Chapter 10

Finding and Editing Music

Remember this:

- There's no reason a film can't have a fully professional-sounding score, even on a limited budget. But doing it the wrong way can get you into serious legal and financial trouble.

- Today's music libraries have an incredible range of good music. If you take some time, you'll find exactly what you need.

- Music editing isn't difficult once you apply a little ear (and finger) training.

Even before they learned to talk, movies had music. Every theater had at least a piano player; bigger houses had elaborate organs that could also make sound effects and some even had small orchestras. While the choice of music was often at the whim of theater management, the more important feature films came with original scores on sheet music. You could even say silent films sparked the singing commercial: As new technologies like the Victrola and radio became popular, movie producers commissioned ballads that incidentally included the film's title. (The old standard, "Janine, I Dream of Lilac Time" was actually written to promote the movie *Janine*.)

But film music didn't take off until the synchronized soundtrack was possible. Many early talkies followed the musical tradition of silent films, with somewhat random instrumentals playing under dialog. Then Hollywood began importing European composers with a tradition of orchestral *program music*—music designed to tell a story. Movie scoring became an art form. Some of the greatest classical composers of the twentieth century, including Prokofiev, Copland, and Bernstein, also wrote for films.[1]

If you're making a narrative film, you're probably already thinking in terms of music. But even if you're producing documentary, corporate, or event video, music can be used the same ways: to

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1. A suite from Prokofiev's *Lieutenant Kijé* score is now part of standard symphonic repertoire, as is Copland's *Our Town*. Copland even won a best-scoring Oscar for *The Heiress*. Leonard Bernstein wrote one film, then vowed never to repeat the experience (see chapter 6). Prolific film composer Elmer Bernstein was no relation.

set the mood, underscore emotions, provide a rhythm for visual sequences, and comment on what we're seeing. The techniques for spotting, obtaining, and applying music are the same for any film, whether it's a drama or a factory tour.

Spotting Notes

You don't need to be a musician to figure out what kind of music your project needs. It does help to be familiar with a wide variety of musical styles, but even that isn't essential. What's critical is that you know your project and its goals.

The music selection process should start before you hire a composer or gather library discs. Read the script or watch a rough cut and see where music is needed. Most likely, you'll want a main title and ending, even if it's just for a few seconds while we see "Installing Your New Disposal" in front and "Acme Gearworks" at the end. But there are probably other places where music can help.

Find places for music by making spotting notes, even for something as simple as a 10-minute sales film. For each scene or segment, write down what the music could be doing. It doesn't need to be in musical terms. Terms like *music swells with inspiration,* or *exciting sports music* are useful. If music is just there to tie testimonials together or support a narrator, it should still reflect the mood of the piece. Be aware of any emotional or subject shifts because that's where the music should change. Of course, if something suggests a particular style or tempo—perhaps a period piece under historic footage or a fast rhythm for a montage—write that down as well.

Break your list into *cues*—segments of music between a few seconds and a few minutes long—linked to specific on-screen sequences. This lets you deal with music pieces efficiently when searching libraries, talking to a composer, and putting the music in place. If there are only a few cues, give them descriptive names. If there are many, numbering them helps.

If a scene doesn't suggest music, perhaps silence is more appropriate. Hold back from time to time, and alternate scored sequences with dialog only or with sound-effects driven sequences. One common approach for documentaries is to score narrative sections but let the interviews stand on their own without music. Some short films work best with continuous music; longer films often benefit by dropping the music for a while, so we're aware of its return. Also consider if you'll need *source* (also known as *diegetic*) *music,* which is music presumably coming from something on the screen. Any scene that involves a working radio or TV, or is set in a restaurant or a party, probably needs source music.

Spotting notes are important even if you're the only one who'll be seeing them because they provide a structure for music selection. If the music is coming from a library, it's a lot easier to search the library when you know what you're looking for. ("I'll know it when I hear it," is a great philosophy for wasting time.) If you're using original music, the spotting notes can help narrow

your search for a composer or band, and be essential when you start discussing the project with the musicians.

Getting the Music

Music is subject to the Golden Triangle of Production: You can have it excellent, fast, or cheap—pick any two. If you're on a limited budget, it's worth taking time to find great music that doesn't cost much. One place you *won't* find great inexpensive music is at a record store. Law and common sense both get in the way.

Copyright Considerations

Students and other low-budget filmmakers sometimes ask why they can't use songs from their personal CD collections; after all, they paid for the music (if they didn't download it from a sharing service). Copyright law takes a different view. When you buy a CD, you get the right to play it for yourself and close friends, or to record a backup copy for your own personal listening. Syncing it with images or playing it outside your immediate circle is almost always specifically forbidden. Copyright violation might not bother you—and a low-profile infringement might never get noticed—but if the lawyers come after you, they'll win.[1] If you're not sure about any of this or think it doesn't apply in your case, talk to an attorney *before* you use the music.

- You can't defend yourself by claiming Fair Use. That doctrine allows criticism, parody, and commentary on the music itself—not the use of the music as a video underscore. (Fair Use is a set of principles you may use to defend yourself in court if you've been accused of infringement; it's not a free ticket for certain kinds of copying.)

- You can't defend yourself by claiming that you couldn't afford to pay for a song, so its creator isn't losing anything when you use it for free. Economic loss is only one of the things courts look at. Paupers and nonprofits are subject to the same laws as professionals.

- You can't argue you're actually promoting the music by giving it more exposure, unless the owner of the music has agreed to this exposure in advance. A band has the right to decide what vehicles it will be associated with.

A couple of copyright myths are based on misunderstandings of real situations where usage is legal. TV stations pay fees to ASCAP and BMI to broadcast songs as entertainment, but those fees are legally defined as compensation to the composers and lyricists for the public performance of their creation. The fees have nothing to do with using a specific recording or syncing the music with video. Also, at one time courts accepted that copying fewer than eight bars of a

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1. It's possible your lawyers could build a convincing case that a wedding video or nonprofit fundraiser *is* Fair Use. I've never heard of this being done. Even if your lawyers manage to pull this off, you'll probably end up paying more for them than a proper license would have cost in the first place.

song was not plagiarism. But the 8-bar rule applied only to the notes on paper, not the performance, and was specifically eliminated many years ago.

⚠ *Gotcha*_____

But it's the client's CD... Some wedding videographers believe they can avoid copyright issues by using music from the client's personal collection. Wedding videographers may even give the client a particular music CD as a wedding present, just so they can use its music in the video.

   While it's unlikely a record company will pursue an amateur who sets his or her own wedding video to music (even though it's clearly an infringement), professional wedding videographers are considered fair game.

   I've heard of producers being put out of business because they claimed innocent use of a copyrighted song in a wedding video. The happy couple just happened to show their wedding album to the wrong neighbor, an employee of the giant corporation that owned the song. Some companies even reward their employees for spotting these infringements.
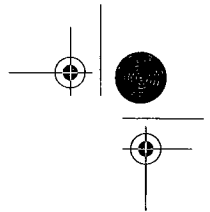
I personally believe the large record companies tend to exploit their artists shamelessly. A band can have two or three hit albums before it sees a penny. Unfortunately, some of the money record companies don't give to artists goes to staff attorneys, who protect copyrights vigorously. So as a professional, I follow the rules.

But there are more practical production reasons for not stealing music. Well-known songs get tied up with viewers' personal memories. Unless the music is incredibly appropriate, it may draw the viewer away from your message. You also don't have as much editing flexibility. If viewers know the original well, they'll be distracted by cuts. Even if you stick to obscure tracks and are never spotted by the record companies, using unlicensed music limits your options for the film. Exhibitors, festivals, and networks won't touch a film unless the producer guarantees it's fully cleared.

Using music legally, for free   You can avoid paying for music if you enlist local musicians to perform their own songs or public domain standards, in exchange for a screen credit and a copy of the film. Some very fine scores have been done this way. You can occasionally find musicians eager for scoring experience, popping up on the Internet and advertising in the `rec.video` newsgroups. Just be sure you're happy with their musicianship, you understand the production costs that might be involved, and you have a written agreement that covers the rights listed below. If there's nothing in writing and either the film or the band strikes it rich, someone is going to want to sue somebody.

If your cause is noble enough, you may be able to get well-known musicians to let you use their recordings for free or for a nominal amount. Check with the record company first because it probably owns the master recording. You may have to then negotiate separately with the composers for performance rights. But it's worth the legwork: I've done PBS promos using Beatles songs, and a recruiting piece for a music school featuring the New York Philharmonic, and the rights didn't cost a thing.

Communication is also important if you're commissioning songs, rather than a score, and the process is much simpler. Generally there'll only be a couple of pieces of music, often created before the final edit. You'll end up trimming the video to fit.

Loop-based original music Many filmmakers with moderate musical skills have been turning to programs like Sonic Foundry's Acid. The program uses CD-ROM libraries of loops—short snippets designed to repeat endlessly. These can be as simple as a bass or drum pattern, include melodic or harmony parts, or even be pieces of a hot solo. You drag the loops onto tracks in a timeline, where they automatically snap into musical sync and can play together. By combining loops, switching to alternative versions, and adding on-board studio effects, you can create a score of any length.

Working with Acid takes creativity, but you don't need composing or performing skills. The program helps you by tweaking each loop's tempo and key in realtime so it'll sound good with your combination of other loops. It even has a brush to randomly paint families of loops across the score. If you do have musical chops, you can record your own solos or vocals and add them to the mix. There's so much possibility for variation that it's unlikely your loop-based score will sound like any other, a definite advantage over other forms of canned music.

On the downside, arranging a loop-based score and fine-tuning the mix can be very time-consuming if you don't have musical and production skills, and it's hard to keep long cues from becoming boring. While the program advertises loops in styles varying from classic country to orchestral, it only works well on highly rhythmic or repetitive genres such as contemporary dance and pop, techno, and trance.

Acid discs cost about $50 each, are well produced, and may contain hundreds of loops within a particular style. The program itself costs about $400 with a collection of loops to get you started, and requires a very fast PC. Mac users can get in on the fun with BitHeadz' Phrazer, which offers similar features for the same price. Other loop-based alternatives are starting to appear in the market.

Library Music

A mix of original and library music may be the best solution for a modest-budget project, hiring a composer for exposed pieces and scoring the rest from existing pieces. A low-budget project can rely on library music exclusively; with a little luck and careful editing, library music can be just as effective. But you need the right music.

Library music has been around almost as long as movies. During the silent film era, a British composer named Meyer de Wolfe started publishing generic sheet music for the staff orchestras common in large European silent cinemas. When the talkies came, De Wolfe Music and a few competitors started recording these pieces for films that couldn't afford original scores. The
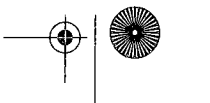
music was first supplied as optical tracks, then on 78 rpm disc, then on 10 inch LPs. By the late 1940s, newsreels and other low-budget films were using DeWolfe extensively.

If you've ever listened to a corporate or classroom film from that era, the nicest thing you could say about this music was that it sounded canned. Libraries didn't have much money for production. A handful of composers cranked out songs that were mostly predictable and boring. Songs were produced so cheaply that horn sections were often out of tune. Film editors frequently had to remove *clams*—wrong or badly played notes that shouldn't have been on the disc in the first place. When I started producing tracks in the early 1970s, there were still only a few libraries to choose from, and those clams were still swimming. It was unusual to find more than a couple of really good cuts on a new disc.

But by the 1990s, cheap, bad studio sessions had been replaced by cheap, good digital instruments. Computers and sampling keyboards made it possible for composers to create well-produced music on their own, without a studio. Some sold cues to the established libraries, but many others started libraries of their own. Today, a Web search for "production music" yields close to one hundred publishers. Competition has raised the standards and widened the variety. Some stock music still sounds canned. But if you pay attention while choosing and fitting library music to your film, you can create an exciting, custom-sounding score for very little money.

Library pros and cons   The main reason for using stock music is economic. You can buy decent-sounding cues for as little as $8 each, comparable to what a synthesizer-based composer might give you for $100/minute. If your tastes are a little richer, you can get top-quality productions with real orchestras, vocals, or hot session players starting at $75 per use—music that, if written for your film, would cost thousands.

Time is also money. An original score can take weeks, but any well-equipped audio post house or music service has hundreds of hours of music waiting on their shelves. Or use your browser: Many publishers let you search and audition over the Web. They'll burn a custom CD of only the songs you like and get it in your hands the next day. Downloading at true CD quality is still too data-intensive for most users (a three minute song takes more than an hour at 56 kbps), but a few libraries are experimenting with online delivery. As broadband gets more common and people get used to working with technologies like mp3 properly[1], this mode of delivery will probably dominate the industry.

On some projects, flexibility is an important consideration. A well-stocked library lets you switch from boogie to Broadway to baroque at the change of a client's mind—something that may not be possible if you've committed to a specific composer.

A minor problem with stock music is that to sound right, it should be edited to picture. This isn't at all hard, even for musical klutzes; instructions are further on in the chapter. A bigger problem

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1. mp3 can sound darned good. See Chapter 19.

is the total lack of exclusivity. Library publishers make their profit by selling the same songs over and over. Some years ago, I scored an insurance company film using one of the bigger libraries. A week later, I heard one of the themes from my score as background music at a supermarket (fortunately, my client didn't). Today, there's so much music available that it's less likely you'll have a conflict—but it's still possible.

Costs and licensing There are two ways of paying for stock music, *needle-drop* and *buyout* (sometimes called royalty free, though you're really paying for the usage up-front). Despite the fact that a couple of libraries are willing to work both ways, the two are very different philosophies. It affects the music they supply.

Needle-drop was the original payment scheme. Newsreel editors would report a usage and pay a fee each time they dropped the phonograph needle on a record to copy its music for editing.[1] Discs are cheap—between $12 and 15—and may even be free to good customers. But having the disc just gives you the right to listen to it. If you actually use a song in a production, you send or e-mail a form (Figure 10.2) and the library bills you. After you pay, the library sends you a written license. Fees per drop are based on the size of the potential audience. They range from about $70 for a local commercial or corporate video, or $300 for films headed to a festival, to up to $1000 for a license that covers TV, Internet, home video, and new media invented in the future.

Blankets are offered by almost every needle-drop library. *Production blankets* are discounted licenses to cover all the music in a project. The cost depends on the library and the kind of use, but its often equivalent to the library's rate if you were to use four individual drops per ten minutes of total running time. If you like to match different cues to the changing moods in a scene (in my opinion, the best way to use library music), blankets can be a significant bargain compared to individual licenses.

Many of the libraries also offer *annual blankets*, you pay a set amount per year, depending on the kind of media you produce. In return, the library licenses every cue you use, for every project destined for your media. It'll also lend you its full library for the life of the blanket, including new CDs as they're released, plus it'll give you a discount on licenses for other media and let you consult with their librarians if you get stuck in a search. Libraries often prefer this arrangement because it lets them predict income. Annual rates vary with the library publisher (and size of its library) as well as the media involved, but for a busy producer it can be a bargain.

If you're buying a blanket, you still report each use and the library issues individual licenses.

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1. Today some libraries call it *laser drop* instead, though that's not how a CD works.

Needle-drop libraries don't make money until you use the music, so it's in the needle-drop's interest to get as much good music in your hands as possible. Needle-drop libraries tend to put a lot of good cues on each disc—usually 20 or more, plus variations—with very little filler or repetition. They also understand they're competing with other libraries each time you search for a cue, so standards tend to be very high. As a general rule, needle-drop music sounds much better than buyout. (I'm basing this on overall experience. Please don't send me e-mail to point out the many exceptions.) The downside of needle-drop is that, in the long run, it costs more.

Buyout libraries have been around a long time, but these exploded with the development of good-sounding MIDI, digital desktop recording, and cheap CD replication. The discs cost $70–175 each, with discounts for multiple purchases, and include permanent licenses for anything you do. You can use a song over and over, for a price equivalent to a single needle-drop, and not even tell the library when you do. The disadvantage is there may be only one song on a CD you want to use.

Buyout libraries make their money selling CDs, so it's to their advantage to put just enough good music on each disc to keep you


10.2 A library music report.
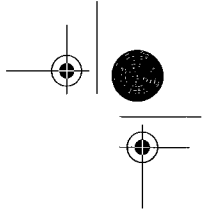
coming back. Really great tracks often get spread over as many discs as possible; other tracks may be as filler, like a keyboard player ad-libbing over a computer-generated rhythm. Buyout CDs usually include 8–12 themes with a lot of repetitious material.

Choosing a library

Some buyout libraries are a waste of money. Others are incredible bargains. That's also true of needle-drop libraries but to a lesser extent—needle-drop publishers who don't sell a lot of licenses usually don't survive. I keep library reviews on my Web site, www.dplay.com/tutorial/lib-cards.html. I've tried to be as unbiased as possible. But your tastes might not agree with mine, and it's your money. Here are some pointers for making a good decision:

- Don't judge a library by its pretty Web site, brochure, or list of satisfied clients. Anyone can hire a designer, and the lists just show who bought (or were given) the discs—not whether the purchasers are using them. Network and feature-film credits may simply mean that a rushed producer grabbed something to put under an unimportant sequence.

- Don't judge a library by its listings. Some publishers describe every track with meaningless labels like, "A winner! Great for corporate, extreme sports, and romantic drama!" But cherish the libraries with descriptions like, "Rock anthem with slow, inspirational start; builds to high-energy finish." These can make searching much easier.

- Don't judge a library by its online samples. Many publishers have databases on their Web sites that let you search for a particular style and stream a short excerpt. These databases are great for finding a specific track once you've chosen a library, but the data compression can make it hard to check production quality, and the excerpt won't tell you if a song continues to develop or just repeats the same figure for three boring minutes.

- Don't even judge a library just by its demo CD. These narrated montages can tell you a lot about how many different musical styles the library supports and give you a good idea of its production quality. But CDs can't tell you how good the writing and arranging is. For that, you have to hear complete tracks.

- *Do* judge a library by auditioning some of the discs along with the demo. Good libraries will send discs on approval or give you an evaluation period. Listen carefully. Is the music interesting? Even a narration underscore should have some development and changes, so you can move parts of it around to fit the mood of each paragraph. What about production values? Does the music sound rich and full? Does it fill the area between the speakers? Pay attention to musical values as well. Unless you're dealing with obvious techno styles, the music should sound like it's being played by live musicians, not computers. Orchestras are particularly hard to synthesize well, but some composers manage. Don't be swayed by claims of live orchestras or choirs if the sound is bogus—some publishers stretch the truth.
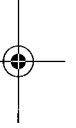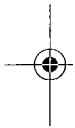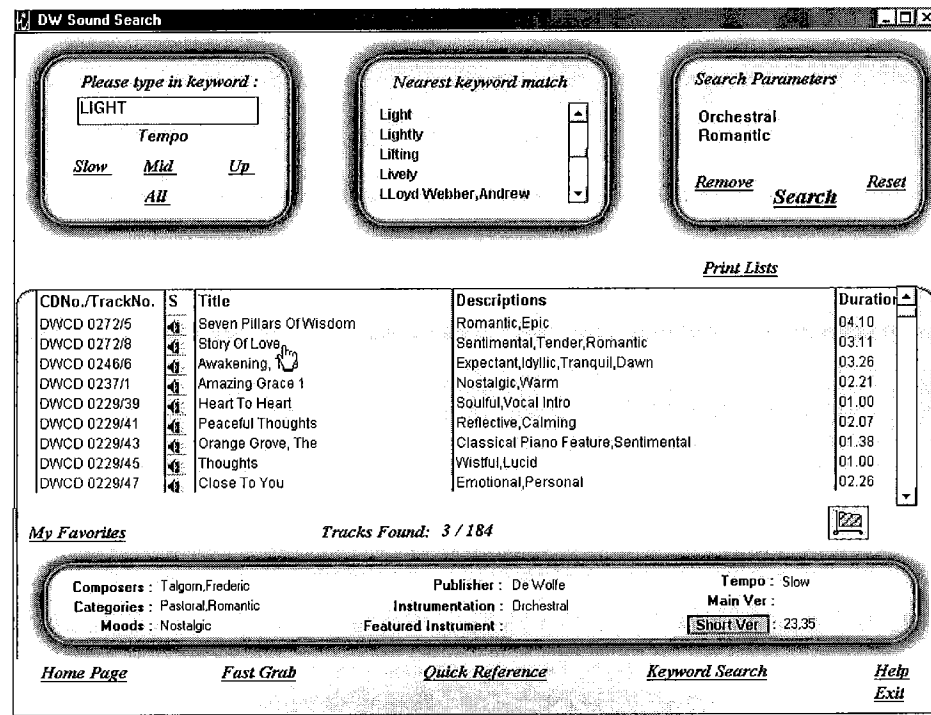
10.3   A library search engine with audio previews. This one's from DeWolfe.

- Give extra points to a library that has a CD-ROM or online search engine with meaningful categories and audio previews, such as the one in Figure 10.3. You might not need the search utility with only a few discs, but libraries grow and these programs can be a great time-saver.

Choosing the music

Grab your spotting notes and start to search. If you don't have a searchable database, flip through your collection and collect appropriate discs based on the track descriptions. If you do have a database, use it to make a short list—not the final decision. To pick music properly, you want to be able to scan through the whole song.

Play each candidate. If it's a reject, turn it off immediately. One key to a successful search is keeping your musical memory free from distractions. If it's not an absolute klunker, listen to different parts of the track. The melody often starts some ten seconds after the beginning, but a well-written piece will have variations or texture changes farther in. Check the ending as well, to make sure it's appropriate.

When you find something that you think will work, play it against the video or narration. Still like it? Then let the video or narration continue but turn the music off! If a piece is just right, you should feel a loss when it goes away. This kind of love-at-first-listen happens surprisingly often. But if it doesn't, don't despair; mark the track as a possible and move on. If a piece is almost right but you think it could be better, look for other tracks with similar descriptions by the same composer.

No matter what you do, don't forget music is an artistic element. No book, catalog description, or software can replace directorial judgement. Don't be afraid to go against type (I once scored a network sports documentary with Bach fugues), and don't be afraid to make a statement.

Choosing source or diegetic music

By and large, any library cue that's in an appropriate style should sound fine coming from an on-screen jukebox or television.[1] A good library will even include pop-sounding vocals designed specifically for source use.

Presumably live music—the off-screen band at a dance or club—is harder to match. Performing bands seldom have the polish or production techniques of a recording. If you can't find something that sounds right in a stock library, see if you can license a recording by a local band.

Music Editing

One of my clients calls it *retrofitting*; after he cuts a documentary, he chooses music from my library. Then he has me move sections of the music around changing melodic treatments when the scene changes, hitting musical peaks against the more dramatic shots, building in sync with the narrator, and ending perfectly with the final fade-out to complement the picture. This editing doesn't take very long, and the result is a score that sounds original—on a much friendlier budget.

Surprisingly, the basic skill is not difficult to learn and doesn't require musical training. It's one of the handiest things you can pick up. Even if you use original music exclusively, the ability to edit gives you the flexibility to make last-minute timing changes or cut an end-credit montage without having to go back to the composer.

Basic Editing

The basic editing technique is shared by music editors throughout the industry. It doesn't require special equipment or software and can be adapted to virtually any program—or even a tradi-

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1. It'll need some technical mangling as discussed in Chapter 18.