**Sound in Cinema**

In 1927, the film ‘The Jazz Singer’ revolutionised the film industry and established Hollywood as a powerful film industry across the world. The Jazz Singer was the first feature length film which featured synchronised voices. The film used a device called the ‘Vitaphone’ which was the only device that was commercially successful. Sound was not recorded on the print directly but on phonograph records which would then be played on a turntable which was physically attached to the projector.

However, sound on film was discussed many years before The Jazz Singer was released. Thomas Edison and Eadweard Muybridge met in 1888 and discussed the idea of combining sound with film by using Muybridge’s zoopraxiscope with Edison’s sound recording technology. However the two never managed to reach an agreement; several years later Edison and Dickenson released the Kinetophone, a combination of Kinetoscope and Phonograph.

Three large issues followed putting sound into film, synchronisation, amplification and recording clarity. Synchronisation is defined as ‘to operate in unison’ [[1]](#footnote-1) and in filmmaking it means to align the recorded sound with the movement on screen. It was found that aligning the sound with the film was difficult because the sound and pictures were recorded on separate devices and played back on separate devices; meaning that keeping both devices in sync was difficult. Amplifying the recorded sound was another problem. Until the invention of electrical amplification decades later, sound could not reach and fill large spaces.

And finally, the quality of the sound recorded was low and unless the actors were standing in front of the recording device directly, better quality sound was limited. These problems meant that film and sound separated for a time before synchronisation had been perfected and re-worked. Another issue that the new ‘Talkies’ proposed was that silent film stars could not find work because they could not remember lines or their voices did not translate to the screen well enough. This issue was the premise for the musical ‘Singin in the Rain’.

By the late 20’s, with the advancement of technology, two contrasting approaches to sound synchronisation came about. The first was sound on film. In 1919 inventor Lee De Forest, created the first optical sound on film technology (optical sound meaning that recorded sounds is stored on the transparent film). The second was sound on disc. Sound on disc technology meant that sound was recorded onto phonograph discs which would be placed on a turntable that was connected with a mechanical interlock to a film projector. Due to the complex mechanics and devices required to play sound on disc, sound on film was preferred and widely used amongst other reasons. Among them reason were that; no interlock device was 100% reliable, meaning that the disk could fall out of sync if not properly monitored. The phonograph discs added expense and a complication to the distribution of film.

When The Jazz Singer became a box office smash and the profits proving that sound technology was worth investing in, film studios around the world took note and began developing and importing the technology and using it in their filmmaking.

1. <http://www.thefreedictionary.com/Film+synchronization> [↑](#footnote-ref-1)