ABSTRACT

This thesis presents an academic study of the development and the instrumentation setup of gamelan Melayu in Malaysia. It draws to attention the current instrumentation set-up in the ensemble, and how restructuring it could enhance and improve the quality of sound projection in the performance of the gamelan Melayu ensemble.

The purpose of this research is to produce alternative solutions to improve the sound projection in gamelan Melayu. This is achieved through orchestrating new gamelan setups, based on the musicology study through the analysis of amplitude data obtained through music technology, and subsequently strengthening it with western orchestration theory.

This research finds out the amplitude of each gamelan instrument by detecting the sound using an instrument microphone (Shure SM57), and then recording the results of the audio level (amplitude) displayed in the digital mixer (Behringer X32). Then, a few samples of instrumentation setup are proposed based on the analysis of the results. This is further supported by the theory of western orchestration, which can determine the priority ranking of the gamelan instruments. In addition, gamelan repertoires in traditional balok (cipher) notation are transcribed into western notation system, as the western notation is more comprehensible by most musicians.

This research provide guidelines for future gamelan enthusiasts who would like to understand more about the gamelan Melayu before purchasing a new set of gamelan in the near future, as well as a reference for gamelan enthusiasts, and promote awareness among readers to explore more in-depth into gamelan instruments. It is hope that through this research, the beautiful sound of gamelan can be mold into a better shape.
This research is divided into five chapters. Chapter 1 contains an introduction to the research, where the research objective and research question is determined. Chapter 2 presents the history and literature review of this research, which covers the literatures of the development of the instrumentation setup in gamelan Melayu, as well as various western orchestration theories that could be applied into the aforementioned. The research methodologies are explained thoroughly in chapter 3. Chapter 4 displays the results and analysis of the amplitude, as well as the discussion about a few different samples of instrumentation setup. A summary of conclusions and findings are highlighted in chapter 5, as well as suggestions for future researches.
ABSTRAK

Tesis ini mempersembahkan suatu kajian akademik tentang perkembangan dan penyusunan instrumentasi dalam gamelan Melayu di Malaysia. Kajian ini memberi fokus kepada penyusunan instrumen masa kini di dalam ensembel tersebut, dan bagaimana penstrukturan semula mampu mempertingkatkan kualiti projeksi bunyi dalam persembahan ensembel gamelan Melayu.

Kajian ini bertujuan untuk menghasilkan penyelesaian alternatif bagi mempertingkatkan projeksi bunyi dalam gamelan Melayu. Ini boleh dicapai melalui pengarangan susunan gamelan yang baru, berdasarkan kajian musikologi melalui analisis data amplitud yang diperoleh melalui teknologi muzik dan seterusnya diperkukuhkan dengan teori susunan muzik barat.

Kajian ini mengukur amplitud bagi setiap instrumen gamelan melalui kaedah pengesanan bunyi menggunakan mikrofon instrumen (Shure SM57), dan seterusnya merekodkan keputusan tahap audio (amplitud) yang terpapar di mixer digital (Behringer X32). Seterusnya, beberapa sampel penyusunan instrumen telah diusulkan berpandukan analisis keputusan yang didapati. Keputusan ini juga disokong oleh teori susunan muzik barat, yang dapat menengal pasti kedudukan instrumen gamelan mengikut keutamaan. Tambahan pula, pelbagai repertoir gamelan dalam notasi balok (cipher) tradisional telah diterjemahkan kepada sistem notasi barat kerana lebih mudah difahami oleh kebanyakan pemuzik.

Kajian ini menyediakan garis panduan kepada aktivis gamelan masa hadapan yang ingin mengetahui dan memahami lebih banyak maklumat tentang gamelan Melayu sebelum membeli suatu set gamelan yang baru. Kajian ini juga boleh dijadikan sebagai sumber
rujukan kepada aktivis gamelan dan menyedarkan para pembaca untuk meneroka secara lebih mendalam lagi tentang instrumen gamelan. Diharapkan melalui kajian ini, bunyi indah gamelan boleh diperindahkan lagi.

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