

ACOUSTICS2008/2111 Contemporary soundscape of ancient theatres

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Ancient drama is performed every summer in ancient theatres in the Mediterranean countries, especially in Greece. In many cases the performance conditions in terms of acoustics are poor, due to the effects of external noise sources. There is often a motorway constructed near an archaeological site, without careful consideration regarding the impact on the overall soundscape. Previous studies have demonstrated the effectiveness of purposely designed scenery on improving the internal acoustic conditions, and this study investigates the contribution of scenery to the improvement of the acoustic environment of ancient theatres in terms of reducing nearby traffic noise. The acoustic simulation for the theatre of Philippi, with scenery design in the form of a background wall in different sizes, suggests that there is a decrease in traffic noise by about 4dB. Further improvements have also been demonstrated with noise barriers of various heights and lengths. Different levels of traffic flow have been examined. It is expected that the results will be verified by on-site measurements and recordings of summer performances will be presented during the conference.