ARTICLE

I Am Big, It's the Pictures That Got Small: Sound Technologies and Franz Waxman's Scores for Sunset Boulevard (1950) and The Twilight Zone's "The Sixteen-Millimeter Shrine" (1959)

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Abstract: Franz Waxman composed over 150 film scores, the most famous of which is Billy Wilder's film noir *Sunset Boulevard* (1950). The film plot bears a striking resemblance to Rod Serling's teleplay for *The Twilight Zone*, "The Sixteen-Millimeter Shrine" (1959). Waxman, composer of the film, was approached to compose a score for a television episode that was what many term a shortened version of Wilder's film for the small screen, but with supernatural elements. This article serves to remedy the dearth of literature on this topic and to form an examination of the ways that Waxman conceived of music to accompany films with similar themes but on different screens. Through this comparison of the two scores, a clearer picture of Waxman's approaches to composing music for moving images will be presented.

Keywords: Film; Television; Franz Waxman; Adaptations; Score

he yearning to return to one's past is nothing unusual, especially on the Hollywood screen. Billy Wilder's 1950 film noir Sunset Boulevard, about an actress who refuses to accept that her fame has passed her by, remains one of the classic films that deal with this subject. It also bears a striking resemblance to Rod Serling's 1959 teleplay for The Twilight Zone, "The Sixteen-Millimeter Shrine," featuring a protagonist who has suffered the same fate. A common theme found in both the film and the teleplay deals with the attempt to escape from contemporary hectic life and return to a simpler time, in turn reclaiming lost youth. Therefore, it should come as no surprise that the CBS Music Department approached Franz Waxman, composer of the film score, to write a score for a television episode that

many regard as a concise version of Wilder's film for the small screen, but with supernatural elements. While the scores for both the film and television episode bear some similarities, the styles in which Waxman composed were dictated by the available sound recording and reproduction technology for film and television of the time. Consequently, it is crucial to articulate the technological differences in the differing viewing locales of cinema and living room to understand the reason why a composer may write differently for film and television.

Although much discussion has materialized on Wilder's film and some on Serling's episode, an examination of the music of the two in tandem has not yet surfaced. This article serves to remedy this dearth of literature and to examine the ways



in which Franz Waxman conceived of music to accompany films with similar themes but for different viewing environments, identifying the technological limitations of moving image sound in the 1950s as a primary reason for these differences. Whereas the musical material might be similar for both the film and television episode, the fundamental difference between them lies in the orchestration, which is dictated by the contemporary technologies of film, sound recording and reproduction, and television. This article will show how these two environments drive compositional methods and, through a comparison of the two scores, a clearer picture of Waxman's approaches to composing music for moving images on big and small screens will emerge.

Practical matters of audio capabilities in music composition

Sounds for both film and television are acoustic events, "heard and experienced by particular audiences occupying specific sites and spaces of reception," something that directly resulted from the publicized versus privatized viewing spaces of the respective media.1 Although "The Sixteen-Millimeter Shrine" and Sunset Boulevard premiered almost a decade apart, it is important to account for the sound technologies available at the time of each work's release. The differences in television and film sound derive from the technological capabilities of the system on which each was recorded and played: the film and the speakers. Most concerns about television's capabilities focused on picture quality. However, a more pressing, yet overlooked, issue concerns the sound quality. In its earliest publicity, television was promoted as technology that added picture to sound, but, as Thomas Hutchinson acknowledges, in actuality it did not add sound, but rather accompanied it.² Television in the 1950s was hindered by what some called its "mediocre sound quality." Sound quality in films and television shows of the late 1940s and early 1950s was not only a product of the sound system on which it was were recorded, but also the sound film on which it was played.

1 Shawn Van Cour, "Television Music and the History of Television Sound," in *Music in Television: Channels of Listening*, ed. James Deaville (New York and Abingdon: Routledge, 2011), 58.

Throughout the 1950s, not only were there audio interference issues on television, but also an FCC (Federal Communications Commission)-mandated drop in audio power, limiting the sounds that televisions could produce. This reduction in sound quality emanated not from the television sets themselves, but from the actual broadcasts.⁴ Indeed, additional problems also included a decrease in audio strength in certain parts of the country, a wide range of frequencies that affected transmission of sound, and limited capabilities of television stations regarding audio—not to mention variations among individual television sets.⁵

In 1959, when "The Sixteen-Millimeter Shrine" aired, 85.9% of American households owned at least one television set.⁶ The majority of American families retained their first television sets for at least a decade, opting to repair them as a more cost-effective option than replacement, until they could afford an upgrade, usually to color. As a result, types of television set and their technological capabilities varied greatly. In 1959, at least some homes may have had televisions manufactured at least as early as 1948, if not earlier.⁷ Most television sets had small speakers and many people could not afford larger systems.⁸

The type of television set also dictated the sound quality: console sets had larger speakers than tabletop sets, improving the sound, and the console cabinet also aided sound reproduction. To augment the tabletop sets' small speakers, the consumer could purchase additional speakers, but few pursued this option. Figure 1 illustrates the relative smaller size of the tabletop sets' speakers, which were to be found at the front near the knobs, when compared with the

⁹ Miller, Television in Your Home, 36.



² Thomas H. Hutchinson, Here is Television: Your Window to the World (New York: Hastings House, 1950), 21.

³ Peter Lev, "Technology and Spectacle," in in *The Fifties: Transforming the Screen*, 1950–1959, ed. Peter Lev (Berkeley and Los Angeles: University of California Press. 2003). 107.

⁴ Television Allocations Study Organization, Engineering Aspects of Television Allocations: Report of the Television Allocations Study Organization to the Federal Communications Commission, March 16, 1959 (Washington, DC: Television Allocations Study Organization, 1959), 30; 580.

⁵ Van Cour, "Television Music and the History of Television Sound," 60 and "Television and V.H.F. Sound," Wireless World (June 1955), 251. 6 United States Census, 20th Century Statistics—Section 31, 20, accessed June 28, 2015, https://www.census.gov/prod/99pubs/99statab/sec31.pdf. 7 In the mid-1950s, television speakers were notorious for distorting sounds. Discussions of sound quality often materialized in the context of trade magazines' promotion of new products, such as television amplification systems. Television manufacturers had begun to experiment with two-channel stereo sound by 1956. The first television show to air in stereo was an episode of The Lawrence Welk Show on October 1, 1958. Compounding this issue was that "the three-inch speaker standard on TV sets allowed for little audio richness" ("Tapetone Mus-et TV Tuner," High Fidelity [May 1957], 99 and 101). See also John Sunier, The Story of Stereo, 1881– (New York: Gernsback, 1960), 67; David Sedmer, "The Legacy of Broadcast Stereo Sound: The Short Life of MTS, 1984-2009," Journal of Sonic Studies, 3 (2012), accessed June 21, 2015, http://journal.sonicstudies.org/ vol03/nr01/a03#FIG1; W.E. Miller, Television in Your Home: Everything the Potential Viewer Needs to Know (London: Iliffe, 1950), 51.

⁸ Harold C. Schonberg, "Hi-Fi Audio Show: Annual High Fidelity Event This Year Points Out Surge of Stereo," *The New York Times* (October 5, 1958), X20.

console set in Figure 2. Here the speaker is the large rectangle under the screen.

Figure 1: Tabletop television set advertisement

Source: Magnavox Television Advertisement, *The New Yorker* (1952), accessed from Duke University Library, http://library.duke.edu/digitalcollections/adaccess_TV0173.



Figure 2: Console television set advertisement

Source: DuMont Television Advertisement, *Saturday Evening Post* (1950), accessed from Duke University Library, http://library.duke.edu/digitalcollections/adaccess_TV0457/.



Networks, sound stages, and composers were all aware of the problems and tried to remedy them in the best way they could—by use of microphones.¹⁰ During the recording of film scores, the choice of where to position the orchestra was at the discretion of the recording engineer and there was no one correct place for the instrumentalists to sit in relation to the microphone.¹¹ Some television composers not only chose the type of microphone for recording their scores, but also sometimes specified the distance of the player from the microphone.¹² Although close-miking was available on sound stages, for



¹⁰ For more on types of microphones, see Robert L. Mott, Sound Effects: Radio, TV, and Film (Jefferson, NC: MacFarland & Co.), 98.

¹¹ Kurt London, Film Music (New York: Arno Press), 187 and Marlin Skiles, Music Scoring for TV and Motion Pictures (Blue Ridge Summit, PA: Tab Books, 1976), 115.

¹² We know for a fact that Bernard Herrmann did this in his scores for *The Twilight Zone* because he left seating diagrams. See Reba Wissner, *A Dimension of Sound: Music in* The Twilight Zone (Hillsdale, NY: Pendragon Press, 2013), 36.

varying reasons it was not always used. However, this did not preclude the issue of what Kurt London calls "mutilation of tone," which is slight distortion of the sound and a product of the intermediate stages that a film's sound goes through when dubbed over the picture.¹³ Through the microphone, an instrument's sound becomes slightly altered.14 Part of the reason for this was that there was no sound control standard in recording for films.15

However, there was also the issue of television sound technology, which at that time was a pale imitation of state-of-the-art motion picture sound reproduction.¹⁶ The poorer sound quality was reminiscent of the early days of sound film.¹⁷ Ironically, although the music score for "The Sixteen-Millimeter Shrine" was recorded on three-channel 35 mm magnetic film, the optical sound of the prints that were telecast was inferior in terms of frequency range. Sunset Boulevard was recorded on 35 mm mono Western Electric film. Similarly, The Twilight Zone, except for six episodes, was shot on three-channel 35 mm film in mono.¹⁸ Mono, or monaural, sound uses one or more microphones which are mixed into a single audio signal which may employ multiple speakers in reproduction.

Music composed for a television show differed in sound quality depending on whether one was listening to the recording, in the dubbing room or in the home. Composer Earle Hagen wrote in his textbook on composing for film and television that, since the dubbing room is a fundamentally different environment than the living room, it would behoove a composer to take the television film home after dubbing to experience watching it as the audience would and then return to the dubbing room "with a little more knowledge about how to achieve an end result that is effective in the home, which is the only place where your musical contribution to T.V. counts."19 He notes that the ambient noise of the home will "compete with, and tend to destroy, the music you have written. [...] The final product in T.V. suffers much more than in the theater."20 A home's ambient noise was part of the technical aesthetics of television viewing in the 1950s, but there was also

the noise of television broadcast transmission to consider.21 Another factor was the distortion of sound as a result of the processes that a television film underwent:

By the time your product has been recorded, re-recorded, subjected to the academy roll-off, transferred to optical, printed, duplicated, transmitted, and received in the home on a four inch speaker, you will swear that there is no music left on the track. Unquestionably, the final music product has suffered—but only in relationship to the overall product. [...] The medium of T.V. is composed of a certain amount of loss.²²

But recording and transfer were not the only problems that affected television sound. Throughout most of the country, especially for those who lived outside of cities, static was a pervasive problem during transmission, impairing the possibilities of a clear sound.²³ As composer Robert E. Dolan wrote in his composition textbook for film and television music, the sound of television shows is directly influenced by the quality of the equipment from which it emanates.24

Film, on the other hand, faced no such audio limitations or problems, although there was a large variance in sound quality among individual theaters. Unlike television, there were similarities between how the recorded music sounded in the dubbing room and how it sounded in the movie theater.²⁵ As Richard T. Hubbell wrote, film sound featured a binaural contrast not possible in television which at this time was monaural.26 Although many theaters in 1950 still strictly operated in mono with optical sound, others began to use multiple-channel stereo systems, creating what some described as a wall of sound. Most theaters operated in mono rather than stereo

²⁶ Richard T. Hubbell, "Use of Sound in Television," Televiser: Journal of Video Production 1, No. 4 (Summer 1945), 27. Stereophonic sound did not come into vogue until 1953 with the advent of 3D and Cinemascope; by the end of the decade relatively few films were released in stereo. A film's motion picture studio determined how a film would be released. Paramount, for example, released very few of its films in stereo during the decade, not wanting to force theaters to invest in new sound systems.



¹³ London, Film Music, 167.

¹⁴ London, Film Music, 165.

¹⁵ London, Film Music, 206-207.

¹⁶ London, Film Music, 206.

¹⁷ For more on this, see chapter 1 of Robert Spadoni, Uncanny Bodies: The Coming of Sound Film and the Origins of the Horror Genre (Berkeley and Los Angeles: University of California Press, 2007).

^{18 &}quot;The Sixteen-Millimeter Shrine" was not one of the six.

¹⁹ Earle Hagen, Scoring for Films (Los Angeles: E.D.J. Music, 1971), 242. 20 Scoring for Films, 242.

²¹ Luke Stadel, "Radio/Television/Sound: Radio Aesthetics and Perceptual Technics in Early American Television," E-Media Studies, 5, No. 1 (2016), http://journals.dartmouth.edu/cgi-bin/WebObjects/Journals.woa/1/ xmlpage/4/article/458.

²² Hagen, Scoring for Films, 242. 23 Max Dawson, "Reception Problems: Postwar Television and the Amateur Experimenter," presentation at the Society for Cinema and Media Studies Annual Conference, Boston, MA, March 22, 2012, http://maxdawson. tv/2012/05/28/receptionproblems/.

²⁴ Robert Emmett Dolan, Music in Modern Media: Techniques in Tape, Disc, and Film Recording, Motion Picture Scoring and Electronic Music (New York: G. Schirmer, 1967), 161.

²⁵ Dolan, Music in Modern Media, 143.

until the late 1950s,²⁷ a format that was considered the most realistic form of sound reproduction.²⁸ At the time of *Sunset Boulevard*'s release, theaters were typically equipped with mono setups and only had a single speaker behind the screen from which the sound would emanate. Variations in movie theater sound equipment were less pronounced than those in television sets, resulting in greater consistency of sound. Still, as advanced as some theaters were, the majority of them dealt with issues of uncorrected reverberation and an inability to remain faithful to the acoustic requirements of the sound film.²⁹

Offering clear reproduction of music in a film was a priority, as one trade magazine reported: "modern recording practice *intentionally* reduces the modulation of dialogue in order that dramatic music and sound effects may have the advantage of adequate volume." By the mid-1940s, theaters used a two-way loudspeaker system that would "give vastly superior sound performance to the loudspeaker systems of the one-way variety utilized in most home radios and many old style theatre sound reproducing systems." By the late 1940s, older sound systems were "absolutely incapable of reproducing faithfully the excellent sound recorded in film" and the theater owners had to either modernize them or replace them altogether. ³²

Wallace Sabine, A.W. Nye and other scientists discuss, in lectures and publications reproduced by the Academy of Motion Picture Arts and Sciences, the properties of sound and how they are conveyed to the human ear in movie theaters. According to Nye, for example, if any overtones in string instruments are lost during recording, the instrument's sound will be improperly heard.³³ Violins are especially prone to this, but violas and cellos can suffer too.³⁴ String sounds also tended to suffer during electronic amplification and often sounded distorted.³⁵ S.K. Wolf presents a chart depicting Weber's Law, which sets out the ranges of instruments that are easily audible to the human ear. This can be seen in Figure 3, in

which anything outside of the dotted shape is beyond the audibility threshold; the further outside of the shape, the more difficult it is to hear. The top of the chart represents the loudest or strongest sounds and the bottom the lowest or weakest. Wolf maintains that, when recording music for a film, a composer and sound engineer should consult the chart to determine what instruments and recording tools such as microphones and reproduction systems would be able to faithfully reproduce the sound in the film.³⁶

Movie theaters were equipped with sound systems appropriate to their shape, dimensions, and seating capacity. Trade journals advised projectionists on speaker placement and how to correct and judge proper film volumes for the space in which the film would be shown.37 Sound systems were also chosen according to industry standards for wattage of output power as measured against size of theater.³⁸ Theaters typically had sound systems appropriate for their size and shape.³⁹ Poor sound quality in theaters was usually the fault of a sound system that was inappropriate for the space or the theater's acoustics. 40 Articles in trade magazines, such as the ones republished as *The Sound Track Book of the Theatre* from the late 1940s, guided film projectionists in everything regarding cinema sound, such as how to orient the loudspeakers for optimal sound or how to modernize that sound.⁴¹

Film sound was adjustable according to the size and shape of the theater and the number of occupants. Television sound, however, was one-size-fits-all, regardless of the room size or the number of people in the room. Televisions, in addition, did not have as wide a volume range or speakers as powerful as those in cinemas. Composers had therefore to compensate for this. Paramount, the studio that produced *Sunset Boulevard*, became a leader in improved sound recording fidelity and reproduction by using fine-grain film stock. These new film stock prints had none of

⁴¹ The Sound Track Book of the Theatre: A Selection of the Best Articles from The Sound Track (Chicago: The Sound Track, n.d.), accessed June 30, 2015, https://archive.org/details/soundtrackbookof00unse.



²⁷ John Belton, "1950s Magnetic Sound: The Frozen Revolution," in Rick Altman, Sound Theory/ Sound Practice, 156.

²⁸ Belton, "1950s Magnetic Sound,"166.

²⁹ London, Film Music, 206.

³⁰ Robert A. Mitchell, "Control of Sound-Film Reproduction," *International Projectionist* (July 1948), 6 (emphasis in original).

³¹ George Ray, "Loudspeaker Equipment: Its Application in Theatre Sound Systems," in *The Sound Track Book of the Theatre: A Selection of the Best Articles from* The Sound Track (Chicago: The Sound Track, n.d.), 233.

³² Ben Ogron, "'Modernizing' The Sound System," in *The Sound Track Book of the Theatre*, 249.

³³ A.W. Nye, *The Nature of Sound*, Academy Technical Digest Reprint No. 11 (Hollywood: Academy of Motion Picture Arts and Sciences, n.d.), 8. 34 London, *Film Music*, 165; 168.

 $^{35 \} Skiles, \textit{Music Scoring for TV} \ and \ \textit{Motion Pictures}, \ 73.$

³⁶ S.K. Wolf, *Theatre Acoustics for Reproduced Sound*, Academy Technical Digest Reprint No. 6 (Hollywood: Academy of Motion Picture Arts and Sciences, n.d.), 75.

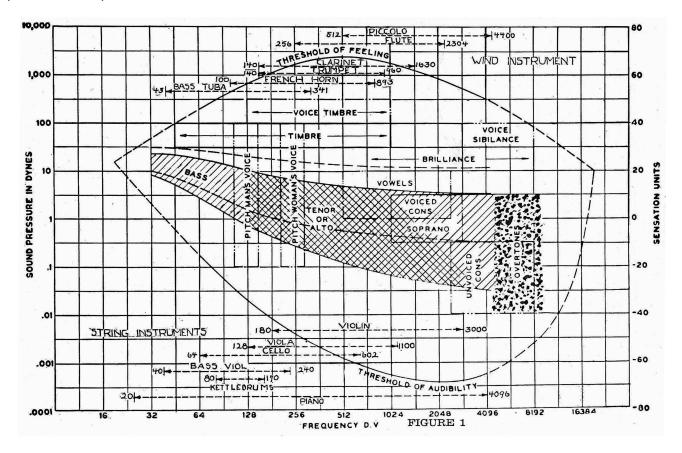
³⁷ Robert A. Mitchell, "Projection Preparations for the 'Seasonal' Theatre," International Projectionist (April 1949), 34; Robert A. Mitchell, "Distortion Factors in Sound Reproduction," International Projectionist (July 1949), 6. 38 R.T. Van Niman, "Theatre Amplifiers: Amplifier Design," in The Sound Track Book of the Theatre, 214. See also The Academy Research Council Theatre Sound Standardization Committee, "Theatre Acoustic Recommendations (1941)," reproduced in The Sound Track Book of the Theatre, 264-281.

³⁹ Ray, "Loudspeaker Equipment," 236-237.

⁴⁰ George P. Little, "Acoustical Materials and Their Use in The Theatre," in The Sound Track Book of the Theatre, 282.

Figure 3: Weber's Law

Reproduced from S.K. Wolf, *Theatre Acoustics for Reproduced Sound*, Academy Technical Digest Reprint No. 6 (Hollywood: Academy of Motion Picture Arts and Sciences, n.d.), 75.



the hissing sound of earlier sound prints and created more natural sound reproduction.⁴²

The aural worlds of the aging film starlet

Sunset Boulevard is a hybrid film noir combining melodrama and black comedy.⁴³ The film chronicles a washed-up and reclusive film starlet from the silent era named Norma Desmond (Gloria Swanson) who still dwells on her career from 30 years ago. Norma, who lives with her ex-husband turned butler Max von Mayerling (Erich von Stroheim), spends much of her time watching her old movies, yearning for her younger self and her lost film career. When Norma meets a handsome aspiring screenwriter named Joe Gillis (William Holden) who unexpectedly shows up

By the time Rod Serling wrote "The Sixteen-Millimeter Shrine," *Sunset Boulevard* already held a reputation as an exceptionally executed film and a near-perfect view of the twisted world into which Hollywood had morphed. David Melbye terms the episode "a melodramatic Hollywood fantasy." When asked how he got the idea for the episode, Serling remarked, "I don't know where the hell I got the idea, but I wish I'd never gotten it," but

⁴⁴ David Melbye, Irony in The Twilight Zone: How the Series Critiqued Postwar American Culture (Lanham, MD and Boulder: Rowman & Littlefield, 2016), viii



at her door, she arranges for him to move in and work as her ghostwriter while he reworks her screenplay called *Salome* which she believes will return her to the limelight. After Cecil DeMille (as himself) turns down her script, Norma kills Joe in a desperate lover's rage when he tries to leave her, resulting in her having hallucinations, believing that she is on a set filming her next movie.

^{42 &}quot;Movies That Mimic Life," *Popular Mechanics* (December 1941), 67. 43 Peter Lev, "Genres and Production Trends, 1950–1954," in *idem., The Fifties.* 59.

Wilder's film undoubtedly influenced him. 45 Like Sunset Boulevard, Serling's adaptation has an ironic self-referentiality. 46 In "The Sixteen-Millimeter Shrine," aging film star Barbara Jean Trenton (Ida Lupino) lives alone aside from her maid, Sally (Alice Frost). Barbara secludes herself daily in her private screening room, where she reminisces about her lost film career by watching her films from 25 years ago. In an attempt to return her to reality, her agent Danny Weiss (Martin Balsam) arranges a part for her in a new movie, which she resentfully declines since she would play a mother. Danny then brings former leading man Jerry Hearndon (Jerome Cowan) to visit Barbara in an attempt to make her stop dwelling on the past. Jerry, who is now also older and has retired from acting many years ago, currently manages a grocery store chain. Jerry's new career and older appearance horrifies Barbara and drives her further into seclusion. Sally, attending to Barbara, finds the screening room empty and is stunned by what she sees on the screen. She calls Danny over and he sees the same thing: Barbara in the living room of the house on the screen, filled with movie stars as they appeared in her old films.⁴⁷

Both the plots of the movie and The Twilight Zone episode, as well as the function of music and Waxman's scoring, bear striking similarities, which, in the words of Christina Gier, "works to emphasize the film's dramatic tension between youth versus age."48 While Norma goes to see Cecil DeMille and has her film rejected, Barbara is brought to a fictitious producer, Marty Sall (Ted deCorsia), but it is she who does the rejecting because of her resentment of being asked to play "a mother. Very alive, very vibrant." "As opposed to what?" she asks Sall, "A corpse?" 49 Both the film and the episode focus on the home as a museum of the past which both women keep, whether by means of the photographs of themselves in costume that each keeps in her home, or by watching their old films.

The film and the television episode function as time capsules that allow us to see both the aging and young starlet simultaneously.⁵⁰ Both women not only possess varying forms of their own image—filmic and photographic—but these images also possess them, with each woman surrounding herself with snapshots of her prime; and they define themselves by these remnants of this past.⁵¹ For both Barbara and Norma, "life had become for her a living death; death allows an escape into a wonderful alternative."⁵² As a result, both women have subordinated themselves to their screen persona.⁵³ Like Norma, Barbara is in denial that she is in her sunset years, and believes that she can return to the screen on her own terms despite its impossibility.⁵⁴

The final scenes of both the movie and the episode feature the most prominent similarities. Figures 4 and 5 come from the final scene of *Sunset Boulevard* and "The Sixteen-Millimeter Shrine" respectively, depicting each woman's descent down the stairway in her home.⁵⁵

What is especially evident in these two scenes is that both the television episode and the film focus on the "death-in-life" of the protagonists who, once film starlets, are now each "a parody of her incarnations, as she lives among her memories, delusions, and the remnants of a ghostly Hollywood past."56 In each case, people at the foot of the stairs surround the protagonist, who in each case descends with open arms. In "The Sixteen-Millimeter Shrine," Barbara appears on a movie screen as Danny watches the events that occur, unknown to her, at that very moment in the foyer. This becomes clear when the onscreen Barbara blows Danny a kiss and then throws her scarf at him. When he goes out to the fover after switching off the projector, he finds the same scarf on the floor, exactly where the onscreen Barbara threw it. Both the film and the television scenes end with the camera falling out of focus.

Franz Waxman composed over 150 film scores and several television scores. The score for "The

⁵⁶ Julian Wolfreys, Occasional Deconstructions (Ithaca, NY: State University of New York Press, 2004), 36.



⁴⁵ Quoted in Martin Grams Jr., The Twilight Zone: Unlocking the Door to a Television Classic (Lanham, MD: OTR Publishing, 2008), 180.
46 Grayson Cooke, "We Had Faces Then: Sunset Boulevard and the Sense of the Spectral," Quarterly Review of Film and Video 26 (2009), 89.
47 For more on "The Sixteen-Millimeter Shrine" and nostalgia, see Reba Wissner, "No Time Like the Past: Hearing Nostalgia in The Twilight Zone," Journal of Popular Television 5, No. 2 (Forthcoming, Summer 2017).
48 Christina Gier, "Music and Mimicry in Sunset Boulevard (1950)," in Anxiety Muted: American Film Music in a Suburban Age, ed. Stanley Pelkey and Anthony Bushard (Oxford and New York: Oxford University Press, 2014), 31.
49 This may be a thinly veiled reference to Gloria Swanson's reaction to Billy Wilder when he asked her to do a screen test for Sunset Boulevard: "What the hell do you have to test me for? You want to see if I'm alive, do you?" See Tricia Welsch, Hollywood Legends: Gloria Swanson: Ready for Her Close-Up (Jackson, MS: University Press of Mississippi, 2013), 319.

⁵⁰ Noël Carroll, Minerva's Night Out: Philosophy, Pop Culture, and Moving Pictures (Somerset, NJ: John Wiley and Sons, 2013), 167.

⁵¹ Cooke, "We Had Faces Then," 92.

⁵² Douglas Brode and Carol Serling, Rod Serling and The Twilight Zone: The 50th Anniversary Tribute (Fort Lee, NJ: Barricade Books, 2009), 114. 53 Lucy Fisher, "Sunset Boulevard: Fading Stars," in Women and Film, ed. Janet Todd (New York: Holmes and Meier, 1988), 109. 54 Carroll, Minerva's Night Out, 167.

⁵⁵ These are by no means the only stairway descent scenes for which Waxman composed similar music. In the stairway scene of *Bride of Frankenstein* (1935), Mary Shelley's (Elsa Lanchester) descent down the stairs with outstretched arms is accompanied by similar music. I am grateful for William Rosar for pointing this out to me.

Figure 4: Final scene, Sunset Boulevard



Figure 5: Final scene, "The Sixteen-Millimeter Shrine" (Image Entertainment)



 $\ensuremath{\mathbb{C}}$ The International Film Music Society 2017.



Sixteen-Millimeter Shrine" was Waxman's first foray into television scoring. As such, it allowed him to synthesize his film scoring technique for the small screen which would be featured in episodes of later shows such as The Fugitive (1963), Kraft Suspense Theatre (1964–1965), and Gunsmoke (1966). His compositional styles varied greatly, and he always carefully adapted his music for the purposes of the film in question.⁵⁷ He understood music's dramatic function and never composed a musical score in a specific style simply based on the film's genre. His film compositions feature economy of musical material, mastery in the shaping and contouring of melodic lines and repetitive thematic material, acute awareness and skill in orchestral color and texture, and innovative and unusual blends of musical idioms and styles. He often stated that he entered into the characters' minds to write their music.58

In general, Waxman's approach to composing music for the moving image is predominantly coloristic, in which he considers timbre before notes.⁵⁹ He considered music for both film and television as sets of variations, and therefore altered them according to the action on screen, often implementing the leitmotif technique.⁶⁰ He described his film music leitmotifs as "characteristically brief, with easily recognizable and sharp profiles that permit repetition through varying forms and textures, to help musical continuity."⁶¹ Waxman recognized the uniqueness of film music in that it:

Operates in set of circumstances quite different from the circumstances in which other music is heard. Film music is heard only once—not many times as concert music is. [...] It should have simplicity and directness. It must make its point immediately and strongly. The emotional impact must come all at once.⁶²

Waxman recounted that he always tried to envision the music's sound in the theater, and thus he may have also imagined what his television scores would sound like in someone's living room.⁶³

As Waxman's son John noted in an interview, his father composed *Sunset Boulevard*'s score as a continuous piece so that, when the music stops, it can resume because of the ability of each new cue

to pick up flawlessly where the last one ended. His father conceived of the keys and orchestration of the themes in a manner such that they would fit together like a puzzle, resulting in a through-composed sounding score.⁶⁴ Some have described the score to Sunset Boulevard as a sonata in noir due to its seamless composition, and Waxman constructed "The Sixteen-Millimeter Shrine" similarly. In fact, the cue sheet for the episode does not list the individual cues; rather it lists only "Sixteen-Millimeter Suite." 65 Each cue's construction in the episode sounds seamless as well. This is because Waxman, who came from the classical Hollywood film music tradition, used tonal relationships to give the film—and, in this case, the episode—a sense of unity. One of Waxman's responsibilities in composing the score for "The Sixteen-Millimeter Shrine" was not only to write music evocative of the 1950s film, but also to limn the new storyline at hand.66

Waxman intimately weaves his music for both the large and small screens into the action and the narrative. In Sunset Boulevard, Norma's music contains both low, pulsating notes and frequent trills to highlight her unstable mental state, and Mervyn Cooke sees Richard Strauss's opera Salome (1905) as the inspiration for this.⁶⁷ Waxman felt that original scoring, not the use of pre-existing music in filmic contexts, could better serve the scene and dramatic plan. As Waxman recounted, Wilder originally used Strauss's "The Dance of the Seven Veils" from Salome for the final scene's temp track and wanted to make it part of the final score, but he decided to have Waxman write the music both to save money (it would have cost too much money to obtain the usage rights for Strauss's music) and to avoid insulting Waxman.68

Television scores had smaller budgets than the music for film scores, necessitating smaller orchestras and sometimes orchestras comprised of unusual combinations of instruments.⁶⁹ In the 1950s television producers often had to deal with much more limited budgets than did film producers.⁷⁰ The budget for *Sunset Boulevard* totaled \$1.75 million, in contrast to

⁷⁰ Ron Rodman, Tuning In: American Narrative Television Music (Oxford and New York: Oxford University Press, 2009), 13.



⁵⁷ "Music From the Films: A CBC Broadcast," $Hollywood\ Quarterly\ 5\ (1950),\ 134.$

⁵⁸ Hollywood Quarterly 5, 134.

⁵⁹ Hollywood Quarterly 5.

⁶⁰ Hollywood Quarterly 5, 136.

⁶¹ Hollywood Quarterly 5.

⁶² Hollywood Quarterly 5, 135.

⁶³ Hollywood Quarterly 5, 136.

^{64 &}quot;Franz Waxman and the Music of Sunset Boulevard," accessed March 3, 2013, http://www.youtube.com/watch?v=JjGUnCYdYiQ.

⁶⁵ Sam Staggs, Close-up on Sunset Boulevard: Billy Wilder, Norma Desmond, and the Dark Hollywood Dream (New York: St. Martins, 2002), 141.

⁶⁶ James Wierzbicki, "Music in *The Twilight Zone,*" in *Music in Science Fiction Television: Tuned to the Future*, ed. K.J. Donnelly (New York and Abington: Routledge, 2012), 7.

⁶⁷ Mervyn Cooke, A History of Film Music (Cambridge: Cambridge University Press, 2008), 101.

⁶⁸ Staggs, Close-up on Sunset Boulevard, 145.

⁶⁹ Dolan, Music in Modern Media, 158.

"The Sixteen-Millimeter Shrine," which totaled a little over \$54,000.71 Although the total amount devoted to the music of each remains unknown, it was likely to have been similarly unequal. Because of this, one of the most noticeable differences between the two is the instrumentation. The score for Sunset Boulevard consists of a full orchestra and relies heavily on the brass section, whereas in "The Sixteen-Millimeter Shrine" the orchestra comprises two clarinets, six violins, one flute (doubling with an alto flute or a piccolo), one piano, one trumpet, a vibraphone, one horn, one cello, one trombone, and one double bass. Aside from the flute and clarinet, the instruments in "The Sixteen-Millimeter Shrine" are more powerful than those featured in Sunset Boulevard. Waxman's choice of instruments for the film and television solos is not attributable only to Hollywood scoring conventions for character depictions, but also whether the sound would be audible in the viewing location on account of the type of speakers likely to be found there. Partially because of trade publications and studies such as those shown in Figure 3 analyzing the audibility threshold, Waxman likely understood how a musical score would sound in different environments and brought this understanding into his television scores. Hence, musical themes and motifs shared by the film and episode were orchestrated differently.

As such, owing to the number of players in the orchestra, the sounds on the small television speakers are usually much less forceful than those on the big screen. Film composers, such as Waxman, who eventually wrote for television, understood these limitations and attempted to remedy this problem as best they could by using instruments that would not only provide the necessary musical impact, but also the volume crucial in successfully conveying the aural nuances of the small screen. These techniques include the ability to convey low dynamic levels or countermelodies that are not obvious due to their placement under a large section's main melody. As London reminds us in terms of film music, "there is no point in overloading it with excessively rich chords, just as it is not advisable to exaggerate the number of parts in the music. To indicate plainly what is required, one could maintain that a good movement in two melodies is best suited to the sound film."⁷² Because of the sound capabilities of movie theater speakers, the themes in Sunset Boulevard

71 Martin Grams, The Twilight Zone: Unlocking the Door to a Television Classic (Lanham, MD: OTR Publishing, 2008), 178; Christopher Beach, A Hidden History of Film Style: Cinematographers, Directors, and the Collaborative Process (Berkeley and Los Angeles: University of California Press, 2015), 91. 72 London, Film Music, 182-183.

can be orchestrated with more subtle-sounding instruments than in "The Sixteen-Millimeter Shrine." Norma's theme, for example, is usually played by a single violin, by several violins, or by a flute. In "The Sixteen-Millimeter Shrine," Waxman gives solos to the horns and the alto saxophone as they have a greater dynamic power.

We can observe these contrasts by looking at specific themes. In Sunset Boulevard, both Norma and Joe have their own leitmotifs, each representing the time in which they live. Norma, who dwells on the past and mentions her encounters with Rudolph Valentino at her parties, appropriately receives a classic-sounding tango melody, while Joe, a 1950s urbanite who lives in the moment, gets a jazzy bebop motif, a type of music that in film and television of the day represented both youth and the hectic element of big-city life. Composer Leith Stevens once noted that the "loud frenetic beat of bop" is used in film as a motif for youth, since they tend to "insulate themselves from the world of reality." 73 By using a tango for Norma's theme, Waxman "is characterizing her as steamy, sultry, Latin and, in 1950, conspicuously out of date."74 Waxman remarks on his use of music for the film are as follows:

The main theme is one of a tango character, which stems from a scene in which Gloria Swanson makes a reference to the early days of Hollywood and the tango dancing of Rudolph Valentino. This is the atmosphere in which she still lives in 1950 and I took this little bit of characterization as the inspiration for the musical theme. As we can see the hero packing to leave her house, the music underneath is the same as the main title only much slower, much heavier, much more foreboding of the tragic things to come. As he leaves the house she runs frantically after him. At this time the tango theme repeats itself in twisted and tortured harmonies until the fatal shot is heard. Then as we discover her in the grotesque pose, her mind clearly half-gone, we hear a faint oboe solo in a theme as disjointed as her mind is in this moment.⁷⁵

Although Waxman never spoke specifically about his composition of "The Sixteen-Millimeter Shrine" score, we can see that musical styles in both the film and television episode recur for specific events, such as in depicting the two protagonists' mental states.

⁷³ Fred Steiner, "An Examination of Leith Stevens' Use of Jazz in The Wild One," in Film Music Notebook 2, Nos. 2–3 (1976), reprinted in Elmer Bernstein's Film Music Notebook: A Complete Collection of the Quarterly Journal, 1974–1978 (Sherman Oaks, CA: The Film Music Society, 2004), 240-249; 280-288. 74 Kathryn Kalinak, Settling the Score: Music and the Classical Hollywood Film (Madison: University of Wisconsin Press, 1992), 13. 75 Quoted in Staggs, Close-up on Sunset Boulevard, 145.



Example 1: Joe's Bebop Theme



Example 2: Norma's Tango Theme



Unlike in *Sunset Boulevard*, there are no leitmotifs for each character. Because of the length of "The Sixteen-Millimeter Shrine"—22 minutes without commercials—using numerous instances of one or more leitmotif(s) would sound monotonous, whereas in the 115-minute film it works.

Waxman uses similar instrumentation and genres in the two scores; for example, he composes a waltz—a musical marker of nostalgia-to represent both Norma's and Barbara's personal longings for a return to the past.76 Waxman uses alto saxophone and horn to depict The Twilight Zone episode's modernity, while depicting the past with full orchestra, often using a solo violin.⁷⁷ Similarly, Waxman's score for the movie contains two principal melodic motifs, each of which has a modernistic touch,78 and he does something very similar in the television episode. Only a few dissimilarities can be found in the orchestration of the two scores, including a lighter emphasis on strings in the television score and a greater emphasis on saxophones.

Waxman takes a similar approach in the film score and in both scores he composes the music as an additional narrative voice. His use in the film of multiple strings, for instance, depicts Norma's feeling of emptiness. And "The Sixteen-Millimeter Shrine," for example, features a cue called "The

of Jerry.
In comparing Norma's theme in Example 3 with "The Penthouse" theme in Example 4, save for a few minor differences they are the same theme, but orchestrated differently. This music would be something viewers familiar with the film would likely recognize. Theater speakers would have the technological capabilities to transmit the flute melody, whereas in the television version a slightly more powerful wind instrument—the alto saxophone—is

The "Prelude" to *Sunset Boulevard* and the "Prologue" of "The Sixteen-Millimeter Shrine" contain similar musical gestures and are equally short in length. Both contain similar rhythms and motivic ascents by thirds. There are other cues that share similar musical gestures, such as the viola line in

used to convey the music through the less powerful

Comprehensive History (Lanham, MD: Ardsley House, 1998), 119-120.

Penthouse," a sumptuous romantic melody for strings emerging out of a jazzy waltz for saxophone, trumpet, and brushed snare drum, to describe the aging actress's sentiment towards the past. ⁷⁹ The saxophone also represents a seductress, here seen in various capacities, whether trying to gain a younger man as her lover or charm her agent. ⁸⁰ This cue plays at the moment that Barbara reflects on her past career as a movie star and repeats with augmented rhythms in the subsequent cue, "A Visitor." These adjacent cues use the same melodic material. In their individual contexts, their melodies serve as a leitmotif for Norma or even her past, then her past resurfacing in the form

 $\hbox{$\odot$}$ The International Film Music Society 2017.



speakers.

⁷⁶ See Wissner, A Dimension of Sound, 95-96.
77 The use of the alto saxophone derives here also from Golden Age Hollywood film scoring in which such instrumentation represents both fallen women and sexual promiscuity See Kathryn Kalinak, "The Fallen Woman and the Virtuous Wife: Musical Stereotypes in The Informer, Gone With the Wind, and Laura," Film Reader, 5 (1981), 76-77.
78 Laurence E. MacDonald, The Invisible Art of Film Music: A

⁷⁹ Jazz, like the saxophone, also represents the fallen woman in classic film scoring. See Kalinak, "The Fallen Woman and the Virtuous Wife," 76. 80 Claudia Gorbman, *Unheard Melodies: Narrative Film Music* (Bloomington: Indiana University Press, 1987), 83.

Example 3: "The Penthouse," Theme



Example 4: "The Penthouse," Theme in "The Visitor"



Example 5: "An Aging Actress," violas only, m. 7



Example 6: "The Penthouse," alto saxophone only, m. 10



"An Aging Actress" from *Sunset Boulevard* and "The Penthouse" from "The Sixteen-Millimeter Shrine," as Examples 5 and 6 illustrate. Again, in a theater, a viola could easily be heard, whereas on television, a stronger, louder instrument—an alto saxophone—is needed.

Returning to the final scene of the movie and television episode, both employ dramatic chromaticism, which lends itself well to the dramatic representation of madness; it also was thought to represent women's fickle nature and rapidly changing emotions in film. The protagonists in each version become trapped in a movie—figuratively for Norma as her mental state deteriorates and she believes that she is on a movie set, and literally for Barbara as she now resides inside of the movie screen with her former co-stars as they appeared a quarter of a century ago. Although Waxman regarded music that depicts mental illness as cliché, he nonetheless believed that "if done with taste and imagination," the result could be effective; the final scene of both Sunset Boulevard and "The Sixteen-Millimeter Shrine" serve as testaments

to this.⁸¹ For *Sunset Boulevard*'s final scene, Waxman composes trills to represent Norma's tortured and demented mind.

While the main tango theme alternating with the tremolos accompanies Norma's scene, Barbara's music operates slightly differently. When the scene begins, a kind of supernatural-sounding music with tremolos, juxtaposed with an atonal flute melody and a lyrical violin solo, emphasizes Danny's reaction to seeing Barbara on the screen. A distorted-sounding piano line accompanies Barbara's close-up on the screen, demonstrating her entrapment in the past and underscoring her mental breakdown. Indeed, Serling allows Barbara to "achieve what earthbound Norma could only dream of: Serling's failed star dissolves into a silver screen." Some critics have even gone as far as to state that this scene serves as a metaphor for Barbara's death by suicide.

⁸² Brode and Serling, *Rod Serling and* The Twilight Zone, 114. 83 Peter Wolfe, *In the Zone: The Twilight World of Rod Serling* (Bowling Green, OH: Bowling Green State University Press, 1997), 67.



⁸¹ Tony Thomas, Film Score: The View From the Podium (South Brunswick and New York: A.S. Barnes, 1979), 57.

Analogously, in "The Sixteen-Millimeter Shrine," Waxman composes subtle tremolos to achieve the same effect of mental breakdown. From the film's opening, and up to this point, Norma's tango theme gradually deteriorates. In Sunset Boulevard, Waxman himself notes that, for the final scene, the music now sounds "twisted and tortured," and this description can also apply to the music in the final scene of "The Sixteen-Millimeter Shrine."84 In The Twilight Zone, the musical repetition depicts obsession, just as in Sunset Boulevard. Throughout his episode cues, even when not writing tremolos, he uses rapidly repeating notes on two alternating pitches which function as tremolos. For the majority of both scores, however, the choice of music is greatly determined by the viewing situation for which it was intended.

Conclusion

As this article has shown, while the music in both the film and the television episode is similar, it displays some fundamental differences, influenced by their different viewing environments. First, Waxman's compositional choices resulted not only from the action and plot, but also the plot trajectory. The film's length allowed Waxman more space to develop musical motifs than was the case in the half-hour

television episode, and this was likely why he used leitmotifs in the former much more frequently than in the latter. One of the key reasons why we hear subtle orchestrations in the film but not the episode is that they would likely not have been audible in the latter. So Waxman had to use alternative orchestrations, appropriate to the medium, to achieve similar effects.

Neither television sets nor movie theater loudspeaker systems were without their own particular sound-quality problems. But I raise the points regarding the general inferiority of the sound in early television loudspeakers to demonstrate that composers were sensitive to the differences in the two media, and made their compositional choices accordingly. Indeed, Waxman's comment about considering what he felt the music would sound like in the theater underlines this point.

Given the lengths of the respective scores of the film and the television episode, there remains much more to examine in terms of their similarities. However, in this article I have illustrated how prior understanding of the technology of the viewing location influenced musical decisions made by a composer. In doing this I have examined two similar plots: one destined for the large screen and one for the small screen. I have aimed to create a better understanding of a composer's approach to composition for two related but different media.

⁸⁴ Quoted in Staggs, Close-up on Sunset Boulevard, 145.

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