

Orchestration Trends in a Sample of Successful Musical Theatre Works

by

Kelsey Kylie Müller



Thesis presented in partial fulfilment of the requirements for the degree of Master of Music (Composition) in the Faculty of Arts and Social Sciences at Stellenbosch University

Supervisor: Dr Barry Ross

April 2019

Declaration

By submitting this thesis electronically, I declare that the entirety of the work contained therein is my own, original work, that I am the sole author thereof (save to the extent explicitly otherwise stated), that reproduction and publication thereof by Stellenbosch University will not infringe any third party rights and that I have not previously in its entirety or in part submitted it for obtaining any qualification.

Date: April 2019

Copyright © 2019 Stellenbosch University
All rights reserved.

Abstract

Orchestration is a vital yet under-appreciated part of musical theatre. Literature on this topic is scarce, with no comprehensive study having been written, nor any guide to orchestration in musical theatre. The purpose of this study is to make a preliminary study of orchestration trends in musical theatre. Thirty musicals were selected, and three divisions became apparent: full musical theatre instrumentation (Type 1), small musical theatre instrumentation (Type 2), and rock band orchestration (Type 3). These musicals were studied, and common orchestration techniques were compiled. 121 examples were selected as typical of musical theatre orchestration practices. These trends can be broadly summarised as follows: (i) the solo voice is not typically accompanied by a full orchestra; (ii) when the vocalist sings softer, fewer instruments are used; (iii) when the orchestrator uses the full orchestra, fewer instruments are used on voice entry; (iv) when different vocalists are used in different parts of a song, each vocalist's accompaniment is orchestrated so that each voice is clearly heard; (v) when simple rhythms and simple melodies are used, then simple orchestration is also found; (vi) when vocal clarity is required, orchestrators decrease the activity in multiple instruments; (vii) when the full chorus is used, only then is the full orchestra used as accompaniment; (viii) when the orchestrator uses polyphonic vocal lines, he or she first presents each vocal line separately; and (ix) when the orchestrator does use the full orchestra with a solo voice, then the orchestration is bare. These trends in orchestration can be identified in this sample, and provide a survey of techniques that have traditionally been found to be successful in musical theatre.

Opsomming

Orkestrasie is 'n belangrike, maar minder waardeerde faset van 'n musiekblyspel. Die literatuur op hierdie onderwerp is skaars met geen omvattende studie tot dusver geskryf, of geen riglyne vir orkestrasie in musiekblyspel. Die doel van hierdie studie is om 'n voorlopige studie van orkestrasie tendense in musiekblyspele te doen. Dertig musiekblyspele is gekies en drie divisies het uitgestaan: volle musiekblyspelinstrumentasie (Tipe 1), klein musiekblyspelinstrumentasie (Tipe 2), en 'rock orkesinstrumentasie' (Tipe 3). Hierdie musiekblyspele is bestudeer en algemene orkestrasie beginsels is saamgestel. 121 voorbeelde was gekies as tipiese musiekblyspel orkestrasie gebruike. Hierdie tendense kan breedweg as volg opgesom word: (i) die solostem word nie tipies begelei deur volle orkes nie; (ii) as die sanger sagter sing, word minder instrumente gebruik; (iii) as die orkestreerder die volle orkes gebruik, word minder instrumente gebruik sodra die sanger begin sing; (iv) as verskillende sangers in verskillende gedeeltes van 'n lied gebruik word, is elke stem se begeleiding georkestreer volgens die spesifieke stem sodat dit helder gehoor kan word; (v) as eenvoudige ritmes en melodieë gebruik word, word eenvoudige orkestrasie gevind; (vi) indien die stem helder hoorbaar moet wees, word die aktiwiteite deur orkestreders in verskeie instrumente verminder; (vii) slegs as die volle koor gebruik word, is die volle orkes gebruik as begeleiding; (viii) wanneer die orkestreerder polifoniese stemlyne gebruik, stel hy of sy eers die vokale lyne apart; en (ix) indien die orkestreerder die volle orkes met 'n solostem gebruik, word die orkestrasie spaarsamig gebruik. Hierdie tendense in orkestrasie kan in hierdie steekproef geïdentifiseer word en voorsien 'n oorsig van tegnieke wat tradisioneel bevind is as suksesvol in musiekblyspel.

Contents

Declaration	i
Abstract	ii
Opsomming	iii
Contents	iv
List of Figures	vi
List of Tables	xii
1 Introduction	1
1.1 Problem Statement	1
1.2 Terminology	1
1.3 Research Design	2
1.4 Objectives	6
1.5 Overview of Dissertation	6
2 Literature Review	8
2.1 Articles	8
2.2 Books	11
2.3 Dictionaries and Encyclopaedias	15
3 Presentation of Data	16
3.1 Type 1 - Full Musical Theatre Instrumentation	16
3.2 Type 2 - Small Musical Theatre Instrumentation	60
3.3 Type 3 - Rock Band Instrumentation	102
4 Assessment of Data	133
4.1 General Trends observed in the sample of Orchestration	133
4.2 Conclusion	135
Appendices	136
A Instrumentations	137

CONTENTS

v

A.1	Type 1 - Full Musical Theatre Instrumentation	137
A.2	Type 2 - Small Musical Theatre Instrumentation	148
A.3	Type 3 - Rock Band Instrumentation	158

List of Figures

- 3.1 *Annie* - ‘Little Girls’ - Accompanying the voice. The orchestrator uses different instruments on different beats to make the orchestration sparse. 19
- 3.2 *Bye Bye Birdie* - ‘One Boy’ - Accompanying the voice. Short notes on every second beat in the reeds allow the voice to be heard. . . . 20
- 3.3 *Cats* - ‘Moments of Happiness’ - Accompanying the voice. Arpeggios are less dense than chords. 21
- 3.4 *Cats* - ‘Gus: The Theatre Cat’ - Accompanying the voice. The vocal line is only accompanied by a keyboard. 22
- 3.5 *Cats* - ‘Macavity: The Mystery Cat’ - Accompanying the voice. The vocal line is simply accompanied by bass and drums. 22
- 3.6 *Into the Woods* - ‘I Know Things Now’ - Accompanying the voice. When the voice enters, several instruments drop out. 23
- 3.7 *Les Misérables* - ‘At the End of the Day’ - Accompanying the voice. The full orchestra plays when the vocalist is not singing. 24
- 3.8 *The Phantom of the Opera* - ‘Angel of Music’ - Accompanying the voice. Meg’s lighter voice is accompanied by a keyboard and a harp. 25
- 3.9 *The Phantom of the Opera* - ‘Angel of Music’ - Accompanying the voice. Christine’s slightly bigger voice is accompanied by a harp and strings. 26
- 3.10 *West Side Story* - ‘A Boy Like That’ - Accompanying the voice. The introduction features the full orchestra, while only the reeds and strings continue to play when the voice enters. 27
- 3.11 *Annie* - ‘Easy Street’ - Recitative accompaniment. Bells and a glockenspiel provide a reference chord. The recitative is simply accompanied by a baritone saxophone, tenor saxophone, and trombone. 29
- 3.12 *Bye Bye Birdie* - ‘Spanish Rose’ - Recitative accompaniment. The reference chord and accompaniment is provided only by a clarinet and bass clarinet. 30
- 3.13 *Bye Bye Birdie* - ‘How Lovely to be a Woman’ - Recitative accompaniment. The reference note is provided by the horn, while the vibraphone and flute provide the accompaniment, along with the horn. 30
- 3.14 *West Side Story* - ‘Maria’ - Recitative accompaniment. 31

3.15	<i>Evita</i> - ‘The Chorus Girl Hasn’t Learned’ - Recitative accompaniment.	32
3.16	<i>Les Misérables</i> - ‘What Have I Done’ - Recitative accompaniment.	33
3.17	<i>Wicked</i> - ‘Opening’ - Recitative accompaniment.	34
3.18	<i>Cats</i> - ‘The Naming of Cats’ - Accompaniment of spoken text. The accompaniment of the spoken text is orchestrated sparsely.	36
3.19	<i>Into the Woods</i> - ‘Act 1 Opening Part 4’ - Accompaniment of spoken text.	37
3.20	<i>Annie</i> - ‘Maybe’ - Image painting. The vocalist singing alone portrays loneliness.	40
3.21	<i>Cats</i> - ‘Grizabella: The Glamour Cat’ - Image painting. Low instruments portray suspense.	41
3.22	<i>Cats</i> - ‘Macavity: The Mystery Cat’ - Image painting. Low keyboards and bass portray suspense.	42
3.23	<i>Chess</i> - ‘Where I Want to Be’ - Image painting. The lone keyboard portrays the lonely character.	42
3.24	<i>Into the Woods</i> - ‘Giants in the Sky’ - Image painting. The low instruments playing loudly portray the giants walking.	43
3.25	<i>Les Misérables</i> - ‘The Second Attack’ - Image painting. The triplet figures in keyboard 1, keyboard 3, violin, and viola recreate the chaos on the battlefield, while the woodwinds emulate rapid gunfire.	44
3.26	<i>Evita</i> - ‘Perón’s Latest Flame’ - Image Painting.	45
3.27	<i>Evita</i> - ‘The Chorus Girl Hasn’t Learned’ - Image Painting. The orchestrator uses an <i>a capella</i> chorus to portray unity among the people of Argentina.	45
3.28	<i>The Phantom of the Opera</i> - ‘The Music of the Night’ - Image painting. The chromatic passages in the strings portray the eeriness of the character.	46
3.29	<i>West Side Story</i> - ‘Tonight’ - Image painting. The word ‘light’ is portrayed in the strings with soft tremolos.	47
3.30	<i>Wicked</i> - ‘For Good’ - Image painting. The word ‘comet’ is portrayed in the drum-set similar to film stereotypes.	48
3.31	<i>Annie</i> - ‘Tomorrow’ - Reed ensembles. The orchestrator uses clarinets.	50
3.32	<i>Annie</i> - ‘Maybe’ - Reed ensembles.	50
3.33	<i>Bye Bye Birdie</i> - ‘A Lot of Livin’ To Do’ - Reed ensembles.	51
3.34	<i>Chess</i> - ‘Merano’ - Reed ensembles.	52
3.35	<i>Annie</i> - ‘Little Girls’ - Reed ensembles. The orchestrator uses saxophones.	53
3.36	<i>Cats</i> - ‘Growltiger’s Last Stand’ - Almost no accompaniment. The melody is doubled by keyboard, guitar, and bass guitar. No bass or harmony is used.	54
3.37	<i>Evita</i> - ‘On This Night’ - Almost no accompaniment. The voice is accompanied by a drum-set. The melody is doubled by the double bass.	55
3.38	<i>Chess</i> - ‘Hymn to Chess’ - <i>A capella</i> chorus.	56

3.39	<i>Wicked</i> - 'Dear Old Shiz' - <i>A capella</i> chorus.	56
3.40	<i>Les Misérables</i> - 'Finale' - <i>A capella</i> chorus.	57
3.41	<i>Annie</i> - 'Overture' - Overtures/Introductions. The overture begins with a solo trumpet, later joined by a trombone.	58
3.42	<i>Cats</i> - 'Jellicle Songs for Jellicle Cats' - Overtures/Introductions. The introduction begins with a clarinet motive followed by a flute motive.	58
3.43	<i>Bye Bye Birdie</i> - 'The Telephone Hour' - Overtures/Introductions. The introduction consists of vocals accompanied by the hihat.	59
3.44	<i>West Side Story</i> - 'Somewhere' - Overtures/Introductions. the voice begins alone. The cello enters a bar later.	59
3.45	<i>9 to 5</i> - 'Here For You' - Accompanying the voice. Only a keyboard, guitars, and drums accompany the voice.	62
3.46	<i>9 to 5</i> - 'Here For You' - Accompanying the voice. Full orchestra plays only on the highest point in the melody.	63
3.47	<i>9 to 5</i> - 'Heart to Hart' - Accompanying the voice. The voice is accompanied by the bass guitar and drum-set.	64
3.48	<i>9 to 5</i> - 'Heart to Hart' - Accompanying the voice. The full orchestra only plays on the high note for the word 'open'.	65
3.49	<i>Aida</i> - 'My Strongest Suit' - Accompanying the voice. The voice is simply accompanied by a guitar, bass guitar, and drums.	66
3.50	<i>Aida</i> - 'Elaborate Lives' - Accompanying the voice. Here the voice is only accompanied by a keyboard.	66
3.51	<i>Aida</i> - 'A Step Too Far' - Accompanying the voice. Three vocal lines are accompanied by three keyboards, bass, and drums, allowing all voices to be heard.	67
3.52	<i>Cabaret</i> - 'Don't Tell Mama' - Accompanying the voice. The voice sings on the first and third beat, while the orchestra plays on every other beat.	68
3.53	<i>Cabaret</i> - 'Perfectly Marvellous'. Accompanying the voice.	69
3.54	<i>Cabaret</i> - 'Two Ladies' - Accompanying the voice.	70
3.55	<i>Cabaret</i> - 'Married' - Accompanying the voice. The accompaniment falls on the second beat of the bar, while the vocalist sings on the first and third beat.	71
3.56	<i>Cabaret</i> - 'I Don't Care Much' - Accompanying the voice.	71
3.57	<i>Chicago</i> - 'Roxie' - Accompanying the voice. The full orchestra plays a chord on the first beat, and the vocalist starts singing on the second beat.	72
3.58	<i>Fiddler on the Roof</i> - 'Tradition' - Accompanying the voice. The first statements of the polyphonic voices are <i>a capella</i>	73
3.59	<i>Grease</i> - 'Shaking at the High School Hop' - Accompanying the voice. The full orchestra plays, but only on the first beat of every second bar.	74

3.60	<i>How to Succeed in Business Without Really Trying</i> - ‘Brotherhood of Man’ - Accompanying the voice.	75
3.61	<i>Cabaret</i> - ‘What Would You Do’ - Accompanying the voice. The melody is echoed in the clarinet and keyboard 2.	76
3.62	<i>Jesus Christ Superstar</i> - ‘Strange Thing, Mystifying’ - Accompanying the voice. The vocal is accompanied only by the band.	76
3.63	<i>Jesus Christ Superstar</i> - ‘Gethsemane’ - Accompanying the voice.	77
3.64	<i>Joseph and the Amazing Technicolor Dreamcoat</i> - ‘Potiphar’ - Accompanying the voice.	77
3.65	<i>Cabaret</i> - ‘Mein Herr’ - Recitative accompaniment. The recitative is simply accompanied by the piano.	78
3.66	<i>Jesus Christ Superstar</i> - ‘This Jesus Must Die’ - Recitative accompaniment. The recitative is accompanied by two keyboards and timpani.	79
3.67	<i>Aida</i> - ‘Fortune Favors the Brave’ - Recitative accompaniment. This recitative simply features <i>staccato</i> chords at the beginning of every bar.	80
3.68	<i>How to Succeed in Business Without Really Trying</i> - ‘Cinderella, Darling’ - Recitative accompaniment. The recitative is accompanied by long notes in the reeds, brass, and band.	81
3.69	<i>Cabaret</i> - ‘So What’ - Accompaniment of spoken text. The text is only accompanied by two clarinets, a trombone, and a double bass.	83
3.70	<i>Grease</i> - ‘We Go Together’ - Accompaniment of spoken text. The text is spoken alone, with the orchestra only playing a <i>staccato</i> chord on the first syllable.	84
3.71	<i>Grease</i> - ‘Born to Hand Jive’ - Accompaniment of spoken text. The text is accompanied by drums and guitar.	85
3.72	<i>Chicago</i> - ‘Cell Block Tango’ - Accompaniment of spoken text.	86
3.73	<i>How to Succeed in Business Without Really Trying</i> - ‘Dear Reader’ - Accompaniment of spoken text. The accompaniment consists of <i>staccato</i> notes creating a bare accompaniment that ensures that the text is audible.	87
3.74	<i>Company</i> - ‘Getting Married Today’ - Accompaniment of spoken text.	88
3.75	<i>Aida</i> - ‘The Gods Love Nubia’ - Image painting. The first vocal line emulates a leader gathering support. The remaining vocal lines emulate the people joining their leader.	90
3.76	<i>Aida</i> - ‘The Gods Love Nubia’ - Image painting. The chorus here signifies unity.	91
3.77	<i>Fiddler on the Roof</i> - ‘If I Were A Rich Man’ - Image painting. The reeds in the third bar imitate the sound of ducks and chickens.	92
3.78	<i>Joseph and the Amazing Technicolor Dreamcoat</i> - ‘One More Angel in Heaven’ - Image painting. The third vocal line portrays angels singing.	93

3.79	<i>9 to 5</i> - ‘Around Here’ - Using the chorus. The chorus doubles part of the vocal line.	95
3.80	<i>9 to 5</i> - ‘One of the Boys’ - Using the chorus. The chorus echoes the voice.	96
3.81	<i>Chicago</i> - ‘Cell Block Tango’ - Using the chorus. The chorus sings the melody allowing it to be heard, even though the full orchestra is playing.	97
3.82	<i>Grease</i> - ‘Those Magic Changes’ - Using the chorus. The chorus provides additional harmony.	98
3.83	<i>Company</i> - ‘Overture’ - Overtures and introductions to songs. The overture consists only of voices.	100
3.84	<i>Fiddler on the Roof</i> - ‘Prologue’ - Overtures and introductions to songs. The introduction starts with a solo violin, joined later by a flute.	101
3.85	<i>13</i> - ‘If That’s What It Is’ - Accompanying the voice. The accompaniment does not occur with the voice.	103
3.86	<i>Urinetown</i> - ‘It’s A Privilege to Pee’ - Accompanying the voice. . .	104
3.87	<i>American Idiot</i> - ‘American Idiot’ - Accompanying the voice. . . .	105
3.88	<i>American Idiot</i> - ‘Jesus of Suburbia’ - Accompanying the voice. . .	105
3.89	<i>American Idiot</i> - ‘St Jimmy’ - Accompanying the voice.	106
3.90	<i>Avenue Q</i> - ‘If You Were Gay’ - Accompanying the voice. When the voice enters, some instruments drop out.	107
3.91	<i>Mamma Mia</i> - ‘Mamma Mia’ - Accompanying the voice.	108
3.92	<i>Next to Normal</i> - ‘Song of Forgetting’ - Accompanying the voice. .	109
3.93	<i>American Idiot</i> - ‘Boulevard of Broken Dreams’ - Accompanying the voice. The voice is simply accompanied by an acoustic guitar. .	109
3.94	<i>American Idiot</i> - ‘Give Me Novocaine’ - Accompanying the voice. .	110
3.95	<i>American Idiot</i> - ‘Whatsername’ - Accompanying the voice. The voice is simply accompanied by a piano.	110
3.96	<i>Avenue Q</i> - ‘Special’ - Accompanying the voice.	110
3.97	<i>Mamma Mia</i> - ‘Money Money’ - Accompanying the voice.	111
3.98	<i>Rocky Horror Show</i> - ‘Over At The Frankenstein Place’ - Accompanying the voice.	111
3.99	<i>13</i> - ‘All Hail The Brain’ - Accompaniment of spoken text. The text is accompanied by a drum-set.	113
3.100	<i>13</i> - ‘Opportunity’ - Accompaniment of spoken text. Here the text is accompanied by drums and bass. The guitar functions as a bass. .	114
3.101	<i>Urinetown</i> - ‘Cop Song’ - Accompaniment of spoken text. Here the text is accompanied by a drum-set.	114
3.102	<i>Rent</i> - ‘Today for You’ - Accompaniment of spoken text. The text is accompanied by a pre-recorded drum machine.	115
3.103	<i>Rent</i> - ‘Sante Fe’ - Accompaniment of spoken text. The text is simply accompanied by the bass.	115

3.104	<i>Urinetown</i> - ‘Urinetown’ - Accompaniment of spoken text. Here the text is accompanied by chords in the keyboard, bass, and timpani. .	116
3.105	<i>American Idiot</i> - ‘Holiday’ - Accompaniment of spoken text. The text is accompanied by bass and drums.	116
3.106	<i>13</i> - ‘Hey Kendra’ - Accompaniment of spoken text. The text appears after each vocal line.	117
3.107	<i>Rent</i> - ‘You’ll See’ - Accompaniment of spoken text. Here a chord in the beginning of the bar, is played only by the piano and guitar. .	117
3.108	<i>Urinetown</i> - ‘Cop Song’ - Accompaniment of spoken text.	118
3.109	<i>Rocky Horror Show</i> - ‘Sweet Transvestite’ - Accompaniment of spoken text. The text is not spoken at the same time that the band plays.	119
3.110	<i>Rocky Horror Show</i> - ‘Time Warp’ - Accompaniment of spoken text. .	120
3.111	<i>13</i> - ‘Thirteen’ - Using the chorus. The chorus sings the melody in unison, and is accompanied by the full band.	122
3.112	<i>Mamma Mia</i> - ‘The Name of the Game’ - Using the chorus. The chorus provides the harmony and accompanies the voice.	123
3.113	<i>Smokey Joe’s Café</i> - ‘Young Blood’ - Using the chorus. Here the chorus serves as accompaniment.	124
3.114	<i>Urinetown</i> - ‘Run Freedom Run’ - Using the chorus.	125
3.115	<i>13</i> - ‘Thirteen’ - Using the chorus. The chorus doubles the voice on the word ‘thirteen’, where the band plays as well.	126
3.116	<i>American Idiot</i> - ‘Boulevard of Broken Dreams’ - Using the chorus. The chorus doubles the voice on the second half of the vocal line. .	127
3.117	<i>13</i> - ‘Thirteen’ - Overtures and introductions to songs. The introduction consists only of drums.	129
3.118	<i>13</i> - ‘Terminal Illness’ - Overtures and introductions to songs. There is no introduction.	130
3.119	<i>Mamma Mia</i> - ‘Super Trouper’ - Overtures and introductions to songs. The introduction consists of an <i>a capella</i> chorus.	131
3.120	<i>Godspell</i> - ‘Prepare Ye’ - Overtures and introductions to songs. The introduction consists of the voice alone.	131
3.121	<i>Smokey Joe’s Café</i> - ‘Keep On Rollin’ - Overtures and introductions to songs.	132

List of Tables

1.1	Type 1: Full Musical Theatre Instrumentation	3
1.2	Type 2: Small Musical Theatre Instrumentation	3
1.3	Type 3: Rock Band Instrumentation	3
1.4	Type 4: Standard Classical Instrumentation	4
1.5	Selected Musicals for Type 1: Full Musical Theatre Instrumentation	5
1.6	Selected Musicals for Type 2: Small Musical Theatre Instrumentation	5
1.7	Selected Musicals for Type 3: Rock Band Instrumentation	6

Chapter 1

Introduction

Despite the obvious importance of orchestration in the creative process of musical theatre, there is a lack of literature concerning orchestration. The general aim of this study is to fill this gap in the literature by observing trends in a selection of successful musicals. While the immediate aim of this thesis is to create a guide, the ultimate usefulness may reside in prompting further studies. The hope is that this thesis will be of use to young orchestrators in musical theatre. Therefore, there has been an emphasis on numerous musical examples from an extensive range of musicals, spanning various orchestra eras and types. The introductory chapter will cover the problem statement, research design, objectives and overview of this study.

1.1 Problem Statement

The focus of the research project is to observe trends in a selection of successful musicals. This requires an investigation into musicals that have already been orchestrated. Such a practical guide has not been written. Multiple musical theatre scores were examined to identify trends used by musical theatre orchestrators. These trends in orchestration technique can be used to create a future guide to orchestration. The thesis will look at trends that are observed in a surveyed sample.

1.2 Terminology

Trend. The Oxford Dictionary defines the word 'trend' as: 'A general direction in which something is developing or changing or a fashion.' The Cambridge English Dictionary Online defines the word as a 'general development or change in a situation or in the way that people are behaving or a new development in clothing.' For the purpose of this thesis, 'trend' will be defined as a technique that appears often in the scores that will be investigated. A technique

will be defined as a type of orchestration. This includes different types of accompaniments with regards to the number of voices being used.

Ensemble types. The identification of ensemble types (full musical theatre instrumentation, small musical theatre instrumentation, rock band instrumentation, and classical orchestration) does not come from the literature, but is rather made due to the instrumentation of the musicals selected for this study. It was noted that instrumentation choices typically fall into these categories, and they have therefore been used to categorise different orchestration techniques. These different ensemble types are further explained in section 1.3 below.

1.3 Research Design

The research in this thesis is qualitative in nature. First, the musicals to be examined were chosen. In order to do this, possible instrumentation was divided into four different types of instrumentation. Type 1 is full musical theatre instrumentation. This consists of three to five reed players, and occasionally includes more. Brass and a large rhythm section is included. Strings are often included as well. *Cats* (1981) is an example of a musical featuring Type 1 instrumentation. Table 1.1 shows the typical instrumentation for a full musical theatre orchestra. These types were identified as the categories that seemed to present itself when looking at the different types of instrumentation.

Type 2 is small musical theatre instrumentation. This includes two reeds or less and a small rhythm section. Strings are not often used here, but the composer or orchestrator sometimes adds a solo violin or solo cello. *Chicago* (1978) is an example of a musical with Type 2 instrumentation. This is shown in Table 1.2.

Type 3 is called the rock band. This usually consists of a small rhythm section containing drums, guitar, keyboard, and a bass guitar. Reeds, brass and strings are not commonly found in this type, however, one or two extra instruments have been used occasionally. *Mamma Mia* (1999) is an example of a musical with Type 3 instrumentation. Typical rock band orchestration is depicted in Table 1.3.

Type 4 is the classical orchestration, so named because it follows the standard instrumentation of a symphony or opera orchestra. *The Sound of Music* (1959) is an example of a musical with Type 4 instrumentation. This type of instrumentation and orchestration has been covered in other literature (Adler and Hesterman, 1989; Piston, 1955) and therefore this thesis will be limited to the first three types. Table 1.4 shows the typical instrumentation for classical orchestration.

Number	Instrument
3-5	Reeds
0-4	Horns
0-3	Trumpets
0-3	Trombones
0-1	Bass Trombone
0-1	Tuba
0-4	Percussion
1-4	Keyboards
0-1	Drums
0-2	Guitars
0-1	Bass Guitar
0-1	Violin I
0-1	Violin II
0-1	Viola
0-1	Cello
0-1	Bass

Table 1.1: Type 1: Full Musical Theatre Instrumentation

Number	Instrument
0-2	Reeds
0-4	Horns
0-3	Trumpets
0-3	Trombones
0-1	Bass Trombone
0-1	Tuba
0-1	Percussion
1-4	Keyboards
0-1	Drums
0-2	Guitars
1	Bass Guitar

Table 1.2: Type 2: Small Musical Theatre Instrumentation

Number	Instrument
1-4	Keyboards
0-1	Drums
0-2	Guitars
1	Bass Guitar

Table 1.3: Type 3: Rock Band Instrumentation

Number	Instrument	Doubling
2-4	Flutes	Piccolo/Alto Flute
2-4	Oboes	English Horn
2-4	Clarinets	E♭/Bass Clarinet
2-4	Bassoons	Contra-bassoon
2-6	Horns	-
2-3	Trumpets	-
2-3	Trombones	-
0-1	Bass Trombone	-
0-1	Tuba	-
1-4	Percussion	-
0-1	Piano	-
0-1	Harp	-
1	Violin I	-
1	Violin II	-
0-1	Violin III	-
1	Viola	-
0-1	Viola II	-
1	Cello	-
1	Bass	Tuba

Table 1.4: Type 4: Standard Classical Instrumentation

Ten pieces are chosen representing each category. A total of thirty pieces were chosen. These pieces are depicted in tables 1.5, 1.6 and 1.7. Each piece will be examined and the orchestration techniques identified will be noted. In each category the techniques will be compared to see what trends can be found. The trends found will be discussed, and reasons why these particular trends are effective will be discussed. Techniques that are uncommon will also be discussed. Reasons why a particular trend might not commonly be successful, as well as why the trend was successful in the piece that it was found in, will also be discussed.

	Musical	Date	Composer
1.	<i>Annie</i>	1977	Charles Strouse
2.	<i>Bye Bye Birdie</i>	1960	Charles Strouse
3.	<i>Cats</i>	1981	Andrew Lloyd Webber
4.	<i>Chess</i>	1986	Benny Andersson & Björn Ulvaeus
5.	<i>Evita</i>	1978	Andrew Lloyd Webber
6.	<i>Into the Woods</i>	1987	Stephen Sondheim
7.	<i>Les Misérables</i>	1987	Claude-Michel Schönberg
8.	<i>The Phantom of the Opera</i>	1988	Andrew Lloyd Webber
9.	<i>West Side Story</i>	1957	Leonard Bernstein
10.	<i>Wicked</i>	2003	Stephen Schwartz

Table 1.5: Selected Musicals for Type 1: Full Musical Theatre Instrumentation

	Musical	Date	Composer
1.	<i>9 to 5</i>	2009	Dolly Parton
2.	<i>Aida</i>	2000	Elton John
3.	<i>Cabaret</i>	1966	John Kander
4.	<i>Chicago</i>	1975	John Kander
5.	<i>Company</i>	1970	Stephen Sondheim
6.	<i>Fiddler on the Roof</i>	1964	Jerry Bock
7.	<i>Grease</i>	1972	Jim Jacobs and Warren Casey
8.	<i>How to Succeed in Business Without Really Trying</i>	1961	Frank Loesser
9.	<i>Jesus Christ Superstar</i>	1971	Jim Jacobs & Andrew Lloyd Webber
10.	<i>Joseph and the Amazing Technicolor Dreamcoat</i>	1972	Andrew Lloyd Webber

Table 1.6: Selected Musicals for Type 2: Small Musical Theatre Instrumentation

	Musical	Date	Composer
1.	<i>13 The Musical</i>	2008	Jason Robert Brown
2.	<i>American Idiot</i>	2010	Green Day
3.	<i>Avenue Q</i>	2003	Robert Lopez and Jeff Marx
4.	<i>Godspell</i>	1972	Stephen Schwartz
5.	<i>Mamma Mia</i>	1999	Benny Andersson & Björn Ulvaeus
6.	<i>Next to Normal</i>	2009	Tom Kitt
7.	<i>Rent</i>	1996	Jonathan Larson
8.	<i>Rocky Horror Show</i>	1973	Richard O'Brien
9.	<i>Smokey Joe's Cage</i>	1995	Jerry Leiber and Mike Stoler
10.	<i>Urinetown</i>	2001	Mark Hollmann

Table 1.7: Selected Musicals for Type 3: Rock Band Instrumentation

1.4 Objectives

The objective of this research project is to survey a wide variety of musicals, in order to observe trends in orchestration. These observations not only fill an important gap in the literature, but could potentially serve as a foundation for future guides to musical orchestration. This research project will describe techniques that are common in musicals. Uncommon techniques will also be presented, and reasons for their lack of popularity will also be discussed. Each of the chosen musicals is a well-known work with successful runs on Broadway or the West End. Thus, the study aims to highlight trends found in musicals that have had commercial success.

1.5 Overview of Dissertation

The dissertation is divided into four chapters. The next chapter concerns the literature review, which is divided into articles, books, and dictionaries/encyclopaedias. The section on articles discusses both peer-reviewed and non-peer reviewed articles, such as reviews of concerts. The objective is to show that literature about musical theatre orchestration is sorely lacking. We then move onto books that mention orchestration. Guides that are targeted to musical theatre personnel such as directors and composers are also mentioned, as are guides that assist the classical orchestrator. The last section concerns dictionaries and encyclopaedias. Encyclopaedias on musical theatre are surveyed to find references to orchestration in the context of musical theatre. Dictionary definitions of orchestration, arrangement, and musical theatre will be surveyed as well.

Chapter 3 contains the presentation of data. The data is divided into three categories: full musical theatre instrumentation (Type 1), small musical theatre instrumentation (Type 2), and rock band instrumentation (Type 3). The

section on Type 1 discusses how the orchestrator should accompany the voice, recitative, and spoken text. This section also discusses how the orchestra can approach image painting, reed ensembles, minimal accompaniment, *a capella* chorus, and introductions of songs and overtures. The section on Type 2 comments on accompanying the voice, recitative accompaniment, accompaniment of spoken text, image painting, use of the chorus, and overtures and introductions to songs. Type 3 discusses accompaniment of the voice, and spoken text. Also discussed are the use of the chorus in orchestration, and how the orchestrator can approach introductions to songs and overtures.

Chapter 4 concerns the analysis of the data presented in Chapter 3. A list of trends observed in the sample are identified. These trends are derived from the techniques presented in Chapter 3. These principles are applicable to all orchestration types. A few trends are for specific types of scoring such as spoken text and recitatives, but are vital to the correct orchestration of those scoring types. These select trends are still relevant for all orchestration types.

Chapter 2

Literature Review

While conducting the literature review for this study, it soon became clear that literature regarding musical theatre orchestration was lacking. Sources on musical theatre that were found did not discuss orchestration, or alternatively the literature did not apply to the modern musical theatre. Instead, these sources discuss musical theatre only in a general sense. In the following literature review articles will be discussed. The aim is to see how often and in how much detail musical theatre orchestrators are discussed. Following this, books will be discussed. The aim will be to see if the orchestrator is mentioned. Similar types of research that cover other fields pertaining to musical theatre will be discussed. Encyclopaedias and dictionaries will be reviewed to see what information these sources contain regarding musical theatre orchestration.

2.1 Articles

Not much has been written about orchestrators of musical theatre. More has been written about composers and librettists. However, a few articles about orchestrators exist. Vacha (1993: 1) states that Robert Russell Bennett is a successful orchestrator, who has orchestrated over three hundred musicals. Bennett's tasks are vaguely mentioned as providing harmony to a melody. His main chore is assigning notes to instruments. Vacha states that if the composer changes his style over time, then the orchestrator must change his style to match the composer's (p. 4). No mention is made of the orchestration techniques that Bennett used.

Wood (2002: 108) discusses Jonathan Tunick. This article is not peer-reviewed. Wood describes the orchestrator's tasks as examining the piano/vocal score and assigning notes to the instruments. He mentions that Tunick would go through the score with the composer, Stephen Sondheim. When Tunick examined the score he would ask Sondheim questions about acting and staging rather than the music itself. Wood mentions one instance of orchestration where instruments are used to create a certain mood: a single woodwind sig-

nifies unhappiness and the addition of strings signify yearning (p. 109).

Parrent (1980) does not focus on one orchestrator, but instead looks at a history of orchestration. He states that the early twentieth century pit orchestra was called the ‘fifteen and piano’ regardless of whether the orchestra had a piano or fifteen instruments (p. 32). Parrent describes the changes in instrumentation which included fewer strings and more brass, woodwinds, and percussion. Saxophones were eventually added to the orchestra.

Banfield (1994: 221) does not discuss an orchestrator or talk about orchestration, but does mention that composers do not do their own orchestrations. He also mentions the lack of full orchestral scores that are published.

The most significant article on an orchestrator is concerned with Don Walker. Purin (2010) looks at three musicals Walker orchestrated (*The Pajama Game* (1954), *The Most Happy Fella* (1956), and *The Music Man* (1957)) and discusses techniques used in these musicals. Orchestration is described by Purin as a ‘skilled craft that shapes the style and sound of a musical’ (p. 41). He recognises the absence of research done on musical theatre orchestration. He also recognises the need for at least one orchestrator to complete the scoring before the show starts its run.

Purin mentions that it is the orchestrator’s job to orchestrate the music during rehearsals (p. 42). In addition, the orchestrator writes the interludes as well as the overture. He also states that research on orchestration in musicals is difficult to do as a result of the lack of published full orchestral scores and because the readily available piano/vocal scores do not contain orchestrations at all. Not much has been written about well-known orchestrators such as Walker. The orchestrator has his own style of orchestrating and Walker is no different. Walker had mastered the swing sound and as a result, he used more brass than other orchestrators (Purin, 2010: 43).

Purin discusses important orchestration techniques, and I will discuss these at length. For example, ‘There Once was a Man’ from *The Pajama Game* is a musical comedy duet in a country and western style. The guitar is strummed using one rhythm throughout. Fills are used when the singer sings a long note and at the end of the vocal phrase. (A ‘fill’ is a small embellishment that is used in moments where there is less happening in the music. This usually occurs between vocal lines.) ‘Hey There’ from the same musical is classified by Purin as a musical comedy ballad (p. 45). A big band sound is required in this piece. Trombone slides as well as muted trumpet are techniques that Walker uses to create a big band sound. He also uses fills in response to the vocal melodies. Here fills are played by the violins when the voice is resting. Strings fills consist of soft chords.

‘Once-a-Year Day’ is up-tempo and contains fills. Fills are added within phrases as well as at the end of phrases. An instrumental downbeat on the first beat of the bar, allows the melody to come in on an off-beat. A quick melodic fragment in the brass creates an upbeat. Another technique that Walker uses is to score a melody differently when it reappears in the song. An example of

this would be a lengthy violin fill replacing a short brass fill. Differences in timbre and register are also used to create contrast. The audience can then experience variety in the orchestration while the singer sings the same melody.

The Most Happy Fella features the song 'Mamma, Mamma'. This song uses clarinets to signify the correct emotion being portrayed by the librettist. Here one can see that Walker uses a different instrument than Tunick to signify 'yearning'. This song appears before the end of the second act and uses string tremolos in octaves, harp glissandi and a full orchestral sound to signify the end of the act. 'I Dunno Nothing About You' uses melodic material in the horns and bass trombone. The brass moves in parallel. When the character Amy claims that she wants to get married, strings are added to suggest romance.

In 'Joey, Joey, Joey', the first statement of the chorus is accompanied by harp glissandi and triplet motives in the woodwinds. The second time the chorus appears, it contains a counter-melody that is played by the English horn. The last version uses fast celesta runs. These instruments are said by Purin to represent the wind that is whispering to the character Joe (p. 50).

Purin compares 'Ya Got Trouble' from *The Music Man* to 'Modern Major-General' from *Pirates of Penzance*. 'Ya Got Trouble' makes use of pitched speaking rather than singing and thus the orchestration must be adjusted to fit this style of singing because Purin claims that pitched speaking is less audible than singing. In 'Modern Major-General' the orchestration is heavier during the introduction and the chorus, including woodwinds, strings, brass and timpani. The accompaniment present during the spoken lines are soft string chords and a violin which doubles the melody. In 'Ya Got Trouble' the half-spoken text is accompanied by light treble instruments and the bass. Brass hits are included, but do not interfere with the vocal line. ('Hits' are short, loud chords.) By comparing the two songs, Purin provides the reader with an idea of how this type of musical number is scored.

Purin claims that Walker's use of moving bass lines, instrumental fills, muted trumpets and brass hits demonstrate his jazz influences. While this article is an improvement on the current lack of texts discussing musical theatre orchestration, more than three musicals must be discussed in order to give the orchestrator a fuller picture of what orchestration techniques are available. This article is the closest example of a comprehensive study of orchestration techniques.

Articles that are not peer-reviewed, such as reviews of shows that appear in newspapers or journals, frequently do not mention the orchestrator or his work. Smith's (2007: 2) review of *A Gentleman's Guide to Love and Murder* mentions that the orchestrations were done by Jonathan Tunick. Sheehan's (1993: 56) review of *The Lost Boys of Syracuse* mentions that Hans Spialek was the orchestrator. Sheehan (1993) mentions previous changes that were made to Spialek's orchestrations. He also mentions that the orchestrations were done during rehearsals. These types of details are rarely mentioned in reviews. Cushman (2016:B6) reviews *Sweeney Todd* and mentions the strings

in the opening.

McHugh (2015: 614) discusses the collaboration between the composer and the orchestrator. He defines the orchestrator's task as sometimes adding articulation, expanding on dynamic ranges and developing tempo markings. The orchestrator also writes overtures and interludes. The composer sometimes writes specifications on the score for the orchestrator to follow. He includes an example where George Forrest required flute, piccolo, and xylophone in a certain section of the music (p. 644). Another example consists of the composer asking the orchestrator to write a four bar introduction.

In the articles discussed above, reviews of productions were sometimes found to mention the orchestrator. Peer-reviewed articles discussed musical theatre generally, but did not mention orchestration. Only one article discussed orchestration in detail. This demonstrates the lack of information on orchestration in musical theatre.

2.2 Books

Book material on musical theatre orchestration is also sparse. Banfield (1993) contains a short chapter on orchestration. He points out the orchestra is not prioritized. The orchestration must be done quickly. He discusses Sondheim's relationship with Jonathan Tunick, his orchestrator (p. 80). Sondheim did not specify which instruments were to be used. He rather described the emotions he wanted the music to portray. Jonathan Tunick preferred it this way as well. They used a different instrumentation for each show. Sondheim describes Tunick's work as sometimes just writing the instruments on the score and other times having to use more complex orchestration (p. 81). Tunick wrote the solo clarinet introduction in 'Send in the Clowns' as well as the quodlibet in 'Being Alive'. This is the limited extent to which orchestration is mentioned in this book.

Gradenwitz (1987: 201) briefly discusses orchestration. He mentions that Sid Ramin and Irwin Kostal orchestrated *West Side Story* (1957) despite Leonard Bernstein being well versed in orchestration himself. Gradenwitz describes some orchestration in *Facsimile* (1946), a ballet (p. 173). He mentions an oboe solo that is taken up by a solo flute and strings. When referring to the orchestration of the ballet scenes, the author describes them as 'colourful' instead of speaking about the instruments or techniques as he did previously when talking about *Facsimile*. It is clear from the treatment of the orchestration by the author that orchestration in Sondheim's musicals is considered to be less important than the orchestration in his classical works.

Suskin (2011: 3) gives various definitions of musical theatre orchestration. Don Walker describes orchestration as:

the clothing of a musical thought, whether original or not, in the

colours of musical instruments and voices. The composer creates the basic themes of a composition. The arranger develops the basic themes into the desired form. The orchestrator adjusts the arrangement to fit the size and composition of whatever orchestral combination has been selected.

Russell Bennett describes orchestration as follows:

You are engaged to work with a composer and put his melodies into shape for a performance in the theatre. Your task is to be a part of him - the part that is missing. He may be capable of doing the whole score himself or he may not know a G clef from a gargoye. Your job is to bring in whatever he doesn't, and make it feel like it belongs there.

Hans Spialek discusses orchestration in these terms:

An artist having an idea for a painting, draws a sketch before putting the actual picture in all its contemplated colour harmonies and combinations on canvas. Painting a musical picture follows the same procedure, with the exception that in musical theatre one man (the composer) furnishes the sketch from which another man (arranger) paints the musical picture an audience actually hears. While the painter works either in oil, pastel or watercolours, the arranger uses the tone colours of the individual orchestra instruments.

Philip Lang describes orchestration as follows:

Like a construction manager, you get the right instrumentation; you understand the limits of the artisan and the technology; and you build something that lasts.

Ralph Burns describes orchestrators as:

good, high-priced whores. You're paid to make people look good. You may think of a better idea, but you try the best way that you can to do it their way and make them look good.

Suskin (2011: 9 & 178) quite adamantly states that his book is not meant to be a guide. The classical orchestra differs from the musical orchestra in several aspects (p. 176). Classical composers orchestrate their own music. Musical theatre composers simply write the melodies and perhaps the harmonies of each song. The orchestrator will orchestrate the music. These orchestrations happen while the rehearsals are under way. A classical composer's score is

completed before rehearsals begin. Often multiple orchestrators will work on one musical because of time constraints.

Robert Russell Bennett described basic orchestration as using the 'oom-pah' system, or 'oom-pah-pah' for a waltz (p. 212). He said that 'ooms' were mostly played by bass, bassoon, trombones, and possibly cellos. Cellos would sometimes play a counter-melody. The first violins and oboe played the melody with the first trumpets playing the melody later. The second and third trumpets played harmonies of the melody. 'Pahs' were played by second violins, violas, sometimes bassoons as well as horns. Flutes and clarinets played what Bennett called flourishes.

The instruments of the orchestra are briefly described (p. 214). This description does not include the ranges of instruments or any of their capabilities. Techniques that apply to certain instruments such as harmonics and mutes on a brass instrument, is not discussed. He does include traditional instruments that sometimes make their appearance in musicals. He also discusses the unconventional doubling of the woodwinds used in an orchestration. This is the first mention of woodwinds that has resulted from the review so far. Suskin briefly describes orchestration techniques that are given to the accompaniment, melody and ornaments (p. 260). He discusses the orchestration of twelve musicals. While this book provides a great insight into the orchestration world, the skills and techniques needed to orchestrate musicals are not discussed at all. Suskin specifically states that the purpose of the book is not to discuss orchestration techniques (p. 18). Rather it discusses the process of changing the piano/vocal score to a full orchestral score.

Bennett (1999) is the only musical theatre orchestrator that has a book written about him. He wrote his autobiography. He, however, focuses on his career and the nature of the musical theatre industry. Bennett states that the knowledge necessary to orchestrate a musical does not exist in literature (p. 307). While his autobiography makes no mention of orchestration techniques, the eight essays included in the book contain snippets of such techniques.

Bennett mentions the importance of brass in musical theatre orchestras (p. 282). He does not give techniques that justify the importance of the brass section. Bennett's basic formula for musical theatre orchestration that was described earlier, is found in this book (p. 286). This formula is called the 'oom-pah' method. The 'oom-pah' method consists of assigning the bass instruments to the 'ooms' and the rest to the 'pahs'. This is the extent to which Bennett discusses orchestration techniques.

Collinson (1949) provides a guide to theatre orchestration. This book, however, is outdated. Collinson mentions the lack of material on theatre orchestration. He states, for example, that microphones and amplification are not used in the theatre (p. 12). This statement, while it is still true for opera and operetta, is no longer valid in the context of musical theatre. As will be seen in the addendum, several of the orchestras or bands contain electric guitars, bass guitars, and keyboards, all of which need amplification in order

to work. The musical theatre hall is not built with the same acoustics as an opera hall, and thus amplification is needed so that the singers can be heard. The halls are often fitted with hanging microphones and all those playing lead characters use head microphones. Opera singers are trained to project in large halls while musical theatre singers use different vocal techniques and thus need microphones.

Strings, when divided, become weaker compared to the brass and woodwind sections (Collinson, 1949: 23). This cannot be done when the full orchestra is used as the balance is upset. A good balance can be achieved by the sound technician as the instruments are often amplified. The balance, however, cannot be completely ignored by the orchestrator, as this creates too much work for the sound technician.

Collinson states that when a melody is given to the violins, it should not be played by less than three violins (p. 27). This is necessary for an orchestral sound. This small number is in contrast to the author's earlier statement that the strings should not be divided as it weakens the sound. Although three violins would give the desired orchestral sound, the melody would be weak in contrast to the rest of the accompaniment especially if a full orchestration is used. Collinson, therefore, indirectly suggests that the orchestra should not have a small string section as it will be too weak against the rest of the orchestra.

Collinson constantly emphasizes the importance of the strings and treats the brass as less important. In his view brass is used to blend in with the rest of the orchestra (p. 142, 147). Currently, strings are not viewed as the most important section of the musical theatre orchestra. Often orchestrators will omit the strings in a musical. This can be seen in some of the instrumentations in Addendum I. These examples provide evidence that this book is outdated and cannot be used to orchestrate for today's orchestras and bands.

Guides for other disciplines that are necessary in musical theatre exist. Frankel (2009) provides a guide for composers wanting to compose a musical. Numerous guides are available for the singer/actor, including Deer and Vera (2015), Melton (2013), Moore and Bergman (2016), and Clark (2015). For those who want to perfect their audition, Flom (2016) and Oliver (1988) provide guides for assistance. The director can use Miller (1996) and the stage director can use Peithman and Offen (2002). The choreographer can use Berkson (1990). There is, however, no comparable guide for the orchestrator.

Orchestration books for classical/opera orchestration are fairly common (Piston, 1955; Adler and Hesterman, 1989; Forsyth, 1935; Sevsay, 2013; Blatter, 1997; Casella et al., 2004; Rimsky-Korsakov, 1964). None of these books, however, consider orchestration in musical theatre. Some of the books (such as Adler and Blatter) discuss saxophones, but do not discuss the saxophone in terms of the orchestra. The saxophone is mainly seen as a solo or jazz instrument. This shows that other styles of orchestration including jazz and musical theatre are not discussed in these books.

Books dealing with classical orchestration are plentiful as can be seen in the review above. This cannot be said for musical theatre orchestration. A guide to musical theatre orchestration does not exist, while guides do exist for other fields in musical theatre. This review demonstrates the need for such a guide.

2.3 Dictionaries and Encyclopaedias

Orchestration is not discussed in encyclopaedias. Gänzel's (1988) entries consist of Broadway shows between 1865 and 1964. Each entry contains details about the composers and librettists that were involved in the show and a synopsis is given, but the orchestrators are not mentioned. Entries of musicals and important people involved in musicals can be found in Vallance (1970). These included entries on actors and actresses, directors, and composers. These entries do not include orchestrators.

Green's (2009) entries consist of musicals. The production details are given. These include the people that were involved in the production including the orchestrators. Other entries include important songs from musicals, composers, librettists, directors, and choreographers. While the orchestrator is mentioned in the production details of musical show entries, no entries are found on the orchestrator.

According to Kreitner (2016: 12), musical theatre is seen as having evolved from other theatre forms such as operetta and vaudeville. The article further deals with the changes in instrumentation through the decades. The rhythm section was added during the 1920s and 1930s. This included piano, bass, drums, and guitar. Saxophones were also added. In the 1940s, orchestrators sought to create individual sounds for each musical. Different instrumentations were required for each. Reeds were required to double on any instrument in the woodwind section by the 1950s. Removing the strings became more common. Amplification also affected the sound of orchestration. Orchestras have grown smaller since the 1970s.

The entry on 'Arrangement' discusses no mention of musical theatre arrangement or how it affects the orchestration process (Boyd, 2016). Similarly, the definition of 'Musical Theatre' has no mention of orchestration (Block, 2016).

Encyclopaedias dealing with musical theatre are lacking. Musical theatre orchestrators are mentioned in only one of the encyclopaedias discussed above. Dictionaries are similarly problematic. The definition of musical theatre did not deal with orchestration and the definition of orchestration did not mention musical theatre.

Chapter 3

Presentation of Data

This chapter details orchestration techniques found in the thirty musicals selected for study. The presentation of data is categorised by instrumentation type (see section 1.3). Within each instrumentation type, various trends have been identified. The reader will note that there are both similarities and differences in orchestration technique across these difference instrumentation types. However, in general it can be observed that foremost in the mind of orchestrators is ensuring that the vocal part is not overshadowed by the ensemble. Any attempts at making orchestration interesting or innovative always comes second to this aim. The examples, as presented in this chapter, fulfil the objectives of the study: they provide a survey of orchestration techniques across a representative sample of successful musical theatre works.

3.1 Type 1 - Full Musical Theatre Instrumentation

The orchestrator has a full range of instruments to work with in full musical theatre instrumentation. These instruments can be found in table 1.5. The orchestrator must remember that each member of the orchestra does not have to play all the time. The techniques that follow, show the orchestrator which instruments can be used at different moments in the musical number.

3.1.1 Accompanying the voice

Opera voices are trained to project in large theatres without microphones. Musical theatre voices are typically much softer and depend on the aid of microphones and amplification. Even so, the female and male voices can be soft. The first priority of the orchestrator is to make sure the voice can be heard clearly. This might seem to be common sense, however, this principle is not always applied.

The full orchestra is almost never used when a voice is present. In figure 3.1 ('Little Girls' from *Annie*) the accompaniment is *staccato*. The tuba, bass drum and double bass play on the strong beats. The guitar, cowbell, xylophone and keyboard play on the weak beats. The baritone saxophone is the only instrument that plays a long note. By using the orchestra to play short notes on different beats, the orchestrator can use more instruments, without overpowering the singer.

In 'One Boy' from *Bye Bye Birdie*, the orchestrator Robert Ginzler uses both longer and shorter notes. The cello and horn play long notes while the reeds play sighing motives. This is illustrated in figure 3.2, where one can see that a flute and three clarinets are used, as they have softer timbres that allow the voice to be heard. Using brass might have drowned out the singer.

David Cullen and Andrew Lloyd Webber use softer instruments in order to use more instruments. Figure 3.3 ('Moments of Happiness' from *Cats*) shows that a clarinet and cello play long notes along with the vibraphone and bass guitar. The three keyboards play arpeggios instead of chords in order to make the accompaniment less dense. This allows the orchestrator to use three keyboards instead of one. A wider array of colours can then be used to make the orchestration more interesting.

On the other hand, the orchestra does not have to be used at all. 'Gus: The Theatre Cat' from *Cats* contains only a single keyboard with a Pop Rhodes sound sample, as seen in figure 3.4. This allows the singer to sing softer, to create the atmosphere that is needed in this particular song while still being audible. Simple chords are used with no fills to interfere with the continuous melody.

One can also leave out the harmony and simply use the bass line. In figure 3.5 ('Macavity: The Mystery Cat' from *Cats*), the left hand of the keyboard and the bass guitar play the bass line as an accompaniment to the voice. The drummer plays a simple rhythm on the hi-hat. This allows the lower notes of the vocal line to be heard and allows the higher notes to stand out.

The orchestrator can use the full orchestra and then use fewer instruments when the voice enters. 'I Know Things Now' from *Into The Woods* (figure 3.6) uses a full orchestra, but only uses the right hands of two keyboards playing a long chord while the text is being sung. The text is interjected by a fill played by the full orchestra. It is very important to refrain from using the full orchestra when a child is singing.

Les Misérables (1987) features the same technique. The full orchestra is used, but drops out when the vocals enter. This allows the orchestra to be loud and the vocals to be heard clearly. The vocals are fast and need to be relatively unaccompanied so that each word is heard clearly. Figure 3.7 shows the contrast between the vocals and the large orchestral fill.

Lloyd Webber changes the accompaniment to fit the fachs that are being used. In 'Angel of Music' from *Phantom of the Opera*, Meg and Christine sing a dialogue. Meg has a lyric fach and thus is only accompanied by the harp and

keyboard II. This can be seen in figure 3.8. In figure 3.9 ('Angel of Music'), Christine sings and is accompanied by the harp and string section as her voice is dramatic and can be accompanied by more instruments. The different timbres also suit the different voices. The Soft Phantom Pad on keyboard II and the gentle harp chords go well with Meg's softer alto voice while the strings and harp arpeggios bring out the focused quality of Christine's voice.

Leonard Bernstein, Sid Ramin and Irwin Kostal used the full orchestra for the introduction of 'A Boy Like That' from *West Side Story*. The same rhythmic pattern is used as the accompaniment when the voice comes in, but only in the reeds and strings. Again, instrumentation is reduced when vocals enter. The large and loud brass section is removed so that the voice can be heard in figure 3.10.

The musical score is for the song 'Little Girls' from the musical *Annie*. It is written in 4/4 time and the key signature has three flats (B-flat major or D-flat minor). The score consists of the following parts:

- Reed 1:** (Sop Sax) - Enters in the third measure with a melodic line.
- Reed 2:** (Bari Sax) - Plays a sustained note in the first measure.
- Tuba:** Provides a steady bass line with quarter notes.
- Voice:** The vocal line with lyrics: "Ev - 'ry where I turn I can see them."
- Guitar:** Plays chords, including Fm⁹ and Fm.
- Double Bass:** Provides a steady bass line with quarter notes.
- Percussion 1:** (Cow Bell) - Plays a rhythmic pattern of quarter notes.
- Percussion 2:** Plays chords on a regular rhythm.
- Keyboard:** (Xylo) - Plays chords on a regular rhythm.

The orchestration is sparse, with different instruments playing on different beats to create a light accompaniment for the voice.

Figure 3.1: *Annie* - 'Little Girls' - Accompanying the voice. The orchestrator uses different instruments on different beats to make the orchestration sparse.

The image shows a musical score for the song 'Bye Bye Birdie' - 'One Boy'. The score is written in 4/4 time and features several instruments and a vocal line. The instruments are: Reed 1 (Flute), Reed 2 (Clarinet), Reed 3 (Clarinet), Reed 4 (Clarinet), Horn in F, Guitar, Vocals, and Cello. The key signature is three flats (B-flat, E-flat, A-flat). The vocal line includes the lyrics: 'One day you'll find out this is what life is all a - bout,'. The score is marked with a dynamic of *p* (piano) at the beginning and end. The reed parts feature short notes on every second beat, which allows the voice to be heard. The guitar part consists of chords, and the cello part consists of sustained notes.

Figure 3.2: *Bye Bye Birdie* - 'One Boy' - Accompanying the voice. Short notes on every second beat in the reeds allow the voice to be heard.

The image displays a musical score for the song 'Moments of Happiness' from the musical *Cats*. The score is arranged for a full orchestra and includes the following parts:

- Reed 2:** Labeled '(Clarinet)', it features a melodic line in the treble clef.
- Cello:** A single line in the bass clef.
- Keyboard 1:** A grand staff (treble and bass clefs) with a rhythmic accompaniment.
- Keyboard 2:** A grand staff with a melodic line in the treble clef and a rhythmic accompaniment in the bass clef, labeled 'Strings'.
- Keyboard 3:** A grand staff with a rhythmic accompaniment in both clefs, labeled 'Harp'.
- Vocals:** A single line in the treble clef with lyrics: "moon - light ____ turn your face to the moon - light. ____ Let your me-mo-ry".
- Percussion:** A single line in the treble clef with chordal accompaniment, labeled 'Vibes'.
- Bass Guitar:** A single line in the bass clef with a simple bass line.

The score is written in a key signature of three sharps (F#, C#, G#) and a 12/8 time signature. The music is characterized by arpeggiated accompaniment for the keyboard and harp parts.

Figure 3.3: *Cats* - 'Moments of Happiness' - Accompanying the voice. Arpeggios are less dense than chords.

$\text{♩} = 108$

Keyboard 3

Pop Rhodes

Vocals

Gus is the cat at the the-a-tre door. His name as I ought to have told you be-fore is

Figure 3.4: *Cats* - 'Gus: The Theatre Cat' - Accompanying the voice. The vocal line is only accompanied by a keyboard.

Keyboard 1

Vocals

Drum Set

Bass Guitar

a - vi-ty's a mys - tery cat: he's called the hid - den paw — for

Figure 3.5: *Cats* - 'Macavity: The Mystery Cat' - Accompanying the voice. The vocal line is simply accompanied by bass and drums.

The musical score is for the song 'Into the Woods - I Know Things Now'. It features a voice part and several instrumental parts. The key signature is one flat (B-flat) and the time signature is 4/4. The instruments and their parts are:

- Reed 3 (Bassoon):** Plays a simple melodic line in the bass clef, starting with a *mf* dynamic.
- Percussion:** Features a triangle that enters at the start of the voice line, playing a rhythmic pattern with a *mf* dynamic.
- Piano:** Provides harmonic support with chords in both hands, playing with a *mf* dynamic.
- Synthesizer (Hammonium):** Plays a sustained chord in the treble clef, also with a *mf* dynamic.
- Vocals:** The vocal line enters at the start of the music with the lyrics: "Mo-ther said 'Straight-a-head!' Not to de-lay or be mis-lead...". The dynamic is *mf*.
- Violin I:** Plays a melodic line in the treble clef, with a *mf* dynamic.
- Violin II:** Plays a similar melodic line in the treble clef, with a *mf* dynamic.
- Viola:** Plays a rhythmic accompaniment in the alto clef, with a *mf* dynamic and a *pizz.* (pizzicato) marking.
- Cello:** Plays a simple melodic line in the bass clef, with a *mf* dynamic.

Figure 3.6: *Into the Woods* - 'I Know Things Now' - Accompanying the voice. When the voice enters, several instruments drop out.

The image displays a musical score for the song 'At the End of the Day' from the musical *Les Misérables*. The score is arranged for a full orchestra and a vocal soloist. The instruments and parts shown are:

- Reed 2 (Oboe)
- Horn in F 1
- Horn in F 2
- Vocals
- Keyboard 1
- Keyboard 3
- Bass Guitar
- Percussion (Xylo)
- Violin
- Viola
- Cello

The score is in the key of B-flat major (two flats) and 12/8 time. The vocal line includes the lyrics: "Have you seen how the fore-man is fu-ming to - day With his ter-ri-ble breathand his wan-de-ring". The instrumental parts are arranged in a multi-staff format, with some instruments (Keyboard 1, Keyboard 3) having both treble and bass clef staves. The score shows a full orchestral accompaniment for the vocal line.

Figure 3.7: *Les Misérables* - 'At the End of the Day' - Accompanying the voice. The full orchestra plays when the vocalist is not singing.

The image displays a musical score for the song 'Angel of Music' from the opera *The Phantom of the Opera*. The score is arranged in three systems, each with a grand staff (treble and bass clefs).

- Harp:** The top system features a harp part. The right hand plays chords in the treble clef, while the left hand plays a simple bass line in the bass clef.
- Keyboard 2:** The middle system features a keyboard part. The right hand has a melodic line with a 'Soft Phantom Pad' effect indicated by a box. The left hand plays a sustained bass line with long notes.
- Vocals:** The bottom system features the vocal line. The melody is written in the treble clef, and the lyrics are written below the notes.

The lyrics for the vocal line are: "Where in the world have you been hi - ding? Real - ly you were per - fect. ____"

Figure 3.8: *The Phantom of the Opera* - 'Angel of Music' - Accompanying the voice. Meg's lighter voice is accompanied by a keyboard and a harp.

The image displays a musical score for the 'Angel of Music' scene from *The Phantom of the Opera*. The score is arranged in a vertical stack of staves, with the following instruments and parts from top to bottom:

- Reed 1:** A single staff in the treble clef, marked with a *Flute* instruction. It contains a whole note chord in the final measure.
- Harp:** A grand staff (treble and bass clefs) with a *mp* (mezzo-piano) dynamic marking. It features a melodic line in the right hand and a supporting bass line in the left hand.
- Vocals:** A single staff in the treble clef with lyrics: "Fa-ther once spoke of an an-gel I used to dream he'd ap-pear".
- Violin I:** A single staff in the treble clef.
- Violin II:** A single staff in the treble clef.
- Viola:** A single staff in the alto clef.
- Cello:** A single staff in the bass clef.

The music is in 6/8 time and the key signature has two flats (B-flat and E-flat). The vocal line is accompanied by the harp and a string quartet (Violin I, Violin II, Viola, and Cello).

Figure 3.9: *The Phantom of the Opera* - 'Angel of Music' - Accompanying the voice. Christine's slightly bigger voice is accompanied by a harp and strings.

The image displays a musical score for the song 'A Boy Like That' from the musical West Side Story. The score is arranged for a full orchestra and includes a vocal line. The instruments listed are:

- Reed 1 (Bass Clarinet)
- Reed 2 (Bass Clarinet)
- Reed 3 (Bass Clarinet)
- Reed 4 (Flute)
- Reed 5 (Bassoon)
- Horn in F 1
- Horn in F 2
- Trumpet in B \flat 1
- Trumpet in B \flat 2
- Trumpet in B \flat 3
- Trombone 1
- Trombone 2
- Timpani
- Drum Set
- Guitar
- Piano
- Vocals
- Violin 1+2+3+4
- Violin 5+6+7
- Cello 1+2
- Cello 3+4
- Double Bass

The score is written in 3/4 time and features a key signature of two flats (B \flat major/D \flat minor). The vocal line begins with the lyrics: "A boy like that who'd kill your bro - ther." The introduction features the full orchestra, while only the reeds and strings continue to play when the voice enters.

Figure 3.10: *West Side Story* - 'A Boy Like That' - Accompanying the voice. The introduction features the full orchestra, while only the reeds and strings continue to play when the voice enters.

3.1.2 Recitative accompaniment

Recitative is a common occurrence in opera. However, the practice of using recitatives is quite common in musicals as well. In a recitative, the singer sings in the rhythm of natural speech. The singer can alter the rhythm to fit his/her natural speaking rhythm. It is therefore important that the orchestra does not have challenging rhythms, as that will make it difficult for the conductor to keep the orchestra and the singer together. In most cases the orchestrator will accompany the recitative with a long chord. In musical theatre, recitatives are often less free, as the composer has written the vocal part in a general speaking rhythm. This allows the conductor to have more control of the orchestra. A greater variety of instruments can be used, but the orchestrator must still be aware of the challenges of singing recitative material. The orchestrator must also be aware that recitatives often do not have introductions, and thus need a chord or note as a harmonic reference for the singer to start on.

In ‘Easy Street’ from *Annie*, Philip J. Lang uses two saxophones and a trombone to play long chords with small fills in between. Figure 3.11 shows that these fills can occur at the end of phrases. Bells and a glockenspiel give the initial chord so that the singer has her starting note.

‘Spanish Rose’ from *Bye Bye Birdie* uses a clarinet and bass clarinet. As seen in figure 3.12, both instruments start on a G. This provides the singer with her starting note. The harmonic basis is very simple, and the melody consists of one pitch as well.

In ‘How Lovely to Be a Woman’ from *Bye Bye Birdie*, Charles Strouse uses consecutive minims played by the flute and vibraphone. In figure 3.13 the horn plays a long note that provides a pedal point. The horn starts before the other instruments and provides the reference note for the singer. The singer fits her rhythms into this rhythmic frame. The melody consists mostly of one pitch. This puts the focus on the rhythmic structure of the melody.

Bernstein wrote the melody of the recitative in ‘Maria’ from *West Side Story* using mostly a single pitch. The last two notes of the phrase change. This is similar to the previous example, but the two changing notes serve a different purpose. Figure 3.14 shows that the bassoon plays falling crotchets. The accompaniment consists of the bassoon and two horns playing different slow rhythms. This does not interfere with the singer, as the same melodic note gives the singer the freedom to vary his rhythms within the rhythmic structure. The last two changing notes are important as they emphasise the two syllables and thus allow the singer to fall back into a strict rhythm.

‘The Chorus Girl Hasn’t Learned’ from *Evita* has a more fixed rhythm. Figure 3.15 features two keyboards and strings playing long notes, while violin I doubles the melody *pizzicato*. This forces the voice to adhere to rhythms the composer has written. This benefits the conductor, but creates a less-than-natural speaking rhythm. The recitative could have been written without the *pizzicato* and would have provided the singer with more freedom. However,

recitatives are often less free in musicals and thus the technique works with the doubling, and can also work without it.

‘What Have I Done’ from *Les Misérables* contains long notes in the guitar, bass guitar, percussion, cello, and keyboard II. All these instruments play tremolos. John Cameron could have left the accompaniment of the recitative with the tremolos, decided to add a small rhythm into keyboard I. This can be seen in figure 3.16 and does not interfere with the melodic line. This technique works with the keyboard figure and without it. This specific rhythm ensures that the first beat of the bar is clear. The singer has a small amount of freedom in each bar, but the conductor can also conduct the orchestra effectively. Either way the vocal line can still be heard.

Figure 3.17 (‘Opening’ from *Wicked*) shows a similar method of dealing with the recitative as is shown in the previous example. The violin, cello, and keyboards use long tremolos. The harp glissando gives the singer her note. The guitar plays a pedal point, and the vibraphone plays minims. This has the same function as keyboard I in the previous example.

The musical score for 'Easy Street' from *Annie* is presented in a multi-staff format. The key signature is G major (one sharp) and the time signature is 4/4. The score includes the following parts:

- Reed 2 (Bari Sax):** Plays a melodic line with long notes and some rhythmic patterns.
- Reed 3 (Tenor Sax):** Plays a similar melodic line to the Bari Sax.
- Trombone (Solotone Mute):** Plays a melodic line with long notes, marked with a Solotone Mute.
- Vocals:** The vocal line with lyrics: "I re - mem - ber the way our sain - ted mo - ther would sit and croon us her lul - la - by." The melody is simple and recitative in style.
- Percussion 2 (Bells):** Provides a reference chord.
- Keyboard 2 (Glock):** Provides a reference chord.

Figure 3.11: *Annie* - ‘Easy Street’ - Recitative accompaniment. Bells and a glockenspiel provide a reference chord. The recitative is simply accompanied by a baritone saxophone, tenor saxophone, and trombone.

The musical score for 'Spanish Rose' is presented in three staves. The top staff is for the Clarinet, the middle for the Bass Clarinet, and the bottom for the Vocals. The key signature is three sharps (F#, C#, G#) and the time signature is 3/4. The Clarinet and Bass Clarinet parts play a simple harmonic accompaniment. The vocal line includes a recitative section with triplets. The lyrics are: 'I'm just a Spa-nish ta - ma - le ac - cor-ding to Mae'.

Figure 3.12: *Bye Bye Birdie* - 'Spanish Rose' - Recitative accompaniment. The reference chord and accompaniment is provided only by a clarinet and bass clarinet.

The musical score for 'How Lovely to be a Woman' is presented in four staves. The top staff is for the Flute, the second for the Horn in F, the third for the Vibes, and the bottom for the Vocals. The key signature is three sharps (F#, C#, G#) and the time signature is 4/4. The Flute, Vibes, and Horn parts provide accompaniment. The Horn part is marked 'Mute'. The vocal line is a recitative accompaniment. The lyrics are: 'When you're a skin-ny child of four-teen Wir-ed with bra-ces from ear to ear, you'.

Figure 3.13: *Bye Bye Birdie* - 'How Lovely to be a Woman' - Recitative accompaniment. The reference note is provided by the horn, while the vibraphone and flute provide the accompaniment, along with the horn.

The musical score is for the recitative accompaniment of the song 'Maria' from West Side Story. It features four staves: Reed 5 (Bassoon), Horn in F 1, Horn in F 2, and Vocals. The key signature is three sharps (F#, C#, G#) and the time signature is 4/4. The Reed 5 part begins with a *pp* dynamic and a slur over the first two measures. The Horn in F 1 part also begins with a *pp* dynamic and a slur over the first two measures. The Horn in F 2 part has a *pp* dynamic in the third measure. The Vocals part features triplets and lyrics: 'The most beau-ti-ful sound I e-ver heard: Ma - ri - a Ma-ri-a Ma-ri-a Ma'.

Figure 3.14: *West Side Story* - 'Maria' - Recitative accompaniment.

The musical score is arranged in a system with the following parts from top to bottom:

- Vocals:** Treble clef, key signature of two sharps (F# and C#). The melody consists of quarter notes with triplet markings (3) over groups of three notes. The lyrics are: "For - give my in - tru - sion but fine as those sen - ti - ments sound".
- Keyboard 1:** Treble and Bass clefs. The right hand is marked "Harp" and "mp". The left hand has a single note with a fermata.
- Keyboard 2:** Treble and Bass clefs. The right hand is marked "p" and "String/voice pad". The left hand has a single note with a fermata.
- Violin I:** Treble clef. The melody is marked "pizz." and features triplet markings (3) over groups of three notes.
- Violin II:** Treble clef. The part consists of a sustained chord with a fermata, marked "mp".
- Cello:** Bass clef. The part consists of a sustained chord with a fermata, marked "p".
- Double Bass:** Bass clef. The part consists of a sustained chord with a fermata, marked "p".

Figure 3.15: *Evita* - 'The Chorus Girl Hasn't Learned' - Recitative accompaniment.

The musical score is arranged in a vertical stack of staves, each representing a different instrument or voice part. The key signature is one flat (B-flat) and the time signature is 4/4. The lyrics are: "I am rea - ching but I fall and the night is clo - sing in And I".

- Vocals:** The vocal line is in a recitative style, with a melodic line and lyrics. The lyrics are: "I am rea - ching but I fall and the night is clo - sing in And I".
- Keyboard 1:** The right hand plays chords, and the left hand plays a simple bass line. The chords are sustained across measures.
- Keyboard 2:** The right hand is silent. The left hand plays a simple bass line with sustained notes.
- Keyboard 3:** The right hand is silent. The left hand plays a simple bass line with sustained notes.
- Guitar:** The right hand plays a Dm chord, marked *p* (piano) in the first measure and *mp* (mezzo-piano) in the second and third measures. The left hand plays a simple bass line.
- Bass Guitar:** The right hand is silent. The left hand plays a simple bass line with sustained notes.
- Drum Set:** The drum set plays a simple pattern, marked *pp* (pianissimo) in the first measure and *mp* in the second and third measures.
- Percussion:** The percussion plays a simple pattern, marked *pp* in the first measure and *mp* in the second and third measures. A Tamtam is indicated in the first measure.
- Cello:** The cello plays a simple bass line, marked *p* in the first measure and *mp* in the second and third measures.

Figure 3.16: *Les Misérables* - 'What Have I Done' - Recitative accompaniment.

The musical score is for the recitative accompaniment of the 'Opening' from the musical *Wicked*. It is written in 4/4 time and the key of A major. The score includes the following parts:

- Percussion:** Features a 'Vibes' part with a melodic line.
- Guitar:** Provides harmonic support with sustained chords.
- Vocals:** The vocal line includes the lyrics: "glad Let us be grate-ful Let us re - joi-ci-fy that good-ness could sub - due the".
- Keyboard 2:** Features 'Muted Strings'.
- Keyboard 3:** Features a 'Celesta' part.
- Keyboard 4:** Features a 'Harp' part.
- Violin and Cello:** Provide additional harmonic support with sustained chords.

Figure 3.17: *Wicked* - 'Opening' - Recitative accompaniment.

3.1.3 Accompaniment of Spoken Text

Accompanied spoken text is a common occurrence in musical theatre. The text is given a rhythmic component, but not a melody. The notes are usually written with cross noteheads. Some composers also use one pitch in the melody. This is different from the recitative as the rhythm is exact and the spoken text is sometimes performed by the chorus. This offers no room for freedom.

‘The Naming of Cats’ from *Cats* contains cross noteheads. The chorus speaks the text in soft voices. The accompaniment is thus extremely rhythmical with no long notes or chords. In figure 3.18 the right-hand of keyboard II and the left-hand of keyboard III play the same part, providing the rhythmic basis for the song. This accompaniment figure continues throughout the song. The cello and percussion play small rhythmic motives to colour the song. These small motives are not played by the cello and percussion at the same time and are also staccato and sparse. This does not distract from the voice.

‘Act I Opening Part 4’ from *Into the Woods* uses a different approach. The accompaniment consists of two different rhythmic components. Figure 3.19 shows that the right-hand of the keyboard and synthesizer play chords on every beat in the bar. The left-hand of the keyboard, as well as bassoon, cello and double bass, play a different rhythm to the first rhythm. In addition, the violins and violas play a secondary rhythm. These poly rhythms create the accompaniment for the spoken text. They create a strict rhythmic environment that leaves no freedom for the singer. The polyrhythms do not seem to interfere with the vocal line as the basic structure of the rhythms combined create quavers. Assigning different quavers to different instruments create a bare accompaniment. Using the whole orchestra to play on every quaver in the bar would be much louder, and would overpower the vocal line.

The musical score is for the spoken text 'The Naming of Cats' from the musical Cats. It is set in 6/8 time and marked 'Slow'. The score includes the following parts:

- Cello:** *Slow*, *pizz.*, *mf*. The part consists of a few scattered notes.
- Keyboard 2:** *Recorder/Music Box/Gong Split*, *mp*. The part features a steady, rhythmic accompaniment.
- Keyboard 3:** *Strings I*, *mp*. The part features a melodic line with a long slur over the first two measures.
- Vocals:** *(spoken)*. The lyrics are: 'nam-ing of cats is a diff-i-cult mat-ter it is - n't just one of your ho-li-day games you'. The notes are represented by 'x' marks.
- Percussion:** *Xylophone* and *Castanet*. The part is marked *p* and features sparse, rhythmic accompaniment.

Figure 3.18: *Cats* - 'The Naming of Cats' - Accompaniment of spoken text. The accompaniment of the spoken text is orchestrated sparsely.

(Bassoon)

Reed 3 *mp*

Keyboard *mp*

Synthesizer Synth *mp*

Vocals
Greens, greens, and nothing but greens: Pars - ley, pep - pers, cab - ba - ges and cel - 'ry, as

Violin 1 *mf*

Viola 1 *mf*

Cello *mp*

Double Bass *mp*

Figure 3.19: *Into the Woods* - 'Act 1 Opening Part 4' - Accompaniment of spoken text.

3.1.4 Image painting

Using the orchestra to reflect the imagery that the librettist attempted to portray can help bring the story to life. There may not be a set recipe for image painting, but looking at examples of image painting may give the reader an idea of how it is done.

In ‘Maybe’ from *Annie*, Annie sings without accompaniment. This can be seen as an expression of loneliness as Annie clings onto the dying dream of her parents coming to find her. This phrase is seen in figure 3.20 and appears at the end of the song. The song itself is optimistic, but the ending signifies how lonely Annie feels. Annie sings the word ‘maybe’ without accompaniment as if she is trying to convince herself that her parents are coming to fetch her. The orchestra enters as Annie once again becomes optimistic. Image painting can depict abstract emotions such as loneliness, or physical attributes.

In *Cats*, David Cullen and Andrew Lloyd Webber use low instruments in parallel to create a sense of mystery or suspense. In ‘Grizabella: The Glamour Cat’ the low notes are in unison. The two horns, trombone, cello, three keyboards, guitar and bass guitar are all playing the exact same notes. In ‘Macavity: The Mystery Cat’ the low note melody is in parallel fifths, played by the bass guitar and the left-hands of both keyboards. In both instances low instruments are used. This effect also depends on the pace of the music. In both cases the music is played slowly. Other techniques can be used to create the same effect, but this technique compliments the songs presented above. Using a technique such as fast passages of high notes in the strings might not work because it does not match the song. This is because both songs are slow and thus fast figures might feel out of place. This is shown in figures 3.21 and 3.22. In either case it is up to the orchestrator to decide whether to use higher instruments or lower instruments. Both can create suspense and mystery.

‘Where I Want to Be’ from *Chess* (figure 3.23) is about a man who has everything, but is unhappy. The solo vocal line with the keyboard playing in its high register sounds similar to a music box. The music thus sounds like a lonely rich child who longs for the company of others.

In ‘Giants in the Sky’ from *Into the Woods* (1987), Jonathan Tunick uses loud low notes on the first beat of the bar to create the sound of a giant’s footsteps. The full orchestra is used here to give a full, heavy sound. The instruments are marked *fortepiano* to create the impression that the sound of the giant’s footsteps are so heavy that it sounds like an echo. This is shown in figure 3.24.

‘The Second Attack’ from *Les Misérables* (1987) portrays a battlefield. In figure 3.25, a voice shouts ‘fire!’ The full orchestra is used as no vocalists are singing during this section. Keyboards 1 and 2 as well as the violins and violas contain rapidly moving triplets. This evokes the continuous chaos of the battlefield. The brass and woodwinds play figures in pairs of threes following each other in the same way that gunshots follow each other. Brass

and woodwinds have more focused timbres and are thus effective instruments to use when depicting gunshots. Strings would not work because of the warmer timbre.

Lloyd Webber and Kay use the *a capella* chorus to portray unity in *Evita* (1978). Figures 3.26 ('Perón's Latest Flame) and 3.27 ('The Chorus Girl Hasn't Learned') shows examples of this technique. More intricate harmonies are used here and the chorus sings in five-part harmony instead of four. The entirety of the songs are not *a capella*, but it is *a capella* when the people of Argentina are singing.

'Music of the Night' from *The Phantom of the Opera* (1988) contains simple reed chords as accompaniment with the voice being doubled by the flute. Figure 3.28 shows that Cullen and Webber bring in chromatic string lines that are played *sul tasto*. This creates an eerie effect due to the timbre and shows the character's dark side. The lyrics also contribute to this, while the melody does not reflect the darkness that the orchestration shows.

The two characters sing about light in 'Tonight' from *West Side Story*. At this point in the song Bernstein, Ramin, and Kostal added very soft string tremolos as well as vibraphone tremolos. This creates a shimmering effect that reminds us of light. Figure 3.29 shows this.

In 'For Good' from *Wicked* (2003), William David Brohn added a tremolo on the cymbal. In figure 3.30, the drummer stops playing the tremolo on the word 'comet', but lets the sound vibrate. This creates the sound of a comet typically used in cinema foley. The audience might not even notice this, but the cymbal is quite effective here without the hidden meaning as it leads to the chorus of the song.

The musical score for 'Annie - 'Maybe'' is presented in a standard orchestral format. It features a vocal soloist and a full orchestra. The vocal line is the only one with lyrics, 'May - - - - - be.' The instrumental parts include Reed 1 (flute), Reed 2 (clarinet), Reed 3 (bass clarinet), Reed 4 (piccolo), Reed 5 (flute), 2 Trumpets in B♭, 2 Trombones, Violin, Cello, Double Bass, Percussion 2 (Timp), and Keyboard 2. The score is in 4/4 time and G major.

Figure 3.20: *Annie* - 'Maybe' - Image painting. The vocalist singing alone portrays loneliness.

Andante

The musical score is for the song 'Grizabella: The Glamour Cat' from the musical *Cats*. It is written for a low instrument ensemble and includes the following parts:

- Horn in F 1: *mp*
- Horn in F 2: *mp*
- Trombone: *mf*
- Cello: *mp*
- Keyboard 1: *p*
- Keyboard 2: *p*
- Keyboard 3: *p* (Hammond Organ/Elec Piano)
- Guitar: *mp*
- Bass Guitar: *mp*

The score is in 4/4 time and marked *Andante*. The key signature is one sharp (F#). The music is characterized by a slow, steady rhythm with a focus on the low register of the instruments, creating a sense of suspense.

Figure 3.21: *Cats* - 'Grizabella: The Glamour Cat' - Image painting. Low instruments portray suspense.

Andante ♩ = 100

Keyboard 1
Piano *mf*

Keyboard 2
mf

Drum Set

Bass Guitar
mf

Figure 3.22: *Cats* - 'Macavity: The Mystery Cat' - Image painting. Low keyboards and bass portray suspense.

Piano
Celeste/Thumb Piano

Vocals
Who needs a dream? Who needs am - bi - tion?

Figure 3.23: *Chess* - 'Where I Want to Be' - Image painting. The lone keyboard portrays the lonely character.

The musical score for 'Giants in the Sky' from 'Into the Woods' is presented in a standard orchestral format. The score is in 4/4 time and B-flat major. The instruments and their parts are as follows:

- Reed 2:** Plays a single note (B-flat) in the first and third measures, marked *fp*.
- Reed 3:** Plays a single note (B-flat) in the first and third measures, marked *fp*.
- Horn in F 1:** Plays a single note (B-flat) in the first and third measures, marked *fp*.
- Horn in F 2:** Plays a single note (B-flat) in the first and third measures, marked *fp*.
- Percussion:** Features Crotales and Bass Drum. The Crotales play a rhythmic pattern of eighth notes, and the Bass Drum plays a single note in the first and third measures, marked *f*.
- Piano:** Plays a heavy, low-register accompaniment consisting of chords and single notes, marked *f*.
- Synthesizer:** Plays a heavy, low-register accompaniment consisting of chords and single notes, marked *f*.
- Vocals:** The vocal line is sparse and dramatic, with the lyrics: "There are gi-ants in the sky! There are big tall ter-ri-ble gi-ants in the sky!". The vocal line is marked *f*.
- Viola I:** Plays a single note (B-flat) in the first and third measures, marked *fp*.
- Viola II:** Plays a single note (B-flat) in the first and third measures, marked *fp*.
- Cello:** Plays a single note (B-flat) in the first and third measures, marked *fp*.
- Double Bass:** Plays a single note (B-flat) in the first and third measures, marked *fp*.

Figure 3.24: *Into the Woods* - 'Giants in the Sky' - Image painting. The low instruments playing loudly portray the giants walking.

The musical score is for the scene 'The Second Attack' from *Les Misérables*. It is written in 12/8 time and features a full orchestra and a vocal soloist. The instruments and parts shown are:

- Reed 1:** Flute (marked *ff*)
- Reed 2:** Oboe (marked *ff*)
- Horn in F 1 & 2:** Horns (marked *ff*)
- Trumpet in B♭ 1 & 2:** Trumpets (marked *ff*)
- Trombone:** Trombone (marked *ff*)
- Vocals:** Vocal soloist (marked *ff*) with the instruction "Fire!"
- Keyboard 1 & 3:** Pianos (marked *ff*)
- Keyboard 2:** Organ (marked *ff*)
- Guitar & Bass Guitar:** Guitar and Bass (marked *ff*)
- Drum Set:** Drums (marked *ff*)
- Percussion:** Percussion (marked *ff*) with a *Tamtam* instrument.
- Violin & Viola:** Violin and Viola (marked *ff*)
- Cello:** Cello (marked *ff*)

The score is characterized by a dense, rhythmic texture, particularly in the keyboard and string sections, which are marked *ff* (fortissimo). The woodwinds and brass also play active, rhythmic parts. The vocal soloist has a prominent role, with the instruction "Fire!" indicating a key moment in the scene.

Figure 3.25: *Les Misérables* - 'The Second Attack' - Image painting. The triplet figures in keyboard 1, keyboard 3, violin, and viola recreate the chaos on the battle-field, while the woodwinds emulate rapid gunfire.

Women

We have al-lowed our-selves to slip. We have com-plete-ly lost our grip.

Men

A

We have de-clined to an all time low. Tarts have be-come the

B

Detailed description: This figure shows a musical score for the song 'Perón's Latest Flame' from the musical Evita. It consists of two systems of music. The first system is for 'Women' and 'Men'. The 'Women' part is written in treble clef with a 7/4 time signature, featuring a complex chordal accompaniment. The 'Men' part is in bass clef with a 7/4 time signature, featuring a simpler, more rhythmic accompaniment. The lyrics are: 'We have al-lowed our-selves to slip. We have com-plete-ly lost our grip.' The second system is for 'A' and 'B'. The 'A' part is in treble clef with a 4/4 time signature, featuring a complex chordal accompaniment. The 'B' part is in bass clef with a 4/4 time signature, featuring a simpler, more rhythmic accompaniment. The lyrics are: 'We have de-clined to an all time low. Tarts have be-come the'.

Figure 3.26: *Evita* - 'Perón's Latest Flame' - Image Painting.

Women

Thus all fai-ry sto-ries end. On - ly an ac-tress would pre - tend

Men

Thus all fai-ry sto-ries end. On - ly an ac-tress would pre - tend

Detailed description: This figure shows a musical score for the song 'The Chorus Girl Hasn't Learned' from the musical Evita. It consists of two systems of music. The 'Women' part is written in treble clef with a 4/4 time signature, featuring a complex chordal accompaniment. The 'Men' part is in bass clef with a 4/4 time signature, featuring a simpler, more rhythmic accompaniment. The lyrics are: 'Thus all fai-ry sto-ries end. On - ly an ac-tress would pre - tend'.

Figure 3.27: *Evita* - 'The Chorus Girl Hasn't Learned' - Image Painting. The orchestrator uses an *a capella* chorus to portray unity among the people of Argentina.

The image displays a musical score for the scene 'The Music of the Night' from the opera *The Phantom of the Opera*. The score is arranged in a standard orchestral format with multiple staves. The instruments and parts shown are:

- Reed 1 (Flute)
- Reed 2 (Flute)
- Reed 3 (Oboe)
- Reed 4 (Clarinet)
- Reed 6 (Bassoon)
- Hom in F 1
- Hom in F 2
- Vocals (with lyrics: Soft - ly, deft - ly, mu - sic shall ca - ress you.)
- Violin I (marked *tasto* and *V*)
- Violin II (marked *tasto* and *V*)
- Viola (marked *pizz.*)
- Cello (marked *pizz.*)
- Double Bass (marked *pizz.*)

The score is written in 4/4 time and features a key signature of three sharps (F#, C#, G#). The vocal line is in the soprano range. The instrumental parts, particularly the strings, feature complex chromatic passages that create a haunting and eerie atmosphere.

Figure 3.28: *The Phantom of the Opera* - 'The Music of the Night' - Image painting. The chromatic passages in the strings portray the eeriness of the character.

The musical score is for the song 'Tonight' from West Side Story, in 4/4 time with a key signature of three sharps (F#, C#, G#). The score includes parts for Vibraphone, Celesta, Vocals 1 and 2, and Violins I, II, III, and IV. The lyrics are: 'night, To - night, The world is full of light, with'. The string parts (Violins I-IV) are marked *pp* and feature soft tremolos, which are used to create an 'image painting' effect for the word 'light'. The Vibraphone and Celesta parts are also marked *p*.

Figure 3.29: *West Side Story* - 'Tonight' - Image painting. The word 'light' is portrayed in the strings with soft tremolos.

The musical score is for the song 'Wicked - For Good' and is written in 4/4 time with a key signature of three flats (B-flat major). The score includes the following parts:

- Reed 1:** Labeled '(Alto Flute)', it plays a melodic line starting with a quarter rest, followed by a quarter note G4, a quarter note A4, a half note B4, and a quarter note G4.
- Percussion:** Features a snare drum hit on the first beat of the second measure, followed by a long, sustained cymbal or snare roll across the remaining three measures.
- Drum Set:** Shows a snare drum hit on the first beat of the second measure, followed by a long, sustained cymbal or snare roll across the remaining three measures.
- Guitar:** Plays a series of chords, primarily triads and dyads, in the right hand, with a bass line in the left hand.
- Vocals:** The vocal line includes the lyrics: "Like a co-met pulled from or - bit as it pas-ses the sun. ... Like a stream that meets a boul - der".
- Keyboard 1:** Labeled 'Piano', it plays a melodic line in the right hand and a bass line in the left hand.
- Keyboard 2:** Labeled 'Ballad Rhodes', it plays a melodic line in the right hand and a bass line in the left hand.
- Keyboard 3:** Labeled 'Muted Vn Section', it plays a melodic line in the right hand and a bass line in the left hand.
- Keyboard 4:** Labeled 'Harp', it plays a melodic line in the right hand and a bass line in the left hand.
- Violin:** Labeled 'Con sord.', it plays a melodic line in the right hand and a bass line in the left hand.

The score illustrates 'image painting' for the word 'comet' through the drum set, which uses a snare hit followed by a long, sustained cymbal or snare roll, a sound often associated with dramatic or cinematic moments.

Figure 3.30: *Wicked* - 'For Good' - Image painting. The word 'comet' is portrayed in the drum-set similar to film stereotypes.

3.1.5 Reed ensembles

Woodwind musicians in theatre settings are often expected to play a variety of instruments competently. The advantage of having reed players that can play most or all of the woodwind instruments is that a choir of one type of reed is possible given the available players. Orchestrators are aware that the woodwinds are the least homogeneous section of the orchestra, as the timbres of single reeds sound different to double reed instruments. These reeds also sound very different to the flutes, which makes it difficult to blend. Using a choir of one type of reed creates a more homogeneous sound, especially if the orchestra does not have strings. In most cases this just adds to the palette that the orchestrator has to work with. Clarinets are commonly used in a choir.

Lang, in ‘Tomorrow’ from *Annie*, uses two clarinets and a bass clarinet (figure 3.31). The advantage of using clarinets is that the range can easily cover the full range of the orchestra. (The bass clarinet obviously contributes to the lower end of the clarinet choir.)

In ‘Maybe’ from *Annie*, three clarinets are used again. Using the same instrument family also ensures that the articulation will be exactly the same. In figure 3.32, the clarinets play the chords with strings. The articulation is very specific and this creates a homogeneous sound.

In figure 3.33 (‘A Lot of Livin’ to Do’ from *Bye Bye Birdie*), the clarinets play *staccato* figures with trumpet 2, along with cello and bass *pizzicatos*. The short notes of the clarinets and the ability of the players to play extremely softly allows the vocal line to be heard clearly. Figure 3.34 (‘Merano’ from *Chess*) shows that clarinets and strings are used with the chorus in unison. Clarinets and strings are soft and light, and do not overpower the vocals.

Saxophones can also be used in a chorus. The soprano, alto, tenor, and baritone cover the range of the orchestra. In ‘Little Girls’ from *Annie* (figure 3.35) the saxophones play long notes while the strings play shorter notes on every beat. The saxophones carry the harmony. Lang uses a soprano saxophone, baritone saxophone, and tenor saxophone.

Figure 3.31 shows a musical score for the song 'Tomorrow' from the musical Annie. The score is for a reed ensemble and includes parts for Reed 1, Reed 2, Reed 3, Guitar, and Cello. The key signature is three flats (B-flat, E-flat, A-flat) and the time signature is 4/4. The tempo is marked *p* (piano). Reed 1 and Reed 2 are both labeled '(Clarinet)' and Reed 3 is labeled '(Bass Clarinet)'. The score shows a melodic line for the reeds and a bass line for the guitar and cello.

Figure 3.31: *Annie* - 'Tomorrow' - Reed ensembles. The orchestrator uses clarinets.

Figure 3.32 shows a musical score for the song 'Maybe' from the musical Annie. The score is for a reed ensemble and includes parts for Reed 1, Reed 2, Reed 3, Vocals, Guitar, Violin, Cello, Double Bass, and Keyboard 2. The key signature is three sharps (F#, C#, G#) and the time signature is 4/4. The tempo is marked *Piu mosso*. Reed 1, Reed 2, and Reed 3 are all labeled '(clarinet)'. The vocal line includes the lyrics: "May - be far a - way, Or may - be real near by." The guitar part includes chord markings: A, Dmaj7, A, and D. The double bass part is marked *pizz.* (pizzicato). The keyboard part is labeled 'Chamber Strings'.

Figure 3.32: *Annie* - 'Maybe' - Reed ensembles.

Reed 1 (Clarinet) *p*

Reed 2 (Clarinet) *p*

Reed 3 (Clarinet) *p*

Reed 4 (Bass Clarinet) *p*

Trumpet 2 Mute *p*

Percussion 1 Timbales *pp*

Percussion 2 Bongos

Vocals
There are chicks, Just ripe for some kis - sin! _
pizz. arco

Cello *p* pizz.

Double Bass *p* pizz.

Figure 3.33: *Bye Bye Birdie* - 'A Lot of Livin' To Do' - Reed ensembles.

The image displays a musical score for the song 'Merano' from the musical *Chess*. The score is arranged in a multi-staff format. At the top, two Clarinet parts are labeled 'Reed 3' and 'Reed 5', both marked with a piano (*p*) dynamic. Below these are the 'Keyboard 1' and 'Harp' parts. The 'Keyboard 1' part includes a 'Strings' section. The vocal parts for 'Women' and 'Men' are shown with lyrics: 'Oh light the heart that lingers in Me-ra-no, Me'. The instrumental parts include Violin I and II (both marked *p*), Cello I, and Cello II. The score is written in 6/8 time and features a key signature of three sharps (F#, C#, G#).

Figure 3.34: *Chess* - 'Merano' - Reed ensembles.

The musical score is for the song 'Little Girls' by Annie. It features a reed ensemble consisting of three saxophones (Soprano, Baritone, and Tenor), a Trombone, and a Tuba. The score is in 4/4 time and B-flat major. The reed parts are marked with a mezzo-piano (*mp*) dynamic. The vocal line includes the lyrics: "Some women are dripping with dia-monds. Some women are dripping with pearls." The guitar part provides harmonic support with chords: Gm7, C7, Fmaj7, F6, A7, A+7, D+7, and C+7. The piano and double bass parts provide a steady accompaniment, and the percussion part adds rhythmic texture.

Reed 1 (Sop Sax)

Reed 2 (Bari Sax)

Reed 3 (Tenor Sax)

Trombone

Tuba

Vocals

Guitar

Piano

Double Bass

Percussion

mp

Some women are dripping with dia-monds. Some women are dripping with pearls.

Gm7 C7 Fmaj7 F6 A7 A+7 D+7 C+7

Figure 3.35: *Annie* - 'Little Girls' - Reed ensembles. The orchestrator uses saxophones.

3.1.6 Almost no accompaniment

Accompaniment often consists of three components: the doubling of the melody, the harmony, and the bass line. Sometimes it is more effective to use only one of these components. The bass line or harmony can simply be left out, and the accompaniment can consist of the melody alone.

Cullen and Lloyd Webber did this in ‘Growltiger’s Last Stand’ from *Cats*. The vocals are doubled by keyboard I, the guitar and the bass guitar. This ensures that the melody is audible, and is especially useful if the melody is difficult to sing. This can be seen in figure 3.36.

Lloyd Webber took this a step further in ‘On This Night’ from *Evita* along with Hershay Kay. The vocals are simply accompanied by the double bass, effectively doubling the melody. The melody as seen in figure 3.37 is therefore easier to sing.

The image shows a musical score for the song 'Growltiger's Last Stand' from the musical *Cats*. The score is written in 4/4 time and features a vocal line and three instrumental parts: Keyboard I, Guitar, and Bass Guitar. The vocal line is in the treble clef and includes the lyrics: "ti-ger was a bra-vocat who tra-veled on a barge in fact he was the roughest cat that e-ver roamed at large From". The Keyboard I part is in the bass clef and is labeled "Piano with Horns". The Guitar and Bass Guitar parts are also in the bass clef and provide a rhythmic accompaniment to the vocal melody. The score consists of four measures.

Figure 3.36: *Cats* - ‘Growltiger’s Last Stand’ - Almost no accompaniment. The melody is doubled by keyboard, guitar, and bass guitar. No bass or harmony is used.

a tempo poco meno

The musical score consists of three staves. The top staff is for the Drum Set, showing a rhythmic pattern of eighth notes with 'x' marks above them, indicating a specific drum sound. The middle staff is for Vocals, written in bass clef with a key signature of one flat (B-flat). The lyrics are: "Real - ly brigh-tened up your out of town en - gage - ment". The bottom staff is for the Double Bass, also in bass clef with a key signature of one flat. It features a melodic line that is a direct doubling of the vocal line, with a "pizz." (pizzicato) marking above the first measure.

Figure 3.37: *Evita* - 'On This Night' - Almost no accompaniment. The voice is accompanied by a drum-set. The melody is doubled by the double bass.

3.1.7 A capella chorus

The chorus is a powerful part of a musical. The orchestrator can use the chorus to simply add harmony under the lead singer or in a dance break. Using the chorus in *a capella* is an effective way to display certain emotions and images.

In ‘Hymn to Chess’, the chorus is used in *a capella*. In figure 3.38 the song sounds like a hymn or anthem because of the I-IV-V-I harmonic structure, as well as the rhythmic structure. A similar technique is used in ‘Dear Old Shiz’ from *Wicked*, as seen in figure 3.39. The song is meant to be a school anthem and the *a capella* vocals convey this.

Cameron uses the *a capella* chorus in *Les Misérables*. The chorus sings the melody with no harmonies. This appears in the beginning of the Finale (figure 3.40). It is the dead soldiers and victims of war singing. The *a capella* chorus depicts a positive energy in the midst of death. This can also be seen as image painting.

The musical score for 'Hymn to Chess' from the musical Chess is presented in 4/4 time with a key signature of two sharps (F# and C#). The Women's part is written in a soprano clef, and the Men's part is in a bass clef. Both parts feature a simple, hymn-like melody with a consistent rhythm of quarter notes. The lyrics are: 'We are one u - ni - ted fam - ly black and white, the game our one true'.

Figure 3.38: *Chess* - ‘Hymn to Chess’ - *A capella* chorus.

The musical score for 'Dear Old Shiz' from the musical Wicked is presented in 4/4 time with a key signature of three sharps (F#, C#, and G#). Vocals 1 is written in a soprano clef, and Vocals 2 is in an alto clef. The melody is simple and hymn-like, consisting of quarter notes. The lyrics are: 'O — hal - lowed halls and vine draped walls The proud - li - est sight there,'.

Figure 3.39: *Wicked* - ‘Dear Old Shiz’ - *A capella* chorus.

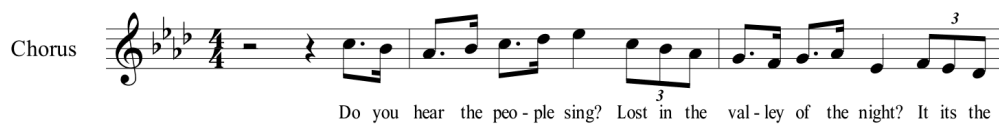


Figure 3.40: *Les Misérables* - 'Finale' - A capella chorus.

3.1.8 Overtures and Introductions to Songs

Overtures and introductions to songs are perfect opportunities to show off the orchestra. While the overture or introduction of a number often starts with full orchestra, using fewer instruments to show off certain instruments or set the tone can work as well. The overture to *Annie* (1977), for example, starts with the trumpet I playing the melody of 'Tomorrow', as seen in figure 3.41.

In figure 3.42, the introduction to 'Jellicle Songs for Jellicle Cats' from *Cats* (1981) starts with a short clarinet motive accompanied by a *pizzicato* cello chord. This is followed by two bars of silence and then a flute motive also with cello *pizzicato*. This type of bare orchestration works with the atonal notes of the clarinet and flute motives. These motives and the two bars of silence create an atmosphere of expectation. This creates anticipation for the entry of the rest of the orchestra.

'The Telephone Hour' from *Bye Bye Birdie* (1960) does not have an introduction. Instead, the vocals begin the song with the simple accompaniment of a hihat. At the beginning of this song, the text is sung without accompaniment. As more voices are added, more instruments are added as well. The song undergoes a continuous build-up that is facilitated by the beginning, which features no instruments. *West Side Story* (1957) contains a similar effect. The vocals start alone. The cello enters with a slow melody that is later divided between the cello and violin as shown in figure 3.44. The purpose of this song, however, is not to build-up. The lack of instruments in the beginning of 'Somewhere' allows the rest of song to remain uncluttered by too many instruments. A longer introduction may require the rest of the song to use a full orchestra, and this may have overpowered the voice.

Figure 3.41 shows a musical score for the 'Overture' of the musical *Annie*. It features two staves: Trumpet in B \flat and Trombone. The Trumpet part begins with a solo melody in 4/4 time, marked *mf* and *solo*. The Trombone part enters later, also marked *mf* and *solo*.

Figure 3.41: *Annie* - 'Overture' - Overtures/Introductions. The overture begins with a solo trumpet, later joined by a trombone.

Figure 3.42 shows a musical score for the 'Jellicle Songs for Jellicle Cats' overture from the musical *Cats*. The score includes parts for Reed 1, Reed 2 (Clarinet), Trumpet in B \flat (Straight mute), Cello (pizz.), Keyboard 1, Keyboard 3, and Percussion (Xylophone). The tempo is marked as quarter note = 126. The score includes dynamic markings like *f* and *mf*, and articulation like *pizz.* and *Straight mute*.

Figure 3.42: *Cats* - 'Jellicle Songs for Jellicle Cats' - Overtures/Introductions. The introduction begins with a clarinet motive followed by a flute motive.

Percussion 2

Vocals

Helen Nancy Helen

Hi, Nan-cy! Hi, He-len! What's the sto-ry, Morn-ing glo-ry?

Perc.

Vox.

Nancy

What's the tale, Night-in-gale Tell me quick a-bout Hu-go and

Figure 3.43: *Bye Bye Birdie* - 'The Telephone Hour' - Overtures/Introductions. The introduction consists of vocals accompanied by the hi-hat.

Vocals

Violin

Cello

There's a place for us, some-where a place for us.

Figure 3.44: *West Side Story* - 'Somewhere' - Overtures/Introductions. the voice begins alone. The cello enters a bar later.

3.2 Type 2 - Small Musical Theatre Instrumentation

Fewer instruments create fewer options in terms of orchestration. Small musical theatre orchestration consists of a maximum of two reed instruments. Often no strings are used, and the brass section is smaller as well. Keyboards, guitars, bass guitars and drums are sometimes used in these types of orchestras where they were not used before. The instrumentation can be seen in table 1.6. Some techniques change, but most remain the same. The fundamental principles of orchestration are common no matter which type of ensemble or orchestra is being used. The techniques that follow are adjusted for small musical theatre instrumentation.

3.2.1 Accompanying the voice

A smaller ensemble calls for a different way of applying orchestration techniques. One such technique is using the small band within the orchestra. Most small musical orchestras contain drums, guitar, bass guitar and keyboards. This means that the full orchestra can be used for bigger chorus numbers, and the band can be used for solos and smaller vocal ensemble items. In ‘Here for You’ from *9 to 5* (2009) (figure 3.45), the drums, bass guitar, guitar 2 and keyboard 2 are playing. These instruments are playing light *staccatos* and the drummer only plays the hi-hat. This ensures that the voice is clearly heard. Later, in figure 3.46, the melody is higher and louder. Bruce Coughlin therefore uses the full orchestra. Immediately after this initial line the vocalist sings slightly lower, and for this reason the reeds and brass are omitted. The same technique can be seen in ‘Heart to Hart’ from *9 to 5*. In figure 3.47, the voice is accompanied by bass and drums. In figure 3.48, the full orchestra plays on the B \natural that the vocalist sings. Coughlin simply uses the full orchestra on the one high note that the vocalist sings.

In *Aida* (2000), Steve Margoshes uses the same technique. ‘My Strongest Suit’ (figure 3.49) and ‘Elaborate Lives’ (figure 3.50) both contain minimal orchestration: ‘My Strongest Suit’ uses guitar, bass, and drums, while ‘Elaborate Lives’ simply uses a keyboard. In both cases the voice is clearly heard and the orchestrator uses instruments that generally do not appear in full musical theatre instrumentation. The orchestrator has fewer orchestral instruments to use, but has new electric instruments in his palette. ‘A Step Too Far’ from *Aida* (figure 3.51) contains three voices in polyphony. Three keyboards are used in addition to bass and drums. Keyboards 2 and 3 play long notes. All vocal parts can be clearly heard, even though all three vocal parts are in their middle register. While vocal polyphony is not as common as recitatives and spoken text, they happen enough to be mentioned. This type of orchestration falls under vocal accompaniment.

Don Walker uses an effective technique in *Cabaret* (1966). In ‘Don’t Tell Mama’ (figure 3.52), the full orchestra plays on the second and third beat, while the vocalist sings on the first and second beat. The vocalist, therefore, sings alone and the full orchestra is used, but not at the same time. Immediately after this, the reeds play the melody along with the vocalist. Walker thus ensures that the melody is heard at all times. This same technique is used in ‘Perfectly Marvellous’ and ‘Two Ladies’ from *Cabaret*, as shown in figures 3.53 and 3.54.

A similar technique can be seen in ‘Married’ from *Cabaret*. In figure 3.55, the bass plays on the first beat and two clarinets play on the second. The instruments do not interfere with the vocals because the rhythm of the melody consists of notes on the first and third beat. In figure 3.56 (‘I Don’t Care Much’ from *Cabaret*), the left-hand of the keyboard plays the first beat, while the right-hand plays the second and third. The melody falls on the first beat with the bass, and thus is clearly heard.

In ‘Roxie’ from *Chicago* (1975), Ralph Burns simply uses the orchestra on the first beat, and then uses the bass and left-hand of the keyboard with the vocal line that comes in on the second beat. This can be seen in figure 3.57.

‘Tradition’ from *Fiddler on the Roof* (1964) contains four vocal parts. In figure 3.58, the vocals are unaccompanied and this makes it easier to hear the polyphony. In ‘Shaking at the High School Hop’ from *Grease* (1972), the solo vocal line remains unaccompanied for the most part. This can be seen in figure 3.59. The orchestra simply plays a chord on the first beat of every second bar. A similar use of the orchestra can be seen in ‘Brotherhood of Man’ from *How to Succeed in Business Without Really Trying* (1961). Here an additional chord is added as can be seen in figure 3.60.

Another effective technique is to make sure that the melody is repeated by the instruments after it is sung. The reader is reminded that adding material and creating accompanimental material falls into the orchestrator’s domain. This ensures that the melody is heard even if the audience misses it the first time. A refrain is most often repeated. In ‘What Would You Do’ from *Cabaret* (figure 3.61) the refrain ‘What would you do?’ is repeated by the clarinet and accordion, while the rest of the orchestra keeps quiet.

‘Strange Thing, Mystifying’ and ‘Gethsemane’ from *Jesus Christ Superstar* (1971) are simply accompanied by the band portion of the orchestra. This can be seen in figures 3.62 and 3.63. ‘Portiphar’ from *Joseph and the Amazing Technicolor Dreamcoat* (1972) uses tuba, percussion and drums as the band. Using the band of the orchestra, which often consists of guitar, keyboard, bass, and drums, allows the vocalist to be heard clearly. As the full orchestra is not being used, there is no need for the vocal line to be doubled by another instrument.

The image displays a musical score for the song '9 to 5 - Here For You'. The score is arranged in five staves, each with a different instrument or voice part. The key signature is one sharp (F#) and the time signature is 4/4. The vocal line is in the top staff, with lyrics: "Oh, my sweet, dear ——— Do-ra-lee ——— You don't know what you ——— mean to me. I". The lyrics are aligned with the notes, with a long dash indicating a sustained note. The keyboard part, labeled "Keyboard 2" and "Clavinet", consists of two staves (treble and bass clef). The guitar part, labeled "Guitar 2", consists of two staves (treble and bass clef). The bass guitar part, labeled "Bass Guitar", consists of two staves (treble and bass clef). The drum set part, labeled "Drum Set", consists of a single staff with a double bar line at the beginning and a series of 'x' marks indicating drum hits.

Figure 3.45: 9 to 5 - 'Here For You' - Accompanying the voice. Only a keyboard, guitars, and drums accompany the voice.

The musical score is arranged in a standard orchestral format with the following parts from top to bottom:

- Reed 1 (Alto Sax)
- Reed 2 (Bari Sax)
- Trumpet in B \flat
- Trombone
- Vocals (with lyrics: Here for you I'm here for you. I want you so, I tru-ly do. My)
- Keyboard 1 (Gospel/Blues Piano)
- Keyboard 2 (Clavinet)
- Guitar 1
- Guitar 2
- Bass Guitar
- Drum Set
- Percussion (Caxixi and Cabasa)

The score is in 4/4 time and the key signature has three sharps (F#, C#, G#). The vocal line is the central focus, with the instrumental ensemble providing accompaniment. The percussion parts include a drum set and caxixi/cabasa, which are active throughout the piece.

Figure 3.46: *9 to 5* - 'Here For You' - Accompanying the voice. Full orchestra plays only on the highest point in the melody.

The image shows a musical score for three instruments: Vocals, Bass Guitar, and Drum Set. The music is in 12/8 time and the key signature has three sharps (F#, C#, G#). The vocal line consists of a series of eighth notes with lyrics: "eye to eye, lip to lip, — hip to thigh, tit to toe — and I'll know what to do I'll". The bass guitar line consists of eighth notes, some with rests. The drum set line shows a pattern of eighth notes and rests, with 'x' marks indicating cymbal hits.

Figure 3.47: *9 to 5* - 'Heart to Hart' - Accompanying the voice. The voice is accompanied by the bass guitar and drum-set.

The image shows a musical score for the song 'Heart to Hart' by the band 9 to 5. The score is arranged for a full orchestra and includes a vocal line. The instruments listed are Reed 1 (Alto Sax), Reed 2 (Bari Sax), Trumpet in Bb, Trombone, Vocals, Keyboard 1 (Piano), Keyboard 2 (Organ and Wuritzer w/Trem), Guitar 1, Guitar 2 (Electric), Bass Guitar, and Drum Set. The music is in 12/8 time and D major. The lyrics are: 'let down my hair and I'll put on a show and I'll o - pen some wine and close all the doors Cu-pid's'. The word 'open' is highlighted in the original image.

Figure 3.48: 9 to 5 - 'Heart to Hart' - Accompanying the voice. The full orchestra only plays on the high note for the word 'open'.

The musical score for 'My Strongest Suit' from the opera Aida is presented in 4/4 time with a key signature of three flats (B-flat major). The score consists of four staves: Vocals, Guitar, Drum Set, and Bass Guitar. The vocal line begins with the lyrics 'be-lieve in loo - king like my time on earth is coo - king Whe-ther'. The guitar part is marked 'muted' and plays a rhythmic accompaniment of eighth notes. The drum set provides a steady beat with snare and bass drum patterns. The bass guitar line follows a simple harmonic accompaniment.

Figure 3.49: *Aida* - 'My Strongest Suit' - Accompanying the voice. The voice is simply accompanied by a guitar, bass guitar, and drums.

The musical score for 'Elaborate Lives' from the opera Aida is presented in 4/4 time with a key signature of three flats (B-flat major). The score consists of two staves: Vocals and Keyboard 1. The vocal line begins with the lyrics 'lead such e-la-bo-rate lives — wild am'. The keyboard part is marked 'Piano' and features a complex accompaniment with chords and moving lines in both the right and left hands.

Figure 3.50: *Aida* - 'Elaborate Lives' - Accompanying the voice. Here the voice is only accompanied by a keyboard.

The image displays a musical score for the opera *Aida*, specifically the piece 'A Step Too Far'. The score is arranged in a multi-stem format, featuring three vocal lines and several instrumental parts. The vocal lines are for Amneris, Aida, and Radames, each with lyrics written below the notes. The instrumental parts include Keyboard 1 (Piano), Keyboard 2 (Pad), Keyboard 3 (Dulcimer), Drum Set, and Bass Guitar. The score is written in 4/4 time and the key signature is three flats (B-flat major or D-flat minor). The lyrics for Amneris are: "he does-n't show me More af - fection than he needs Al-most". The lyrics for Aida are: "I am cer - tain that I love him. but a". The lyrics for Radames are: "I'm in e - very kind of trou - ble can't you tell just look at me".

Figure 3.51: *Aida* - 'A Step Too Far' - Accompanying the voice. Three vocal lines are accompanied by three keyboards, bass, and drums, allowing all voices to be heard.

The musical score is for the song 'Don't Tell Mama' from the musical Cabaret. It is written in 4/4 time and the key signature has three sharps (F#, C#, G#). The score consists of eight staves:

- Reed 1 (Alto Sax):** Plays a melodic line starting on the second beat of the first measure, with accents on the notes.
- Reed 2 (Clarinet):** Plays a similar melodic line, also starting on the second beat of the first measure.
- Trumpet in B♭:** Plays a simple harmonic line, starting on the second beat of the first measure.
- Trombone:** Plays a simple harmonic line, starting on the second beat of the first measure.
- Voice:** Sings the lyrics: "Great big fa - vor? — And". The notes are placed on the first and third beats of each measure.
- Guitar:** Provides harmonic accompaniment with chords: F#m7, B7, E7, and Fm6. The notes are placed on the second and fourth beats of each measure.
- Bass Guitar:** Provides harmonic accompaniment with notes on the second and fourth beats of each measure.
- Drum Set:** Provides a steady rhythmic accompaniment with notes on the second and fourth beats of each measure.

Figure 3.52: *Cabaret* - 'Don't Tell Mama' - Accompanying the voice. The voice sings on the first and third beat, while the orchestra plays on every other beat.

The image displays a musical score for the song 'Perfectly Marvellous' from the musical Cabaret. The score is arranged in a multi-staff format, including parts for Reed 1 and Reed 2 (both labeled '(Clarinet)'), Trumpet in B \flat , Trombone, Vocals, Guitar, Bass Guitar, and Drum Set. The music is in 4/4 time and the key signature has two sharps (F# and C#). The vocal line includes the lyrics: 'sat re ci ting some'. The guitar part includes chord markings: Dm7, Em7, Dm7, and G7. The score is presented in a clean, black-and-white format with standard musical notation.

Figure 3.53: *Cabaret* - 'Perfectly Marvellous'. Accompanying the voice.

The musical score is for the song 'Two Ladies' from the musical Cabaret. It is written in 4/4 time and the key signature has three flats (B-flat major or D-flat minor). The score includes the following parts:

- Reed 2:** Labeled '(Tenor Sax)', playing a simple harmonic line with quarter notes.
- Trumpet in B \flat :** Playing a similar harmonic line to the reed.
- Trombone:** Playing a harmonic line with some chromatic movement.
- Vocals:** The vocal line with lyrics: "On - ly man. Ja!".
- Keyboard:** Labeled 'Accordion', playing a chordal accompaniment.
- Guitar:** Labeled 'Banjo', playing a chordal accompaniment with specific chord markings: D \flat , D \flat dim, E m7, and E dim.
- Bass Guitar:** Playing a simple harmonic line.
- Drum Set:** Playing a simple drum pattern.

Figure 3.54: *Cabaret* - 'Two Ladies' - Accompanying the voice.

The musical score for 'Married' from Cabaret is presented in a four-staff format. The top two staves are for Reed 1 and Reed 2, both labeled '(Clarinet)'. The third staff is for Vocals, and the bottom staff is for Bass Guitar. The music is in 3/4 time and B-flat major. The vocal line consists of a series of quarter notes: 'world', 'can', 'change.', 'It', 'can', 'change', 'like', 'that.', 'Due', 'to'. The accompaniment for the reeds and bass guitar features a consistent rhythmic pattern where the instrument plays on the second beat of each bar, while the vocal line sings on the first and third beats.

Figure 3.55: *Cabaret* - 'Married' - Accompanying the voice. The accompaniment falls on the second beat of the bar, while the vocalist sings on the first and third beat.

The musical score for 'I Don't Care Much' from Cabaret is presented in a two-staff format. The top staff is for Vocals, and the bottom staff is for Keyboard. The music is in 3/4 time and B-flat major. The vocal line consists of a series of quarter notes: 'I', 'don't', 'care', 'much.'. The keyboard accompaniment features a consistent rhythmic pattern where the right hand plays chords on the second beat of each bar, while the left hand plays a single note on the first and third beats. A 'Piano' dynamic marking is present in the first measure of the keyboard part.

Figure 3.56: *Cabaret* - 'I Don't Care Much' - Accompanying the voice.

The musical score for the first two measures of the accompaniment for 'Roxie' from the musical Chicago. The score is written in 4/4 time and B-flat major (two flats). The instruments and their parts are as follows:

- Reed 1:** (Clarinet) - Rests in both measures.
- Reed 2:** (Piccolo) - Rests in both measures.
- Reed 3:** (Bass Clarinet) - Rests in both measures.
- Trombone:** - Rests in both measures.
- Drum Set:** - Plays a consistent pattern of eighth notes with 'x' marks, indicating cymbal hits.
- Vocals:** - Rests in the first measure, then begins on the second beat with the lyrics 'The name on ev-'ry - bo-dy's'.
- Guitar:** - Plays a chord on the first beat, then a melodic line in the second measure.
- Piano:** - Plays a chord on the first beat, then a melodic line in the second measure.
- Bass Guitar:** - Plays a chord on the first beat, then a melodic line in the second measure.

Figure 3.57: *Chicago* - 'Roxie' - Accompanying the voice. The full orchestra plays a chord on the first beat, and the vocalist starts singing on the second beat.

The musical score is arranged in a system with the following parts from top to bottom:

- Reed 2**: Clarinet part, starting with a rest and ending with a triplet of eighth notes.
- Reed 4**: Bassoon part, starting with a rest and ending with a triplet of eighth notes.
- Reed 5**: Oboe part, starting with a rest and ending with a triplet of eighth notes.
- Trumpet 1+2**: Trumpet part, starting with a rest and ending with a triplet of eighth notes.
- Papas**: Vocal line with lyrics: "Who, day and night must scramble for a li - ving, feed a wife and chil - dren say his dai - ly prayers? And"
- Mama**: Vocal line with lyrics: "Whom us know the way to make a por - per home, a qui - et home, a"
- Sons**: Vocal line with lyrics: "At three I star - ted He - brew school. At ten I learned a"
- Daughters**: Vocal line with lyrics: "And who does ma - ma teach To mend and tend and"
- Percussion**: Snare and Bass Drum parts, starting with a rest and ending with a triplet of eighth notes.

Figure 3.58: *Fiddler on the Roof* - 'Tradition' - Accompanying the voice. The first statements of the polyphonic voices are *a capella*.

The musical score is for the song 'Shaking at the High School Hop' from the movie Grease. It is in 4/4 time and the key signature has three sharps (F#, C#, G#). The score is arranged for a full orchestra and includes the following parts:

- Reed 1 and Reed 2:** Both parts play a single note (G#4) on the first beat of every second bar, marked with an accent (>). A box labeled 'Alto Sax' is placed above the first bar of each part.
- Trumpet in B♭ and Trombone:** Both parts play a single note (G#4) on the first beat of every second bar, marked with an accent (>).
- Vocals 1:** The lead vocal line with lyrics: "hon-ky tonk ba-by get on ___ the floor All the cats are shou-tin' they're yel - lin' for more My".
- Vocals 2:** A second vocal line, currently silent.
- Keyboard 1:** Plays a chord (F#4) on the first beat of every second bar, marked with an accent (>).
- Keyboard 2:** Plays a chord (F#4) on the first beat of every second bar, marked with an accent (>). A box labeled 'Drawbar Organ' is placed above the first bar.
- Guitar:** Plays a chord (A7) on the first beat of every second bar, marked with an accent (>).
- Bass Guitar:** Plays a single note (F#3) on the first beat of every second bar, marked with an accent (>).
- Drum Set:** Plays a single note (F#3) on the first beat of every second bar, marked with an accent (>).

Figure 3.59: *Grease* - 'Shaking at the High School Hop' - Accompanying the voice. The full orchestra plays, but only on the first beat of every second bar.

The image displays a musical score for the song 'How to Succeed in Business Without Really Trying' - 'Brotherhood of Man'. The score is arranged for a full band and includes the following parts:

- Reed 1 (Alto Sax)
- Reed 2 (Tenor Sax)
- Reed 3 (Bari Sax)
- Trumpet in B \flat 1
- Trumpet in B \flat 2
- Trombone 1
- Trombone 2
- Vocals
- Bass Guitar
- Drum Set

The music is in 4/4 time and the key signature has three flats (B \flat , E \flat , A \flat). The vocal line includes the lyrics: "Oh, that no - ble fee - ling; Feels like bells are pea - ling;". The score shows the first four measures of the piece, with various musical notations such as rests, notes, and dynamic markings (e.g., accents) for the instruments.

Figure 3.60: *How to Succeed in Business Without Really Trying* - 'Brotherhood of Man' - Accompanying the voice.

The musical score for 'What Would You Do' from Cabaret is presented in a 4/4 time signature with a key signature of three sharps (F#, C#, G#). The score includes parts for two Clarinets (labeled 'Clarinet'), Vocals, Keyboard 1 (labeled 'Piano'), and Keyboard 2 (labeled 'Accordion'). The vocal line begins with the lyrics 'What would you do With the'. The clarinet and piano parts echo the vocal melody, while the accordion provides a harmonic accompaniment.

Figure 3.61: *Cabaret* - 'What Would You Do' - Accompanying the voice. The melody is echoed in the clarinet and keyboard 2.

The musical score for 'Strange Thing, Mystifying' from Jesus Christ Superstar is in 4/4 time with a key signature of one sharp (F#). It features Vocals, Keyboard (labeled 'Piano'), Guitar 1, Guitar 2, Bass Guitar, and Drum Set. The vocal line includes the lyrics 'It seems to me a strange thing, mystify - ing that a'. The keyboard provides a rhythmic accompaniment with chords. Guitar 1 and 2 play chords (G, G7, C, Cm) and rhythmic patterns. The bass guitar and drum set provide a steady accompaniment.

Figure 3.62: *Jesus Christ Superstar* - 'Strange Thing, Mystifying' - Accompanying the voice. The vocal is accompanied only by the band.

The musical score for 'Gethsemane' is written in 4/4 time with a key signature of three flats (B-flat major). The vocal line consists of two phrases: 'I on-ly want to say' and 'If there is a way'. The guitar accompaniment includes chords for Guitar 1 and rhythmic patterns for Guitar 2. The bass guitar provides a steady accompaniment.

Vocals
I on-ly want to say If there is a way

Guitar 1
E \flat m E \flat m

Guitar 2
B \flat m B \flat m/A \flat B \flat m/G \flat B \flat m/F E \flat m E \flat m/D \flat E \flat m/C E \flat m/B \flat

Bass Guitar

Figure 3.63: *Jesus Christ Superstar* - 'Gethsemane' - Accompanying the voice.

The musical score for 'Potiphar' is written in 4/4 time with a key signature of three sharps (F# major). The vocal line consists of two phrases: 'Po - ti - phar had ve - ry few cares.' and 'He was one of E - gypt's mil - li - o - naire.' The tuba provides a rhythmic accompaniment. The percussion includes Chinese Blocks and a Drum Set.

Vocals
Po - ti - phar had ve - ry few cares. He was one of E - gypt's mil - li - o - naire.

Tuba

Percussion
Chinese Blocks ad lib

Drum Set

Figure 3.64: *Joseph and the Amazing Technicolor Dreamcoat* - 'Potiphar' - Accompanying the voice.

3.2.2 Recitative Accompaniment

Recitatives in opera are usually accompanied by a smaller ensemble. For example, the recitatives in *Die Zauberflöte* (1791) are simply accompanied by the strings and not the full orchestra. ‘Mein Herr’ from *Cabaret* and ‘This Jesus Must Die’ from *Jesus Christ Superstar* are close to the conventional style of recitative writing. Figure 3.65 (‘Mein Herr’) simply features piano accompaniment. Figure 3.66 (‘This Jesus Must Die’) uses two keyboards and long timpani notes.

‘Fortune Favors the Brave’ from *Aida* features a different technique. In figure 3.67, the full orchestra is used, but only on the first beat of the bar. The vocalist sings between these short orchestral chords. Figure 3.68 (‘Cinderella, Darling’ from *How to Succeed in Business Without Really Trying*) also uses the full orchestra. The chord is held, but the initial attack is accentuated. This creates a similar effect to the previous example, with the exception that the vocals are accompanied by the decaying chord.

The image shows a musical score for the recitative 'Mein Herr' from the musical *Cabaret*. It consists of two staves: 'Vocals' and 'Piano'. The key signature is three flats (B-flat, E-flat, A-flat) and the time signature is 4/4. The vocal line begins with a rest for the first two measures, then enters with a series of eighth notes: G4, A4, B4, C5, B4, A4, G4, F4, E4, D4. The piano accompaniment features a series of sustained chords in the right hand and a bass line in the left hand. The lyrics are: 'You have to un-der-stand the way I am Mein Herr. A ti-ger is a ti-ger not a'.

Figure 3.65: *Cabaret* - ‘Mein Herr’ - Recitative accompaniment. The recitative is simply accompanied by the piano.

The musical score is arranged in four systems. The top system is for Keyboard 2, featuring a treble clef and a 4/4 time signature. It contains a series of chords, with a 'Gong/Bell' label in the bass line. The second system is for Vocals, with a treble clef and 4/4 time signature. The vocal line is a recitative melody with lyrics: 'Good Ca-la - phas the coun-cil waits for you. The Pha-ri - sees and Priests are'. A 'Timp' (timpani) label is placed below the first measure. The third system is for Percussion, with a bass clef and 4/4 time signature, showing a series of chords. The bottom system is for Keyboard 1, with a bass clef and 4/4 time signature, also showing a series of chords. A 'Piano' label is placed in the bass line. The score is framed by dashed lines at the top and bottom, with '8va' markings at the top and bottom corners.

Figure 3.66: *Jesus Christ Superstar* - 'This Jesus Must Die' - Recitative accompaniment. The recitative is accompanied by two keyboards and timpani.

The image displays a musical score for the recitative accompaniment of the song 'Fortune Favors the Brave' from the opera *Aida*. The score is written in 5/4 time and features a key signature of one sharp (F#). The vocal line is at the top, with lyrics: "This is the sto-ry of a love that flou-rished in a time of hate, of lo-vers no ty-ran-ny could se-pe-rate". The accompaniment consists of several instruments: Keyboard 1 (Piano), Keyboard 2 (Dirty Rhodes), Keyboard 3 (Clavinet), Guitar 1 (Electric), Guitar 2 (Electric), Percussion (Djembe), Drum Set, and Bass Guitar. The score shows a recitative style where the accompaniment is primarily composed of staccato chords at the beginning of each bar, providing a rhythmic and harmonic foundation for the vocal line.

Figure 3.67: *Aida* - 'Fortune Favors the Brave' - Recitative accompaniment. This recitative simply features *staccato* chords at the beginning of every bar.

The image displays a musical score for the recitative accompaniment of the song 'How to Succeed in Business Without Really Trying' - 'Cinderella, Darling'. The score is written in 4/4 time and features a variety of instruments. The vocal line is in the center, with lyrics: "How of-ten does it hap-pen that a se-cre-ta-ry's boss wants to mar-ry 'er? _". The accompaniment includes:

- Reed 2 (Clarinet) and Reed 3 (Bassoon): Both play long, sustained notes.
- Horn in F and Trombone 1 & 2: Play long, sustained notes.
- Keyboard (Small Church Organ): Provides harmonic support with long notes.
- Harp: Provides harmonic support with long notes.
- Bass Guitar: Provides harmonic support with long notes.
- Mallets (Chimes): Provides harmonic support with long notes.

Figure 3.68: *How to Succeed in Business Without Really Trying* - 'Cinderella, Darling' - Recitative accompaniment. The recitative is accompanied by long notes in the reeds, brass, and band.

3.2.3 Accompaniment of Spoken Text

Much like the accompanied recitative, accompanied spoken text is also found more often in smaller orchestras. Spoken text does not have pitches as recitatives do. Writing the rhythm in the vocal line with a series of cross note-heads was found to be the most common method of notating spoken text. ‘So What’ from *Cabaret* contains a solo voice speaking the given text. Figure 3.69 shows that the vocal line is only accompanied by two clarinets, a trombone and a double bass. The trombone plays with a solo tone mute and the double bass plays *arco*. The four instruments play the exact same rhythm making the accompaniment bare, and thus the vocal line is easily heard. ‘We Go Together’ and ‘Born to Hand Jive’ from *Grease* both use the chorus to speak the text. In ‘We Go Together’ the text is ‘Ramalamalama dingity ding dedong, shoo bop sha wada wada yippity boom de boom’. Figure 3.70 (‘We Go Together’) is simply accompanied by the drums. The text in ‘Born to Hand Jive’ is simply the phrase ‘Born to Hand Jive’ repeated. Figure 3.71 (‘Born to Hand Jive’) is accompanied by drums and guitar. The guitar uses mute with wah pedal, which creates a percussive effect. The spoken text is later joined by a sung vocal line that is doubled by the alto saxophone.

Another way of notating the text is to simply write it in a block between the instruments, as in figures 3.72 and 3.73. This indicates the text is in the speaker’s own time and that it serves as a narration, rather than being part of the music. Typically, more instruments are used in this situation. ‘Cell Block Tango’ from *Chicago* (figure 3.72) contains two reeds, drums, violin, and mandolin. The drummer only uses the snare, and this does not interfere with the spoken text. In addition to the instruments, the chorus also sings in whispery voices while the text is being spoken. ‘Dear Reader’ from *How to Succeed in Business Without Really Trying* (figure 3.73) contains more instruments than the previous example: two reeds, guitar, keyboard, bass guitar, percussion and drums. The drummer only uses the hi-hat, which is typically even softer than the snare drum. This allows for the use of a shaker or cabasa from the percussionist. The rest of the instruments are playing the same rhythm. This allows the voice to be clearly heard.

‘Getting Married Today’ from *Company* (1970) is an example of what is known as a patter song. A patter song is usually a song with a simple melody and a text that gets sung very quickly. The melody usually moves stepwise as the fast pace of the text makes the melody difficult to be sung properly. The melody is often not heard and thus should be doubled by another instrument. Figure 3.74 (‘Getting Married Today’) features a melody that is doubled by the strings. The bass guitar, drums and trombone are the other instruments used to play very repetitive accompaniment. The patter song can be seen as spoken text, as it is half sung half spoken. Another good example of a patter song is ‘Modern-Major-General’ from the musical *Pirates of Penzance* (1879). The difference between the patter song and a recitative is that a recitative is

sung in a free rhythm that resembles speaking, while the patter song is in a strict rhythm and extremely fast.

The image displays a musical score for the song 'So What' from the musical Cabaret. The score is arranged in five staves, each with a different instrument or voice part. The key signature is three sharps (F#, C#, G#) and the time signature is 4/4. The first staff is for Reed 1, the second for Reed 2, the third for Trombone, the fourth for Vocals, and the fifth for Double Bass. The Reed parts and Double Bass part feature a slow, melodic line with a 'Solotone mute' marking above the Trombone staff and an 'arco' marking above the Double Bass staff. The Vocals part consists of a series of 'x' marks representing a spoken rhythm, with the lyrics: 'dif-fe-rence of fif-ty marks What should that stand in our way? As long as the room's to let, the'. The lyrics are written below the vocal staff, with the 'x' marks above them.

Figure 3.69: *Cabaret* - 'So What' - Accompaniment of spoken text. The text is only accompanied by two clarinets, a trombone, and a double bass.

The musical score is for the song 'We Go Together' from the movie *Grease*. It shows the accompaniment for the spoken text. The score is written in 4/4 time and features a variety of instruments. The vocal line is written in a lower register, and the lyrics are: "Ra-ma-la-ma la-ma - ka din-gi-ty ding de-dong. Shoo bop sha wad-da wad-da yip-pi-ty boom de boom." The instrumental parts include Reed 1 and 2 (Alto Sax), Trumpet in Bb, Trombone, Keyboard 1 and 2 (with a Strings section), Guitar 1 and 2 (with a Bb section), Bass Guitar, and Drum Set. The drum set part is marked "Drum solo under chant".

Figure 3.70: *Grease* - 'We Go Together' - Accompaniment of spoken text. The text is spoken alone, with the orchestra only playing a *staccato* chord on the first syllable.

The image displays a musical score for the song 'Born to Hand Jive' from the movie Grease. The score is arranged in two systems. The first system includes staves for Alto Sax, Vocals 1, Vocals 2, Guitar, and Drum Set. The second system includes staves for A. Sx., Vox. 1, Vox. 2, Gtr., and D. S. The key signature is three sharps (F#, C#, G#) and the time signature is 4/4. The lyrics are: 'Born to hand jive Born to hand jive Born to hand jive Born to hand jive'. The guitar part is marked 'Mute with Wah' and the drum set part includes a circled 'x' symbol. The second system includes a melodic line for the Alto Sax and two vocal lines (Vox. 1 and Vox. 2) with lyrics: 'Born to hand jive Born to hand jive Born to hand jive Born to hand jive' and 'Born to hand jive ba - by'. The guitar and drum set parts continue with the same accompaniment.

Figure 3.71: *Grease* - 'Born to Hand Jive' - Accompaniment of spoken text. The text is accompanied by drums and guitar.

The musical score is arranged in a system with six staves. The top two staves are for Reed 1 (Clarinet) and Reed 2 (Bass Clarinet). The third staff is for the Drum Set. The fourth staff is for Vocals, with the lyrics: "Velma: My sister, Veronica and I did this double act and my husband, Charlie, traveled around with us co - ming. He had it co - ming. He on - ly". The fifth staff is for Violin, and the sixth staff is for Guitar. A box labeled "Mandolin" is positioned above the Guitar staff. The music is in 4/4 time and the key signature has three sharps (F#, C#, G#).

Figure 3.72: *Chicago* - 'Cell Block Tango' - Accompaniment of spoken text.

The musical score is for a 4/4 piece in B-flat major. It features the following parts:

- Reed 2 (Bass Clarinet):** Treble clef, playing a staccato melody of quarter notes.
- Reed 3 (Contrabass Clarinet):** Treble clef, playing a staccato melody of quarter notes.
- Vocals:** Treble clef, containing the spoken text: "BOOK VOICE: Dear Reader: This little book is designed to tell you everything you need to know about the science of getting ahead."
- Guitar (Electric):** Treble clef, playing a staccato melody of quarter notes.
- Keyboard (Bass Marimba):** Bass clef, playing a staccato melody of quarter notes.
- Bass Guitar:** Bass clef, playing a staccato melody of quarter notes.
- Percussion (Cabasa or Shaker):** Percussion clef, playing a steady eighth-note accompaniment.
- Drum Set:** Percussion clef, playing a steady eighth-note accompaniment.

Figure 3.73: *How to Succeed in Business Without Really Trying* - 'Dear Reader' - Accompaniment of spoken text. The accompaniment consists of *staccato* notes creating a bare accompaniment that ensures that the text is audible.

The musical score is for the song 'Getting Married Today' from the musical 'Company'. It features six staves: Vocals, Bass Guitar, Drum Set, Trombone, Violin, and Viola. The key signature is three flats (B-flat major/D minor) and the time signature is 4/4. The lyrics are: 'Par-don me, is ev-'ry-bo-dy there? Be-cause if ev-'ry-bo-dy's there, I want to thank you all for'. The vocal line consists of eighth notes. The bass guitar plays a simple harmonic accompaniment. The drum set has a steady eighth-note pattern. The trombone plays a sustained note with a 'Str. Mute' instruction. The violin and viola play a 'Spicatto' accompaniment.

Figure 3.74: *Company* - 'Getting Married Today' - Accompaniment of spoken text.

3.2.4 Image Painting

Fewer examples of image painting were found in musicals with smaller orchestras, as the orchestrator does not have a full palette of instruments at his disposal. The first example does not use instruments, but is rather notable for the way in which Steve Margoshes orchestrated the vocals in ‘The Gods Love Nubia’ from *Aida*. Figure 3.75 begins with Aida, the lead character, trying to convince her people to band together to overcome their enslavement. One by one people join her. This is indicated by the Nubians beginning to sing with Aida. The Nubians sing on the consonant ‘mmm’ as if agreeing with Aida. Later in the song (figure 3.76), when Aida has rallied everyone together, the whole chorus sings together in harmony. This arguably depicts the united Nubians.

Don Walker uses reed instruments to imitate poultry. In ‘If I Were A Rich Man’ from *Fiddler on the Roof*, Tevye sings ‘Squawking just as noisily as they can’, and then a flute, two clarinets, a bassoon and an English horn play a melody in unison that sounds similar to ducks and chickens squawking. This can be seen in figure 3.77. Multiple instruments are used to show that Tevye is rich, as he has a lot of poultry.

In ‘One More Angel in Heaven’ from *Joseph and the Amazing Technicolor Dreamcoat* (figure 3.78), Martin Silvestri uses the vocals to create the image of angels. The brothers of Joseph are telling their father that Joseph is dead. When they sing: ‘There’s one more angel in heaven,’ this line is immediately followed by children’s voices singing a melody that is reminiscent of angelic voices. This portrays the angels that the brothers are talking about.

Aida

one more taste of free-dom One more lon-ging back-ward glance In the

Nubian 1

Nubian 2

Nubian 3

5

Aida

sway of som-ber mu-sic I shall ne-ver ne-ver un-der-stand Let me

N 1

Mmm

N 2

N 3

Mmm Mmm Mmm Mmm

9

Aida

slip in in-to the swee-ter cho-rus of that o-ther land. The

N 1

Mmm Mmm Mmm Mmm

N 2

Mmm Mmm

N 3

Mmm Mmm Mmm Mmm Mmm

Figure 3.75: *Aida* - 'The Gods Love Nubia' - Image painting. The first vocal line emulates a leader gathering support. The remaining vocal lines emulate the people joining their leader.

The image displays a musical score for the chorus 'The Gods Love Nubia' from the opera *Aida*. The score is arranged in four staves, each representing a different vocal group: Aida, Nehebka, Women, and Men. The music is written in 4/4 time and features a key signature of one flat (B-flat). The lyrics for all parts are: 'gods love Nu-bi-a we have to keep be-lie-ving Though scat-tered and di-vi-ded'. The Aida and Nehebka parts are written in a soprano-like range, while the Women and Men parts are written in a lower range, with the Men part using a bass clef. The Women part consists of a series of chords, and the Men part consists of a series of chords and a few moving lines.

Figure 3.76: *Aida* - 'The Gods Love Nubia' - Image painting. The chorus here signifies unity.

The musical score is arranged in a system with the following parts from top to bottom:

- Reed 1 (Flute)
- Reed 2 (Clarinet)
- Reed 3 (Clarinet)
- Reed 4 (Bassoon)
- Reed 5 (English Horn)
- Vocals: Squaw-king just as noi-si-ly as they can.
- Keyboard 2 (Mandolin)
- Guitar: Chords Ebm, Bb7Eb7, Ab7, Db, Db9
- Violin

Figure 3.77: *Fiddler on the Roof* - 'If I Were A Rich Man' - Image painting. The reeds in the third bar imitate the sound of ducks and chickens.

The image displays a musical score for the song 'One More Angel in Heaven' from the musical *Joseph and the Amazing Technicolor Dreamcoat*. The score is arranged for a full band and three vocalists. The instruments and parts are:

- Vocals 1:** Treble clef, lyrics: "one more an - gel in hea - ven There's one more star in the sky —"
- Vocals 2:** Bass clef, lyrics: "one more an - gel in hea - ven There's one more star in the sky —"
- Vocals 3:** Treble clef, lyrics: "Ah — Ah —"
- Bass Clarinet:** Treble clef, playing a rhythmic accompaniment.
- Guitar:** Treble clef, playing chords and a melodic line. Chords are labeled F, F, and Gm.
- Piano:** Grand staff (treble and bass clefs), playing chords and a bass line. Chords are labeled F, F B \flat , and Gm/F.
- Glockenspiel:** Treble clef, playing chords.
- Bass Guitar:** Bass clef, playing a rhythmic accompaniment.
- Drum Set:** Drum notation, playing a rhythmic accompaniment.

Figure 3.78: *Joseph and the Amazing Technicolor Dreamcoat* - 'One More Angel in Heaven' - Image painting. The third vocal line portrays angels singing.

3.2.5 Using the Chorus

Because the Type 2 orchestra has fewer instruments for the orchestrator to use, the chorus becomes a useful tool in orchestration. A useful technique when a singer with a softer timbre is singing is to double some of the vocalist's lines with chorus. In 'Around Here' from *9 to 5*, the orchestrator doubles every second line with chorus in unison (figure 3.79). Later, in 'One of the Boys', the orchestrator uses the chorus to echo the vocalist. The chorus sings in four-part harmony in figure 3.80. 'Cell Block Tango' from *Chicago* uses spoken text for the verse and uses full chorus for the chorus of the song. The full chorus in unison allows the vocal line to be accompanied by the full orchestra. This can be seen in figure 3.81. In 'Those Magic Changes' from *Grease*, the orchestrator uses the chorus to provide the harmonic basis for the solo vocal line along with the guitar and keyboards. In figure 3.82, vocals 2 and 3 sing chords on the vowel 'oo'.

The musical score is arranged in a multi-staff format. The top two staves are for vocalists: Violet and Women. Violet's part includes the lyrics: "got no time__ to fool a - round a-round here. A-round here. You got-ta". Women's part includes: "got no time__ A-round here." The instrumental parts include: Keyboard 2 (Fender Rhodes and Electric), Guitar 1 (Electric), Guitar 2, Bass Guitar, Drum Set (Triangle), and Percussion (Shaker). The score is in 4/4 time and B-flat major.

Figure 3.79: *9 to 5* - 'Around Here' - Using the chorus. The chorus doubles part of the vocal line.

The musical score is arranged in a standard orchestral format with the following parts from top to bottom:

- Reed 1:** Flute part with notes and slurs.
- Reed 2:** Clarinet part with notes and slurs.
- Trumpet in B♭:** Part with rests and a "Str. Mute" instruction.
- Trombone:** Part with rests and a "Str. Mute" instruction.
- Vocals 1:** Lead vocal line with lyrics: "Beau-ti - ful Gla-mo-rous Brill-iant and a-mo-rous fe".
- Vocals 2:** Harmonizing vocal line with lyrics: "Beau-ti - ful Gla-mo-rous Brill-iant a-mo-rous".
- Keyboard 2:** Part with "Arco Strings" instruction.
- Guitar 1:** Part with rhythmic patterns and slash marks.
- Guitar 2:** Part with notes and chords.
- Bass Guitar:** Part with notes and chords: G^b6, B maj7, B/C, A^b7/C, C7.
- Drum Set:** Part with a consistent rhythmic pattern.

Figure 3.80: *9 to 5* - 'One of the Boys' - Using the chorus. The chorus echoes the voice.

The image displays a musical score for the song 'Cell Block Tango' from the musical Chicago. The score is written for a full orchestra and includes a vocal line. The instruments and parts are:

- Reed 1 (Sop Sax): *mf*
- Reed 2 (Sop Sax): *mf*
- Reed 3 (Sop Sax): *mf*
- Trumpet in B \flat 1
- Trumpet in B \flat 2: *p*
- Drum Set: *mf*
- Vocals: The chorus melody is clearly visible, with lyrics: "co - min' He had it co - min' He on - ly had him - self to blame ___ If you had".
- Violin: *mf*
- Piano
- Tuba: *mf*

The score is in 4/4 time and the key signature has two flats (B \flat major or D \flat minor). The vocal line is in the soprano clef, and the lyrics are written below it. The orchestral accompaniment is spread across the other staves, with various dynamics and articulations.

Figure 3.81: *Chicago* - 'Cell Block Tango' - Using the chorus. The chorus sings the melody allowing it to be heard, even though the full orchestra is playing.

The musical score is arranged in a grand staff format with the following parts from top to bottom:

- Vocals 1:** Lead vocal line with lyrics: "Those ma-gic chan - ges _ my heart ar - ran - ges _ a me-lo". It features triplet markings over the first and last measures.
- Vocals 2:** Harmonizing vocal line with "Ooo" lyrics.
- Vocals 3:** Harmonizing vocal line with "Ooo" lyrics.
- Keyboard 1:** Piano accompaniment, marked "Piano".
- Keyboard 2:** Drawbar Organ accompaniment.
- Guitar:** Electric guitar accompaniment with chords B \flat , Gm, E \flat , and F indicated above the staff.
- Bass Guitar:** Bass line.
- Drum Set:** Drum pattern.

Figure 3.82: *Grease* - 'Those Magic Changes' - Using the chorus. The chorus provides additional harmony.

3.2.6 Overtures and Introductions to songs

Overtures and introductions to songs often use the full ensemble, as mentioned in Section 3.1.8. The overture is often loud and thickly orchestrated, as this is where the orchestrator does not need to worry about voices. This, however, is not the only way to orchestrate an overture or the introduction to a song.

The overture to *Company* (figure 3.83) uses vocals only. It begins with two singers in unison. Two more singers join two bars later with different material. Jonathan Tunick simply uses polyphonic voices in the overture. The voices even fall into the same rhythm leading to the last two chords of the overture. Another unconventional overture is that of *Fiddler on the Roof*. In figure 3.84, the violin plays a solo melody. The flute joins nine bars later with a counter-melody. Overtures do not often begin with solos. These examples are exceptions: most overtures start with the orchestra.

The musical score is divided into three systems, each with four vocal parts (Vocals 1-4). The key signature is three flats (B-flat, E-flat, A-flat) and the time signature is 4/4.

System 1:

- Vocals 1:** (Susan, Marta) Bob-by Bob-by Ba-ba-ba-ba-ba-ba-ba Bob-by Bob-by Bob - by Bob-by Bob-by
- Vocals 2:** (Jenny, April) Bob-by Bob-by ba-ba-ba-ba-ba-ba-ba Bob-by Bob-by Ba-
- Vocals 3:** (Jenny, April, Sarah)
- Vocals 4:** (Jenny, April, Sarah)

System 2:

- Vox. 1:** (Susan, Marta, Jenny) (Jenny, Marta) Ba-ba-ba-ba-ba-ba-ba Bob-by Bob-by Bob - by Bob-by Bob-by Ba-ba-ba-ba-ba-ba-ba
- Vox. 2:** (April, Sarah) (April, Sarah) ba-ba-ba-ba-ba-ba-ba Bob-by Bob-by Bob - by Ba-ba-ba-ba-ba-ba-ba B - ba-ba Bob-by Ba
- Vox. 3:** (Susan, Kathy, Peter, Paul) Bob-by Bob-by Ba-ba-ba-ba-ba-ba-ba Bob-by Bob-by Ba - ba-ba-ba-ba-ba-ba-ba
- Vox. 4:** (Amy, Joanne, Harry, David) Bob-by Bob-by Ba-ba-ba-ba-ba-ba-ba

System 3:

- Vox. 1:** (Jenny, Marta) Bob-by Bob-by Ba - ba - ba - ba - ba - ba - ba Bob - by
- Vox. 2:** (April, Sarah) Bob-by Bob-by Ba - ba - ba - ba - ba - ba - ba Bob - by
- Vox. 3:** (Susan, Kathy, Peter, Paul) Bob-by Bob-by Ba - ba - ba - ba - ba - ba - ba Bob - by
- Vox. 4:** (Amy, Joanne, Harry, David) Bob-by Bob-by Ba - ba - ba - ba - ba - ba - ba Bob - by

Figure 3.83: *Company* - ‘Overture’ - Overtures and introductions to songs. The overture consists only of voices.

The image displays a musical score for the 'Prologue' of the musical 'Fiddler on the Roof'. It consists of three systems of staves, each with a Flute (Fl.) and Violin (Vln.) part. The first system shows the Violin playing a melodic line while the Reed 1 part is silent. The second system shows the Flute and Violin playing together, with the Flute part starting at measure 6. The third system shows the Flute and Violin playing together, with the Flute part starting at measure 12. The score is written in treble clef with a key signature of one flat (B-flat) and a common time signature (C).

Figure 3.84: *Fiddler on the Roof* - 'Prologue' - Overtures and introductions to songs. The introduction starts with a solo violin, joined later by a flute.

3.3 Type 3 - Rock Band Instrumentation

Rock band instrumentation consists mainly of guitars, keyboards, as well as a bass guitar and drums. This instrumentation can be seen in table 1.7. When using rock band instrumentation, most of the instruments are electric and are thus amplified. This makes it easy for the sound technician to create a balance between the band and the voices. It is still important, however, to make sure, as the orchestrator, that the voice is always clearly heard. The orchestrator cannot rely on the sound technician as he may not have the necessary skill to ensure that the balance is correct.

3.3.1 Accompanying the voice

In ‘If That’s What It Is’ from *13* (2008), Jason Robert Brown presents the vocal line alone and only then brings the band in. This can be seen in figure 3.85. The same technique is used in ‘It’s A Privilege to Pee’ from *Urinetown* (2001) (figure 3.86). Tom Kitt uses a similar technique in ‘American Idiot’ from *American Idiot* (figure 3.87), where he simply uses the bass drum with the vocal line and brings the band in on the last note of the vocal line. This ensures the vocal line will be clearly heard as no instruments are obstructing it. In ‘Jesus of Suburbia’ from *American Idiot* (figure 3.88), the band is presented first, followed by the vocal line alone. In figure 3.89 (‘St Jimmy’ from *American Idiot*) the band plays a single chord on the first beat of the bar and the vocal line comes in on the second beat, only accompanied by guitar I playing with palm mute. The orchestrators simply take the band out when the vocal is singing. This allows the voice to be heard, especially when the full band is being used.

Using the above technique for most of a musical would make it sound very empty. The orchestrator can remove half of the instruments playing when the vocal line enters. This is difficult when there are so few instruments in the band, but is still possible. In figure 3.90 (‘If You Were Gay’ from *Avenue Q* (2003)), the vocal line is accompanied by the bass guitar, and both keyboards. The drum-set provides the rhythm. When the vocal line drops out the clarinet and right-hand of keyboard I is added. Similarly, keyboards II and IV are removed, albeit not completely, when the vocal line enters in ‘Mamma Mia’ from *Mamma Mia* (1999). The vocal line is still accompanied, however, by keyboard I, bass guitar and drums, as can be seen in figure 3.91. In ‘Song of Forgetting’ from *Next to Normal* (2009), the strings are added when the voice drops out. While this looks like a small addition in figure 3.92, the aural effect is a much fuller sound that could have overpowered the vocal line had the strings played. Using half the band is also an effective way to ensure the vocal line is heard.

A technique that is more common in rock band instrumentation than in other instrumentation types, is simply accompanying the vocal line with an

acoustic guitar or a piano. The reason for this is that the band has limited options in terms of accompaniment choices, and thus a technique such as this is used more often. ‘Boulevard of Broken Dreams’ (figure 3.93) and ‘Give Me Novocaine’ (figure 3.94) from *American Idiot* both contain vocals that are accompanied by acoustic guitars. ‘Whatsername’ from *American Idiot* (figure 3.95) contains an example of a vocal line that is accompanied by piano.

The vocal line can also be accompanied by bass and drums. This especially makes the voice stand out, as the low pitches of the bass and drums do not interfere with the higher pitches of the voice. Figure 3.96 (‘Special’ from *Avenue Q*) shows the vocal line accompanied by bass and drums. In ‘Money Money’ from *Mamma Mia* (figure 3.97), the vocal line is accompanied by the keyboard in addition to the bass and drums. In ‘Over At The Frankenstein Place’ from *Rocky Horror Show* (1973) (figure 3.98) the vocal line is only accompanied by the bass. Using bass and drums to accompany the vocal line is extremely effective, as the voice is quite audible.

The image shows a musical score for the song 'If That's What It Is'. It consists of four staves: Vocals, Piano, Guitar 1, and Guitar 2. The key signature is three sharps (F#, C#, G#) and the time signature is 4/4. The vocal line starts with a rest, followed by the lyrics 'If that's what it is' and 'Then that's what it is'. The piano accompaniment features chords in the right hand and a bass line in the left hand. The guitar parts provide harmonic support with chords and a rhythmic pattern.

Figure 3.85: 13 - ‘If That’s What It Is’ - Accompanying the voice. The accompaniment does not occur with the voice.

The image displays a musical score for the song 'It's A Privilege to Pee' from the musical *Urinetown*. The score is arranged for a vocal ensemble and a band. The instruments and parts are:

- Reed:** Labeled 'Sop Sax', it plays a melodic line in the treble clef.
- Trombone:** Plays a supporting line in the bass clef.
- Vocals 1:** The lead vocal part, with lyrics: "You think you've got some kind of right!"
- Vocals 2:** A vocal part with lyrics: "Kind of right! Kind of"
- Vocals 3:** A vocal part with lyrics: "Kind of right! Kind of"
- Keyboard:** Provides harmonic support with chords in both treble and bass clefs.
- Bass Guitar:** Provides a rhythmic bass line in the bass clef.
- Drum Set:** Provides the rhythmic accompaniment.

The music is in 2/4 time and the key signature has two flats (B-flat and E-flat).

Figure 3.86: *Urinetown* - 'It's A Privilege to Pee' - Accompanying the voice.

Figure 3.87 shows a musical score for the song 'American Idiot' by Green Day. The score is in 4/4 time and features five staves: Vocals, Guitar 1, Guitar 2, Bass Guitar, and Drum Set. The key signature is three flats (B-flat major/D minor). The vocal line begins with the lyrics 'Don't want to be an A-me - ri-can I-di-ot'. The guitar parts are labeled 'Electric' and feature a driving, rhythmic pattern. The bass guitar part provides a steady, rhythmic accompaniment. The drum set part features a consistent, driving rhythm.

Figure 3.87: *American Idiot* - 'American Idiot' - Accompanying the voice.

Figure 3.88 shows a musical score for the song 'Jesus of Suburbia' by Green Day. The score is in 4/4 time and features five staves: Vocals, Guitar 1, Guitar 2, Bass Guitar, and Drum Set. The key signature is three flats (B-flat major/D minor). The vocal line begins with the lyrics 'I'm the son of rage and love. The Je-sus of Su-bur-bi-a the'. The guitar parts are labeled 'Electric' and feature a driving, rhythmic pattern. The bass guitar part provides a steady, rhythmic accompaniment. The drum set part features a consistent, driving rhythm.

Figure 3.88: *American Idiot* - 'Jesus of Suburbia' - Accompanying the voice.

The image displays a musical score for the song 'St Jimmy' by American Idiot. The score is arranged in five staves, each representing a different instrument or voice part. The key signature is D major (two sharps) and the time signature is 4/4. The vocal line is written in a soprano clef and includes the lyrics: "St. Jim - my's co - ming down a - cross the al - ley - way ____". The guitar parts are written in a treble clef, with Guitar 1 featuring a palm mute and a dynamic marking of A . Guitar 2 is also written in a treble clef. The bass guitar part is written in a bass clef. The drum set part is written in a drum clef and includes various rhythmic patterns, including a snare drum pattern in the first two measures and a cymbal pattern in the last two measures. The score is marked with various dynamics and articulations, such as A and D above the guitar parts, and A and D above the bass guitar part. The drum set part includes a snare drum pattern in the first two measures and a cymbal pattern in the last two measures.

Figure 3.89: *American Idiot* - 'St Jimmy' - Accompanying the voice.

The image shows a musical score for the song 'If You Were Gay' from Avenue Q. The score is written in 4/4 time and G major. It features six staves: Clarinet in B \flat , Vocals, Keyboard 1 (Tack Piano), Keyboard 2 (Accordian), Bass Guitar, and Drum Set. The vocal line includes the lyrics: 'If you were gay. That'd be o - kay.' The score illustrates how various instruments drop out when the voice enters.

Clarinet in B \flat

Vocals

Keyboard 1
Tack Piano

Keyboard 2
Accordian

Bass Guitar

Drum Set

If you were gay. That'd be o - kay.

Figure 3.90: *Avenue Q* - 'If You Were Gay' - Accompanying the voice. When the voice enters, some instruments drop out.

The image displays a musical score for the song 'Mamma Mia' from the film *Mamma Mia!*. The score is arranged for a full band and includes the following parts:

- Vocals:** The vocal line is in the key of D major and 4/4 time. The lyrics are: "I was chea-ted by you — and I think you know when —".
- Keyboard 1 (Piano):** Features a complex accompaniment with chords and arpeggios in the right hand, and a steady eighth-note bass line in the left hand.
- Keyboard 2 (Strings):** Provides a harmonic support with sustained chords in the right hand and a melodic line in the left hand.
- Keyboard 4:** Remains mostly silent, with some light accompaniment in the right hand.
- Guitar 2:** Plays a simple chordal accompaniment.
- Bass Guitar:** Plays a consistent eighth-note bass line.
- Drum Set:** Features a standard rock drum pattern with a steady bass drum and snare.

Figure 3.91: *Mamma Mia* - 'Mamma Mia' - Accompanying the voice.

Vocals

Our house on Wal - ton Way the house with the red door Our trip to St. Tro - pez

Piano

Guitar

Bass Guitar

Violin

Cello

Figure 3.92: *Next to Normal* - ‘Song of Forgetting’ - Accompanying the voice.

Vocals

Steel Stg Acoustic

Fm Ab Eb Bb

Onstage Guitar

I walk a lone - ly road the on - ly one that I have e - ver known

Figure 3.93: *American Idiot* - ‘Boulevard of Broken Dreams’ - Accompanying the voice. The voice is simply accompanied by an acoustic guitar.

Vocals

Take a-way the sen - sa - tion in - side

Guitar 1

A Steel String Acoustic F#m

Guitar 2

A Steel String Acoustic F#m

Figure 3.94: *American Idiot* - 'Give Me Novocaine' - Accompanying the voice.

Vocals

Thought I ran in - to you down on the street

Keyboard

Figure 3.95: *American Idiot* - 'Whatsername' - Accompanying the voice. The voice is simply accompanied by a piano.

Vocals

spe-cial For an ho-ur or two Your

Bass Guitar

Drum Set

Figure 3.96: *Avenue Q* - 'Special' - Accompanying the voice.

Figure 3.97 shows a musical score for the song 'Mamma Mia - Money Money'. The score is written in 4/4 time and features four staves: Vocals, Piano, Bass Guitar, and Drum Set. The key signature is two flats (B-flat and E-flat). The vocal line includes the lyrics: "Work all night I work all day to pay the bills I have to pay". The piano accompaniment consists of chords in the right hand and a bass line in the left hand. The bass guitar part is a simple bass line, and the drum set part is a simple drum pattern.

Figure 3.97: *Mamma Mia* - 'Money Money' - Accompanying the voice.

Figure 3.98 shows a musical score for the song 'Rocky Horror Show - Over At The Frankenstein Place'. The score is written in 4/4 time and features three staves: Vocals, Piano, and Bass Guitar. The key signature is two flats (B-flat and E-flat). The vocal line includes the lyrics: "in the vel-vet dark-ness of the darkest night Burning bright there'sa gui-ding". The piano accompaniment consists of chords in the right hand and a bass line in the left hand. The bass guitar part is a simple bass line.

Figure 3.98: *Rocky Horror Show* - 'Over At The Frankenstein Place' - Accompanying the voice.

3.3.2 Accompaniment of Spoken Text

Spoken text is softer than singing and needs to be treated as such. The full band can never accompany a spoken text, even if it is delivered by the chorus. Spoken text is usually accompanied by bass and drums. The low pitches of the bass instruments do not interfere with the higher pitches of the voice.

In figure 3.99 ('All Hail The Brain' from *13*), the vocal line is accompanied only by the drums. The same text is performed by different groups. These groups each come in one bar after the other. It seems as if the orchestrator put emphasis on the polyphony displayed here, and thus it would make sense to use drums alone. The same idea is used in 'Cop Song' from *Urinetown* (figure 3.101). In 'Opportunity' from *13*, the drums once again accompany the spoken text. It can be seen in figure 3.100 that the guitar and bass guitar enter when the spoken text is repeated. That is, the orchestrator makes sure the text is understood before bringing in more instruments. A pre-recorded drum machine is used in 'Today for You' from *Rent* (1996). This can be seen in figure 3.102. Pre-recorded material is not often used as the tempo of the music is fixed. Live musicians allow for songs to be performed faster or slower depending on the preference of the performer, director or conductor. Whether the material is pre-recorded or not, it is still drums being used and this allows the spoken text to be heard. In 'Sante Fe' from *Rent* (figure 3.103), the bass accompanies the spoken text. All these examples use cross-heads to depict the rhythm of the spoken text. The composer thus wants a specific rhythm to be spoken.

'Urinetown' from *Urinetown* opens with a narrator introducing the musical. The text is thus written out with no definite rhythm, as depicted in figure 3.104. The text is accompanied by bass guitar as well as the left hand of the keyboard, which supports the bass. In addition, the timpani is used, rather than a drum-set, reinforcing the bass. The right hand of the keyboard provides the only harmonic material. This example depicts the importance of the bass over the harmony and reinforces the ideas that the bass is commonly used to accompany spoken text. 'Holiday' from *American Idiot* also uses the left-hand of the keyboard to support the bass guitar. Figure 3.105 also shows that there are drums in addition to the bass.

'Hey Kendra' from *13* presents an interesting case of spoken text. In this example the spoken text is placed in the rests between the singer's lines. As figure 3.106 shows, the vocal line is repeated by another character. The imitation, however, is spoken rather than sung. Here, the importance of the spoken text is minimal and the full band is used. The repetition of the text ensures that the audience can hear what is said even if the text was not heard the first time.

If the orchestrator wants to use the whole band to accompany the text, he must orchestrate carefully so that the vocal line is heard. In figure 3.107 ('You'll See' from *Rent*), the piano and guitar play on the first beat of the

bar, allowing the vocals to be heard for the rest of the bar. It is interesting to note that this orchestrator uses cross-heads as well as written text in the span of four bars. The orchestrator mostly chooses between cross-heads and written text, but in this example the two different types of spoken text portray the different characters' personalities. While the piano and guitar are not the full band playing, this technique would be effective for the orchestrator to use with a full band. 'Cop Song' from *Urinetown* uses the full band. Each instrument plays extremely short notes. The left hand of the keyboard and the bass guitar both play *staccatissimos* creating very little sound. The right hand of the keyboard and the left hand do not play together, thus creating sparse accompaniment. The spoken text can thus be heard above the band.

Another way to utilize the full band with spoken text is to ensure that the spoken text and the band do not happen at the same time. In 'Sweet Transvestite' and 'Time Warp' from *Rocky Horror Show* (1973), the orchestrator uses this technique. In figure 3.109 ('Sweet Transvestite'), the text is spoken and the band follows with an accented chord in the last beat of the bar. In figure 3.110, the text is spoken and then the band enters and the melody is sung with accompaniment. This allows this text to be clearly heard. This technique is very effective, and can create variety in the music.

The image shows a musical score for three parts: Vocals 1, Vocals 2, and Drum Set. The music is in 4/4 time and B-flat major. The lyrics are: "Brain's gon-na do it. Brain's gon-na do it. Fri-day night, the Brain's gon-na do it." The score uses cross-heads (x) to indicate spoken text and musical notation for accompaniment. The Drum Set part shows a simple rhythmic pattern of quarter notes and rests.

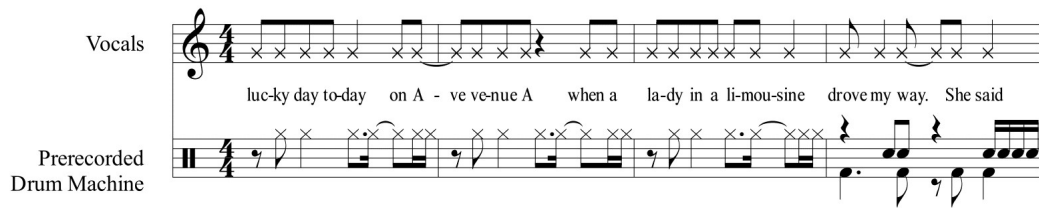
Figure 3.99: 13 - 'All Hail The Brain' - Accompaniment of spoken text. The text is accompanied by a drum-set.

The musical score for 'Opportunity' is written in 4/4 time with a key signature of one sharp (F#). It features four staves: Vocals, Guitar, Bass Guitar, and Drum Set. The lyrics are: O - P - P - O - R - T O - P - P - O - R - T No. The guitar and bass guitar parts provide a rhythmic accompaniment, while the drum set provides a steady beat.

Figure 3.100: *13* - 'Opportunity' - Accompaniment of spoken text. Here the text is accompanied by drums and bass. The guitar functions as a bass.

The musical score for 'Cop Song' is written in 2/4 time with a key signature of two flats (Bb). It features four staves: Vocals 1, Vocals 2, Vocals 3, and Drum Set. The lyrics are: them, don't be like them, don't be like them, don't be like them Oh it's a Don't be like them, don't be like them, don't be like them, don't be like Don't be like them, don't be like them, don't be like. The drum set provides a steady beat, while the vocal parts are accompanied by a simple melody.

Figure 3.101: *Urinetown* - 'Cop Song' - Accompaniment of spoken text. Here the text is accompanied by a drum-set.



The musical score for 'Today for You' consists of two staves. The top staff is labeled 'Vocals' and is in 4/4 time. It features a melody of eighth and sixteenth notes with lyrics: 'luc-ky day to-day on A - ve ve-nue A when a la-dy in a li-mou-sine drove my way. She said'. The bottom staff is labeled 'Prerecorded Drum Machine' and shows a rhythmic pattern of eighth notes and rests.

Figure 3.102: *Rent* - 'Today for You' - Accompaniment of spoken text. The text is accompanied by a pre-recorded drum machine.



The musical score for 'Sante Fe' features three staves. The top two staves are labeled 'Vocals 1' and 'Vocals 2' and are in 6/8 time. Vocals 1 has lyrics: 'New York Ci-ty Cen-ter of the u - ni-verse'. Vocals 2 has lyrics: 'Uh - huh. Sing it, girl.'. The bottom staff is labeled 'Piano' and contains a 'Synth Bass' line with a rhythmic pattern of eighth notes.

Figure 3.103: *Rent* - 'Sante Fe' - Accompaniment of spoken text. The text is simply accompanied by the bass.

The musical score for 'Urinetown' features a 2/2 time signature. The vocal line consists of four measures of spoken text: 'Well, hello there. And welcome - to Urinetown. Not the place, of course. The musical.' The accompaniment includes a Keyboard (Piano) with chords in the right hand and bass notes in the left hand, a Bass Guitar with a steady quarter-note bass line, and Timpani with a single drum hit at the end of the fourth measure.

Figure 3.104: *Urinetown* - 'Urinetown' - Accompaniment of spoken text. Here the text is accompanied by chords in the keyboard, bass, and timpani.

The musical score for 'American Idiot' features a 4/4 time signature and a key signature of three flats. The vocal line consists of two parts: Vocals 1 sings 'Zieg heil to the pre-si-dent gas-man bombs a-way is your pu-nish-ment' and Vocals 2 sings 'pu-nish-ment'. The accompaniment includes a Keyboard (Piano) with a steady eighth-note bass line, Guitar 2 with a steady eighth-note bass line and occasional chords, Bass Guitar with a steady eighth-note bass line, and a Drum Set with a steady eighth-note bass line and occasional chords.

Figure 3.105: *American Idiot* - 'Holiday' - Accompaniment of spoken text. The text is accompanied by bass and drums.

Spoken: Hey Kendra I've been thinking

Vocals
Ken - dra I been thin - kin' I

Keyboard 2
Electric Piano

Guitar 2
Electric

Bass Guitar

Drum Set

Figure 3.106: *13* - 'Hey Kendra' - Accompaniment of spoken text. The text appears after each vocal line.

Vocals
Hey you, bum. Yeah, you, move o-ver. Get your ass off that Range Ro-ver

Mark: That attitude toward the homeless is exactly what Maureen is protesting tonight.

Piano

Guitar

Figure 3.107: *Rent* - 'You'll See' - Accompaniment of spoken text. Here a chord in the beginning of the bar, is played only by the piano and guitar.

The image displays a musical score for the song 'Cop Song' from the musical *Urinetown*. The score is written in 2/4 time and features five staves: Trombone, Vocals, Keyboard (Piano), Bass Guitar, and Drum Set. The key signature is B-flat major. The lyrics are: 'It's a hard, cold tum-ble of a jour - ney wor-thy of a gur - ney a'. The Trombone part consists of a simple melodic line. The Vocals part is a spoken line with a rhythmic accompaniment of 'x' marks. The Keyboard part features a piano accompaniment with chords and a bass line. The Bass Guitar part provides a steady bass line. The Drum Set part features a simple drum pattern.

Figure 3.108: *Urinetown* - 'Cop Song' - Accompaniment of spoken text.

The image displays a musical score for the song 'Sweet Transvestite' from the musical Rocky Horror Show. The score is arranged for a band and includes the following parts:

- Tenor Sax:** A single melodic line in the key of B-flat major (two flats) and 4/4 time.
- Vocals:** A vocal line with lyrics: "So! Come up to the lab / And see what's on the slab / I see you shiver with antici...pation! / But maybe the rain".
- Keyboard 1:** A piano accompaniment with chords E, G, E, E.
- Keyboard 2:** A brass accompaniment with chords E, G, E, E.
- Guitar:** An electric guitar accompaniment with chords E, G, E, E.
- Bass Guitar:** A bass line with notes E, G, E, E.
- Drum Set:** A drum line with a consistent rhythm.

The score is written in 4/4 time and features a key signature of two flats (B-flat major). The lyrics are written below the vocal line, and the instrumental parts are written in their respective staves.

Figure 3.109: *Rocky Horror Show* - 'Sweet Transvestite' - Accompaniment of spoken text. The text is not spoken at the same time that the band plays.

The image displays a musical score for the 'Time Warp' sequence from the film *Rocky Horror Show*. The score is written in 4/4 time and features a key signature of three sharps (F#, C#, G#). The instruments and parts are as follows:

- Tenor Sax:** Plays a melodic line starting with a quarter rest, followed by a quarter note G#4, a quarter note A4, and a quarter note B4.
- Vocals 1:** Features a rhythmic pattern of eighth notes marked with 'x' (representing breathers or percussive sounds) over the lyrics "its just a jump to the left".
- Vocals 2, 3, and 4:** Each part has a similar rhythmic pattern of eighth notes marked with 'x' over the lyrics "and then a step to the right".
- Piano:** The right hand plays a series of chords (E7, A, A) while the left hand plays a bass line.
- Guitar:** Plays a simple chord progression (A, E, E, A) with a rhythmic accompaniment.
- Bass Guitar:** Provides a steady bass line.
- Drum Set:** Plays a consistent drum pattern, including a snare drum and cymbals.

Figure 3.110: *Rocky Horror Show* - 'Time Warp' - Accompaniment of spoken text.

3.3.3 Using the Chorus

When using rock band instrumentation, the chorus can be a valuable aid to the band, especially when there are fewer instruments. Using the whole chorus to sing the melody in unison can be useful when the orchestrator wants to use the full band. This can be seen in figure 3.111 ('Thirteen' from *13*). Here, the orchestrator uses two guitars, as well as two keyboards, among other instruments in the band. Thus using the chorus allows the orchestrator to use the full band.

The chorus can also be used to provide harmony and accompaniment for the solo vocal line. In 'The Name of the Game' from *Mamma Mia* (figure 3.112), the vocal line is accompanied by the chorus in five-part harmony. Similarly, in figure 3.113 ('Young Blood' from *Smokey Joe's Café* (1995)), the band plays a chord on the first beat of the bar, and then the chorus accompanies the vocal line for the rest of the phrase in two-part harmony. In 'Run Freedom Run' from *Urinetown* (figure 3.114), the chorus does not sing with the solo vocal line, but immediately after in four-part harmony. The chorus thus provides the harmonic background with no further help from the band.

The chorus can also be used as an instrument that doubles the vocal line to reinforce the melody. In 'Thirteen' from *13*, the chorus doubles the vocal line on the word 'thirteen'. This is important, because after two beats of silence the band enters again on the word 'thirteen', and thus the voice needs to be doubled in order to be heard. This can be seen in figure 3.115. In 'Boulevard of Broken Dreams' from *American Idiot* (figure 3.116), the chorus doubles the second half of the phrase sung by the soloist.

The musical score is arranged in a multi-staff format. The top staff is for Vocals, with lyrics: "No, you're not ready!" "No, it's not time yet!" "No, it's not right now!" "Wait until you're older!". Below it are two staves for Keyboard 1 (Piano), showing a complex accompaniment with chords and moving lines in both hands. Keyboard 2 (Electric Piano) provides a harmonic accompaniment with chords F, G7, and Bb. Guitars 1 and 2, along with the Bass Guitar, play a rhythmic pattern of eighth notes, indicated by diagonal slashes. The Drum Set provides a steady beat with a mix of snare and bass drum patterns.

Figure 3.111: 13 - 'Thirteen' - Using the chorus. The chorus sings the melody in unison, and is accompanied by the full band.

The image shows a musical score for the song 'The Name of the Game' from the musical Mamma Mia. The score is written in 4/4 time and the key signature is two sharps (D major). It features five staves: Vocals 1, Vocals 2, Vocals 3, Piano, and Drum Set. The lyrics for Vocals 1 are: 'Make me talk and you make me feel and you'. Vocals 2 and 3 use 'Do' syllables. The Piano part includes a box labeled 'Alto Flute' in the first measure. The Drum Set part shows a simple rhythmic pattern.

Figure 3.112: *Mamma Mia* - 'The Name of the Game' - Using the chorus. The chorus provides the harmony and accompanies the voice.

The musical score is arranged in a standard Western format with the following parts from top to bottom:

- Tenor Sax:** A single staff with a treble clef, showing a whole note chord in the first measure and rests in the second and third measures.
- Vocals 1:** A staff with a treble clef and lyrics: "can't get you out of my mind". The melody consists of quarter notes in the first measure, followed by a half note in the second measure, and a whole note in the third measure.
- Vocals 2:** A staff with a bass clef and the same lyrics. The accompaniment consists of a steady eighth-note bass line.
- Keyboard 1:** A grand staff (treble and bass clefs) with a "Piano" dynamic marking. The right hand plays a sustained chord, and the left hand plays a simple bass line.
- Keyboard 2:** A grand staff with a "Wurlitzer" dynamic marking. The right hand plays a rhythmic pattern of chords, and the left hand plays a bass line.
- Guitar:** A staff with a treble clef, featuring an "F7" chord and a rhythmic pattern of eighth notes.
- Bass Guitar:** A staff with a bass clef, playing a steady eighth-note bass line.
- Drum Set:** A staff with a drum clef, showing a simple drum pattern.
- Percussion:** A staff with a percussion clef and a "Vibraslap" dynamic marking, playing a steady eighth-note pattern.

Figure 3.113: *Smokey Joe's Café* - 'Young Blood' - Using the chorus. Here the chorus serves as accompaniment.

The image shows a musical score for three voices in 4/4 time, key of D major. The score is as follows:

Voice 1: Treble clef. The melody begins with a quarter rest, followed by quarter notes D4, E4, F4, and G4. A half note A4 is tied to the next measure, which contains a whole rest. The lyrics are "Run free-dom, run!" with a long horizontal line under "run!".

Voice 2: Treble clef. The melody begins with a whole rest. In the second measure, it has quarter notes D4, E4, and F4, followed by a half note G4. The lyrics are "Run free-dom, run, — Run, free-dom, run!".

Voice 3: Bass clef. The melody begins with a whole rest. In the second measure, it has a quarter note D3, followed by quarter notes E3, F3, and G3. The lyrics are "Run free-dom, run — Run, free-dom, run!".

Figure 3.114: *Urinetown* - 'Run Freedom Run' - Using the chorus.

The musical score for 'Thirteen' by 13 is presented in a multi-staff format. The score includes the following parts:

- Vocals 1:** The lead vocal line with lyrics: "Just a-bout to turn Thir - teen Ev' - rything swi-tches Ev' - rything".
- Vocals 2:** A second vocal line with lyrics: "Thir - teen Thir - teen".
- Keyboard 1:** Features a **Piano** section and an **Electric Piano** section.
- Keyboard 2:** Features an **Electric F7(#9)** section.
- Guitar 1:** Features an **Electric F7(#9)** section and a **B \flat B \flat /D E \flat E \flat /F B \flat B \flat /D E \flat** section.
- Guitar 2:** Features an **Electric F7(#9)** section.
- Bass Guitar:** Features an **Electric F7(#9)** section.
- Drum Set:** The drum part.

The score is written in a key signature of two flats (B \flat and E \flat) and a 4/4 time signature. The music is arranged in a way that allows for a double vocal performance on the word 'thirteen'.

Figure 3.115: 13 - 'Thirteen' - Using the chorus. The chorus doubles the voice on the word 'thirteen', where the band plays as well.

The image displays a musical score for the chorus of 'Boulevard of Broken Dreams' by American Idiot. The score is arranged in a multi-staff format. The top staff is for Vocals, with lyrics: 'My sha - dow's the on - ly one that walks be - side me on - ly one that walks be - side me'. The second staff is for Keyboard, which provides harmonic support for the vocal line. The third staff is for Guitar 1, the fourth for Guitar 2, and the fifth for Bass Guitar, all of which are electric guitars. The sixth staff is for the Drum Set, showing a consistent rhythmic pattern. The seventh, eighth, and ninth staves are for Violin, Viola, and Cello, respectively, which provide a string accompaniment. The score is in 4/4 time and features a key signature of three flats (B-flat major or D-flat minor).

Figure 3.116: *American Idiot* - 'Boulevard of Broken Dreams' - Using the chorus. The chorus doubles the voice on the second half of the vocal line.

3.3.4 Overtures and Introductions to songs

Introductions to songs are different when fewer instruments are used. There are fewer instruments that can play a melody and thus introductions often consist of basic chords. There are, however, some techniques to make the introductions to songs more interesting, and to have them vary from song to song.

‘Thirteen’ from *13* (3.117) simply uses drums in the introduction. ‘Terminal Illness’ from *13* (3.118) contains no introduction at all and the vocal line starts immediately. In figure 3.119 (‘Super Trouper’ from *Mamma Mia*), the introduction consists of an *a capella* chorus singing the melody of the chorus. These are examples of different techniques that one can use to create introductions. The orchestrator can use the drums or bass in the introduction alone. One can also use an *a capella* chorus in the introduction, or simply have no introduction at all.

A solo voice can also be used in the introduction. The following examples all begin with the a solo vocalist singing with no accompaniment at all: ‘Prepare Ye’ (figure 3.120) from *Godspell* (1971), and ‘Keep Rollin’ from *Smokey Joe’s Café*. This technique makes for an interesting introduction, as well as making sure that the vocal line used in the introduction is audible.

The image shows a musical score for the song 'Thirteen'. The score is arranged in a standard multi-staff format. At the top, the 'Drum Set' part is shown in 4/4 time, featuring a simple, steady rhythm. Below this, the 'Vox' part begins with the lyrics: 'Pic - ture me just a - no - ther school kid in N. Y. C. near the Park and the Met. —'. The vocal line is accompanied by an 'Electric Piano' (Kbd. 2), two 'Electric' guitars (Gtr. 1 and Gtr. 2), a 'Bass' line, and a 'D. S.' (Double Bass) line. The introduction of the piece is marked with a double bar line and a '5' above it, indicating a five-measure introduction consisting entirely of the drum set part.

Figure 3.117: 13 - 'Thirteen' - Overtures and introductions to songs. The introduction consists only of drums.

The musical score is written in 4/4 time with a key signature of one sharp (F#). The lyrics are: "No one says 'no' to a boy with a terminal illness." The score includes parts for Vocals, Keyboard 1 (Piano), Keyboard 2 (Marimba), Guitar 1 (Electric), Guitar 2 (Acoustic), Bass Guitar, and Drum Set. The vocal line begins with a melodic phrase, followed by the lyrics. The instrumental parts provide accompaniment, with the piano and marimba playing chords and the guitars and bass providing harmonic support. The drum set provides a steady rhythm.

Figure 3.118: 13 - 'Terminal Illness' - Overtures and introductions to songs. There is no introduction.

Vocals 1
Su - per Trou - per Beams are gon - na blind me but I ___ won't feel blue.

Vocals 2
Su - per Trou - per Beams are gon - na blind me but I ___ won't feel blue. ___

Vocals 3
Su - per Trou - per Beams are gon - na blind me but I won't feel blue.

Figure 3.119: *Mamma Mia* - 'Super Trouper' - Overtures and introductions to songs. The introduction consists of an *a capella* chorus.

Vocals
Pre - pare ye ___ the way of ___ the Lord!

Vox.
5
Pre - pare ye ___ the way of ___ the Lord!

Vox.
9
Pre - pare ye ___ the way of ___ the Lord!

Kbd.
Organ

Gtr. 2
Electric
8^{vb}
9

Figure 3.120: *Godspell* - 'Prepare Ye' - Overtures and introductions to songs. The introduction consists of the voice alone.

The musical score is arranged in a system with six staves. The top staff is for Vocals, followed by two more vocal staves (Vox.), then a grand staff for Keyboard (Kbd.), a Bass staff, and finally a Drums (D. S.) staff. The key signature is three flats (B-flat, E-flat, A-flat) and the time signature is common time (C). The lyrics are: "Gon-na buy me a tic-ket and ride Gon-na buy me a tic-ket and ride on the B and O I'm gon-na keep on rol-lin' as far as I can go. Gon-na". The piano part includes a "Piano" dynamic marking. The bass part has a "Brushes on Snare" marking. The drum part features a consistent snare brush pattern.

Figure 3.121: *Smokey Joe's Café* - 'Keep On Rollin' - Overtures and introductions to songs.

In closing, the techniques presented in this chapter are all from well-established musicals. These orchestration techniques have been used before by multiple orchestrators, and therefore have been proven to work. Using these techniques will ensure that the future musical will be interesting in its orchestration, and most importantly, that the voice will always be heard.

Chapter 4

Assessment of Data

4.1 General Trends observed in the sample of Orchestration

The most important trend, as is reiterated throughout the previous chapter, is that the voice is the most important instrument and must be clearly heard at all times. A few trends observed in the sample are important in orchestrating for musical theatre and all techniques found adhere to these principles. The following are trends that were gathered from the data that was presented in the previous chapter:

1. Orchestrators often avoid accompanying the solo voice with full orchestra. Often, the solo voice is heard over the orchestra, even if the voice is amplified.
2. If the vocalist sings softer, fewer instruments are often used. Simply making the instruments softer is not as effective as using fewer instruments. This is because some instruments, such as brass, are still louder than the voice even if they are played at a soft dynamic level. The orchestrator can also create a different timbre by using fewer, as well as different instruments.
3. If the orchestrator wants to use the full orchestra, orchestrators usually use fewer instruments. The orchestrator can use the full orchestra in overtures, introductions of songs, dance breaks and interludes in songs. There is plenty of opportunity to use the full orchestra, but when the voice enters, then the full orchestra is not used.
4. If multiple vocalists are used in a song, each vocalist's accompaniment is orchestrated so that each voice is heard and each orchestration suits the voice being accompanied. As shown in the previous chapter, the accompaniment of Christine and Meg from *The Phantom of the Opera* (figures 3.8 and 3.9) are scored differently so that each voice is heard.

Meg's character requires a lyric voice and should be scored with softer instruments such as a harp.

5. If simple rhythms and melodies are used, it was found that simple orchestration is also used. Complex orchestration can create too much activity, and this leads to the orchestration overpowering the simplistic vocals. Instruments should play longer notes and the orchestration should not be too rhythmic. Simple chords and arpeggios are useful if the melody is very simple.
6. If vocal clarity is required, orchestrators decrease the activity in multiple instruments. The instruments playing often play more or less the same thing. Too many layers of different rhythmic and melodic elements overpower the voice and thus vocal clarity is lost.
7. If the full chorus is used, then the full orchestra is often used as accompaniment. A chorus, especially when singing in unison, can easily be heard above the orchestra. More voices result in a clearer vocal line.
8. Each vocal line is presented separately before the lines are combined to form polyphony. Orchestrators often use polyphony in musicals, however each vocal line is sung alone before the orchestrator puts them all together. Using polyphony without presenting each line first will leave the audience confused and unable to hear what the song is about.
9. If the orchestrator wants to use the full orchestra with a solo voice, he could orchestrate in such a way that the orchestration is bare. Orchestrators who have successfully used this technique have been extremely experienced in musical theatre orchestration, such as Philip J. Lang who orchestrated *Annie* (figure 3.1).

A few trends that were observed are dependent on specific types of scoring. In recitatives the following trends were found:

1. Orchestrators use a reference chord for the singer in recitatives. If a reference chord is not present then the singer will most likely not sing in the correct key when the accompaniment enters. This is especially important if the previous song is in another key or there is a considerable amount of time between the recitative and the previous song.
2. Recitatives are often accompanied by simply orchestrated melodies and rhythms. Simple chords are most commonly used, but this is not the only method. Its common use shows that it is the most dependable method, however, the use of more complex chords is a possibility.

Spoken text also has certain trends:

1. If the full chorus is delivering spoken text, a full orchestra not usually used, as spoken text is softer than singing.
2. If the words are not important in spoken text and a full chorus is delivering the text, orchestrator use the full orchestra. This means that the text must have been presented audibly before or that the same text is repeated.

One important trend that was observed is found in *a capella* settings:

1. The chorus does not replace the orchestra, and is only be used for a short period of time. While the chorus can create interesting imagery (as seen in figures 3.75 and 3.76), overuse of this technique can make the musical boring.

4.2 Conclusion

There are different types of orchestras used in musical theatre. In this study, full musical theatre instrumentation, small musical theatre instrumentation, and rock band instrumentation were discussed. Each type of instrumentation features a variety of techniques, with some of the techniques overlapping. Most of these techniques are found in more than one type of instrumentation group. The rest of the techniques are a result of the type of instrumentation. For example, reed ensembles can only occur in full musical theatre instrumentation, because this is the only group of instrumentation that contains a large group of reed instruments. The most important aspect of all of these techniques, is that the voice is clearly heard at all times. These techniques can be described in the form of the general trends that were observed throughout this study. With knowledge of these techniques, the orchestrator is able to emulate orchestration trends commonly found in musical theatre.

Appendices

Appendix A

Instrumentations

A.1 Type 1 - Full Musical Theatre Instrumentation

A.1.1 Annie

Music: Charles Strouse
Orchestrations: Philip J. Lang
Broadway Première: April 21, 1977
Ran: 2377 performances
West End Première: May 2, 1978
Ran: 1485 performances

Reed 1: Flute/Soprano Sax/Alto Sax/Clarinet
Reed 2: Baritone Sax/Alto Sax/Clarinet/Flute
Reed 3: Clarinet/Tenor Sax/Bass Clarinet
Reed 4: Piccolo/Flute
Reed 5: Flute/Clarinet
Trumpet 1
Trumpet 2
Trombone 1
Trombone 2
Tuba
Piano
Guitar
Violin
Cello
Bass
Percussion 1
Percussion 2
Keyboard 1

Keyboard 2

A.1.2 Bye Bye Birdie

Music: Charles Strouse

Orchestrations: Robert Ginzler

Broadway Première: April 14, 1960

Ran: 607 performances

West End Première: June 15, 1961

Ran: 269 performances

Reed 1: Flute/Piccolo/Clarinet/Alto Sax

Reed 2: Clarinet/Alto Sax

Reed 3: Clarinet/ Tenor Sax

Reed 4: Clarinet/ Bass Clarinet/Baritone Sax

Horn

Trumpet 1 & 2

Trumpet 3

Trombone 1

Trombone 2

Percussion 1

Percussion 2

Guitar/Banjo

Piano

Violin

Cello

Bass

A.1.3 Cats

Music: Andrew Lloyd Webber

Orchestrations: David Cullen and Andrew Lloyd Webber

West End Première: May 11, 1981

Ran: 8949 performances

Broadway Première: October 7, 1982

Ran: 7485 performances

Reed 1: Flute/Tenor Sax/Soprano Sax

Reed 2: Clarinet/Baritone Sax/Flute

Reed 3: Oboe/English Horn

Horn 1

Horn 2

Trumpet 1

Trumpet 2

Trombone

Cello

Keyboard 1

Keyboard 2

Percussion

Drums

Guitar

Bass

A.1.4 Chess

Music: Benny Andersson and Bjorn Ulvaeus

Orchestrations: Anders Eljas

West End Première: May 14, 1986

Ran: 1986 performances

Broadway Première: April 28, 1988

Ran: 68 performances

Reed 1: Flute/Piccolo

Reed 2: Oboe/English Horn

Reed 3: Clarinet

Reed 4: Clarinet/Bass Clarinet

Reed 5: Flute/Clarinet/Baritone Sax

Reed 6: Bassoon/Contra Bassoon

Horn 1

Horn 2

Trumpet 1

Trumpet 2

Trumpet 3

Trombone 1

Trombone 2

Trombone 3

Percussion

Drums

Guitar

Contrabass

Keyboard 1

Keyboard 2

Harp

Organ

Violin A

Violin B

Cello A

Cello B

A.1.5 Evita

Music: Andrew Lloyd Webber

Orchestrations: Andrew Lloyd Webber and Hershy Kay

West End Première: June 21, 1978

Ran: 2900 performances

Broadway Première: September 25, 1979

Ran: 1567 performances

Reed 1: Flute/Piccolo/Alto Flute

Reed 2: Clarinet/ Bass Clarinet/Tenor Sax

Horn

Trumpet 1 & 2

Trombone

Drums

Percussion

Keyboard 1

Keyboard 2

Keyboard 3

Violin 1

Violin 2

Viola

Cello

Contrabass/Bass Guitar

A.1.6 Into The Woods

Music: Stephen Sondheim

Orchestrations: Jonathan Tunick

Broadway Première: November 5, 1987

Ran: 765 performances

West End Première: September 25, 1990

Ran: 197 performances

Flute

Clarinet

Bassoon

Horn 1

Horn 2

Trumpet

Percussion

Piano

Synthesizer

Violin 1

Violin 2

Viola 1

Viola 2

Cello

Bass

A.1.7 Les Misérables

Music: Claude-Michel Schönberg

Orchestrations: John Cameron

Broadway Première: May 12, 1987

Ran: 6680 performances

West End Première: October 8, 1985

Ran: Currently running/ 13000 performances as of May 14, 2017

Reed 1: Flute/Clarinet

Reed 2: Oboe/English Horn

Horn 1

Horn 2

Trumpet 1

Trumpet 2

Trombone

Keyboard 1

Keyboard 2

Keyboard 3

Guitar

Bass Guitar

Drums

Percussion

Violin

Viola

Cello

A.1.8 The Phantom of the Opera

Music: Andrew Lloyd Webber

Orchestration: David Cullen and Andrew Lloyd Webber

West End Première: October 9, 1988

Ran: Currently running/ 12552 performances as of May 14, 2017

Broadway Première: January 1, 1988

Ran: Currently running/ 12238 performances as of June 25, 2017

Reed 1: Flute/Piccolo

Reed 2: Flute/Clarinet

Reed 3: Oboe/English Horn

Reed 4: Clarinet/Bass Clarinet

Reed 5: Bassoon

Horn 1 & 2

Horn 3

Trumpet

Trombone

Harp

Piano

Synth

Percussion

Violin

Viola

Cello

Bass

A.1.9 West Side Story

Music: Leonard Bernstein

Orchestrations: Leonard Bernstein, Sid Ramin and Irwin Kostal

Broadway Première: September 26, 1957

Ran: 734 performances

West End Première: December 12, 1958

Ran: 1039 performances

Reed 1: Piccolo/Flute/Alto Sax/Clarinet/Bass Clarinet

Reed 2: Eb Clarinet/Clarinet/Bass Clarinet

Reed 3: Piccolo/Flute/Oboe/English Horn/Tenor Sax/Baritone Sax/Clarinet/Bass Clarinet

Reed 4: Piccolo/Flute/Soprano Sax/Bass Sax/Clarinet/Bass Clarinet

Reed 5: Bassoon

Horn 1

Horn 2

Trumpet 1

Trumpet 2

Trumpet 3

Trombone 1

Trombone 2

Timpani

Percussion

Piano/Celeste

Electric Guitar/Spanish Guitar/Mandolin

Violin 1-7

Cello 1-4

Contrabass

A.1.10 Wicked

Music: Stephen Schwartz

Orchestrations: William David Brohn

Broadway Première: October 30, 2003

Ran: Currently running/ 5697 performances as of June 25, 2017

West End Première: September 27, 2006

Ran: Currently running/ 4291 performances as of May 14, 2017

Reed 1: Piccolo/Flute/Alto Flute

Reed 2: Oboe/English Horn

Reed 3: Soprano Sax/Eb Clarinet/Clarinet/Bass Clarinet

Horn

Trumpet 1

Trumpet 2

Trombone

Percussion

Drums

Guitar

Keyboard 1

Keyboard 2

Keyboard 3

Keyboard 4

Violin

Cello

Bass

A.2 Type 2 - Small Musical Theatre Instrumentation

A.2.1 9 to 5

Music: Dolly Parton

Orchestrations: Bruce Coughlin

Additional Orchestrations: Alex Lacamoire and Stephen Oremus

Broadway Première: April 30, 2009

Ran: 148 performances

Reed 1: Alto Sax/Clarinet/Flute/Piccolo

Reed 2: Baritone Sax/Tenor Sax/Clarinet/Flute/Bass Clarinet

Trumpet 1

Trumpet 2

Trombone

Keyboard 1

Keyboard 2

Guitar 1

Guitar 2

Bass Guitar

Drums

Percussion

A.2.2 Aida

Music: Elton John

Orchestrations: Steve Margoshes

Broadway Première: March 23, 2000

Ran: 1852 performances

Reed 1: Flute/Alto Flute/Big Bamboo Flute in F/Big Bamboo Flute in G/Small Bamboo Flute in Bb

Reed 2: Oboe/English Horn

Horn

Keyboard 1

Keyboard 2

Keyboard 3

Percussion

Drums

Guitar 1

Guitar 2

Violins

Viola

Cello

Bass

A.2.3 Cabaret

Music: John Kander

Orchestrations: Don Walker

Broadway Première: November 20, 1966

Ran: 1166 performances

Flute

Reed 1: Clarinet/Alto Sax

Reed 2: Clarinet/Tenor Sax

Trumpet

Trombone

Banjo/Guitar

Bass

Drums

Synthesizer

A.2.4 Chicago

Music: John Kander

Orchestrations: Ralph Burns

Broadway Première: June 3, 1975

Ran: 936 performances

Reed 1: Soprano Sax/Alto Sax/Clarinet/Piccolo

Reed 2: Soprano Sax/Tenor Sax/Piccolo/Clarinet/Bass Clarinet

Reed 3: Soprano Sax/Tenor Sax/Baritone Sax/Clarinet/Bass Clarinet

Trumpet 1 & 2

Trombone 1

Trombone 2

Percussion

Violin

Banjo

Keyboard

Keyboard 2

Tuba/Bass

A.2.5 Company

Music: Stephen Sondheim

Orchestrations: Jonathan Tunick

Broadway Première: April 26, 1970

Ran: 705 performances

West End Première: April 18, 1972

Ran: 344 performances

Reed 1: Piccolo/Flute/Alto Sax/Clarinet/Eb Clarinet/Alto Flute

Reed 2: Tenor Sax/ Clarinet/Oboe/English Horn

Reed 3: Baritone Sax/Clarinet/Bassoon/Bass Clarinet

Trumpet

Trombone

Drums

Keyboard 1

Keyboard 2

Violin 1 & 2

Viola

Cello

Bass

A.2.6 Fiddler on the Roof

Music: Jerry Bock

Orchestrations: Don Walker

Broadway Première: September 22, 1964

Ran: 3242 performances

West End Première: February 16, 1967

Ran: 2030 performances

Reed 1: Flute/Piccolo

Reed 2: Clarinet

Reed 3: Bass Clarinet/Clarinet

Reed 4: Bassoon

Reed 5: English Horn/Oboe

Trumpet 1 & 2

Accordion

Guitar

Percussion

Piano

Violins

A.2.7 Grease

Music: Jim Jacobs and Warren Casey

Orchestrations: Michael Leonard

Broadway Première: February 14, 1972

Ran: 3388 performances

Reed 1: Flute/Piccolo/Alto Sax/Tenor Sax

Reed 2: Soprano Sax/Alto Sax/Tenor Sax

Trumpet

Trombone

Bass

Drums

Guitar

Keyboard 1

Keyboard 2

A.2.8 How to Succeed in Business Without Really Trying

Music: Frank Loesser

Orchestrations: Robert Ginzler

Broadway Première: October 14, 1961

Ran: 1417

West End Première: March 28, 1963

Ran: 520 performances

Reed 1: Alto Flute/Alto Sax/Clarinet/Flute/Kazoo/Piccolo

Reed 2: English Horn/Kazoo/Oboe/Tenor Sax

Reed 3: Alto Sax/Bass Clarinet/Clarinet/Eb Clarinet/Kazoo

Reed 4: Baritone Sax/Bassoon/Clarinet/Kazoo

Trumpet

Trombone

Contrabass

Drums

Piano

Piano/Celeste

A.2.9 Jesus Christ Superstar

Music: Andrew Lloyd Webber

Orchestrations: Andrew Lloyd Webber

Broadway Première: October 12, 1971

Ran: 711 performances

West End Première: August 9, 1972

Ran: 3358 performances

Reed 1: Piccolo/Flute

Reed 2: Clarinet/Soprano Sax/Flute/Tenor Sax

Horn 1 & 2

Trumpet 1 & 2

Trumpet 3

Trombone 1 & 2

Trombone 3

Keyboard 1

Keyboard 2

Keyboard 3

Percussion

Guitar 1

Guitar 2

Bass Guitar

Drums

A.2.10 Joseph and the Amazing Technicolor Dreamcoat

Music: Andrew Lloyd Webber

Orchestrations: Martin Silvestri

West End Première: October 16, 1972

Ran: 259 performances

Broadway Première: January 27, 1982

Ran 747 performances

Reed 1: Flute/Piccolo

Reed 2: Clarinet/Soprano Sax

Reed 3: Clarinet/Bass Clarinet

Trumpet

Trombone

Guitar

Bass Guitar

Piano/Harpsichord

Drums

Percussion

A.3 Type 3 - Rock Band Instrumentation

A.3.1 13 The Musical

Music: Jason Robert Brown

Orchestrations: Jason Robert Brown

Broadway Première: October 5, 2008

Ran: 105 performances

Bass

Drum

Guitar 1

Guitar 2

Keyboard 1

Keyboard 2

Type 3

A.3.2 American Idiot

Music: Green Day

Orchestrations: Tom Kitt

Broadway Première: April 20, 2010

Ran: 421 performances

Guitar 1

Guitar 2

On Stage Guitar

Keyboard

Drums

Violin

Viola

Cello

Bass

A.3.3 Avenue Q

Music: Robert Lopez and Jeff Marx

Orchestration: Stephen Oremus

Broadway Première: July 31, 2003

Ran: 2534 performances

Reed: Flute/Clarinet/Alto Saxophone

Bass Drums

Guitar

Keyboard 1

Keyboard 2

A.3.4 Godspell

Music: Stephen Schwartz

Orchestrations: Michael Holland

Off-Broadway Première: May 17, 1971

Ran: 2651 performances

West End Première: January 26, 1972

Ran: 1128 performances

Broadway Première

June 22, 1976

Ran: 527 performances

Bass

Drums

Guitar 1

Guitar 2

Guitar 3/Keyboard

A.3.5 Mamma Mia

Music: Benny Andersson and Björn Ulvaeus

Orchestrations: Benny Anderesson, Björn Ulvaues and Martin Koch

West End Première: April 6, 1999

Ran: Currently running/ 7409 performances as of March 14, 2017

Broadway Première: October 18, 2001

Ran: 5765 performances

Keyboard 1

Keyboard 2

Keyboard 3

Keyboard 4

Guitar 1

Guitar 2

Bass Guitar

Drums

Percussion

A.3.6 Next to Normal

Music: Tom Kitt

Orchestrations: Michael Starobin

Broadway Première: April 15, 2009

Ran: 733 performances

Piano

Guitar

Bass

Percussion

Violin

Cello

A.3.7 Rent

Music: Jonathan Larson

Orchestration: Steve Skinner

Broadway Première: April 29, 1996

Ran: 5123

Bass

Drums

Guitar 1

Guitar 2/Keyboard

A.3.8 Rocky Horror Show

Music: Richard O'Brien

Orchestration: Richard Hartley

West End Première: June 19, 1973

Ran: 2960 performances

Broadway Première: March 10, 1975

Ran 32 performances

Tenor Saxophone

Bass Drums

Guitar

Piano

Synth

A.3.9 Smokey Joe's Cafe

Music: Jerry Leiber and Mike Stoler

Orchestration: Steve Margoshes

Broadway Première: March 2, 1995

Ran: 2036 performances

Saxophone

Bass

Drums

Guitar

Percussion

Synth

A.3.10 Urinetown

Music: Mark Hollmann

Orchestrations: Bruce Coughlin

Broadway Première: September 20, 2001

Ran: 965 performances

Reed: Soprano Sax/Alto Sax/Clarinet/Bass Clarinet

Trombone

Percussion

Bass

Piano

References

- Adler, S. and Hesterman, P. (1989). *The Study of Orchestration*. New York: W. W. Norton.
- Banfield, S. (1993). *Sondheim's Broadway Musicals*. Michigan: University of Michigan Press.
- Banfield, S. (1994). Bit by Bit. Stephen Banfield Finds Five Ways of Looking at Musicals. *The Musical Times*. 135(1814): 220-223.
- Bennet, R.R. and Ferencz, G.J. (1999). *The Broadway Sound: The Autobiography and Selected Essays of Robert Russell Bennet*. Rochester: University Rochester Press.
- Berkson, R. (1990). *Musical Theater Choreography: A Practical Method for Preparing and Staging Dance in a Musical Show*. New York: Backstage Books.
- Blatter, A. (1997). *Instrumentation and Orchestration*. Ohio: Wadsworth.
- Block, G. (2016). Musical Theatre. *Grove Music Online* [online]. Retrieved February 27, 2017: <http://www.oxfordmusiconline.com/subscriber/article/grove/music/A2262833?print=true>.
- Boyd, M. (2016). Arrangement. *Grove Music Online* [online]. Retrieved February 27, 2017: <http://www.oxfordmusiconline.com/subscriber/article/grove/music/01332?print=true>.
- Casella, A., Mortari, V. and Frascillo, T. V. (2004). *The Technique of Contemporary Orchestration*. Milano: Ricordi.
- Clark, M. R. (2015). *The Broadway Song: A Singer's Guide*. Oxford: Oxford University Press.

- Collinson, F. M. (1949). *Orchestration for the Theatre*. London: Bodley Head.
- Cushman, R. (2016). Simply the Best; This version of Sweeney Todd feels like a masterpiece. *National Post*. p. B6
- Deer, J. and Dal Vera, R. (2015). *Musical Theatre: A Comprehensive Course*. London: Routledge.
- Flom, J. (2016). *Get the Callback: The Art of Auditioning for Musical Theatre*. Maryland: Rowman & Littlefield.
- Forsyth, C. (1935). *Orchestration*. Massachusetts: Courier Corporation.
- Frankel, A. (2009). *Writing the Broadway Musical*. Massachusetts: Da Capo Press.
- Gäzel, K. and Lamb, A. (1988). *The American Musical*. Cambridge: Cambridge University Press.
- Gradenwitz, P. and Bernstein, L. (1987). *The Infinite Variety of a Musician*. New York: Berg Publishers.
- Green, S. (2009). *Encyclopedia of the Musical Theatre*. Massachusetts: Da Capo Press.
- Kreitner, K., Terey-Smith, M., Westrup, J., Holoman, D. K., Hopkins, G., Griffiths, P. and Conrad, J. A. (2016). Instrumentation and Orchestration. *Grove Music Online* [online]. Retrieved February 27, 2017: <http://www.oxfordmusiconline.com/subscriber/article/grove/music/20404?print=true>.
- McHugh, D. (2015). I'll Never Know Exactly Who Did What: Broadway Composers as Musical Collaborators. *Journal of the American Musicological Society*. 68(3): 605-652.
- Melton, J. (2013). *Singing in Musical Theatre: The Training of Singers and Actors*. New York: Skyhorse Publishing, Inc.
- Miller, S. (1996). *From Assassins to West Side Story: The Director's Guide to Musical Theatre*. Portsmouth: Heinemann Drama.
- Parrent, A. (1980). From "The Beggar's Opera" to "Sweeney Todd": The Art of the Broadway Orchestrator. *Music Educators Journal*. 66(9): 32-35.

- Peithman, S. and Offen, N. (2002). *The Stage Directions Guide to Musical Theatre*. Portsmouth Heinemann Drama.
- Piston, W. (1955). *Orchestration*. New York: WW Norton.
- Purin, P. (2010). An Examination of Don Walker's Style of Orchestration in "The Pajama Game," "The Most Happy Fella," and "The Music Man." *The American Music Research Center Journal*. 19(1): 41-61.
- Rimsky-Korsakov, N. (1964). *Principles of Orchestration*. Massachusetts: Courier Corporation.
- Sevsay, E. (2013). *the Cambridge Guide to Orchestration*. Cambridge: Cambridge University Press.
- Sheehan, J.J.D. (1993). Lost Boys. *Opera News*. 61(1): 56-57.
- Smith, W. (2007). Music Theatre: Good Thing Going. Stephen Sondheim only looks better with time. *The American Scholar*. 76(1): 109-116.
- Suksin, S. (2011). *The Sound of Broadway Music: A Book of Orchestrators and Orchestration*. Oxford: Oxford University Press.
- Vacha, J. E. (1993). The Sound of Musicals: How orchestrator Robert Russell Bennett helped shape many a Broadway show. *Opera News*. 58(1): 22-26.
- Vallance, T. (1970). *The American Musical*. New York: A. Zwemmer.
- Wood, M.D. (2002). Jonathan Tunick: Finding the Fit. *American Theatre*. 19(1): 108-111.