

How the pianist's touch affects tone quality
A review of performance-based and scientific literature with
applications to piano practice and performance

Cameron James Roberts

MBBS, University of Melbourne, Australia

M.Mus, University of Melbourne, Australia

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School of Education
University of New England, Australia

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Abstract

This research examines the relationship existing between a pianist's touch and the tone quality resulting from it – the tone-touch relationship. Pianists have long debated the nature of this relationship though with little consensus of opinion. In an attempt to understand the reasons for the diversity of such opinion, the study examines the literature on the tone-touch relationship from the performer's perspective and the scientist's perspective. Tone quality causality is explored under the categories of pedagogical definitions, pianists' postures and touch characteristics, key-hammer analysis, hammer-string analysis and sound perception. Findings suggest that in order to resolve the dispute about tone quality interpretation, tone quality should be interpreted under two distinct categories: objective and subjective. Objectively, there appears to be no reliable way for a pianist to effect changes in the acoustic profile of a piano tone by means of touch, except for the contribution of key surface contact noises that are transmitted directly to the observer or indirectly via the transmission of vibrations through the instrument's structure. Subjectively, however, tone quality can be considered to be a multimodal sensory experience, relative to dynamic contributions of proprioceptive, auditory and visual inputs. In order to give this research practical relevance, focus is maintained on trying to apply an understanding of the tone-touch relationship to one's own performance practice. Personal reflection by the author is used to explore this latter point with reference made to the preparation and performance of two diverse recital programs.

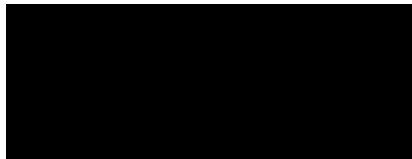
Candidate's Certification

I certify that this thesis is entirely my own work.

I certify that the substance of this thesis has not already been submitted for any degree and is not currently being submitted for any other degree or qualification.

I certify that any help received in preparing this thesis and all sources used have been acknowledged in this thesis.

Signed: Cameron Roberts (e-signature)



Date: 16th July, 2014

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Dedication

To my wife Diana (thanks), my kids (sorry), my dad (in memory), my mum (with love) and everybody else who has helped me on the journey – you are many and dear.