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Nonconventional Musical Analysis and Disguised Infringement: Clever Musical Tricks to Divide the Wealth of Tin Pan Alley

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"NONCONVENTIONAL" MUSICAL ANALYSIS AND "DISGUISED" INFRINGEMENT: CLEVER MUSICAL TRICKS TO DIVIDE THE WEALTH OF TIN PAN ALLEY

MARK AVSEC[1]

> "And I should myself hesitate to utter so clear an invitation to exploitation of slight musical analogies by clever musical tricks in the hope of getting juries hereafter in this circuit to divide the wealth of Tin Pan Alley. This holding seems to me an invitation to the strike suit par excellence." -- Judge Clark, dissenting in *Arnstein v. Porter*.

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I. Introduction

While it is certainly false that only professional composers are capable of writing quality music, the likelihood for frivolous claims in musical plagiarism cases is much higher when nonprofessionals are plaintiffs.

> [W]hat we're talking about is dreams. They've always dreamed they would make it big . . . and it's just hard for them to believe that 30 or 50 or 100 other people had the same idea. And once they've filed their lawsuit, they are true believers. They've told their friends and relatives that this [work] was stolen from their material, and it is very difficult for them to accept defeat.[2]

A reasonable theory of access, a copyrighted song, and a contingency-fee lawyer is all a plaintiff has practically needed to get into court. The issue of whether or not disputed songs are musically similar, that other all-important prong necessary to establish copying *in fact*, has rarely been decided by judges *before* a defendant's expenses of litigation have begun to mount because judges, not musically proficient themselves, are typically faced with conflicting affidavits submitted by paid music experts. If one is willing to pay someone to testify, one is going to be able to find someone someplace who has a few credentials to his or her name and is willing to testify to anything for the right price. The result is that, contrary to what Judge Frank promised us in *Arnstein v. Porter*,[3] the device of summary judgment may not serve the purpose for which it was designed in the musical copyright infringement lawsuit, i.e., the disposition of needless litigation.[4] If songs at issue are not factually similar, cases ought to be dismissed as a matter of law. Judge Frank's ruling in *Arnstein* depended on the belief that judges throw out cases in which the absence of similarities is obvious.[5] The subject of this article concerns what happens when plaintiffs' contingency-fee lawyers and the musicologists they hire attempt to "manufacture" similarities, though, by "clever musical tricks" in order to create factual disputes *even in patent cases*[6] in an effort to fool judges and defeat meritorious motions for summary judgment.

In the early 1940s, Ira Arnstein was an amateur songwriter and career litigant who filed a complaint alleging that noted tunesmith, Cole Porter, had stolen several of his compositions.[7] Although Mr. Arnstein's theories of how Cole Porter might

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[2]Maureen Baker, Note, *La[w]-- A Note To Follow So: Have We Forgotten the Federal Rules of Evidence in Music Plagiarism Cases?*, 65 S. CAL. L. REV. 1583, n.6 (1992) (citation omitted) (quoting Louis Petrich).

[3]154 F.2d 464 (2d Cir. 1946).

[4]Summary judgment is a procedural device available for prompt and expeditious disposition of controversy without trial when there is no dispute as to either material fact or inferences to be drawn from undisputed facts, or if only question of law is involved. BLACK'S LAW DICTIONARY 1001 (Abridged 6th ed. 1991).

[5]*See infra* text accompanying notes 6 - 11.

[6]These are the cases upon which Judge Frank's decision depends where summary judgment will be granted without question. *See infra* text accompanying notes 10 - 11.

[7]*See infra* note 33.

have had access to his works were fanciful and farfetched, Judge Frank prudently acknowledged that "sometimes truth is stranger than fiction" and would not grant Cole Porter summary judgment solely on the basis that Arnstein's theories of access were tenuous.[8] The court felt obliged to give Mr. Arnstein the benefit of the doubt and inquire whether there was further evidence of copying, i.e., were there sufficient musical similarities between the disputed songs so as to warrant a trial? Judge Frank opined that there were and dismissed Porter's motion for summary judgment.[9]

Did Judge Frank's opinion in *Arnstein v. Porter* give carte blanche to potential musical terrorists? After all, many plaintiffs armed with tenuous theories of access and hungry professors of music may only yearn to accomplish what Ira Arnstein did, i.e., defeat motions for summary judgment. It is axiomatic that if it will cost an innocent defendant $100 to litigate, the rational person may be tempted to settle for $99. Judge Clark, dissenting, was afraid that the opinion, then, would open up floodgates of vexatious litigation.[10] Judge Frank, however, did not believe it. *Arnstein v. Porter* would not unfairly invite amateur songwriters and their contingency-fee lawyers to extort huge settlements from reputable composers, publishing companies, and record labels via strike suits because, as he pointed out in a now famous dictum, there existed the "patent" case.[11] There would be no deluge of spurious litigation in the area of musical copyright infringement so long as there was a "dike" to protect innocent defendants from the deluge. This dike, built of solid, objective analytical techniques and old-fashioned common sense, works to summarily dispose of the most frivolous suits because in the most obvious cases the absence of musical similarities between two pieces of music are so patent that even judges recognize them.

> We should not be taken as saying that a plagiarism case can never arise in which absence of similarities is so patent that a summary judgment for defendant would be correct. Thus suppose that Ravel's "Bolero" or Shostakovitch's "Fifth Symphony" were alleged to infringe "When Irish Eyes Are Smiling." But this is not such a case.[12]

In recent years there has emerged, however, a breach in the "dike," a disease which has fatally undermined Judge Frank's prudent qualification in *Arnstein*. This disease is called "disguised" infringement, the specious result of a highly doubtful belief, i.e., that actionable infringement is being committed by composers who are actually abusing traditional methods of composition.

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[8]*Arnstein*, 154 F.2d at 469. *See also infra* note 34.

[9]*Arnstein*, 154 F.2d at 475. *See also infra* note 24.

> [10]And I should myself hesitate to utter so clear an invitation to exploitation of slight musical analogies by clever musical tricks in the hope of getting juries hereafter in this circuit to divide the wealth of Tin Pan Alley. This holding seems to me an invitation to the strike suit par excellence.

Arnstein, 154 F.2d at 479. (Clark, J., dissenting).

[11]*Id.* at 473.

[12]*Id.*

> Because of the current frenzy of music copyright litigation, purposeful infringers have become very sophisticated in devising compositional methods to disguise copying. For example, composers of commercial music often receive assignments to emulate a particular popular song, but to avoid risking a lawsuit. There are various techniques used to fulfill such an assignment.[13]

"Disguised" infringement is invisible and cannot be diagnosed by conventional expert analysis; it requires instead, according to its proponents, special, "nonconventional" methods in order to detect it.

With the music industry struggling to find outlets to expose new material in the post-Napster era, established record labels, producers, writers, and artists have recently begun to directly get involved in the advertising business by actually creating original musical compositions for advertisements. This has prompted such partnerships as independent label Artemis Records' joint venture with commercial production facility JSM Music and the formation of Soundproof, a new company created by veteran artist manager Irving Azoff, music manager Jordan Bratman, and marketing executive Noah Kerner, to offer original music for commercials created by top record producers.[14] However, as art begins to more directly intersect with Madison Avenue, there will also likely be a significant increase in "disguised" infringement claims. This is because composers, artists, and producers will inevitably receive instructions from their advertising agency clients, or from the brands themselves, to "safely" emulate a particular sound or popular song. Given the chance, "nonconventional" musicologists would likely point to various "disguised" infringement techniques used to fulfill such an assignment.[15]

This article argues that "disguised" infringement is oxymoronic and demagogic, and that the "nonconventional" musical analytical techniques employed to diagnose it are misguided. If an expert cannot tell that two pieces of music are similar by traditional methods, that is probably because they are not similar. The theory of "disguised" infringement effectually destroys the distinction between plagiarism and composition because the "nontraditional" techniques when employed to detect plagiarism potentially implicate *every* composition as an infringing work. Consequently, "disguised" infringement is a breach in *Arnstein*'s "dike," for as I will show in Part IV of this article, even Judge Frank's famous patent case is allowed to slip through, i.e., Ravel's "Bolero" will be seen to have infringed "When Irish Eyes Are Smiling" when analyzed under the lens of "disguised" infringement.[16] A summons and complaint take only one person convincing one lawyer to go forward. The paucity of musical copyright infringement cases disposed of by summary judgment already encourages litigation in the area. Employing specious analytical methods will only exacerbate this problem.

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[13]Judith Greenberg Finell, *A Musicologist Discusses Disguised Infringement*, N.Y. LAW JOURNAL, 5 (May 29, 1992), *available at* http://www.jfmusicservices.com/nyljarticle92part3.html.

[14]*See* Melinda Newman, *Azoff's Brand-New Sound*, BILLBOARD, May 29, 2004, at 9.

[15]Finell, *supra* note 13, at 5.

[16]*See* discussion *infra* part IV.C.

Part II of this article chronicles the role of the musical expert as it has been carved out over time. Part III exposes the expert's traditional methods for comparing musical compositions. Part IV explores nonconventional analytical techniques, explains why they are misapplied when employed to detect "disguised" plagiarism and illustrates why Judge Frank would certainly retract his opinion if he heard of such sophistry. Part V therefore concludes that lending authenticity to "nonconventional" analytical methods and "disguised" infringement claims would make professional songwriters more vulnerable than they already are.[17]

II. Carving Out the Role of the Musical Expert in Copyright Infringement Suits

A. Elements of a Copyright Infringement Suit

There are three basic elements that a plaintiff is required to establish in a musical copyright infringement suit.[18] First of all, the plaintiff must establish a valid copyright.[19] Secondly, there must have actually been copying.[20] Thirdly, there must have been impermissible or unlawful copying, i.e., there must be a substantial degree of similarity between the disputed compositions.[21]

The last two criteria, copying and impermissible copying, have been the source of some confusion. If the defendant did not copy, all of the similarity in the world, even to the point of identity, would not matter.[22] Plaintiff, therefore, must first prove

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> [17][T]hese suits are very common. Typically, an unknown plaintiff sues a successful artist for a large sum. Increasingly, the stakes are in the millions of dollars. Music's intangible nature, coupled with the potential for a high judgment or settlement value has served to make songwriters especially vulnerable to accusations of stealing another's work. And, "more often than not, somebody is ready to believe the accuser – or afraid somebody else will."

Baker, *supra* note 2, at 1584 (footnotes omitted).

[18]*See* WILLIAM F. PATRY, LATMAN'S THE COPYRIGHT LAW 191 (6th ed. 1986) [hereinafter LATMAN]; Lone Wolfe McQuade Assocs. v. CBS, Inc., 961 F. Supp. 587, 592 (S.D.N.Y. 1997) (citing Fisher-Price, Inc. v. Well-Made Toy Mfg. Corp., 25 F.3d 119, 122-23 (2d Cir. 1994)).

[19]*See* 17 U.S.C. § 410(c) (2001) (if a certification of registration is made before or within five years of first publication of the work, the copyright is valid).

[20]*See* Arnstein v. Edward B. Marks Music Corp., 82 F.2d 275 (2d Cir. 1936), *motion to set aside decree denied*, 86 F.2d 715 (2d Cir. 1936) (proof of copying is essential to a claim of copyright infringement; no matter how similar the disputed works are, if defendant did not copy plaintiff's work, there is no infringement).

[21]*See* Laureyssens v. Idea Group, Inc., 964 F.2d 131, 139-40 (2d Cir. 1992) ("[A] plaintiff must first show that his work was actually copied . . . . The plaintiff then must show that the copying amounts to an 'improper' or 'unlawful' appropriation."); *see also* Jeffrey G. Sherman, Note, *Musical Copyright Infringement: The Requirement of Substantial Similarity*, 22 COPYRIGHT L. SYMP. (ASCAP) 81-82, 92 (1977).

[22]Thus, two programmers who independently create the same software are both entitled to copyright. RAYMOND T. NIMMER, THE LAW OF COMPUTER TECHNOLOGY ¶ 1.06, at 1-42 (1985) ("Copyright protection does not preclude independent creation of even identical works."). *But see* Bright Tunes Music Corp. v. Harrisongs Music, Ltd., 420 F. Supp. 177, 180-81 (S.D.N.Y. 1976) (holding that one can even be guilty of copying subconsciously; in this case, it was

there was copying. Because as a practical matter it is usually not possible to prove directly that defendant(s) copied plaintiff's work, circumstantial evidence is permitted to establish it.[23] In the musical copyright infringement suit, typically the plaintiff first establishes that the alleged infringer had access to his or her song, and second, that both songs are substantially similar.[24] Yet, even if the trier of fact decides that there was copying, the pieces must *again* be judged "substantially similar" before liability will ensue. Herein lies the confusion. Copying by itself is not copyright infringement. In order to have an infringement, there must not only be copying, but also "substantial similarity" between defendant's work and the original work at a level that the ordinary observer would recognize.[25] What this means, in the context of the musical copyright infringement suit, is that some part of the defendant's work has to be substantially similar to the plaintiff's work *to the ears of the ordinary lay listener*.

Substantial similarity is, absent actual evidence of real copying, therefore really required to prove copying; once, however, copying has been established, plaintiff must again show substantial similarity in order to prove there was an infringement. Obviously, "substantial similarity to show that the original work has been copied is not the same as substantial similarity to prove infringement . . . . While [a] rose is a rose is a rose is a rose,' substantial similarity is not always substantial similarity."[26]

B. Probative Similarity as Distinguished from Substantial Similarity

Arguably, juries do not understand the difference between a test for substantial similarity which proves copying only and a second test for substantial similarity which indicates that too much was taken. It is apparent that the term "substantial similarity" has been employed too loosely in copyright infringement jurisprudence. In the first part of the bifurcated test, it refers just to the act of copying itself, i.e., the factfinder is seeking proof that defendant copied *as a factual matter* from plaintiff's work based on the disputed songs' similarities.[27] The late Professor Alan Latman suggested calling similarity which is merely probative of copying probative

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determined that George Harrison subconsciously plagiarized the old hit song "He's So Fine" when he wrote "My Sweet Lord").

[23] *See, e.g.*, Derrick D. Moore v. Columbia Pictures Indus. Inc., 972 F.2d 939 (8th Cir. 1992) (copying can be established by a demonstration of access by the alleged infringer and substantial similarity between the disputed works); 3 MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT, § 13.01[B], at 13-11 (2004) (explaining that it is usually not possible to establish copying by direct evidence because it is rare that a plaintiff actually has a witness to the physical act of copying) [hereinafter NIMMER].

[24] "Of course, if there are no similarities, no amount of evidence of access will suffice to prove copying. If there is evidence of access and similarities exist, then the trier of the facts must determine whether the similarities are sufficient to prove copying." *Arnstein*, 154 F.2d at 468.

[25] *Id.*; *see also infra* note 38.

[26] Universal Athletic Sales Co. v. Salkeld, 511 F.2d 904, 907 (3d Cir. 1975), *cert. denied*, 423 U.S. 863 (1975).

[27] This is "copying as a factual matter." *See* NIMMER, *supra* note 23, at 13-13. In and of itself, factual copying will not create liability in a defendant; there still must have been legally actionable copying.

similarity,"[28] *not* "substantial similarity." That *would* alleviate the confusion. In the second step, after copying had already been demonstrated factually by establishing access and probative similarity, the issue of whether it was substantial enough to constitute *impermissible* copying becomes relevant.[29] The term "substantial similarity" is properly employed in this latter context, to signify plaintiff's final hurdle (s)he must overcome before (s)he recovers, i.e., that defendant's copying, which we now know occurred, was also *substantial* enough to amount to an unlawful appropriation.[30]

This second prong, the "substantial similarity" prong of the bifurcated copyright test, has been articulated in two ways by courts in the Second and Ninth Circuits, in the cases of *Arnstein v. Porter*[31] and *Sid & Marty Krofft Productions, Inc. v. McDonald's Corporation*.[32]

C. The Purview of Expert Analysis as Articulated by Arnstein

1. To Establish Probative Similarity (Factual Copying) Expert Testimony is Permitted.

In *Arnstein v. Porter*, Ira Arnstein accused Cole Porter of plagiarizing several of his compositions.[33] Arnstein's theories of access were tenuous, even fantastic; still,

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[28] "Substantial similarity," while said to be required for indirect proof of copying, is actually required only after copying has been established to show that *enough* copying has taken place. A similarity, which may or may not be substantial, is probative of copying if, by definition, it is one that under all the circumstances justifies an inference of copying. In order to emphasize the function of such similarity and avoid the confusion of double usage, this Article suggests use of the term "probative similarity" in place of "substantial similarity" in this context.

Alan Latman, *"Probative Similarily" As Proof of Copying: Toward Dispelling Some Myths in Copyright Infringement*, 90 COLUM. L. REV. 1187, 1189-90 (1990).

> Professor Latman wisely counsels that, in the previous formulation, the term "substantial similarity" be discarded in favor of "probative similarity." In other words, when the question is copying as a factual matter, then similarities that, in the normal course of events, would not be expected to arise independently in the two works are probative of defendant's having copied as a factual matter from plaintiff's work. Otherwise stated, such similarities negate defendant's claim of independent creation.

NIMMER, *supra* note 23, at 13-12, 13.

[29] "In any event, however, copying as a legal proposition must still be established; hence, substantial similarity remains an indispensable element of plaintiff's proof, even in cases . . . in which defendant does not contest factual copying." NIMMER, *supra* note 23, at 13-13.

[30] "In a suit like this, plaintiff, to make out his or her case, must establish two separate facts: (a) that the alleged infringer copied from plaintiff's work, and (b) that, if copying is proved, it was so 'material' or 'substantial' as to constitute unlawful appropriation." *See* Heim v. Universal Pictures Co., 154 F.2d 480, 487 (2d Cir. 1946).

[31] 154 F.2d 464 (2d Cir. 1946).

[32] 562 F.2d 1157 (9th Cir. 1977).

[33] Plaintiff alleged that defendant's

the judge would not grant Porter's motion for summary judgment and dismiss Arnstein's case solely on that basis.[34] (The modern trend insists that a plaintiff must establish a theory of access that is not merely possible, but also *reasonable*.[35])

Assuming there was a reasonable possibility of access, expert testimony would be permitted to aid the court in deciding whether or not there was any copying; specifically, expert testimony is permitted to help the factfinder decide whether or not two works are probatively similar.[36] At this juncture, visual exhibits are commonly prepared comparing the various musical elements (notes, chord changes, rhythmic values) of each song.[37] If *factual copying* is established (access plus

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> "Begin the Beguine" is a plagiarism . . . that defendant's "I Love You" is a plagiarism . . . [and] that defendant's . . . "Night and Day" is a plagiarism . . . . He further alleged that defendant's "You'd Be So Nice To Come Home To" is plagiarized . . . . He also alleged that defendant's "Don't Fence Me In" is a plagiarism.

Arnstein, 154 F.2d at 467.

[34]Although some of Arnstein's pieces that he had accused Porter of plagiarizing had been published, i.e., were theoretically available to Porter, some had never been published nor publicly performed at all. Arnstein concluded that Porter assigned "stooges" to live in his apartment to watch him; he said that Porter might even have had something to do with the burglaries which occurred in his apartment. *Id.*

> Summary judgment was, then, proper if indubitably defendant did not have access to plaintiff's compositions. Plainly that presents an issue of fact . . . . Although part of plaintiff's testimony on deposition (as to "stooges" and the like) does seem "fantastic," . . . yet plaintiff's credibility, even as to those improbabilities, should be left to the jury . . . . We should not overlook the shrewd proverbial admonition that sometimes truth is stranger than fiction.

Id. at 469 (footnote omitted).

[35]*See, e.g.*, Selle v. Gibb, 741 F.2d 896 (7th Cir. 1984) (holding that where plaintiff's contention was that the two disputed pieces were so strikingly similar, i.e., so much alike, that even if there was no possibility of access whatsoever, the factfinder could *infer* access). Here, the court granted defendant's motion for J.N.O.V., though, opining that:

> although it has frequently been written that striking similarity *alone* can establish access, the decided cases suggest that this circumstance would be most unusual. The plaintiff must always present sufficient evidence to support a reasonable possibility of access because the jury cannot draw an inference of access based upon speculation and conjecture alone.

Id. at 901. *See also* Jorgensen v. Epic/Sony Records, 351 F.3d 46, 49 (2d Cir. 2003) (holding that a record company's "bare corporate receipt" of a plaintiff's work is insufficient proof of access).

[36]"Where plaintiff relies on similarities to prove copying (as distinguished from improper appropriation) paper comparisons and the opinions of experts may aid the court." *Arnstein*, 154 F.2d at 473, n.19.

> [37]According to Dr. Parson's testimony, the first eight bars of each song (Theme A) have twenty-four of thirty-four notes in plaintiff's composition and twenty-four of forty notes in defendants' composition which are identical in pitch and symmetrical position. Of thirty-five rhythmic impulses in plaintiff's composition and forty in defendants', thirty are identical. In the last four bars of both songs (Theme B), fourteen notes in each are identical in pitch, and eleven of the fourteen rhythmic impulses are identical. Both Theme A and Theme B appear in the same position in each song but with different intervening material.

Selle, 741 F.2d at 899.

probative similarity), the factfinder then has to evaluate whether or not there was improper or *illegal copying* — whether, as *Arnstein* articulated it, there was an "improper appropriation."[38]

2. To Establish Substantial Similarity (Improper Copying) Expert Testimony is Not Permitted.

Expert testimony is not permitted to help the factfinder decide whether or not there has been improper copying, i.e., an improper appropriation.[39] Instead, the method employed under *Arnstein* to evaluate whether or not an improper appropriation has occurred is the lay listener test.[40] If an unlawful taking has occurred, the ordinary listener has to recognize the original in the copy. While expert testimony is not completely banned at this stage of the litigation, it is limited to "assist in determining the reactions of [the] lay [audience]."[41]

The salient criterion of the lay listener test is whether, considering "what is pleasing to the ears of lay listeners, who comprise the audience for whom such popular music is composed, that defendant wrongfully appropriated something which belongs to the plaintiff."[42] Consequently, while a music expert may offer an opinion as to whether or not defendant copied *in fact*, i.e., whether there is probative similarity, it is the sole purview of the "reasonable prudent listener" to ultimately determine whether there is substantial similarity, namely, whether or not there has been a "wrongful appropriation."[43] The expert is never allowed to say that "the songs sound the same."[44]

> [38]The plaintiff's legally protected interest is not, as such, his reputation as a musician but his interest in the potential financial returns from his compositions which derive from the lay public's approbation of his efforts. The question, therefore, is whether defendant took from plaintiff's works so much of what is pleasing to the ears of lay listeners, who comprise the audience for whom such popular music is composed, that defendant wrongfully appropriated something which belongs to the plaintiff.

Arnstein, 154 F.2d at 473.

[39]*See id*. at 468. "If copying is established, then only does there arise the second issue, that of illicit copying (unlawful appropriation). On that issue (as noted more in detail below) the test is the response of the ordinary lay hearer; accordingly, on that issue, 'dissection' and expert testimony are irrelevant." *Id.*

> [40]At the trial, plaintiff may play, or cause to be played, the pieces in such manner that they may seem to a jury to be inexcusably alike, in terms of the way in which lay listeners of such music would be likely to react . . . . The impression made on the refined ears of musical experts or their views as to the musical excellence of plaintiff's or defendant's works are utterly immaterial on the issue of misappropriation . . . for the views of such persons are caviar to the general — and plaintiff's and defendant's compositions are not caviar.

Id. at 473.

[41]*Id.* "The plaintiff may call witnesses whose testimony may aid the jury in reaching its conclusion as to the responses of such audiences." *Id.*

[42]*Id.*

[43]*See* Raphael Metzger, *Name That Tune: A Proposal for an Intrinsic Test of Musical Plagiarism*, 34 COPYRIGHT L. SYMP. (ASCAP) 139, 163 (1987).

[44]*See supra* note 39.

3. Summary

According to *Arnstein*, music experts are permitted, based on their objective analyses or dissections of the disputed songs, to testify as to the similarities between them, but this testimony is only permitted on the issue of copying; on the issue of improper appropriation, experts are only permitted to render opinions as to what they think the hypothetical lay listener who is a member of the intended audience group might perceive upon hearing the two songs. What the experts themselves perceive with their "refined" ears is irrelevant. After all, it was the lay public who bought the records and compact discs containing the song(s) at issue and for whom the music was originally composed.[45]

D. The Purview of Expert Analysis as Articulated by Krofft

1. A Different Dimension in the Copyright Infringement Suit: The Idea/Expression Dichotomy

The prohibition of expert testimony on the ultimate issue of whether or not there has been a wrongful appropriation still exists.[46] The Ninth Circuit Court of Appeals in *Sid & Marty Krofft Television Productions, Inc. v. McDonald's Corp.*, however, emphasized a different dimension in the test for infringement,[47] one that has not been easily imported into the musical copyright infringement suit.[48]

In *Krofft*, an advertising agency attempted to acquire the McDonald's hamburger restaurant chain account. The agency approached Sid & Marty Krofft Television Productions and expressed a strong interest in offering a proposal to McDonald's based on plaintiffs' very successful H.R. Pufnstuf series.[49] The advertising agency ultimately decided not to formally involve Sid & Marty Krofft Television Productions, circumventing the "need to pay the Kroffts a fee for preparing artistic designs and engineering plans."[50] It was nevertheless awarded the McDonald's account and at some point hired former employees of the Kroffts "to design and construct the costumes and sets for McDonaldland."[51] The agency also hired "the same voice expert who supplied all of the voices for the Pufnstuf characters to supply some of the voices for the McDonaldland characters."[52] The plaintiffs filed

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[45] *See supra* note 38.

[46] *See, e.g.*, Michael Der Manuelian, Note, *The Role of the Expert Witness in Music Copyright Infringement Cases*, 57 FORDHAM L. REV. 127 (1988); Universal Athletic Sales Co. v. Salkeld, 511 F.2d 904 (3d Cir. 1975) (vacating summary judgment in favor of plaintiff because the district court relied on dissection on the ultimate issue of infringement), *cert. denied*, 423 U.S. 863 (1975); Midway Mfg. Co. v. Bandai-America, Inc., 546 F. Supp. 125, 139 (D.N.J. 1982) (holding that dissection was not allowed on the issue of wrongful appropriation).

[47] 562 F.2d 1157 (9th Cir. 1977).

[48] *See infra* note 73.

[49] *See Krofft*, 562 F.2d at 1161.

[50] *Id.*

[51] *Id.*

[52] *Id.*

suit and alleged, inter alia, that the McDonaldland advertising campaign "infringed the . . . copyrighted articles of Pufnstuf merchandise."[53]

The first requirement in a copyright infringement suit is the ownership of a valid copyright.[54] Copying, then, "is said to be shown by circumstantial evidence of access to the copyrighted work and substantial similarity between the copyrighted work and the defendant's work."[55] More precisely, since this article has embraced the lexicon of Professor Latman, copying is established by circumstantial evidence of access, plus "probative similarity."[56]

The Ninth Circuit Court of Appeals then put a new spin on the bifurcated copyright test.

> There must be ownership of the copyright and access to the copyrighted work. But there also must be substantial similarity not only of the general ideas but of the expressions of those ideas as well. Thus two steps in the analytic process are implied by the requirement of substantial similarity.[57]

2. Comparing and Contrasting *Krofft* with *Arnstein*

Arnstein and *Krofft* say the same thing in different ways.

Under *Arnstein*, a plaintiff who was alleging an infringement was required to establish ownership of a valid copyright, copying (access plus probative similarity), and improper appropriation (substantial similarity).

The Ninth Circuit Court of Appeals did not claim to be making new law;[58] *Krofft* merely equated its concept of infringing general ideas with *Arnstein's* "copying" element and its concept of infringing the expression of those ideas with *Arnstein's* "improper appropriation" element. "[T]he protection granted to a copyrighted work extends only to the particular expression of the idea and never to the idea itself."[59] There is an idea/expression dichotomy; where the line falls is "subtle and complex" and must be decided on a case-by-case basis.[60]

The "copying" prong of *Arnstein*, access plus probative similarity, establishes whether or not the "idea" has been infringed, this by itself is not copyright

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[53]*Id.* at 1162.

[54]*Id.* "It has often been said that in order to establish copyright infringement a plaintiff must prove ownership of the copyright and 'copying' by the defendant." *Id*. *See also Arnstein*, 154 F.2d at 468.

[55]*See Krofft*, 562 F.2d at 1162.

[56]"[S]uch probative similarity need not be 'substantial.'" *See* LATMAN, *supra* note 18, at 1188.

[57]*See Krofft*, 562 F.2d at 1164.

[58]*Id.* at 1165."We believe that the court in *Arnstein* was alluding to the idea-expression dichotomy which we make explicit today." *Id.*

[59]*Id.* at 1163.

[60]*Id.* at 1164.

infringement.[61] Consequently, *Arnstein's* "copying" prong has a counterpart in *Krofft*, i.e., the copying of merely the idea, but not the expression.

Under *Krofft*, expert testimony is only permitted to establish whether or not the idea has been copied.

> We shall call this the "extrinsic test." It is extrinsic because it depends not on the responses of the trier of fact, but on specific criteria which can be listed and analyzed . . . [s]ince it is an extrinsic test, analytic dissection and expert testimony are appropriate. Moreover, this question may often be decided as a matter of law.[62]

Under *Arnstein*, recall that expert dissection and analysis were permitted only to establish "probative similarity" between plaintiff's and defendant's works, assuming that there was a reasonable possibility of access. (Under *Arnstein*, expert testimony is not permitted to help the factfinder decide whether there was an unlawful appropriation; the "lay listener test" was employed there.) Under *Krofft*, similarly, expert testimony is not permitted to decide the ultimate issue of whether or not "expression" has been infringed; rather, "the test to be applied in determining whether there is substantial similarity in expressions shall be labeled an intrinsic one depending on the response of the ordinary reasonable person."[63] Practically, therefore, the musical expert's testimonial role ends up being the same whether one litigates in New York or California.

Despite their fundamental agreements, however, there remains some elusive, but practically insubstantial differences between the two cases. *Arnstein* never formally articulated the "idea/expression dichotomy." Further, "wrongful appropriation" and "infringement of expression" are not necessarily fungible terms. When an "idea" becomes an "expression" is arguably a *qualitative* distinction. *Arnstein*, however, contemplated the distinction between copying in fact and wrongful appropriation as more of a *quantitative*[64] one: Assuming that there was copying, was *enough* taken to constitute a wrongful appropriation?[65] This article supports the view that in musical infringement suits *Krofft* should be read in light of *Arnstein*.

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[61]When the *Arnstein* court referred to "copying," specifically, access plus probative similarity, it was referring to "the work's idea, which is not protected by the copyright." *Id.* at 1165.

[62]*Id.* at 1164.

[63]*Id*.

[64]One commentator notes that "*Arnstein* did not contemplate this type of qualitative distinction between material copied and material improperly appropriated, as *Krofft* presumes. Rather, *Arnstein*'s distinction was one of the degree to which defendant copied plaintiff's work." *See* Der Manuelian, *supra* note 46, at 138.

[65]"The question, therefore, is whether defendant took from plaintiff's works *so much* of what is pleasing to the ears of lay listeners, who comprise the audience from whom such popular music is composed, that defendant wrongfully appropriated something which belongs to the plaintiff." *Arnstein*, 154 F.2d at 473 (emphasis added).

E. Applying Idea-Expression Analysis to the Musical Infringement Suit

Judge Learned Hand admitted that there is no rule of thumb, no principle that can be put forth when an imitator, riding the abstract continuum between *idea* and *expression*, has "gone beyond copying the 'idea'" and has now "borrowed its 'expression.'"[66] "Decisions must therefore inevitably be ad hoc."[67] Substantial similarity of "ideas" will not itself constitute an infringement, but rather, only when the trier of fact decides that substantial similarity exists in the "expressions" of the ideas.[68]

In music, when can it be said that an imitator has crossed the Rubicon, gone beyond copying the "idea," and ventured into the land of borrowed "expression?" What constitutes a musical "idea?" The distinction is at times obvious. Common musical elements like chords and scales lie in the public domain and may be properly classified as "ideas." However, the real genius of a Beethoven, a Mozart, or a Stravinsky is the particular manner in which they extracted motifs from the chords and scales and then developed them. That is "expression."

Let us now consider the concept of "musical copyright infringement" in terms of *Krofft*'s idea-expression continuum in order to illustrate how nebulous the concept is. Except in the patent cases to which Judge Frank referred,[69] it is very difficult to ascertain exactly when copyright infringement does or does not occur.

Suppose a songwriter hears a sad song on the radio. Surely, a sad song is an "idea;" no writer can monopolize the concept of a "sad song."[70] The second writer will not infringe upon the first's by writing a sad one of her own. What if the first is in the key of D minor? Still, a sad song in the key of D minor is only an "idea," for surely nobody can possess a monopoly on the idea of a "sad song in the key of D minor." Assume, now, that the song has nothing but string quartet as musical accompaniment, and is sung by a male singer. If some imitator felt inspired, upon listening to such a "sad song in D minor for male singer with string quartet" to compose one of her own, still who could stop her? Furthermore, if the first composer based his leading melody on the D minor scale, so could the second for, in addition to everything else, no writer should be able to monopolize the D minor scale.[71]

What, though, if the first composer executed some identifiable "twist" on the D minor scale as he developed his melody, and the imitator then copied *that* — is that now actionable? The answer could only depend upon whether the imitator has

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[66]*See* Peter Pan Fabrics, Inc. v. Martin Weiner Corp., 274 F.2d 487, 489 (2d Cir. 1960).

[67]*Id.*

[68]*See Krofft*, 562 F.2d at 1164.

[69]*See supra* text accompanying notes 11-12.

[70]*See, e.g.*, *Krofft*, 562 F.2d at 1164 (9th Cir. 1977) (analogous to the example of the cheaply manufactured plaster statue of a nude this case employed to demonstrate the outer limits of copyright protection).

[71]*See, e.g.*, Paul M. Grinvalsky, *Idea-Expression in Musical Analysis and the Role of the Intended Audience in Music Copyright Infringement*, 28 CAL. W. L. REV. 395, 400-01 & n.40 (1992) (stating that the chords and musical notes themselves are in the public domain and cannot be copyrighted) [hereinafter Grinvalsky].

somehow crossed our metaphorical line, has captured that ineffable, but recognizable, magical essence that truly defines the original author's motif. Perhaps for the first time we will allow plaintiff to whisper that the imitator has gone beyond copying merely the "idea" of a "sad song in D minor based on a D minor scale for male singer with string quartet accompaniment" and has now borrowed its "expression." Although we cannot say for sure *when* it happened, because the distinction between idea and expression is such an arbitrary one, if Judge Frank is right, in at least the most extreme cases we will know that it *did not*; those are Judge Frank's patent cases.

F. Arnstein*: A Recapitulation*

The *Krofft* court admitted that it intended to maintain the same type of bifurcated test that was announced in *Arnstein v. Porter*,[72] i.e., that expert analysis and dissection must not be permitted to aid the trier of fact in deciding whether or not "expression" has been borrowed. Contemporary music copyright infringement cases, however, have generally ignored *Krofft*'s explication of the idea/expression dichotomy, preferring instead to rely on the basic tenets of *Arnstein*.[73]

Arnstein is not perfect. The "lay listener test" is lamentably flawed because a factfinder, whether judge or jury, may not be able to put itself in the shoes of the hypothetical person who is a member of the intended audience for whom that work was composed.[74] As Judge Lay candidly admitted, concurring in part and dissenting in part in *Derrick D. Moore v. Columbia Pictures, Industries, Inc.*:

> I have played the tape which contains the two musical compositions and although I do not know the difference between be-bop, hip-hop, and rock and roll, the tunes all sound the same to me. This may be because I have no ear for music other than reflecting my generation's preference for the more soothing rhythms of Glen Miller and Wayne King or the sophisticated beat of Woody Herman playing the Wood Chopper's Ball.[75]

Furthermore, the "layhearer test" may result in infringement verdicts based on similarities which may not be due to copying at all, but to prior art or happenstance, and on the other hand, as Professor Nimmer has stated, under the "lay hearer test,"

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[72]"This same type of bifurcated test was announced in Arnstein v. Porter." *Krofft*, 562 F.2d at 1164.

[73]"Recent music plagiarism cases have, for the most part, ignored *Krofft*'s introduction of the idea-expression dichotomy and adhered to the principles of *Arnstein*." Der Manuelian, *supra* note 46, at 139. *See, e.g.*, Benson v. The Coca-Cola Co., 795 F.2d 973 (11th Cir. 1986); Selle v. Gibb, 567 F. Supp. 1173 (N.D. Ill. 1983), *aff'd*, 741 F.2d 896 (7th Cir. 1984); Testa v. Janssen, 492 F. Supp. 198 (W.D. Pa. 1980). *But see* Baxter v. MCA, Inc., 812 F.2d 421, 423 (9th Cir. 1987) (following *Krofft*), *cert. denied*, Williams v. Baxter, 484 U.S. 954 (1987).

[74]*See, e.g.*, Debra Presti Brent, *The Successful Musical Copyright Infringement Suit: The Impossible Dream*, 7 U. MIAMI ENT. & SPORTS L. REV. 229, 247 (1990) (stating that the "lay listener test" is a far cry from the "reasonable man under the circumstances" standard used in negligence law that it purports to emulate). "Because expert testimony is not allowed to lend guidance to the factfinder in making an informed response, the average lay listener standard is extremely difficult to apply." *Id.*

[75]972 F.2d at 948 (Lay, J., concurring in part and dissenting in part).

"very real appropriation" may not be detected.[76] Notwithstanding these criticisms, the "layhearer test" is arguably no more flawed than a normal negligence test.

In stark contrast, the objective prong of *Arnstein*, which advocates the use of expert dissection and analysis of the musical elements of both parties' songs in order to probe for concrete similarities between them, is steadfast. It is not subjective like a "layhearer test." Ah, this was the stuff of which Judge Frank's "dike" was built; at the summary judgment stage, such "meat-and-potatoes" analysis seemed sure to keep the patent case out of court. The musical expert compares lyrical and musical elements of two songs and renders an opinion for the benefit of the trier of fact whether or not they are probatively similar, i.e., whether one was copied from the other. If the disputed pieces are not factually similar, the suit theoretically ought to be dismissed as a matter of law. Whether or not such a case will be appropriately dismissed, however, may depend on whether the expert uses conventional or nonconventional analytical techniques. The balance of this article evaluates the expert's methodology.

III. Conventional Methods of Comparing Two Musical Pieces

Musicologists compare musical pieces by first transposing them into the same key. They then juxtapose salient accompaniment lines, harmonies, and melodic themes in order to identify which rhythms, chords, and notes occur simultaneously.[77] Such a comparison yields an opinion as to the degree of similarity between two musical pieces.

A. Preparation for Musical Analysis

1. Audition

The expert is initially requested by the client, typically the client's attorney, to audition two pieces of music in dispute and to offer an opinion as to whether or not they are similar. Almost always this first involves a *listening* session, but can occasionally mean a direct examination of musical notation on manuscript paper.[78] During the initial listening session, an expert with "good ears" may notice chordal, structural, lyrical, or melodic similarities, assuming that they do exist. The expert's task is to objectively compare the musical elements of both pieces and to render a professional opinion as to whether or not there was any copying. In order to graphically demonstrate to the trier of fact a rational basis for his or her conclusion, the expert will ultimately commit the pieces of music to paper. Such a process is called *transcription*.

2. Transcription

Upon transcription, a prima facie analysis of four bars of two disputed compositions may yield the following results:

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[76]*See* NIMMER, *supra* note 23, § 13.03[E][2], at 13-92.

[77]The expert typically prepares elaborate charts for purposes of litigation. These charts line up disputed musical elements and either serve to highlight or disparage the alleged similarities.

[78]The expert is customarily provided with compact disc or digital (DAT) audio tapes for purposes of this analysis.

Example 1

Example 2

Notice that although certain rhythmic similarities are intentional and obvious, the notes themselves are not the same. Notice, too, that the accompaniment chords are quite different. In short, aside from the striking graphic similarities which identical rhythms have a tendency to produce on the printed page, there are melodic and harmonic similarities that exist between the two pieces which go unnoticed simply because they are in entirely different musical keys. Example 1, with two sharps, is in the key of D major; Example 2, with one flat, is in F major. For this reason, the expert will *transpose* both pieces into the same key, and that key is almost always C major.

3. Transposition

Example 3

Example 4

Notice how much *more* similar the two pieces are revealed to be once they are put in the same key. Indeed, the melodic lines in measures two and four,

respectively, expose a sequence of notes which is *exactly* the same. Melodic fragments in the second halves of the first measures, moreover, and in the first halves of the third measures, also reveal identity. Numerous similarities in the harmonic accompaniment have now become obvious. For all of these reasons, *transposition* is the launching pad for expert analysis. The key musical elements in both pieces, particularly the melody, can be fairly compared in a generic musical key.

B. Substantive Musical Analysis and Comparison

1. Melody

Melody is simply defined as that aspect of music having to do with the succession of pitches and rhythms.[79] "A good melody generally remains within a reasonable compass, not straying too far from a central range."[80]

A musicologist compares melodies for similarities and differences in note sequence and rhythmic patterns. As one musical expert has written, "If a large percentage of the same pitches are the same rhythmically, and occur in the same sequence, then I consider the melodies to be substantially similar."[81] The melodies of Examples 3 and 4, tested under this criterion, initially indicate probative similarity, or factual copying.

2. Harmony

Harmony is defined as that aspect of music having to do with chords.[82] A chord is a combination of several pitches of music played simultaneously; a "chord progression," in turn, is a sequence of particular chords. "The combination of two or more harmonic intervals makes a *chord*."[83] Some chord progressions are common and have the potential to support a seemingly infinite number of melodies. For example, hundreds of tunes have been written to the I-VI-IV-V chord progression, i.e., a C major chord, followed by an A minor, followed by an F major, and culminating with a G major.[84] Even more common is the basic I-IV-V chord progression which has provided the basis for blues and rock-n-roll, and taken more abstractly, has provided a basic theoretical harmonic map for all western music, even the classical symphony.[85] The I chord is a home base, the IV chord departs into new territory like a proverbial prodigal son, and the V chord announces his inevitable return home again. The existence of identical chord progressions, especially those

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[79]JOSEPH KERMAN, LISTEN 549 (3D ED. 1980).

[80]ARNOLD SCHOENBERG, FUNDAMENTALS OF MUSICAL COMPOSITION 16 (Gerald Strang & Leonard Stein eds., 1967).

[81]Judith Greenberg Finell, *Using an Expert Witness in a Music Copyright Case*, 12 ENT. L. REP. 3 (1990) [hereinafter Finnell II].

[82]KERMAN, *supra* note 79, at 548.

[83]WALTER PISTON, HARMONY 13 (5th ed. 1987).

[84]*See, e.g.*, Lorenz Hart & Richard Rodgers, *Blue Moon* (Robbins Music Corp. 1934); Hoagy Carmichael & Frank Loesser, *Heart and Soul* (Famous Music Corp. 1938).

[85]"The I-IV-V progression has been the most widely used progression in western civilization." Grinvalsky, *supra* note 71, at 413.

banal ones most common to popular music, does not in and of itself indicate copying. "With a strikingly similar melody, however, the same chord progression suggests possible plagiarism."[86] Consequently, while Examples 3 and 4, supra, do indicate that substantially the same chord progressions were employed by both plaintiff and defendant, that would be insufficient to establish factual copying if it were not also true that both progressions buttress substantially similar melodies.

3. Accompaniment, Orchestration, and Style

Musical compositions are generally texturized or treated. *Accompaniment* and *orchestration* refer to the musical treatment a composition receives.[87] *Style* refers to a particular genre of music. The presence of some or all three elements in both plaintiff's and defendant's musical compositions may further evidence copying if more substantive elements like *melodic* similarity, *harmonic* similarity, and *lyrical* similarity have already raised red flags in the eyes and ears of the expert. Choices of accompaniment, orchestration, and stylistic treatment become salient whenever a musical hook, as so often happens, is the product of a unique sound or recording technique. Historically, many signature guitar, synthesizer, and drum sounds have become married to the musical hooks they have introduced.[88] Duplications of unique sounds, in plaintiff's sound recording, like the unusual "noise" of the dribble of a basketball on a hardwood floor to emulate a kick drum, or the clamorous clanking of a garbage-can lid to simulate a snare, could be evidentially significant that there was factual copying of plaintiff's musical composition because the sound recording in which plaintiff's musical composition was embodied obviously inspired defendant.

4. Musical Structure or Form

Structure or *form* has to do with the *shape* of a piece of music.[89]

> When music theory speaks of *traditional forms*, its reference is to established models of musical structure which were brought to consummate realization in the eighteenth and nineteenth centuries, and which show remarkable viability today. Most formal studies in musical

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[86]Finell II, *supra* note 81, at 4.

[87]Musical texture results from the synthesis of individual parts in a composition. We describe a texture as having one or more elements (such as melody and accompaniment), as being in two or more parts, as homophonic, polyphonic, light, dense, complex, transparent, or other more or less precise attributes. We may also speak of vocal or instrumental texture, or orchestral or keyboard texture, terms that reflect performance media.

PISTON, *supra* note 83, at 284.

[88]*See, e.g.*, EMERSON, LAKE & PALMER, *Lucky Man*, *on* EMERSON, LAKE & PALMER (Victory Music Inc./Polygram Records 1970) (Keith Emerson's synthesizer sound); DONNIE IRIS & THE CRUISERS, *Ah! Leah!*, *on* BACK ON THE STREETS (Carousel/MCA Records 1980) ("stacked" vocal chorus); PHIL COLLINS, *In The Air Tonight*, *on* FACE VALUE (Atlantic Records 1981) (bombastic, "gated" drum bursts). This is not to say that it is copyright infringement to copy or emulate such sounds provided that the copier does not merely "sample" them. *See generally* Bridgeport Music, Inc. v. Dimension Films, 383 F.3d 390 (6th Cir. 2004) (enunciating a different standard for infringement of sound recordings).

[89]KERMAN, *supra* note 79, at 548, 552.

> form have as their basis of subject matter the literatures which reflect the broad principles of these forms.[90]

Classical symphonies are written in *sonata-form*, consisting of the exposition, the development, and the recapitulation.[91] Music, like life, is born, grows and develops, and ultimately expires. Popular music is not quite as profound, nor so complex. Nevertheless, there are strict forms employed in popular music. Most popular songs of the 1930s and 1940s were written in "A-A-B-A" form.[92] Many contemporary songs continue this tradition.[93] The most popular song form, however, of the last twenty years has been a straight *verse-chorus* form, with a "middle eight" added for harmonic and melodic contrast. Chart this form as "A-B-A-B-C-A-B." Quite often there is an additional sub-chorus included to *set up* the *actual* chorus ("A-B-A-B-C-D"). In pop parlance, the *actual* chorus is called the "hook" of the song, and must be something quite special.[94] It is this "hook" which simultaneously grabs a radio-listener's ear, increases a general manager's advertising revenue, brings a smile to the metaphysical countenance of the record company, and helps society to mark time.

The use of identical musical structures or forms, like composing in a particular style or employing a specific orchestration technique, will not by itself indicate factual copying. Considered along with circumstantial evidence of access and other indicia of copying, however, the use of a similar musical form, especially an *unusual* one, certainly would buttress a finding of factual copying.[95]

C. Prior Art, Tradition, and Standardized Musical Formulas

Prior art refers to "earlier pieces of music with passages that are similar or identical to the relevant portions of the music at issue."[96] Prior art is important because if the relevant portions already existed in past musical compositions, the fact

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[90] WALLACE BERRY, FORM IN MUSIC, at xiii (1966).

[91] *Id.* at 173.

[92] *See, e.g.*, Hoagy Carmichael & Stuart Gorrell, *Georgia on My Mind* (Peer International Corp. 1930); Dorothy Fields & Jimmy McHugh, *I'm in the Mood for Love* (Famous Music Co. 1935); Hoagy Carmichael & Mitchell Parish, *Star Dust* (Mills Music, Inc./Everbright Music Co. 1929).

[93] *See, e.g.*, THE BEATLES, *Yesterday*, *on* HELP! (Capitol Records 1965).

[94] The repeated title section of the song is called the *hook*, the part of the song that grabs the listener's attention and tends to remain in the mind after the song is over. The term *hook* can also refer to any memorable melodic figure, which, more often than not, contains the song's title.

SHEILA DAVIS, THE CRAFT OF LYRIC WRITING 31 (1985).

[95] "In other words, when the question is copying as a factual matter, then similarities that, in the normal course of events, would not be expected to arise independently in the two works are probative of defendant's having copied as a factual matter from plaintiff's work." NIMMER, *supra* note 23, § 13,01[B], at 13-12.

[96] Finell II, *supra* note 81, at 4.

that they now turn up in both plaintiff's and defendant's musical pieces is not surprising and is not necessarily by itself indicative of copying.[97]

Moreover, each genre of music, e.g., blues, rock, light pop, classical, and numerous ethnic styles such as polka, has particular characteristics, rhythm and instrumentation that make all works in that genre somewhat similar. Indeed, certain practices over time develop a "gloss" which, analogous to legal precedent, become part of common musical parlance.[98] Consequently, the fact that in both plaintiff's and defendant's musical compositions the guitarists may have played "Johnny B. Goode" type guitar introductions would not in and of itself indicate factual copying.

In other words, there are standardized musical formulas and compositional devices which no one can appropriate, i.e., in *Krofft* terms, the musical "idea" as opposed to personal musical "expression."

Example 3

Example 4

Please reconsider Examples 3 and 4. While the melodies in the second measures of the pieces are identical, notice that the shared motif is slavishly derivative of the C major scale.

[97]"This policy balances an author's interest against the competing interests of science and art, the need for society at large to build upon, and benefit from the use of, ideas." Grinvalsky, *supra* note 71, at 399 (footnote omitted).

[98]*Id.* at 413. "Countless examples exist . . . . each genre has particular characteristics, rhythm and instrumentation for example, that make them more similar to works within the genre than without." *Id.* at 414. These are commonly called scenes a faire. "A scenes a faire finding, unlike a finding of copyright validity, does not turn on whether plaintiff copied prior art. Rather, the court examines whether 'motive' similarities that plaintiffs attribute to 'copying' could actually be explained by the commonplace presence of the same or similar motives within the relevant field." *See* Smith v. Jackson, 84 F.3d 1213, 1219 (9th Cir. 1996).

Example 5 — 'C' major scale

Plaintiff's melody, therefore, is not *distinctive*, and (s)he will consequently need a great deal of corroborating evidence, e.g., there will have to be substantial lyrical and harmonic similarities between the disputed pieces, in addition, of course, to proof that defendant had prior access, in order to prevail.

IV. NONCONVENTIONAL METHODS OF COMPARING MUSICAL PIECES

A. Defining "Nonconventional" Methods

Nonconventional methods of comparing musical pieces go beyond traditional approaches in attempting to uncover possible "disguised" plagiarism.

> If there is an obvious perceptible similarity between two pieces of music that is not reflected by simple comparative methods, then it is the obligation of the expert to go further to explain analytically why the pieces are perceived to be similar, rather than rigidly relying on a simple linear comparison that, in some situations, will conceal more than reveal.[99]

The notion is that conventional methods of comparative musical analysis do not work when pieces of music somehow seem similar but have been deliberately disguised so as to avoid plagiarism claims. For example, musicologist Judith Greenberg Finell has written that one method of disguise is to *reposition* or *reverse* related musical elements so that they have the same musical effect as in the original piece, but do not line up identically on manuscript paper. Consequently, they escape detection by conventional analysis.[100]

> For example, an original song may have a main melodic theme consisting of the scale positions 5-5-4-3-2 in a tango rhythm. A purposefully disguised imitation may have its main theme, also in the same tango rhythm, as 2-2-3-4-5. Technically, these are opposites. Yet the two pieces can have a very similar impact on the listener.[101]

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[99]Finell, *supra* note 13, at 5.

[100]*Id.*

[101]*Id.*

Examples 6 and 7

In other words, Ms. Finell would argue that although both motifs in Examples 6 and 7 have a similar impact on the listener, as can readily be observed, they look different on paper. Consequently, the employment of "nonconventional" musical analysis, i.e., looking for reversed tonal orders, for deliberate transpositions, for deliberate augmentations or diminutions of time values, and techniques like them, ought to be deployed to uncover similarities where none may exist otherwise in order to detect the infringement, i.e., the "disguised" infringement.

B. A Critique

1. The Basic Argument Against Nonconventional Musical Analysis

The implications of the assumptions underlying nonconventional musical analysis appear irrational, dangerous, and at times even ridiculous. *Reversed tonal order*, for example, illustrated in Examples 6 and 7, is one of a battery of common composition techniques commonly taught in music conservatories; it is meant to be utilized in conjunction with other compositional devices like *transposition*, *expansion*, *contraction*, *augmentation*, *diminution*, *fragment repetition*, *fragment subtraction*, and *changed tonal order* by serious composers as a means to develop musical motifs in intellectual, time-tested ways.[102] "True, it is the themes which catch the popular fancy, but their invention is not where musical genius lies, as is apparent in the work of all the great masters."[103] It is in the *development* of the tune where the composer's true genius lies, and the serious music student learns how to develop by analyzing how the great masters employed such devices.[104] Exploited for

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[102]*See* WALTER PISTON, COUNTERPOINT 103-07 (1st ed. 1947), for a discussion of motive variation. Professor Piston includes examples of *diminution*, *augmentation*, *inversion* and *retrograde motion*, *i.e.*, reversed tonal order, transposition, and other rhythmic variations. *See also* WILLIAM RUSSO ET AL., COMPOSING MUSIC 27-41 (1983), for a discussion of melodic transformation. Mr. Russo includes examples and applications of *transposition*, *retrograde motion*, *inversion*, *augmentation*, *diminution*, *fragment addition*, and *fragment subtraction*.

[103]Arnstein v. Edward B. Marks Music Corp., 82 F.2d 275, 277 (2d Cir. 1936).

[104]While it is impossible to list all techniques used in the development of musical themes and motives because they are limited only by a composer's imagination, there have always been "tried and true" techniques employed either consciously (as in the case of Beethoven) or subconsciously (as in the case of Lennon & McCartney) by composers to effectively develop melody.

the purposes of highlighting similarities between disparate pieces of music instead, the composition techniques are misapplied. This article argues that no two pieces of music composed by different composers could pass muster under the nonconventional musical analyst's lens[105] and, as this article will show, misapplying classical composition techniques in this fashion crudely destroys the dike that Judge Frank declared to exist at the summary judgment stage, transforming it into a sieve; a jury trial or an extorted settlement will be the inevitable result of every plagiarism suit.

2. Understanding Classical Composition Techniques

A *motif* (or *motive*) is a short fragment of melody or rhythm which is used to construct a long section of music.[106] Schoenberg referred to the basic motif as the "germ" of a melodic idea.[107] *Development* is the process of expanding a motif into larger sections of music.[108] "Everything depends on its treatment and development."[109] What follows is a list of basic composition techniques that have been employed by composers for several centuries to develop motifs.[110]

The original idea is based on a C 6th chord.

> The process of . . . thematic change is called *development*, a principal resource in the so-called organic or narrative musical forms, especially the sonata and rondo forms. Symphonic melodies may be repeated in toto without essential change but in a variety of keys, as in the ritornello forms of the Baroque; or they may be used in every kind of contrapuntal combination and transposition, with or without motivic fragmentation, as in fugal technique. Or they may be fragmented and the fragments repeated with seemingly endless variety, as in Beethoven's technique . . . they may be continued and extended with new phrases, as in Mozart's; they may be transformed rhythmically and metrically into new and independent guises, as in Liszt's. In the sonatas and symphonies of Viennese Classicism and nineteenth-century Romanticism, themes become the protagonists in a narrative succession of events; what they are becomes less important than what happens to them.

PISTON, *supra* note 83, at 94.

[105]Consider, for example, that the principal motif of *The Theme From "Star Wars,"* written by John Williams and published in 1977, happens to be the mirror melodic image of *Born Free*. When analyzed side by side, these two melodies represent a classic application of the transformational technique of *inversion*. *Born Free*, written by Don Black & John Barry, was published eleven years earlier in 1966. I am not suggesting that John Williams deliberately inverted the melody of *Born Free*; to the contrary, I point to the absurd results that "nonconventional" musical analysis produces.

[106]KERMAN, *supra* note 79, at 549-50.

[107]SCHOENBERG, *supra* note 80, at 8. "Since it includes elements, at least, of every subsequent musical figure, one could consider it the 'smallest common multiple'. And since it is included in every subsequent figure, it could be considered the 'greatest common factor.'" *Id.*

[108]*Id.*

[109]*Id.*

[110]These are specific examples of the techniques discussed *supra* note 102.

Example 8

Transposition — repeating the idea on a different scale degree.
Example 9 — 3rd lower

Example 10 — 4th higher

Example 11 — A 2nd higher

Expansion — expanding the idea by using larger intervals.
Example 12 — original idea, then expanded

Contraction — the idea is brought closer together by making the interval distance smaller.
Example 13 — original idea, then contracted

Augmentation — the time value of each tone is lengthened (often doubled).
Example 14 — original idea with augmentation

Diminution — the time value of each note is shortened.

Example 15 — original idea with diminution

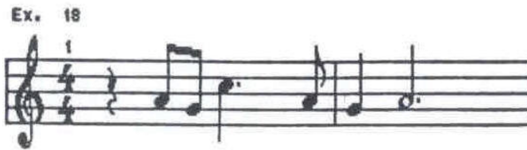
Fragment repetition — the idea is enlarged by the repetition of one or more of its basic members or fragments.

Example 16 — original idea

Example 17 — use of fragment repetition

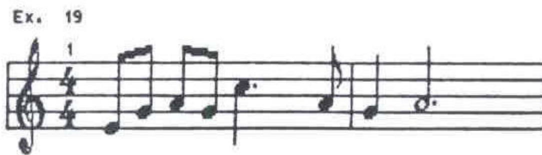
Fragment subtraction — omitting one or more fragments of the idea.

Example 18



Changed tonal order — the original tonal order is staggered or changed.

Example 19 — original idea



Example 20 — with changed tonal order

Reversed tonal order — turning idea around without changing rhythm.

Example 21 — original idea

Example 22 — with reversed tonal order

3. Mozart's Sonata in C Major

The following twelve-bar excerpt from Mozart's Sonata in C major (right-hand only) displays these techniques as they were applied by a genius.

Example 23

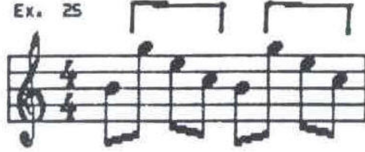
The salient motif, Mozart's theme, can be found in measures one and two. Notice that it is developed further by techniques of *transposition* and *expansion* in measures three and four. In measure five, Mozart begins an obvious developmental section, choosing to make the leading pivotal tone of each successive measure a note of the C scale.

Example 24 — C scale

Mozart is using this downward progression of the C scale in order to lead us back to the V chord in measure twelve, which in turn leads us inevitably back home to the I chord. He then embellishes what would otherwise be a merely prosaic progression with an elaborate sequence of scale-based phrases, which he develops further by blatant use of *transposition* in measures six, seven, eight, nine, and ten.

Notice the second, third, and fourth notes — and the last three notes of measure eleven.

Example 25



Compare these with the notes Mozart chooses for his motif in measure one.

Example 26

It ought to be observed that *reversed tonal order* has been employed here. Mozart has exposed his motif to us in measure one, and in measure eleven has repeated it — but this time backwards!

The conventional techniques that Mozart utilized are the building blocks of creativity that have animated Bach, Beethoven, and the balance of western music. It is important to realize that "nonconventional" methodology also applies them, but inappropriately, i.e., not as a means to develop melodies, but rather, as a fatally flawed method to "detect" infringement.

C. Applying Nonconventional Musical Analysis to the Hypothetical Case: Ball v. Ravel

It is difficult for plaintiffs to win copyright infringement suits; it is also expensive for defendants to litigate them. Consequently, a defendant who refuses to settle on principle may find ultimate victory to be a Pyrrhic one.

As long as there is a material dispute whether or not the two songs at issue are substantially similar, a defendant cannot hope to win a motion for summary judgment. "The avowed purpose of those who sponsored the summary judgment practice was to eliminate needless trials where by affidavits it could be shown beyond possible question that the facts were not actually in dispute."[111]

Let us now return to Judge Frank's famous dictum: the patent case of noninfringement. "Nontraditional" analytical techniques take that patent case and obscure it, crudely and naively destroying *Arnstein's* substance and meaning. Judge Frank in *Arnstein v. Porter* stated that although Cole Porter could not be granted judgment as a matter of law on the grounds that his and Mr. Arnstein's songs were not substantially similar, that did not mean that a case could never arise in which the absence of similarities was so obvious.

> We should not be taken as saying that a plagiarism case can never arise in which absence of similarities is so patent that a summary judgment for defendant would be correct. Thus suppose that Ravel's "Bolero" or

[111]*Arnstein*, 154 F.2d at 474.

> Shostakovitch's "Fifth Symphony" were alleged to infringe "When Irish Eyes Are Smiling." But this is not such a case.[112]

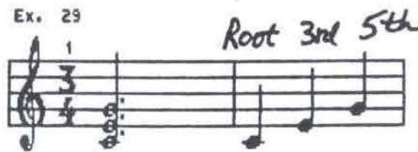
Let us assume, however, that there *is* such a case and let us see what happens to it under the lens of "disguised" infringement analysis. Mr. Ernest R. Ball, composer of "When Irish Eyes Are Smiling," hypothetically sues Maurice Ravel for copyright infringement. Mr. Ball claims that "Bolero" has been deliberately disguised so as to avoid a plagiarism claim and his expert employs "nonconventional" methods of musical analysis in the response to M. Ravel's motion for summary judgment.

Example 27 — "When Irish Eyes Are Smiling"[113]

Example 28 — "Bolero"[114]

Notice that in the first four measurers of plaintiff's song, a C major triad has been outlined; the fifth of the scale is employed in measures one and four (a G note), the third in measure two (an E note), and the tonic in measure three (a C note).

Example 29 — A C major triad



Defendant's piece, "Bolero," also "coincidentally" employs the device of chordal outline. Measure one articulates the tonic, weaves towards the fifth of the scale in measure three, and settles on the third (an E note) in measures three and six.

Consider measures eight, nine, and ten of "When Irish Eyes Are Smiling."

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[112]*Id.* at 473.

[113]Ernest R. Ball, Chauncey Olcott, & Geo. Graff, Jr., *When Irish Eyes Are Smiling* (M. Witmark & Sons 1912).

[114]Maurice Ravel, *Bolero* (Durand & Cie/United Music Publishers/Elkan-Vogel Co. 1929).

Example 30

The *exact same sequence* of notes that appears in measure five of "Bolero" also appears in measures eight and nine of plaintiff's tune — a G note, followed by A and B.

Observe the motif, an altercation between a C note and a B note, in measures ten and eleven of plaintiff's song.

Example 32

Notice how this germ of a motif has been "appropriated" by the defendant throughout "Bolero;" it has, indeed, become the "heart" of M. Ravel's piece. M. Ravel, however, has cleverly disguised his "infringement" by employing a battery of composition techniques to cover his tracks. The spirit of Mr. Ball's tune, nevertheless, remains; its evocative feeling has been "captured" and is obvious to a trained expert.

Defendant's "Bolero" also centers around an altercation between the C and B notes, exposed in measure one.

Example 33 — measure one of "Bolero"

This motif, a nonconventional musical analyst would allege, has been directly lifted from "When Irish Eyes Are Smiling," but "cleverly" altered by *transposition* and *fragment repetition* to avoid detection by conventional analysis.

Observe the composition techniques of *transposition* and *fragment repetition* "working its magic" on Mr. Ball's original motif in measure two of "Bolero."

Example 34 — measure two of "Bolero"

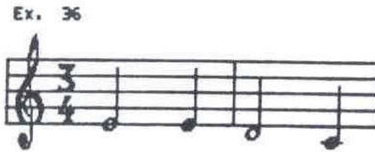
Notice that M. Ravel has taken Mr. Ball's melodic C to B altercation, has fragmented it, and has "transformed" it into a C to A altercation.

Consider, furthermore, measure six of defendant's piece.

Example 35 — measure six of "Bolero"

Notice that by skillful use of *diminution*, M. Ravel has disguised the fact that he had *directly lifted* measures two and three of plaintiff's tune.

Example 36 — measures two and three of "When Irish Eyes Are Smiling"



Observe that the exact same note sequence has been employed — an E followed by a D, then C. Time values, however, have been deliberately truncated by M. Ravel, if one were to believe the nonconventional theorists, in order to avoid a charge of blatant infringement.

To be sure, conventional musical analysis would not support factual copying in this case. The song, "When Irish Eyes Are Smiling," has been, of course, a hugely popular one. It lived on the lips and in the hearts of American men and women during World War I and survived into the roaring twenties. Maurice Ravel had access to it, was aware of it, and may have admired its popular success and folksy charm. If one were to swallow the nonconventional musical analyst's line, either he deliberately intended to musically meld a more serious work with the whimsy of Mr. Ball's song, or, conceding the ubiquitous nature of plaintiff's copyright, subconsciously plagiarized it. Either way, Mr. Ball's attorney might conclude in his brief in opposition to M. Ravel's motion for summary judgment, there is no doubt that "When Irish Eyes Are Smiling" was singing in M. Ravel's head when he composed his "Bolero." The musical similarities between the two pieces are obvious when "nonconventional" analytical techniques are employed to detect them. They are even both in three-quarter time! Defendant's motion for summary judgment must therefore be denied; the lay listener, upon reviewing the evidence, will have to make the proper determination.

V. Conclusion

Absurdly, by abusing conventional composition techniques a musicologist could convince a judge that Ravel's "Bolero" came from "When Irish Eyes Are Smiling" or that Beethoven's "Fifth Symphony" was derived from "Play That Funky Music, White Boy." To insult Judge Frank's prudently qualified opinion is to give *carte blanche* to every musical terrorist who dares to file a complaint. "Nonconventional" musical analysis is, after all, a boon for plaintiffs, their contingency-fee lawyers who game the system, and the musicologists who are hired to construct these musical mirages for them; it is not the right approach, though, for discovering truth or achieving justice. It is not fair that legitimate professionals work hard at a respectable craft and under the American system are forced to finance frivolous

lawsuits by every Tom, Dick, or Hillary who believes, for whatever reason, that some great work of genius that (s)he whistled in the shower has been plagiarized by the likes of a Cole Porter or even a Barry Gibb. Society must look for ways to curb and restrict spurious litigation. Lending credibility to "nonconventional" musical analysis and "disguised" infringement claims will have the opposite effect. Musicologists must have something better to do with their time; courts surely do.

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This article is dedicated to Billy Joel, Lionel Richie, the Gibb Brothers, John Fogerty, and many others, but especially Cole Porter.