Film Music Analysis and Pedagogy

David Neumeyer

The ubiquitous videocassette gives us, for the first time, a convenient way to examine films and their music closely. Many classic films are available, especially in VHS format, and, thanks to cable stations, more films of all eras and genres are being shown on television than ever.\(^1\) Since music has been an important element in the medium from its earliest days, it follows that now we have the opportunity to invoke film scores routinely as audio-visual aids in the teaching of music and to treat them as another repertoire of twentieth-century music subject to scholarly study.

Videocassettes, to be sure, have some disadvantages: re-wind/fast-forward mechanisms are slow; dubbing from a video-

\(^1\)Readers should be aware of some complications due to copyright laws, which are just as confusing for video as they are for music. It is legal to dub copies from television for personal use, but it is not legal to show these “fair copies” to a class. An instructor may show a legally owned or rented videotape to a class, but a student may not. Furthermore, the showing must be “private” (for the class only). Copyright holders are apparently especially sensitive to this issue of “public” screenings of films.

None of this applies, of course, to American films now coming out of copyright (in general, those released in 1933 and earlier—but be careful of silent films reconstructed or re-released with new music accompaniments) and it may not apply to certain films released later but whose copyrights were allowed to lapse, the most famous example being *It's A Wonderful Life* (1947).

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cassette results in significant loss of image quality, even on good machines; TV monitors lose the edges of the image (more on the sides than on top or bottom); and videotapes tend to "flatten" or "muddy" black and white images with a wide range of gray tones, and color images generally. Add to all of these, of course, some image degradation in the transfer from reel to videotape and a certain lack of "authenticity" in the loss of the big-screen effect.\footnote{Loss of authenticity also applies to colorized versions of black-and-white films. Since it now seems apparent that the great expense, poor results, and poor audience reception will not deter the colorizers, one can only hope that videodiscs will eventually permit the viewer to turn the "color" on or off at will. (It is possible to do this now, of course, with TV controls, but the resulting image quality is inferior to a black-and-white print.)} Because of these several disadvantages, I suspect that before very long, perhaps in as little as five or six years, videodiscs or some other optical disk format will be the favored medium for home and class viewing of films, aided, one hopes, by high-definition television. Still, videotapes are inexpensive, readily available for anyone's use now, and clearly will remain serviceable tools for teaching and research for a number of years. Even now video-capture cards for microcomputers allow integration of film stills into computer-based or paper-copy pedagogical and research materials. And sound-track playback can be quite acceptable, thanks to easily made connections between video and audio reproduction equipment.

In the following, then, I discuss pedagogical issues based on my recent experiences in teaching film music and I raise questions with respect to film-music research and film in music-theory scholarship.

Critical viewing. A basic obstacle in film pedagogy applies also to film music: getting students to pay attention; that is, to actively structure a reading of the film as they watch. Admittedly, this is a situation very little different from the one we face teaching concert music—but if we must expend considerable energy turning students into critical listeners, in film we have the double dilemma of turning them into critical viewers of the image track as well as critical listeners to the sound track. The problem is compounded by the
fact that most of us are strongly conditioned to regard TV watching as an electronic tranquilizer, a part of the post-work, "non-thinking" entertainment part of the day, a notion to which the majority of network offerings freely cater. Thus it requires a deliberate effort to involve oneself actively at a level deeper than the minimum required to follow the plot and to appreciate the most general or obvious dramatic and expressive effects of image or sound track.

There are a number of effective paths into critical viewing skills. The simplest, which I have found works with most students, and very quickly with the more diligent or the more creative, is merely to point out the problem of passive TV watching and emphasize the need for close viewing. Then, with a simple framework of time, plot, and music (or sound-track) categories, almost any student can produce the sort of "analytic diagram" reproduced below, which can be regarded as analogous to a simple line-diagram of a piece of concert music.


<table>
<thead>
<tr>
<th>Time</th>
<th>Events</th>
<th>Music</th>
</tr>
</thead>
<tbody>
<tr>
<td>0:00</td>
<td>main titles(^3)</td>
<td>(cue 1)(^4) music in</td>
</tr>
</tbody>
</table>

"CURRENT TIME"; LATE EVENING
--Murder

\(^3\)The main titles are the credit listings at the beginning of the film. "End titles" or "end credits" are similar listings at the conclusion.

\(^4\)A music cue is the basic formal division in a film score; it indicates an entry (or "cue") and a continuous passage of music. The first cue is usually called the "main title"; others are assigned numbers for recording purposes, names for production records and copyright purposes. It is often not possible to determine the correct number of cues for a film without consulting the score or studio records, since a cue may include a grand pause, for example, or a low-volume timpani roll that could disappear under dialogue or sound-track noise. Even continuous music may be given two cue numbers if it overlaps reels (a typical pre-release working print of a feature film in the forties consisted of 10-12 reels).
### Parameters

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:35</td>
<td>Monty’s beach house</td>
</tr>
<tr>
<td></td>
<td>--Suicide?</td>
</tr>
<tr>
<td>2:15</td>
<td>wharf; Mildred considers suicide</td>
</tr>
<tr>
<td></td>
<td>--Mildred and Wally</td>
</tr>
<tr>
<td>3:55</td>
<td>front of Wally’s wharf-side cafe; Wally comes out</td>
</tr>
<tr>
<td></td>
<td>(music continues)</td>
</tr>
<tr>
<td>5:57</td>
<td>beach house; Wally, Mildred</td>
</tr>
<tr>
<td>8:46</td>
<td>(music continues)</td>
</tr>
<tr>
<td></td>
<td>(--· music out; source music in: band and a singer, “You must have been a beautiful baby.” music out</td>
</tr>
<tr>
<td>10:45</td>
<td>police car appears</td>
</tr>
<tr>
<td></td>
<td>--aftermath: Mildred’s house; police station</td>
</tr>
<tr>
<td>12:00</td>
<td>Mildred arrives at her house</td>
</tr>
<tr>
<td></td>
<td>/police/Veda</td>
</tr>
</tbody>
</table>

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5. "Source music" is music which can be understood as coming from some physical source within the film’s story world or diegesis, whether or not we can see the performers or device (such as a radio). In this case, we hear the band and the singer about thirty seconds before we see them. Music which is not source music is usually referred to as “underscoring” or “background music.”

6. A “stinger chord” is a sharply attacked, but not necessarily loud, chord used to reinforce moments of surprise or revelation. Steiner was very fond of the stinger chord and most of the films he scored contain at least three or four. Perhaps the most famous is the one which occurs in *Casablanca* when Rick (Humphrey Bogart) walks casually out of a back room to find that his lost love Ilsa (Ingrid Bergman) is present in the cafe. This chord, the tones D and A in the outer voices with an E-half-diminished-seventh-chord in between, is reused in the film and eventually comes to connote conflict in the relationship of Ilsa and Rick. On the stinger chord, see also Claudia Gorbman, *Unheard Melodies: Narrative Film Music* (Bloomington: Indiana University Press, 1987), 88-89.
Neumeyer, *Film Music Analysis and Pedagogy*

13:30  at police station; several characters come in and out

16:40  in Inspector Peterson's office  music out; replaced by loudly ticking clock

FIRST FLASHBACK  
--family life

20:00  real estate office/Bert—Mildred as narrator

25:00  children, outside, then in the house

-------- etc.

(3) music in out at 21:30

(4) in; out at 26:10, then Veda at the piano, plays beginning of Chopin, E-flat major waltz twice, briefly

Such diagrams suffice if the goal is primarily to cover general design of the film in order to get as quickly as possible to closer study of the music, which would be the case if film music were a special topic or short unit of a course. In a longer unit or full semester's course devoted to film music, one must also go more deeply into topics covered in introductory film courses, in particular film types and feature-film genres, narrative structure, and image-track editing. The ideal, obviously, would be a course on film as prerequisite to one on film music, but for a majority of students an adequate alternative is a unit based on appropriate chapters in a film textbook. One choice might be David Bordwell and Kristin Thompson's *Introduction to Film Art*, a thorough, serious, sometimes daunting book with an avowedly structuralist or formalist bias. Thanks to specialized discussions in chapter appendices, this book would also serve well as a starting point for anyone wishing to become familiar with the literature on film theory and criticism, a literature to which the authors themselves have been major
contributors. A less formal, less demanding text is Joseph M. Boggs' *The Art of Watching Films*, whose extensive lists of questions can be practical sources for drill or discussion sessions in critical viewing.\(^7\) Samples: “What is the overall effect of editorial intercutting and transitions on the pace of the film?” “How does the cutting speed ... correspond to the emotional tone of the scene involved?” “What symbols appear in the film and what do they represent?”

Below is part of a solution to an exercise in the detailed analysis of shot sequences, which are the result of the “editorial intercutting” referred to above. This exercise is roughly the equivalent in “fussiness” to an exercise in Roman-numeral analysis of a chorale setting. The scene is about three minutes long;\(^8\) it occurs early in *Wings*, an Academy-Award winning silent film from 1927, in a videocassette release with a new score written and performed by veteran silent-film organist Gaylord Carter.\(^9\) Students are asked to describe each shot, including setting, characters in the frame, and camera position and movement. They are also asked to provide a general evaluation of shot pacing (relative durations, or, one might say, “editing rhythm”), not included here. They are not asked to measure the duration of individual shots, work too tedious and imprecise to be of much value.\(^10\)

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\(^8\)A typical Hollywood feature film of 80-100 minutes can have 300-500 shots.


\(^10\)Shot durations are normally measured in terms of numbers of frames, a task which requires film-editing equipment (and 16mm or 35mm prints).
Neumeyer, *Film Music Analysis and Pedagogy*

**IMAGE TRACK**

1. story title “dreams of youth”
2. medium shot (MS), Jack
3. story title
4. long shot (LS) of plane shadow against clouds
5. to 2
6. story title
7. LS, Jack; camera travels as he gets up and goes to his automobile
8. story title
9. medium closeup (MCU), Mary (through clothesline)
10. LS as she climbs the fence
11. full shot (FS), same
12. LS, Mary and Jack as she approaches
13. MS, Jack; MCU, Mary from behind
14. reverse shot
15. LS, both with the automobile
16. closeup (CU), Mary; Jack (from behind)
17. reverse
18. dialogue title
19. to 17
20. to 16
21. to 14
22. MS, Mary from behind generic “tense” music
23. MS, Mary
24. to 14; dissolve to black
25. story title
26. [fade in?] LS, Jack and Mary by the car (from behind)

**MUSIC (SOUND TRACK)**

1. “small-town” theme; a moderate waltz tempo; major key “march” or “hero’s” theme from opening credits
2. “small-town” theme fragment
generic “tense” music
3. “small-town” theme starts again generic “tense” music

3. “small-town” theme starts again
The Repertoire of Film and the Film-Music Canon. Even if one ignores the rich heritage of filmmaking in other countries and limits one’s study to American films, the repertoire is very large. It is, in other words, no easier to achieve a secure and wide-ranging knowledge of films and film music than it is to acquire the knowledge of European musical traditions we expect of our students and ourselves.

Nor is there a generally accepted film-music canon to fall back on, either for teaching or research purposes. Something approaching a canon of feature films can be distilled from the scholarly literature, and in some instances might serve as a guide for music as well; the list would include the films of D. W. Griffith (though they remain problematic with respect to their musical accompaniments), The Informer (1935), Citizen Kane (1941), Mildred Pierce (1945), and the Hitchcock films after 1950, including Vertigo, North by Northwest, and Psycho. But a few frequently discussed films, surprisingly, have mediocre scores (I shall name no names), or, as in the case of a significant number of post-World War II European films, no scores at all. Furthermore, scholars have given relatively little attention to film musicals, fantasy or horror films, and the more conventional Hollywood films of the thirties and forties. Without these it is impossible to obtain any kind of representative historical view of film-music practice.

Another strategy might be to focus on those film scores that have won Academy Awards. The resulting list, however, would be rather small, poor in silent-film scores, and would not mesh well with the list in the paragraph above. It would also miss certain highly influential scores, such as Erich Korngold’s music for the Errol Flynn vehicle Captain Blood (1935)—that year, Max Steiner won the first Oscar for an original dramatic score (The Informer). Expanding the list to include other categories—such as “Best Song” or “Best Arrangement”—would not add much of interest except to specialists.

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11The film-music literature is too fragmented and unreliable to be used in a comparable way. See Clifford McCarty, “Introduction: The Literature of Film Music,” in McCarty, ed., Film Music 1, ix-xiii.
A better tactic might be to include not only “Best Score” winners but also nominees. Augmented with a few important but “unsuccessful” films (such as *Citizen Kane*), this list could be quite useful, though it would be somewhat large and biased a bit too much toward the present for my taste.

Still another possibility is to start with films included in the National Film Registry, created by Congress in 1988. The films were chosen by the Library of Congress and the National Film Preservation Board. Nominations by the public were also considered. A total of seventy-five films will make up the Registry. The first twenty-five were chosen in 1989; they are: *The Best Years of Our Lives* (1946; music Hugo Friedhofer), *Casablanca* (1942; Steiner), *Citizen Kane* (1941; Herrmann), *The Crowd* (1928), *Dr. Strangelove* (1964; Laurie Johnson), *The General* (1927), *Gone with the Wind* (1939; Steiner), *The Grapes of Wrath* (1940; Alfred E. Newman), *High Noon* (1952; Dimitri Tiomkin), *Intolerance* (1916; J. C. Breil), *The Learning Tree* (1969), *The Maltese Falcon* (1941; Adolph Deutsch), *Mr. Smith Goes to Washington* (1939; Tiomkin), *Modern Times* (1936; Chaplin and David Raksin), *Nanook of the North* (1922), *On the Waterfront* (1954; Leonard Bernstein), *The Searchers* (1956; Steiner), *Singin’ in the Rain* (1952), *Snow White and the Seven Dwarfs* (1937; Leigh Harline [bgnd. music]), *Some Like It Hot* (1959), *Star Wars* (1977; John Williams), *Sunrise* (1927), *Sunset Boulevard* (1950; Franz Waxman), *Vertigo* (1958; Herrmann), *The Wizard of Oz* (1939; Herbert Stothart [arr. and bgnd. music, based on Harold Arlen’s songs]). Even this list, without the remaining fifty films still to be chosen, has sufficient variety in film type and genre as well as composer to serve fairly well for pedagogical purposes, but as a core repertoire for research it is simply too artificial and too quirky.

The formation of a film-music canon, by some device or another, seems inevitable, if for no other reason than that a composer’s work becomes more fashionable (or falls out of fashion) and writers make choices about the films and scores they prefer to discuss—and other writers respond to those discussions. Finally, one can hope that the process may tell us something about the formation
of other musical canons, including that of European concertstage masterworks.

Another point closely related to canon formation is that films have mainly been regarded as popular entertainment. This does have some definite advantages for an instructor, for it gives easy access to links between students' classwork and their everyday lives (I am no longer thinking of a film-music course, but of film incorporated, to any degree, into a traditional music course). On the other hand, it raises the problem of a persistent high culture/low culture dichotomy in the fine arts (a distinction by and large irrelevant in other disciplines), as well as the fact that musicians in academe often ignore or reject media or art products precisely because they are popular or mass entertainment. Discussing this problem in class is itself a valuable exercise, particularly since, unlike concert music and jazz, the distinction between film and concert music cannot be made on a stylistic basis alone, for every major style of later nineteenth- and twentieth-century composition may be found exploited in film scores.

**Resources in published music.** So far as I know, no complete orchestral score for a sound film has ever been published, nor has any piano conductor's score or set of sketches. On the other hand, composers have sometimes published their film scores in forms appropriate for concert-music use. William Walton, for example, published a suite which contains the majority of his score for Laurence Olivier's production of *Henry V* (1945); Aaron Copland published a suite called *Music for Movies*, which contains excerpts from both feature films and documentaries; and Prokofiev published music taken from *Lieutenant Kije* (1934), *Alexander Nevsky* (1938),

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12 Film-music scholarship does have some difficulties at the level of basic research: as H. Stephen Wright puts it: “There exists in the world today a huge body of contemporary music for which there is virtually no bibliographic control, very limited or nonexistent access, and only the most minimal attempts at preservation.” This, alas, is film music. (H. Stephen Wright, “The Materials of Film Music: Their Nature and Accessibility,” in McCarty, ed., *Film Music 1*, 4.).
and *Ivan the Terrible* (1943; this last has been said to contain all the music from the film, but I have not been able to verify this yet).

Extended quotes from scores are not common in the critical literature, but short citations do occur—see the following: Roy Prendergast’s introductory survey, which contains a variety of examples, including a series of quotes from Hugo Friedhofer’s Oscar-winning music for *The Best Years of Our Lives* (1946) and David Raksin’s score for the historical costume drama *Forever Amber* (1947); Irwin Bazelon’s survey, which has nearly forty full-page facsimiles from scores or sketches, mostly from films of the sixties or early seventies; Graham Bruce’s monograph on Bernard Herrmann; and, for harmonic examples, Royal S. Brown’s article on Herrmann’s music for Hitchcock films.13 Claudia Gorbman cites melodies from *Mildred Pierce* and *Zéro de conduite* (1937); Kathryn Kalinak and Steven Westcott reproduce motives and themes from *The Informer* (1935) and *Ben Hur* (1959), respectively.14

Significant music cues from some sound films were also published in the thirties. Examples include a collection of cues by Max Steiner published in the form of piano pieces in 1932, as well as separately published cues from *King Kong* (1933), including “Natives’ Dance” and “Ann’s Theme.”15 Apparently, this was a vestige of earlier practice, when publication was driven by the fact that silent films were accompanied by live music performances.

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15 This information is taken from listings in documents in the Max Steiner Archive, Harold B. Lee Library, Brigham Young University.
Later, it remained common to publish songs written for or featured in a film, or songs which were expansions of themes from a film. To some extent, this is still true today. Four examples from among many: Leigh Harline's "When You Wish upon a Star" from Disney's animated feature *Pinocchio* (1940); David Raksin's "Laura" from the film of that name; "Mam'selle" from *The Razor's Edge* (1946; song by Edmund Goulding; score is by Alfred Newman), and "Moon River" from Henry Mancini's score for *Breakfast at Tiffany's* (1961). Of course, film musicals, whether original productions or filmed versions of stage productions, are rich sources of songs. The Astaire-Rogers musicals, for example, include songs by Irving Berlin in *Follow the Fleet* (1936) and *Top Hat* (1935), by Jerome Kern in *Swing Time* (1936), and by George Gershwin in *Shall We Dance* (1937).

*Ear training.* Another way to acquire thematic or motivic materials for study is to transcribe them from the sound track. I find that students who have had four semesters of ear training can take down most melodies from the classic Hollywood film repertoire without undue difficulty, so long as the melodies are clearly defined in terms of phraseology, etc. (that is, are not simply concatenations of motives and shifting meters/tempi/moods). Those students who do not have absolute pitch can check pitch (beginning tone, tonic, etc.) using a pitch pipe, piano, or other device that may be at hand. Since a score will often consist of three basic types of music—several themes or motives, passages which develop those motives, and stereotyped action or connotative music—a student can develop a remarkably detailed description of a film score with lists of themes and types of conventional passages in hand.

Most Hollywood feature films have at least one self-contained, clearly phrased melody which would be suitable for dictation. Apart from their use in film study, such melodies can be useful for ear-training classes. Even using dubbed excerpts from the sound track provides a certain amount of variety in class activities, particularly if dialogue or sound effects are included. At the least,
orchestrated melodies provide interesting problems in contextual listening.

Examples: *Gone with the Wind* (1939): the famous “Tara” theme is constructed in a simple antecedent-consequent two-phrase period, and is both diatonic and internally repetitious. Furthermore, it is repeated five or six times in the main titles (though rarely in its entirety afterwards). Except for this theme, some source music (dances), and versions of “Dixie,” there are very few sufficiently distinctive themes or motives in this film.

*Johnny Belinda* (1948; not the 1982 TV-movie remake), which earned Jane Wyman an Oscar, includes seven or eight complete melodies which are diatonic, rhythmically repetitious, and simply harmonized. Most are modeled on—or perhaps are direct quotations of—traditional Scotch or Scotch/Irish melodies, and at least one, labeled “The Baby,” first heard after Belinda’s child is born, is given in its entirety twice later, including at the end of the film.

*Mildred Pierce*: after a very brief introduction coming off the Warner Bros. signature tune,16 the music for the main titles is a setting of a complete, self-contained melody with an ABA design and would be suitable for dictation, except perhaps for the chromatically meandering B-section. Otherwise, the majority of the score is built from leitmotives and conventional dramatic passages and stinger chords, which are not very amenable to ear-training purposes. On the other hand, the most heavily used leitmotive, D-flat–C–A-flat (the opening of the main theme), is often varied and would make a good exercise in recognition of transpositions or

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16 A “signature tune” is a phrase or theme which, primarily through repeated use, becomes very closely associated with a studio, actor, or film. An obvious example of a signature tune is “Thanks for the Memories,” which connotes “Bob Hope” for almost any listener. Another is the song “As Time Goes By,” the signature tune for the film *Casablanca* (1943). The Warner Bros. signature tune was written by Max Steiner as the beginning of the main-title music for *Gold is Where You Find It* (1938)—although in a note on the first page of his sketches for this score, he claims that he had used it once earlier, in *Tovarich* (1937). These sketches are in the Max Steiner Archive, Harold B. Lee Library, Brigham Young University.
interval changes (later examples: D-flat—C-flat—A-flat, D-flat—C—G-flat, and their transpositions).

Certain other scores pose interesting possibilities for ear-training applications because they are monothematic; that is, the underscoring—except for some conventional dramatic gestures—is based exclusively on one theme, usually stated first as the main title music. The classic of this type is David Raksin’s score for Laura (1944), built on the standard of that name.¹⁷

The examples given above come from films whose scores I have studied recently, but almost any score from Hollywood’s golden era of sound film (c. 1930-1950) would provide similar examples, as would a significant percentage of later films. Which films one should use as sources depends mainly on the instructor’s relative familiarity with a particular film genre or repertoire and access to prints or recorded sound tracks. In any case, whether standard songs, film musicals, or themes in narrative films, a large potential repertoire is available for enriching ear-training in materials, stylistic range, and medium.

Film music and music theory. Film places music in a new aesthetic environment that offers new opportunities to test theories of musical listening, hierarchical structure, or formal and tonal organization. It may also nudge music scholars into confronting more systematically and regularly some (admittedly complex) problems of intertextuality—which begin, of course, with the relationship of the film score to the other elements of the film—as well as the impact of social and ideological constraints on both compositional design and aesthetic judgments. The insights gained can surely feed back into our understandings of concert and stage music in the later nineteenth and twentieth centuries.

¹⁷See Roy Prendergast’s discussion of this film in A Neglected Art, 58-68.
The general books on film music, whatever else they may do, always address the question: What is music’s function in film?\textsuperscript{18} And most arrive at one or another variant of the same answer: first, music is a part of a whole which is identifiable as the film’s narrative or signifying system, or simply its “text”; second, music is subordinate to the visual image. Thus, music can relax or intensify the pacing of a scene, it can reflect emotion or create atmosphere, it can evoke social or ethnic stereotypes or localize time or place (military fanfare or march, church music, a menuet, can-can, or tango),\textsuperscript{19} it can imitate screen action (for obvious reasons, this is called “mickey-mousing”), and it can even add referential or narrative dimensions missing from the image track (by quoting military music, though no soldiers are present, for example, or by recalling a theme associated with an earlier event in the film).\textsuperscript{20}

In every case listed above, it would obviously be insufficient to analyze the internal design of a musical cue independently, taking no notice of the music’s expressive, narrative, or other signifying function(s).\textsuperscript{21} Thus, the parallel between film music and descriptive or program music of the nineteenth century is by and large

\textsuperscript{18}See comments on Prendergast and Bazelon below. I have also in mind here anecdotal histories such as Tony Thomas, \textit{Music for the Movies} (New York: A. S. Barnes, 1973) and Mark Evans, \textit{Soundtrack: The Music of the Movies} (New York: Hopkinson and Blade, 1975), and more technical or scholarly works, such as Gorbman or Roger Manvell and John Huntley, \textit{The Technique of Film Music}, rev. ed. (New York: Hastings House, 1975).

\textsuperscript{19}Gorbman refers to these conventions as “cultural musical codes” (13).

\textsuperscript{20}Among essays built around lists of this sort, the best are Gorbman’s chapter 4 ("Classical Hollywood Practice . . .") and Prendergast’s chapter 6 ("The Aesthetics of Film Music"), which uses as section headings quotes from a newspaper article by Aaron Copland.

\textsuperscript{21}I am not considering closely constructed misreadings here. One might even say that a composer “misreads” his or her own score by extracting it from the film and turning it into concert music. Even when they are the same notes, a film score and a concert suite are very different musical entities, involving a massive reordering of what Gorbman calls “pure musical codes” (13-14).
erroneous, since the usual standard of judgment—can the music stand alone, separated from its title or program?—is not applicable. The same is true of the critical framework of the absolute-music/program-music dichotomy, which plays significantly into the European masterworks canon (opera notwithstanding) and which is heavily implicated in the high-modernist prejudices that still drive a great part of music analytic activity. Film music is a new medium which draws equally on opera, the stage musical, and concert music (and, post-1950, on jazz and pop as well). Thus, no matter where we begin with the analysis of film music, at the level of style comparison or individual work-analysis, we are confronted with large critical questions: “Is film music good or bad music?” “And, on what terms?” “Is an individual film score good or bad?” “And, on what terms?” This is not even to consider historical-stylistic questions, such as: “Do film genres and film-music genres coincide?” “Is this score representative of its genre?” “Of its composer?” Etc.

My own position (at present) is that film music in its earlier years drew more from opera and operetta than from any other traditional genre. Yet analytic method has been concentrated almost exclusively on procedures in absolute music and is poorly adapted for use in more complex types of genres; a tradition is thus well-established which is, generally speaking, powerless in the face of a medium such as cinema. If our mainly formalistic, procedure-oriented analytic methods have greatly improved our understanding of the absolute or concert music repertoire, they have also impoverished the possible contexts for musical analysis and therefore close critical discussion of music in general. Analytic tools should not lock out musics, but should be reinterpreted and reconstructed when necessary to cope with whatever musics are at hand.

To summarize: it is nearly impossible to study a film score purely in terms of the structuralist/formalist descriptions of design that most of us are used to as the primary activity of music analysis. Other questions constantly intrude in the study of a film score, and not merely questions about what in the image track or plot may have motivated an event in the music.
Among those questions are ones related to the most basic musicology, such as “What is the text?” It seems reasonable to assume that the released print of a film constitutes its text, but there are alternate versions of released prints for some films. And, since music theorists and historians have been uncomfortable with recorded sound, should we not give priority to a written-out score? But, what score? The composer’s “short score” from which the orchestrator worked? The piano-conductor’s score? The full orchestral score? And what about changes made by sound engineers or editors, with or without the composer’s permission, after the recording sessions? Finally, for the open performance practices of silent-film accompaniment, it would seem impossible in most instances to undertake traditional music analysis.

Another fundamental question is “Who’s the composer?” Many of Max Steiner’s scores, for instance, might fairly be labeled “Steiner/Friedhofer” in recognition of the generally accepted importance of orchestration (timbre) to music’s role in a film. Nor are film credits always reliable. Karl Hajos is credited with the music for \textit{The Werewolf of London} (1935), but he wrote only fifteen minutes of original music; the other thirteen minutes came from the studio library, cues written by Heinz Roemheld for use in two earlier films.\textsuperscript{22} It is also well-known that Alfred Newman, who was music director at 20th Century Fox, assigned members of his staff to write parts of scores credited to him. And in 1970 Bernard Herrmann complained about the allegedly common practice of “ghostwriting” scores.\textsuperscript{23} Needless to say, problems of attribution cause difficulties not only for style comparison but also for work-analysis.

Having answered to one’s own satisfaction questions about composer and text, one is still faced with questions about analytic priorities and method. It is characteristic of film criticism to treat the entire sound track as a unit. Thus, music is only one of three


components, the others being dialogue and "effects," this last being natural or apparently natural sounds other than speech. A complete, closely focused analysis of the music for a film would then reasonably work within the framework of the music's interaction with the rest of the sound track, since features of many musical events are influenced by dialogue or effects—dynamic levels, orchestration choices, and timing of particular events such as stinger chords or even appearances or combinations of motives. Hugo Friedhofer, for example, claimed that he would schedule "a conference with the film editor and the sound effects cutter in order to ascertain whether or not certain sequences shot out of doors, and in which the dialogue has been partially obscured by the sound of wind, running water, . . . etc., are to be replaced by clean dialogue; what kind of sound effect it will be necessary for me to take into consideration when planning music for such and such a scene, and so on."24

Even the traditional analytic focus on harmony and tonality can be disrupted by film scores. Tonal design, defined here as the patterning of succession and relationships of key centers, has traditionally held a privileged place in the composition of concert music (though less so in music for theater), and can claim broad formal and affective (or sometimes other referential) dimensions. In film, the matter hasn't been explored thoroughly yet, but since early Hollywood composers, by and large, came out of theater (or radio) backgrounds in Europe or the United States, it would at first seem unlikely that large-scale key constructions—at least ones of the simplicity found in most concert music—would play a significant role in music for film. Indeed, Gorbman cites one early technical manual to the effect that "if music has been absent for more than fifteen seconds, the composer is free to start a new music cue in a different and even unrelated key, since the spectator/auditor will have sufficiently forgotten the previous cue's tonality."25 On the other

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24 Cited in Manvell and Huntley, 205.

25 Gorbman, 90.
hand, composers who were also concert-music composers might be expected to pay attention to this aspect of composition in film scoring as well. Alfred Cochran, for example, has shown this was the case with Aaron Copland, who came to film with twenty years' experience as a concert composer.26

From my own investigations to date, I would venture to say that composers during the early history of sound film used a number of overlapping and potentially conflicting models for tonal design, depending on whether they treated tonal patterning as an abstract sort of narrative referential code:27 the unified hierarchical schemes of concert music, simple "chaining" of key regions (which had been kept alive in popular theatre), the seemingly radical disunity of the "15-second rule," and later nineteenth-century design archetypes such as associative tonality and dual keys. Composers' choices were further complicated by the fact that music was rarely continuous throughout a film, by a lack of power sometimes to dictate where music would be used, by source music already incorporated into the film, and by the vestiges of silent-film tradition in composite scores (such as Hajos' mixing of original music and library tracks in *The Werewolf of London* or the non-referential use of music by Wagner, Tchaikovsky, or other nineteenth-century composers). The results were also influenced by post-recording image-track and sound editing—it was not uncommon for passages of music, from two- or three-second tags to entire cues, to be deleted from the final release print.

Examples are in order. In the score for the celebrated but enigmatic Kurosawa film *Rashomon* (1950), the composer Fumio


27The assertion that large-scale tonal designs in film music tend to be abstract and symbolic rather than functional follows Leonard Meyer's claim that "the history of tonality in the nineteenth century can be understood as a continued 'foregrounding' of syntactic relationships" (*Style and Music* [Philadelphia: Univ. of Pennsylvania Press, 1989], 302) and the generally negative results reported by Nicholas Cook in "The Perception of Large-Scale Tonal Closure," *Music Perception* 5/2 (1987): 197-205.
Hayasaka clearly adopts a scheme which encompasses all the music cues and incorporates tonal associationism or symbolism. In part, we may assume that he felt secure enough to plan this carefully because of his close working relationship and personal friendship with the director. A summary of the tonal design of the fourteen music cues is given in Example 1. Choices were made using a number of criteria, including relative stability of the tonal area (length of the passage, definition of the tonic, clarity of functional relationships), significance of associated thematic or motivic materials, plot positioning, and the logic of the evolving tonal scheme (though this last runs the risk of being self-fulfilling). Hayasaka takes one of the traditional modal tonics of medieval Japanese court music (E) and has it do double duty as a Western-style tonal center (the tonality can be understood as E minor, E Phrygian, or a mixture of both). He then constructs a large-scale scheme built around this traditional-tonic/modern-tonic pairing: E, associated with the court music of the main titles and the scenes at the ruined city gate, is "reality" or diegesis; C, as E-minor's submediant, is the most important secondary key and is readily associated with the couple, and later, more specifically with the wife, there being ten minutes of nothing but C during cue 11, which imitates the style and process of Ravel's Boléro. I would also suggest that C is something like the "story key," associated with the dubious accounts of events offered by the various characters throughout the film. Note, for example, that C is first established clearly in cue 6, when the bandit Tajomaru first encounters the couple on the road, that C in the ninth cue is associated with Tajomaru’s version of his encounter with the wife, and that, from the ninth cue to the end of the film, the only really stable tonal areas are C and E.

Max Steiner's score for Mildred Pierce uses similar methods, but the resulting network of tonal relationships is much more complex. Given that Steiner's typical working method was to compose the score after the film was completed (though before any
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- 8. (Tajomaru and husband fight) 
- 9. (Tajomaru and the wife) 
- 10. (Tajomaru and husband fight) 
- 11. (Wife's story) 
- 12. (Husband's story) 
- 13. (Final statements of the medium) 
- 14. (Final shots & end title)
final pre-release "tinkering"), it should be possible, at one level, to interpret the score as embodying or at least suggesting his personal reading of the film, a notion that has some interesting implications for analysis of the musical materials, particularly tonality and thematic design. The main title, after the Warner Bros. signature, is in D-flat major and consists of the fully elaborated "Mildred" theme, as described above. During the first brief scene—late at night at a beach house; Monty Berigan, Mildred’s second husband, is shot and killed, though we do not see the murderer—the music wanders toward E minor, and a pedal point B is firmly settled on by the time the scene changes to a pier, later that night, as Mildred contemplates suicide. After more wandering, an emphatic E-flat-minor six-four chord (with an added sixth, C-flat) is reached, and this resolves to E-flat minor: $V^b_9$, before a "harmonic tag" appears, a first-inversion A-minor triad which acts as reinforcement for the sound effects "stinger" of a policeman’s nightstick banging on the railing. With this the main-title cue ends.

In this cue, Steiner has established all but one of the components of a tonal network he exploits throughout this film. The associations thus established are partly based on traditional tonal functional hierarchies, and are partly of the kind referred to by Gorbman as "cinematic musical codes," that is, associations established within the film itself rather than imposed from without by cultural conventions. The missing element is the key of G major, which is used at length in the third cue under two stable and fully presented themes, both referring to Mildred’s first marriage and a normal domestic life—one is associated with Mildred’s first husband, Bert, the other with their two daughters.

The tritone relationship of D-flat and G is the principal member of the network: the former is associated with Mildred’s success as a business person, with her independence and individuality, but also with the core problem of her life, her relationship with her grasping, morally bereft daughter Veda. E-flat and E minor function interchangeably as what might be roughly called "trouble

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28Gorbman, 13 ff.
with husbands” or “trouble with men,” and other keys, notably B-flat, F, C, and D major as well as D minor play into the network in various ways as well. A few examples: The second cue, which starts as Mildred’s former business partner Wally realizes that he has been abandoned in the beach house, is very unstable tonally, but begins on C-sharp and briefly defines C-sharp minor. Later, when it dawns on him that he has been framed and that the police might charge him with Monty’s murder, a resounding E-minor six-four chord emerges as a stinger out of the murky harmonic surroundings. After an extended sequence built on the opening of Mildred’s theme, the cue ends with a long-drawn-out bass descent B-flat—A-flat—G—F—E, the final note reached as Mildred enters the police station. The next cue, the beginning of the flashback to a happy family life, is firmly in G, but the following cue begins in E-flat minor as Mildred and Bert argue, then agree to separate. The music shifts abruptly to G as the scene changes to the children playing outdoors. The sixth cue establishes the link between D-flat, Veda’s greed, and Mildred’s business, and the seventh moves between clearly articulated keys G and D-flat as Mildred moves back and forth between home life and the demands of managing her growing restaurant chain. The keys of C and D are also established as half-step related functional “equivalents” of D-flat, in the same way that E-flat and E minor are established as equivalent, by placing them in musical situations where we would by now expect D-flat.

In general, in working out tonal relationships, Steiner made fairly frequent use of these half-step equivalences and, as here, combined them with more traditional functional relationships, in particular diatonic and chromatic third-relations. He exploits the tritone in its traditional meaning of “opposition” to, or greatest distance from, the tonic, but so far I have found no instance in which dominant or subdominant relations take on any associational properties. “Double tonic” complexes—or here “triple tonic” (D-flat, G, and E-flat/E minor)—seem to be the rule rather than the exception.

Issues in harmonic and tonal design are emblematic of those that can be raised in connection with any of the musical elements.
Among other points worth examining are appropriate theoretical/methodological responses to film composers' treatment of melody and timbre/instrumentation, since it is clear that these elements are routinely asked to carry the greatest part of the weight of musical "information" conveyed by a score. Is this a unique problem of film music, or does it suggest the need for an altered set of priorities for theories of concert music, as well? What about the patterning of dynamics, which is complicated by the activities of the studio's sound editor? How does one approach the issue of musical form, by which I mean here the interplay of large-scale rhythmic/metric patterning and thematic/motivic articulation? The multiple time strands of film (in the sense of Wallace Berry's "multiple rhythms") are generally clearly delineated even at hierarchically superior levels because they are associated with components of image track or sound track: plot pacing, the pacing of image track editing, dialogue/non-dialogue articulations, musical divisions— to which list we could add external clock time, insofar as it is applicable at all. A kind of internal unity is established in the music by the "sectionalization" imposed in the series of cues. But music is also used to provide unity—especially motivic music (leitmotives); blocks of same texture/instrumentation, such as a fugue; or blocks of differentiated styles (Wagnerian symphonic vs. jazz, for instance). And, reciprocally, a hierarchy of dramatic functions can influence reading of musical organization, forcing—or at least encouraging—a certain kind of reading of musical formal/sectional hierarchy.

For example, as I interpret his practice, Max Steiner worked with five basic types of musical units in underscoring: a stylized miniature overture for main titles; complete, clearly phrased themes,

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29The problem of clock time vs. narrative time is especially evident in High Noon, one of the few classic Hollywood films in which the two coincide. The effect is not to "relax" narrative time into clock time, but to force the viewer to take notice of the latter as "passing time," which slows down narrative time and increases tension. The typical lack of coincidence between clock time and narrative time also compromises—or at least renders exceedingly difficult—analysis of film-music "form" in terms of proportional structure.
borrowed or original (the latter are typically on the antecedent-consequent model)—used more often than not for characterization; music for dramatic situations (leitmotivic development of themes); music for comedic situations ("scherzando"—Steiner's own term was "screwy"—usually with considerable mickey-mousing); and generic action music, used for chases, running, etc. The last is derived from the "hurry" music of the silent era, and even in Steiner, who was as heavily committed to the leitmotivic as anyone, it tends to be rather faceless, a conventional music needed to enhance the sense of action or motion but without thematic or even tonal consequence. Clearly, any sense of formal hierarchy in the music here calls heavily on extramusical factors for its definition.

Conclusion: Music Theory and the Literature of Film-Music Analysis. Depending on one's definition of "analysis," the analytic literature on film music is either quite extensive or virtually nonexistent. A surprising percentage of the literature on music in film could fall into the general category of "work-analysis"; that is, studies focusing on, or at least including, examination of the features, procedures, or characteristics of an individual film and its score. But if one

30There are a few "subsidiary" types as well, such as short cues used purely functionally as transitions between scenes or as stereotyped characterizations (brass flourishes for "authority," for instance). Nor do I mean to imply that Steiner's practice stands for all of classic Hollywood cinema—the comments would apply quite well to Alfred Newman, Adolph Deutsch, or Franz Waxman, but rather less well, generally speaking, to Bernard Herrmann or Miklos Rozsa.

takes the definition of "analysis" prevalent among music theorists for the past thirty years or so, then the literature is very small indeed, restricted to work-analysis limited in both tools and agenda: the analyst is obliged to privilege the integration of small-scale and large-scale features of pitch and, sometimes, rhythmic organization while choosing from a "canonic set" of analytic methods or systems, or at least a carefully argued variant of one of them. Of all the texts I have read, only one—Alfred Cochran's dissertation—could hope to meet such a restricted definition, and even Cochran's analytic methodology is more eclectic than closely focused.

To be fair to the discipline of music theory, current debates about the nature, function, and contexts of musical analysis are already expanding the limits of method beyond such severe constraints, and would permit us to include in our "short list" of film-music analyses texts by those writers who show the most sustained interest in problems of music's role in film narrative: among others, Graham Bruce, Claudia Gorbman, and Kathryn Kalinak. And, from the standpoint of music theory, one might complain that the published film-music literature in general lacks evidence of sophisticated interpretation of the musical materials and shows little if any recognition of current music-theoretical tools. For example, although the literature is heavy on discussion of melodic/motivic features, no one has taken advantage even of the merely relative formality of Leonard Meyer's melodic archetypes (not to mention voice-leading and other schemata discussed by Meyer and Robert Gjerdingen).

1989).

Finally, one has to admit that film is an inhospitable environment for analytic methods which were designed for concert music and whose underlying aesthetic values have their source in high modernism, fifties' scientism, and sixties' structuralism. Serious reinterpretation is required to make these tools fit for use in an art where authorship is often in doubt, where contexts constantly point outside the musical materials and their "internal" processes, and where music is rarely continuous and is only one element—usually a subservient one—among several. Still, one might reasonably suppose that recent phenomenological models for musical analysis, the revivified expressivist-hermeneutic model, and a musical semiotics could all find the medium congenial. And film music is far easier to work with than, say, music of other cultures, where system, technique, and social context are often radically different—film music is, by and large, the music of the European tradition set in a different aesthetic context. Thus opportunities are near at hand to expand the range of closely articulated musical understandings.