
CONTENTS

Abstract	v
Zusammenfassung	vii
Acknowledgements	xi
Glossary	xv
1. Introduction	1
2. Theory	5
2.1. Performance and interpretation of music	5
2.2. Model of a solo music performance	10
2.3. Performative adjustments recommended by scholars and musicians	16
3. Related Work	25
3.1. Room acoustics and the performance of music	25
3.2. Stage acoustics	31
4. Methods	41
4.1. Research design	41
4.2. Room acoustical measurements and simulation	46
4.2.1. Room acoustical measurements	46
4.2.2. Room acoustical models	47
4.2.3. Auralisation and acquisition of binaural room impulse re- sponses	48
4.3. Performance analysis	51
4.4. Hierarchical linear models	57
4.5. Qualitative content analysis	61

5. Field Study	65
5.1. Performances	66
5.2. Room acoustics	68
5.2.1. Concert venues	68
5.2.2. In-situ measurements	69
5.2.3. Room acoustical models	74
5.3. Statistical analysis	86
5.3.1. Predictor variables	86
5.3.2. Data structure	88
5.3.3. Results	90
5.4. Guided interviews	96
5.4.1. Methods	96
5.4.2. Results	98
5.5. Conclusions	114
6. Laboratory Study	119
6.1. Performances	120
6.2. Room acoustics	122
6.2.1. Room acoustical models	122
6.2.2. Room acoustical measurements	130
6.3. Technical setup and experimental procedure	133
6.4. Statistical analysis	136
6.4.1. Predictor variables	136
6.4.2. Data structure	139
6.4.3. Results	140
6.4.4. Influence of subjective room acoustical quality	148
6.5. Guided interviews	151
6.5.1. Methods	151
6.5.2. Results	152
6.6. Conclusions	167
7. Overall Discussion and Conclusions	171

Bibliography	179
A. Performance Data	I
B. Room Acoustical Data	III
B.1. In-situ measurements field study	III
B.2. Parameters of room acoustical simulations	VII
B.3. PCA components used in laboratory study	IX
C. Interviews and Questionnaire	XI
C.1. Qualitative content analysis	XI
C.2. Questionnaire	XIII