Conclusion

The initial assumption of the present research was the consideration of sound as a component of film that has been *lost in transience*. Film sound has been underestimated and underrepresented in film studies as well as in film preservation studies. Film has in fact been considered, especially in the past, as an image-oriented medium. The sound component of film has become a subject of interest only in a more recent phase of film studies. Moreover, film studies mainly considered film sound as a text composed by music, dialogue, and sound effects, where the musical score had precedence. In this dissertation, the underrepresentation of film sound is interpreted as related to two phenomena: the *hegemony of the visual*, which alludes to the predominance of vision and image in contemporary Western cultures and societies, and the *transience of sound*. This concept relates to the transitory nature of sound: sound is a fleeting and elusive event that is difficult to catch, define, and analyze through words.

Despite its underrepresentation, film sound, in combination with the image, is a fundamental component of film as a cultural form. In this research, the importance of film sound as part of our cinematic experience has been investigated through the concept of *cinematic soundscapes*, while the relevance of film sound to our cinematic memories has been elaborated with the idea of *film sound souvenirs*. Since film sound is fundamental in our cinematic experiences and memories, it is relevant to first investigate and then preserve its nature properly: with this aim I conducted the research of this dissertation.

In order to study the nature of film sound, I researched film preservation and presentation practices: from the analysis of case studies concerning these practices I derived the definition of film sound as *material form, trace, and performance*. The *material form* of film sound is characterized by the film carrier, *dispositif* and text. Film sound as *trace* is defined by the internal history of the material object (*physical trace*) and the external history of film exhibition and presentation (*mnemic trace*). Film sound as *performance* relates to the variable elements of film presentation (*dispositif, space and institutional context*). The *material form* and the *performance* determine how film sound is perceived and experienced by the audience in a particular presentation.
occurrence (i.e. the cinematic soundscape), while the trace relates to how film sound enters the individual and cultural memory (i.e. film sound souvenirs).

The definition of film sound as material form, trace, and performance has a wider relevance for the field of film studies. This elaboration encourages the consideration of film sound in its multiple dimensions, not only as a text composed of a musical score and dialogue, giving relevance to the different dimensions of film sound: the material dimension (carrier, physical trace), the human and technological dimensions (dispositif), the textual dimension (text), the institutional dimension (physical space, institutional context), the performative dimension (performance), the experiential dimension (cinematic soundscape) and memorial dimensions (film sound souvenirs, mnemic trace).

Additionally, the consideration of film sound as material form, trace, and performance can lead to a redefinition of the historiographic reading of film sound. The fact that the coming of sound is generally dated only to the late 1920s entails that sound film is intended as the film having a synchronized soundtrack recorded on the film carrier; in this perspective, film sound is reduced to the soundtrack. If, as I have argued in this dissertation, film sound is instead considered as a complex of different dimensions, the beginning of sound film should be dated back to the beginning of cinema as spectacle. The sound of early cinema, according to the model proposed in this research, should thus be considered as part of the history of film sound. This possible rethinking of the historiography of film sound is also supported by the consideration of early sound systems, as they were described in the case studies.

In addition, the definition of film sound as material form, trace, and performance also has a wider relevance for the field of film preservation and presentation. I formulated a theoretical model that, starting from the definition of film sound, could be used for understanding and interpreting the preservation and presentation of film, understood as both sound and image. The theoretical model is based on the concepts of material form, trace, and performance, which can help in individuating the interplay between variables and invariables of film in preservation practices and theories.

The way in which film sound is affected by the passage of time, its variables and invariables, can be interpreted examining the domain of noise. Film sound preservation can in fact be considered as the activity that operates in the field of noise: first, through a distinction between the noises inherent to the recording carrier, those inherent to the technological device, those caused by the dispositif, and those acquired through the
passage of time or other factors, then, by deciding which noises should be preserved and which should be erased in the film trace preserved for future use, and finally, by presenting film sound in new spaces and institutional contexts. The cinematic soundscape can in fact be shaped and characterized by working on the dispositif, the space, and the institutional context.

Along the same lines, the work of film preservation and presentation can be interpreted as the practices acting in the field of variables and invariables of film. The variables and invariables are determined by the movements of transition and transience occurring throughout time, which change film as material form, trace, and performance. With the passage of time, some elements of film as material form and trace get changed, others are kept, and the rest disappear. What changes or remains the same are tied to transition, while the features that disappear pertain to transience. Preservation and presentation practices intervene in the interplay between the variables and invariables, and address the marks and noises of the past in film.

The theoretical elaboration and findings of this dissertation offer possible ideas and inspirations for further research in the domain of film theory and film preservation. The definition of film sound and the theoretical model proposed can contribute to the discussion of other crucial issues, for instance, problems that have emerged with the digital transition. The digital debate in fact made its way into film theory and film preservation theory only once digitization started to involve the image dimension of film, in the late 1990s and 2000s, even if the digitization of sound in the cinematic field appeared many years before, in the mid 1980s. Significantly, the main


282 The digitization of sound first involved sound recording during film production, with the introduction of the Digital Audio Tape (1987) as sound recording carrier, and digital recording devices such as the Nagra-D (1994). It then involved sound in postproduction, with the launch of digital workstations and software such as Sound Designer (1984) and Pro Tools (1991). Finally, digital spread into sound distribution, in the form of recording formats such as Dolby Stereo Digital (1991), and carriers, for
arguments in the analogue-digital debate were related to the visual aspect of film: the quality of the analogue image based on film emulsion and grain was compared to the quality of the digital image based on pixel and resolution. The questions of how the essential qualities of film sound changed in the passage from analogue to digital recording and display formats have still not been investigated in film theory. The fact that the digital debate was primarily driven by and concerned the image can be interpreted in the light of the hegemony of the visual and the idea of the transience of sound. The recognition of this lack opens the field to potential research in the future: it could be interesting to reinterpret the issue of digitization considering the nature of film sound together with the nature of the image. Some questions and topics on this subject could be: what would change in the theoretical conception of digital cinema if the nature of sound is considered together with the image? How can digital cinema be read in the frame of the definition of film sound as material form and trace? Does the transition to digital offer an occasion to overcome the hegemony of the visual?

Besides the questions on whether the consideration of film sound can help to rethink the digital turn, other questions can be posed. An example could be the use of multimedia texts for film sound analysis. In the past, film histories, film analysis and film criticisms could describe the visual aspects of a film using the support of still photos, which show different features of the film such as the lighting, set construction, and also the editing through the use of picture sequences. In the analysis of film sound it was not possible to refer to samples in the text. This obstacle may be overcome in the future with the aid of multimedia texts published in academic publications, which allow sound files to be linked to written texts. This would create the possibility of referring to samples and examples in the analysis of film sound, thus contributing to a reduction of the hegemony of visual in film analysis.

Another topic that can be further investigated, in the light of the findings and considerations of this dissertation, concerns the activity of film heritage institutions in the digital world. In the present context of continuous and simultaneous access to the widest archive of human knowledge, the Internet, film heritage institutions are forced to reshape their role and activity. If film as text and content is copiously and easily accessible through the Internet, digital distribution (DVD, film on demand, internet and digital TV) and portable mobile devices, what tasks are left to the film archives? It is instance in the Digital Disc Playback system for IMAX theatres (1988) and the Digital Theatre System (1993).
possible to find some answers considering the concepts of film as material form, trace, and performance. The model suggests in fact an approach to preservation and presentation that is not only focused on film as text but also on other elements: the technological devices, the human techniques and practices, the space of exhibition can also become, to a certain extent, objects of preservation and presentation.

Film heritage institutions will soon be the only institutional repositories of original carriers (analogue film copies) and traditional theatrical dispositifs (analogue projection systems). With the rapid digitization of theatrical projection, film heritage institutions will very soon become the only place where it will be possible to experience analogue film in its original form: as analogue film stock projected by an analogue projector. The focus on the creation of cinematic events would support a reevaluation of the communal and social aspects of film presentations, aspects that risk becoming lost in an era of individual consumption of media content through mobile devices. The characteristics of performances and events can in fact be considered as the elements that keep the audience going to the theater rather than watching a movie at home, on a DVD player, or on the Internet. The role of film heritage institutions in the digital world can therefore be rethought through a creative use of dispositifs, spaces, and institutional contexts for creating cinematic experiences. In this frame of possible solutions, film sound can play an important role. Live musical accompaniments constitute a valuable factor in the creation of cinematic experiences. However, possible experimentations in the use of playback dispositifs can also contribute to this goal: for instance, recreating the cinematic soundscape of silent films with historical gramophone discs and record players instead of with live musical accompaniment could be an interesting offering for the audience.

Along this line of reasoning, I conclude with a final note on the role of the human actors involved in preservation and presentation work: film archivists, curators, restorers, programmers, technicians, etc. The field of work of archivists and curators can be interpreted as characterized by the interaction of transition and transience, variability and invariability, permanence and obsolescence, memory and oblivion. Considering this dialectic, the role of the archivist and curator can be described as a translator (traduttore) and traitor (trditore) of film forms and traces. They translate and transfer the film forms and traces of the past into the present and future (transition). At the same time, they betray those same film forms, since in each translation something of the form can become lost forever (transience). The acceptance of this loss and the
awareness of the continuous movement of transition and transience that inevitably changes the film forms and traces are a moral challenge for the archivist and curator. The recent digital turn prompts us to rethink the ways in which archivists and curators work with film transition and transience. In this context, the attention to film sound can contribute to new solutions for preservation and presentation practices. Furthermore, the definition of film sound as *material form*, *trace*, and *performance*, and the consideration of its different dimensions that have been investigated throughout this dissertation, can be productive for revisiting film history, film theory, and film preservation theories.