processes monophonic musical structures and therefore it is only capable of comparing melodies but not any other feature of a song.¹⁶⁶

B. A Proposal for a New Comparison System

If this article were to suggest a new test, it would promote further development of the perceptual weighting concept to a Full Statistical Test, utilizing a similar database and method as described above. Each song will be divided to its consisting layers: melody, harmony, rhythm and other prominent elements performed by each of the accompanying instruments, i.e.: horizontal

164. *Id.*, at 33.

165. *Id.* at 34. After assembling a large database of pop songs, the melodies in each song are extracted, analyzed and compared to all the other melodies in the database and weighted in accordance with their relative occurrence in it. The more common a melody is, it will receive a lower weight, less likely to be considered as a possible copyright infringement. The more unique a melody is and shared among a smaller number of songs, it will receive a higher weight, indicating a higher probability of infringement in case it is used in a different song.

166. *Id.* at 36.

splitting, and its structure will be broken to its consisting parts: verse, bridge, and chorus, i.e.: vertical splitting. This will result in a grid of columns, or parts, and rows, or layers that constitute the song.

First, each cell in this grid¹⁶⁷ is analyzed separately in comparison with the corresponding cells of all the other songs. With this analysis, based on the similarities and differences between all the parallel cells, the structure of each cell is summarized with a statistical value that represents the probability of composing an identical part. Thus when comparing two disputed songs in a trial, the comparison is cell by cell. The similarities between each couple of parallel cells will also be summarized with a numerical value, which will be confronted with the general statistical values of the complaining song's cell.

For example, a cell representing the harmony of a song's verse, constructed by a typical four chord progression, will show a high statistical value indicating the probability of a recurrence of the same progression in other songs. At trial, assuming the parallel cell in the defending song is using a very similar or identical set of chords, this similarity will be translated to another high value, or the "similarity count." The general statistical value of the complaining song is then placed in an equation with the two songs' similarity count. A combination of low general statistical value and high similarity count indicates a high probability of copying and vice versa. The same procedure is performed in each cell in a song, with a focus on the parts and layers with higher degrees of similarity. Obviously, if one cell from the defending song (for example: the melody of the chorus) has low statistical value and high similarity count in relation to the parallel cell in the plaintiff's song, the probability of copying increases. If in addition, a second cell from the defending song (for example: the harmony of the chorus) is also found to have low statistical value and high similarity count in relation to its parallel cell in the plaintiff's song, then the probability of copying increases further, turning the likelihood of coincidental similarity extremely improbable. In such a case, since the highly similar melody of chorus coincides with the high-

167. An example for a particular cell in the song's grid: part (vertical) – verse, layer (horizontal) – harmony.

ly similar harmony of the chorus, the probability of misappropriation of the chorus part is multiplied.

This procedure makes any expert testimony to appear much more decisive and convincing, as it supports the dissection and elaborated findings with unequivocal figures representing the probability of misappropriation. However, the final decision still must originate through the untrained ears of lay listeners. For this purpose, this article proposes several tests that challenge listeners' subconscious and neutralize distractions, prejudices, and cognitive biases. In order to fulfill this purpose, these tests must be conducted before the jury is introduced to the expert testimony and before the disclosure of the works concerned in the given case. One option is to assemble a lineup of random similar songs including the two disputed songs and play them to the members of the jury to determine if any exceptional similarity is detected prior to any external intervention. Another option is to create different variations of each song with different balances between instruments; this will enable the listeners to pay more attention to important elements that are blended in the original mix. An even more radical option is to create manipulated versions of the songs, replacing key features with different ones, in an attempt to examine the amount of influence these features have on lay listeners' opinions. Following these tests, listeners would be introduced to expert testimony and the results of the statistical test, with which they will be able to compare their initial reaction to the songs. Based on their own impressions, expert opinions, and statistical evidence, the listeners will reach a concrete and reasonable decision of whether unlawful appropriation of the plaintiff's song has taken place or not.

Nevertheless, like all the other tests discussed in this article in relation to plagiarism detection, this proposed test will also never be able to reach scientifically accurate results, since the very essence of music and arts, in general, contradicts this notion. This indeterminacy of music is what makes copyright infringement such a complex matter to deal with legally, yet such an exciting and colorful experience on the culturally.