

THE CATHOLIC UNIVERSITY OF AMERICA

Rediscovering Forgotten Meanings in Schubert's Song Cycles:
Towards an Understanding of Well Temperament as an Expressive Device
In the Nineteenth-Century Lied

A DISSERTATION

Submitted to the Faculty of
The Benjamin T. Rome School of Music
Of The Catholic University of America
In Partial Fulfillment of the Requirements for the Degree
Doctor of Philosophy

©

Copyright

All Rights Reserved

By

Angeline Ashley Smith Van Evera

Washington, D.C.

2012

Rediscovering Forgotten Meanings in Schubert's Song Cycles:
Towards an Understanding of Well Temperament as an Expressive Device
In the Nineteenth-Century Lied

Angeline Ashley Smith Van Evera, Ph.D.

Director: Andrew H. Weaver, Ph.D.

An essential element of Franz Schubert's Lieder has been lost since the advent of equal temperament: the meanings and emotions that manifest when his songs are played in well temperament. Not only did well and equal temperament exist concurrently in the nineteenth century, but a truly equal temperament was not attainable until early in the twentieth century. What was *called* equal temperament in the nineteenth century *sounded* like well temperament; Schubert's music was composed and performed in a system that, regardless of name, sounded like well temperament.

Twentieth-century equal temperament eliminates the meanings and emotions that manifest through what I call *Temperaturfarben*, or timbral colors created through the uniquely sized intervals in well temperament. This dissertation presents evidence that Schubert's songs were conceived in well temperament and argues that Schubert exploited the colors of keys and chords to create musico-literary tools. Examining Schubert's use of *Temperaturfarben* provides us with new insights into his interpretation of the song

cycles *Die schöne Müllerin* and *Winterreise*, and provides insight into whether or not *Schwanengesang* constitutes a cycle.

In this dissertation I present an analytical system for examining *Temperaturfarben*, which includes rankings of major and minor keys according to the amount of color each contains (which are derived primarily from the systematic changes in interval sizes in the tonic, dominant, and subdominant chords). I also examine elements other than key and chord quality (such as melodic vs. harmonic context, tessitura, dynamics, and tempo) that impact how temperament is perceived in a composition. I provide detailed temperament-based analyses of the songs in *Die schöne Müllerin* and *Winterreise* that highlight the extra-musical meanings that Schubert associated with certain keys and chords and reveal how he used *Temperaturfarben* as a tool on par with melodic, harmonic, and rhythmic elements to depict poetic meaning. I also examine how *Temperaturfarben* impacted key choices and the overall formal design of the cycles. The discussion of *Schwanengesang* uses *Temperaturfarben* to examine the cyclical nature of the work, including the potential mini cycles within the work as a whole (Rellstab and Heine) and the often discussed reordering of the Heine songs.

This dissertation by Angeline Ashley Smith Van Evera fulfills the dissertation requirement for the doctoral degree in Musicology approved by Andrew H. Weaver, Ph.D., as Director, and by G. Grayson Wagstaff, Ph.D., and Paul Taylor, Ph.D. as Readers.

Andrew H. Weaver, Ph.D., Director

G. Grayson Wagstaff, Ph.D., Reader

Paul Taylor, Ph.D., Reader

List of Examples, Figures, Tables	vii
Acknowledgements.....	xi
Introduction.....	1
Chapter 1: Temperament.....	16
Musical Ratios, the Harmonic Series, and Musical Temperament.....	16
Equal vs. Well Temperaments	21
Young's Temperament.....	35
Discrimination Thresholds.....	38
The Perception of Beats	40
Key Characteristics and Affect.....	44
Schubert's Piano	52
Concert Pitch.....	59
Conclusion	60
Chapter 2: Methodology	62
Schubert's innovative practice.....	63
Degrees of <i>Temperaturfarben</i>	64
Young's Representative Temperament.....	74
The <i>Temperaturfarben</i> of other intervals and chords	77
Minor Seconds	77
Major Seconds	78
Perfect Fourths	79
Tritones	79
Major and Minor Sixths.....	80
Major and Minor Sevenths.....	80
Seventh Chords.....	81
Diminished Chords and Augmented Chords	82
Other musical elements affecting the perception of <i>Temperaturfarben</i>	82
Conclusion	86
Chapter 3: <i>Die schöne Müllerin</i>	88
Background.....	88
Temperaturfarbe as a basis for key choices in <i>Die schöne Müllerin</i>	91
Key centers of <i>Die schöne Müllerin</i>	103
B \flat major	103
G major and G minor	104
C major and C minor.....	106
A major and A minor	107
D major	109
B major and B minor.....	110
E major and E minor	112

Chapter 4: <i>Die schöne Müllerin</i> Individual Song Analyses.....	115
<i>Die schöne Müllerin: Ein Cyclus von Liedern</i>	115
1. <i>Das Wandern</i> (To Wander).....	115
2. <i>Wohin?</i> (Where to?).....	117
3. <i>Halt!</i> (Stop!).....	125
4. <i>Danksagung an den Bach</i> (Thanks to the Brook).....	130
5. <i>Am Feierabend</i> (After Work).....	135
6. <i>Der Neugierige</i> (The Inquisitive One).....	141
7. <i>Ungeduld</i> (Impatience).....	147
8. <i>Morgengruss</i> (Morning Greeting).....	151
9. <i>Des Müllers Blumen</i> (The Miller's Flowers).....	155
10. <i>Tränenregen</i> (Rain of Tears).....	158
11. <i>Mein!</i> (Mine!).....	165
12. <i>Pause</i> (Pause).....	171
13. <i>Mit dem grünen Lautenbande</i> (With the Green Lute Ribbon).....	179
14. <i>Der Jäger</i> (The Hunter).....	183
15. <i>Eifersucht und Stolz</i> (Jealousy and Pride).....	186
16. <i>Die liebe Farbe</i> (The Beloved Color).....	191
17. <i>Die böse Farbe</i> (The Evil Color).....	195
18. <i>Trockne Blumen</i> (Withered Flowers).....	200
19. <i>Der Müller und der Bach</i> (The Miller and the Brook).....	204
20. <i>Des Baches Wiegenlied</i> (The Brook's lullaby).....	209
Conclusion.....	213
 Chapter 5: <i>Winterreise</i>	215
Müller's <i>Die Winterreise</i>	215
Schubert's <i>Winterreise</i>	218
The Manuscripts.....	221
Song Order.....	225
Transpositions vs. Original Keys.....	231
Individual Transpositions.....	236
The Conception of Key.....	243
Formal Structure and Key Meaning.....	247
 Chapter 6: <i>Winterreise</i> Individual Song Analyses.....	256
Part I.....	256
1. <i>Gute Nacht</i> (Good Night).....	256
2. <i>Die Wetterfahne</i> (The Weathervane).....	263
3. <i>Gefror'ne Tränen</i> (Frozen Tears).....	269
4. <i>Erstarrung</i> (Congealment).....	274
5. <i>Der Lindenbaum</i> (The Linden Tree).....	281
6. <i>Wasserflut</i> (Flood Water).....	286
7. <i>Auf dem Flusse</i> (On the River).....	290
8. <i>Rückblick</i> (Backward Glance).....	299

9. <i>Irrlicht</i> (Will-o'-the-wisp)	303
10. <i>Rast</i> (Rest).....	308
11. <i>Frühlingstraum</i> (Dream of Spring).....	314
12. <i>Einsamkeit</i> (Solitude).....	319
Part II	326
13. <i>Die Post</i> (The Post).....	326
14. <i>Der greise Kopf</i> (The Gray Head)	333
15. <i>Die Krähe</i> (The Crow)	337
16. <i>Letzte Hoffnung</i> (Last Hope).....	342
17. <i>Im Dorfe</i> (In a Village)	350
18. <i>Der stürmische Morgen</i> (The Stormy Morning).....	354
19. <i>Täuschung</i> (Illusion)	357
20. <i>Der Wegweiser</i> (The Signpost).....	360
21. <i>Das Wirtshaus</i> (The Inn).....	367
22. <i>Mut</i> (Courage).....	372
23. <i>Die Nebensonnen</i> (The Mock Suns)	375
24. <i>Der Leiermann</i> (The Organ Grinder).....	378
Conclusion	383
Chapter 7: <i>Schwanengesang</i>	386
Origins of <i>Schwanengesang</i> : the Rellstab and Heine Songs	388
Haslinger's role in the Creation of a Faux Song Cycle	389
<i>Temperaturfarben</i> and Cyclicism in <i>Schwanengesang</i>	393
<i>Temperaturfarben</i> as a Guide for an Overall Tonal Plan	394
Key Meanings	396
Individual Song Commentary: The Rellstab Songs.....	398
1. <i>Liebesbotschaft</i> (Message of Love)	398
2. <i>Kriegers Ahnung</i> (Warrior's Premonition)	400
3. <i>Frühlingssehnsucht</i> (Spring Longing)	402
4. <i>Ständchen</i> (Serenade).....	406
5. <i>Aufenthalt</i> (Resting Place)	408
6. <i>In der Ferne</i> (In the Distance)	409
7. <i>Abschied</i> (Farewell)	412
Individual Song Commentary: The Heine Songs	413
8. <i>Der Atlas</i> (Atlas).....	414
9. <i>Ihr Bild</i> (Her portrait).....	417
10. <i>Das Fischermädchen</i> (The Fisher Maiden)	419
11. <i>Die Stadt</i> (The City).....	421
12. <i>Am Meer</i> (By the Sea).....	423
13. <i>Der Doppelgänger</i> (The Double).....	424
Summary	426
A Heine cycle?	427
Conclusion	432

Conclusion	434
Appendix A: Calculating Beats	444
Bibliography	446

List of Examples, Figures, Tables

Chapter 1

Figure 1.1: The first four divisions of the string in the overtone series.....	18
Figure 1.2: The size of major thirds in Young’s temperament of 1799.....	31
Figure 1.3: Major Thirds in Well Temperament.....	35
Figure 1.4: The size of perfect fifths, major thirds, and minor thirds in Young’s well temperament of 1799	36
Figure 1.5: The difference between pure perfect fifths, major thirds, and minor thirds, and those in Young’s well temperament of 1799	37
Figure 1.6: Franz Schubert’s room in Wipplingerstrasse, Vienna.....	53
Figure 1.7: <i>Schubertiade at Josef von Spaun’s</i> by Morits von Schwind, 1865	53
Figure 1.8: Viennese Action	57
Table 1.1: Frequency ratios of perfect consonances.....	18
Table 1.2: Interval ratios and their corresponding measurement in cents	19
Table 1.3: The difference in cents between pure intervals and equal tempered intervals	22
Table 1.4: Specimens of Tuning in Equal Temperament	26
Table 1.5: The categorization of keys in regards to purity	47

Chapter 2

Figure 2.1: The relationship of tonic purity to dominant purity in minor keys	72
Figure 2.2: The size of major thirds in cents in Young, Victorian well, and equal temperament.....	74
Figure 2.3: The size of major thirds in cents in Young and Kirnberger II temperaments..	76
Table 2.1: Size of major and minor thirds in Young’s temperament in order from most pure to least pure	65
Table 2.2: The rank of major triads based on the purity of the major third.....	66
Table 2.3: Cents measurements of diatonic intervals in Young’s well temperament.....	67
Table 2.4: Average <i>Temperaturfarben</i> ranking of major keys based on the tonic, dominant, and subdominant triads	68
Table 2.5: Purity rankings of major keys.....	69
Table 2.6: Purity rankings of the minor tonic and major dominant in minor keys.....	70
Table 2.7: Overall purity rankings based on the average dissonance of tonic and dominant triads. Keys with the same ranking are listed with the purest tonic first	71
Table 2.8: The contrast ranking between minor triads and their major dominant.....	73
Table 2.9: Minor keys according to contrast (purest triad listed first).....	73
Table 2.10: Observations about the nature of beats made by Mayer and Stumpf	85

Chapter 3

Figure 3.1: The Keys of <i>Die schöne Müllerin</i>	102
Table 3.1: Thomas Archer, “The Formal Construction of <i>Die schöne Müllerin</i> ”	92
Table 3.2: Donald G. Wiggins, “Tonal Structure of <i>Die schöne Müllerin</i> ”	95
Table 3.3: Vivian S. Ramalingam, “Tonal Structure of <i>Die schöne Müllerin</i> ”	96
Table 3.4: Charles Rosens’ tonal groups of <i>Die schöne Müllerin</i>	99
Table 3.5: The four tonal groups of <i>Die schöne Müllerin</i>	101

Chapter 4

Example 4.1: <i>Das Wandern</i> , mm. 12–16	117
Example 4.2: <i>Wohin?</i> , mm. 11–14	118
Example 4.3: <i>Wohin?</i> , mm. 35–41	122
Example 4.4: <i>Wohin?</i> , mm. 23–30	123
Example 4.5: <i>Wohin?</i> , mm. 41–49	124
Example 4.6: <i>Wohin?</i> , mm. 61–69	125
Example 4.7: <i>Halt!</i> , mm. 29–38	128
Example 4.8: <i>Halt!</i> , mm. 53–60	130
Example 4.9: <i>Danksagung an den Bach</i> , mm. 10–19	132
Example 4.10: <i>Danksagung an den Bach</i> , mm. 21–30	134
Example 4.11: <i>Am Feierabend</i> , mm. 51–59	139
Example 4.12: <i>Am Feierabend</i> , mm 79–89	140
Example 4.13: <i>Der Neugierige</i> , mm. 33–46	145
Example 4.14: <i>Der Neugierige</i> , mm. 49–55	147
Example 4.15: <i>Ungeduld</i> , mm. 19–22	150
Example 4.16: <i>Morgengruss</i> , mm. 12–15	153
Example 4.17: <i>Des Müllers Blumen</i> , mm. 13–21	157
Example 4.18: <i>Tränenregen</i> , mm. 17–19	163
Example 4.19: <i>Tränenregen</i> , mm. 25–32	164
Example 4.20: <i>Mein!</i> , mm. 41–55	169
Example 4.21: <i>Pause</i> , mm. 20–26	173
Example 4.22: <i>Pause</i> , mm. 35–41	175
Example 4.23: <i>Pause</i> , mm. 63–69	177
Example 4.24: <i>Mit dem grünen Lautenbände</i> , mm. 4–7	182
Example 4.25: <i>Der Jäger</i> , 16–20	185
Example 4.26: <i>Eifersucht und Stolz</i> , mm. 26–39	188
Example 4.27: <i>Eifersucht und Stolz</i> , mm. 80–83	190
Example 4.28: <i>Die liebe Farbe</i> , mm. 5–13	193
Example 4.29: <i>Die böse Farbe</i> , mm. 19–22	197
Example 4.30: <i>Trockne Blumen</i> , mm. 36–38	203
Example 4.31: <i>Der Müller und der Bach</i> , mm. 3–6	207

Example 4.32: <i>Des Baches Wiegenlied</i> , mm. 9–11	211
Example 4.33: <i>Des Baches Wiegenlied</i> , mm. 16–20	212

Chapter 5

Example 5.1: <i>Die Wetterfahne</i> , engraver’s copy mm. 14–18	224
Example 5.2: The first four measures from the engraver’s copy of <i>Frühlingstraum</i> ...	237
Example 5.3: The first stanza from the engraver’s copy of <i>Rast</i>	241
Figure 5.1: The Gathering Structure of <i>Winterreise</i> part I	223
Figure 5.2: <i>Temperaturfarben</i> map of <i>Winterreise</i> part I	242
Figure 5.3: <i>Temperaturfarben</i> map of <i>Winterreise</i> part II	243
Figure 5.4: The amount of <i>Temperaturfarben</i> for each song in <i>Winterreise</i>	248
Figure 5.5: The key signatures used in <i>Winterreise</i>	249
Figure 5.6: Dürr’s graph of the tonal relationships in <i>Winterreise</i> part I	254
Figure 5.7: Dürr’s graph of the tonal relationships in <i>Winterreise</i> part II	254
Table 5.1: <i>Winterreise</i> timeline	221
Table 5.2: Müller and Schubert’s versions of (<i>Die</i>) <i>Winterreise</i>	226
Table 5.3: Transpositions in <i>Winterreise</i>	237
Table 5.4: Christopher Lewis’s Key Meanings	252
Table 5.5: Extra-musical meanings linked to specific keys in <i>Winterreise</i>	253

Chapter 6

Example 6.1: <i>Gute Nacht</i> , mm. 1–7	257
Example 6.2: <i>Gute Nacht</i> , mm. 23–27	259
Example 6.3: <i>Gute Nacht</i> , mm. 28–29	260
Example 6.4: <i>Die Wetterfahne</i> , mm. 10–14	265
Example 6.5: <i>Die Wetterfahne</i> , mm. 14–22	266
Example 6.6: <i>Die Wetterfahne</i> 29–33	268
Example 6.7: <i>Gefror’ne Thränen</i> , mm. 1–7	270
Example 6.8: <i>Gefror’ne Thränen</i> , mm. 20–28	272
Example 6.9: <i>Gefror’ne Thränen</i> mm. 33–39	274
Example 6.10: <i>Erstarrung</i> , mm. 19–23	277
Example 6.11: <i>Erstarrung</i> , m. 55	278
Example 6.12: <i>Der Lindenbaum</i> , mm. 28–36	283
Example 6.13: <i>Der Lindenbaum</i> , mm 57–62	285
Example 6.14: <i>Wasserflut</i> , mm. 1–4	287
Example 6.15: <i>Wasserflut</i> , m. 12	288
Example 6.16: <i>Wasserflut</i> , m. 12 in autograph	289
Example 6.17: <i>Auf dem Flusse</i> , mm. 8–14	292
Example 6.18: <i>Auf dem Flusse</i> , mm. 27–28	294
Example 6.19: <i>Auf dem Flusse</i> , mm. 44–51	296
Example 6.20: <i>Rückblick</i> , mm. 39–43	302

Example 6.21: <i>Irrlicht</i> , mm. 9–12	306
Example 6.22: <i>Irrlicht</i> , mm. 28–36	307
Example 6.23: <i>Rast</i> , mm. 1–6.....	310
Example 6.24: <i>Rast</i> , mm. 16–25.....	312
Example 6.25: <i>Frühlingstraum</i> , mm 14–16.....	316
Example 6.26: <i>Frühlingstraum</i> , mm. 27–28.....	317
Example 6.27: <i>Einsamkeit</i> , mm. 1–6	321
Example 6.28: <i>Einsamkeit</i> , mm. 14–22	322
Example 6.29: <i>Einsamkeit</i> , mm. 28–34	324
Example 6.30: <i>Die Post</i> , mm. 12–16	329
Example 6.31: <i>Der greise Kopf</i> , mm. 1–4	334
Example 6.32: <i>Der greise Kopf</i> , mm. 10–16	335
Example 6.33: <i>Der greise Kopf</i> , mm. 20–23	337
Example 6.34: <i>Die Krähe</i> , mm. 15–23	340
Example 6.35: <i>Die Krähe</i> , mm. 29–33	341
Example 6.36: <i>Letzte Hoffnung</i> , mm. 1–8	343
Example 6.37: <i>Letzte Hoffnung</i> , mm. 11–17	345
Example 6.38: <i>Letzte Hoffnung</i> , mm. 34–38	347
Example 6.39: <i>Im Dorfe</i> , mm. 37–39	353
Example 6.40: <i>Der stürmische Morgen</i> , mm. 7–8.....	355
Example 6.41: <i>Der stürmische Morgen</i> , mm. 15–19.....	356
Example 6.42: <i>Täuschung</i> , mm. 21–33	359
Example 6.43: <i>Der Wegweiser</i> , mm. 1–5	362
Example 6.44: <i>Der Wegweiser</i> , mm. 12–19	363
Example 6.45: <i>Der Wegweiser</i> , mm. 27–33	364
Example 6.46: <i>Das Wirthshaus</i> , mm. 20–24	370
Example 6.47: <i>Mut</i> , mm. 31–36.....	375
Example 6.48: <i>Der Leiermann</i> , mm. 1–8	381

Chapter 7

Example 7.1: <i>Frühlingssehnsucht</i> , mm. 94–99	404
Example 7.2: <i>Aufenthalt</i> , mm. 117–124	410
Example 7.3: <i>In der Ferne</i> , mm.100–111	412
Example 7.4: <i>Der Atlas</i> , mm. 15–20.....	415
Figure 7.1: Purity rankings of individual songs in <i>Schwanengesang</i>	395
Figure 7.2: The <i>Temperaturfarben</i> of the Heine songs as they occur in <i>Schwanengesang</i>	430
Figure 7.3: The <i>Temperaturfarben</i> of the Heine songs as they occur in <i>Der Heimkehr</i>	430
Table 7.1: The songs of <i>Schwanengesang</i>	392
Table 7.2: Songs with shared key signatures in <i>Schwanengesang</i>	396
Table 7.3: The ordering of the Heine songs in <i>Schwanengesang</i> and <i>Der Heimkehr</i> ..	429

Acknowledgements

I want to first extend my thanks to the scholars who have come before me; without their work to reflect and build upon, this project would not be possible. My interest in temperament stemmed from Ross Duffin's *How Equal Temperament Ruined Harmony and Why You Should Care*; this book excited and fascinated me. Duffin's work, paired with seminars on the history of music theory and on the romantic song cycle inspired the ideas that developed into this dissertation. I would also like to thank the scholars who, although they did not know me, responded to my inquiries with generosity. Jonathan Bellman shared with me the paper he wrote concerning temperament and Chopin, which gave me ideas on how to approach a relatively unexplored topic. The late Owen Jorgenson, whose scholarship on temperament is unparalleled, corresponded with me regarding temperament in relation to Schubert and openly shared his opinions and knowledge. I am also thankful for a serendipitous taxi ride during the National American Musicological Society meeting in Indianapolis where I met Honey Meconi who, upon hearing of my research suggested I investigate historical recordings, which has proven extremely valuable.

Dover Publishers, The Morgan Library, and Wienbibliothek im Rathaus generously granted me permission to use images from their publications and collections. All other images used in this dissertation are in the public domain or were created by me. I am particularly grateful for the hosting and digitization of manuscripts by The Morgan Library, Wienbibliothek im Rathaus, Harvard University Library, and the International

Music Score Library Project; it is incredible to be able to pull up manuscripts held in Vienna, New York City, and other distant places, while in my home in Washington, DC.

The faculty and staff at The Catholic University of America have provided me with a nurturing environment throughout my graduate school career. My committee members not only deserve thanks for the time and energy that they have invested in me during the writing of this document, but they also deserve thanks for being incredible teachers. Paul Taylor is a talented theorist and pedagogue whose generosity of spirit is unmatched; he truly gives his students the knowledge, tools, and feedback that they need to succeed. Much of my musicological skill and knowledge came from my many classes with G. Grayson Wagstaff; he deserves profound thanks for not only helping me develop as a musicologist, but also for being the first to encourage me to pursue the field of musicology. My dissertation director, Andrew H. Weaver, has supported this project since its conception and deserves the utmost thanks for his indispensable feedback and all that he had done to help me become a better scholar and writer.

My professors and directors at Saint Michael's College in Vermont nurtured and supported me during my undergraduate studies, especially Paul LeClair, Susan Summerfield, and Jermone Monachino; they always believed that I could and would succeed. I am also thankful for the enduring support and friendship of my undergraduate classmates Lesley Hostetter and Casey Reever, with whom I am fortunate enough to share enduring friendships. A second thanks goes out to Casey for offering her editorial and proofreading skills to this dissertation, an immeasurable gift that is a reflection of her generosity of spirit. I would also like to thank those whom I met at Catholic University

who are both esteemed colleagues and treasured friends, particularly, Kevin O'Brien, Francesca Hurst, Matthew D. Morrison, Ian Wardenski, Cait Miller, and Janet McKinney. You were my comrades through course work and comprehensive exams.

I would not be where I am today if it were not for my family, especially my Mom and Dad who have been loving and supportive my entire life. It is difficult to articulate just how much you have done for me: thank you for everything. I also have an incredible extended family, especially my aunts who support and love me as if I were their own daughter. My final thanks goes to my husband Bill for his sacrifices and support; he could not wait to call me doctor.

Introduction

Although there is no lack of scholarship on Schubert's Lieder, an essential element of his songs has been lost since the advent of equal temperament: the meanings and emotions that manifest when his songs are played in well temperament. The unequal division of the semitones in well temperament results in unique acoustical characteristics for each key in terms of both melodic and harmonic constructs. All keys in equal temperament sound the same; the scale merely begins at different pitch levels. Equal temperament thus eliminates the elements of musical timbre that are derived (in large part) from the beating of different-sized tempered intervals. The difference between equal temperament and well temperament can be compared to the difference between a person's identifying voice and his or her tone of voice; a person can differentiate his mother from his sister due to the timbre of their voices, much as a person can differentiate an organ from a piano, but people's moods, whether they are excited or sad, are indicated by their tones of voice. Much meaning is lost if a person's tone of voice is ignored, and much is lost in Schubert's Lieder if the colors created through well temperament are ignored.

Commonly held attitudes and misconceptions surrounding equal temperament have prevented scholars from fully exploring the relationship between temperament and nineteenth-century Lieder. The two most relevant misconceptions are that equal

temperament was the predominant system in use during the Romantic era and that nineteenth-century equal temperament was the same as twentieth-century equal temperament. The theories of well and equal temperament existed concurrently, and endorsements of equal temperament, like that of Louis Spohr in his 1832 *Violinschule*, would not have been necessary if another temperament was not in use.¹ In 1829 (a year after Schubert's death) Johann Nepomuk Hummel (to whom Schubert originally dedicated his last three piano sonatas) published a new "easy and convenient" method of tuning.² Hummel's commentary implies that a more equal temperament may be easier to tune than unequal temperaments, and that equal temperament may be the key to greater uniformity in musical practices. He stated, "it is much wished that a uniform mode of tuning were universally introduced...how is it possible, among all this diversity, to obtain a pure and equal mode of tuning?"³ Hummel's comments reveal that he was in favor of equal temperament but that the temperament systems in use were varied. Past scholars have misinterpreted endorsements of equal temperament as proof that the system was in use; however, even if Spohr, Hummel, and others wrote in favor of equal temperament, their writings also indicate that equal temperament was still an idea and not a practice.

There are only a handful of studies exploring temperament and nineteenth-century composers. Ross Duffin has been the most vocal advocate for reexamining assumptions

¹ Louis Spohr, *Violinschule* (1832); repr. as *Louis Spohr's Celebrated Violin School*, trans. John Bishop (London: R. Cocks, 1843).

² Johann Nepomuk Hummel, *A Complete Theoretical and Practical Course of Instructions on the Art of Playing the Piano Forte* (London: T. Boosey, 1829), 69.

³ *Ibid.*

about temperament and listening to past composers' works with new ears in his book *How Equal Temperament Ruined Harmony and Why You Should Care*.⁴ Jonathan Bellman delivered a paper in 2005 exploring Chopin's compositional choices in his piano works in light of well temperament.⁵ There have also been two DMA dissertations examining Romantic composers and well temperament. In his 2001 dissertation "The Effects of Unequal Temperament on Chopin's Mazurkas," Willis Glen Miller examines select passages from Chopin's mazurkas and compares intervallic size in cents for nine different temperaments.⁶ Robin M. Rysavy's 1997 dissertation "Selected Piano Compositions of Beethoven and Schubert, and the Effect of Well Temperament on Performance Practice" contains musical analyses primarily focused on the traditional affects and characteristics associated with keys in selected piano works.⁷ The only publication on Schubert's Lieder and temperament is Herbert Kellat's short work *Zur musikalischen Temperatur III: Franz Schubert*, which provides brief (but neither in-depth nor systematic) analyses of the songs in *Die schöne Müllerin* and *Winterreise*.⁸ I

⁴ Ross Duffin, *How Equal Temperament Ruined Harmony and Why You Should Care* (New York: W.W. Norton, 2006).

⁵ Jonathan Bellman, "Toward a Well-Tempered Chopin," *Chopin in Performance: History, Theory, Practice*, Proceedings of the 5th International Chopin in Performance Conference 2004, ed. Artur Szklener (Warsaw: Narodowy Instytut Fryderyka Chopina, 2005), 27-40.

⁶ Willis G. Miller, "The Effects of Unequal Temperament on Chopin's Mazurkas" (DMA diss., University of Houston, 2001).

⁷ Robin M. Rysavy, "Selected Piano Compositions of Beethoven and Schubert, and the Effect of Well Temperament on Performance Practice" (DMA diss., University of Missouri-Kansas City, 1997).

⁸ Herbert Kellat, *Zur musikalischen Temperatur III: Franz Schubert* (Berlin: Merseburger, 1994).

challenge Kelleter's observations about temperament and Schubert's song cycles in chapters one and two.

There is a strong link between temperament and key characteristics. Since most scholars mistakenly believe that the equal temperament of the twentieth century was used during the nineteenth century, their discussions of key characteristics and Romantic composers do not venture into the relationship between well temperament and the composer's creative process, but instead they focus on linking a composer's use of key to historical or published key characteristics. Scholars Richard Wiggins and Vivian Ramalingam have postulated that Schubert's non-traditional choices of keys in *Die schöne Müllerin* were guided by the key characteristics published by C.F.D. Schubart in his *Ideen zu einer Aesthetik der Tonkunst*.⁹ These studies, however, are flawed in that Schubart's key characteristics are long and multi-faceted, making it easy to find something in the description that could relate to the lyrics or emotion of any given song. When connections between Schubert and Schubart cannot be found, scholars must speculate about Schubert's reasons for not adhering to Schubart's key characteristics. Temperament analysis allows us to explore Schubert's personal key characteristics rather than placing his songs within the context of other composers' and authors' published key characteristics. My analytical tools illuminate the link between Schubert's key choices and the affects that he attributed to individual keys, whether this connection is universal to his song output or relative within a song or the context of a cycle.

⁹ Vivian S. Ramalingam, "Schubart, Tonality, and *Die schöne Müllerin*," in *The Creative Process*, ed. Charlotte B. Winsor (New York: Broude Brothers, 1992), 201–216, and Donald G. Wiggins, "Franz Schubert, C. F. D. Schubart, and *Die schöne Müllerin*," *The NATS Bulletin* (May/June 1984): 12–15.

The remaining scholarship linking Schubert's choice of key and extra-musical meaning is predominantly limited to passing observations in studies with a different focus. Susan Youens, for instance, has noted the connection between the key of A major and dreams in *Die schöne Müllerin*, and Richard Kramer has explored how Schubert contrasted major and minor in *Winterreise*. In his discussion of the issues surrounding the transposition of Schubert's Lieder, Kramer stated that the unequal temperaments of the eighteenth century led to a "hermeneutics of key" in the early nineteenth century in which some keys had acquired extra-musical connotations.¹⁰ Kramer's comments are grounded in the assumption that equal temperament was used in the nineteenth century; the knowledge that well temperament was used during Schubert's lifetime opens up new ways to examine the specific meanings that composers assign to keys instead of viewing keys as having inherited meaning. Charles Rosen has explored how musical techniques and poetic meanings in *Winterreise* emphasize the Romantic idea of memory, a study that could be greatly augmented by examining how well-tempered keys and chords evoke memory. These studies show the limitations encountered when scholars approach Schubert's works through the lens of equal temperament: they are restricted to contrasts that are audible in equal temperament (major and minor) and obvious links between key signatures and repeated poetic ideas. Examining Schubert's works through the lens of well temperament exposes more connections between poetic meaning, musical expression, and key. This dissertation not only establishes a methodology for examining

¹⁰ Richard Kramer, *Distant Cycles: Schubert and the Conceiving of Song* (Chicago: University of Chicago Press, 1994), 13.

how well temperament is perceptible in a composition but also presents methods and analyses that are informed by how the songs sound in well temperament. The tuning software *Little Miss Scale Oven*, a scale analysis and editing tool, allows me to “bake” a temperament in a software synthesizer and set the temperament for scores played through the music notation software *Sibelius*. By inputting Schubert’s Lieder into Sibelius and playing them either through my computer or my Roland digital piano, I am able to hear Schubert’s compositions in well temperament. Additionally, I have been able to study recordings of Schubert’s Lieder created at the beginning of the twentieth century before true equal temperament was achievable. While the temperaments used in these recordings are closer to equal temperament than the temperament used during Schubert’s lifetime, they still manifest the unique properties of individual keys, albeit on a more muted scale.

Approaches to Schubert’s Lieder involving temperament and key characteristics are only a small fraction of the vast body of influential Schubert scholarship. The following section gives a brief overview of the most prolific scholars and the most popular approaches to Schubert’s Lieder. Although not all of these scholars are referenced in the following study, their work has nevertheless shaped the important body of Schubert Lieder scholarship.

The historical documents and biographical information from Schubert’s time remain some of the most important sources. The first book-length biography on Schubert was compiled by Kreissle Von Hellborn, who solicited information from Schubert’s

friends and acquaintances. Although it was compiled decades after his death, leaving time for memories to fade, it still provides valuable recollections by Schubert's friends.¹¹ The most definitive sources for primary documents from Schubert's lifetime and shortly after his death are the publications of letters, writings, documents, and commentary compiled by Otto Erich Deutsch, published in the mid-twentieth century.¹² A more recent contribution is Till Gerrit Waidelich's two-volume collection of documents from Schubert's life that are not found in Deutsch's publications.¹³

Like the primary documents from Schubert's lifetime, the source studies conducted on the many drafts, manuscripts, engraver's copies, and editions of Schubert's Lieder are essential in studying his working process, gaining insight into transpositions, and creating a timeline of events. One of the most significant source studies is Robert Winter's research on the paper types that Schubert used for his manuscripts.¹⁴ Winter's work has provided the most definitive dating for drafts of songs in *Winterreise*, helping to illuminate the timeline of a cycle with a complex compositional history. Julian Armitage-Smith and Maurice J. E. Brown have published numerous articles that have examined the discrepancies between manuscripts and editions, highlighted wrong notes and misprints, and discussed the new scores when they surfaced in the twentieth

¹¹ Kreissle Von Hellborn, *The Life of Franz Schubert*, trans. Arthur Duke Coleridge, 2 vols. (1865; reprint, New York: Vienna House, 1972).

¹² Otto Erich Deutsch, *Schubert: A Documentary Biography*, trans. Eric Blom (London: J. M. Dent and Sons, 1946) and Otto Erich Deutsch, *Schubert: Memoirs by His Friends*, trans. Rosamond Ley and John Nowell (New York: W. W. Norton, 1968).

¹³ Till Gerrit Waidelich, *Franz Schubert: Dokumente 1817–1830*, ed. Renate Hilmar-Voit and Andreas Mayer, 2 vols. (Tutzing: Hans Schneider, 1993).

¹⁴ Robert Winter, "Paper Studies and the Future of Schubert Research," in *Schubert Studies: Problems of Style and Chronology*, ed. Eva Badura-Skoda and Peter Branscombe (New York: Cambridge University Press, 1982),

century.¹⁵ Susan Youens and Martin Chusid have provided commentaries on the facsimiles of the autographs of *Winterreise* and *Schwanengesang* respectively,¹⁶ but the most extensive commentary belongs to Walther Dürr and stems from his editorial works with *Die Neue Schubert-Ausgabe*.¹⁷ Finally, a valuable extension of score study is Stephen Carlton's examination of Schubert's working methods seen through the transformation from sketch to finished score.¹⁸

Many scholars have studied Schubert's Lieder through analytical approaches ranging from traditional to progressive. The Schenkerian approach to Schubert's Lieder has proved popular, beginning with Schenker himself, whose analysis of *Ihr Bild* became highly influential and a starting point for many other scholars' analyses.¹⁹ Carl Schachter

¹⁵ See Julian Armitage-Smith, "Notes on 'Winterreise,'" *Musical Times* 113 (August 1972): 766–767, "Schubert's 'Winterreise', Part I: The Sources of the Musical Text," *Musical Quarterly* 60 (January 1974): 20–36; Maurice J. E. Brown, "Schubert: Discoveries of the Last Decade," *Musical Quarterly* 47 (April 1961): 293–314, "Schubert: Discoveries of the Last Decade," *Musical Quarterly* 57 (July 1971): 351–378, "Schubert's 'Winterreise', Part I," *Musical Quarterly* 39 (April 1953): 215–222, "Some Unpublished Schubert Songs and Song Fragments," *Music Review* 15 (1954): 93–102, and Maurice J. E. Brown and Julian Armitage-Smith, "Songs: A Catalogue and a Review," *Musical Times* 117 (March 1976): 310–313.

¹⁶ See Franz Schubert, *Schwanengesang: Facsimiles of the Autograph Score and Sketches, and Reprint of the First Edition*, ed. Martin Chusid (New Haven: Yale University Press, 2000) and Susan Youens's introduction to Franz Schubert, *Winterreise: The Autograph Score* (New York: Pierpont Morgan Library in association with Dover Publications, 1989).

¹⁷ Walther Dürr, "Die Lieder-Serie der neuen Schubert-Ausgabe," *Musica* 40 (1986): 28–30, "Die Neue Schubert-Ausgabe: Über einige Probleme des Herausgebens von Musik," *Österreichische Musik Zeitschrift* 24 (1969): 553–563, and "Die Neue Schubert-Ausgabe: Zum editorischen Konzept einer kritischen Gesamtausgabe," *Musica* 32 (1978): 131–6. Dürr has also published extensively on a wide variety of topics on Schubert's Lieder.

¹⁸ Stephen Carlton, "Sketching and Schubert's Working Methods," *Current Musicology* 37/38 (2002): 75–88.

¹⁹ Heinrich Schenker, "*Ihr Bild* (August 1828): Song by Franz Schubert to a Lyric by Heinrich Heine," translated by Robert Pascall, *Music Analysis* 19 (2000): 3–9.

has also analyzed individual Lieder in the Schenkerian approach,²⁰ and Walter Tripp Everett has applied a Schenkerian approach specifically to grief and text painting in *Winterreise*.²¹ Scholars have criticized Schenker and other purely theory-oriented approaches for analyzing the music without regard for the text,²² prompting David Lewin, Kofi Agawu, and others to examine and address alternate models for analysis that better incorporate the role of text in analysis.²³ Lewin, Agawu, Richard Kramer, and others still draw upon Schenkerian techniques, but in a selective, modified way.²⁴

Numerous scholars have focused on individual structural elements in Schubert's Lieder ranging from arpeggiation, to register and rhythm.²⁵ A favorite topic among both

²⁰ Carl Schachter, "Motive and Text in Four Schubert Songs," in *Aspects of Schenkerian Theory*, ed. David Beach (New Haven: Yale University Press, 1983), 61–76.

²¹ Walter Tripp Everett, "Grief in 'Winterreise': A Schenkerian Perspective," *Music Analysis* 9 (July 1990): 157–175 and "A Schenkerian View of Text Painting in Schubert's Song Cycle 'Winterreise'" (PhD diss., University of Michigan, 1988).

²² See Joseph Kerman, "How We Got Into Analysis, and How We Get Out," *Critical Inquiry* 7 (1980): 311–331.

²³ David Lewin, "Auf dem Flusse: Image and Background in a Schubert Song," in *Schubert: Critical and Analytical Studies*, ed. Walter Frisch (Lincoln: University of Nebraska Press, 1986), 126–162; Kofi Agawu, "On Schubert's 'Der Greise Kopf,'" *In Theory Only* 8 (July 1984): 3–21, "Theory and Practice in the Analysis of the Nineteenth-Century 'Lied,'" *Music Analysis* 11 (March 1992): 3–36; Anthony Newcomb, "Structure and Expression in a Schubert Song: *noch Einmal Auf Dem Flusse zu Hören*," in *Schubert: Critical and Analytical Studies*, ed. Walter Frisch (Lincoln: University of Nebraska Press, 1986), 153–174.

²⁴ Richard Kramer, *Distant Cycles: Schubert and the Conceiving of Song* (Chicago: University of Chicago Press, 1994).

²⁵ David Schwartz, "The Ascent and Arpeggiation in *Die Stadt*, *Der Doppelgänger*, and *Der Atlas* by Franz Schubert," *Indiana Theory Review* 7 (Spring 1986): 38–50; Jeannette Fraiser Swent, "Register as a Structural Element In Schubert's *Die Schöne Müllerin* and *Winterreise*" (PhD diss., Yale University, 1984); and Arnold Feil, *Franz Schubert: Die schöne Müllerin; Winterreise*, trans. Ann C. Sherwin, ed. Rolf Vollmann (Portland: Amadeus, 1988).

theorists and musicologists is Schubert's use of mode mixture,²⁶ which is often paired with a discussion of time and memory.²⁷ Time and memory also link to the discussion on how Schubert's Lieder reflects tenets of Romanticism.²⁸

The general and biographical Schubert sources do not always focus primarily on Schubert's songs, but they often provide many insights into how the authors view and interpret Schubert's musical practices in the entirety of his output.²⁹ Works concerning the interpretation of Schubert's works have focused primarily on his piano works and on the vocal styling of Johann Michael Vogl, whose embellishments were published in an 1830 Anton Diabelli edition of *Die schöne Müllerin*.³⁰ Nevertheless, Malcolm Bilson's

²⁶ David Beach, "Modal Mixture and Schubert's Harmonic Practice," *Journal of Music Theory* 42 (Spring 1998): 73–100; Eric Blom, "His Favourite Device," *Music & Letters* 9 (October 1928): 372–380; Edward T. Cone, "Schubert's Promissory Note: An Exercise in Musical Hermeneutics," in *Schubert: Critical and Analytical Studies*, ed. Walter Frisch (Lincoln: University of Nebraska Press, 1986), 13–30; Hans Heinrich Eggebrecht, "Prinzipien Des Schubert-Liedes," *Archiv für Musikwissenschaft* 27, no. 2 (1970): 89–109; William Kinderman, "Schubert's Tragic Perspective," in *Schubert: Critical and Analytical Studies*, ed. Walter Frisch (Lincoln: University of Nebraska Press, 1996), 65–83.

²⁷ Barbara Barry, "Time Levels and Tonal Structures in Schubert's 'Die Winterreise,'" *Music Review* 46 (August 1985): 170–178; Christopher Orlo Lewis, "Text, Time, and Tonic: Aspects of Patterning in the Romantic Cycle," *Intégral* 2 (1988): 37–73.

²⁸ Joseph Kerman, "A Romantic Detail in Schubert's *Schwanengesang*," in *Schubert: Critical and Analytical Studies*, ed. Walter Frisch (Lincoln: University of Nebraska Press, 1986), 48–64; Lawrence Kramer, "The Schubert Lied: Romantic Form and Romantic Consciousness," in *Schubert: Critical and Analytical Studies*, ed. Walter Frisch, 200–237; Charles Rosen, *The Romantic Generation* (Cambridge, Mass.: Harvard University Press, 1995).

²⁹ A. Craig Bell, *The Songs of Schubert* (Lowestoft: Alston Books, 1964); Maurice J. E. Brown, *Schubert, a Critical Biography* (New York: St. Martin's Press, 1958); Brian Newbould, *Schubert, the Music and the Man* (Berkeley: University of California Press, 1997); Peter Clive, *Schubert and His World: A Biographical Dictionary* (New York: Oxford University Press, 1997); Alfred Einstein, *Schubert: A Musical Portrait* (New York: Oxford University Press, 1951); Christopher H. Gibbs, *The Life of Schubert* (New York: Cambridge University Press, 2000); Elisabeth Norman McKay, *Franz Schubert: A Biography* (New York: Oxford University Press, 1996); John Reed, *Schubert*, First American Ed. (New York: Schirmer, 1997), *Schubert: The Final Years* (London: Faber and Faber, 1972); David P. Schroeder, *Our Schubert: His Enduring Legacy* (Lanham, MD: Scarecrow, 2009).

³⁰ Walthur Dürr, "Schubert and Johann Michael Vogl: A Reappraisal," *19th-Century Music* 3 (November 1979): 126–140; Franz Schubert, *Die schöne Müllerin: Ein Cyclus von Liedern gedichtet von Wilh. Müller* (Vienna: Ant. Diabelli & Comp, 1830). < <http://nrs.harvard.edu/urn-3:fhcl.loeb:2642715>>.

writings about Schubert's piano brings to the foreground important elements regarding the nature of the fortepiano of his time and its unique expressive capabilities.³¹ David Montgomery has also written extensively on Schubert and performance practice. While he has examined the historical documents from Schubert's time, a misinterpretation of these documents seems to have dissuaded him from investigating his own observation that some of Schubert's key choices, like in the songs *Die liebe Farbe* and *Die böse Farbe*, may have been inspired by well temperament. Montgomery misinterprets Hummel and other writer's support of equal temperament as an indication that it was the accepted system and thus the qualities of well temperament were not a factor in Schubert's key choices.³²

Other authors have written extensive monographs on Schubert's Lieder output specifically, some of the most influential being John Reed and Thrasybulos Georgiades, whose works are referenced and built upon by numerous scholars.³³ The song cycles *Die*

³¹ Malcolm Bilson, "Schubert's Piano Music and the Pianos of His Time," *Studia Musicologica Academiae Scientiarum Hungaricae* 22 (1980): 262–271; "The Future of Schubert Interpretation: What Is Really Needed?" *Early Music* 25 (Nov. 1997): 715–722; and "The Viennese Fortepiano of the Late 18th Century," *Early Music* 8 (April 1980): 158–162. See also John Glogfcheskie, "Schubert and the 'Gentle' Fortepiano," *Musick* 11, no. 3 (January 1990): 2–9; and Elizabeth Norman McKay, *The Impact of the New Pianofortes on Classical Keyboard Style: Mozart, Beethoven, and Schubert* (West Hagley, West Midlands: Lynwood Music, 1987).

³² David Montgomery, "Franz Schubert's Music in Performance: A Brief History of People, Events, and Issues," in *The Cambridge Companion to Schubert*, ed. Christopher H. Gibbs (New York: Cambridge University Press, 1997), 270–283; *Franz Schubert's Music in Performance: Compositional Ideas, Notational Intent, Historical Realities, Pedagogical Foundations* (Hillsdale, NY: Pendragon Press, 2003); "Modern Schubert Interpretation in the Light of the Pedagogical Sources of His Day," *Early Music* 25 (February 1997): 101–118.

³³ Maurice J. E. Brown, *Schubert Songs*, BBC Music Guides (Seattle: University of Washington Press, 1967); Richard Capell, *Schubert's Songs*, 2nd ed (New York: The Macmillian Company, 1957); Kristina Muxfeldt, "Schubert Song Studies" (PhD diss., State University of New York at Stony Brook, 1991); "Schubert's Songs: The Transformation of a Genre," in *The Cambridge Companion to Schubert*, ed. by Christopher H. Gibbs (New York: Oxford University Press, 1997), 121–137; *Vanishing Sensibilities: Critical Essays in Reception and Historical Restoration: Schubert, Beethoven, Schumann* (New York:

schöne Müllerin and *Winterreise* have also been the subject of much scholarly attention. Susan Youens has been a leading scholar in both Schubert's Lieder in general and his song cycles. Her primary focus has been on the historical context of the Lieder as well as the relationship between Schubert and his poets.³⁴ Arnold Feil's monograph on both cycles, which primarily focuses on the rhythmic elements of the songs and cycles, is a comprehensive and influential work.³⁵ Other literature pertaining to the cycles, such as the origins of *Die schöne Müllerin* and song order and interpretation of *Winterreise* are discussed in the chapters on the cycles.

The leading scholar on *Schwanengesang* is Martin Chusid, who edited and contributed numerous chapters to *A Companion to Schubert's Schwanengesang: History, Poets, Analysis, Performance*, the seminal work on *Schwanengesang*,³⁶ as well as editing the facsimile edition of the score.³⁷ The most frequently studied topic pertaining to

Oxford University Press, 2012); Ernest G. Porter, *Schubert's Song Technique* (London: D. Dobson, 1961); John Reed, *Schubert*, first American ed. (New York: Schirmer, 1997); John Reed, *The Schubert Song Companion* (London: Farber, 1993); Thrasybulos Georgiades, *Schubert: Musik und Lyrik* (Göttingen: Vandenhoeck & Ruprecht, 1967).

³⁴ Susan Youens, "Behind the Scenes: Die schöne Müllerin before Schubert," *19th-Century Music* 15 (Summer 1991): 3–22; "Schubert and His Poets: Issues and Conundrums," in *The Cambridge Companion to Schubert*, ed. by Christopher H. Gibbs (New York: Oxford University Press, 1997), 99–117; *Schubert, Die schöne Müllerin* (New York: Cambridge University Press, 1992); *Schubert, Müller, and Die schöne Müllerin* (New York: Cambridge University Press, 1997); *Schubert's Poets and the Making of Lieder* (New York: Cambridge University Press, 1996); "Poetic Rhythm and Musical Metre in Schubert's 'Winterreise,'" *Music & Letters* 65 (January 1984): 28–40; "Retracing a Winter Journey: Reflections on Schubert's 'Winterreise,'" *19th-Century Music* 9 (Autumn, 1985), 128–135; *Retracing a Winter's Journey: Schubert's Winterreise* (Ithaca: Cornell University Press, 1991); "Wegweiser in *Winterreise*," *Journal of Musicology* 3 (Summer 1987): 357–379, "*Winterreise*: In the Right Order," *Soundings* 13 (1986).

³⁵ Arnold Feil, *Franz Schubert: Die schöne Müllerin: Winterreise*, trans. Ann C. Sherwin, ed. Rolf Vollmann (Portland: Amadeus, 1988).

³⁶ Martin Chusid, ed., *A Companion to Schubert's Schwanengesang: History, Poets, Analysis, Performance* (New Haven: Yale University Press, 1989).

³⁷ Franz Schubert, '*Schwanengesang*': *Facsimilies of Autograph Score and Sketches, and Reprint of the First Edition*, ed. Martin Chusid (New Haven: Yale University Press, 2000).

Schwanengesang is the Heine songs. With the Heine songs, the debate centers around how well Schubert understood and represented Heine's unique brand of irony as well as whether or not he should be expected to interpret the songs true to Heine's intentions.³⁸

This dissertation is divided into five chapters. Chapter 1 begins with an examination of the science and history of temperament. I discuss why the keys in well temperament sound different and review acoustical studies that demonstrate musicians' and audiences' ability to discern small changes in temperament. I then explore the tradition of key characteristics that Schubert inherited, and I further examine how the fortepianos of Schubert's time, which had a different action than the modern piano, highlighted many of the qualities of well temperament.

In Chapter 2 I lay out my analytical methodology, which is based on Thomas Young's temperament for two primary reasons: first, Young attempted to exemplify the tuning practices of the leading instrument makers on the European continent at the turn of the nineteenth century through his temperament, and second, it is exemplary of qualities common to all well temperaments. Owen Jorgensen supported the use of Young's temperament as the best choice for Schubert's music in personal correspondence with me before his death. I ranked the major and minor keys separately according to their purity

³⁸ Charles Brauner, "Irony in the Heine Lieder of Schubert and Schumann," *Musical Quarterly* 67 (April 1981): 261-281; Oliver Fürbeth, "Schubert's Doppelgänger," *Musik-Konzepte* 97-98 (1997): 66-74; *Franz Schubert: Todesmusik*, ed. Rainer Riehn and Heinz-Klaus Metzger (München: Kritik München, 1997), 66-74; Gernot Gruber, "Romantische Ironie in den Heine-Liedern," in *Schubert-Kongress Wien, 1978: Bericht*, ed. Otto Brusatti (Graz, 1970), 321-334; Kramer, *Distant Cycles*, 125-147; Douglass Seaton, "Interpreting Schubert's Heine Songs," *Music Review* 53 (May 1992): 85-99; Jack M. Stein, "Schubert's Heine Songs," *Journal of Aesthetics and Art Criticism* 24 (1966): 559-566; Francis Davis Stovall III, "Schubert's Heine Songs: A Critical and Analytical Study" (DMA diss., University of Texas, 1967); Susan Youens, *Heinrich Heine and the Lied* (New York: Cambridge University Press, 2007).

and the amount of color that each key contains, deriving the rankings from the systematic changes in interval sizes in the most significant chords in a key, namely tonic, dominant, and subdominant. In addition, I explore the elements other than key and chord quality (e.g., melodic vs. harmonic context, tessitura, dynamics, and tempo) that impact how temperament is perceived in a composition.

Chapters 3 and 4 examine the song cycle *Die schöne Müllerin*. I begin with an examination of how temperament is the guiding force behind the formal construction of the cycle, followed by an overview of which keys Schubert chose, how they keys were used, and what meaning(s) Schubert attributed to them. I examine Schubert's use of key colors and their meaning on both the macro and micro level, first by giving an overview of the musico-literary meanings Schubert associated with each key (specific to this cycle) and then by investigating these extra-musical associations in depth in detailed analyses of each song in Chapter 4.

Chapters 5 and 6 examine *Winterreise*, a song cycle with a more complex history than *Die schöne Müllerin*. Chapter 5 first documents the origins of the cycle and its manuscripts. I defend Schubert's transpositions and discuss the dramatic arc of the cycle created through *Temperaturfarben*. I also discuss the conception of key and the specific key meaning found in *Winterreise*. Chapter 6 follows the same model as Chapter 4: I examine the individual songs and elaborate upon how *Temperaturfarben* is used as a musico-literary tool within the cycle.

In Chapter 7 I discuss the controversial *Schwanengesang*, a publication that has long been viewed as a song cycle created by the publisher Tobias Haslinger. After

discussing the origins of the cycle and defending Haslinger's intention not to present these songs as a cycle but rather as Schubert's last works, I then examine the songs through the lens of *Temperaturfarben* to see if any cyclic elements emerge. After providing commentary on the individual songs, I use *Temperaturfarben* to test the hypothesis postulated by such scholars as Maurice Brown, Harry Goldschmidt, and Richard Kramer, that if Schubert's Heine songs are reordered according to the order in which they appear in *Die Heimkehr* they would constitute a mini cycle.³⁹ I conclude the dissertation with a synthesis of the elements found in the analyses of *Die schöne Müllerin*, *Winterreise*, and *Schwanengesang*, as well as discussion of transpositions, and future applications of temperament analysis both within Schubert's oeuvre and the works of other composers.

³⁹ See Maurice Brown, *Schubert's Songs* (Seattle: University of Washington Press, 1967), 61; Harry Goldschmidt, "Welches war die ursprüngliche Reihenfolge in Schuberts Heine-Liedern?" *Deutsches Jahrbuch für Musikwissenschaft* 17 (1974): 52–62; and Richard Kramer, *Distant Cycles, Schubert and the Conceiving of Song* (Chicago: University of Chicago Press), 125–147.

Chapter 1

Temperament

In this dissertation I argue that Schubert's song cycles were conceived and performed in well temperament, a system in which each key has a unique timbral color created by intervals that are not uniform in size. These colors influenced Schubert's key choices and allowed him to create musico-literary devices, such as foreshadowing and irony, that are lost when we listen to his Lieder in equal temperament. The first step to understanding the importance of musical temperament in Schubert's Lieder is to understand what temperament is and why it is used.

Musical Ratios, the Harmonic Series, and Musical Temperament

Tempering intervals makes it possible to build scales on different starting pitches and have them all sound acceptably in tune. Temperament can be traced back to the music of Ancient Greece: Pythagoras created the first known temperament (based on the interval of a perfect fifth), in the late sixth century BC. He was the first to acknowledge the relationship between musical intervals and numerical ratios. Legend has it that Pythagoras discovered frequency ratios while passing by a blacksmith's shop. According to the legend, he heard octaves, fifths, and fourths and realized that proportionally weighted hammers striking the horseshoes were producing the intervals.¹ To demonstrate

¹ This legend and other variations regarding Pythagoras's experiments circulated in works by writers including Micomachus, Iamblichus, Gaudentius, Macrobius, Boethius, and others.

the connection between musical and mathematical principles, we will use a monochord, a single string mounted on a sound box, instead of horseshoes and hammers.

The vibrations of a monochord's string demonstrate the naturally occurring frequency ratios for musical intervals. The basic premise is this: a string vibrates as a whole and in parts. The vibrations of different sized segments of string create harmonics that are part of the natural harmonic (or overtone) series.² For example, the sound of an octave is created through the frequency emitted by the string vibrating as a whole (referred to as the fundamental) and the string vibrating in half. Likewise, the sound of a perfect fifth is created by the frequencies emitted from the string vibrating in thirds and also in halves. Figure 1.1 shows the first four divisions of string vibration that result in the creation of the intervals unison, octave, fifth, and fourth above the fundamental.³

Because the intervals created by harmonics are divisions of the fundamental frequency, the intervals manifest themselves in whole-number ratios. The frequency ratios of perfect consonances are found in Table 1.1. These frequency ratios can be applied to harmonics or to any independently produced tones from a vibrating string, membrane, column of air in a tube, or other type of sonorous body. For example, when a pianist strikes an A that resonates at 440 Hz (our present-day standardized concert pitch), the A an octave above will resonate at 880 Hz, which is at the frequency ratio of 2:1.

² Harmonics are a sequence of frequencies that are composite multiples of the fundamental. The fundamental is the first harmonic and has the frequency $1f$, the second harmonic a frequency of $2f$, etc. Overtones are harmonics occurring above the fundamental; so, the second harmonic is also the first overtone, etc.

³Hermann von Helmholtz, *On the Sensation of Tone as a Physiological Basis for the Theory of Music*, 2nd English ed., trans. Alexander J. Ellis (New York: Dover, 1954), 46.

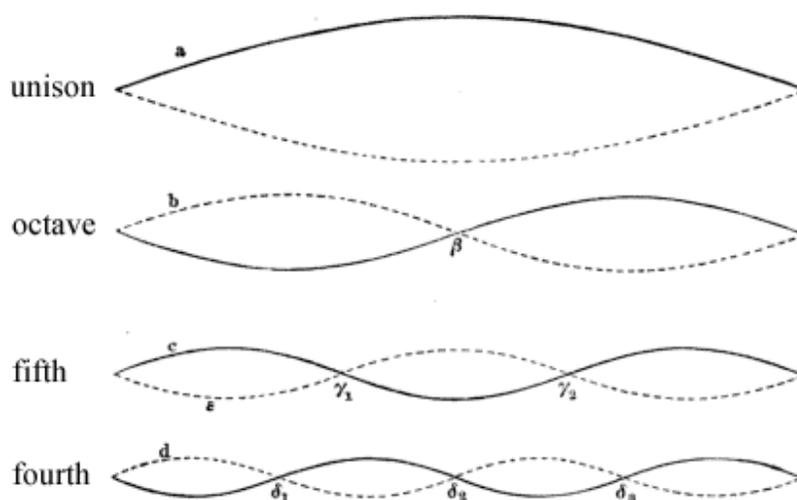


Figure 1.1: The first four divisions of the string in the overtone series. From Helmholtz, *On the Sensation of Tones*, p. 46. Used with permission from Dover.

Table 1.1: Frequency ratios of perfect consonances

1:1	unison
2:1	octave
3:2	fifth
4:3	fourth

The standard unit of measurement for discussing and comparing both intervals and temperaments is not frequency ratios or hertz, but cents.⁴ A cent is a logarithmic unit developed by Alexander J. Ellis, a philologist and mathematician who translated and contributed original content to Hermann von Helmholtz's monumental work *On the Sensation of Tones as a Physiological Basis for the Theory of Music*.⁵ Cents are a unit of measurement that allow for the comparison of extremely small intervals. 1 cent is equal

⁴ Hertz and cents measure different things. Hertz are a measurement of a pitch's frequency in cycles per second. Cents are used to measure the distance between two pitches. If compared to a map, hertz would be to longitude and latitude what cents are to miles or kilometers.

⁵ Alexander J. Ellis, "Additions by the Translator," in Helmholtz, *On the Sensation of Tone*, 430-556.

to .01 semitones, thus a single semitone is equal to 100 cents. Table 1.2 lists the corresponding cents measurements for the interval ratios listed in Table 1.1 as well as for major and minor thirds.⁶

Table 1.2: Interval ratios and their corresponding measurement in cents

1:1	unison	0 cents
2:1	octave	1200 cents
3:2	fifth	702 cents
4:3	fourth	498 cents
5:4	major third	386 cents
6:5	minor third	316 cents

With the use of cents we can more easily examine the natural phenomenon that creates the need for musical temperament. In Western music, it is traditional to use octaves that are pure intervals (also known as just or natural intervals). However, when all intervals are used in their pure form, additive combinations of different sized intervals that should result in same pitch class do so at slightly different frequencies. For example, if a musician were to tune a keyboard according to the circle of fifths, she would tune a succession of 12 fifths, which would be equivalent to 8,424 cents (12×702). However, the seven octaves that span the same distance as the 12 fifths are equivalent to 8400 cents (7×1200). What results is a discrepancy of 24 cents, which is called a Pythagorean or diatonic comma. Thus it is impossible to have both pure fifths and pure octaves.

Pythagoras's solution to this problem, known as Pythagorean tuning, was to preserve as many pure fifths as possible and only temper the last fifth in order to match the frequency

⁶ The formula for converting frequency ratios to cents is: $1200 * (\log r) / \log(2)$ where r is the frequency ratio. All computations are rounded to the nearest cent.

created by pure octaves. Pythagoras's system resulted in one fifth that was 24 cents wider than pure. This type of tempered fifth is often referred to as a *wolf fifth*, a fifth so far from pure that it seems to be howling out of tune. In Pythagorean tuning, the wolf fifth is built on G#.

Another important comma is the difference between four natural fifths ($4 \times 702 = 2808$ cents) and two octaves plus a major third ($2 \times 1200 + 386 = 2786$ cents). This 22 cent comma is called the syntonic comma. Often in theoretical writings, no distinction is made between the different commas; the generic term "comma" is often used instead of "Pythagorean comma" or "syntonic comma." Clive Greated has stated that "for practical tuning purposes, the difference between the two types of commas is often ignored and the comma is taken to equal 24 cents."⁷

Musicians throughout history have dealt with the comma according to their own musical needs and aesthetic sensibilities; some have valued purity of intervals, while others have valued the usability of keys. However, it is impossible to have both purity of intervals and usability of all keys. A more even distribution of the comma results in an increased number of usable keys but at the same time creates fewer pure intervals. Currently, the temperament in use for Western music is equal temperament, which accentuates the usability of all keys at the expense of intervallic and harmonic purity. Yet, equal temperament is only one of many types of temperament used throughout history.

⁷ Clive Greated, "Comma," in *Grove Music Online. Oxford Music Online*, <http://www.oxfordmusiconline.com/subscriber/article/grove/music/06186> (accessed March 18, 2009).

Equal vs. Well Temperaments

During Schubert's lifetime, there were two prevalent systems of temperament: equal and well. Two major issues encountered when studying temperament during this era stem from the coexistence of these two temperaments. The first issue is the general assumption among the current musical community that present-day equal temperament was the only temperament in use during Schubert's lifetime. The second issue is the assumption that if given a choice between equal temperament and another system, Schubert and his contemporaries would have chosen equal. In order to clarify these misconceptions, we must first examine equal temperament and its history.

In the equal temperament system used in Western music, the octave is divided into twelve equal semitones.⁸ The only non-tempered interval is the octave. All of the other intervals are narrow or wide, with the smallest difference being two cents (perfect fifth) and the largest difference 24 cents (major third). The tempering of each musical interval is the same for every key, which results in the uniformity of major and minor scales. Table 1.3 illustrates the difference in size between intervals in their pure form and in equal temperament.

⁸ Any equal division of the octave is a form of equal temperament. Non-Western traditions and avant-garde composers have divided the octave in equal intervals both greater and less than twelve.

Table 1.3: The difference in cents between pure intervals and equal tempered intervals.

Interval	Pure interval (in cents)	Equal temperament interval (in cents)	Difference (in cents)
Unison	0	0	0
Minor second	112	100	-12
Major second	204	200	-4
Minor third	316	300	-16
Major third	386	400	+24
Perfect fourth	498	500	+2
Augmented fourth	590	600	+10
Diminished fifth	610	600	-10
Perfect fifth	702	700	-2
Minor sixth	814	800	-14
Major sixth	884	900	+6
Minor seventh	1018	1000	-18
Major seventh	1088	1100	+22
Octave	1200	1200	0

The theory of equal temperament appeared in theoretical treatises centuries before it was put into practice. The first tuning instructions to be interpreted as equal temperament were published by Giovanni Maria Lanfranco in his *Scintille de musica* of 1533. His instructions were far from exact; he instructed keyboard players to tune fifths flat and thirds as sharp as one's ear can stand.⁹ The results of this method would be approximate at best.

Not long after Lanfranco's *Scintille*, Francisco de Salinas published his own theory of equal temperament in 1577, and Simon Stevin published calculations for the intervals in 1585.¹⁰ Other important writers on equal temperament include, but are not

⁹ James Murray Barbour, *Tuning and Temperament: A Historical Survey* (New York: Dover, 2004), 45.

¹⁰ Owen Jorgensen, *Tuning the Historical Temperaments by Ear* (Marquette: Northern Michigan University Press, 1977), 7.

limited to: Gioseffo Zarlino, Marin Mersenne, Andreas Werckmeister, Johann Georg Neidhardt, Georg Andreas Sorge, Friedrich Willhelm Marpurg, and Alexander J. Ellis. Some writers, like Lanfranco, offered tuning instructions, while others offered geometrical, mechanical, or mathematical descriptions. However, as Marc Lindley points out, the impact that early theorists had on the adoption of equal temperament by practicing musicians is less than originally thought.¹¹ When instructions were given, as in the case of Lanfranco, the interval ratios were approximations. The majority of the theoretical discussions of equal temperament did not give musicians practical instructions on how to tune their instruments. Owen Jorgenson, one of the leading authorities on temperament, has pointed out that many of these theoretical tunings were designed for use with a monochord, so no additional instructions were given for tuning actual instruments.¹² The theory of equal temperament existed for centuries before musicians had specific and practical instructions for tuning their instruments in this system.

Musicians began to claim the use of equal temperament in their every-day music in the early nineteenth century. Nevertheless, a gap exists between the time musicians made this claim and the time that they were able to achieve a truly equal division of the octave. Jorgensen claims that equal temperament was not truly achievable on the piano until 1917 when William Braid White published his *Piano Tuning and Allied Arts*, a practical tuning manual that first established the modern science behind tuning a piano in

¹¹ Mark Lindley, "Temperaments," In *Grove Music Online*, Oxford Music Online, <http://www.oxfordmusiconline.com/subscriber/article/grove/music/27643> (accessed January 30, 2009).

¹² Owen Jorgensen, *Tuning. Containing: The Perfection of Eighteenth-century Temperament, The Lost Art of Nineteenth-century Temperament and The Science of Equal Temperament* (East Lansing, MI: Michigan State University Press, 1991), 406.

equal temperament.¹³ White, an acoustical engineer, was the first to create a system for tuning equal temperament on pianos that involved *checks*, also known as comparative intervals, which guaranteed the creation of a truly equal temperament. Prior to White's publication, it was customary for tuners to tune in sequences of fifths and fourths by ear without using checks. Nineteenth-century piano tuners relied heavily on hearing the specific color qualities associated with different intervals; thus they were guided more by their ears than a scientific method.¹⁴ As Ross Duffin has stated, "Before 1917 they may have called it ET [equal temperament], they may have thought they were tuning ET, but they weren't."¹⁵

Jorgensen and Duffin's assertion that equal temperament was not truly achievable before 1917 is supported by a study executed in the late 1885 by Alexander J. Ellis in which he tested the theoretical correctness of seven pianos representative of different tuners (including Ellis's own), who claimed to be using equal temperament.¹⁶ He used a *tonometer*, an instrument comprised of 105 precisely calibrated tuning forks spanning approximately one and a half octaves to measure the frequency of individual notes.¹⁷ His results showed that not a single tuner who claimed to tune in equal temperament actually

¹³ Jorgensen, *Tuning*, 3, 354–355; William Braid White, *Piano Tuning and Allied Arts*, 5th ed. (Boston: Tuners Supply Company, 1946).

¹⁴ Jorgensen, *Tuning*, 5–6.

¹⁵ Ross Duffin, *How Equal Temperament Ruined Harmony and Why You Should Care* (New York: W.W. Norton, 2006), 112.

¹⁶ Ellis, "Additions by the Translator," 484–485.

¹⁷ See Alexander J. Ellis, "On the History of Musical Pitch," *Journal of the Society of Arts* 28 (March 5, 1880): 299. The tonometer was invented by Johann Heinrich Scheibler, a German physicist who is credited with being one of the first people to create scientifically accurate measurements of sound frequencies.

achieved it. Table 1.4 is a reproduction of Ellis's results table: line one lists the measurements for theoretically correct equal temperament, and the following lines are the measurements of the seven pianos he tested. The results show that the tuners were tuning the most frequently used keys so that they had purer intervals than the lesser-used keys.¹⁸ Thus, what tuners claimed was equal temperament was actually an unequal temperament that reflected attributes of well temperament. The closest approximation to equal temperament is found on piano seven. For pianos one, three, and six, the major thirds built on C are noticeably narrower than equal temperament, implying that the tuners favored the C major triad by tempering the third built on C major to make it closer to pure (a practice found in well temperament). The cents measurements for piano two also imply a well temperament, although in this temperament the major third built on C is substantially wider than both a pure and an equal-tempered third.¹⁹ Since it is clear that what was called equal temperament during the nineteenth century was not truly equal, it is more accurate to label equal temperament in the 1800s as *quasi-equal temperament* or, as Jorgensen has labeled it, "Victorian" temperament.²⁰

Until recently, most scholarship on temperament has presented equal temperament as the ultimate solution to the problem of distributing the comma, perpetuating the idea that it is superior to earlier kinds of temperament. This view is connected to the concepts of modernism and progress. For example, the twelve-tone

¹⁸ Ellis, "Additions by the Translator," 485.

¹⁹ Jorgensen, *Tuning*, 535.

²⁰ Owen Jorgensen, *The Equal Beating Temperaments* (Raleigh: Sunbury, 1981), 14. Jorgensen chose to call these temperaments *Victorian* after the historical area.

Table 1.4: Specimens of Tuning in Equal Temperament from Ellis's *Additions by the Translator*, p. 485. Ellis took the measurement in cents of each note of 7 different pianos.

	C	C#	D	D#	E	F	F#	G	G#	A	A#	B	C
Equal Temp.	0	100	200	300	400	500	600	700	800	900	1000	1100	1200
Piano 1	0	96	197	297	392	498	590	700	797	894	990	1089	1201
Piano 2	0	99	200	305	411	497	602	707	805	902	1003	1102	1206
Piano 3	0	100	200	300	395	502	599	702	800	897	999	1100	1200
Piano 4	0	101	199	299	399	500	598	696	800	899	999	1100	1200
Piano 5	0	101	192	297	399	502	601	702	806	898	1005	1099	1201
Piano 6	0	98	200	298	396	498	599	702	800	898	999	1099	1199
Piano 7	0	100	200	300	399	499	600	700	800	900	1001	1099	1200

system could not exist outside of equal temperament. In the twentieth century, the question of which temperament was best for Western music was largely viewed as a resolved issue; musicians and scholars were generally of the mind that earlier composers would have used equal temperament if the system had been available to them. However, recent work by such scholars as Ross Duffin, Herbert Kellertat, and Jonathan Bellman have helped shed light on the importance of alternative temperaments previously dismissed as inferior systems.²¹ Unequal temperaments may have played an important role in the conception, execution, and expression of musical works throughout the nineteenth century, a century to which the reign of equal temperament has been

²¹ For further reading see Jonathan Bellman, "Toward a Well-Tempered Chopin," *Chopin in Performance: History, Theory, Practice*, Proceedings of the 5th International Chopin in Performance Conference 2004, ed. Artur Szklener (Warsaw: Narodowy Instytut Fryderyka Chopina, 2005), 27-40, and Herbert Kellertat, *Zur musikalischen Temperatur III: Franz Schubert* (Berlin: Merseburger, 1994).

erroneously attributed. The scholarly community's reexamination of the prevalent attitudes regarding equal temperament is reflected in Stuart Isacoff's publications on temperament. In 2001 he published the book *Temperament: The Idea That Solved Music's Greatest Riddle*; however, when the book was released in paperback two years later, the title was changed to *Temperament: How Music Became A Battleground for the Great Minds of Western Civilization*.²² Equal temperament is no longer regarded as the perfection of temperament, but instead as a choice related to the musical aesthetics and values of a certain time.

During Schubert's lifetime, many composers and musicians did not feel a need for equal temperament and rejected the system. Jorgensen has stated that "until the nineteenth century chromaticism developed and until composers wrote extensively in the keys D \flat , G \flat , and F \sharp major, there was no demand for true equal temperament."²³ Some musicians disliked equal temperament for the same reasons that others praised it: its potential to make all keys sound the same. For example, Johann Kirnberger advocated abandoning equal temperament in his *Die Kunst des reinen Satzes in der Musik* (1771), even though he acknowledged the advantages of equal temperament, such as the ability to play in all keys with the same degree of purity, and the presence of tempered intervals that are not offensive to the ear.²⁴ He criticized equal temperament for being impossible to tune by ear and for getting rid of the variety or colors of the keys. Kirnberger thought

²² Stuart Isacoff, *Temperament: How Music Became a Battleground for the Great Minds of Western Civilization* (New York: Vintage, 2003).

²³ Jorgensen, *Tuning the Historical Temperaments by Ear*, 11.

²⁴ Johann Kirnberger, *Die Kunst des reinen Satzes in der Musik*, trans. David Beach and Jürgen Thym (New Haven: Yale University Press, 1982), 11–24.

that nothing was gained by having twenty-four usable scales with the only differences being in mode: major or minor.²⁵ Kirnberger was not alone in his views: Jorgensen has stated that until 1815, the majority of musicians rejected equal temperament because of its “harsh thirds in natural keys and its lack of modulatory interest.”²⁶ Many composers desired the ability to create a different affect or color by modulating, and not just raise or lower the overall pitch level.

The continued popularity of systems other than equal temperament from the late 1700s to the mid 1800s is confirmed in an article by Thomas McGeary, which examines sources that advocated equal temperament and other temperaments.²⁷ McGeary has focused on documents that were “originally disseminated in a form suitable for practical tuning.”²⁸ Of these fourteen sources, seven advocated equal temperament, six advocated well temperament, and one gave instructions for both equal temperament and well temperament. It is safe to say that well temperament was still popular in the mid-nineteenth century.

While there is only one type of equal temperament that divides the octave into twelve semitones, there are many different kinds of well temperament. We unfortunately

²⁵ Ibid.

²⁶ Jorgensen, *The Equal Beating Temperaments*, 22.

²⁷ Thomas McGeary, “German-Austrian Keyboard Temperaments and Tuning Methods, 1770–1840: Evidence from Contemporary Sources,” *Journal of the American Musical Instrument Society* 15 (1989): 90–117. This article encompasses the temperaments advocated in Franz Schubert’s lifetime, which is the period that is most relevant to this dissertation.

²⁸ Ibid., 90. McGeary points out that neither of the two major surveys of temperament, Murry Barbour’s *Tuning and Temperament: A Historical Survey* and Owen Jorgenson’s *Tuning* make this distinction. I, however, disagree. Jorgenson in particular makes a distinction between theoretically correct and equal-beating methods of tuning, and he comments on the practicality of the theoretical models.

do not know which system of well temperament Schubert used, but for the purposes of this dissertation, I have chosen Thomas Young's well temperament of 1799 as a model.²⁹ Choosing Young's temperament took much research, thought, and deliberation. Most influential in my decision was personal correspondence that I had with Owen Jorgenson in February and March of 2009 while I was planning this project. I originally wrote to Jorgenson with the idea that I would create a model temperament that would be representative for what was most likely in use in Vienna during Schubert's lifetime instead of using a theoretical model that may have been published during Schubert's lifetime but not actually used by practicing musicians. To this he replied, "My latest conclusion is that the temperament published in 1799 by Thomas Young is the best common model well temperament that serves as a general temperament for the eighteenth century and at least the first half of the nineteenth century."³⁰ After further correspondence and consideration, Young's temperament seemed to be the best choice for two primary reasons: it is based on the tuning practices of the leading instrument makers on the European continent at the turn of the nineteenth century instead of a theoretical model that was never adopted, and it exemplifies qualities common to all well temperaments, which is important in analysis because what is true in Young's well temperament will remain true even if documents emerge revealing further information on which temperament Schubert used for his piano.

²⁹ Thomas Young, "Outlines of Experiments and Inquiries Respecting Sound and Light," *Proceedings of the Royal Music Society of London* 1 (1800), 106–150.

³⁰ Owen Jorgenson, "Personal Correspondence" (February 13, 2009).

The disparity between the temperaments published in theoretical treatises and the practice of working musicians was discussed earlier in this chapter. Young has stated that his temperament was an attempt to reflect the practices in use rather than advocate a new and or better system of tuning.³¹ This means that Young's temperament may be closer to the type of well temperament systems that musicians were using in Continental Europe at the beginning of the nineteenth century than the theoretical temperaments published around the same time.

In addition to being the system closest to common practice, Young's temperament embodies the characteristics common to all true well temperaments. Jorgensen has stated that "Young's temperament was the most perfect idealized form of well temperament ever published."³² One characteristic of all well temperaments is that the size of major thirds expands in an orderly fashion as the keys move away from C major in both directions around the circle of fifths. The variety in the size of major thirds gave keys unique qualities, often referred to as colors. All well temperaments will manifest the same basic colors. Jorgensen has explained:

Whether the various well temperaments were based on one-half, one-third, one-fourth, one-fifth, or one-sixth comma narrow fifths made no difference. The locations of the various color effects nevertheless remained the same in the scale. The only differences between the various temperaments were differences in degrees; that is, the color contrasts could be great, or they could be mild. A specific color might be brilliant and highly contrasting in one temperament while it could be subdued almost to the point of being grey in another temperament; but, it was nevertheless still the same color.³³

³¹ Ibid, "Outlines of Experiments," 145.

³² Jorgensen, *Tuning*, 252.

³³ Jorgensen, *Tuning*, 517.

Figure 1.2 shows Young's temperament in graphic form.³⁴ Note that the thirds are paired and increase in size as they move away from C major in a symmetrical pattern. The uniformity in Young's model allows for more distinction between the different colors in well temperament. For example, in other well temperaments, keys close to C may be kept more pure, and thus have their colors muted, which would result in exaggerated colors in the keys with three to four accidentals. A less symmetrical distribution of minor thirds can, as Jorgensen puts it, subdue some colors to the extent to which they are gray.

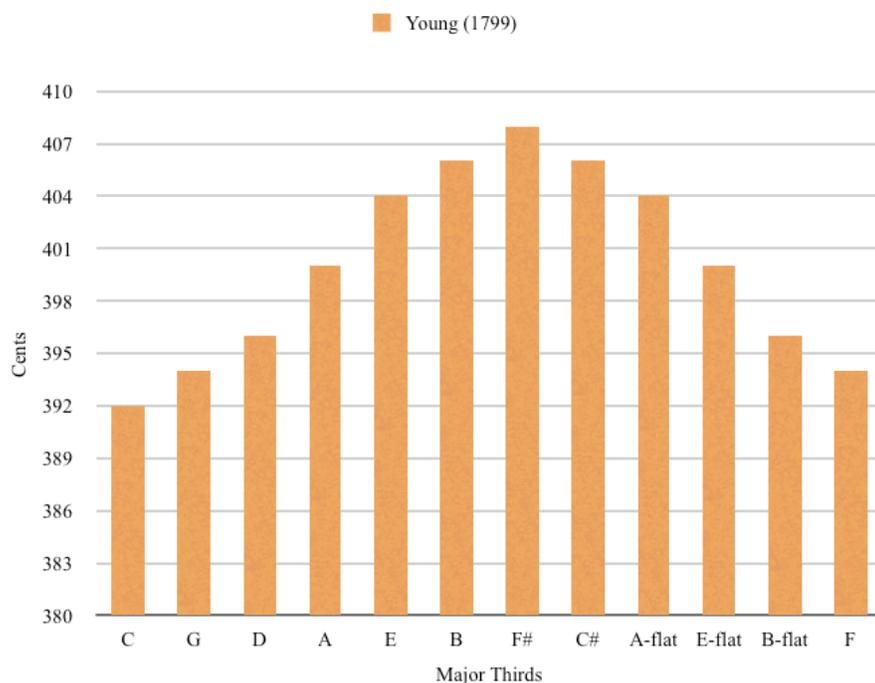


Figure 1.2: The size of major thirds in Young's temperament of 1799. Chart data taken from Jorgensen *Tuning*, 264–265.

³⁴ Since Young did not discuss his tuning in cents, my calculations for his temperament are based on the cent conversions of major thirds that Jorgenson established in *Tuning*, p. 264. From these measurements I calculated all of the other intervals in Young's temperament.

In addition to explaining why I have chosen Young's system of temperament as a model, I must explain why I did not choose Kirnberger's temperament. Not only was Kirnberger an advocate of well temperament, but he also created three different versions of his own temperament. The most popular of these is referred to as Kirnberger II and was published in the aforementioned *Kunst des reinen Satzes in der Musik*. In the only monograph to address the topic of Schubert and temperament, *Zur musikalischen Temperatur III: Franz Schubert*, Herbert Kellat has advocated for analyzing Schubert's song cycles using Kirnberger II.³⁵ Kellat has supported this position by examining the different texts advocating well temperament that were in circulation during Schubert's time. There are, however, multiple factors that weaken Kellat's argument that Schubert would have used Kirnberger II. First, while Kirnberger's system was mentioned in print quite frequently, it was still a theoretical model that was not generally used by working musicians. McGeary has stated that:

Of the unequal temperaments, it was Kirnberger's second temperament that was sufficiently well known to be recognized as *the* alternative to equal temperament. However, we should not let the number of advocates of Kirnberger's temperament, or its notoriety, mislead us about its importance and use as a practical tuning scheme.³⁶

One of the reasons for the popularity of Kirnberger's system in print was the controversy that occurred between Kirnberger and Friedrich Wilhelm Marpurg.³⁷ Kirnberger, who had

³⁵ Kellat, *Zur musikalischen Temperatur III: Franz Schubert*, 6–13.

³⁶ McGeary, "Keyboard Temperaments," 115.

³⁷ For a more detailed discussion of this controversy, See "Marpurg versus Kirnberger: The Tuning Controversy in Germany," in Rita Steblin, *A History of Key Characteristics in the Eighteenth and Early Nineteenth Centuries*, 2nd ed. (Rochester: University of Rochester Press, 2002), 73–95. Also see *Piano: An Encyclopedia* (New York: Routledge, 2003), s.v. "Temperaments, Historical."

been a student of J. S. Bach, and Marpurg, who had been a student of Rameau, were engaged in a public dispute over musical matters including temperament. Kirnberger advocated well temperament and Marpurg was a firm believer in equal temperament. It is probable that Kirnberger's temperament system was mentioned in print frequently because theorists and musicians were taking sides in the Kirnberger versus Marpurg controversy. McGeary states that "advocates of Kirnberger II were clearly in a minority position—friends and partisans of Kirnberger, and musical conservatives (some of whom thought he was transmitting the Bach tradition) conducting a polemical campaign...."³⁸ Kirnberger's system was discussed frequently not because of its popularity, but because of its controversial nature.

Jorgensen also points out that "unlike the Thomas Young temperaments which were based on common practice, the Kirnberger temperament was a new proposal aimed at the easiest methods of tempering possible."³⁹ While the ease with which musicians could create Kirnberger's temperament on their own instruments could be a reasonable argument for its use or popularity, the resulting sound appears to have been less than desirable. In Kirnberger II, the C major, G major, E minor, and B minor triads are all in just intonation. Kirnberger divided the comma between the fifths D/A and A/E. Jorgensen points out that these two fifths, both a half-comma narrow, were "exactly twice as much as the quarter comma tempering that had been traditional for centuries."⁴⁰

³⁸ McGeary, "Keyboard Temperaments," 115.

³⁹ Jorgensen, *Tuning*, 277.

⁴⁰ *Ibid.*, 275.

The last reason why Young's temperament is preferable to Kirnberger's is that while Kirnberger's system can be categorized as a type of well temperament, it can also be classified as modified Pythagorean or modified meantone.⁴¹ Since Kirnberger's system divides the syntonic comma between only two intervals, it does not create the same orderly variety in the sizes of major thirds and other intervals that are found in most well temperaments. Young's system is much more useful for illustrating the typical qualities and effects of well temperament. Figure 1.3 shows the size of major thirds in the Young and Kirnberger temperaments, as well as two other well temperaments: Prinz, and Victorian well (which is modeled on the best tuner from Ellis's 1885 experiment discussed above).⁴² One will observe that the well temperaments all have a similar contour. The size of the major thirds gets larger as the tonic pitch moves farther away from C.

With the Young, Prinz, and Victorian well temperaments the size of the thirds change gradually, but in Kirnberger's temperament they are more terraced. While Kirnberger's temperament has the most pure thirds, four that measure 386 cents (built upon C, G, and D), his temperament also has the widest thirds, which, at 418 cents, are almost a quarter tone wider than a natural major third. One also notices that Kirnberger's temperament does not follow the same contour as the other well temperaments, which outline a bell shape. Kirnberger's temperament is too different from the other well temperaments popular in the eighteenth and nineteenth century to be used as an analytical

⁴¹ Ibid., 277.

⁴² The Ira F. Brilliant Center for Beethoven Studies uses the Prinz temperament for their pianos.

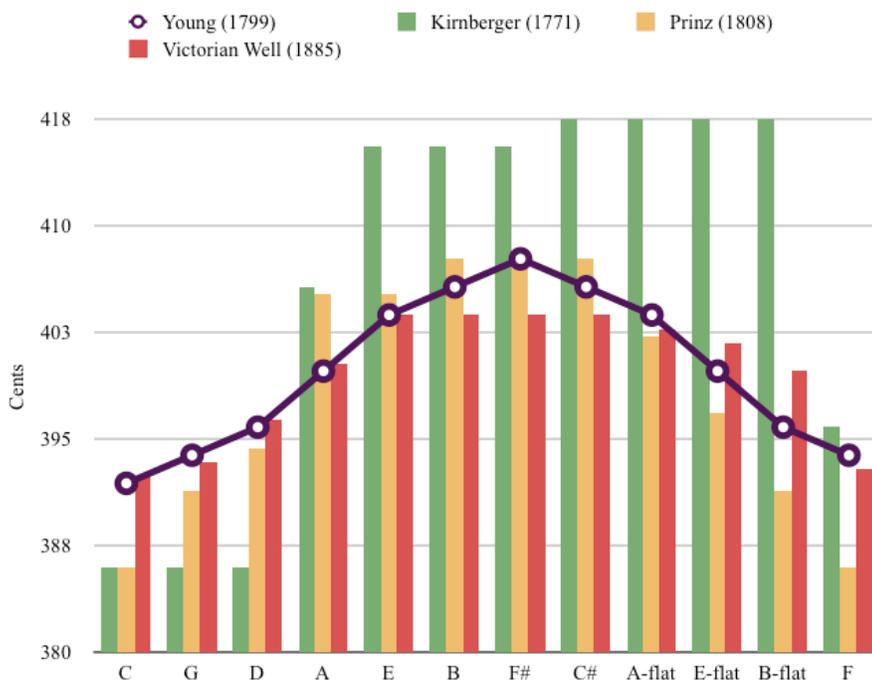


Figure 1.3: Major Thirds in Well Temperament. Chart Data taken from Jorgensen, *Tuning*.

model. Figure 1.3 clearly shows that Young's temperament is indeed more representative of other types of well temperament and is thus a better choice for the basis of an analytical model for Schubert's use of temperament in his song cycles.

Young's Temperament

The colors in well temperament result from an ordered changing in the size of significant intervals as keys move away from C major. This is best illustrated by looking at the intervals in major and minor triads: perfect fifths, major thirds, and minor thirds. As a point of reference, remember that in equal temperament, all major chords will contain a fifth of 700 cents and a major third of 400 cents. Minor chords will contain a

fifth of 700 cents and a minor third of 300 cents. Figure 1.4 below illustrates the size of perfect fifths, major thirds, and minor thirds in the context of the circle of fifths in

Young's well temperament of 1799.⁴³

When looking at the figure, one observes that there are three different kinds of fifths: 702 cents (pure), 700 cents, and 698 cents. For each of the three sizes of fifths, none has the same sized major third. Thus, a major triad built on each note of the scale will sound slightly different.

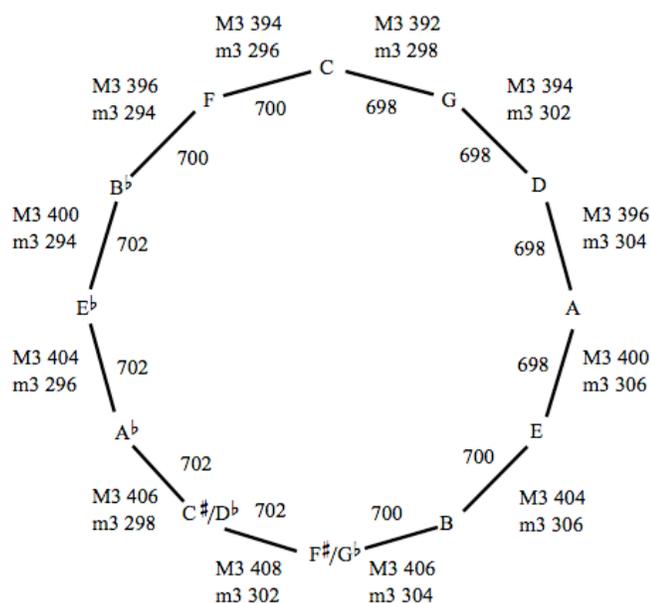


Figure 1.4: The size of perfect fifths, major thirds, and minor thirds in Young's well temperament of 1799.

The variety of interval sizes in different keys is more easily perceived when examining how the intervals in Young's well temperament differ from pure intervals.

Figure 1.5 shows the same circle of fifths with the degrees to which each interval is away

⁴³ Modeled after diagrams found in Claudio Di Vérolí, *Unequal Temperaments and Their Role in the Practice of Early Music* (Argentina: Artes Graficas Farro, 1978).

from pure. In Young, all of the major thirds are wider than pure. The narrowest major third is between C and E at 6 cents wider than pure, and the largest is between F# and A# at 22 cents wider than pure. With the exclusion of these two intervals, the major thirds are paired; they increase in size moving away from C, both clockwise and counterclockwise, around the circle of fifths.

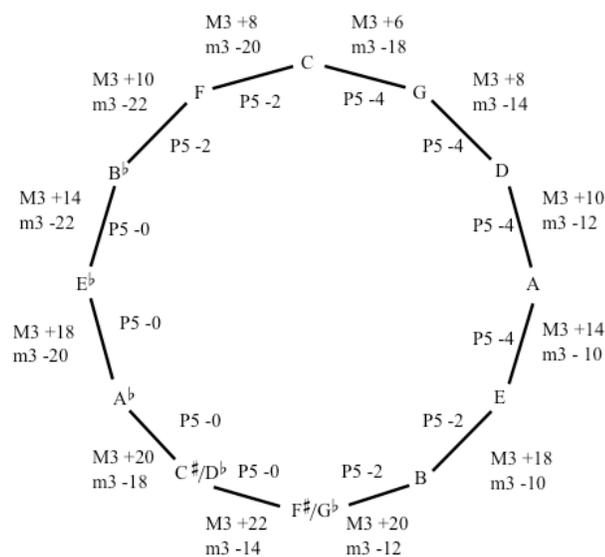


Figure 1.5: The difference between pure perfect fifths, major thirds, and minor thirds and those in Young's well temperament of 1799.

The minor thirds are all narrower than pure; they are also paired, but in a different pattern than the major thirds. The closest minor thirds to pure are found in the minor triads of A and E minor. The minor thirds become farther away from pure as they move clockwise and counterclockwise away from A and E. The minor thirds built on F and B \flat are the narrowest at 22 cents away from pure.

Figures 1.4 and 1.5 show that the largest deviation between a pure and tempered interval is 22 cents, and sometimes the difference between pure and tempered intervals

varies by only a few cents. If a cent is one one-hundredth of a semitone, the differences listed above range from one-twentieth to eleven-fiftieths of a semitone. This highlights an important issue: to what extent can human ears perceive these differences?

Discrimination Thresholds

In White's aforementioned influential tuning book, he has noted "a distance of 3 Cents is noticeable by keen ears."⁴⁴ Ellis believed that two cents is the limit of what human ears can perceive.⁴⁵ Studies in the fields of acoustics and psychoacoustics have shown that people with musical training or high exposure to music have a greater ability to detect intonation deviations.⁴⁶ Scientists acknowledge that the perception of intonation is dependant on multiple factors, and thus there is not yet an established discrimination threshold that outlines definitively the difference in cents that the human ear can perceive. Musical training, although extremely important in creating acute listening skills, is only one element that contributes to what a person can or cannot hear. Other important factors impacting a person's ability to perceive differences in intonation are the context of a pitch or an interval (isolated, melodic, or harmonic), the complexity of the musical frequency ratio, and the perception of beats.

⁴⁴ White, *Piano Tuning*, 75. Capitalization and numbers are in the style of the original source text.

⁴⁵ Ellis, "Additions by the Translator," 485.

⁴⁶ Janina Fyk, "Tolerance of Intonation Deviation in Melodic Intervals in Listeners of Different Musical Training," *Archives of Acoustics Quarterly* 7 no. 1 (1982): 13–27.

A study conducted by acoustician Jania Fyk tested the ability of trained and untrained musicians to perceive intonation deviation in melodic intervals.⁴⁷ Not only did this study substantiate the difference between trained musicians and untrained individuals in their ability to perceive intonation deviations, but it also showed that people's ability to perceive intonation discrepancies decreased when intervals were isolated rather than placed within a melodic context.⁴⁸ Additionally, in the test group comprised of trained musicians, their ability to discern intonation differences was influenced by the functional tendency of the interval; listeners were more sensitive to discrepancies among intervals with strong harmonic implications, such as melodies with a melodic major seventh as part of a $vii^{\circ} - I$ progression.⁴⁹ The results of this study showed that for intervals within a melodic context, some listeners could identify intonation differences at five cents.⁵⁰

The last two factors impacting intonation discrimination, musical frequency ratio and the perception of beats, apply specifically to intervals in the harmonic context. Acoustician Joos Vos has done multiple studies exploring the perception of and discrimination threshold for pure and tempered intervals. His experiments show that listeners are more likely to perceive temperament differences in traditionally consonant intervals than in dissonant ones because discrimination thresholds are highly correlated

⁴⁷ Ibid.

⁴⁸ Ibid., 25.

⁴⁹ Ibid., 16 and 26.

⁵⁰ Ibid., 19–21.

with the complexity of a musical interval's frequency ratio.⁵¹ Consonant intervals have simple frequency ratios comprised of small whole numbers, such as octaves (2:1), fifths (3:2), fourths (4:3), and major thirds (5:4). More dissonant intervals like minor seconds (16:15) and augmented fourths (45:32) have more complex ratios, and since these intervals are already perceived as dissonant, the increased dissonance created by tempering is harder for a listener to detect.

The Perception of Beats

Many who advocate historical temperaments often postulate that the reason intervals in equal temperament are agreeable to the ears of twenty-first century listeners is because we have become conditioned to them. Nevertheless, even if equally-tempered intervals are our aural model for proper tuning and intonation, we can still objectively examine the beats produced by these more complex frequency ratios found in equal temperament and how they differ from the pure forms of the intervals. As defined by Clive Greated in the *New Grove Dictionary*, beats are “an acoustical phenomenon, useful in tuning instruments, resulting from the interference of two sound waves of slightly different frequencies. The number of beats per second equals the difference in frequency between the two notes.”⁵² For example, if one instrument is producing the tone A 440

⁵¹ Joos Vos and Ben G. van Vianen, "Thresholds for Discrimination Between Pure and Tempered Intervals: The Relevance of Nearly Coinciding Harmonics," *Journal of the Acoustical Society of America* 77 (1985): 186.

⁵² Clive Greated, “Beats,” in *Grove Music Online*, Oxford Music Online, <http://www.oxfordmusiconline.com/subscriber/article/grove/music/02424> (accessed February 14, 2009).

Hz, and another is producing the tone A 441 Hz, a listener will hear one beat per second.⁵³ Listeners hear the phasing of the sound waves of the two frequencies, which manifests as regular pulsations of greater volume.

Greated's definition states that beats occur between notes very close in frequency; however, beats are also heard with larger intervals. Helmholtz was one of the first to explain that the beats produced by intervals that are larger than a minor third are created by upper partials and combination tones.⁵⁴ Intervals that result in beats are tempered or complex; the intervals with simple frequency ratios have beatless relationships. Beats in tempered intervals occur because the two fundamental tones have upper partials that are nearly the same pitch as other upper partials or one of the fundamental frequencies. For example, if an equal tempered fifth C–G sounds, the fifth produced as the third harmonic (or second upper partial) above C as its fundamental will be a pure fifth at 702 cents, while equally tempered fifth will measure 700 cents. This two-cent difference will manifest itself as two Gs sounding approximately 8 hertz apart, thus beating at a rate of eight times per second.

The other source of beats in complex or tempered intervals is combination tones. The phenomenon of combination tones occurs when a listener can perceive a tone that is

⁵³ The intervallic difference between A 440 Hz and A 441 Hz is approximately four cents. See the Appendix for more information on calculating beats.

⁵⁴ Helmholtz, *On the Sensation of Tones*, 180. Ellis distinguishes between upper partials, harmonics and overtones in footnotes 23–25. Ellis states that upper partials are the partials created excluding the prime or fundamental tone. He says that “harmonics” is an ambiguous term, and that “overtone” is a mistranslation of *Obertöne*, a contraction of *Oberpartialtöne*; he notes that in German *ober* means upper and *über* means over.

the frequency of the sum or difference of the other frequencies in the interval. Between upper partials and combination tones, the former is the more prominent source of beats.

In a study that tested the perception of pure and mistuned fifths and major thirds, Vos concluded that the discrimination threshold was highest for intervals with the lowest beat frequencies.⁵⁵ This corresponds to his previous finding because the intervals with the simplest frequency ratios also have the smallest number of beats (or none whatsoever). The pulsing of beats is a major determining factor of whether or not an interval is perceived as in tune. Indeed, the beating of an interval or chord is a major factor in the establishment of different key colors in well temperament.

Vocalists and other instrumentalists who are not performing on instruments with fixed tuning, such as a violin, can adjust to the tuning method in use. However, it is important to note that in the performance of Lieder, if the singer is using vibrato, the occurrence of beats will only occur between notes produced by the piano, and not between the piano and vocalist. The use of vibrato eliminates the perception of beats.⁵⁶ However, if a singer chooses to use a straight tone, she can emphasize or highlight the beats of tempered intervals.

It is plausible that beats created from the piano accompaniment in Lieder create a distinct element of musical inflection that can correspond to a tone of voice or mood. For example, beatless intervals may be perceived as pure or sweet, while intervals that beat quickly as being harsh, excited, or agitated. In well temperament, each key has slightly

⁵⁵ Joos Vos, "The Perception of Pure and Mistuned Musical Fifths and Major Thirds: Thresholds for Discrimination, Beats and Identification," *Perception & Psychophysics* 32 (1982): 297–313.

⁵⁶ Johan Sundburg, "Acoustic and Psychoacoustic Aspects of Vocal Vibrato," *Department for Speech, Music and Hearing Quarterly Progress and Status Report* 35, no. 2–3 (1994), 64.

different sized intervals that will produce different numbers of beats per second, giving each key a unique sound that can be explained scientifically and objectively heard or observed.

There are other elements that impact beats, such as volume and frequency (louder notes will have more perceptible beats, and the pitches of higher frequencies will beat faster than those of lower frequencies) as well as constructive interference (when two sound waves of the same frequency sound they will combine and sound like one wave at a greater amplitude) and destructive interference (when two identical sound waves are out of phase by 180 degrees they will cancel each other out, also called phase cancelation). Acousticians have not created a formula that will account for all the variables that contribute to beats, but the sonic difference in well-temperament keys created by beats is as essential and complex as instrumental timbre. The entry for “Timbre (i)” in *Grove Music Online*, Murray Campbell states that:

Timbre is a more complex attribute than pitch or loudness, which can each be represented by a one-dimensional scale (high–low for pitch, loud–soft for loudness); the perception of timbre is a synthesis of several factors... The frequency spectrum of a sound, and in particular the ways in which different partials grow in amplitude during the starting transient, are of great importance in determining the timbre.⁵⁷

In spite of its complexity, no one doubts the importance that timbre has on a musical composition. The same complexity applies to the sound that results from beats created by temperament. The beating of well temperament adds another dimension to musical timbre. If the timbre of an instrument is equivalent to its identifying voice, the

⁵⁷ Murray Campbell. “Timbre (i),” in *Grove Music Online. Oxford Music Online*, <http://www.oxfordmusiconline.com/subscriber/article/grove/music/27973> (accessed October 21, 2009).

beats resulting from temperament result in an instrument's tone of voice. For example, a person can differentiate his mother from his sister due to the timbre of their voices, much as a person can differentiate an organ from a piano. But their moods, whether they are excited or sad, are indicated by their tones of voice, and this same effect in music is produced through the beating of tempered intervals. Non-beating intervals will sound neutral, fast-beating intervals will create a sense of agitation or excitement, and intervals with 'roughness' can create an emotionally laden timbre.

Key Characteristics and Affect

Throughout history, musicians and music theorists have attributed subjective meaning to the perceivable differences in keys in unequal temperaments.⁵⁸ Both Plato and Aristotle wrote about the ancient Greeks' belief that the unique characteristics of different keys or modes had the ability to not only impact one's mood, but one's *ethos*, or moral character.⁵⁹ Boethius, who is credited with translating many of the ideas regarding music and music theory into Latin in the early sixth century, illustrated the ancient Greek's belief in the power of music through a retelling of a tale from antiquity involving Pythagoras in his *Fundamentals of Music*:

⁵⁸ The most thorough studies of the history of key characteristics are: Rita Steblin, *A History of Key Characteristics in the Eighteenth and Early Nineteenth Centuries*, 2nd ed. (Rochester: University of Rochester, 2002), and Wolfgang Auhagen, *Studien Zur Tonartencharakteristik in Theoretischen Schriften Und Kompositionen Vom Späten 17. Bis Zum Beginn Des 20. Jahrhunderts*, Europäische Hochschulschriften 36: Musikwissenschaft, vol. 6 (Frankfurt am Main: Peter Lang, 1983).

⁵⁹ See Aristotle, *Politics*, trans. H. Rackham, Loeb Classical Library (London: W. Heinemann, 1932); Plato, *Republic*, trans. I. A. Richards (New York: Cambridge University Press, 1966); Plato, *The Laws*, trans. Trevor J. Saunders (Harmondsworth: Penguin, 1970).

It is common knowledge that song has many times calmed rages, and that it has often worked great wonders on the affections of bodies or minds. Who does not know that Pythagoras, by performing a spondee, restored a drunk adolescent of Taormina incited by the sound of the Phrygian mode to a calmer and more composed state? One night, when a whore was closeted in the house of a rival, this frenzied youth wanted to set fire to the house. Pythagoras, being a night owl, was contemplating the courses of the heavens (as was his custom) when he learned that this youth, incited by the sound of the Phrygian mode, would not desist from his action in response to the many warnings of his friends; he ordered that the mode be changed, thereby tempering the disposition of the frenzied youth to a state of absolute calm.⁶⁰

While the idea that different modes could change one's moral character was not maintained in the Western musical tradition, the belief in the affective qualities of the scales was perpetuated for hundreds of years, dating back to modal music. Medieval and Renaissance sources that discussed the different characters of the modes include Johannes Cottonis's *De Musica* (ca. 1100), Johannes de Muris's *Summa musicae*, Heinrich Glarean *Dodecachordon* (1547), and Gioseffo Zarlino's *Le Istitutioni harmoniche* (1588).

The Baroque Era is the historical period most closely associated with cultivating the idea of key characteristics as one element of the practice of creating musical affections and rhetoric. Hans Lennenberg states that "The doctrine of the affects and its sister doctrine of musical rhetoric were not merely theoretical approaches to a kind of music criticism; they were meant to be practical guides to composers."⁶¹ The number of Baroque theorists writing about the affections was vast and included Rousseau, Rameau,

⁶⁰ Anicius Manlius Severinus Boethius, *Fundamentals of Music*, trans. Calvin M. Bower, ed. Claude V. Palisca (New Haven, Yale University Press, 1989), 5.

⁶¹ Hans Lennenberg, "Johann Mattheson on Affect and Rhetoric in Music (I)," *Journal of Music Theory* 2 (April 1958): 47.

Mersenne, Kircher, Werckmeister, Printz, Mattheson, Marpurg, Scheibe, and Quantz. These writings were varied and diverse. In his *Das neu-eröffnete Orchestre* (1713), Johann Mattheson wrote about the lack of uniformity in the meanings composers assigned to keys.⁶² He described the characteristic affections for what he deemed the seventeen most practical keys, but he explicitly stated that these key characteristics are not universal but rather his alone. He acknowledged that those who discuss key characteristics do not agree on their meaning; there are contradictions among musicians since personal preference is a factor in the interpretation of key characteristics and affections.

While composers did not subscribe to a universal doctrine of the affections, many had their own personal doctrine. Kirnberger believed that the key characteristics were related to the purity of each key: the closer a key is to the natural form of the scale, the more pure or colorless it is.⁶³ Kirnberger's students Johann Abraham Schulz (bapt. 1747–1800) and Heinrich Christoph Koch (1749–1816) echoed their teacher's view on key purity in their treatises in two charts, one for major and one for minor (see Table 1.5). They listed the overall level of purity for the keys in a three-tiered system. The keys closest to C major and A minor are most pure. The tables of Schulz and Koch are almost identical except for enharmonic keys.

⁶² Johann Mattheson, *Das neu-eröffnete Orchestre* (1713; repr. New York: G. Olms, 1993), 235–236.

⁶³ Johann Kirnberger, *Die Kunst*, 11–24.

Table 1.5: The categorization of keys in regards to purity from Koch's tables from *Musikalisches Lexikon* (1802), p. 1553.

Major Keys:				
C	G	D	F	purest
A	E	B	F#	harder [härter]
Bb	Eb	Ab	Db	hardest
Minor Keys:				
A	E	B	D	purest
F#	C#	Ab	Db [sic Eb]	softer [weicher]
C	G	F	Bb	softest

Even with theorists such as Marpurg advocating equal temperament and debating the validity of well temperaments and affect, the tradition of key characteristics continued into the nineteenth century. At the turn-of-the-century theorists began to move away from the classification of keys in regards to purity and wrote about key characteristics in a more fanciful way. However, the ideas of earlier musicians such as Mattheson and Kirnberger were often incorporated into their writings.⁶⁴

One of the most famous and influential publications on key characteristics at the turn of the nineteenth century was Christian Frederich Daniel Schubart's *Ideen zu einer Ästhetik der Tonkunst* (written in 1784, published in 1806). Schubart's descriptions are representative of the more rhapsodic style of nineteenth-century writers. For example, Schubart describes A major as a key that "includes declaration of innocent love, satisfaction with one's state of affairs; hope of seeing one's beloved again when parting; youthful cheerfulness and trust in God," and states that E minor "can be compared to a

⁶⁴ Steblin, *A History of Key Characteristics*, 146.

maid, dressed in white, with a rose-red bow at her breast.”⁶⁵ Schubart’s work does not assign concrete meaning to keys, but his list of key characteristics was nevertheless widely adapted and commented upon by other writers and musicians.

There were many other early-nineteenth-century writers on key characteristics including high profile names such as E.T.A. Hoffmann (“Kreislers musikalisch-poetischer Klub,” 1814), Georg Joseph Vogler (*Deutsche Encyclopädie*, 1779), J.J. Wagner (“Ideen über Musik” 1823), and Robert Schumann, who in 1835 wrote an essay on key characteristics in response to Schubart’s *Ideen*.⁶⁶ Starting in 1839, ideas from Schubart’s and Hoffmann’s essays appeared frequently in Schumann’s *Die Neue Zeitschrift für Musik*.⁶⁷

Throughout history, the published debates regarding key characteristics did not focus on the specific meaning of each key, but rather on which phenomena caused the characteristics. Mattheson attributed the key characteristics mainly to differences in pitch levels.⁶⁸ Kirnberger and his students attributed them to key purity. Another justification

⁶⁵ Ibid., 91.

⁶⁶ Robert Schumann, “Characteristics of the Keys (1835),” in *The Musical World of Robert Schumann: A Selection from His Own Writings*, ed. and trans. Henry Pleasants (New York: St. Martin’s Press, 1965), 62–63.

⁶⁷ Leon B. Platinga, *Schumann as Critic* (New Haven: Yale University Press, 1967), 70.

⁶⁸ Joel Lester, “The Recognition of Major and Minor Keys in German Theory,” *Journal of Music Theory* 22 (Spring 1978): 85. Lester notes that Mattheson’s presentation of key affects is “a confusing mixture of old and new theory. He [Mattheson] rejects the opinion that the entire affect resides in the major or minor third, or in the key signature.” Mattheson relates affect back to modality by referring to modal names so that he could continue in the tradition of affect because affects for major and minor keys had yet to be established. Mattheson’s focus on affect is more modally and linearly based than tonally and harmonically based.

for key characteristics is what Rita Steblin refers to as “the sharp–flat principle,”⁶⁹ which was stimulated by two main factors: physical and psychological. The physical considerations pertain mostly to orchestral instruments, string instruments in particular. Many writers who discussed the physical reasons behind key characteristics explained that keys that were played with many open strings, such as D, A, and E, sounded different from those that used more stopped stings, such as B \flat , E \flat , and A \flat .⁷⁰ These factors may have influenced the personal and historical connotations of individual keys, but the differences in sound created by the specific properties of stringed instruments are not present in a Lied for voice and piano. The psychological factors behind the sharp–flat principle involve preconceived notions about how musical pieces in certain keys should sound.⁷¹ Generally speaking, sharp and flat keys are associated with different overall qualities; sharp keys were characterized as being lively, edgy, and joyful, while flat keys were characterized as being softer and more solemn.

The associations with sharp and flat key signatures extend beyond the use of current key signatures. The ideas relate back to the *cantus durus* (hard; incorporated b \natural) and *cantus mollis* (soft; incorporated b \flat) of modal music. Eric Chafe has discussed how the literal meaning of these terms (hard and soft) was associated with both changes in

⁶⁹ Steblin, *A History of Key Characteristics*, 96–128.

⁷⁰ *Ibid.*, 131.

⁷¹ *Ibid.*, 96.

system (*durus*, *mollis*), mode, and the mode's final.⁷² Tonal composers inherited these complex ideas regarding key signatures.

The historical associations of different keys were also related to instruments or well-known compositions. D major, for example, was often characterized as victorious, rejoicing, grand, noble, and/or courageous largely because of the military use of the natural trumpet, which was most commonly pitched in D. Other historical associations were derived from composers' common use of a key, such as the use of F major for pastoral imagery, the most well-known example being Ludwig van Beethoven's Symphony No. 6, "Pastoral" (Op. 68), which was completed in 1808.

Since it is well known that Beethoven was a very influential figure in Schubert's life, it is reasonable to believe that Beethoven's own views on key characteristics would have either directly or indirectly had an impact on Schubert. While there is no written evidence about Schubert's views on key characteristics, there are some primary documents that illuminate a few of Beethoven's views on different keys.⁷³ On the back of a sketch for the Cello Sonata Op. 102/2, Beethoven wrote "h moll schwartzte Tonart" (B minor dark key); B minor also proves to be a dark key in Schubert's song cycles.⁷⁴ Beethoven also mentioned key characteristics in a letter to George Thomson on February

⁷² Eric Chafe, "Aspects of *Durus/Mollis* Shift and the Two-System Framework of Monteverdi's Music," *Schütz-Jahrbuch* 12 (1990): 177.

⁷³ For a thorough examination of Beethoven and key characteristics, see Bruce E. Clausen, "Beethoven and the Psyches of the Keys" (Ph.D. diss., University of Southern California, 1988).

⁷⁴ Douglass Johnson, Alan Tyson and Robert Winter, *The Beethoven Sketchbooks* (Berkeley: University of California Press, 1985), 340–343.

19, 1813. Thomson had given Beethoven melodies with some tempo and expression markings and commissioned him to finish the songs.⁷⁵ Beethoven wrote:

The last two songs in your letter of December 21 pleased me very much. For this reason I composed them con amore, particularly the second one. You noted in [A \flat -major key signature drawn] but this key seems a little too natural and so little in harmony with the direction Amoroso that it might rather become *Barbaresco*, I have set it in a more appropriate key.⁷⁶

Beethoven's words illustrate that composers as well as theorists contemplated key characteristics during the early 1800s, and that they were a consideration in the compositional process. For Beethoven, key choice and the resulting character were an important factor in creating the mood or aesthetic he desired. Beethoven even spoke of key associations as if they were commonly held beliefs and nothing out of the ordinary. Another such comment about key characteristics was retold by Friedrich Rochlitz, the first editor of the Leipzig *Allgemeine Musikalisches Zeitung*, who documented a conversation he had with Beethoven in 1822. Beethoven reportedly said of the poet Klopstock, "Well, I did not always understand him, of course, He leaps about so much, he begins at too lofty an elevation. Always *Maestoso*, D flat major! Isn't it so? But he is great and uplifts the soul nevertheless."⁷⁷

In addition to absorbing Beethoven's ideas regarding key characteristics, Schubert would also have assimilated his teacher Antonio Salieri's (1750–1774) views. Salieri recounted in his memoirs his steps for composing an opera: "I read the poem through

⁷⁵ Bruce E. Clausen, "Beethoven and the Psyches of the Keys," 14.

⁷⁶ Elliot Forbes, ed., *Thayer's the Life of Beethoven* (Princeton: Princeton University Press, 1967), 1:555.

⁷⁷ Forbes, *Thayer's Life of Beethoven*, 1:802.

again, found it certainly well adapted to music, and, having read the vocal pieces for the third time, my first step was—as I had seen my master do—to determine which key would suit the character of each separate piece.”⁷⁸ Salieri stated that he had inherited the practice of determining key characteristics from his teacher, and it is highly probable that Salieri passed this tradition on to his students as well. Walthur Dürr has expressed his belief that Schubert became familiar with key characteristics and affect through the works of Johann Zumsteeg; this is probable, but Zumsteeg’s Lieder were certainly not Schubert’s only exposure to these concepts.⁷⁹ It is clear that Schubert inherited a rich and active tradition of writing about and discussing key characteristics from his teacher, idols, and contemporaries.

Schubert’s Piano

Schubert’s Viennese piano is another important element in the perception of well temperament. Schubert would have tuned the pianos he played himself; they would have had a more sensitive action and accentuated overtones. Thus, the sonorities unique to keys in well temperament were more easily perceivable on a Viennese piano than they would be on modern piano. Figures 1.6 and 1.7 give examples of what types of pianos Schubert played. Figure 1.6 is a drawing of Schubert’s piano from when he lived on

⁷⁸ Alexander Wheelock Thayer, *Salieri: Rival of Mozart*, ed. Theodore Albrecht (Kansas City: The Philharmonia of Greater Kansas City, 1989), 45.

⁷⁹ Walthur Dürr, “Franz Schubert: Winterreise--Gedanken Zur Struktur Des Zyklus,” in *Meisterwerke Neu Gehört: Ein Kleiner Kanon Der Musik: 14 Werkporträts*, ed. Hans-Joachim Hinrichsen and Laurenz Lütteken (New York: Bärenreiter, 2004), 140.

Wipplingerstrasse in Vienna, and Figure 1.7 is a sepia drawing of a Schubertiade at Josef von Spaun's home.



Figure 1.6. Franz Schubert's room in Wipplingerstrasse, Vienna. Pen and ink drawing by Moritz von Schwind (1827). Wien Museum Karlsplatz, Vienna, Austria. Inv. 49.296.



Figure 1.7: *Schubertiade at Josef von Spaun's* by Moritz von Schwind, 1865.

The piano depicted in Schubert's room appears to be five-octave fortepiano without pedals. The following passage by Robert Winter is an excellent description of the piano that Schubert had:

In 1800 the Viennese fortepiano...differed little from that encountered by Mozart in the workshop of Johann Andreas Stein in the late 1770s. It generally had a length of about 215 cm and a width of about 97 cm. The range was 5 octaves, from F' to f'''. It was double strung to about a', then triple strung to the top, with the bottom octave in brass and the remainder in soft iron. The total tension on the frame was a moderate 1500 kg. The instrument itself weighed less than 70kg. Two knee levers (replacing the hand stops of the 1770s) underneath the keyboard provided all of the tone-colour options: the lever on the right raised the dampers (one for each of the 61 notes), while the one on the left activated the moderator (a cloth strip brought between hammer and string to create a special soft effect). The action was the Viennese or *Prellmechanik* (flipping action).⁸⁰

As the nineteenth century came, the Viennese piano changed from Stein's original model. The five-octave range expanded; the typical Viennese piano of 1820 had six to six and a half octaves.⁸¹ These instruments also had between two to six pedals instead of knee dampers or no pedals. Schubert wrote his Lieder for a wider range than his piano had. Since his Lieder were written with the intention of publication and for performance at Schubertiades, which were hosted by Schubert's wealthier friends and patrons, it makes sense that Schubert would write for the most modern Viennese piano that would likely be at the homes of his wealthy friends and those he hoped would buy his music.

⁸⁰ Robert Winter, "Keyboards," in *Performance Practice: Music After 1600*, ed. Howard Mayer Brown and Stanley Sadie (New York: W. W. Norton, 1989), 346, 372. In fn 1 on p. 372 Winter states that the term "fortepiano" was commonly used in Vienna until around 1815, when Schubert began using the term "Pianoforte." Beethoven preferred the German term "Hammerklavier."

⁸¹ Philip R. Belt, Maribel Meisel, and Gert Hecher, "The Viennese Piano from 1800," in *Grove Music Online*. <http://www.oxfordmusiconline.com/subscriber/article/grove/music/21631> [accessed 23 March 2007].

Compared with modern pianos, all Viennese pianos are smaller and lighter. The instrument had little to no iron reinforcement; the use of iron bars was not widespread until around 1845.⁸² Thus the strings were lighter and under much less pressure than modern pianos. Jorgensen stated that it was common for composers to tune their own pianos until the mid-nineteenth century, and until the creation of the professional piano technician, theoretically correct temperaments (e.g., equal temperament) were not obtainable.⁸³ Patrizio Barbieri reaffirms this idea, adding that pianos at this point in history were “structurally fragile and needed very frequent tuning, an operation that was necessarily often done by the player himself.”⁸⁴

We know from Ellis’s experiments with pianos tuned by professional tuners in the first quarter of the nineteenth century that tuners claiming to use equal temperament still favored some keys in terms of purity. It is safe to assume that composers and pianists who tuned their instruments themselves would also give preference to certain keys, perhaps consciously or subconsciously, based on personal taste or tradition. Jorgenson explains that one of the reasons for extremely little documentation of the tuning practices of past musicians is that the tuning methods and systems used were “considered so traditional and so simple, that no great and busy musician bothered writing down such

⁸² *Piano: An Encyclopedia*, ed. Robert Palmieri and Margaret Palmieri (New York: Routledge, 2003), s.v. “Viennese Piano.”

⁸³ Jorgensen, *Tuning*, 12 and 9. Jorgensen further adds that it was the development of the modern piano with metal bracing and increased string tension that gave rise to the professional piano tuner and to the ability to achieve a truly equal temperament; the advances in the construction of the piano made it impossible for anyone without a good “tuning hammer technique” to tune a piano and have it stay in tune after it was played.

⁸⁴ *Piano: An Encyclopedia*, s.v. “Temperaments-Historical.”

basic information.”⁸⁵ As noted earlier, it was usually theorists who wrote about tuning, not composers or performers. Usually, published theoretical models were put forth because they were different from what was actually done in practice.⁸⁶ Thus, it is almost impossible for scholars to conclude that Schubert, or any of his contemporaries, tuned their instruments to a specific published system, but we can confidently conclude that Schubert tuned his own instrument in some sort of well temperament.

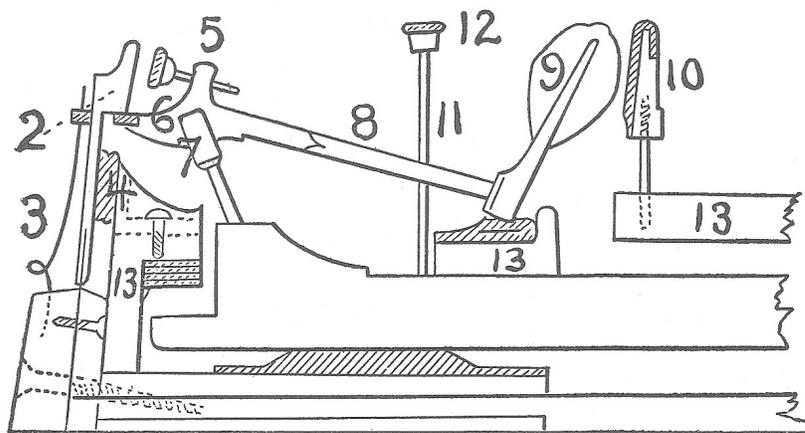
The unique qualities of the Viennese piano are evident in a letter from 1858 by Johann Leopold Ebner, one of Schubert’s friends from the seminary, in response to Ferdinand Luib’s request for bibliographic information about the composer. While discussing Vogel and Schubert’s visits to the town of Steyr, Ebner mentions that his wife (née Schellmann) complained that while Schubert was staying at the Schellmanns’ house “he always took the pianoforte of the house into his room, so that during his visit they had to do without all dancing parties and the like.”⁸⁷ Because of the smaller size and lightness of the Viennese piano, moving a piano from a living area into a bedroom was not the problem that it would be with a modern instrument, and it could easily be tuned after it was moved. In fact, fortepianos would have had to be tuned every few days or whenever it was moved, subjected to different temperatures or varying levels of humidity. Fortepianos had to be tuned as frequently as harps, and like harps, were tuned by their players.

⁸⁵ Jorgensen, *Tuning the Historical Temperaments by Ear*, 11.

⁸⁶ Jorgensen, *Tuning the Historical Temperaments by Ear*, 4.

⁸⁷ Johann Leopold Ebner, “Innsbruck, 3 May 1858,” in *Schubert, Memoirs by his Friends*, ed. Deutsch, Otto Erich, trans. Rosamod Ley and John Nowell (New York: Macmillan, 1958), 47.

The second important aspect of the Viennese piano that relates to temperament is its action. The action of Schubert's piano was different from both modern piano action and also from the English and French piano action of the same period. With Viennese action, also known as *Wienermechanik* or *Prellmechanik*, leather-covered hammers are connected directly to the rear of the key; they face the player and strike the string from underneath (see Figure 1.8). Since the hammers are connected directly to the keys, when the pianist touches the keys of the piano, his or her fingers are in direct mechanical connection with the strings. This action is more sensitive and responsive to the player's touch than the action of the English and French pianos, which involves suspended hammers that contact the string with the help of rods and levers.



ACTION BY ANDREAS AND NANETTE (STEIN), STREICHER VIENNESE ESCAPEMENT (1794).

- | | |
|--|-----------------------|
| 1. Key. | 7. Hammer-butt pivot. |
| 2. Jack. | 8. Hammer-shank. |
| 3. Jack-operating spring. | 9. Hammer-head. |
| 4. Cushion limiting rebound of jack. | 10. Check. |
| 5. Button and screw regulating escapement of hammer. | 11. Damper-lifter. |
| 6. Hammer-butt and operating face. | 12. Damper-head. |
| | 13. Action-rails. |

Figure 1.8: Viennese Action. *From William Braid White's Theory and Practice of Piano Construction* p. 98. Used with permission from Dover.

In Malcolm Bilson's discussion of English versus Viennese action in regards to Schubert's piano music, he states that "the advantages of both systems were quite clear; the one: light, responsive, sensitive; the other, a bit clumsy but far more powerful."⁸⁸ While the English action (a predecessor to our modern grand piano action) may have been better for filling a large concert hall with sound, the Viennese action, with its more delicate sound and sensitive action, was much better suited to the intimate setting of the Lied.

Winter further notes that the Viennese piano had a thinner soundboard that created a faster, brighter sound with more decay than the English pianos.⁸⁹ The Viennese piano's hard, light hammers contributed to the quick decay of the tone but also to the prominence of more upper partials. The hammers in English action were heavier and softer, which activates the vibration of the string more slowly, destroying some of the upper partials but creating a longer sustaining tone.⁹⁰ Upper partials are an important factor in the perception of temperament because they are the reason beats are heard in larger intervals. Thus, the unique qualities of each key will be brought forth when more upper partials are produced and heard.

⁸⁸ Malcolm Bilson, "Schubert's Piano Music and the Pianos of His Time," *Studia Musicologica Academiae Scientiarum Hungaricae* 22, no. 4 (1980): 264.

⁸⁹ Winter, "Keyboards," 357.

⁹⁰ *Ibid.*, 358.

Concert Pitch

Since the production of beats is impacted by frequency, one final issue that is important to acknowledge in regards to tuning during Schubert's era is that standard concert pitch had not yet been established. Handel and Mozart were known to favor specific pitch standards, A=423 and A=422 respectively.⁹¹ The pitch Mozart preferred is taken from records dating from 1790 of tuning of Mozart's Stein pianos in Vienna. These pitches are approximately a half semitone lower than A=440. Ellis states that for about 200 years, from approximately the 1620s to the 1820s, European mean pitch was between A=415 and A=428.⁹² However, due to musicians' desire to create increasingly brilliant sounds in larger performance spaces, pitch standards gradually rose. Ellis states that in Austria, it was not until 1816 that pitch began to slowly rise.⁹³ In Bruce Haynes's monograph on performing pitch, he states that:

Beethoven's 8th Symphony was first performed in 1814 and his 9th in 1824; the two might have been at slightly different levels, but both would have been bracketed by 430 to 440. This was apparently the same pitch as Mozart's performances at Vienna, Haydn's at Esterháza, and Schubert's throughout his life.⁹⁴

⁹¹ Ellis, "On the History of Musical Pitch," 333–334.

⁹² *Ibid.*, 333.

⁹³ *Ibid.*, 310. Ellis states that the rise in pitch began when Emperor Alexander of Russia presented the Congress of Vienna with a set of musical instruments made by Stephan Koch. These instruments were famous for their brilliance and higher pitch than the mean. This rise in pitch was mostly found in orchestras and opera houses all trying to sound more brilliant than the others.

⁹⁴ Bruce Haynes, *A History of Performing Pitch: The Story of "A"* (Lanham, MD: Scarecrow Press, 2002), 339.

While estimations can be made for what the average pitch was in a geographical area at a certain point in time, there were no universally established pitch standards until 1939. Pitch varied from region to region and from venue to venue. Additionally, pitch standards for church music were often lower than those of orchestral or operatic music, as church music used organs that were built generations before. While churches and opera houses may have left evidence for pitch standards in regards to their documented tuning standards or tuning forks, no such records or evidence has been left to indicate what composers' and performers' pitch standards were when performing chamber music at home. It is highly probable that Schubert's Lieder was performed at a pitch level slightly lower than A=440.

Conclusion

Not only was well temperament still a popular system during Schubert's lifetime, but nineteenth-century equal temperament was only equal in theory; it still sounded like well temperament. Young's temperament, which was an attempt to recreate the temperament practices of the European Continent at the turn of the nineteenth century, is the best theoretical model to use for comparing the colors created through the uniquely-sized intervals in each well-tempered key. Well temperament is associated with a long, rich tradition of key characteristics that was part of Schubert's musical culture. Two people who were highly influential in Schubert's musical development, his teacher Salieri and his idol Beethoven, both referenced key characteristics in their writings. Through the

examination of Schubert's Lieder we will see what meanings he assigned to keys and how he used the colors of well temperament to enhance poetic expression.

Chapter 2

Methodology

In present scholarship, temperament is primarily approached in one of two ways: as part of the history of music theory, or as part of performance practice studies. These approaches have allowed musicians and scholars to gain knowledge of past temperaments and give more historically accurate performances. What has yet to be thoroughly examined is the impact of temperament on how composers wrote music, including their harmonizations, chord voicings, and key choices. When contemporaries of Schubert thought about music, conceived musical ideas, and worked those ideas out on paper, the intervals, chords, and keys that they heard in their minds and produced on their instruments were well tempered. The unique qualities of the keys in well temperament influenced composers' compositional choices. To echo the words of Jonathan Bellman regarding temperament and Chopin, "temperament...has a significant effect upon how his music sounded and in fact 'worked.'"¹ In order to understand how temperament helped shape the inner workings of a composition, we must first examine the unique qualities of different chords and keys in well temperament, which will enable us to better understand how and when compositional choices were based on well temperament. In this chapter I will establish a methodology for analyzing the elements and impact of well temperament within a composition.

¹ Jonathan Bellman, "Toward a Well-Tempered Chopin," *Chopin in Performance: History, Theory, Practice*, Proceedings of the 5th International Chopin in Performance Conference 2004, ed. Artur Szklener (Warsaw: Narodowy Instytut Fryderyka Chopina, 2005), 27-40.

Schubert's Innovative Practice

Schubert used the unique colors of each well-tempered chord as an expressive device on par with other musical elements such as form, rhythm, and melody. By using well temperament in this way, Schubert moved beyond a general association between key and key characteristics, and he anticipated the focus on color and timbre that is exemplified in the works of later composers like Arnold Schoenberg.

When Schoenberg sent his yet unfinished *Five Pieces for Orchestra* to Richard Strauss, he enclosed a letter in which he commented on the pieces: “There is no architecture and no build-up, just a vivid uninterrupted succession of colors, rhythms, and moods.”² From these pieces comes the idea of *Tonfarbenmelodie*, or a melody that is based on contrasting instrumental timbres. Schubert also focused on timbre in his compositions, but in a different way. Instead of focusing on the timbre created by different instruments, he emphasized the timbral differences created in well temperament. Drawing inspiration from Schoenberg’s terminology, I propose calling the timbral colors created through well temperament and Schubert’s use of these colors *Temperaturfarben*, or temperament colors. I will use the plural form *Temperaturfarben* for keys and the singular form *Temperaturfarbe* for intervals and chords.

² Alex Ross, *The Rest is Noise: Listening to the Twentieth Century* (New York: Farrar, Straus and Giroux: 2007), 54. The original letter is housed at the Arnold Schoenberg Center, Vienna.

Degrees of *Temperaturfarbe*

All intervals and chords in well temperament have a unique *Temperaturfarbe* that composers can use in the same way that a painter uses color. Individual colors can be used to represent different ideas and objects, and they can also be blended to create new colors and contrasts. The colors of the individual chords combine to create an overall *Temperaturfarben* for any given key. In order to facilitate an examination of Schubert's use of *Temperaturfarben*, I will establish a ranking of all major and minor chords and their corresponding keys according to purity and color.

Joos Vos has argued that the overall acceptability of a temperament can be accurately predicted by the combination of the purity rating of harmonic fifths and major thirds.³ This is not surprising given that thirds and fifths have simple frequency ratios, are considered highly consonant, and are basis for the triad (the most frequently used and essential building block for tonal music). For well-tempered major and minor triads, the third will have a greater impact on the creation of a chord's *Temperaturfarbe* than the fifth because the importance of having the purest possible fifths is second only to the desire for pure octaves; the fifths are less tempered and have fewer variations in size and sound. In Young's temperament there are only three sizes of fifths: pure, 2 cents narrow, and 4 cents narrow.⁴ In contrast, there is much variation in the size of the major and minor thirds, and they are all tempered much more than the fifths. Young's temperament

³ Joos Vos, "Subjective Acceptability of Various Regular Twelve-Tone Tuning Systems in Two-Part Musical Fragments," *Journal of the Acoustical Society of America*, 83 (June 1988): 2391.

⁴ A cent is a logarithmic unit used to measure musical intervals. 1 cent = .01 semitones.

contains seven sizes of major thirds, six sizes of minor thirds, and three sizes of perfect fifths (see Table 2.1).⁵

Table 2.1: Size of major and minor thirds in Young's temperament in order from most pure to least pure. The note names given are the pitches on which the major thirds are built.

Size of major thirds in cents:	Size of minor thirds in cents:
Pure: 386	Pure: 316
C: 392	A & E: 306
F & G: 394	D & B: 304
B \flat & D: 396	G & F \sharp /G \flat : 302
E \flat & A: 400	C & C \sharp /D \flat : 298
A \flat & E: 404	F & A \flat /G \sharp : 296
D \flat /C \sharp & B: 406	B \flat & E \flat /D \sharp : 294
F \sharp /G \flat : 408	

As discussed in the first chapter, the more tempered a note is, the more complex its frequency ratio is, and the more dissonant it will sound. Because of this, the colors created through temperament increase in saturation with decreased overall purity of the key. The more distant a key is from C major, the more noticeable its *Temperaturfarben* will be. For example, C major, which is traditionally the purest key in well temperaments, is often equated with purity and the color white. Keys with one to two accidentals may sound as if they are tinted. Since the roughness of distant keys is more extreme, they come across as highly colored.

When discussing the amount of overall *Temperaturfarben* of the different keys, it is best to compare like with like and rank major and minor keys separately. In all well

⁵ The following tables are derived from the cents measurement of Young's temperament as presented in Barbour's *Tuning and Temperament a Historical Survey* p. 168. These calculations have been checked against the measurements given for major thirds in Jorgensen's *Tuning* p. 264–265. I have calculated the measurements for all other intervals provided in these tables.

temperaments, the size of major thirds expands as one moves away from C major in both directions around the circle of fifths, and in Young's temperament the major thirds are paired and symmetrical; the tonic chord in a key with one flat (F) has the same size major third as the tonic chord in a key with one sharp (G), and so on (see Table 2.2). In Young's temperament, if a composer were to move around the circle of fifths clockwise through sharp keys, and then counterclockwise through flat keys, the order and quality of the chord colors would sound virtually identical.

Table 2.2: The rank of major triads based on the purity of the major third

1	C
2	F & G
3	B \flat & D
4	E \flat & A
5	A \flat & E
6	D \flat /C \sharp & B
7	G \flat /F \sharp

There is, however, more to a key than its tonic. Table 2.3 lists the cents measurements for every interval in each major key. The scale degrees with the most consistent changes are mi, la, and ti; all three gradually expand as we move away from C major in the circle of fifths. These changes result from the reordering of pitches and introduction of a new pitch into the scale that results from the new do. Mi, la, and ti are important notes in all of the major chords in each key; they dictate the size of the major third in the tonic, dominant, and subdominant chords, respectively.

Table 2.3: Cents measurements of diatonic intervals in Young's well temperament

Key	Do	Re	Mi	Fa	Sol	La	Ti	Do
C	0	196	392	500	698	894	1092	1200
G	0	196	394	502	698	894	1094	1200
D	0	196	396	502	698	896	1098	1200
A	0	198	400	502	698	898	1102	1200
E	0	200	404	502	700	902	1106	1200
B	0	202	406	500	700	904	1108	1200
F#/G♭	0	204	408	500	702	906	1108	1200
C#/D♭	0	204	406	498	702	906	1106	1200
A♭	0	202	404	498	702	904	1102	1200
E♭	0	202	400	498	702	902	1098	1200
B♭	0	200	396	498	700	898	1094	1200
F	0	198	394	500	700	896	1092	1200

If we rank the overall purity of all major triads within a major key, we will notice that this ranking corresponds to the purity ranking of the key's tonic triad (see Table 2.4). Of the tonic, subdominant, and dominant, the importance of the tonic and dominant chords in functional harmony make them the most significant chords in establishing a key's *Temperaturfarben*, and the prevalence of the dominant chord differentiates the pairs of keys with the same overall purity ranking of their tonic triads. For flat keys, the dominant triad is closer to C major and thus has less color, and for sharp keys, the dominant is farther away from C major and has more color. For a V-I progression in F major, C-F, the dominant adds a more harmonically pure major triad to the tonic, while for a V-I progression in G major, D-G, the dominant adds a less harmonically pure triad. With sharp keys, the dominant chord increases the amount of *Temperaturfarben*, and with flat keys the dominant lessens the amount of *Temperaturfarben*. In all keys the tonic, dominant, and subdominant are within one degree of each other, creating a gradual increase or decrease in tension due to *Temperaturfarben*.

Table 2.4: Average *Temperaturfarben* ranking of major keys based on the tonic, dominant, and subdominant triads

I	V	IV	Mean
C: 1	G: 2	F: 2	1.66
F: 2	C: 1	B \flat : 3	2
G: 2	D: 3	C: 1	2
B \flat : 3	F: 2	E \flat : 4	3
D: 3	A: 4	G: 2	3
E \flat : 4	B \flat : 3	A \flat : 5	4
A: 4	E: 5	D: 3	4
A \flat : 5	E \flat : 4	D \flat : 6	5
E: 5	B: 6	A: 4	5
D \flat /C \sharp : 6	A \flat : 5	G \flat /F \sharp : 7	6
B: 6	G \flat /F \sharp : 7	E: 5	6
G \flat /F \sharp : 7	D \flat /C \sharp : 6	C \flat /B \sharp : 6	6.33

By factoring in the purity and importance of the dominant triad, it is possible to rank the amount of *Temperaturfarben* in each major key. The key with the greatest overall purity and the least amount of *Temperaturfarben* (C) is ranked 1, and the key with the lowest overall purity and the greatest amount of *Temperaturfarben* (G \flat /F \sharp) is ranked 12 (see Table 2.5). The pairs of sharp and flat keys with the same sized major third in their tonic chords and similar overall purity ratings based on I, IV, and V will be similar in *Temperaturfarben*, but the sharp keys will have more color due to the greater color of their dominant chords. In general, the keys closest to C major will sound pure and calm, keys with an increasing number of sharps will sound more energized, animated, and harsh (this is often perceived as tension or excitement), and the keys with an increasing number of flats will sound more relaxed, placid, and subdued compared to their sharp-key counterparts. Perhaps the dominant chord's role in the creation of *Temperaturfarben*

is the reason that throughout history, sharp keys have often been characterized as being more animated and excited and the flat keys as more solemn and calm.

Table 2.5: Purity rankings of major keys

Major key	Rank
C	1
F	2
G	3
B \flat	4
D	5
E \flat	6
A	7
A \flat	8
E	9
D \flat /C \sharp	10
B	11
G \flat /F \sharp	12

The ranking of minor keys' *Temperaturfarben* is not as straightforward. In minor, the overall purity of each key will vary depending on whether it is presented in its natural form or using borrowed chords. Since it is common practice to borrow chords from the parallel major, particularly the major V chord, the purity of a minor key also depends heavily upon the purity of its borrowed dominant. Because the major dominant appears more frequently than the minor dominant in tonal music, I will use the major V chord to establish *Temperaturfarben* rankings for minor keys.

With minor triads, the size of the minor thirds are paired starting with A and E minor, and the thirds become less pure as we move around the circle of fifths in both directions. The keys of A and E minor both have comparable tonic triads, but the borrowed dominant of E minor (B major) is a more colored major chord than the borrowed dominant of A minor (E major). Thus, E minor will ultimately have more

Temperaturfarben than A minor. Table 2.6 ranks the purity of the minor tonic and major dominant triads in each key along with an average of the two rankings. The purest, least colored triads have a rank of 1, and the numbers increase as the *Temperaturfarbe* increases. Table 2.7 shows the overall ranking of minor keys based on the average purity of the tonic and dominant triads. When ranked by overall purity and not just the purity of the tonic triad, one notices that D minor is the key with the greatest overall purity; while A and E major have the most pure tonic triads, they both have highly-colored dominant chords.

Table 2.6: Purity rankings of the minor tonic and major dominant in minor keys

Minor key	Purity rank of tonic triad	Purity rank of major dominant	Average of tonic and dominant	
A	1	E	5	2.5
E	1	B	6	3
D	2	A	4	2
B	2	F#	7	3.5
G	3	D	3	3
F#	3	C#	6	4.5
C	4	G	2	3
C#	4	G#	5	4.5
F	5	C	1	3
G#	5	D#	4	4.5
Bb	6	F	2	4
D#	6	Bb	3	4.5

Table 2.7: Overall purity rankings based on the average dissonance of tonic and dominant triads. Keys with the same ranking are listed with the purest tonic first.

Minor Key	Rank
D	1
A	2
E	3
G	4
C	5
F	6
B \flat	7
B	8
F \sharp	9
C \sharp	10
G \sharp	11
D \sharp	12

The individual purity rankings of the major dominant and tonic minor create a hierarchy of keys in terms of *Temperaturfarben*, but there is also a hierarchy between the dominant and tonic. In major keys, sharp-major keys have dominant chords with more color than the tonic chord, and flat-major keys have dominant chords with less color than the tonic chord. With minor keys, one key, G minor, has a tonic and dominant with equal purity rankings. Going clockwise around the circle of fifths, minor keys from D minor to C \sharp minor all have dominant chords that have more color than the tonic chord, and going counterclockwise around the circle of fifths from C minor to A \flat /G \sharp minor, these keys have tonic chords with more color than the dominant chord (see Figure 2.1). Keys where the dominant chord is more highly colored create a greater sense of peace and complacency, and those where the tonic are more highly colored resolve to a more tense, agitated, or unsettled feeling.

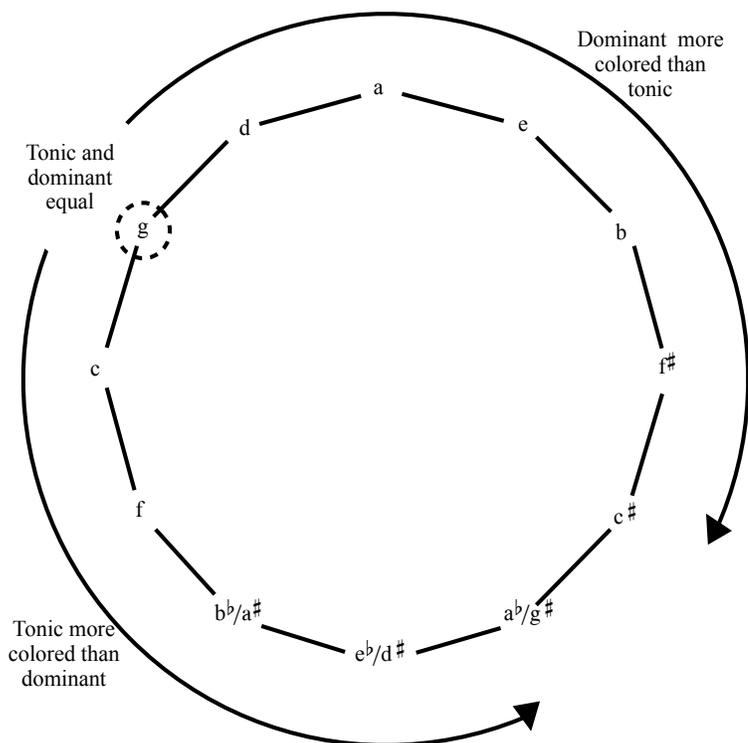


Figure 2.1: The relationship of tonic purity to dominant purity in minor keys.

While both major and minor keys have tonics and dominants that are either more or less colored than the tonic, in major keys the V and I chords are always within one purity degree of each other. Minor keys have a greater variety in contrast that create more terraced and striking changes in tension. The amount of contrast between the tonic and dominant likely influenced Schubert's choice of minor key: a key with a relatively pure tonic chord and a highly colored dominant chord will lend itself to different types of expression from a key whose tonic and dominant are of similar *Temperaturfarbe*. Table 2.8 lists the difference between the purity ranking of the tonic chord and that of the dominant in the twelve minor keys. The table shows that there are six different degrees of contrast in the minor keys; thus we have six different classifications of contrast in

minor keys, categorized in Table 2.9. The ranking and categorization of key purity and contrast will allow us to better analyze *Temperaturfarben* in Schubert's Lieder.

Table 2.8: The contrast ranking between minor triads and their major dominant

Minor key	Purity ranking of tonic triad	Purity ranking of Major dominant	Contrast ranking (difference)	
A minor	1	E	5	4
E minor	1	B	6	5
D minor	2	A	4	2
B minor	2	F#	7	5
G minor	3	D	3	0
F# minor	3	C#	6	3
C minor	4	G	2	2
C# minor	4	G#	5	1
F minor	5	C	1	4
G# minor	5	D#	4	1
Bb minor	6	F	2	4
D# minor	6	Bb	3	3

Table 2.9: Minor keys according to contrast (purest triad listed first)

Highest contrast	Low contrast
E minor	D minor
B minor	C minor
High contrast	Lowest contrast
A minor	C# minor
F minor	G# minor
Bb minor	No contrast
Medium contrast	G minor
F# minor	
D# minor	

Young's Representative Temperament

As explained in Chapter 1, Young's temperament has served as the basis for my methodology. Since Young's temperament is representative of other well temperaments, the basic principles that I have presented will remain true even if new documentary evidence sheds more light on which specific well temperament Schubert and his contemporaries used. The rankings of the major and minor keys outlined above will stay the same for the majority of well temperaments, even if they have different cents measurements for specific intervals. Also, if scholars discover new evidence that suggests that Schubert's temperament was more akin to the later Victorian well temperament or quasi-equal temperament, the same basic properties of *Temperaturfarben* remain; the differences between the keys will just be more muted. Figure 2.2 shows the sizes of major thirds in Young's temperament, Victorian well, and equal temperament. Equal temperament removes any distinction in key color, but Young's temperament and Victorian well temperament have many similarities.

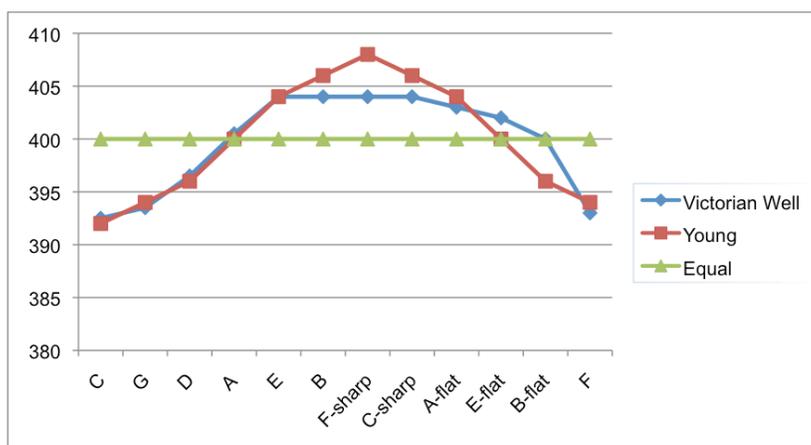


Figure 2.2: The size of major thirds in cents in Young, Victorian well, and equal temperament. Chart data from Jorgensen, *Tuning* pp. 264, 558.

Young's temperament and Victorian well, which is a temperament Jorgensen derived from the results of Ellis's 1885 study on how the best piano tuners who claimed to be tuning equal temperament actually tuned, have a similar contour. The variation in the size of major thirds has been reduced in the keys that are most distant from C major, but Schubert only used these distant keys sparingly, and they are still more dissonant than those keys with fewer sharps and flats in their key signatures. The rest of the keys still have a hierarchical relationship in Victorian well, and some of the major thirds measure the same as in Young's temperament.

Herbert Kellat published the first analyses of Schubert's *Die schöne Müllerin* and *Winterreise* that deal primarily with temperament.⁶ His work helped pioneer the study of temperament in relation to a composer's work. In his short analyses, he speaks of the sonic qualities that result from hearing Schubert's song cycles in Kirnberger II temperament.⁷ He relays the cents measurements of important or unique intervals and describes the resulting key character. Nevertheless, the majority of his observations do not seem applicable to Schubert's compositional process because they are specific to Kirnberger's temperament, which is not representative of most other systems of well temperaments and which Schubert most likely did not use. Figure 2.3 shows how different the contour is between the Kirnberger II and the bell shape of most well temperaments, as depicted by Young's temperament.

⁶ Herbert Kellat, *Zur musikalischen Temperatur III: Franz Schubert* (Berlin: Merseburger, 1994).

⁷ For a more detailed discussion of Kirnberger's temperament, how it differs from other well temperaments, and why it was probably not in use by Schubert or his contemporaries, see chapter 1.

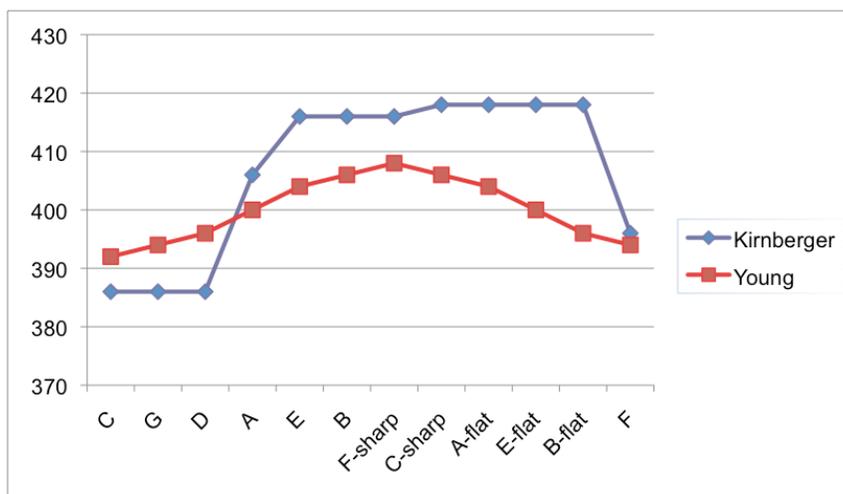


Figure 2.3: The size of major thirds in cents in Young and Kirnberger II temperaments. Chart data from Jorgensen's *Tuning*, p. 263, 283.

Unlike most well temperaments, the major thirds in Kirnberger's temperament are not distributed in the same graduated manner. There is a significantly wider span between the biggest and the smallest major thirds, and less variety in the sizes of major thirds. Thus, conclusions that Kellat draws from the sounds resulting from Kirnberger's temperament will not coincide with what is happening sonically with other well temperaments. For example, in his analysis of *Das Wandern*, he says that the B \flat major of this song is "herbes, gespanntes" (harsh, strained) because of the wide major third of the tonic triad.⁸ Figure 2.3 shows that in Kirnberger's temperament, the major third built on B \flat is 418 cents: 18 cents wider than an equal-tempered major third and 32 cents wider than a pure major third. Kellat also discusses how the purity of the dominant chord, F major, brightens up the darkness of the tonic.⁹ In Kirnberger's temperament, the F-major chord has a major third that measures 396 cents. Thus the

⁸ Kellat, *Zur musikalischen Temperatur III*, 33.

⁹ Ibid.

major third of the dominant chord is 22 cents smaller than the major third of the tonic. In most well temperaments, there would not be this large of a discrepancy between the tonic chords of two keys that are only one accidental apart. Much of what Kellertat says about which chords appear dark or light, pure or highly tempered, in Kirnberger's temperament does not apply in other well temperaments.

The Temperaturfarben of Other Intervals and Chords

The purity rankings for major and minor keys were based on the tonic, dominant, and subdominant chords, which are either major or minor; however, there are variations in the size and sound of all intervals and chords within a well-tempered key. Listed below are some commonly found intervals and chords and how their sound differs in Young's temperament.

Minor Seconds

In Young's temperament there are six sizes of minor seconds ranging from 92 cents to 108 cents, varying in size by 16 cents. A pure minor second measures 112 cents; all of the minor seconds in Young's temperament are narrow. A pure minor second has a frequency ratio of 16:15, one of the few double-digit ratios in a diatonic major or minor scale. Minor seconds are one of the more dissonant frequencies in the scale; the "purest" minor seconds sound rough, and the roughness only increases as the size of the second decreases and the two notes come closer in frequency. The widest and narrowest minor seconds are most likely to sound out of tune to the listener accustomed to equal

temperament because they are, on average, 10 cents away from an equal-tempered minor second. The variety in minor seconds also contrasts with each other; when a 92 cent minor second is juxtaposed next to a 108 minor second, the 16 cent difference will be audible.

Major Seconds

Major seconds are considered more consonant than minor seconds, but comparing the major seconds in Young's temperament to pure seconds has an added challenge because there are two sizes of pure seconds, 9:8 (known as a major tone or greater tone) and 10:9 (known as a minor tone or lesser tone), measuring 204 or 182 cents, respectively. Here is how major and minor seconds arrange themselves between the pitches of the C major scale comprised of pure intervals:

	C (1:1)	D(9:8)	E (5:4)	F (4:3)	G (3:2)	A (5:3)	B (15:8)	C (2:1)
Frequency								
ratio between								
notes		9:8	10:9	16:15	9:8	10:9	9:8	16:15

There are five sizes of major seconds in Young's well temperament spanning eight cents. Two major seconds, those build upon F#/G \flat and C#/D \flat major are pure greater tones at 204 cents and they are the largest major seconds in Young's temperament. C major, G major, and D major all have the least pure major seconds (between do and re), even though they are some of the purest keys overall. Nevertheless, the added dissonance in the major second is slight; as they move away from the purity of the greater tone, they move toward the purity of the lesser tone.

Perfect Fourths

Because perfect fourths are the inversions of perfect fifths, the fourths in Young's temperament have the same qualities as the fifths. There are three different sizes that span four cents. Four keys have pure fourths: F#/G \flat , C#/D \flat , A \flat , and E \flat . The most pure fourths are in the keys with the least amount of purity overall; when played as an open dyad or in the melodic context they can add greater purity to those highly-colored keys.

Tritones

The tritone has long been considered the most dissonant of all intervals. In equal temperament, the augmented fourth and diminished fifth are enharmonic, and both measure 600 cents. In the harmonic series these two intervals are not enharmonic, and have the frequency ratios of 45:32 and 64:45, which convert to 590 and 610 cents, respectively.¹⁰ The tritone has the largest whole number ratio of any diatonic interval within a key, and it sounds dissonant regardless of how close it is to its pure form.

All of the tritones in Young's temperament fall between the pure augmented fourth and the pure diminished fifth. There are five sizes of tritones spanning sixteen cents from 592 to 608. The wider tritones have a slightly stronger pull towards the fifth scale degree, and the narrower tritones pull slightly more toward the subdominant.

¹⁰ The ratios of a pure augmented fourth (45:32) and a pure diminished fifth (64:45) are derived differently from the other intervals in the scale. The overtone series creates many different sizes of tritones within the first sixteen notes that are all vastly different sizes: 7:5 (583 cents), 10:7 (617 cents), 11:8 (550 cents), 13:9 (637 cents), 16:11 (649 cents) and 18:13 (563 cents). With just intonation an augmented fourth is calculated as a major third (5:4) plus a major second (9:8) = 45:32. The diminished fifth is an inversion of the augmented fourth at 64:45.

Major and Minor Sixths

There are six different-sized major sixths in Young's temperament, which span 12 cents. The sixths that are closest to pure are built on C and G and measure 894 cents, 10 cents wider than pure. The size expands as the root of the interval moves both directions around the circle of fifths until it reaches 906 cents when built upon C#/D \flat and A \flat .

In Young's temperament there are seven different-sized minor sixths, which span 16 cents. The minor sixth built upon E is the closest to pure, measuring 808 cents (6 cents narrower than pure). The sixths continue to narrow around the circle of fifth until B \flat at 792 cents (22 cents narrower than pure).

Major and Minor Sevenths

Pure major sevenths measure 1088 cents; in Young's temperament the closest major sevenths to pure are built on C and F and measure 1092 cents. The interval expands in both directions around the circle of fifths with the widest sevenths built upon F#/G \flat and C#/D \flat , respectively. The widest sevenths measure 1108 cents, 20 cents wider than a pure major seventh. Sevenths follow the same overall pattern as the major keys in general; as the keys move away from C major, they increase in color and tension. In the melodic context, the widest seventh have the greatest pull towards the tonic, thus creating a stronger leading note feel.

Like major seconds, there are two accepted sizes of minor sevenths: 16:9 at 996 cents or 9:5 at 1018 cents. In Young's temperament there are five sizes of minor sevenths spanning 8 cents. The narrowest minor sevenths are built upon E \flat , B \flat , and F major and measure 996 cents, which is the equivalent to a pure 16:9 minor seventh. The

widest minor sevenths measure 1004 cents, 8 cents wider than a 9:5 minor seventh and 14 cents narrower than a 9:5 minor seventh. The pure sevenths are heard in the moderately colored flat keys; since the dominant seventh is built upon the fifth scale degree, and in these minor keys the dominant has less color than the tonic, the seventh scale degree adds to the more relaxed nature of the flat major keys in comparison to their sharp counterparts. The widest minor sevenths are found in the moderate sharp keys, adding to the increased excitement associated with those keys.

Seventh Chords

When sevenths are added to a chord, regardless of temperament, they add tension without obscuring the characteristic color of the triad to which they are added. In well temperament, major seventh chords enhance and add to the tension of a chord exponentially; as the *Temperaturfarben* of the major chord increases, so does the color of the major seventh that is added.

Minor seventh chords are generally tenser in sharp keys; the more narrow minor sevenths are found built upon F, B \flat , E \flat , A \flat , and C \sharp /D \flat , three of which are pure. The widest, least pure minor sevenths occur in the keys of G, D, A, E, and B. When used, minor seventh chords add to the excited quality of sharp keys and the more relaxed quality of flat keys.

Diminished Chords and Augmented Chords

Both diminished and augmented chords resist the kind of classification applied to major and minor chords. Both types of chords will sound dissonant in well temperament with their basic color based largely upon beats and roughness. Overall, more or less pure diminished and augmented chords will all be inherently dissonant and contain the same potent clash. The main difference in feel will be the beating or pulsation of the chords, but this is hard to identify as less pure or more pure, since the chords are inherently dissonant. Nevertheless, listeners used to equal temperament will notice that these chords have a slightly different sound in well temperament than what they are used to.

Other Musical Elements Affecting the Perception of *Temperaturfarben*

The triad is of foremost importance in creating key color, but there are other musical elements that influence the perception of *Temperaturfarben* in a key. One such element is whether or not a composer presents a musical idea melodically or harmonically, because temperament manifests differently in harmonic and melodic contexts. The more colored harmonies created by the beating of intervals in keys ranked high in *Temperaturfarben* will not be present in the melodic context because notes beat when they are presented concurrently, not sequentially. Some of the keys that have harsh beating will sound more in tune when they are presented in a melodic context. For example, in Young's temperament, the four keys with pure perfect fifths in their tonic triads are E \flat major, A \flat Major, D \flat /C \sharp Major, and D \flat /F \sharp major. Thus, some of the keys with the least pure tonic triads and the most overall *Temperaturfarben* have the purest

perfect fifths. A further example of this is seen in the key C# major, where scale degrees 2, 4, 5, and 8 all measure pure in relation to the fundamental C# (scale degree 1). Thus, when C# major is presented in a melodic context without harmony, its *Temperaturfarben* will be mitigated. Melodically, C# major may actually be considered purer than C major. Jorgensen noted that historically in well temperaments, C, F, and G major were the keys that were tuned closest to the overtone series, which “automatically caused the chromatic keys (black keys) to be tuned in a superior melodic manner for more expressive linear effects. ...When harmony is improved in some keys, melody is always improved in the remaining keys.”¹¹

Another musical element that impacts the perception of temperament is tessitura, or range. Since there is a direct correlation between beats and frequency, individual beats will be more easily perceptible at lower frequencies. For example, a difference of 1 hertz will create more beats at a higher frequency than at a lower one. Using the formula for calculating beats presented in Chapter 1, we know that A 440 Hz played at the same time as A 441 Hz will result in 1 BPS (beat per second), while A 880 Hz played at the same time as A 881 Hz, which is still a change of 1 Hz, will produce 2 BPS. The rate of beating increases as frequency increases, and so at higher frequencies, the beating of intervals is less distinct.

Another reason that the perception of beats decreases with increased pitch frequency is the limits of the human ear, which has the most hearing acuity in the range

¹¹ Owen Henry Jorgensen, *Tuning* (East Lansing: Michigan State University Press, 1991), 517.

2000–5500 Hz.¹² If the harmonics and combination tones created by higher notes cannot be heard, neither can their beats. For example if A 3520 Hz is struck on the piano, its second harmonic is A 7040 Hz, its third harmonic is E 10548 Hz, and its fourth is A 14080 Hz. With the exception of the fundamental, all of the harmonics are outside of the range of what humans hear best, and some reach the limit of the frequencies humans are capable of hearing.

The beating rate of intervals and the degree to which the human ear finds beating unpleasant is directly related to frequency. The critical *bandwidth*, or window around a pitch in which beating and roughness can be distinguished, differs depending on the lowness or highness of the frequency. Table 2.10, adapted from Mayer and Stumpf, reports the results of their experiments determining critical bandwidth. The table shows that as frequency increases, both the number of BPS that are most displeasing to the ear and the number of BPS at which beats can no longer be heard increases. Since a composer's choice of tessitura will impact how well the beats in well temperament are heard, Schubert's use of a low tessitura could indicate his desire to emphasize the beating and mood of that particular key.

Dynamics also affect how well beats are heard. Since beats manifest themselves as a periodic change in amplitude or volume, louder intervals will create stronger and more perceptible beats. Loud passages will emphasize the qualities of key in well temperament and quiet passages will minimize them. The overall dynamics of a song, as

¹² John Borwick. "Ear and Hearing," in *The Oxford Companion to Music*, edited by Alison Latham; *Oxford Music Online*, <http://www.oxfordmusiconline.com/subscriber/article/opr/t114/e2164> (accessed October 21, 2009).

Table 2.10: Observations about the nature of beats made by Mayer and Stumpf. Cited in James Jeans, *Science and Music* (New York: Dover, 1968), 50.

Frequency (in Hz.) of tuning fork I	No. of BPS at which beats are most unpleasant	No. of BPS at which beats can no longer be heard
96	16	41
256	23	58
575	43	107
1707	84	210
2800	106	265
4000	---	400

well as the changing dynamics within a song, are musical elements that Schubert could use to alter the intensity of *Temperaturfarben* in a well-tempered key.

Tempo also influences the perception of beats. Beats and roughness are measured in cycles per second: if a musical passage is moved through quickly, the notes may not sound long enough to establish their full character. Thus, *Temperaturfarben* will be most noticeable in a song with a slow tempo, long note values, and slow harmonic rhythm. Schubert's use of long, sustained chords can also be a testament to his desire to use temperament as an essential element of the musical timbre.

The last element that shapes how *Temperaturfarben* is heard, is Schubert's use of chords with more intrinsic dissonance than major and minor chords. In the previous chapter, I discussed how differences in temperament are more easily perceived by listeners when they hear traditionally consonant intervals (e.g., fifths and major thirds) than when they hear more dissonant ones (e.g., minor seconds or augmented fourths). Vos's studies showed that a listener's ability to decipher differences in the tuning of intervals is highly correlated with the complexity of a musical interval's frequency

ratio.¹³ Thus, when Schubert used intervals or chords that are characteristically dissonant in their natural form, such as a tritone or a diminished triad, their dissonance will be apparent, but their dissonance will not be as noticeably changed by temperament as are major and minor chords.

Conclusion

Temperament affected how music was conceived by composers, expressed by performers, and experienced by listeners. The methodology that I have outlined above and the analyses that will follow are guided in part by my own experience of listening to Schubert's *Die schöne Müllerin* and *Winterreise* in well temperament. I was able to do this with the use of a program called *Lil Miss' Scale Oven*, which enabled me to "bake" a temperament into a software synthesizer and play back through my computer or my Roland digital piano the Schubert scores that I had inputted into my music notation software *Sibelius*.¹⁴ I have also listened to historical recordings from the beginning of the twentieth century, which were produced at a time before truly equal temperament was

¹³ Joos Vos and Ben G. van Vianen, "Thresholds for Discrimination Between Pure and Tempered Intervals: The Relevance of Nearly Coinciding Harmonics," *Journal of the Acoustical Society of America* 77 (1985): 186. From Chapter 1: Consonant intervals have simple frequency ratios comprised of small whole numbers, such as octaves (2:1), fifths (3:2), fourths (4:3), and major thirds (5:4). More dissonant intervals like minor seconds (16:15) and augmented fourths (45:32) have more complex ratios, and since these intervals are already perceived as dissonant, the increased dissonance created by tempering is harder for a listener to detect.

¹⁴ *Lil Miss' Scale Oven*: <http://www.nonoctave.com/tuning/LilMissScaleOven/>. Copyright 1997–2010 X. J. Scott.

achievable.¹⁵ Although the recording quality of these recordings is poor, they still embody some of the characteristics of well temperament.

While using well temperament as the basis for a musical analysis is uncommon, this approach is consistent with the aim of other Schubert scholarship that focuses on how individual musical elements add to the overall caliber of Schubert's songs. This includes approaches such as Feil's focus on rhythmic elements, Richard Kramer's focus on the cyclic qualities, and Susan Youens's focus on Romantic and biographical elements expressed in the music.¹⁶ By creating an analytical model based on well temperament, scholars will be able to recognize, identify, and interpret the ideas that Schubert chose to express through the *Temperaturfarben* of different keys, allowing for new insights into Schubert's compositional choices and the importance of well temperament.

¹⁵ Schubert, Franz, *Lieder on Record, 1898–1952*, Volume I: 1898–1939, EMI Classics CDHC 66150, 1997.

¹⁶ Arnold Feil, *Franz Schubert: Die Schöne Müllerin; Winterreise*, ed. Rolf Vollmann, trans., Ann C. Sherwin (Portland: Amadeus Press, 1988); Richard Kramer, *Distant Cycles: Schubert and the Conceiving of Song* (Chicago: University of Chicago Press, 1994); Youens, *Retracing a Winter's Journey: Schubert's Winterreise* (Ithaca: Cornell University Press, 1991); Susan Youens, *Schubert, Müller, and Die Schöne Müllerin* (New York: Cambridge University Press, 1997).

Chapter 3

Die schöne Müllerin

Examining Schubert's use of *Temperaturfarben* opens up a new world of expressive potential that has yet to be explored. One of the ways Schubert used *Temperaturfarben* in *Die schöne Müllerin* was as a type of musico-literary device that contrasts moods, highlights emotional changes, foreshadows events, creates sarcasm or irony, exposes a character's façade, or expresses an emotion different from what the lyrics and music express on face value. I contend that *Temperaturfarben* is in fact the guiding force behind the overall form of this song cycle. While Schubert's use of *Temperaturfarben* is partially derived from the long tradition of key characteristics and unequal temperament, the extra-musical ideas that he associates with different keys in *Die schöne Müllerin* are his own and are tailored to this cycle.

Background

Die schöne Müllerin, Schubert's first song cycle, was composed between May and September of 1823. Wilhelm Müller published the poems under the same title in 1820 in *Sieben und siebenzig Gedichte aus den hinterlassenen Papieren eines reisenden Waldhornisten*, which would become part one of his two-volume collected works.¹

Müller's published lyrical cycle comes from the Liederspiel tradition; his own group of

¹ Wilhelm Müller, *Sieben und siebenzig Gedichte aus den hinterlassenen Papieren eines reisenden Waldhornisten* (1821; repr., Zeno.org: EBooks-Sammlung, 2010), 8–357.

friends (often referred to as the Stägemann circle), chose the well-known tale of the miller maid who is the object of many men's affections for their Liederspiel *Rose, die Müllerin*.² The group collaborated on the creation of the Liederspiel and performed it within their circle, with Müller in the role of the miller. Five of Müller's poems from *Rose* were set as part of a ten-song set by Ludwig Berger, and Müller published earlier versions of the poems in anthologies in the years leading up to the publication of the *Sieben und siebenzig Gedichte*. Müller's completed cycle includes the twenty songs set by Schubert, as well as a prologue, epilogue, *Das Mühlenleben* (The Mill Life), *Erster Schmerz, letzter Scherz* (First Pain, Last Joke), and *Blümlein Vergissmein* (Little Forget-Me-Not Flower).

We do not know when Schubert first discovered Müller's *Die schöne Müllerin*, but it is clear from the poetic make up of the cycle that he based his cycle on the complete cycle published in the *Sieben und siebenzig Gedichte* and not any other earlier sources. Schubert mentions his work on the cycle in a letter to his friend Franz Schober dated November 30, 1823, "I have composed nothing since the opera, except a few 'Maid of the Mill' songs. The 'Mill' songs will appear in four books, with vignettes by Schwind."³ Scholars are not sure how long Schubert spent composing *Die schöne Müllerin*, or when he began or ended the process, but Schubert's letter, which is dated after the *Eifersucht und Stolz* manuscript, implies that the process may have been a bit drawn out. Joseph von Spaun and Franz Schober both recalled that Schubert composed

² The core of the group included Friedrich August von Stägemann (host and amateur poet), Wilhelm Hensel (artist and Fanny Mendelssohn's eventual husband), Luise Hensel (poet), Friedrich Fürster (publisher), and Müller himself.

³ Otto Erich Deutsch, *Schubert: A Documentary Biography*, trans. Eric Blom (London: J. M. Dent and Sons, 1946), 301.

some of the cycle when he was in the hospital, but they do not mention when exactly that was.⁴

When the cycle was published in 1824 by Sauer & Leidesdorf it appeared as *Die schöne Müllerin, ein Zyklus von Liedern, gedichtet von Wilhelm Müller* (The lovely miller maid, a song cycle on poems by Wilhelm Müller) in five books instead of four, and without vignettes by Schwind. The first book contained songs one through four, the second book songs five through nine, the third book songs 10 through 12, the fourth book songs 13 through 17, and the fifth book songs 18 through 20. The first two books were released in February and March of 1824, respectively, and the rest of the books were not available until August. A letter to Schubert from his father reveals that Schubert's brother Ferdinand corrected the proofs for the last three books (songs 10–20); Schubert was at the Esterházy home in Zseliz that summer.⁵ This accounts for the large number of typographical errors in the first edition.

Unfortunately, neither the manuscript nor the complete autograph copy for *Die schöne Müllerin* are still extant. The only surviving manuscripts for *Die schöne Müllerin* are the engraver's copy of *Eifersucht und Stolz*, which Schubert signed and dated October 1823, and three transpositions that he made for the cycle's dedicatee, Baron Carl von Schönstein.⁶ Thus, we have no previous sketches or visible edits to aid us in

⁴ Otto Erich Deutsch, *Schubert: Memoirs by His Friends*, trans. Rosamond Ley and John Nowell (New York: W. W. Norton, 1968), 367; 266.

⁵ Otto Erich Deutsch, *Schubert: A Documentary Biography*, 356.

⁶ Schubert allegedly gifted this manuscript to Countess Marie Wimpffen. It is now held by the Vienna Gesellschaft der Musikfreunde. Digitized copies of the transposed manuscripts of songs 7, 8, and 9 of *Die schöne Müllerin* can be found at http://www.schubert-online.at/activpage/manuskripte_en.php?werke_id=488&herkunft=allewerke. 7. *Ungeduld* was transposed to F major, 8. *Morgengruss* to A major, and 9. *Des Müllers Blumen* to G major.

understanding how Schubert's concept of the cycle may have changed or any transpositions that he made from the conceptions of the songs to the published versions.

Temperaturfarbe as a basis for key choices in Die schöne Müllerin

Many published analyses of the formal construction of *Die schöne Müllerin* attempt to explain Schubert's key choices by means of traditional functional harmonic progressions and large-scale forms. However, I assert that Schubert's key choices are primarily dependent on one principle: the progression of tonal centers with less *Temperaturfarben* to those with more in accordance with the rising dramatic tension of the cycle.

A careful examination of scholarly interpretations of the structure of *Die schöne Müllerin* illustrates that placing the cycle into a functional harmony context is a forced fit. In "The Formal Construction of *Die schöne Müllerin*," Thomas Archer proposed that the overall structure of the song cycle is a free rondo in G major with a prelude, interlude, and a postlude.⁷ He divided the cycle into different sections that correspond with rondo form, and those sections fall into the rising action and the falling action of the story. His table is reproduced here as Table 3.1. Archer asks us to look at the cycle as neither beginning nor ending in the tonic key because the first and last songs are a prelude and postlude. This is not outside the realm of possibility; however, if Schubert had intended the cycle to be heard as a traditional rondo in G major, it would seem that the prelude and

⁷ Thomas Archer, "The Formal Construction of *Die schöne Müllerin*," *The Musical Quarterly* 20 (1934): 407.

postlude should be in keys that have a stronger link to the tonic, such as IV or V for the prelude.

Table 3.1: Thomas Archer, “The Formal Construction of *Die schöne Müllerin*,” *The Musical Quarterly*

Prelude. <i>Das Wandern</i>	B♭ major	Mediant tonality
Part I. Rising Action (<i>Aufgesang</i>)		
A. Section I. Exposition, “The Miller-Boy”		
<i>Wohin?</i>	G major	Tonic major tonality
<i>Halt</i>	C major	
<i>Danksagung an den Bach</i>	G major	
B. Section II. Development, “Hope”		
<i>Am Feierabend</i>	A minor	Dominant tonality of tonic major
<i>Der Neugierige</i>	B major	
<i>Ungeduld</i>	A major	

<i>Morgengruss</i>	C major	Interludial, for contrast and to ease tension

<i>Des Müllers Blumen</i>	A major	Dominant tonality of tonic major
<i>Tränenregen</i>	A major	
<i>Mein</i>	D major	
Interlude. <i>Pause</i>	B♭ major	Mediant tonality
<i>Mit dem grünen Lautenbande</i>	B♭ major	
Part II. Falling Action (<i>Abgesang</i>)		
A. Section III. Exposition, “The Rival”		
<i>Der Jäger</i>	C minor	Tonic minor tonality
<i>Eifersucht und Stolz</i>	G minor	
B. Section IV. Development, “Despair”		
<i>Die liebe Farbe</i>	B minor	Dominant tonality of tonic minor
<i>Die böse Farbe</i>	B major-minor	
<i>Trock’ne Blumen</i>	E minor-major	
C. Section V. Reprise of Cycle		
<i>Der Müller und der Bach</i>	G minor to G major	Tonic minor to tonic major tonality
Postlude. <i>Des Baches Wiegenlied</i>	E Major	May be taken as referring to the second half of <i>Trock’ne Blumen</i>

Archer lists the overall tonality of each section on the right hand side of Table 3.1. If we use roman numerals to map the tonalities he verbally describes in the right-hand column (tonic, dominant, mediant), the harmonic progression he outlines looks like this: Prelude (iii) – I – V – Interlude (iii) – i – V – i→I – Postlude (V). At first glance, the progression seems to be evidence in support of Archer’s argument for the cycle being in G major. Nevertheless, upon closer examination one notices that the keys of the individual songs do not match up with the harmonic progression presented above. It seems that Archer is using the terms “dominant” and “mediant” in very general terms to refer to sharp side keys and third relationships, not to the specific tonalities with these functions in G major. When the terms are used in this way, it is very easy to make the cycle fit into the context of an overall G major tonality.

The second issue in Archer’s chart occurs in what he labels as Part II, B., Section IV: Development “Despair.” This includes songs 16 through 18. Archer had stated that G minor is the tonic of Part II, and that Part II B is in the “dominant tonality of tonic minor.” The dominant of G minor is D major, yet the songs in this section are in B minor, B major/minor, and E minor/major, respectively, as indicated on Archer’s chart. B major is the V of E major, and E major is the V of A major, neither of which Archer proposed as a tonic in Part II or anywhere else in the cycle. These songs are not the dominant but rather the mediant and submediant of G major, respectively.

In the cycle there is no dominant–tonic or other traditional cadence to truly establish G major (or minor) as the tonic. There are too many “borrowed chords” or key signatures that are not used to affirm G major or minor as a tonal center. There is neither an authentic nor a plagal cadence; the cycle appears to end with a deceptive cadence.

Even if one excludes the postlude from the equation, there is no name for a VI-I cadence. While G major does appear towards the beginning and towards the end of the cycle, that is not enough to make the cycle sound as if it is in G major.

Two additional analyses of the formal structure of *Die schöne Müllerin*, by Donald G. Wiggins and Vivian S. Ramalingam, follow Archer in postulating that the cycle is centered around G major and has a prelude, interlude, and postlude that are outside the G major tonal scheme.⁸ What most distinguishes these analyses from Archer's is that both Wiggins and Ramalingam propose that Schubert's key choices in the cycle correspond to the key characteristics published by C. F. D. Schubart in his *Aesthetik der Tonkunst*. These authors' tonal maps of the cycle are reproduced in Tables 3.2 and 3.3.

Wiggins's tonal outline of the cycle is different from Archer's in that Wiggins labels each individual song with a roman numeral instead of designating groups of songs with an over-arching tonality. Wiggins states that the cycle "must be felt in G major" and that the prelude, interlude, and postlude are third relations to the tonic. He labels the prelude as an upper third relation to G major and the postlude as a lower third relation.⁹ Wiggins also points out the tritone relationship between the tonics of the first and last songs of the cycle.

⁸ Vivian S. Ramalingam, "Schubart, Tonality, and *Die schöne Müllerin*," in *The Creative Process*, ed. Charlotte B. Winsor (New York: Broude Brothers, 1992), 201–216, and Donald G. Wiggins, "Franz Schubert, C. F. D. Schubart, and *Die schöne Müllerin*," *The NATS Bulletin* (May/June 1984): 12–15.

⁹ Wiggins, "Franz Schubert, C. F. D. Schubart, and *Die schöne Müllerin*," 13.

Table 3.2: Donald G. Wiggins, “Tonal Structure of *Die schöne Müllerin*” from “Franz Schubert, C.F.D. Schubart, and *Die schöne Müllerin*” *The NATS Bulletin*

Prelude	1. <i>Das Wandern</i>	B♭ major – Upper 3 rd relation
PART 1.	2. <i>Wohin?</i>	I
	3. <i>Halt!</i>	IV
	4. <i>Danksagung an den Bach</i>	I
	5. <i>Am Feierabend</i>	ii
	6. <i>Der Neugierige</i>	III
	7. <i>Ungeduld</i>	V/V
	8. <i>Morgengruss</i>	IV
	9. <i>Des Müllers Blumen</i>	V/V
	10. <i>Tränenregen</i>	V/V
	11. <i>Mein!</i>	V
	Interlude	12. <i>Pause</i>
Prelude to Part 2.	13. <i>Mit dem grünen Lautenbände</i>	B♭ major – Upper 3 rd relation
PART 2.	14. <i>Der Jäger</i>	iv
	15. <i>Eifersucht und Stolz</i>	i
	16. <i>Die liebe Farbe</i>	iii
	17. <i>Die böse Farbe</i>	V/VI
	18. <i>Trock'ne Blumen</i>	vi
	19. <i>Der Müller und der Bach</i>	i/I
	Postlude	20. <i>Des Baches Wiegenlied</i>

Wiggins does not propose that Schubert knew of Schubart’s key characteristics, but he does assert that Schubert’s key choices coincide with Schubart’s key characteristics. The article includes a chart that lists each song of *Die schöne Müllerin* and an excerpt from Schubart’s key characteristics relevant to the individual song. Wiggins asserts that all but two of the songs (*Der Neugierige* and *Des Baches Wiegenlied*) correspond. He does not discuss why Schubert did not use Schubartian keys for these two songs.¹⁰

¹⁰ Wiggins, “Franz Schubert, C.F.D. Schubart, and *Die schöne Müllerin*,” 14–15.

Table 3.3: Vivian S. Ramalingam, “Tonal Structure of *Die schöne Müllerin*” from “Schubart, Tonality, and *Die schöne Müllerin*.” 205.

1. <i>Das Wandern</i>	B-flat		
2. <i>Wohin?</i>	G		G: I
3. <i>Halt</i>	C		IV
4. <i>Danksagung an den Bach</i>	G		I
5. <i>Am Feierabend</i>	a		ii
6. <i>Der Neugierige</i>	B		[“midpoint” of Part I] V of E
7. <i>Ungeduld</i>	A		
8. <i>Morgenruss</i>	C		IV } V/V
9. <i>Des Müllers Blumen</i>	A		(ii)
10. <i>Tränenregen</i>	A/a		V
11. <i>Mein</i>	D		
12. <i>Pause</i>	B-flat		CENTER
13. <i>Mit dem grünen Lautenbande</i>	B-flat		[interruption of G]
14. <i>Der Jager</i>	c		g: iv
15. <i>Eifersucht und Stolz</i>	g/G		i - I
16. <i>Die Liebe Farbe</i>	b		[“midpoint” of Part II] V of E
17. <i>Die böse Farbe</i>	B		
18. <i>Trock’ne Blumen</i>	e/E		[e - E]
19. <i>Der Müller und der Bach</i>	g/G		i - I
20. <i>Des Baches Wiegenlied</i>	E		

Ramalingam organizes her tonal chart in a slightly different way from Archer or Wiggins. She identifies songs 2–11 and 14–19 as those that being centered around G and serving a narrative function. The remaining four songs, which the previous two authors labeled as prelude, interlude, and postlude, she labels as “framing songs” centered around

B♭.¹¹ Like Wiggins, Ramalingam also notes the tritone relationship between the first and the last songs. She postulates that the first three of the framing songs are in B♭ major and represent the miller's life, and the last song, a tritone away in E major, is the musical antithesis of B♭ major and represents death.

Ramalingam and Wiggins have slightly different views on which songs do not coincide with Schubart's key characteristics. They both agree on *Der Neugierige*: Ramalingam thinks that Schubert chose not to use a Schubertian key in order to strengthen the tonal plan of the cycle.¹² Unlike Wiggins, she believes that *Der Jäger* does not fit with Schubart's key descriptions, saying that "Schubert's setting of this song, however, has none of the elements Schubart associates with this key [C minor]."¹³ Wiggins believes that this song fits with Schubart's description of C minor as "complaining of unfortunate love."¹⁴ Wiggins does not believe that the final song fits into Schubart's characteristics, but Ramalingam disagrees. She believes that when the final song of the cycle is viewed through the lens of Schubart's description of E major, which she translates as "loud jubilation, laughing joy, and not yet complete, full delight," the story is enhanced, making the miller's death a metamorphosis into a new existence.¹⁵

I agree with Wiggins and Ramalingam in their assertion that there are extra-musical connotations associated with Schubert's key choices, but I disagree that the cycle

¹¹ Ramalingam, "Schubert, Tonality, and *Die schöne Müllerin*," 204. In footnote 6 on this page, Ramalingam emphasizes that the cycle is G-centric, and not in G major, as Archer states. It does not appear that she has read Wiggins's article.

¹² Ramalingam, "Schubert, Tonality, and *Die schöne Müllerin*," 212.

¹³ *Ibid.*, 213.

¹⁴ Wiggins, "Franz Schubert, C. F. D. Schubart, and *Die schöne Müllerin*," 14.

¹⁵ Ramalingam, "Schubert, Tonality, and *Die schöne Müllerin*," 212.

has a tonal structure motivated by functional harmony, and the extent to which Schubert's keys correspond with Schubart's ideas. Adhering to both a functional tonal scheme and to extra-musical key associations is nearly impossible. Ramalingam recognizes this to some extent and hypothesizes that Schubert's desire to create a cohesive tonal plan partly explains why some of his key choices do not correlate with Schubart's key characteristics.¹⁶ I contend that the meaning associated with Schubert's key choices is directly linked to the *Temperaturfarbe* of different keys and is specific to the emotions and events in this cycle, and that these choices, not a tonic key or keys, mold the overall form of the cycle. Schubert's choice of keys creates a temperament-based color palette that allows him to enhance the narrative and expressive potential of the cycle.

Schubart's key descriptions are so multifaceted that it is easy to find a link between any Lied and a Schubartian idea. For example, Wiggins and Ramalingam both postulate that *Am Feierabend* fits with Schubart's "pious womanhood and tenderness of character" because in the song the miller is concerned about impressing the virtuous miller maid.¹⁷ Wiggins specifically links Schubart's "pious womanliness" to the maid saying "'Goodnight' to *everyone*."¹⁸ In this instance, the connection between the maid in the song and piety seems contrived.

Three scholars who do not view G major as the reference point for their tonal map of *Die Schöne Müllerin* are Charles Rosen, Kurt Von Fischer, and Christopher Lewis.

¹⁶ Ibid.

¹⁷ Ted Alan Dubois, "Christian Friedrich Daniel Schubart's 'Ideen Zu Einer Aesthetik der Tonkunst': An Annotated Translation" (PhD diss., University of Southern California, 1983), 433. Ramalingam, "Schubert, Tonality, and *Die schöne Müllerin*," 210. Wiggins, "Franz Schubert, C. F. D. Schubart, and *Die schöne Müllerin*," 14.

¹⁸ Wiggins, "Franz Schubert, C. F. D. Schubart, and *Die schöne Müllerin*," 14.

Rosen divides the cycle into six tonal groups based on the overall emotional quality of a group of songs (see Table 3.4). Rosen touches upon an important point: that the songs in the cycle “are defined partly by how dramatic are the key changes from one song to another, and by the character of the music and the poem.”¹⁹

Table 3.4: Charles Rosens’ tonal groups of *Die schöne Müllerin*, from *The Romantic Generation*.

Song 1. Introduction: B \flat
Songs 2–4. Arrival and meeting: G, C, G
Songs 5–10. Progress and anxiety: a, B, A, C, A, A-a
Song 11. Triumph: D
Song 12–15. Pause, jealousy: B \flat , B \flat , c, g-G
Songs 16–20. Towards death: b-B, B-b, e-E-e, g-G, E

Fischer has divided the cycle into two parts marked by opposite tonal trajectories.²⁰ He has expressed his belief that Schubert’s key choices were only partly functional, and often they were guided by Schubert’s wish to link keys and text associations. Fischer has noted that first half of the cycle centers around keys with zero to three sharps, which depict the miller’s journeys towards love, and latter half moves towards keys with a high number of flats, depicting, according to Fischer, the miller’s journey towards death.

Lewis’s ideas are most similar to my own in regards to dramatic structure and view on Schubert’s key choices. He designates songs 1–4 as the exposition, 5–11 as the

¹⁹ Charles Rosen, *The Romantic Generation* (Cambridge, Mass.: Harvard University Press, 1995), 187.

²⁰ Kurt von Fischer, “Einige Gedanken zur Tonartenordnung in Schuberts Liederzyklen,” *Muzikološki Zbornik* 17 (1981): 87–96.

development, and 12–20 as the *dénouement*.²¹ While Lewis’s discussion of the cycle is not extensive, he has noted that commonalities are not hard to find in all the songs on a given tonic, and he labels them as follows: B \flat “Him,” G “The Brook,” C “Her,” A “Nature,” D “Love requited,” B “Doubt & Disaster,” and E “End of Journey.”²²

Although his descriptions of extra-musical associations are not very specific, Lewis has recognized the importance of the musical intensification that occurs throughout the cycle and its connection to the text. He has noted that:

Some of the connections may indeed seem trivial ... but... more to the point is the exactly parallel textural and musical intensification provided by the rising tessitura as we climb from *his* key (B \flat) in song one, through *her* key (C) in songs three and eight, to *their* key (D) in song eleven.²³

Lewis’s description of the cycle’s “upward progress” is an oversimplification that forces one to discount the importance of B major and A major in the first half of the cycle. Nevertheless, the “textural and musical intensification” that Lewis notes are ultimately a byproduct of Schubert’s use of *Temperaturfarben*. Well-temperament analysis provides scholars with the means to investigate musical intensification and the link between key and poetic meaning with more depth and precision.

The tonal groups and the extra-musical associations that Rosen and Lewis describe are the result of what I assert are two of Schubert’s driving principles: the contrast of keys with different *Temperaturfarben* and the correlation between poetic expression and the emotive power of a given key. I propose that the cycle can be

²¹ Christopher Orlo Lewis, “Text, Time, and Tonic: Aspects of Patterning in the Romantic Cycle,” *Intégral: The Journal of Applied Musical Thought* 2 (1998): 54–55.

²² *Ibid.*, 54–55.

²³ *Ibid.*, 53, 56.

categorized into four tonal groups, the first of which is divided throughout the cycle, and that these tonal groups, based on increasing *Temperaturfarben* as the story progresses, correlate with the traditional elements of dramatic structure (see Table 3.5).

Table 3.5: The four tonal groups of *Die schöne Müllerin*

Group 1	1. <i>Das Wandern</i>	B \flat	Introduction
Group 2	2. <i>Wohin?</i>	G	Rising Action
	3. <i>Halt!</i>	C	
	4. <i>Danksagung an den Bach</i>	G	
Group 3	5. <i>Am Feierabend</i>	a	False Climax
	6. <i>Der Neugierige</i>	B	
	7. <i>Ungeduld</i>	A	
	8. <i>Morgengruss</i>	C	
	9. <i>Des Müllers Blumen</i>	A	
	10. <i>Tränenregen</i>	A/a	
Group 1	12. <i>Pause</i>	B \flat	Interlude
	13. <i>Mit dem grünen Lautenbande</i>	B \flat	
Group 4	14. <i>Der Jäger</i>	c	True Climax
	15. <i>Eifersucht und Stolz</i>	g/G	
	16. <i>Die liebe Farbe</i>	b	Dénouement
	17. <i>Die böse Farbe</i>	B	
	18. <i>Trockne Blumen</i>	e/E	
	19. <i>Der Müller und der Bach</i>	g/G	
	20. <i>Des Baches Wiegenlied</i>	E	

Group 1 encompasses the songs in B \flat Major, which as the only flat major key in the cycle, functions as a key for narration and for songs that do not build dramatic tension. Group 2 contains songs in G and C, which are sharp keys with minimal *Temperaturfarben*. Group 3 is centered on A major, with songs that foreshadow (*Der Neugierige* in B) and alleviate tension (*Morgengruss* in C). The overall *Temperaturfarben* of group 3 is drastically increased; the overall purity rating of A major

is 7, which is much more colored and tense than any of the keys that Schubert used in the first two tonal groups. The color and tension increase again with the songs of group 4, where the predominant tonalities are B and E.

A look at the keys used in the cycle helps to illustrate how Schubert increased *Temperaturfarben* throughout the work. Figure 3.1 is a graphic representation of Schubert's key choices in *Die schöne Müllerin*. The keys in black are key signatures that Schubert used and those in lavender are ones he did not. The main major keys of each tonal group are circled and labeled.

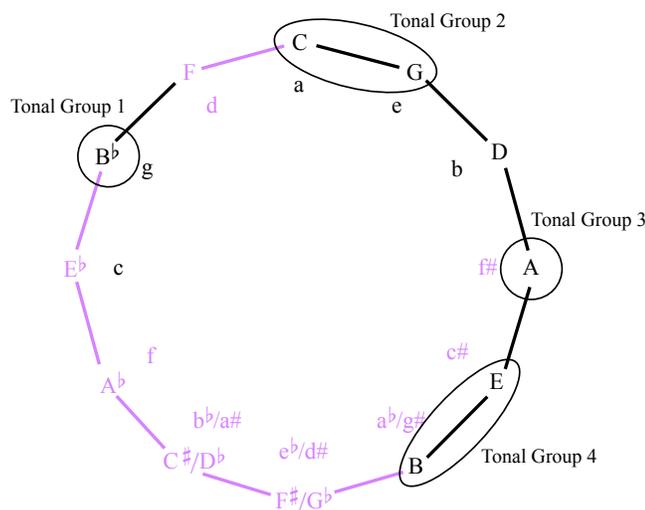


Figure 3.1: The Keys of *Die schöne Müllerin*

As is apparent in Figure 3.1, Schubert used seven major keys and four minor keys in this cycle. All of the minor keys used have a corresponding parallel major; D major and Bb major are the only major keys whose corresponding parallel minors are not used. Bb is the only flat-major key used in the cycle. It is likely that Schubert chose to use primarily sharp keys for *Die schöne Müllerin* because they have more inherent

Temperaturfarben than do flat keys due to the increased color of sharp dominant chords. Sharp keys allow Schubert to more easily build dramatic tension in *Die schöne Müllerin*.

Key Centers of *Die schöne Müllerin*

While many of Schubert's key choices in *Die schöne Müllerin* are based upon building dramatic tension and creating contrast, the keys he used repeatedly can be linked to more concrete meaning that is specific to this song cycle. I will give an overview of Schubert's use of each key the order in which they appear. I have grouped parallel major and minor keys together because their meanings are usually connected; many of the minor songs and sections function as a contrast to the parallel major. I will also give Christopher Lewis's and C.F.D. Schubart's characterization of the keys for reference.

B \flat major

Schubert chose B \flat major as the first key to greet the listener. It is the key of all of the songs in tonal group 1, which is divided throughout the cycle and consists of *Das Wandern*, *Pause*, and *Mit dem grünen Lautenbande*. Schubert uses B \flat major for an absence or break from the dramatic tension. Many of the aforementioned authors note that the songs in the cycle that are set in B \flat function as a prelude and interlude or framing songs; these observations highlight the fact that Schubert used the songs in B \flat major differently from the rest of the songs in the cycle. Because it is the only flat-major key that Schubert uses in the cycle, B \flat major contrasts with the other sharp-major keys. In all flat major keys, with the exception of G \flat major and C \flat major, the dominant is purer

than the tonic. Especially when the tonic–dominant relationship is emphasized, well-tempered flat keys do not build tension in the same way as sharp keys because the dominant introduces a less colored chord instead of a more colored one. Of the songs in the cycle in B \flat major, *Das Wandern* functions as a prologue in place of Müller’s original prologue that Schubert omitted, while *Pause* and *Mit dem grünen Lautenbande* function as an interlude between the false climax, *Mein!* and the true climax, *Der Jäger*.

Lewis labels B \flat major as the key that represents “him” (the miller).²⁴ The problem with this categorization is that all of the songs represent the miller since he is the only character, and the three songs in B \flat major do not have any other common elements, such as the miller wandering or not thinking about the maid. For Schubart, B \flat major is the key of “cheerful love, good conscience, hope, a longing for a better world.”²⁵ From this description we can assume that Schubart perceived B \flat major as a key with positive, yet not intense emotion. Schubert’s use of B \flat major is not tied to specific sentiments, but his use of the key and Schubart’s descriptions both share mild emotions.

G major and G minor

G Major is the next key signature encountered in the cycle, and it is the primary key in which the miller communicates happily and optimistically with the brook. G major is the key of songs *Wohin?* and *Danksagung an den Bach*. Contrastingly, Schubert generally uses G minor for the miller’s more angst-written addresses to the brook. G minor is the beginning key of *Eifersucht und Stolz*, and both G minor and G major

²⁴ Lewis, “Text, Time, and Tonic,” 54.

²⁵ Ted Alan Dubois, “Christian Friedrich Daniel Schubart’s ‘Ideen Zu Einer Aesthetik der Tonkunst,’” 433.

alternate in *Der Müller und der Bach*. This penultimate song illustrates Schubert's use of these two keys: the miller is in a dialogue with the brook, lamenting about ending his life. The despondent sections that he sings to the brook are in G minor, while the brook's consolations are in G major.

Both G major and G minor are mild keys with regard to *Temperaturfarben*. G major ranks third in purity out of all major keys, and G minor ranks fourth out of the minor keys. Upon examining the songs in G minor, one notes that Schubert does not use G minor alone, but rather he contrasts it with its parallel major or other tonal centers. The primary reason for this is likely that G minor is in the category of "no contrast"; since the tonic and the dominant chords have equal amounts of *Temperaturfarben*, Schubert must tonicize other chords or modulate away from G minor in order to create more variety in the dramatic tension.

Lewis has not differentiated between major and minor keys when he presents extra-musical ideas common to songs in a certain key. Lewis has noted all songs in G are associated with the brook. The G tonal centers have more to do with the miller's interaction with the brook.²⁶ Schubart's G major is "everything rustic, moderately idyllic and lyrical, each quiet and satisfied passion, each tender recompense for sincere friendship and true love; in a word, each gentle and serene motion of the heart can be expressed splendidly in this key."²⁷ Like many of Schubart's key descriptions, it is both specific and all-encompassing at the same time. "Quiet and satisfied passion" is very exact, but the number of characteristics that Schubart lists makes it easy to find

²⁶ Lewis, "Text, Time, and Tonic," 54.

²⁷ Dubois, "Christian Friedrich Daniel Schubart," 436.

something in any song that will align with one of his descriptions. Many emotions can be classified as a “gentle and serene motion of the heart.” Nevertheless, it is clear that Schubert’s G major is a key with positive, happy connotations, and these general sentiments are consistent with Schubert’s use of the key. Schubert also links G major to the brook, which fits with Schubert’s label of “rustic” and “idyllic.” Schubert’s G minor, on the other hand, is “displeasure, uneasiness, worry about a failed scheme; discontented gnashing at the bit; in a word, anger and disgust.”²⁸ Schubert’s use of G minor and Schubert’s description both share negative connotations. If we were to write a description based on Schubert’s use of G minor in *Die schöne Müllerin*, it would state that G minor is the key of jealousy and lament.

C major and C minor

Two songs of *Die schöne Müllerin* are in C major: *Halt!* and *Morgengruss*. Throughout history, musicians have tuned C major so that it has the purest harmonies. Because of this, C major is associated with purity and freedom from excitement or sorrow. Schubert adheres to this traditional use of C major and uses it for pleasant songs without intense emotion. The first song in C major appears third in the cycle, as the miller wonders if he should stop at the mill. The miller’s journey is just beginning at this point, so the mill carries neither positive nor negative connotations for him. The second song in C major is *Morgengruss*, a simple, pleasant strophic song in which the miller says good morning to the miller maid; he is content and satisfied.

²⁸ Dubois, “Christian Friedrich Daniel Schubert,” 433.

C minor is the key for one song, *no. 14. Der Jäger*. This song is the true climax of the cycle, and it seems appropriate that Schubert chose a key that is not repeated elsewhere in the cycle. C minor has a purity ranking of five and is in the low contrast category. C minor seems appropriate for this song because the miller is expressing his shock but has yet to tumult into an emotional despair.

For Lewis, C represents “Her.”²⁹ The three songs with C key signatures, *Halt!*, *Morgengruss*, and *Der Jäger*, are all related to the maid or the idea of the maid, but this is a communality not limited to songs in C. The maid has not even entered the story with the song *Halt!* Schubart characterizes C major as “quite pure. Its character is innocence, simplicity, naivety, [and] baby-talk.”³⁰ Schubart’s description is very much in line with the historical associations surrounding C major. He describes C minor as “declaration of love, and at the same time lamentation of unrequited love. Every languishing, longing, sighing of the love-crazed soul lies in this key.”³¹ Schubert’s use of C minor is slightly different; in *Der Jäger*, the miller is lamenting his unrequited love, but through grumbles and anger rather than longing and sighs.

A major and A minor

In *Die schöne Müllerin*, A major is the key of daydreams and fantasies. The occurrence of A is concentrated in the third tonal group of the cycle. This whole group of songs could be classified as the daydream section; the miller is yearning for the maid’s

²⁹ Lewis, “Text, Time, and Tonic,” 54.

³⁰ Dubois, “Christian Friedrich Daniel Schubart,” 433.

³¹ Dubois, “Christian Friedrich Daniel Schubart,” 434.

love and attention and fantasizes about it until the tide turns with the final song of this tonal group, *Mein!* Of songs five through eleven, three are in A major, and one is in A minor fluctuating with A major as an important tonal center. A major is a key with a medium amount of *Temperaturfarben*; it ranks number seven for purity out of the twelve keys. With this third tonal group of the cycle Schubert has moved away from the more neutral keys of B♭ major, G major, and C major and has created more tension and excitement through the use of A major.

When A minor occurs in the cycle, it contrasts the dream quality of A major with a dose of disillusionment and reality. This is seen in *Tränenregen*, in which the miller is sitting with the miller maid, projecting and dreaming of an intimacy between them that is not really there. The maid speaks, but they are not words of love or affection; she is merely stating that it is going to rain. At this point the music shifts from A major to A minor, and Schubert's decision to change modes contrasts the real world with the miller's fantasy world.

Nature is the common theme Lewis finds in A major songs.³² The idea of nature is prevalent in many songs in many keys throughout this cycle, and the songs in A do not always feature nature as a prominent element. *Am Feierabend* is in A minor, but it is more about work than nature. Likewise, *Ungeduld*, in A major, focuses on the miller's impatience and not nature. Regarding A major, Schubart says "this key contains declarations of innocent love, contentment over its situation, hope of reunion at the parting of a lover, youthful cheerfulness, and trust in God."³³ Schubert's use of A major

³² Lewis, "Text, Time, and Tonic," 54.

³³ Dubois, "Christian Friedrich Daniel Schubart," 435.

differs from Schubart's description, but the intensity and positivity of emotion are similar. As discussed above, Schubart describes A minor as reflecting "pious womanhood and tenderness of character."³⁴ Again, Schubert assigns a different meaning to the key, but both Schubert and Schubart's meanings have similar degrees of emotional intensity. A minor is not a highly colored key; so, composers were not prone to use it for intense emotions.

D major

Schubert uses D major only once in the cycle; it is also the only sharp major key whose parallel minor does not occur as a significant tonal center. Schubert's use of D major is linked to its historical connotations as a triumphant and celebratory key (it is associated with military triumphs since natural trumpets were pitched in D). In *Mein!*, the miller excitedly claims that the miller maid is his.

Mein! is the last song in tonal group three, which is centered around A major. D major is the IV chord in A major, and Schubert's use of D-major chords within this group of songs suggests that he consciously avoided using it for the more intense songs. D-major chords are conspicuously absent in the songs at the beginning of this group. In *Am Feierabend* and *Ungeduld*, the former of which is in A minor with A major as a strong tonal center and the latter of which is in A major, D-major chords are not used. These are intense songs, about work and impatience respectively. In sharp keys in well temperament, the IV chord is more pure than the V chord. By not using the IV chord, Schubert places more emphasis on the *Temperaturfarben* created by the tonic and

³⁴ Dubois, "Christian Friedrich Daniel Schubart," 433.

dominant chords. In song nine, *Des Müllers Blumen*, in A major, the D-major chord appears one time only, but in song ten, *Tränenregen* (also in A major), there is a much greater prevalence of D major. These songs are not as frantic as the others that are in (or have significant sections in) A major. Both songs ten and eleven highlight the close relationship between A major and D major.

Lewis labels D major as the key of “love requited.”³⁵ Since Lewis’s method of deriving key characteristics is to find the commonalities between songs in a given key, D major logically expresses the sentiment of *Mein!*, the only song in D. However, I contend that the miller does not truly believe that the maid is his, and that D major is more strongly connected to A major and dreams. Schubart describes D major as “the key of triumph, of Hallelujahs, of battle cries, of triumphant rejoicing.”³⁶ His description very much corresponds with historical associations with this key, and it is probable that Schubert had the associations between triumph and D major in mind when he chose the key for *Mein!*

B major and B minor

In *Die schöne Müllerin* both B major and B minor are keys of the miller’s intense negative emotions and turmoil. Out of all the major keys used in *Die schöne Müllerin*, B major has the most *Temperaturfarben*, with a purity ranking of 11. The darkness and intensity of the *Temperaturfarben* in the B-major songs have not gone unnoticed by such

³⁵ Lewis, “Text, Time, and Tonic,” 55.

³⁶ Dubois, “Christian Friedrich Daniel Schubart,” 436.

scholars as Susan Youens.³⁷ B major and minor are prevailing tonalities in the cycle; there are three songs in B major and minor, and the B major triad is used frequently in keys where it is not diatonic, such as in the G- and A-major songs. The B-major tonality is used frequently and early in the cycle to foreshadow the trouble that is to come; Schubert incorporates a B-major key signature or B-major chords in eleven out of the twenty songs.

B minor has less *Temperaturfarben* than B major. They share the same highly colored dominant triad (F# major, which has a purity ranking of 12), but the tonic B-minor chord has much less *Temperaturfarben* than the B-major chord. B minor is the second purest minor triad out of six, and B major is the sixth purest major triad out of seven. Schubert almost always presents B minor juxtaposed with B major in the cycle; the presentation of a less colored minor next to a more dissonant major highlights the color of B major and makes the impact of this major chord much more poignant.

B major has traditionally carried intense negative connotations. As mentioned in chapter 1, Beethoven considered B major and B minor to be dark keys. Schubart describes B major as “highly colored, announcing wild passions, made up of the crudest colors. Anger, rage, jealousy, fury, desperation, and every burden of the heart lies in its sphere.”³⁸ Schubert’s use of B major is consistent with Schubart and tradition; Schubert uses B major for the miller’s most intense emotional turmoil.

Scholars often comment on the juxtaposition of B minor and B major in *Die liebe Farbe* and *Die böse Farbe*. The second of the two songs is in major, but it has an angry

³⁷ Susan Youens, *Schubert, Die Schöne Müllerin* (New York: Cambridge University Press, 1992), 102.

³⁸ Dubois, “Christian Friedrich Daniel Schubart,” 435.

sentiment, which can seem inconsistent with a major key in equal temperament; however, in well temperament, B major would be heard as the more dissonant of the two keys, because of its greater *Temperaturfarben*.

For Lewis, B is the key of “doubt and disaster.”³⁹ Lewis is correct, but his description is still too vague. Schubart’s description of B minor does not contain the same strong emotions, which is indicative that the key has less *Temperaturfarben* than B major. His commentary reads, “B minor, is, as it were, the key of patience, of the silent expectation of fate, and of the submission the divine decree. Therefore, its complaint is so gentle, without ever breaking out in offending murmurs or whimpers.”⁴⁰ Schubert used B minor primarily as a contrast to B major, but he still associated it with suffering. Schubart’s description of B minor seems to have been written with a saint or religious person in mind and does not really apply to *Die schöne Müllerin*.

E major and E minor

In *Die schöne Müllerin*, Schubert chose to associate E major and minor with death. E major has a purity ranking of nine, which means that with death Schubert eases back from the intense negative emotions that correspond with B major. E minor is one of the purest minor keys, with a purity ranking of 3. By contrasting the pleasing E minor with the more colored E major, Schubert depicts the bittersweetness of death, of sadness intermingled with the hope for eternal rest. *Trock’ne Blumen* begins in E minor with solemn funereal music. The first five and a half bars consist solely of E-minor chords,

³⁹ Lewis, “Text, Time, and Tonic,” 55.

⁴⁰ Dubois, “Christian Friedrich Daniel Schubart,” 436.

which carry a purity ranking of 1. The purity of this minor chord creates a type of consolation and peace in the face of death; a more colored minor chord might depict death but not necessarily rest. The song eventually modulates to E major, the more colorful of the two keys, when the miller gets animated as he thinks of how the flowers on his grave will make the maid think of his faithfulness to her. The final song, the Brook's lullaby, is in E major and focuses on the consolatory side of death, but with the *Temperaturfarben* of E major manifesting the bittersweet aspects of the miller's death.

Lewis labels E as the "end of the journey."⁴¹ This description does not give any indication of how the story ends, it just implies that E is used at the end of the cycle and not at the beginning or middle. Schubart's description of E major is not similar to the emotions that Schubert expresses through this key. Schubart's description reads "loud shouts of joy, laughing pleasure, and still not altogether full gratification lies in E major."⁴² Schubart's words are in line with the excitement and agitation often associated with sharp keys, but the sentiment is not similar to the E-major songs in *Die schöne Müllerin*. Even the brook's consolation, which is presented in E major, is far from joyous sentiments and laughing pleasure.

Schubart lists the characteristics for E minor as:

naïve, womanly, innocent declaration of love, lament without murmuring, sighs accompanied by few tears. The key speaks of impending hope of the purest happiness calling forth in C major. Since by nature it has only one color, one could compare it with a girl, dressed in white, with a rose-red bow on her bosom. One withdraws from this tone with inexpressible grace again to the fundamental C major, where the heart and ear find the most perfect satisfaction.⁴³

⁴¹ Lewis, "Text, Time, and Tonic," 55.

⁴² Dubois, "Christian Friedrich Daniel Schubart," 435.

⁴³ Dubois, "Christian Friedrich Daniel Schubart," 436.

Schubart's description of E minor is perhaps the most fanciful of all his descriptions. He makes a clear connection between E minor and C major, possibly due to the purity of the E minor triad in relation to the other minor keys. His description does not match Schubert's use exactly, but there is a sense of sadness without deep despair or regret that appears in both men's use of this key.

Chapter 4:

Die schöne Müllerin Individual Song Analyses

Die schöne Müllerin: Ein Cyclus von Liedern

1. *Das Wandern* (To Wander)

B \flat major, 2/4 time, *mässig geschwind* (moderately fast)

Die schöne Müllerin begins with the simple, strophic song *Das Wandern* (Wandering). The song is one of three in B \flat major which, as discussed in Chapter 3, is the only major flat key used in the entire cycle. B \flat major is the fourth purest major key in regards to *Temperaturfarben*, and Schubert uses it as the key of neutrality, narration, or a break from the dramatic and emotional tension of the cycle. *Das Wandern* fits perfectly into this context; the miller is singing a simple song about the appeal of wandering. He has yet to encounter anyone or anything that has made him happy or sad.

Schubert's music for this first song establishes a feeling of neutrality. This comes first from his choice of a flat key. As discussed in Chapter 2, in flat keys the subdominant triad has more *Temperaturfarbe* than the tonic, and the dominant has less. By focusing primarily on the tonic and dominant triads and completely avoiding the more colored subdominant chord (E \flat major), Schubert decreases the potential *Temperaturfarben* of the song. What the audience hears is a very consistent and consonant B \flat major; in Young's temperament the major third of B \flat major is 396 cents, and the F major's is 394 cents. Both thirds are still wider than a pure third (386 cents), but in well temperaments, this major third is closer to pure than the major third in equal temperament (400 cents). Thus,

when a modern-day listener who is used to hearing this song in equal temperament hears it in well temperament, she might perceive B \flat major as being a bit sweeter sounding because the major thirds will beat less.

Schubert's use of other musical elements in this song also suggests that he intended to start the cycle with a song that had a neutral *Temperaturfarben*. The song's moderate tempo and dynamic markings do not emphasize the song's *Temperaturfarben*. The range of the song is moderate, and the accompaniment uses eighth and sixteenth notes and is primarily linear, with no full vertical triads; these elements downplay the small amount of color inherent in B \flat major because they minimize the beating of intervals. The accompaniment consists primarily of octaves in the left hand and arpeggiated triads in the right. In the instances where the right hand of the piano strikes more than one note at once, it plays the root and third of either the tonic or dominant triad.

The section of *Das Wandern* with the most *Temperaturfarben* is mm. 13-16 (see Example 4.1). In these measures the texture of the left hand of the piano is thickened to block octaves that move in parallel thirds with the vocal line for parts of the passage. This section has a momentary tonicization of G minor, vi of B \flat major. The color contrast of V-I in G minor with V⁷-I in B \flat major, which has comprised the harmony for the song thus far, is easily audible. This tonicization accompanies the miller's words "Das muss ein schlechter Müller sein / Dem niemals fiel das Wandern ein" (a poor miller he must be, who has never thought of wandering). G minor is the key associated with the miller's negative address to the brook; the *Temperaturfarbe* of the chord paired with the figuration of the accompaniment creates a feeling of irritation. It is plausible that this

occurrence of G minor is the first hint at the fragility of the miller; he is not just singing a song about carefree wandering, but he is also subtly stating his belief that he must wander in order to be a real man.

Example 4.1: *Das Wandern*, mm. 12–16

12

Das muß ein schein-ter Mül-ler sein, dem nie-mals fiel das Wan-tern ein, das
 Das hat nicht Rast bei Tag- und Nacht, ist stets auf Wan-der- schaft be-dacht, das
 Die gar nicht ger- ne stil- le stehn, die sich mein Tag nicht mü- de- gehn, die
 Sie tan-zen mit den mun-tern Reihn, und wol- len gar noch schnell ler- sein, die
 Herr Mei-ster und Frau Mei-ster - in, lasst mich in Frei-den wei- ter ziehn und

p

F⁷ B^b B^b g D⁶ g a a F C⁶ F

Schubert's compositional choices imply that he wanted to create a mellow, uniform atmosphere throughout the course of this strophic opening song. With regard to the dramatic structure of the cycle, this opening song functions as an introduction. The rising action of the story is yet to come.

2. *Wohin?* (Where to?)

G major, 2/4 time, *Mässig* (Moderate)

G major is the key of the miller's pleasant, direct addresses to the brook. In *Wohin?* (Where to?) the miller asks the brook where he should go. The song opens with a sixteenth-note accompanimental figure in the right hand of the piano that depicts the sounds of the rolling brook turning the mill wheel. The left hand repeatedly strikes G and D while the right hand repeats the arpeggiated notes of the G-major triad. As in the first

song, *Das Wandern*, the rhythmic units are comprised of short note values, and the tempo is moderate. The combination of a slow harmonic rhythm at the beginning of the song and the repetition of the sixteenth notes causes the G-major triad to ring out at the beginning of *Wohin?*, firmly establishing the sonority of G for the first ten measures of the song. Susan Youens has called this introduction “another musical spell,” and she is indeed correct;¹ the music firmly establishes the *Temperaturfarbe* of G major in the listeners’ ears and situates it as a color against which other tonalities can be contrasted.

The first tonality that is contrasted against the tonic G major is A minor in mm. 11–14 (see Example 4.2). A minor may at first seem like an unusual choice since it is neither the parallel nor relative minor of G major. A minor could usher in a ii-V $\frac{6}{5}$ -I progression, but it does not in this context. Nevertheless, by tonicizing A minor, two chords are introduced that will be important tonal centers later in the cycle: B and E major. Schubert has thus planted the seeds of the sonorities that will later be associated with emotional pain and death. In essence, he has created a type of musical foreshadowing. Schubert alluded to these sonorities in this song and others throughout the cycle.

Example 4.2: *Wohin?*, mm. 11–14

The musical score for Example 4.2 shows measures 11–14 of the song *Wohin?*. The vocal line (treble clef) has the lyrics: "hell. Ich weiss nicht, wie mir wur - de nicht wer den Rath mir_ gab Ich". The piano accompaniment (grand staff) features a steady sixteenth-note accompaniment in the right hand and a bass line with chords in the left hand. The chords are labeled as G, B⁶, g^{#o}_{4/3}, a⁶, E⁵, and a.

¹ Susan Youens, *Schubert, Die schöne Müllerin*, 75.

The A minor chord itself does not bring much more tension into the song, but its V, V/V, and vii^o chords do by creating a sense of suspense and anticipation. The presence of the B-major chord in m. 11 suggests that Schubert specifically chose to tonicize A minor in order to introduce B- and E-major sonorities; neither B or E major are diatonic to the home key of G major. E major is expressed through an E-dominant-seventh chord in first inversion; the minor seventh of the chord infuses even more tension into the sonority. The chord is not unusual since it is the V⁶ of A minor, but the B-major chord is the II⁶ of A minor, or in this case functioning as V of V with the G#-diminished-seventh chord in second inversion appearing instead of the expected E major chord. The G#-diminished-seventh chord in second inversion is a bit of a surprise, and it intensifies the *Temperaturfarben* of this section. G major surrounds this passage for approximately eight bars on both sides functioning as a contrast for this more highly colored section.

There are other elements in this passage that highlight B-major and E dominant seventh sonorities. With the G#-diminished-seventh chord in second inversion in m. 12, Schubert chose to emphasize the tritone B-F in the right hand of the piano against the G# of the voice, creating an extremely dissonant measure that causes the listeners to tune in to the unusual harmonies that occur in this passage. These harsh harmonies and the *Temperaturfarbe* of the first inversion B-major and E-dominant-seventh chords are resolved and contrasted with A minor, one of the two purest minor triads in Young's well temperament. A minor serves as a foil to and means of incorporating B and E major into the song; the arrival on A minor as a tonic is a secondary function. Throughout the cycle, we will observe that one of the techniques that Schubert has used to draw attention to

Temperaturfarben is contrasting keys and triads with drastically different degrees of purity.

Susan Youens has argued that the minor tonality and descending diminished fourth in mm. 11–12 of the vocal line is a subtle indication of the miller’s coming grief.² Schubert is indeed foreshadowing the grief to come, but this foreshadowing extends beyond the vocal line in this section. Schubert also highlighted first inversion B-major and E-dominant-seventh chords, which are associated with pain and death in the cycle. In mm. 11–14, the left hand of the accompaniment drops to the lowest note played so far, and changes from fifths to octaves. This slight change in texture and the shift to a lower register emphasizes the more highly colored triads in this passage.

Youens also attributes the first chromatic notes that appear in this song at m. 11 (the B-major chord) to the miller’s first mention of himself.³ However, the first sentence of this song begins with “ich;” although the miller is speaking of the brook, he is doing it in relation to himself: “Ich hört' ein Bächlein rauschen” (I hear a brook rustling). It would not have been difficult for Müller to have described the brook without an “Ich,” with a sentence such as “There is a brook rustling.” A more probable impetus for the first chromatic notes is the miller’s allusion to what has come over him: “Ich weiss nicht, wie mir wurde / nicht wer den Rath mir gab” (I do not know what came over me, or who gave me advice). The tense *Temperaturfarben* of both B major and E-dominant-seventh in first inversion allude to the fact that whatever has come over him, whether stemming from internal or external sources, will bring negative consequences. These words are the

² Ibid.

³ Ibid.

first allusions to the miller's fluctuating mental state, and Schubert's harmonic choices link this statement with the harmonies of the miller's angst when it is in full bloom later in the cycle.

Schubert chose to emphasize E and B major again in mm. 35–41 when the miller asks “Ist das denn meine Strasse? / O Bächlein sprich wohin? / Wohin? sprich wohin” (Is this, then, my path? O brook say where? Where? Say where?) (see Example 4.3). If Schubert is not providing an explicit answer (Where? Not here!), he is at least foreshadowing that something bad will come. The harshness of the B-major triad, which has a purity ranking of 11 out of 12 major keys, would not have been lost on the listener when the song was performed in well temperament, especially since it is preceded by an Italian sixth chord. The Italian sixth is built on C and contains what audibly sounds like a dominant seventh chord built on C without the fifth. The augmented sixth adds much color to the relatively pure C-E third, transitioning the listener's ear to B major.

Measures 39–41 linger on a B-major triad, which functions as the V of E minor, which foreshadow the key Schubert uses for death. Youens describes the occurrences of E minor in *Wohin?* as premonitions, adding that “even though one only locates the relationship across the wide span between opposite ends of the cycle in retrospect, it can seem meaningful to those receptive to such long-range relationships.”⁴ This is true, particularly when the cycle is performed in equal temperament. However, in well temperament, E minor is not just a pitch reference for the minor scale, but also an atmosphere and mood that is evoked in the mind of the listener when the key returns. While the listener will not be aware of the significance of E minor when it first appears,

⁴ Youens, *Schubert, Die Schöne Müllerin* 76.

Example 4.3: *Wohin?*, mm. 35–41

35

Ist das denn mei- ne Stra- ße? O Bäch- lein Sprich wo

pp

E³ a⁶ It⁶

39

hin? wo - hin? sprich wo - hin? Du

B^{m5}

its meaning will emerge as the cycle progresses. The key's significance will appear not only in retrospect, but also at the end of the cycle with the songs *Trockne Blumen* and *Des Baches Wiegenlied*.

Schubert made significant allusions to E minor in *Wohin?* that help bring the purity of the E minor triad to the foreground of the listener's consciousness. The first is in mm. 23–24 where D major is tonicized. The *Temperaturfarben* of the whole song increases at this point; the tonic and dominant of D major create more tension because they beat more than those of the home key G major. Schubert emphasized E minor as the ii of D major, and incorporated B major as the V of ii, which directly establishes the link between E minor and death by using both words and music to foreshadow. E minor is emphasized with the text “Hinunter und immer weiter / und immer den Bache nach” (Down and always onward, Always following the brook) (see Example 4.4). Youens has

pointed out that “‘Hinunter’ is the realm of death,” which indeed is where the miller is going to end up at the end of the cycle.⁵ After a V-I cadence on D major at mm. 25–26, the music continues to tonicize and linger on D until m. 34, at which point the *Temperaturfarben* of the song is increased even more with the emphasis placed on B major discussed above.

Example 4.4: *Wohin?*, mm. 23–30

22
stab Hin - un - ter und im - mer wei - ter, und im - mer dem Ba - che

G B e^{6no5} e^{6no5} A

26
nach, und im - mer hel - ler_ rausch - te und im - mer hel - ler der Bach, und

D^{no5} D⁶ e⁶ D⁶ D

cresc.

Schubert emphasizes the E-minor tonality by tonicizing it until m. 50 and linking this tonality to the text, “Du hast mit deinem Rauschen / Mir ganz berauscht den Sinn” (You have, with your rushing, completely intoxicated my mind). The miller’s death will come by way of the brook; the E-minor tonality establishes in the second song the link between the two as well as the miller’s anthropomorphizing of the brook (see Example 4.5).

⁵ Ibid.

Example 4.5: *Wohin?*, mm. 41–49

41
hin? Du hast mit deinem Rauschen mir ganz be-rauscht den Sinn, du

B B $e^{6no}B$ $e^{7no}B$ e^4 B $e^{6no}B$ $e^{7no}B$

45
hast mit deinem Rauschen mir ganz be-rauscht den Sinn. Was

e^6 $f\#^{7b9}$ e^4 B⁷ e

M. 62 begins with the same music as mm. 23 and 43, with the lyrics “Lass singen, Gesell, lass rauschen, / und wand’re fröhlich nach” (Let’s sing, friend, keep rushing, and happily wander along) (see Example 4.6). The mood is carefree and happy, and Schubert chose to harmonize this section in the home key of G major instead of tonicizing D major or extending the tonicization of E minor. The song then remains in the home key until the end, and the tension created by the more highly colored chords eases. By creating parallel sections that begin the same way, but have different harmonies depending on the content of the lyrics, Schubert has created contrast; since the departure point for the harmony of each of these sections is the same, the listeners can easily identify the distinct harmonic choices and link them to the words.

Example 4.6: *Wohin?*, mm. 61-69

61 *pp*
Reih'n Laß sin- gen, Ge- sell, laß rau- schen, und wan- d're fröh- lich

65
nach! es gehn ja Müh- len - rä - der in_ je - dem kla - ren_ Bach_ es

G B e°B A D°A G⁶ a⁷ G[♯] D⁷ G

It is with the second song that Schubert begins to foreshadow by introducing important tonalities that will return later in the cycle. Schubert maintains the jaunty optimism of this song while introducing (but not spending too much time on) the darker, more foreboding tonalities. When played in well temperament, the B-major, E-major, and E-minor sonorities create a strikingly different atmosphere from the G major of *Wohin?* The miller asks the question “O Bächlein, sprich, wohin?” Schubert answered with B major and E minor: somewhere dark.

3. *Halt!* (Stop!)

C major, 6/8 time, *Nicht zu geschwind* (Not too Fast)

The third song of the cycle belongs to tonal group 2 and is part of the story’s exposition. The song has no extremes in range or dynamics. *Halt!* contains a variety of tonal centers but is limited to the major keys with the least amount of *Temperaturfarben*.

The song highlights C major, F major, G major, G minor, and D minor, all of which are ranked as some of the purest out of all the major and minor keys.

Halt! is in C major, but throughout the song other tonal centers seem to compete with or undermine the home key. The first chord arpeggiated by the piano is a C major chord, but because of the similarities between *Halt!* and the preceding song *Wohin?* (the similar tessituras and sixteenth-note figures evoke the image of the brook and the turning mill wheel), the opening C chord of *Halt!* is heard in relation to the G-major chord that was reiterated for the last ten measures of *Wohin?* Aurally, the listener will hear this C-major chord as a pivot chord, initially as the IV of G major and eventually as the I of C major. Schubert's use of the D-major chord, the V/V, in mm. 7–8, continues to imply a G major or minor tonality. The right hand of the piano highlights the clash of the major second between notes G and A in the D-major chord with a suspended fourth that creates even more tension. Although a C-major tonality is implied with chords such as G major with a four-three suspension, C major does not emerge as the prevailing tonality of *Halt!* until the V-I cadence that occurs in mm. 10–11. It is at these measures where the *Temperaturfarben* of G major begins to ease and C major is established. Once the song shifts to C major, the V-suspended four chord found in the tonicization of G no longer appears, making the C-major sonority sound all the more tranquil when it returns in m. 11.

Although Schubert uses a key with only a mild amount of *Temperaturfarben*, he contrasts different chord colors by presenting a chord and then immediately juxtaposing it with a triad with a different quality. He often accomplishes this by chromatically changing one note of the chord. For example, in mm. 4–5, the G-major chord is

transformed into a G-minor chord through the inclusion of a B \flat . Likewise, the C-major chord of mm. 11 and 12 changes into a C-augmented chord before moving on to an A-minor chord in m. 13. Schubert has clearly contrasted the *Temperaturfarbe* of different chords with the same roots but different qualities.

At m. 23 G major begins to be tonicized at the words “Ei willkommen, ei willkommen / Süßer Mühlengesang!” (Ah, welcome, ah, welcome, Sweet song of the mill!). The phrase repeats verbatim, alternating D- and G-major harmonies and ending on a half-cadence on D major. Schubert’s use of G major increases the song’s *Temperaturfarben*; Schubert’s harmonic choices also provide musical commentary on the miller’s words. The miller’s excitement is heightening and almost seems contagious, and the increased sense of excitement is due largely to the use of D major, the dominant of G. D major is the key of song 11 (*Mein!*), in which the miller rejoices at possessing the miller maid’s love. We know from listening to the rest of the cycle that the miller’s assertion that the maid is his is mistaken; we also know that the house is not going to be welcoming for the miller. Schubert thus used the same sonority to highlight all of these misconceptions and delusions.

A significant change occurs starting at m. 31 (see Example 4.7). The D-major chord of the previous measure is modified into D minor and measures 31–35 prolong the D minor sonority as the song transitions back to C major at mm. 37–38. At this point the miller sings “Und das Haus, wie so traulich! / Und die Fenster, wie blank!” (And the house, how inviting! And the windows, how shiny!). The main sonorities are D-minor and G-dominant-seventh chords, the latter of which is voiced so that the seventh and root sound together in close position in the right hand. The tension created by these two

chords seems to undermine the Miller's words; he is speaking of the positive elements of the house, but the harmony implies that the house may not be the cozy refuge that the miller envisions; it sounds gloomy rather than inviting. The shiny windows also play an important role in this story, as many of his observations of the miller maid happen through a window. The windows seem to be a looking glass into how the miller sees the world, not necessarily how the world really is.

Example 4.7: *Halt!*, mm. 29–38

29
 sü - sser Müh - len - ge - sang. Und das Haus wie so

33
 trau - lich und die Fenster - - ster wie

36
 blank, und die Son - ne, wie

Chords: G, D, d, d, d°, G7, d, d, d°, G7, G7, C, G7

Dynamics: *pp*, *cresc.*, *f*

When the miller turns his commentary to the more neutral observation of the brightness of the sun, the music returns to C major, beginning with the G-dominant-seventh chord in m. 36. When the C-major chord sounds on the word “Sonne” (sun), its purity creates a type of word painting; the chord sounds bright compared to the gloomy chords that came before. Schubert pairs neutral words with a neutral key. The sun is not luring or inviting the miller; it is just shining brightly. The music loses some of its color when the miller stops anthropomorphizing.

For the last 15 measures of *Halt!*, the miller repeats the question “Ei Bächlein, liebes Bächline, / was es also gemeint?” (Oh brook, dear brook, was it thus meant?). The music has returned to the home key of C major, but some striking harmonies occur in bars 54 and 56 (see Example 4.8) as the piano arpeggiates a B-diminished chord in second inversion above the tonic C note in the bass. This diminished seventh chord undermines the neutral *Temperaturfarbe* of C major; not only does the root of the chord clash with the C that is underneath it, creating tension between the C and B notes, but the diminished seventh chord is highly colored, and does not create the neutral, pure feeling that another type of chord progression in C major would create, like a V-I progression, but rather it creates a foreboding sound. The diminished seventh chord here is not entirely diatonic to C major; it evokes conflict. Through this harmonic choice, the music offers an answer to the miller’s question that is undoubtedly heard by the audience; the piano implies that the miller’s decision to go to the mill will not result in joy.

Example 4.8: *Halt!*, mm. 53–60

53
meint? war es al - so ge - meint? war es al - so ge -

57
meint?

C b⁹/4/C C b⁹/4/C

C C C C

4. Danksagung an den Bach (Thanks to the Brook)

G major, 2/4 time, *Etwas langsam* (Somewhat Slow)

Danksagung begins with the familiar onomatopoeic sound of the mill wheel in the piano. The tessitura and figuration of *Danksagung an den Bach* is similar to the songs that have come before it, but the texture of the piano accompaniment is a bit sparser. It is the last song of tonal group two, and Schubert maintained similar *Temperaturfarben* in this song as the other ones in the same tonal group.

Danksagung is one of the turning points in the cycle; it is with this song that the story shifts from the introduction to the rising action. The miller begins with the same words with which he ended song 3: “War es also gemeint?” He then proceeds to repeatedly demand answers from the brook. For the majority of the questions, the music

is mostly diatonic to G major. The G-major tonality of the song is firmly established with the alternation of tonic-dominant harmonies for the first ten measures.

At m. 10 the miller turns from asking the question to providing the answer himself. The brook continues to move the mill wheel as the miller questions what the brook is telling him. It is natural that the brook would lead the miller to a water mill; however, the miller does not think about this and instead seeks an explanation with a meaning that links the brook's destination to his destiny. The miller answers his own question, the mill continues on, and the miller takes this steadfastness as confirmation of what he wants to hear. He is not really waiting for an answer from the brook.

When the miller starts to infer the brook's answer, his conjectures are accompanied by colorful harmonies. An audible change in the song's intensity occurs at m. 10 when the left hand changes to broken octaves and drops to a lower tessitura that enhances the *Temperaturfarben* of the chords. The downward expansion of the left hand marks a shift away from the tonic-dominant harmony; we hear a circle of fifths progression from A major to C major as the miller answers the question by proclaiming "To the miller maid!" in m. 11 (see Example 4.9). The momentum of the circle of fifths progression depicts the force with which the miller is propelling himself towards the mill. The forceful nature of the vocal line as it jumps a tritone to the highest note in the song portrays the miller's bravado and his attempt to assure himself. The tritone in the voice is paralleled by one in the right hand of the piano on the word "Müllerin." Regardless of which system of temperament is in use, tritones are not subtle dissonances. Since the dissonance of the tritone will not pass by the listeners unnoticed, Schubert's harmonic choice clearly shows an association between the miller maid and something negative.

Example 4.9: *Danksagung an den Bach*, mm. 10–19

meint? Zur Mül-ler-rin hin, so lau-tet der Sinn; gelt, hab' ich's ver-stan-den?

hab' ich's ver-stan-den? zur Mül-le-rin hin, zur Mül-le-rin hin!

G D⁶ A⁷ D G⁷ C E⁶ a E⁶ a

D⁶ G G D⁷ G D⁷ G D⁷

The most striking tonicization in this song is of A minor, which occurs at m. 13.

The arrival at A minor is quite abrupt; a V⁷-I progression in C major in m. 12 is immediately followed by a V⁶-i progression in A minor in the following measure. This chord progression occurs on the word “gelt” (right). Both Youens and Feil have commented upon the jarring effect of this word and harmony.⁶ This measure is unexpected; the E-major chord on the downbeat of the measure seems to come from nowhere, and the voice emphasizes the harmony because the singer remains on E for the entire measure. In well temperament, the E-major chord will have a much wider major third than the C-major chord that precedes it; the music jumps from one of the purest major chords to the fifth most colored one; the E-major chord has an edginess. In this

⁶ Youens, *Die schöne Müllerin*, 78, and Feil, *Franz Schubert*, 58.

passage in particular, it seems as if Schubert's harmonic choices were influenced by his desire to contrast the color of chords in well temperament.

One question the miller asks the brook is: "Hat sie dich geschickt?/ Oder hast mich berückt?" (Did she send you to me, or am I enchanted?). With this question the song shifts to G minor (see Example 4.10). Throughout the cycle, G minor is associated with the miller's anxious addresses to the brook. At this point, the miller is getting flummoxed because the brook keeps moving without answering his question. Youens attributes this turn to G minor to the miller's knowledge that the brook has the ability to enchant.⁷ The enchanting qualities of nature are familiar themes in German literature, but I argue that the shift of *Temperaturfarben* at this moment represents the miller's projection of his own ideas and desires onto the brook. The miller is getting annoyed at the brook's apparent silence, and G minor is the color of his annoyance. The miller wonders out loud if the maid sent the brook two more times. With the second repetition of the question "Did she send you to me?" the tonality shifts to B♭ major, the key that in this cycle does not represent any building drama. The brook is remaining a neutral constant; the miller is again anthropomorphizing when he states that the brook could enchant him. The miller uses the idea of an enchanting brook as a way to justify his decision to head to the mill. If the brook were answering the miller, he is telling the miller to keep wandering by evoking the tonality of the first song *Das Wandern*. Nevertheless, it is not the brook that is answering the miller's question; it is Schubert.

⁷ Youens, *Die schöne Müllerin*, 78.

Example 4.10: *Danksagung an den Bach*, mm. 21–30

21
 Hat sie dich ge-schickt, o-der hast mich be-rückt? das möcht' ich noch wis-sen, ob
pp
 G D^{o3} G g D⁷ g D⁸⁻⁷ g D

25
 sie dich ge-schickt ob sie dich ge-schickt. Nun wie's_auch mag sein, ich
 F⁷ B^b B^{b7} B^b D³ G D³ G

29
 ge-be mich d'rein; was ich such', hab' ich fun-den, wie's im-mer mag sein.
 G⁷ C E⁶ a D⁶⁻⁵ G

What immediately follows is a turning point in the song, where the story shifts from the exposition to the rising action. The miller states “Nun wie’s auch mag sein, / ich gebe mich d’rein:” (No matter what happens, I commit myself); at this precise moment, the voice sings dissonant parallel seconds against the right hand of the piano (see Example 4.10, m. 28). Again, Schubert used an obvious dissonance to provide

commentary on the miller's statement. The dissonance between the voice and the right hand of the piano suggests that the miller is committing himself to something bad or painful.

This song marks the end of tonal group two as the rising action of the story begins. The miller questions and wavers throughout the song, which Schubert illustrates through wandering harmony. The miller nevertheless surrenders himself to whatever fate awaits him and puts his mind temporarily at peace. *Danksagung an den Bach* ends as it began, solidly in the key of G major.

5. *Am Feierabend* (After Work)

A minor, 6/8 time, *Ziemlich geschwind* (Fairly Fast)

Am Feierabend is a song of many firsts; it is the first song in tonal group 3, the first song that embodies the miller's intense emotion, the first in which Schubert rapidly changes tonal centers for contrast, the first in which the accompaniment departs from the sound of the mill wheel, and the first in which the accompaniment pattern changes during the course of the piece.

The changing texture of this song is one of the primary means through which Schubert highlights different *Temperaturfarben*. In the previous four songs, the listener became accustomed to the sound of the brook in the piano. Although the sound of the brook is present in song five, it is more frantic than in the previous songs, and it is interrupted by the sounds of physical labor. This song is about the end of the workday, and the piece opens with a rhythmic motive of two eighth notes followed by an eighth rest at a forte dynamic, which evokes the sounds of manual labor. In the fourth measure

sixteenth notes alternate between E and F and then eventually settle into the rising pattern that evokes the sounds of the brook moving the mill wheel. By the time the voice enters at m. 7, Schubert has established the brook's pattern, which will continue for the next 18 measures.

While the song begins firmly in A minor, the dominant, E major, is tonicized as early as mm. 3–4 with a $V\frac{4}{3}/V$ progression. A more extended tonicization of E major begins at m. 12. This is the second song in the cycle that incorporates B-major and B-dominant-seventh sonorities. At this point in the cycle, it is not plausible to think that the listener would be able to recognize the significance of B major, but Schubert's repeated incorporation of this sonority is subtle and cumulative. The more times Schubert uses this sonority, the more firmly established it becomes as a reference point in the listener's mind.

Not only does Schubert use B major to foreshadow what is to come, but he also uses the chord as a *Temperaturfarbe* contrast to A minor. A minor is one of the purest minor triads, while B and E major are some of the most severely colored major triads. In this passage, a B-dominant-seventh chord serves as the secondary dominant; the added seventh degree adds more tension and color to the chord without obscuring the characteristic color of the B-major triad. A minor is a key of high contrast; when Schubert emphasizes the dominant chord, he greatly increases the *Temperaturfarben* of the tonic. In the first verse, the miller's wish for the ability and means to work harder than is humanly capable is harmonized with an E-major tonality that highlights the miller's anxiety and frustration. The secondary dominant of B major establishes an even greater degree of *Temperaturfarben*, as can be seen in m. 12.

When the miller begins to speak of the lovely miller maid in m. 16, the harmony shifts to A major, the predominant tonality of Tonal Group 3 and the key most closely associated with dreams. The A-major triad, along with its partner flat major triad, E \flat , are the triads that are most similar to the equal tempered major triad; however, the key of A major will sound a bit more tense than equal-tempered A major because of the increased beating of the dominant chord, E major. In this context specifically, the color of the A-major chord is heightened when contrasted with the purity of the surrounding A minor. At this point in the song, a daydream momentarily interrupts the miller's frustration. A major is immediately followed by a return to the home key of A minor at m. 20; the miller is inspired by the object of his affections, yet he is frustrated that he cannot make her see his love and devotion: "Dass die schöne Müllerin / Merke meinen treuen Sinn!" (That the beautiful miller maid could notice my faithfulness!). While A major is the key of dreams, A minor represents reality and disillusionment; Schubert's decision to change the harmony reflects the miller's knowledge that his wishes for super-human abilities in order for the miller maid to notice his faithfulness are pipe dreams. The negativity that Schubert associated with A minor is further confirmed with the recurrence of a B-dominant-seventh chord as a secondary dominant at m. 21. Again, the listener can easily discern the contrast between the purity of A minor and the harshness of B major and E major. The phrase ends in A major, as if the Miller is attempting to return to his dream world and suppress the disillusionment he feels.

A minor returns at m. 25, and in the following measure the accompaniment pattern that echoed the sounds of work at the beginning of the song returns. The miller complains about how weak he is, and how he does not stand out from his fellow workers.

Schubert underscores the miller's lament and oscillating emotions by passing through a series of secondary dominants. When the miller speaks of sitting and resting, the work sounds of the accompaniment give way at m. 36 to a thinner, lighter accompaniment in C major, representing the neutrality of rest, in regards to both physical work and the miller's racing mind. Many times when Schubert uses C major, he does so in a way that presents the listener with a harmonious triad that highlights the *Temperaturfarben* of the surrounding sonorities, and this song is no exception. In m. 42, C major gives way to D minor, the key that Schubert has already used, along with its parallel major, to undermine and comment upon the miller's words in song three (when the miller attributed welcoming qualities to the house). Schubert chose D minor to usher in the section where the miller retells what the master and maid said to the workers, which seems to anticipate a later tonicization of D minor that begins in m. 54.

The relaxed texture and D-minor tonality quickly dissolve into something new: an F-major tonality and a piano texture comprised solely of dotted half notes. F major lessens the *Temperaturfarben* of the song and is appropriate for this recitative-like section in which the miller shifts from singing about his own feelings to narrating what the master and maid said. At the beginning of this section the purity of the F-major chords ring out from the piano and in the listener's ears. When the speaker changes from the master to the miller maid, the harmony becomes colored by the miller's feelings for the miller maid. When the miller quotes the maid as saying "allen eine gute Nacht" (To all a good night), the audience hears the miller's emotion swell (see Example 4.11). Her words are accompanied by a tonicization of D minor beginning in m. 55 and are followed by a Neapolitan-sixth chord, E \flat -major in first inversion. Schubert's color palette has

changed drastically from the preceding F and C-dominant-seventh harmonies. Not only does the E-diminished chord provide color, but the A-major and the E \flat -major chords are ranked 6 and 7 in purity out of all major chords. This is an audibly noticeable difference from the F major that Schubert had previously been tonicizing, with an overall purity ranking of 2; the more highly-colored chords make this passage sound more agitated and charged.

Example 4.11: *Am Feierabend*, mm. 51–59

51
fal - len und das lie - be Mäd - chen sagt al - len ei - ne gu - te

56
Nacht, al - len ei - ne gu - te Nacht. *Etwas geschwinder.*

Chord symbols: F, B \flat , B \flat , e $^{\circ 6}$, d $^{\sharp 4}$, A 7 , d, E \flat^6 , e $^{\circ 6}$, d $^{\sharp 4}$, A 7 , d, b $^{\circ}$

Dynamics: *pp*, *sf*, *p*, *f*

After Schubert repeats the maid's words, the beginning of the song returns with slight variations, including changing the rhythm in the left hand of the piano beginning at m. 64. The left hand also shifts from arpeggiated octaves to block octaves, which thickens the texture and intensity of the accompaniment and thus increases the *Temperaturfarben* of this section. The miller's frustration for not standing out amongst the other workers increased after seeing the miller maid.

At the end of the song, the frantic work sounds cease, and Schubert writes another recitative-like section. This final section ends in the home key of A minor, but Schubert uses the dominant to again undermine the purity of the A-minor chord. At mm. 79–80 and 83–84, Schubert superimposes an E-dominant-seventh chord in the right hand above an A chord with no third in the left hand (see Example 4.12). The *Temperaturfarbe* of the E-major chord, particularly with the added seventh, contrasts with the purity of the A-minor chord that follows and maintains the high degree of tension created throughout the song. *Am Feierabend* has the most tonal, textural, and emotional contrast of any song yet in the cycle. By contrasting these musical elements, Schubert has begun to show the vast extremes in emotion of which the miller's mind is capable.

Example 4.12: *Am Feierabend*, mm. 79–89

79

dass — die schö - ne Mül - le - rin merk -

p *f* *p*

E^{7noB}/A a a E^{7noB}/A

84

- te mei - nen treu - en Sinn!

pp *f*

a a E^7 a

6. *Der Neugierige* (The Inquisitive One)

B Major, 2/4 time, *Langsam* (slow)

In *Der Neugierige* (translated as “The Inquisitive One”), the miller (who has asked many questions in previous songs) asks what is perhaps one of the most universal, major questions of all time: does she love me? Significantly, the audience has not yet heard any direct interaction between the miller and the maid. In the last song, she and her father spoke to all of the workers. Some listeners might assume that much has been skipped over in the narrative, but perhaps it is more plausible to think that nothing has been skipped. The previous song clearly showed that the miller was enamored with the maid. The maid said goodnight to everyone, and this encounter may have been all he needed to hope that she noticed him and thought that he was the most deserving of her love.

Song 6 illustrates the miller’s frequently changing mindset through varying tonalities. It is set in B major, a tonality that has been alluded to in previous songs but now appears as a key signature for the first time in the cycle. B major is ranked eleventh (out of twelve) in the purity rankings and is the key with the greatest degree of *Temperaturfarben* out of all of the keys that Schubert used in *Die schöne Müllerin*. Schubert’s key choice suggests that he wanted to communicate to the listener that the answer to the miller’s question is not favorable. Perhaps it is too early in the courtship for the miller to ask this type of question, or perhaps he and the maid do not even have that kind of relationship. Regardless, the *Temperaturfarben* of B major indicates that something is distorted in the miller’s thinking.

Both the key and harmonies that Schubert used in this song contrast with its seemingly simple, light, and sweet texture. If the song were in C major, or any key with less *Temperaturfarben* than B major, it would have a very different feel and meaning. The sparse texture of the opening piano accompaniment is dotted with rests. The short rhythms and rests not only evoke questioning but also keep the *Temperaturfarbe* of B major subdued since the chords are not sustained and do not ring out. The listener will still perceive the harshness of B major, but with shorter note values, the color of B major is not as much in the foreground of the listener's consciousness as it would be with loud, sustained chords. This song alludes to the miller's future pain, and the frequent use of non-diatonic chords further evoke how the strong emotion that accompanies the millers questioning; he is at times frustrated, pained, impatient, and longing. A non-diatonic chord occurs as early as m. 2; an E#-diminished-seventh chord sounds for the first half of the measure. The E#-diminished triad has one of the narrowest diminished fifths, measuring 592 cents (the widest diminished fifths are built on E, B, and F# and measure 608 cents, 16 cents wider). The minor thirds of the chords, both of which are the same size (a characteristic shared by only one other diminished triad), are also some of the narrowest, measuring 296 cents. With the addition of the diminished seventh from E# to D, which is also narrow compared to other equivalent intervals in Young's well temperament, the resulting sound is a diminished-seventh chord that sounds more tense and compressed than it would in equal temperament. Even though diminished and diminished-seventh chords do not fit as easily into hierarchies as do the major and minor chords, they nevertheless create a sound that is noticeably different from equal temperament.

At m. 11 the tension of the song increases as the dominant, F# major, which has the greatest amount of *Temperaturfarben* out of all twelve major keys, is tonicized. Schubert introduces a C#-dominant seventh chord as a secondary dominant and accentuates this harmony by momentarily thickening the texture of the accompaniment to three and four voice chords instead of the alternating single notes and dyads of the previous measures. The dominant is also accentuated by an E#-half-diminished chord in m. 17 and the V⁷-I cadence in m. 20 on F# major. In Young's temperament, the major third of an F#-major chord measures 408 cents, 16 cents wider than the major third of a C-major chord, and 8 cents wider than an equal tempered third. The color of the F# major, which may be perceived by those used to equal temperament as out of tune because of its wide third, is certain to be heard by even the least sensitive listeners.

The F#-major harmonies in mm. 17–20 underscore the miller's words: "Mein Bächlein will ich fragen, / Ob mich mein Herz belog" (I will ask the little brook, if my heart deceived me). This question is followed by a beat-and-a-half rest in m. 22, after which the sounds of the brook are heard for the first time in this song. The pause, the absence of brook sounds until this point, and the miller's incessant pleading for an answer indicate that the miller believes the brook is silent and not answering his question. Nevertheless, the audience who hears the song performed in well temperament will know the answer to the miller's question because of the *Temperaturfarbe* of the harmony. Schubert use of *Temperaturfarbe* creates dramatic irony. His harmonic choices let the audience know what the miller has yet to discover: that heartache will come.

When the sounds of the brook return after the rest, the meter and tempo change to 3/4 and *Sehr langsam* (very slow). The accompaniment texture changes to dotted half

notes in the left hand with sixteenth notes that outline triads in the right. The sounds of questioning have been replaced by the sounds of the gently flowing brook. The changing accompaniment and shift of emphasis from the dominant to the tonic decreases the song's tension. In the third measure of this new texture, B major dissolves to B minor for one measure. The B-minor triad itself is not highly colored (it ranks second out of the six sizes of minor triads in the purity ranking); its borrowed dominant accounts for a lot of its color and ties B minor to its relative major. The F#-major, C#-dominant-seventh, and B-major chords follow in mm. 26–27; the placement of a relatively pure triad before these severe harmonies makes their color even more noticeable. These harmonies sound like any other major chords in equal temperament, but in well temperament they create a sense of agitation, and evoke the miller's torment over not knowing whether or not the maid loves him.

At the words "Ja heisst das eine Wörtchen" (Yes is one word), the piano strikes an F#-major chord with dotted half-notes tied to quarter notes in both the right and left hand of the piano, which allows the color of F# major to ring out in the listener's ear. In Young's temperament, the major third of an F#-major chord measures 408 cents, 16 cents wider than the major third of a C-major chord, and 8 cents wider than an equal tempered third. The next line, "Das andre heisset Nein" (the other is no), begins with a sustained A#-diminished-seventh chord with no fifth. The dissonance of this chord contrasts in color to the relatively pure G major sounded at the word "Nein." The texture of the accompaniment shifts from sustained chords in a recitative-like style to alternating G- and C-major chords on every eighth note (see Example 4.13).

Example 4.13: *Der Neugierige*, mm. 33–46

33
Ja, heisst das ei-ne Wört-chen, das an-dre heis-set Nein, die bei-den Wört-chen schlie-ssen die

37
gan-ze Welt mir ein, die bei-den Wört-chen schlie-ssen die gan-ze Welt mir ein.

42
O Bäch - - lein mei - ner

44
Lieb - be, wie bist du wun - der - lich! Will's

Chord symbols: F#, aa#^{07noE}, G⁶, C G^{4noB} C, G⁶ C G⁴ C G⁶ C, G⁶ a⁶ G⁴ D⁷, G G⁶ C G^{4noB} C, G⁶ C G⁴ C G⁶ C, G⁶ a⁶ G⁴ D⁷, G G⁷, B, F#⁷, B, B, b, F#, C#⁵, F#

The audience will hear the purity of C major as a break from the tension of the highly colored B major; C-major chords ring while B-major chords pulse. Schubert used the piano to answer the miller's question; the more neutral chords of C and G major depict

the objective answer, the one that is free from the miller's emotional projections. The extended tonicization of G major from mm. 35–41 sounds purer and sweeter than B major; the triads contain less beating and create a more serene sound as well as the feeling that tension has been released.

The music returns to the sounds of the brook in B major as the miller once again begs the brook to tell him if the maid reciprocates his love. Schubert includes a measure of B minor in m. 45, but the most jarring harmonies begin at m. 50 when the miller is asking the brook (again) if the maid loves him. The miller's mental torture is depicted poignantly through the harmonization of the last two repetitions of "Bächlein, liebt sich mich?" (Little brook, does she love me?). Beginning on the word "mich" at m. 50, Schubert uses chords that last a quarter note each: a D \sharp -seventh chord in first inversion, followed by a G \sharp -minor chord, a B \sharp -diminished chord in first inversion, a C \sharp -minor chord, and finally a return to the dominant: F \sharp -dominant-seventh chord (see Example 4.14).

The four chords that occur between the two F \sharp -major chords (on the last beat of m. 49 and the second beat of m. 51) tonicize two minor chords: G \sharp minor and C \sharp minor. These minor keys are ranked twelve and ten on the purity scale, respectively. While the brook is in a key with significant *Temperaturfarben*, Schubert chooses even more strongly colored minor keys to express the miller's feelings at this moment.

The final four measures of the song (also shown in Example 4.14) depict a very steadfast brook that does not deviate from B major. Schubert used B as a pedal point underneath the F \sharp -dominant-seventh chords, the A \sharp -diminished chord, and of course, the tonic chord. The brook's steadfastness contrasts with the miller's questioning; Schubert

Example 4.14: *Der Neugierige*, mm. 49–55

49

Bäch- lein, liebt_____ sie mich? sag' Bäch- lein, liebt_____ sie

52

mich?

c#6 B F#7 D#9 g# b#9 c#6 F#7

B F#7/B F#7/B B a#no E/B F#7/B B B

has made it clear that the brook is a constant and that the activity is all in the miller's mind; the brook is not enchanting him.

7. *Ungeduld* (Impatience)

A major, 3/4 time, *Etwas geschwind* (Somewhat quickly)

Ungeduld is the first of three strophic songs in a row. In the previous song, *Der Neugierige*, the miller asked the brook if the miller maid loved him.⁸ In this song, the miller answers the question “Do I love her?” with a definitive yes. The miller's impatience is spurred by his desire for the miller maid to notice his love. The miller declares that if he could do anything to express his love, he would. He would carve it into a tree, sow it in every flowerbed, whisper it to the wind, et cetera. In *Am*

⁸ Note that Müller wrote a poem that comes between these two songs that Schubert chose not to set: *Das Mühlenleben*.

Feierabend, the miller expressed anxiety over not having greater strength and the ability to work faster, better, and more impressively; he wanted superhuman abilities. In *Ungeduld*, the majority of the things that the miller says he *would* do, he *could* do. There is nothing stopping him from carving initials into a tree or whispering his feelings as the wind blows, or singing to the miller maid through her window. Nevertheless, it is important to note that he does not do these things. These ideas are part of his fantasies, which Schubert set appropriately in the key of dreams: A major. The miller does not explicitly proclaim his feelings to the miller maid in this song or in any others in the cycle; he does not give the miller maid the opportunity to accept him or reject him. In the last two lines of the song, the miller sings: “Und sie merkt nichts von all’ dem bangen Treiben: / Dein ist mein Herz, und soll es ewig bleiben!” (And she does not notice my anxious longing. Yours is my heart, and it will be eternally). Müller’s word choice here is interesting; he uses “ewig,” which many translate to forever or always, but its primary definition is “eternity.” Müller could have chosen “immer” for this meaning, but instead his word choice harkens to the afterlife and the miller’s future death and eternal rest.

The miller’s impatient state of mind is immediately depicted in the opening piano accompaniment. Instead of depicting the brook, the piano pounds triplets in the right hand with a melodic line in the left hand. The block chords are incessant. The song starts with a piano dynamic marking, and has decrescendos following the downbeat of measures 1, 3, and 4. The downbeat of m. 8 contains a fortepiano marking over a first inversion B-dominant-seventh chord, which is one of only two forte indications in the whole song (the other is a plain forte on the last chord of the song). Since the surrounding music is in a piano dynamic, the fortepiano marking highlights the fleeting

increase in *Temperaturfarbe* created by the first inversion B-dominant-seventh chord, the V_3^6 of V. Schubert paired the franticness of the piano with an overall song dynamic of *piano* to represent the Miller's state of mind: he is impatient, but he is keeping it quiet and to himself.

When the voice enters, the song's texture changes slightly as the accompaniment becomes thinner and a bit more buoyant, like a fast dance song. The song moves quickly through dissonant harmonies but spends full measures on voicings of E-major, E-dominant-seventh, and A-major chords in mm. 8, 9, 13, 14, 23, 24, and 27. The E-dominant-seventh chords contain the characteristic color of their major triad with the added tension created through the addition of the seventh. The miller's fantasy as established by A major is peppered with the darker chords of B major and B minor, which foreshadow the miller's future suffering. B minor is diatonic to A major, but B major is not; Schubert incorporated B-major and B-dominant-seventh chords multiple times throughout the song at mm. 8, 11, 19, and 20.

The miller repeats the same line at the end of every verse: "Dein ist mein Herz, und soll es ewig bleiben!" (Yours is my heart, and it will be eternally). This statement is repeated beginning in m. 19 and lasts until the repeat sign or the end of the song. It is here where Schubert increases the emotional intensity of the song and emphasizes its *Temperaturfarben* (see Example 4.15). This is achieved in a number of ways. The first is a thickening of the musical texture: the piano accompaniment returns to the style of the introduction, but the right hand is pounding out triads instead of dyads. Also, in the last three measures of the song, the left-hand melodic line drops an octave lower than anything sounded previously. Crescendos also appear for the first time in the song.

Additionally, the section begins with a B-dominant-seventh chord in first inversion for two measures, the longest that any harmony sounds in this song. The only chords that Schubert stays on for two measures are A major (mm. 1–2), B-dominant-seventh (mm. 19–20), and D \sharp -diminished-seventh in first inversion (m. 21–22).

Example 4.15: *Ungeduld*, mm. 19–22

19
Dein ist mein Herz, dein ist mein Herz, und soll es

23
e - - wig, e - - wig - - blei - -

26
1. 2. 3. ben. 4. ben!

Chords: B \sharp , B \sharp , d \sharp \circ , d \sharp \circ , A, E 7 , A, b 6 , E 7 , A, b 6 , A \sharp , E 7 , A, A

The first-inversion B-dominant-seventh chord sounds for all of mm. 19 and 20.

These two measures of a B-major sonority significantly increase the *Temperaturfarben* in

the song, as do the tritones in the vocal line in mm. 21 and 22–23, and the following two measures of the D \sharp -diminished-seventh chord in first inversion further intensifies the dissonance. The passage sounds volatile. Susan Youens states that these two measures of D \sharp -diminished-seventh chords in first inversion indicate “momentary instability.”⁹ This is true, and this is not the first time that Schubert has created additional meaning through harmony. The question is: what does this instability mean? Does the harmony represent the miller’s own doubt, his future heartache, or his own mental distortions? The answer will become clearer to the audience as the cycle progresses.

8. *Morgengruss* (Morning Greeting)

C major, 3/4 time, *Mässig* (Moderate)

Morgengruss, the second of the series of three successive strophic songs, belongs to tonal group 3 and functions as a contrast to the other tonalities in the group. This C-major song is a way for Schubert to establish a neutral tonality in the listeners’ ears so that they do not become too accustomed to the *Temperaturfarbe* of the A-major songs of this tonal group. *Morgengruss* also functions as a contrast and respite to the highly emotional song in the highly colored key of B major that preceded it.

The dramatic tension created by the *Temperaturfarben* of different keys in the cycle is alleviated not only by the shift to the key of C, but also through the texture of the piano accompaniment. *Morgengruss* has a light accompaniment consisting primarily of four-part block chords and arpeggios. The first vocal phrase is written in a recitative-like style; the vocal line moves primarily in eighth and sixteenth notes over full-measure

⁹ Youens, *Die schöne Müllerin*, 84.

block chords. This style brings the listeners' attention to the voice, which does not manifest the colors of temperament in the same way as the piano does due to vibrato. Thus, not only does the purity of C major alleviate the dramatic tension created so far in the cycle, but the focus on the vocal line instead of the piano in mm. 4–8 further deemphasizes the *Temperaturfarben* of the more colorful chords in the recitative-like section.

Because of the strophic setting, Schubert's chord choices repeat and create an overall emotion for the song rather than linking words or phrases to specific harmonic changes. Nevertheless, the harmony of *Morgenruss* appears to be inspired by the first verse. The miller greets the maid in C major, a minor-dominant chord ushers in non-diatonic chords when the miller asks if he has displeased the maid, and the harmony returns to C major when the miller says he will go. The first reflection in the harmony that the miller had perceived the maid's discomfort occurs at m. 9 where a B-diminished-seventh chord in third inversion resolves to a G-dominant-seventh chord. In the following measure an F#-half-diminished-seventh chord in third inversion serves as a secondary leading-tone chord for G major. Not only does the overall *Temperaturfarben* of the song increase because the tonicization of G major highlights a more highly colored key, but the diminished-seventh and half-diminished-seventh chords create a more severe dissonance rather than just an increase in *Temperaturfarben* (which could have been achieved by tonicizing G major with its dominant, D major). The diminished fifth in the B-diminished-seventh chord and F#-half-diminished-seventh chords are the widest that occur in Young's well temperament, measuring 8 cents wider than an equal tempered diminished fifth. This tritone sounds more tense in well temperament because although

still considered vastly dissonant, it is not the tritone we are used to hearing. Both of these chords create moments of palpable beating and tension before resolving to G-major chords.

The four measures that follow (mm.12–15) contain an unusual harmonic progression with a chromatic descending bass line: G minor in first inversion, A major, F minor in first inversion, and G major (see Example 4.16). Schubert's chord choices allude to important key centers, and his voicing creates the descending bass line that in the Baroque period was commonly associated with a lament.¹⁰ In this cycle, Schubert associates G minor with the miller's complaints to the brook; he does complain in *Morgengruss* about the maid being annoyed with his greeting and gaze. A major is associated with daydreams and fantasies, and the miller is daydreaming about the maid in this song. The F-minor chord is not linked to any specific ideas in the cycle, but its use enables Schubert to create the pattern of first inversion minor chords resolving to major over the descending chromatic bass line. The historical associations with the descending chromatic bass line hint at what is to come for the miller: despair and death.

Example 4.16: *Morgengruss*, mm. 12–15

Verdriesst dich denn meinGruss so schwer? ver - stört dich denn meinBlick so sehr? So
 Du blon - des Köpf-cherkomm her - vor, her - vor aus eu - rem run - den Thor? ihr
 Hat es die Nacht so gut ge - meint, dass ihr euch schliesst und bückt und weint nach
 Die Ler - che wir belt in der Luft, und aus dem tie - fen Her - zen ruft die

f^{#7}/G G g⁶ A f⁶ G

¹⁰ In the Baroque Era the descending chromatic bass line typically outlined a fourth, and here it outlines a third.

The color created in the middle section of the song, which is emphasized through the strongly diatonic sections at the beginning and end that firmly establish the *Temperaturfarben* of C major, helps illustrate that there is more to the miller's greeting than may at first seem to be the case; he is a bit unbalanced.

In this song the miller is greeting the miller maid, but a close examination of the text reveals that it is doubtful that he is actually interacting with her. The first and second stanzas read:

Guten Morgen, schöne Müllerin! Wo steckst du gleich das Köpfchen hin, Als wär' dir was geschehen? Verdriest dich denn mein Gruss so schwer?	Good morning, beautiful miller maid! Why do you quickly hide your head, As though something had bothered you? Does my greeting irritate very much?
Verstört dich denn mein Blick so sehr? So muss ich wieder gehen.	Does my gaze greatly unsettle you? So I must go again.
O lass mich nur von ferne stehn, Nach deinem lieben Fenster sehn, Von ferne, ganz von ferne!	O let me stand at a distance And look toward your dear window From a distance, completely from a distance!
Du blondes Köpfchen, komm hervor! Hervor aus eurem runden Tor, Ihr blauen Morgensterne!	Blonde head, come out! Out from your arched gate, You blue morning stars!

One notes that in the second stanza, the miller redundantly states how he is admiring the miller maid from a distance. He sees her through her window; the same glistening window he admired in *Halt!* This implies that although in the first stanza he asks if the miller maid is bothered by his greeting and gaze, his greeting may not have been heard, only his gaze noticed. The miller is assigning meaning and an intimacy to the vision of the maid that he sees in the distance; their relationship is developing in his mind rather than in real life.

9. *Des Müllers Blumen* (The Miller's Flowers)

A major, 6/8 time, *Mässig* (Moderate)

Both *Des Müllers Blumen* and the preceding song seem calm in contrast to *Ungeduld*. The tessitura of the piano part is lower than that of the two previous songs, which helps highlight the *Temperaturfarben* of A major, as do the octaves that ring out for full measures in the piano's left hand. A major has much more *Temperaturfarben* than the preceding song in C major, but much less *Temperaturfarben* than *Ungeduld*.

Morgengruss and *Des Müller's Blumen* function as a pair; the former is associated with morning and the latter with night. We have no idea how many days and nights the miller has passed in yearning for the miller maid. In this song the miller is singing to the forget-me-not flowers and asking them to whisper to her not to forget him. The song embraces the same sentiment as *Ungeduld*, but without the urgency; he is daydreaming about his love for the miller maid and how he would or should express it to her.

However, in the last stanza the poem takes a dark turn. The miller's mood has turned from the quiet ache for requited love to sadness and tears.

Und schließt sie früh die Laden auf,	And when she opens the shutters early
Dann schaut mit Liebesblick hinauf:	Then look lovingly upwards
Der Tau in euren Äugelein,	The dew in your eyes
Das sollen meine Tränen sein,	Will be my tears
Die will ich auf euch weinen.	That I weep on you.

This last stanza is quite different in mood compared to the previous stanzas, but Schubert did not decide to set it any differently from the rest. However, he does seem to have composed the music for this song with the last stanza in mind. A major is presented almost completely diatonically for the first three lines of each verse, with secondary dominants appearing beginning with the penultimate line. These harmonic changes

coincide with the shift in emotion in the final verse from longing to tears; they create a greater sense of angst and more dramatic tension.

The first half of the song consists primarily of A-major, E-major, and E-dominant-seventh chords. The left hand of the piano plays predominantly dotted half notes, which help the V⁽⁷⁾-I of A major become firmly established in the listeners' ears. The moderate color of A major paired with the relaxed accompaniment and moderate tempo makes the opening sound energized, evoking the feelings of hope and promise. At m. 9, Schubert incorporates a IV chord, D major, and on the last eighth note of the measure, a B-dominant-seventh chord in first inversion. This is the fifth song in the cycle in which B major harmonies are present; Schubert simultaneously increases the *Temperaturfarben* of this song (this section sounds fraught), and establishes the importance of the B-major tonality. It is quite plausible that by this point the listener is beginning to notice this prominent tonality, especially since *Ungeduld* was set in B major.

Another harmonization that increases the song's *Temperaturfarben* appears at m. 13 when F# minor, the vi chord, is tonicized with a C#-dominant-seventh chord in second inversion (see Example 4.17). It is likely that Schubert chose to tonicize the vi chord because of the dissonant ranking of its dominant C# major. F# minor has an overall purity ranking of nine out of the twelve minor keys, which intensifies the overall dissonance of A major, ranked seventh out of twelve in the major keys. The F#-minor tonicization is followed by a repeated V/V-V progression in A major, again incorporating the important sonority of B major. Another C# major to F# minor progression occurs at m. 18, thereby maintaining the high degree of color tension. The following measure tonicizes B minor

before returning to A in the last two measures with a V-I progression. The intense colors underscore the end of every verse, making it sound somehow out of balance and out of tune to the listener accustomed to equal temperament. This intense, agitated *Temperaturfarben* is particularly appropriate for the end of the last verse when the miller speaks about his tears.

Example 4.17: *Des Müllers Blumen*, mm. 13–21, with words for the last verse.

The musical score for Example 4.17 consists of two systems of music. The first system covers measures 13 to 16, and the second system covers measures 17 to 21. The key signature is D major (two sharps) and the time signature is 6/8. The vocal line is in the treble clef, and the piano accompaniment is in the bass clef. The lyrics are: "sol - len mei - ne Trä - ne sein, die will_ ich auf_ euch wei - nen, dei will_ ich auf_ euch wei - nen." Dynamic markings include *pp* at measure 16 and *cresc.* at measure 19. Chord symbols are provided below the piano part: C#3, f#6, B7, E, B7, E, A, b6, A4, E, c#6, f#, a#o7, b, A4, E, A.

With the exception of the piano dynamic marking that begins the song and two decrescendos in the piano introduction, all of the dynamic markings in the song are contained in Example 4.17. Schubert's use of dynamics indicates his desire to highlight the *Temperaturfarben* in this section. The only crescendo of the song occurs at m. 19 on the A#-diminished-seventh chord. The effect of this chord is striking because it is not

harmonically related to the chord that was tonicized in the immediately preceding measure, and it is also a striking contrast to the A-major tonality of the key signature.

In *Die schöne Müllerin*, A is a key of dreams, a poetic association that is clear when looking at the score, regardless of which temperament is in use. Nevertheless, in well temperament, this association between A major and dreams is something that the audience experiences aurally; the key of dreams sounds more colored than the more neutral keys that Schubert uses, but not as colored as the keys that represent pain and death. Youens states that this song is a daydream and also points out the similarities of the song's meter and tonality with that of *Frühlingstraum* from *Winterreise*, another song about dreams.¹¹ Youens also states that this song is the “point of least tension in the cycle.”¹² I believe that this last description may more accurately belong to the previous song *Morgengruss* because of its predominantly C-major-diatonic harmonies and its lack of extreme emotions expressed through the lyrics and the harmony. There are no tears in *Morgengruss*, and there are no B- or E-major chords; the song has very little tension created through *Temperaturfarben*.

10. *Tränenregen* (Rain of Tears)

A major, 6/8 time, *Ziemlich langsam* (Fairly slow)

Tränenregen (Rain of Tears) is one of the more emotionally intense songs of the cycle, and it precedes the false climax of *Mein!* It is a song of contrasts, between consonance and dissonance, and perception versus reality. The first element of contrast

¹¹ Youens, *Die schöne Müllerin*, 87.

¹² *Ibid.*

in *Tränenregen* is between this song and the previous one: both songs have the same key and meter, similar right-hand piano figuration, and ranges. These similarities create the sensation that the two songs are connected, causing the sonorities of *Tränenregen* to at first be heard in relation to the key of *Des Müllers Blumen*. Thus, the dissonance of the opening A-augmented chord contrasts with the tonic A major that was sounded as the last chord of the previous song. The dissonance created by the A-augmented chord is increased with each succeeding suspension and tritone. The audience will hear these dissonances regardless of temperament due to the complexity of the frequency ratios of these traditionally dissonant intervals.

By interspersing consonant and dissonant phrases throughout *Tränenregen*, Schubert was able to represent the contrast between the miller's delusions and reality. In this song, the miller describes an interaction he has with the miller maid. Upon first reading, it might appear as if the miller and the maid are involved in an intimate moment; however, a closer look reveals that the miller misconstrues the maid's interaction with him as signs of her affection. The miller's misapprehension may also be occurring on an even deeper level; Müller's word choices suggest that the miller and the maid are not interacting in a tête-à-tête. The miller is not just misinterpreting a conversation with the maid, but he is creating a conversation in his mind where one is not occurring in reality.

The first stanza of Müller's poem reads:

Wir sassen so traulich beisammen
 Im kühlen Erlenbach,
 Wir schauten so traulich zusammen
 Hinab in den rieselnden Bach.

We sat so cozily together
 In the cool shade of the adlers,
 We gazed so intimately together
 Down into the rippling brook.

These lines imply intimacy, but there is nothing that explicitly states that the miller and the maid are alone or that they are interacting with each other. The word “traulich” translates to “intimately” or “cozily”; however, intimate and cozy does not always imply only two people, as a small gathering is often called intimate. The poem begins with the pronoun “Wir,” but Müller never specifies who “we” are. There could very well be a small gathering of mill workers crowded in close proximity under the trees.

The lack of intimacy is also indicated by what the miller and the maid are “intimately gazing” at. He does not say that they are looking at each other, or interacting with each other in any way; rather, they are looking at the brook. Nothing implies that they are doing so in partnership. The miller may be observing the maid as she looks into the brook and then doing the same, which he registers as a shared experience.

Another possibility is that the miller knows that the maid is looking into the brook because it is her reflection and not her true person with which he is sharing this experience. In the last two lines of the third stanza and the first two of the fourth, the miller states:

Ich schaute nach ihrem Bilde,	I looked only at her image,
Nach ihren Augen allein.	At her eyes alone.
Und sahe sie nicken und blicken	And saw her nodding and looking
Herauf aus dem seligen Bach,	Up from the blessed brook,

The miller explicitly states that he is looking at the maid’s image or picture (Bilde), reflected up from the brook. He is not sharing intimacy with her: he is watching a reflection of her eyes, not gazing into them. It is possible that she may not even be aware of his presence. He may be out of the way, able to hear her, but looking at her through

the clear waters of the brook much in the same way that he often gazes at her through the window of her house.

When discussing the last stanza of the poem, people often note the maid's callous, sarcastic reaction to the miller's tears:

Da gingen die Augen mir über, Da ward es im Spiegel so kraus; Sie sprach: Es kommt ein Regen, Ade, ich geh nach Haus.	Then my eyes overflowed, and made the mirror fuzzy; She said: Rain is coming Goodbye, I'm going home.
--	--

The miller's tears have fallen into the brook and made it ripple; it is possible that the maid has no awareness of the miller, but she has mistaken the teardrops for raindrops. Her comments also make sense in this context: she could be bidding the mill workers, including our miller, a quick goodbye before she parts.

Schubert's harmonic choices are symptomatic of the miller's warped sense of reality. The musical contrasts in this song depict the miller's delusions, his deteriorating mental state, and foreshadow his suicide. The dissonant introduction is laden with A-augmented chords, but the contrapuntal nature of the introduction highlights a striking melodic feature that sounds dissonant to listeners used to equal temperament. The E – E# – F# ascent juxtaposes two different sized semitones: E – E# measures 108 cents and E# – F# measures 92 cents. These are the widest and narrowest semitones, respectively, in Young's well temperament. For the listener used to equal temperament, both intervals sound significantly out of tune; the equal-tempered semitone is 8 cents narrower and 8 cents wider than the two intervals, respectively.

The first two phrases sung by the miller are more diatonic than the introduction. The first six stanzas are set strophically in pairs. Stanzas one, three, and five are largely

diatonic. The dissonant-sounding E – E# – F# occurs down an octave between the first and second phrase. The second phrase ends on a half cadence with a B-dominant-seventh chord functioning as the V⁷/ V. This cadence both incorporates the B-major sonority, which continues to foreshadow the negative emotions and turmoil to come, and it also introduces a three-bar piano interlude on E major, which is the key of death in the cycle. In this passage, the familiar sixteenth-note figuration that has represented the brook throughout the cycle momentarily returns. The brook sounds also return after stanzas two, four, and six, but in A major. The brook is a constant, continually flowing and moving the mill wheel at a steady pace. The brook's figuration is a contrast from the miller's lilting dreamy music, and the harmony of the brook sections foreshadows significant tonalities that are associated with the brook as well as the miller's suffering at the end of the cycle. These brook sections – contrast the real world with the world inside the miller's head.

Another way that Schubert represents the miller's mental flux is with a surprise C#-major chord in m. 18 that lasts for almost the entire measure (see Example 4.18). In the purity rankings of major chords, C# major and B major are second only to G^b major/F# major in their amount of *Temperaturfarben*. Like the augmented tonic chord and suspensions heard throughout this song, this highly colored chord intensifies the overall color of this A-major song. Schubert lingers on C# major, moving the internal voices and then re-articulating the third and the fifth of the chord. This chord is followed by octave Es, which will not beat since the octave is the only interval that is untempered. The absolute consonance of the octave Es serve as a foil to the highly colored C#-major

chord. The following measure contains clashes of a second, the dissonance that indicated the miller's instability in *Danksagung an den Bach* (Thanks to the brook).

Example 4.18: *Tränenregen*, mm. 17–19

16

kom - men, die Stern - lein hin - ter - drein, und schau - ten so trau - lich zu -
bli - ken her - auf aus dem se - li - gen Bach, die Blüm - lein am U - fer, die
Ster - nen da rie - sel - te mun - ter der Bach, und rief mit Sin - gen und

A d^{#7(A)}E C^{#6} D⁶ E A f^{#(C)} b⁶ C[#] E D^{(no A)9-8} g^{#o}

The seventh and final stanza of *Tränenregen* is set differently from the others (see Example 4.19). The mode unexpectedly changes from A major to A minor, a contrast that appears often in this cycle to represent reality versus dreams. The change seems to be prompted by the miller's forthcoming tears. A minor is a very pure triad, and A major has a medium amount of color, so their contrasts will be aurally perceptible. Susan Youens notes that in Schubert's works, A minor is associated with "solitary, tragic beings such as Mignon and the Harper."¹³ This description also holds for the miller; he, too, is alone, and his end will be tragic.

A minor is firmly established at the beginning of this section, but the second line of the final stanza ends unexpectedly with a V⁷-I cadence on C major in mm. 27–28. Both A minor and C major are keys with minimal amounts of *Temperaturfarben*. These tonal centers function in three ways: as a way to momentarily lessen the *Temperaturfarben* of the song, to provide contrast against which the more dissonant

¹³ Youens, *Die schöne Müllerin*, 90.

Example 4.19: *Tränenregen*, mm. 25–32

25

Da gin-gen die Au-gen mir ü - ber, da ward es im Spie - gel so kraus, sie

a d E a a G⁷ C c^{#o7}

29

sprach: es kommt ein Re - gen, a - de, ich geh' nach Haus.

d d^{#o7} A⁴ E⁷ A A⁺

harmonies of the song are heard, and to highlight an event happening in reality (opposed to in the miller's mind, or the miller's personal interpretation of real events). The miller's tears seem to be portrayed through the descending chromatic inner voice of the right hand of the piano immediately after the C-major chord is struck.

Starting with the C-major chord in m. 28, the music transitions to an A-major chord as the bass line rises chromatically from C to E. A major seems to represent the miller's increased happiness because the maid has spoken, even if only to say she is leaving. Although the music has returned to the key of dreams by m. 32, the instability of the miller's dreams is made apparent in the morphing A chord: from major to augmented and then minor. The distortions of the A chord are symbolic of the miller's distorted thoughts. The miller is not able to pretend that he and the maid had an intimate moment for very long. The fact that the miller shed tears while they were supposedly connecting

is another indication that something is awry; if he were getting what he wanted—time with his sweetheart—why would he cry? He cried after singing about how cozy and intimate they are; his tears are incongruous with the interaction that he has just described. Maybe he could not build up the courage to speak with her, but her comment about the rain was enough to lift his spirits momentarily.

The postlude appears to be reflecting back the miller's emotional shift from happiness to sadness; it ends with a repetition of the piano introduction, but the song ends in A minor instead of the home key of A major. A minor is associated with reality, and the reality of the miller's situation is that the words exchanged between him and the maid could have been exchanged by complete strangers.

11. *Mein!* (Mine!)

D major, Cut time, *Mässig geschwind* (moderately fast)

Mein!, the midpoint of the cycle, is reminiscent of the opening song *Das Wandern*. Both share the time signature 2/4, the tempo marking *mässig geschwind*, and have similar accompaniment figurations that evoke the sound of the brook. While they do not share the same key signature, the B section of *Mein!* tonicizes the key of *Das Wandern* (B \flat major). This is not a traditional key choice (although chromatic third relationships were becoming increasingly common in Schubert's time), and the *Temperaturfarben* of B \flat major sounds less tense and more neutral. *Das Wandern* and *Mein!* function as bookends for the first half of the cycle, encompassing a group of predominantly optimistic songs in which the miller's hope for love prevails.

The dominant of *Mein!*, A major, is both the over-arching tonality of tonic group three and the key of dreams. The D major of *Mein!* links the miller's emotions to his dreams; at this moment, it seems as if his dreams have come true. While *Mein!* begins firmly in D major with repeated V⁶-I chord progressions, symbolically significant chords of B major and E minor appear in the fourth measure: a B-dominant-seventh chord is substituted for the diatonic B minor (vi chord) and tonicizes E minor (ii). B-major or B-dominant-seventh chords appear as the secondary dominant of ii either preceding or following an E-minor chord at measures 4, 11–12, and 18–19. Throughout the cycle, Schubert has repeatedly made the highly colored B-major chord prominent in songs in which the chord is not diatonic, which has further increased the listeners' awareness of this ominous sonority. The tempo of the song and the arpeggiation of chords cause the B-major tonality to be moved through quickly, but the sonority nevertheless colors this D-major song.

At m. 22 there is a sudden shift from the established D-major tonality to a tonicization of the dominant A major. In m. 16 the bass line shifts from fifths to octaves, further highlighting the chord color by shifting the range of the song downward and allowing for the overtones of the lower notes to ring out. Both the louder dynamics and the lower pitches further highlight the colors of the chords. Beginning at m. 22, A-major chords alternate with E-major and E-dominant-seventh chords in various inversions for eight measures, firmly solidifying the tonicization of the dominant and alluding to the dreams associated with A major in tonal group three. This tonicization makes the miller's building excitement audible. This section both increases the song's *Temperaturfarben* and alludes to E major, a key that is linked to death (via the brook) at

the end of the cycle. D major returns in m. 30 when the miller states the reason for his happiness by singing twice “Die geliebte Müllerin ist mein, ist mein” (the beloved miller maid is mine, is mine).

Schubert transitions to the B \flat -major B section of this ABA song beginning at m. 38 with an unexpected shift from the tonic D-major to a D-minor chord. The bass and the voice both contain the root third of the D-minor chord. With the following chord, an F dominant seventh, the voice contains the F \sharp , which is both the root of the chord and also the altered note that gives rise to this non-diatonic chord. This is the first instance in the song where chord tones from non-diatonic harmonies infiltrate the vocal line. When Schubert previously used B-major harmonies, the third of the chord, the element that distinguishes major from minor, was always found in the piano and not the voice. One could substitute the diatonic B minor for the previous B-major chords in the piano without affecting the vocal line. In those instances, Schubert’s symbolic use of temperament represents the discrepancies between the miller’s thoughts and the true state of affairs. As doubts and reality creep into his mind, however, we start to hear harmonic changes in the vocal line itself. When the miller sings “mein” at m. 38–39, the third of the chord is lowered, in a way an audible deflation of the miller’s assuredness and glee.

The D-minor chord of m. 38 begins the B section with a iii-V⁷-I progression in B \flat major. I contend that Schubert had two reasons for using B \flat major in this section. The first reason concerns the large-scale tonal structure of the cycle: B \flat major alludes to the first song of the cycle, and it will be the key of the following two songs. Schubert is thus creating a musical frame for the first ten songs. The second reason is that Schubert did not want to change the overall *Temperaturfarben* of this song; B \flat major and D major

have almost the same degree of *Temperaturfarben*; their tonic triads have the same sized major thirds. By modulating to B \flat -major, Schubert could maintain the same basic *Temperaturfarben* for the entire song and use secondary dominants and non-diatonic harmonies for additional color.

In the beginning of this B \flat major section, the miller asks spring if it has any more flowers and the sun if it can shine brighter. The miller seems to be reprimanding the world for not being able to match his level of joy. At times during the B section it seems as if the piano and the voice are being pulled in different directions harmonically, a divide that is symbolic of the disconnect between the miller's mind and the real world. This divergence begins at m. 43 with A-diminished-seventh chord over a tonic pedal, creating a clash of a minor second between B \flat in the bass and A in both the voice and the right hand of the piano accompaniment (see Example 4.20). Linear dissonance occurs simultaneously as the right hand of the piano begins the measure with a tritone leap from E \flat to A, and then alternates between A and G \flat . While the A clashes with the B \flat in the bass, the G \flat creates a harmonic clash of an augmented second with the A in the voice. The dissonance between the voice and the bass is emphasized because both tones are sustained and the same harmony repeats.

Example 4.20 also shows the tonicization of G minor in measures 47–50. This change to minor corresponds with a change in the poetry; the miller had been anthropomorphizing spring and the sun and addressing them as if they were sentient creatures, and now he is acknowledging his solitude. He states: “Ach, so muss ich ganz allein / Mit dem seligen Worte mein / Unverstanden in der weiten Schöpfung sein!” (Ah,

then I must be all alone, with the blissful word “mein,” misunderstood by all creation). Schubert repeats this line twice with the same harmony in mm. 51–55 and mm. 56–60.

Example 4.20: *Mein!*, mm. 41–55

Früh - ling, sind das al - le dei - ne Blü - me - lein? Son - ne! hast du

kei - nen hel - ler'n_ Schein?_ Ach! so muss ich ganz al - lein

mit dem se - li - gen Wor - te mein_ un -

- ver - stan - den in der_ wei - ten_ Schöp - - fung sein,

mf

B \flat B \flat a $^{\circ 7}$ /B \flat a $^{\circ 7}$ /B \flat

a $^{\circ 7}$ /B \flat B \flat g F $\sharp 07$ g

g F $\sharp 07$ g C $\sharp 7$ e $^{\circ 7}$

F $\sharp 04$ F $\sharp 2$ B $\flat 6$ c 6 B $\flat 4$ F B \flat

The miller truly is alone with his love; not only is there is no one there with whom to share his feelings, but the miller's love is unrequited and perhaps even unnoticed. When the miller declares that he is misunderstood by all creation, the harmony is no longer tonicizing G minor. B \flat major has returned as the tonal center, but this passage is harmonized with a large percentage of colorful, non-diatonic chords that illustrate the tumultuous world of the miller's frantic mind. In m. 51 on the word "unverstanden," a C-dominant-seventh chord in first inversion moves to an E-diminished-seventh chord. This is followed by an F \sharp -diminished-seventh chord in third inversion, an F-dominant-seventh chord in third inversion, a B \flat -major chord in first inversion, a C-minor chord, and then I $\frac{4}{2}$ -V-I in B \flat (see Example 4.20). The harmony is wandering; the C-dominant-seventh chord implies F major, and F \sharp -diminished chord implies G minor. The miller is struggling to keep his dreams and upbeat mood intact. He momentarily regains his dreamy, triumphant frame of mind with the return of the A section, which is almost an exact restatement of the first A section with the exception of the last repeated "mein, ist mein."

Mein! is the emotional high point of the cycle so far as the miller declares to the world that the maid is his. The audience does not know which events (if any) have occurred between the last song and this one; it is still plausible at this point to have a happy ending to the miller's story. I categorize this song as the false climax of the cycle; it is only upon listening to the following songs that the miller's relationship with the maid is clarified.

12. *Pause* (Pause)

B \flat major, common time, *Ziemlich geschwind* (Fairly Fast)

Songs eleven and twelve are linked both harmonically and poetically. *Pause*'s B \flat -major key signature was introduced in the B section of *Mein!* The miller states at the beginning of *Pause* that his heart is too full and that he cannot sing anymore, which seems to allude to his joyful song of triumph in love that the audience just heard. The moods of the two songs contrast greatly; the exuberance of *Mein!* juxtaposed with the calm of *Pause* seems to contrast manic behavior followed by a swing to a state of much lower energy levels. The miller was at the heights of happiness, but his joy does not prevent feelings of anxiety from surfacing.

Since *Pause* follows the false climax, it is part of the falling action before the true climax occurs with *Der Jäger*. *Pause* is in B \flat major, a key that is associated with narration in this cycle. B \flat major may represent a break from the action of the storyline, but the frequency of the non-diatonic chords and numerous tonicizations in this song illustrate that there is a great degree of action in the miller's internal thoughts. The miller's anxiety, which he tried to suppress in the last song, is rising to the surface. The harmony depicts his emotional push-and-pull. When the miller's state of mind seems calm and unaffected, the B \flat -major tonality is clear, but his frequent feelings of anxiety are depicted through the *Temperaturfarbe* of non-diatonic chords.

Schubert accentuated the *Temperaturfarben* of *Pause* by changing musical textures within this song. The audience is accustomed to hearing the sounds of the brook in the accompaniment, but this song opens with musical figurations that echo the sound of the miller's lute. The texture is relatively thin; it is mostly limited to four-note

voicings of chords, with the left hand usually sustaining two notes while the right hand plays a rocking figure harmonized in thirds. The piano firmly establishes the home key of B \flat major in the first two measures by emphasizing the root and fifth in the left hand and the root and the third in the right, and by presenting harmony that is firmly within the realm of B \flat major for the entire introduction. The home key is further emphasized when the pitch B \flat is sustained under the non-tonic chords found in m. 3. The simple harmony and firm anchoring in B \flat major coupled with the rocking motion of the lute figuration creates a trance-like effect, like the calming of a lullaby.

The song begins with an ironic twist: when the voice enters at m. 9 the miller says that he has hung his lute on the wall and can no longer sing because his heart is too full, yet the voice is singing these words with lute-like piano accompaniment. The first two vocal phrases are sung over the same lute-like rocking figure heard during the introduction. At m. 20, the accompanimental texture, tonality, and sentiment change (see Example 4.21). The miller turns from singing about his heart that is full of love to singing about “Meiner Sehnsucht allerheissesten Schmerz” (the hot pain of my longing). The light, rocking figuration becomes heavier and more percussive as an incessant quarter-note texture emerges with eighth-note anticipations in the right hand of the piano. The rocking sounds of a lullaby seem to suddenly turn into the measured sounds of a march. Two measures of G minor followed by a dominant seventh chord of G minor emphasize G minor as a temporary tonal center; this is the same tonality that surfaced in the previous song when the miller began to sing of his loneliness. The G-minor tonality is implied for four measures before F major is implied in the first half of m. 24. In the second half of the measure the G-minor-seventh chord in first inversion becomes a G-

dominant-seventh chord when the third of the chord is raised, which then leads to a V⁷-I cadence on C. The miller's recollection of his longing is expressed through G-minor harmonies, but when he speaks of breathing them into a playful song, the tonality briefly turns to C major, the purest key. The vocal line arpeggiates the G-dominant-seventh chord upward, starting on the second syllable of the word "aushauchen" (exhale). The C-major chord quickly dissolves to C minor for a contrary sentiment as the miller recalls the how seriously he took his own pain; "Und wie ich klagte so süß und fein" (And when I complained, so sweet and fine).

Example 4.21: *Pause*, mm. 20–26

20
Mei - ner... Sehn - sucht al - ler hei - sses - ten

g D⁶ D⁷

23
Schmerz... durft' ich... aus - hau - chen in Lie - der - scherz,

g D F g⁶ G⁶ C G⁷ C c

Beginning at m. 30 the F-major chord becomes more prevalent, and when the C-major sonority returns it does so as a C-dominant-seventh chord, functioning as the V⁷ of F instead of dissolving into C minor. This creates what sounds like an imperfect authentic cadence in F major at m. 32. At m. 33 a fortissimo F-dominant-seventh chord

in second inversion sounds, and the dissonance between the root and the seventh is striking because the notes are placed in close position and doubled in both hands. This chord begins the third change of texture and tonality in the song, which lasts until m. 40. The march-like quarter notes change to chords struck and sustained on beats one and three for the majority of this passage. The sustained chords and the dynamic marking of *fortissimo* at m. 33 emphasize the passage's increased *Temperaturfarben*. Instead of tonicizing the major tonic as expected, the F-dominant-seventh chord in second inversion tonicizes progresses to the minor tonic, which begins a transition to D \flat major as the miller begins to sing "Ei, wie gross ist wohl meines Glückes Last, / Dass kein Klang auf Erden es in sich fasst?" (Ah, how heavy is the weight of my happiness that no sound on earth can contain it?). D \flat major is an unusual choice; it is not closely related to the tonic nor the dominant. This section sounds like it has much more roughness and tension; the sustained chords highlight the beating of these highly colored chords. G \flat major, the IV chord in D \flat major, is prominent in this tonicization; it is ranked tenth out of the twelve major keys in terms of purity. With flat-major keys the subdominant adds more color to the key than does the tonic, and Schubert chose to feature the IV chord, G \flat major as much as he used the V chord A \flat major. G \flat major is the most highly colored major triad in well temperament. The placement of G \flat major for the sake of its *Temperaturfarbe* seems intentional; Schubert aligned the G \flat -major chord with the word "Klang" (sound) (see Example 4.22). As the miller says that there is no sound that can contain his joy, Schubert sounds the most dissonant major chord available to him, which is not a joyous chord at all. The voice contains a 4-3 suspension, which increases the inherent

dissonance of the G \flat -major chord. Schubert created a clash of a major second by writing a 4-3 suspension on words “Klang” and “Erden” in m. 36 and again in mm. 38–39.

Example 4.22: *Pause*, mm. 35–41

35
Last, dass kein Klang auf Erden es in sich fasst,
pp
Db Db⁶ G \flat Ab⁷ G \flat Ab⁶

38
dass kein Klang auf Erden es in sich fasst?
8
Db⁶ G \flat eb⁶ Fr⁺⁶ F^{7oc} Fr⁺⁶ F

Schubert ends this section by repeating the words “dass Klang auf Erden es in sich fasst” (no sound on earth can contain it) with some text painting. The vocal line ascends as the chords in the piano expand beginning with the G \flat -major chord at m. 38. The expanding chords point up towards heaven and down towards hell, or more generally to what is beyond earth. This expansion ends on an F-major chord without the fifth. The F-A major third is not very colored and contrasts with the colorful chords that have come before it. After the cadence in m. 40 the piano plays what seems like an echo in the distance. The bass note jumps over an octave and a very dissonant augmented sixth

chord with the notes C, E, and G \flat sounds, with the top voice in the piano moving from C to B \flat and back. This chord resolves into a full F-major chord that sounds for the whole of m. 41.

At m. 42 the music of the introduction returns with an abrupt transition that breaks textbook voice-leading rules. The voicing of the F-major chord of m. 41 is identical to the voicing of the B \flat -major chord; all of the voices drop the interval of a fifth. The audience has not heard B \flat major, the home key, since the lute-like accompaniment ceased at m. 19. The harmony and accompanimental figuration of verse one repeat with the words from the second stanza until m. 52. The first time this passage was heard in mm. 15–16, Schubert tonicized the dominant with a V/V to V progression. This time G minor is tonicized with a D-dominant-seventh to G-minor progression. G minor keeps resurfacing in the cycle; is the key in which the miller expresses solitude and loneliness, his jealousy, and his sorrow for having to end his own life. The D-dominant-seventh and G-minor sonorities accompany the first line of miller's words: "Und streift eine Biene mit ihren Flügeln dich, / Da wird mir so bange, / und es durchschauert mich" (And if a bee brushes you with its wings, I shall feel afraid and anxious). This sentence shows how fragile the miller is; a disturbance as small as the displaced air from the wings of a bee is enough to fill him with anxiety. These phrases end by tonicizing C minor, a key that will return linked to the hunter in *Der Jäger*. Schubert then surprisingly modulates to A \flat major in m. 56, which is a third away from C minor. The opening sounds of the lute are heard again, but in a new key. It is almost as if the miller cannot muster enough imagination to get himself back to B \flat major, so he ends up singing a whole step down and in a key with a greater amount of *Temperaturfarben*. In m. 63, A \flat major is changed

to $A\flat$ minor, which is the enharmonic equivalent of $G\sharp$ minor, the second to least pure minor triad in our rankings. Schubert follows the $A\flat$ -minor chord with a $F\flat$ -major chord in first inversion, which is enharmonically E major (a key associated with death) (see Example 4.23). The words “Ist es der Nachklang meiner Liebespein?” (is it the echo of my love’s sorrow?) are sung in recitative style, first over an over the $F\flat/E$ -major chord, then moving on “Liebespein” (love’s sorrow) to a French sixth chord followed by a $G\flat$ -dominant-seventh chord which creates word painting. The beating of the sustained chords seems to manifest the miller’s intense pining. Schubert built a seventh chord on the most highly colored major triad, which further evokes the bittersweetness of love’s sorrow.

Example 4.23: *Pause*, mm. 63–69

The image displays a musical score for Example 4.23, consisting of two systems of music. Each system includes a vocal line (treble clef) and a piano accompaniment (grand staff). The key signature is three flats (B-flat major/C minor), and the time signature is common time (C).

System 1 (Measures 63-65):

- Vocal line:** The lyrics are "Ist es der Nach - klang — mei - ner Lie - bes -". The melody is recitative, with a long note on "klang" and a dotted note on "bes".
- Piano accompaniment:** Features sustained chords. Chord labels below the staff are $a\flat$ (at measure 63), $F\flat^6$ (at measure 64), and Fr^+6 (at measure 65).

System 2 (Measures 66-69):

- Vocal line:** The lyrics are "pein? Soll es das Vor - spiel - neu - er — Lie - der sein?". The melody continues in a recitative style.
- Piano accompaniment:** Features sustained chords. Chord labels below the staff are $G\flat^{\sharp 6}$ (at measure 66), Gr^+6 (at measure 67), $B\flat^{\sharp 6}$ (at measure 68), F^7 (at measure 69), and $B\flat$ (at measure 70).

The tonic B \flat -major tonality reemerges with a V-I cadence in mm. 67–69 after the miller sings the phrase “Soll es das Vorspiel neuer Lieder sein?” (Shall it be the prelude to new songs?). Before the miller repeats his two questions (is this the echo of love’s sorrow? or the prelude to new songs?), the audience hears a measure that incorporates G minor and E \flat major (i-VI⁶ in G minor), and then the material that began at m. 63 repeats. These additional measures add more color to this passage’s *Temperaturfarben*. G minor is a relatively pure minor triad, and is it the second purest in our rankings, while A \flat minor is a highly colored minor key. By contrasting relatively pure and relatively impure triads, Schubert highlighted the difference in the two questions that the miller is asking: is the sighing sound that the ribbon makes when it brushes the lute strings a sorrowful sound or a hopeful one?

The rocking, lute-like musical gesture that opened the song in B \flat major reemerges as the closing bars of the piano accompaniment, but with one alteration: the second measure of this four-measure unit is changed from B \flat major to B \flat minor. This juxtaposition of major and minor again highlights the differences between hope and sorrow and hints at the miller’s mental instability. Both the shift in the textures of the accompaniment and in tonal centers throughout the song make the song function as the eerie calm before the storm. The miller was at a high point in *Mein!*, and there is nowhere to go but down.

13. *Mit dem grünen Lautenbande* (With the Green Lute Ribbon)

B \flat major, 2/4 time, *Mässig* (Moderate)

Mit dem grünen Lautenbande is a strophic song in B \flat major. It is much more of a pause than *Pause*; the tempo is moderate, and the harmony is much more diatonic than the previous song. Its solid B \flat -major tonality embodies the neutral narrative qualities Schubert has linked to this key; Youens has commented about the apparent lack of emotional depth in this song by describing it as “devoid of greater feeling.”¹⁴ There are no dynamic markings, the texture is relatively thin, and the range of both the piano and the vocal line is very moderate. The sparse musical texture highlights the miller’s state of mind as revealed through his narration of an interaction with the maid.

Mit dem grünen Lautenbande opens with a B \flat -major chord that echoes the B \flat -major chord that closed the previous song but in a more closed position. The chord is symbolic of a calming of the miller’s emotional outbursts. In this song the miller is recounting an encounter with the maid that sheds light on the nature of their relationship and on his mental state. In the previous song he hung up his lute with a green ribbon because his heart was too full; this song begins with the maid commenting on the lute hanging on the wall. The audience does not know how much time has gone by, but the miller places the encounter in the past. When the miller describes the words that the maid spoke to him, he is not depicting an emotional exchange or any type of dialogue that implies the warmth of lovers or intimacy:

¹⁴ Youens, *Die schöne Müllerin*, 96.

»Schad' um das schöne grüne Band, ribbon Dass es verbleicht hier an der Wand, Ich hab das Grün so gern!« So sprachst du, Liebchen, heut zu mir; Gleich knüpf ich's ab und send es dir: Nun hab das Grüne gern!	"It's a shame that this beautiful green fades here on the wall, I am so fond of green!" So you spoke, love, to me today. I untied it at once and sent it to you. Now enjoy the green!
--	--

Her words could simply have been an off-hand comment that was not directed to him specifically. She may have been walking by and seen the ribbon through a window and not even been aware of the miller's presence. The miller's description of what he did next could also be an indication of their lack of intimacy; he tells how he untied the ribbon and sent it to her; "send" is not the same as "give." "Giving" her the ribbon would have been a much more personal gesture. "Sending" it implies that the gesture happened after her comments; if she were interacting with him, it seems odd that he would send her the ribbon afterwards and not at the time of her remarks. By sending her the ribbon and not giving it to her in person, the miller has removed the intimacy of the gesture. There is no way for the audience to know if she ever received the ribbon, or if she knew the miller sent it.

Discussions of *Die schöne Müllerin* often include speculations about the maid's character and her role in the love story. I propose that the maid's relationship with the miller is entirely in his mind. She may be aware of his existence as one of her father's workers, and it is possible that she is aware that he has crush on her, but I believe that is the extent of her involvement. *Mit dem grünen Lautenbande* and *Tränenregen* illustrate the lack of intimacy in the interactions between the miller and the maid. Youens has presented the historical reputation of miller maids and traced the story of the maid of the

mill in literature and music.¹⁵ She notes that *Mahlen*, German for to mill or to grind, was a metaphor for sexual intercourse, which derived from the practice of a miller's offering his daughter for sex to the men who brought grain to the mill.¹⁶ It is perhaps these historical associations and Schubert's own suffering from a sexually transmitted disease that he knew would make him go mad and eventually die that has colored Youen's and other scholars' interpretation of the maid as a hussy. Youens also recounts how the poet Müller was interested in tales of fin' amors from the Middle Ages at the time when he wrote this monodrama.¹⁷ I believe that Schubert represents the maid more like the object of courtly love than the sexually promiscuous heartbreaker. In the second stanza of *Mit dem grünen Lautenbände*, the miller sings of how the maid is all in white, the traditional color of virginity. The simplicity of the music in this song reflects the innocence and purity with which the miller views the maid, and there is no reason to assume that there was a sexual liaison between the two. The next song brings the realization that the maid is human and in love with another, which will be the tipping point for the miller's already unstable mind.

The biggest divergence from B \flat major occurs at m. 7 where Schubert cadences on D major and precedes it with a G-minor and a C-minor chord (see Example 4.24). By emphasizing D major, a connection is made with the song *Mein!* as well as the wandering tonalities of the previous song, *Pause*. Schubert incorporated B \flat major into *Mein!* and D major into *Mit dem grünen Lautenbände*; as mentioned in the discussion of *Mein!*, B \flat

¹⁵ See Youens, *Schubert, Müller, and Die schöne Müllerin*, 42-100, and her liner notes for the CD *Schubert: Die schöne Müllerin* by John Elwes and Kenneth Slowik, Dorian DSL-90702 (CD), 2007.

¹⁶ Susan Youens, *Schubert, Müller, and Die schöne Müllerin*, 82.

¹⁷ *Ibid.*, 4.

major and D major are not closely related keys, which leads one to believe that Schubert's decision to incorporate B \flat major into a D-major song (*Mein!*) and then D major into a B \flat -major song may have been intentional because of the *Temperaturfarben* link that he wanted to create.

Example 4.24: *Mit dem grünen Lautenbände*, mm. 4–7

"Schad' um das schö-ne grü - ne Band, dass es ver - bleicht hier an der Wand, ich
Ist auch dein gan - zer Lieb - ster weiss, soll Grün doch ha - ben sie - nen Preis, und
Nun schlin-ge in die Lo - cken dein das grü - ne Band ge - fäl - lig ein, du

B \flat F \sharp B \flat F B \flat ⁶ B \flat ⁴ g c⁶ D

As noted previously, B \flat -major and D-major triads are ranked the same in *Temperaturfarben*; by tonicizing D major, Schubert was able to add harmonic interest without increasing the overall *Temperaturfarben*. This allows for the next song, *Der Jäger*, to have much more emotional and harmonic impact. One also notes that Schubert focuses on the V-I relationship in this song and only uses the IV chord, E \flat major, twice: on the first eighth note of mm. 10 and 18, both of which transition to a C-minor sixth chord with the next notes. If he had used more E \flat major, it would have increased the *Temperaturfarben* of this key since it is a flat key signature (the IV chord is more colored than the V chord in flat key signatures).

Mit dem grünen Lautendande serves two functions: the simple, diatonic harmony provides a break between the emotional tension created in the previous two songs and the

climax of *Der Jäger*, and the song reveals more information about the true nature of the miller's relationship with the maid. The calm simplicity of this song sets up the next event in the narrative; without the arrival of the hunter or some other event, the story would lose its momentum. The song illustrates the miller's misconceptions regarding his relationship with the maid, which function as a rising action in the story because, without these misconceptions, the hunter would not shatter the miller's world.

14. *Der Jäger* (The Hunter)

C minor, 6/8 time, *Geschwind* (Fast)

The hunter's arrival causes the miller's fantasy world to come crashing down around him. The miller cannot perpetuate an imaginary relationship with the maid when another suitor appears on the scene. *Der Jäger* is a strophic song in C minor with a fast tempo marking and a contrapuntal texture. Both the voice and the piano deliver notes at a rapid pace; few notes last longer than a beat. The quick tempo and emphasis on linear elements emphasize the overall *Temperaturfarben* of the entire song and de-emphasize the *Temperaturfarbe* of individual chords. This song is more diatonic than any other minor song in the cycle.

The canon that opens the song evokes the imagery of a hunt. Youens points out that the association between canonic imitation and hunting dates back to the Italian *Caccia* of the Trecento.¹⁸ She also notes that Schubert probably had not studied this form, but similar to key characteristics, the link between musical canons and a chase were probably in the collective consciousness of nineteenth-century composers.

¹⁸ Youens, *Die schöne Müllerin*, 97.

The depiction of hunting is an obvious interpretation of the canonic lines, but the harmony and frantic pace also depict the miller's thoughts racing around his mind. Schubert chose to set this song in the key of C minor, a key that is not traditionally associated with hunting. Schubert most likely chose the key to emphasize the miller's reaction to the hunter rather than to focus on the hunter himself. *Der Jäger* is the first and only time in the cycle that Schubert uses the key signature of C minor. C minor is a low-contrast minor key with a purity ranking of four; it is a medium-colored key, which seems appropriate because, while the miller is shocked and reactionary, he is not yet contemplating death. The harmony does allude to a key more traditionally associated with hunting: E \flat major.¹⁹ Since horns are commonly pitched in E \flat , this is an association that is not lost on us today because of our knowledge of past musical traditions, but this association is stronger and more obvious when the song is performed in well temperament, which provides an aural reference point and not just an intellectual one. Mm. 8, 12, 18, and 20 feature a B \flat -major to E \flat -major cadence, which is VII-III in C minor, but it is V-I in E \flat major (see Example 4.25).

In addition to the convention of the canon, Schubert also evokes another musical convention that appears to draw inspiration from a past era: the Baroque descending chromatic line that represents grief. A descending chromatic line appears frequently in the piano's right hand, as seen in Example 4.25. Schubert repeats this musical gesture in at least six measures of the song, and each time the descending inner alto voice is positioned against the outer soprano voice of the right hand of the piano that repeats the same note.

¹⁹ Youens has pointed out that E \flat major is associated with horns and thus the hunter (Ibid., 98). A well-known example is the hunting-horn trio of the third movement of Beethoven's *Eroica* Symphony.

Example 4.25: *Der Jäger*, 16–20

16

Wal - de steh'n, und lass dei - ne klaf - fen - den
Rä - dern al - lein, und willst mei - nem Schätz - chen dich

G c C⁶ (G) f

18

Hun - de zu Haus, und lass auf dem Hor - ne den Saus — und Braus, und
ma - chen be - liebt, so wis - se, mein Freund, was ihr Herz - chen be - trübt: Die

B^b (G) E^b C⁶ (G) f B^b (G) E^b

This musical gesture is representative both of the miller's mounting grief over his lost love and of his thoughts racing in different directions. A descending line against a static one may also represent how the miller is becoming overcome with his emotions and cannot maintain a level head. The thoughts that the miller expresses do not always make sense. As part of his rant, he asks the hunter to leave him alone with his three mill wheels. It is possible that the mill where the miller works has three wheels, but it is also possible that three is symbolic, much like the three suns in *Die Nebensonnen* from *Winterreise*. Perhaps in both of these works the significance of three is based on the Christian concept of the Trinity and perfection. As in early mensural notation, division by three was perfect and division by two was imperfect. The miller's perfect world, represented by threes, is now ruined.

Der Jäger is the true climax of *Die schöne Müllerin*. It is the point at which the miller is confronted with reality; he cannot ignore the hunter's flesh-and-blood presence. The miller's inability to cope with losing a relationship that was real in his mind will be played out in the rest of the cycle. *Der Jäger* begins tonal group 4, which is centered on the more highly colored keys of B major and E major.

15. *Eifersucht und Stolz* (Jealousy and Pride)

G minor, 2/4 time, *Geschwind* (Fast)

Sounds of the brook have been noticeably absent from the previous three songs, but the introduction to *Eifersucht und Stolz* depicts raging waters. The turbulent brook is reflecting the miller's hot-running emotions. The fast tempo and the accompanimental texture, sixteenth notes in the right hand supported by dyads or single notes in the left, is reminiscent of the incessant sounds of Gretchen's spinning wheel in Schubert's *Gretchen am Spinnrade*. In both songs, love is pushing the main character to the emotional breaking point.

Eifersucht und Stolz has a fast tempo and quickly moving harmonies. Like the previous song, the temperament is thus more perceptible as larger blocks of sound than as individual sonorities. This song is in G minor, the fourth most pure minor key, and the only minor key in which the borrowed major dominant has the same purity ranking as the minor tonic. G minor is one degree more pure than the C minor of the previous song, but *Eifersucht und Stolz* has more non-diatonic harmonies and a mode change to G major, which increase the song's overall *Temperaturfarben*.

G minor is firmly established at the beginning of the song through the alternation of G minor and diminished triads and seventh chords on F#. The miller begins his rant by chastising the brook. He must be sitting downstream from the mill because he assumes that the brook must be rushing after the hunter and away from the mill. The miller tells the brook to turn back and scold the maid first. The tonalities of the opening section are diatonic in G minor; the most striking and emotion-filled moments in the first section of the song are not created through temperament but through the miller's cries of "kehr' um" (come back). The miller has moved from the mindset of denial to full-blown anger. He is lashing out at the brook and speaking ill of the maid's character.

The miller's recollection of the maid's misdeeds ushers in the first section of increased *Temperaturfarben* (see Example 4.26). The previous night she was watching out the window for the hunter to return, something that no decent girl would do. At the anacrusis to m. 26 the voice begins to sing a repeated B \flat while the left hand of the piano sustains a G that chromatically descends into an F in m. 29. With the absence of the raised leading tone, the VII chord becomes a secondary dominant for a B \flat -minor chord in m. 31, which harmonizes the voice's high F \sharp at the word "langem" in the phrase "mit langem Halse" (with long neck). B \flat and D \sharp minor are the two mostly highly colored minor triads in well temperament, with a purity ranking of six. The B \flat -minor triad contrasts highly with its F-major dominant, which has a purity ranking of two. F major sounds for two full measures, which, due to the length of time that it is sounded, increases the impact of the highly colored B \flat -minor chord that follows it. The B \flat -minor chord changes into a B-diminished chord in second inversion in the second half of m. 31,

and when the latter chord is played again in m. 33 the left hand of the piano plays sustained octaves instead of single notes, intensifying the *Temperaturfarben* further.

Example 4.26: *Eifersucht und Stolz*, mm. 26–39

The musical score for Example 4.26 consists of three systems, each with a vocal line and a piano accompaniment. The key signature is two flats (B-flat and E-flat), and the time signature is 2/4.

System 1 (Measures 26-30):
 - **Vocal line:** Starts at measure 26 with a rest, then "Saht du sie ge - stern A - bend nicht am Tho - re steh'n, mit".
 - **Piano accompaniment:** Features a steady eighth-note pattern in the right hand and sustained octaves in the left hand.
 - **Harmony:** Chords are labeled as g, g, It⁺6, F, and F.

System 2 (Measures 31-34):
 - **Vocal line:** Starts at measure 31 with "lan - - gem Hal - se nach der gro - ssen Stra - sse".
 - **Piano accompaniment:** Continues with the eighth-note pattern in the right hand and sustained octaves in the left hand.
 - **Harmony:** Chords are labeled as b^b4, b^o4, F⁷troA, b^o4, and e^o7/F.

System 3 (Measures 35-39):
 - **Vocal line:** Starts at measure 35 with "seh'n? Wenn von dem Fang der Jä - ger lus - stig zieht nach Haus,".
 - **Piano accompaniment:** The right hand continues with the eighth-note pattern, while the left hand plays dotted figures on the downbeats.
 - **Harmony:** Chords are labeled as F, F, B^b, F⁷, B^b, and F⁷troA. A dynamic marking of *mf* is present.

The *Temperaturfarbe* of the song eases in m. 36 when the sounds of the brook cease and B^b major is tonicized. The piano begins to punctuate the downbeat of each measure with dotted figure between the miller's phrases, evoking a feeling of pomp. Youens notes that this section sounds like a fanfare.²⁰ This pomp is a musical

²⁰ Youens, *Die schöne Müllerin*, 100.

representation of the miller's pride, which at this point begins to overshadow his jealousy. The miller is placing the maid in an inferior moral position when he says "Wenn vom den Fang der Jäger lustig zieht nach Haus, / Da steckt kein sittsam Kind den Kopf zum" (When the hunter returns happily from the hunt, no decent girl sticks her head out the window).

At m. 51 the sounds of the brook return in G major as the miller urges the brook to go and reprimand the maid. The miller wants to hide his sadness, and so the music turns to G major because it has been the key of the miller's positive, happy addresses to the brook. Nevertheless, the miller is not able to maintain the happy façade of G major; both G minor and B \flat minor reappear in mm. 59 and 61, respectively, when the miller states "kein Wort von meinem traurigen Gesicht" (no word of my sad face).

The key signature changes to G major when the miller begins to tell the brook his cover story: not only is the miller not sad, but he is sitting by the brook carving reed pipes and singing and dancing with children. Gerald Moore has postulated that the shift to G major that accompanies the miller's command for the brook to turn back and tell the maid this implies "that the miller is deriving a perverse pleasure at the pain he is inflicting on himself in castigation of the girl he loves."²¹ I maintain that the shift to major represents the miller's attempt at maintaining a happy façade. There is not enough evidence to support Moore's reading; the text does not indicate that the miller is deriving any pleasure from this situation or commanding the brook to chastise the maid. Furthermore, the miller is not able to maintain the lighter mood created by the G-major key signature. G major gives way to G minor each time the miller interjects "sag' ihr" (tell her). The

²¹ Gerald Moore, *The Schubert Song Cycles: With Thoughts on Performance* (London: Hamish Hamilton, 1975), 50.

intensity of “sag’ ihr” is both unexpected and powerful; it occurs on a i-V progression beginning on the last eighth note of the measure with a forte-piano marking (see Example 4.27).

Example 4.27: *Eifersucht und Stolz*, mm. 80–83

80

Rohr, sag' ihr, sag' ihr: er bläst den

fp *fp*

G g D g D G⁶ C E⁷/C

At the end of the song the miller cries “sag’ ihr’s” three times in a row. The dynamics and harmony have changed; the voice crescendos over the alternation of G-major and F#-diminished harmonies in the right hand of the piano and the open fifth G–D in the left hand as a tonal pedal. This creates a bitonal effect and momentarily intensifies the song’s *Temperaturfarben*. The high F#–G in the vocal line further intensifies the dramatic tension of the song. The miller is trying to forcefully remain in G major.

Both Georgiades’s and Feil’s analyses of this song focus on the rhythmic elements, particularly how the rhythm is derived from the speech patterns. Feil states that rhythm and meter subordinate the other musical elements.²² I agree that the song is driven by its rhythmic elements, but the importance of the tonal centers has been overlooked. They are symbolic of the miller’s attempts to hide his jealousy and sorrow and maintain a happy façade.

²² Feil, *Franz Schubert*, 73.

16. *Die liebe Farbe* (The Beloved Color)

B minor, 2/4 time, *Etwas langsam* (Somewhat slow)

Die liebe Farbe's haunting calmness contrasts with the frantic emotions expressed in the previous two songs. This song is in B minor, but the B-minor triad alone is not a strongly colored chord; it ranks second out of six purity levels for minor chords. However, its major dominant chord, F# major, is ranked seventh out of seven purity levels for major chords. The combination of the pure minor tonic and the highly colored major dominant creates one of the highest contrasting minor keys. It is likely the contrast of the colored tonic and relatively pure minor tonic that caused Beethoven to characterize B minor as “the dark key.”²³

Schubert limited the harmony of *Die liebe Farbe* predominantly to B minor, B major, F# minor, F# major, and D major. These restricted sonorities create a consistent *Temperaturfarben*, unlike the wandering and conflicting harmonies of previous songs. The song also has a consistent texture, which centers on a repeating F# sixteenth note in the right hand of the piano that sounds throughout the entirety of the song. These musical elements create a haunting, trance-like atmosphere. Many scholars have noted how the incessantly repeating F# is like a death knell.²⁴ Death is not calling the miller; rather, he is resolving to embrace it. This song is where the miller announces his intention to pursue death, as is most apparent in the second stanza:

²³ Douglass Johnson, Alan Tyson and Robert Winter, *The Beethoven Sketchbooks* (Berkeley: University of California Press, 1985), 340–343.

²⁴ Thrasybulos Georgiades, *Schubert: Musik Und Lyrik* (Göttingen: Vandenhoeck & Ruprecht, 1967), 283; Feil, *Franz Schubert 75*; Youens *Die schöne Müllerin*, 102.

Das Wild, das ich jage, das ist der Tod; Die Heide, die heiß ich die Liebesnot: Mein Schatz hat's Jagen so gern.	The game that I hunt is death; The heath is what I call love's sorrow: My sweetheart is so fond of hunting.
--	---

Even with its limited harmonies, the *Temperaturfarben* of *Die liebe Farbe* ebbs and flows because of the voicings of chords. The introduction is limited to B-minor and F#-major tonalities and consists primarily of sixteenth-note block chords with one note in the left hand of the piano and two, three, or four notes in the right hand. When the voice enters, the texture thins to the repeated F# sixteenth notes in the right hand and predominantly single eighth notes in the left, and the piano abandons the lower register for a higher tessitura. This change of the piano's range and the modification of the dominant chord soften the *Temperaturfarben*. When the voice enters at the pick-up to m. 6, the first two F#-dominant chords occur without a major third (see Example 4.28). By removing the third from the F#-major chord, Schubert removes the color from the chord. In Young's temperament, the fifth between F# and C# is pure, measuring 702 cents. In all well temperaments, fifths are tempered less than thirds, and so the coloring of fifths is always less noticeable. In this instance, a pure fifth replaces a highly colored major triad. In the next measure (m. 7), the F#-major chord again appears without its third, this time as a seventh chord in third inversion. With the absence of the third, the color that will come through in this chord is created by seventh of the chord sounding against the root, creating a second. The seventh of the chord adds more harmonic color; it is a more generic dissonance than a major third.²⁵ In m. 8, the F#-major chord is voiced in first inversion with all chord tones, intensifying the highest point of the vocal line.

²⁵ Note that in chapter 1 explained that temperament is more noticeable in intervals that have simple ratios and are traditionally considered consonant than in intervals that have more complex ratios and are traditionally considered dissonant.

Example 4.28: *Die liebe Farbe*, mm. 5–13

5

In Grün will ich mich klei - den, in grü - ne Thrä - nen -
 Wohl - auf zum fröh - li - chen Ja - gen, wohl - auf durch Haiß und
 Grabt mir ein Grab im Was - sen, dekt mich mit grü - nen

b b⁶ F[#]₄noA⁵ F[#]₂noA⁵ b⁶ b F[#]₆ b F[#]₆ G⁷

9

wei - den: mein Schatz hat's Grün so gern, mein Schatz hat's Grün so gern. Will
 Ha - gen! mein Schatz hat's Grün so gern, mein Schatz hat's Grün so gern. Das
 Ra - sen: mein Schatz hat's Grün so gern, mein Schatz hat's Grün so gern. Kein

F[#]noC F[#]₆ B F[#]noA⁵ B⁶noB b₄noB F[#]₃ b

pp ζ

The *Temperaturfarben* of the song maintains its intensity at m. 10 when B major is substituted for B minor. The B-major triad is sixth (out of seven) in the purity ranking of major triads, second only to its dominant, F# major. The B-major harmony accompanies the first statement of “mein Schatz hat’s Grün so gern” (my sweetheart’s so fond of green) and first sounds on the word: “Schatz” (see Example 4.28). The harshness of this B-major chord is mitigated because of the placement of the third in the voice, yet the color of the chord makes it clear that the music is depicting a notion contrary to the idea of a sweetheart. Youens has speculated that this “unprepared tonic *major* harmony...[is] a bitter twist on the cliché association of major mode with brightness, happiness, cheer.”²⁶ In well temperament, B major was not usually characterized as a happy key; C.F.D. Schubart described the key as “made up of the crudest colors. Anger,

²⁶ Youens, *Die schöne Müllerin*, 103.

rage, jealousy, fury, desperation, and every burden of the heart lies in its sphere.”²⁷

With the second repetition of this statement, B minor has returned.

The texture of the song thickens starting around m. 12. The bass lowers, and the chords from this point on are three notes, not dyads. The *Temperaturfarben* of the song has temporarily decreased; in mm. 14 and 15 Schubert not only substituted F# minor, the minor v chord, for the F#-major dominant, but he also tonicized it. Nevertheless, the changes in tessitura and texture, along with the addition of a seventh, make the next occurrence of F#-dominant-seventh chord at m. 17 even more impactful; the resulting sound is grating. The additional color provided by the seventh increases the impact of the most dissonant chord in well temperament. I agree with Youens and Feil who state that this harmony seems to be inspired by the words of verse two: “Liebesnot” (The grief of love). Verse two is also when the miller announces that he is hunting death. The harmony in this passage serves as the emotional pinnacle of the song; the F#-dominant-seventh chord lasts for three-quarters of the measure before it resolves to B minor and then quickly returns to an F#-major triad. The miller then repeats “Mein Schatz hat's Grün so gern” with the same harmony as m. 10.

In the previous song the miller was verbally lashing out in anger, and in this song he is adamant about death. The audience has not been privy to how the miller transitioned from anger and jealousy to acceptance of death. Schubert omitted a poem titled *Erster Schmerz, Letzer Scherz* (First sorrow, last joke) that Müller originally had placed between *Eifersucht und Stolz* and *Die liebe Farbe*. In this poem, the miller's emotions have calmed and he speaks of seeing the maid through a window with the

²⁷ Dubois, “Christian Friedrich Daniel Schubart,” 435.

hunter in her arms. I postulate that Schubert's omission of this poem reinforces his interpretation of a virtuous maid who is oblivious to the miller's misconstrued relationship. By not setting this poem Schubert has eliminated the only reference to physical contact between the maid and the hunter, and he also eliminated the miller's question, "Willst du den Müller wieder?" (Do you want your miller back?). Asking if the maid wants him back would imply a more concrete relationship between the two and could undermine the view that the miller has constructed the relationship in his own mind. This phrase could imply that they had physically been together, not just interacting through windows and the brook's reflection. In Schubert's cycle, however, it is the miller's own mind, not the maid, that is causing his grief. Schubert has shifted the focus of the cycle away from any type of physical relationship between the maid and the miller or the maid and the hunter and turned his cycle into more of a psychological tale than Müller's original; it is a forerunner to the psychological journey of the protagonist in *Winterreise*.

17. *Die böse Farbe* (The Evil Color)

B major, 2/4 time, *Zeimlich geschwind* (quite fast)

Die böse Farbe is a through-composed song in B major that embodies contrast, primarily in texture, key, and dynamics. The rapidly changing elements in the song highlight different *Temperaturfarben* and seem to depict the miller's complex feelings: he has not recanted his decision to die, but he has yet to muster up enough courage to go

through with ending his life because he has not fully made peace with his feelings of jealousy and anger. Youens calls this song a “masterpiece of disjunction.”²⁸

Both the texture and tonality of *Die böse Farbe* change before the completion of the three-measure introduction. The song opens in B major with the sounds of a rapidly rushing brook depicted by sixteenth notes that are interrupted in m. 3 by block B-minor chords. B minor is the second purest minor triad out of six types of minor triads, and B major is the sixth purest out of seven types of major triads. A shift from a piano dynamic marking to forte accompanies this sudden change to B minor, and when B major returns when the voice enters in m. 5, the dynamic is fortissimo. Schubert’s decision to align the contrasts in dynamics with the changes from B major to B minor and back implies his desire to accentuate the contrasting *Temperaturfarbe* of B major and B minor. Dynamics are often used to accentuate *Temperaturfarben*; in this song the dynamics are extreme; there are not any mezzo-piano or mezzo-forte markings, but there are the dynamic extremes of fortissimo and pianissimo, and they are often more terraced than gradual.

When the miller begins to sing at the anacrusis to m. 5 the dynamic level increases further to fortissimo. In equal temperament, this loud B-major section may seem happy; the voice sings out jaunty arpeggios, and the alternating left and right hand of the piano accompaniment evoke the sounds of pomp and pride. However, the *Temperaturfarben* of B major in well temperament undercuts this surface contentment. The words and the key give the vocal and piano figuration a tinge of sarcasm or madness, as if the miller is singing through gritted teeth. The miller is singing that he would like to go out into the world if only it were not so green (like the hunter). The highly colored

²⁸ Youens, *Die schöne Müllerin*, 104.

expression is accentuated in m. 11 with the emphasis on F# minor, which is ranked tenth out of twelve minor keys in regards to *Temperaturfarben*, making it comparable to the *Temperaturfarben* of B major.

One of Schubert's most interesting harmonic choices in *Die böse Farbe* occurs at m. 20: a C-major chord in first inversion, the Neapolitan sixth chord of B major (see Example 4.29). Preceded by a F#-major chord and a B-minor chord, the C-major chord contrasts with the chords that surround it. The difference between the purity of the C-major chord and the dissonance of the F#-major and B-minor chords make the *Temperaturfarben* of the colored chords more striking. Schubert wrote the Neapolitan chord as dotted quarter note, which is the longest note value used in the song up to this point.

Example 4.29: *Die böse Farbe*, mm. 19–22

The musical score for Example 4.29 consists of a vocal line and a piano accompaniment. The key signature is three sharps (F#, C#, G#) and the time signature is 2/4. The vocal line begins at measure 19 with the lyrics "wei-nen ganz to-dten-bleich wei-nen ganz to-dten-bleich. Ach". The piano accompaniment features a series of chords: b_4 , $F\#7$, b_6 , C^6 , b_4 , $F\#7$, and B . The dynamics are marked as ff , f , and fp . The piano part includes a triplet of eighth notes in the final measure.

Not only is Schubert contrasting the *Temperaturfarben* of chords, but he is also word painting through *Temperaturfarben*. The Neapolitan emphasizes the “bleich” of “totenbleich,” which means “bleach.” The miller is singing about how he would like to use his tears to bleach the green out of the grass. The C-major chord, the most harmonically pure and colorless triad, has momentarily bleached the color out of the key of B major.

At m. 22 the texture changes, and the following two measures emphasize B-dominant-seventh and E-minor tonalities. E minor foreshadows death and the tonality of the next song. The accompaniment of the song becomes more urgent with an incessant, sixteenth-note single-pitch ostinato and descending eighth notes in the bass. This ostinato is reminiscent of the repeated F# of the previous song, but the pitch changes every two measures. The ostinato also represents the pain the miller cannot seem to escape; he is soon going to choose to free himself from pain through death. He is approaching his breaking point.

Mm. 25–26 tonicize D major, which momentarily lessen the *Temperaturfarben* before Schubert begins to emphasize the dominant, F# major, which is the most highly colored major key in well temperament. The F#-major sonority has been used sparingly throughout the cycle, but mm. 27–28 feature the chord as a dominant for B minor, and mm. 29–30 is a prolongation of the dominant F# major when the chord alternates with French sixth chords. These dark, tense harmonies underscore the miller's questioning of why the color green takes pleasure in his pain; he had previously asked why green was staring, and he continues with, "So stolz, so keck, so schadenfroh, / Mich armen weissen Mann?" (So proud, so bold, so malicious, at me, a poor white man?). The miller contrasts himself with the color by describing himself as white. Earlier when the miller used the word "bleached" at the end of the sentence, Schubert incorporated a C-major chord; the piano was expressing the miller's words. This time, Schubert does not do that on the word "white," but in this instance the word is not at the end of the sentence; it seems as if Schubert repeated the word "armen" (poor) so that the word "weissen" would

be harmonized by French-sixth chord and not F# major. In this instance, the piano is an opposing force to the miller, representing the color that is overwhelming him.

At m. 32, B major returns, the dynamic shifts to pianissimo (where it remains for the rest of the song), and the sounds of the brook return. This transition may mark the point where the miller loses his will to live; his spirit is broken, and his fight is fading. He has reached the darkest depths of his mind, as portrayed by F# major, and he cannot recover. The sound of the brook represents the comfort and peace that death will give the miller, and he will shortly embrace it.

The C-major Neapolitan chord is heard again at m. 39, but it does not have the same impact that it did the first time it was used. There is no word painting, and the chord is not surrounded by the dissonant F# major, but rather the less dissonant B minor. There is also no change in the dynamic markings. Two measures after the second Neapolitan chord, the listener and the miller hear music that portrays the hunter's presence. The miller's vocal line shows his anger, and his words reveal once again that he is watching the maid through her window. He sings:

Horch, wenn im Wald ein Jagdhorn schallt, Da klingt ihr Fensterlein! Und schaut sie auch nach mir nicht aus, Darf ich doch schauen hinein.	Listen, when a hunting horn sounds in the woods, I hear sounds at her window! And although she does not look out at me, Yet I can look in at her.
---	--

The miller is currently observing the maid, not confronting her or speaking with her, but watching her. He is infuriated with her, but does she even know that she has hurt him?

Appropriately, the sound of the brook returns when the miller sings "Ade" (Goodbye). The miller has made up his mind to end his life. The Neapolitan chord

returns in m. 59, as do oscillations between B major and B minor. The miller asks for the maid's hand in parting, but we know from his previous statement that he is looking in on her through her window and that she does not even see him. The opening of the song returns, presenting a last rally of anger before the melancholy that will pervade the following songs.

18. *Trockne Blumen* (Withered Flowers)

E minor, 2/4 time. *Zeimlich langsam* (Somewhat slow)

Trockne Blumen is the first song of the cycle in E minor, which is a tritone away from the opening song *Das Wandern*. E minor is one of the minor keys with the highest amount of contrast due to its highly colored major dominant. This key embodies the two extremes that are facing the miller: the pain of love and escape through the peace of death.

The song opens with repeated E-minor triads in the piano accompaniment, and the harmony does not change until the second half of m. 5. These E-minor chords have a three-note texture, are in root position, and sound as eighth notes on beats one and two. E minor is one of the purest minor chords in well temperament; alone, the chord creates a different *Temperaturfarbe* than the overall key of E minor, which becomes more highly colored because of its major dominant and subdominant. The E-minor chords are voiced root-fifth-third; the combination of the steady rhythm, rests between the chords, and the predominance of the fifth evoke the sound of church bells. When the voice enters at the anacrusis to m. 3, it creates a recitative-like texture over the steady pulse of the piano.

The miller begins the song by singing:

Ihr Blümlein alle,	All you flowers,
Die sie mir gab,	That she gave me,
Euch soll man legen	You should be put
Mit mir ins Grab.	With me in the grave.

The miller states that “sie” (she) gave him flowers. At first glance this may imply that he is referring to the maid, which may be an indication of their romantic relationship.

However, if we revisit song nine, *Des Müllers Blumen*, we will recall that the miller stated that numerous tiny flower blossoms on the edge of the brook had blue eyes like his love’s. The miller then concluded that “Und hellblau Liebchens Auge scheint, / Drum sind es meine Blumen” (And my love’s eyes shine bright blue, therefore they are my flowers). From these lines one could extrapolate that the maid did not physically give the miller any flowers, which I argue is more plausible than the possibility that an exchange of flowers was skipped in the narrative.

Beginning in m. 5, G-minor and G-major harmonies follow the opening E-minor harmony. Throughout the cycle, G major has been associated with the miller’s positive communications with the brook, and G minor has been a key linked to solitude, loneliness, and longing. The miller is beginning to view death as an escape from a painful existence, and so G major is linked in a positive way to death and the grave. Both times in this song that the miller sings the word “Grab” (grave), it is harmonized with a G-major chord. G major also harmonizes the word “todte” (dead) in. 19.

At m. 11, the third stanza begins with the lines “Ihr Blümlein alle, Wie welk, wie blass? Ihr Blümlein alle, Wovon so nass?” (All you flowers, why withered, why pale? All you flowers, what makes you so wet?). The texture of the accompaniment changes and begins to emphasize the dominant, B major. This is the first time in the song that

Schubert has used the dominant, which significantly increases the *Temperaturfarben* of the song. The texture changes, and while in equal temperament this passage may sound major and optimistic, in well temperament, this line will be the one with the most dissonance yet encountered in the song, especially with the Italian sixth chord that cadences to B major in mm. 14, 15, and 29.

Stanzas four, five, and six share the same harmony as one, two, and three: E minor, G major, B major. The seventh stanza brings with it a key change to E major at m. 30. When the key changes the texture thickens, and the accompaniment figuration of the left hand seems to be portraying the brook gaining momentum. This key and texture change accompanies a shift in the miller's focus. In the first six stanzas the miller had been speaking of tears, withered flowers, and the grave. Starting in stanza seven, he begins to think of spring, nature's rebirth, and of the maid learning of his faithfulness. The miller is starting to explore the positive side of death. The repetition of the words from stanzas seven and eight comprise the second half of this song.

In m. 33 a G#-major chord appears as the III chord instead of the expected iii, functioning as the V of vi (c# minor) that follows. G# major is the enharmonic equivalent of A \flat major, which is a chord with less *Temperaturfarbe* than B major. This harmony underscores a thought that has lifted the miller's spirits. He envisions how the maid will walk by his grave "und denkt im Herzen, der meint' es treu!" (and think in her heart, he was true to me!). This is a bittersweet thought, but it positive enough to momentarily change the *Temperaturfarben* of the passage.

The texture thickens again at m. 35 with the beginning of the eighth and last stanza. The accompaniment is at a much lower tessitura than it has been previously in

the cycle. Dotted figures depicting the rolling brook now appear in both hands of the piano. Instead of alternating B major and E major, this section alternates A \sharp -diminished-seventh chords with E major. The lower tessitura of the piano and the forte-piano markings in m. 35 highlight the increased *Temperaturfarben* created through the use of the A \sharp -diminished-seventh chord.

The high point of the song follows when the miller sings “Der Mai ist kommen, / Der Winter ist aus.” (May has come, winter is over) (see Example 4.30). A C \sharp -minor chord harmonizes the word “Mai,” which leads into an E-major chord at the word “kommen.” On the first syllable of “kommen” the voice sings the highest note of the song. The word “Winter” is on a B 7 chord, and E major returns on the word “aus.” This results in a vi-I $_4^6$ -V 7 -I progression. Although the second-inversion tonic chord is a decoration of the dominant, the harmony alludes to the E-major tonality that will end the cycle. The miller repeats this phrase with the same harmony three times, at mm. 37, 46, and 50. The only differences in the repetitions are the accents and dynamic markings in the piano. The miller seems to be asserting a triumph of death as a release from pain.

Example 4.30: *Trockne Blumen*, mm. 36–38

aus, her- aus! der Mai ist kom - men, der Win - ter ist aus.

f *pp*

a \sharp ^{o7} E $_4$ c \sharp a \sharp ^{o6} E $_4$ B 7 E

Feil has suggested that the miller is referencing a future May in which the purity of his love will be fulfilled and that the cycle must end with this song.²⁹ He has pointed out that Schubert has already arrived at a key that is a tritone away from the starting song. I do not agree with Feil's assessment. This song shows a battle for dominance between E minor and E major, and on a lesser level, G major and G minor. The miller is building his resolve to take his own life; he is not yet ready to follow through with his decision to embrace death. If Schubert had decided to end the song in E major, the music might have convinced the audience that the miller was at peace with death. However the song does not end in E major, even though the key signature has changed. E minor re-emerges, not just for a beat or a measure, but for the final last four measures of the song. The miller is still experiencing an inner battle that he has yet to resolve.

19. *Der Müller und der Bach* (The Miller and the Brook)

G minor, 3/8 time, *Mässig* (Moderate)

Der Müller und der Bach is the only song in the cycle that designates that someone (or something) other than the miller is singing. One may interpret the designation of "Der Bach" as giving legitimacy to the brook as a separate character in this poem. Many people view the brook as an enchanting element of nature that lures the miller to his death. However, I do not believe that the brook is a separate sentient entity; it is more plausible that this song represents the culmination of the miller's anthropomorphizing. From the beginning of the cycle the miller has addressed the brook,

²⁹ Feil, *Franz Schubert*, 80.

flowers, the sun, and other elements of nature as if they were real beings. The miller's mental state has deteriorated to the point where he believes that the words he hears in his head are the brook's words. Indeed, the miller's inability to differentiate between his own thoughts and his projections marks his end.

It is Müller's designations of "Der Müller" and "Der Bach" that Schubert maintained in the musical score, and the poet's own words support my reading that the brook is not its own entity. In the introduction to the cycle "Der Dichter, als Prolog" (The Poet, as Prologue), which Schubert chose not to set, Müller himself expressed that the brook should not be viewed as a character. He explains this in the third stanza:

<p>Doch wenn ihr nach des Spiels Personen fragt, So kann ich euch, den Musen sei's geklagt, Nur eine präsentiren recht und euht, Das ist ein junger blonder Müllersknecht.</p>	<p>But if you ask about the people in the play, So I can tell you, (the muses are to blame), Only of one character fairly and truly, This is a young blonde mill worker.</p>
<p>Denn, ob der Bach zuletzt ein Wort auch spricht, So wird ein Bach deshalb Person noch nicht. Drum nehmt nur heut' das das Monodram vorlieb: Wer mehr giebt, als er hat, der heisst ein Dieb.</p>	<p>For, though the brook speaks a word, Still, this does not make the brook become a person. Therefore be pleased with the monodrama today: Who gives more than he has is a thief.</p>

In the penultimate song in the cycle, the miller is still weighing the pros and cons of taking his own life. The brook's words are a reflection of the miller's thoughts. Many of the miller's thoughts and feelings in this cycle have been filtered through the clear waters of the brook or the glass of a window. The miller often sees what he wants to see. Here, he wants to see comfort.

Schubert illustrated the miller's struggle with the idea of death primarily through contrasting G minor and G major. The miller's melancholy words are in G minor, and the brook's consolations are in G major. Schubert treated each of these tonalities differently; the miller's G-minor sections have more harmonic variation and color, while the brook's sections are much more diatonic to G major with tonicizations of closely related keys such as C major and D major.

The song begins with the sound of the miller's lute at a piano dynamic marking. The left hand strikes fifths or octaves with the right hand entering an eighth note later to complete the triad. The open fifths and octaves once again evoke funeral imagery. The G in the bass is persistent; it often occurs under the dominant harmony. G minor has a purity ranking of four out of the twelve minor keys and is the only minor key in the "no contrast" category because its major dominant is also fourth in purity of the of twelve major keys. The first seven bars of the song contain only tonic and dominant harmonies, firmly establishing the *Temperaturfarben* of G minor.

In addition to the use of non-diatonic chords, Schubert used non-chord tones and other added dissonances to add more color to the G-minor sections. Not only are the miller's sections in G minor, but they contain more dissonance than the brook's section. In m. 4 a D-major chord sounds over a G pedal point (see Example 4.31). In the following measure on the word "Liebe" (love) a neighbor tone E \flat is added as the second degree of the chord that resolves to the root on the second eighth note of the measure. On the downbeat, the voice is singing an F \sharp while both an E \flat and a D sound in the left hand of the piano. The same dissonance is found at m. 22.

Example 4.31: *Der Müller und der Bach*, mm. 3–6

(Der Müller)

3
Wo ein treu-es Her - ze in Lie - be ver - geht, da

g D/G D^b-D/G g

At m. 8 a Neapolitan chord, A^b major, sounds on the word “Lilien” (lilies). The A^b-major chord has a purity ranking of five out of six. Although major, this is much more highly colored than the tonic G minor or its dominant D major. The chord highlights the word “Lilien,” and lilies are also closely linked to death as flowers that are often used at funerals. The Neapolitan chord returns in m. 16 to harmonize a descending triad in the vocal line on the word “Thränen” (tears) and once more before the brook enters on the word “singen” (sing) in m. 25.

The brook’s music begins at the anacrusis to m. 29. The key signature changes, and the lute and funeral sounding accompaniment change to the familiar sounds of the brook. The harmony of the brook’s section is limited to the tonic, subdominant, dominant, and dominant of the dominant (V/V). There are no minor chords in this section, and the most dissonant chord played is a dominant seventh chord (including as secondary dominants). G major has an overall *Temperaturfarben* ranking of three out of the twelve keys, and its dominant, D major, has a ranking of 5. Even when the dominant is tonicized, this whole section is only lightly tinted rather than highly colored. The

slight excitement created by tonicizing the dominant creates a feeling of hope in the release and joy that death can bring.

When the miller sings again at the anacrusis to m. 62, he is accompanied by the sounds of the brook and not of his lute, but the G minor tonality has returned. This section begins harmonically similarly to the first section, but the music slowly transitions to G major, the key that will end the song. One of the first noticeable differences in the harmony occurs at m. 64. The chords are the same: a D-major chord appears over a G in the bass, but the dissonance of a 2-1 suspension that was so jarring the first time this harmony was heard is no longer present. There is already a softening of the dissonance, although the song has returned to G minor.

The first significant departure from the original harmony occurs in m. 73 when an F-dominant-seventh chord tonicizes B \flat major, which harmonizes the word “Ruh” (rest). B \flat major has represented neutrality throughout the song cycle; it seems appropriate that this key that has been separate from the miller’s emotions would represent the peace that he will soon feel. Following the B \flat -major chord, a progression begins firmly in G major, which harmonizes the miller’s final words “Ach Bächlein, liebes Bächlein, / So singe nur zu” (Oh brook, dear little brook, sing on).

The postlude in the piano stays in G major. This song’s ending contrasts with the ending of the last song in which forcefully asserted E major was superseded by E minor. The miller’s emotional transformation is depicted through the harmony; the G-major tonality has prevailed, and the song ends firmly in this key.

20. *Des Baches Wiegenlied* (The Brook's lullaby)

E major, cut time, *Mässig* (Moderate)

Scholars such as Archer, Wiggins, Feil, and Ramalingam label the last song in the cycle as a postlude or a framing song, but I argue that this is not the correct conclusion. If this song were a mere postlude, it would most likely be in the key of B \flat major, the key Schubert used for neutrality and narration in this cycle. The key of E major is significantly linked to the miller's emotional struggle with death that has been prominent though the last half of the cycle. E major is a logical ending key for multiple reasons: it is significantly more colored than the keys with which Schubert began the cycle and is representative of the miller's emotional journey, but it is less colored than the keys that expressed the miller's most intense pain and sorrow, which indicates the consolation of death. Schubert's harmonic choices in this song, such as deemphasizing the more highly colored V chord that was associated with the miller's pain and emphasizing the IV chord, which was associated with the miller's dreams, provides an important conclusion to the cycle.

Although this song is called *Des Baches Wiegenlied* (The Brook's Lullaby), there is no indication in the score that the brook is speaking as there was in the previous song. I contend that it is not the brook singing in this song; instead, what the audience hears is the miller's final anthropomorphizing of brook as he submerges himself and takes his own life. The miller's point of view, and not neutrality of the brook's, comes through loud and clear: the maid is called wicked, the blue flowers are not supposed to look into the brook, and any hunting noises will be muffled.

The accompaniment of this strophic song combines the rocking sounds of waves with a funereal knell to create a lullaby. The song opens with the alternation of E-major and B⁷ chords; the inner voices of the piano accompaniment have the rocking figures while the outer voices sound a fifth between E and B. Schubert incorporated intervals and figures that evoke the sounds of a funeral in three of the last five songs of the cycle: *Die liebe Farbe*, *Der Müller und der Bach*, and *Des Baches Wiegenlied*. In this song Schubert used the figuration of a lullaby and *Temperaturfarben* to create funeral sounds that evoke the peacefulness of eternal rest rather than grief and lamentation. Each time the B-dominant-seventh chord sounds before m. 9, the chord is without its third. The repeated tonic pedal E in the bass functions as an added fourth in the dominant chord, but the lack of the major third from B to D[#] removes much of the color of B major. B major has represented the miller's pain and suffering, and the lessening of the chord's color is representative of the lessening of the miller's pain.

Beginning at m. 9 the bass note of the funeral knell begins to change to accommodate a harmonic progression that leads to an extended tonicization of A major. This is the first point in the song that deviates from the tonic/dominant harmony. The harmonic progression leading up to A major is not traditional. The E- and B-major chords of m. 9 are followed by C[#] minor and G[#] major in m. 10 before reaching A major in m. 11 (see Example 4.32). I postulate that Schubert's decision to arrive at A major via G[#] major was motivated by *Temperaturfarben*. A major is the IV chord of E major; Schubert has not been in the habit of tonicizing the subdominant throughout this cycle. A major is purer than E major, and Schubert may have chosen to tonicize A major in order to lighten the *Temperaturfarben* of the song so that he could evoke a sense of greater

peace and link the miller's death to the key that contained his dreams. This sounds like two deceptive cadence-like motions in which the vi chord pivots to the next key. The G \sharp -major chord, however it is viewed, is an unconventional chord choice. Respelled, the chord is an A \flat -major chord, which contrasts with the A-major chord that follows, just a half step away. The A \flat - and E-major triads are slightly more inherently colored than A major, and the shift to A is a sudden pull back to a less dissonant chord. By choosing to modulate via G \sharp major, the *Temperaturfarben* is already lessened from E major, but the arrival of the A-major tonality is highlighted through the chromatic approach: two solid measures of A major, and then tonic–dominant harmonies in A major until m. 15. The miller is now entering a state of eternal dreams or rest.

Example 4.32: *Des Baches Wiegenlied*, mm. 9–11

Wand'- rer, du mü - der, du bist zu__ Haus. Die
 in dem__ blau - en kry - stal - le - nen Käm - mer - lein. Her -
 sau - sen und brau - sen wohl um dich__ her.
 dass ihn dein Schat - ten, dein Schat - ten nicht weekt!
 aus dei - ne Freu - de, schlaf aus dein__ Leid! Der

E B c \sharp G \sharp A

The funeral knell temporarily disappears at m. 16 when the texture thickens, changes to block chords, and returns to tonicizing the home key of E major. The harmonic changes seem to be guided by the text of the first stanza. Until this point, the brook has been singing general consolations, but in m. 15 the brook sings “Sollst liegen bei mir” (You’ll lie with me). This is the moment where the funeral knell, which

represents the miller's impending death, stops and actual death is achieved. This section has the greatest *Temperaturfarben* of the entire song. The chord progression D#-half-diminished-seventh chord, to B major, to C# minor 6/4, to E major in second inversion repeats three times (see Example 4.33). The voicing of these chords places the root and the third in close position each time, which highlights the identifying color of each chord. On what would be the fourth repeat, the D#-half-diminished seventh becomes D#-diminished seventh. This chord change is achieved through the lowering of C# to C natural, and when it is sounded in the voice it evokes something of a sinking feeling.

Example 4.33: *Des Baches Wiegenlied*, mm. 16–20

The musical score for Example 4.33 consists of two staves. The top staff is the vocal line in treble clef, and the bottom staff is the piano accompaniment in bass clef. The key signature is three sharps (F#, C#, G#) and the time signature is common time (C). The lyrics are: "bis das Meer will trin-ken die Bächlein aus, bis das Meer will trin-ken die Bächlein aus." The piano accompaniment features a repeating pattern of chords in the right hand and a steady bass line in the left hand. The chord symbols below the piano staff are: d#°7/4 B, c#°7/4 E4, d#°7/4 B, c#°7/4 E4, d#°7/4 B, c#°7/4 E4, d#°7/4 B, c#°7/4 E4, B7noD# E4 B E.

The high point of the song comes at m. 20 on the first syllable of the word “Bächlein” (brooklet). The B-dominant-seventh chord harmonizing this word is again without a third, softening what should be a highly colored chord. On the second half of beat two a B-major chord sounds, but with the third in the voice. This chord only lasts an eighth note, and the placement of the third in the vocal part removes the beating of the chord because the vibrato in the voice inhibits the presence of beats. The miller's pain is

easing. The sounds of the lullaby and death knell return in between the verses and in the piano postlude. The miller's journey has ended.

Conclusion

When Wilhelm Müller wrote *Die schöne Müllerin*, the story of the miller maid was not a new one; rather, it had been recycled and reinvented by numerous authors and composers.³⁰ Schubert began his song cycle with Müller's version of the tale but made decisions about which poems to set and how to set them, thereby developing his own unique interpretation of the story.³¹ Schubert's compositional choices, particularly those concerning *Temperaturfarben*, point toward a reading that focuses on the miller's internal struggle with his conceptions regarding love and his own mental turmoil, rather than the fallout of love affair gone awry.

Susan Youens has thoroughly explored the traditional meanings associated with the miller maid tale and her characterization as a loose woman. She has stated:

It is crucial to the plot that the miller maid either sleeps with the lad – a reading that I believe is supported by the symbolic details of “Blümlein Vergißmei” to follow there – or after – or else that he deludes himself with fantasies of possession (and how artful of Müller to make the matter so ambiguous).³²

³⁰ Susan Youens, *Schubert, Müller, and Die Schöne Müllerin*, 42-158. Chapter two of this book deals with the tale of the miller maid in literature and chapter three discusses other composers' settings of the story.

³¹ Susan Youens, *Die schöne Müllerin*, 34, 42-43, 60, 64 and Phillip Miller, *The Ring of Words: An Anthology of Song Texts* (New York: W. W. Norton, 196), 192-195, 202-205, 216-219, 230-231.

³² Youens, *Schubert, Müller, and Die Schöne Müllerin*, 194.

To paraphrase Youens, *Blümlein Vergissmein* has an erotic tone and depicts the miller's internal torment before death.³³ I contend that Schubert removed this and other poems to remove allusions to a sexual act between the maid and the miller. The protagonist praises the maid's virtue in numerous songs and expresses that her virtue is one of the reasons that he admires her. He loves her because of her honor, and in Schubert's interpretation, he does not expect to physically consummate the relationship. Nevertheless, Youens is also correct that if a sexual liaison did not happen, then the miller must have deluded himself. Through *Temperaturfarben*, Schubert uses tonalities that contrast with the Miller's delusions of possession and undermine his grip on reality.

In the miller's eyes, the maid is above the earthly delights of the flesh, and when she unites with the hunter, the miller's realization that she is a carnal being shatters his conceptions of her virtue. The miller's mental fragility, which Schubert depicted through *Temperaturfarben*, cannot handle a broken heart. He could maintain enough emotional stability when he loved her from afar, but seeing her love another is too much for him. Schubert has turned the miller's story into more of an internal struggle and one-sided love story than a story of a love affair that ended badly; the cycle has both a narrative element and an element of psychological drama that is illuminated through Schubert's use of *Temperaturfarben*. *Die schöne Müllerin* serves as a forerunner the very personal journey of the protagonist in *Winterreise*.

³³ Youens, *Die schöne Müllerin*, 64.

Chapter 5

Winterreise

Winterreise has a complex compositional history; Schubert originally set what he believed was the entirety of Wilhelm Müller's *Die Winterreise*, only to discover through a later publication that the poet had extended and amended his lyric cycle. Unlike *Die schöne Müllerin*, there are extant autographs for parts one and two of *Winterreise* as well as the engraver's copy for part one, which provide invaluable information about Schubert's working process. Some of the changes that these documents illuminate, such as transpositions, have been the subject of much controversy. Examining these changes through the lens of *Temperaturfarben* provides valuable insights into this controversy.

Müller's *Die Winterreise*

Wilhelm Müller published *Die Winterreise* on three separate occasions, changing and expanding it each time. Schubert discovered the first publication before coming across the final version, which necessitated the composition of his cycle in sections as well. Müller sent the first 12 poems of *Die Winterreise* to editor and publisher Friedrich Brockhaus in January of 1822.¹ The poems appeared in *Urania: Taschenbuch auf das Jahr 1823* (*Urania: Yearbook for the Year 1823*) as "Wanderlieder von Wilhelm Müller -

¹ Heinrich Lohre, ed., *Wilhelm Müller als Kritiker und Erzähler: Ein Lebensbild mit Briefen an F. A. Brockhaus und anderen Schriftstücken* (Leipzig: F. A. Brockhaus, 1927), 157.

Die Winterreise. In 12 Liedern.”² *Urania* was published in the fall of the preceding year.³ The poems are in the same order as songs one through twelve of Schubert’s *Winterreise*. Müller did not indicate in *Urania* that the cycle would be continued; the poems were presented as a complete unit.

Ten additional poems of *Die Winterreise* appeared in the March 13–14, 1823 issues of the *Deutsche Blätter für Poesie, Literatur, Kunst und Theatre*.⁴ This set of ten poems is titled “Die Winterreise.*) Lieder von Wilhelm Müller.” The asterisk refers to the note “Zwölf zu diesem Zyklus gehörige Lieder in der Urania 1823 abgedruckt” (Twelve songs belonging to this cycle were published in the 1823 *Urania*). The poems

² Wilhelm Müller, “Wanderlieder von Wilhelm Müller - Die Winterreise. In 12 Liedern,” in *Urania: Taschenbuch auf das Jahr 1823* (Leipzig: F. A. Brockhaus, 1823), 207–222.

³ When discussing the timeline of Müller’s *Die Winterreise* publications, Schubert scholars have used the date 1823 for Müller’s first poems in the *Urania*; however, the periodical was released in the fall of the preceding calendar year. A censorship problem with the 1822 issue highlights the publication timeline. On September 19, 1821, right before its scheduled publication, the 1822 issue was marked “Dammatur” by the Austrian censors. This led to the censorship of all of Brockhaus’s publications for about a year by the Saxon, Prussian, and Austrian governments, who lifted their bans at different times. After a lengthy appeal by Brockhaus, the Austrian ban of the 1822 *Urania* was lifted on November 30, 1822, more than a year after it was banned and more than a month after the 1823 issue was already on the market. See Paul Martin Bretscher, “The History and Significance of the Taschenbuch *Urania*” (PhD diss., University of Chicago, 1936), 26–28; Karl Goedeke, *Grundriss zur Geschichte der deutschen Dichtung aus den Quellen* (Dresden, L. Ehlermann, 1884), 8:73; Heinrich Hubert Houben, *Der gefesselte Biedermeier: Literatur, Kultur, Zensur in der guten, alten Zeit* (1924; repr., Hildesheim: H. A. Gerstenberg, 1973), 218–224; and Heinrich Hubert Houben, *Verbotene Literatur von der klassischen Zeit bis zur Gegenwart* (Bremen: K. Schünemann, 1828), 2:545–567. Additionally, see Susan Youens, *Retracing a Winter’s Journey: Schubert’s Winterreise* (Ithaca: Cornell University Press, 1991), 10; in footnote 13 she explains that the 1822 prohibited issue of *Urania* contained “Müller’s essay ‘Kritik Lord Byron als Dichter’ in the same issue with the first twelve poems of *Die Winterreise*.” Youens is incorrect that *Die Winterreise* was in the 1822 yearbook with the Lord Byron essay (this was the piece that caused the issue to be censored). The 1821 issue was published with only one page rewritten; it is not possible that *Die Winterreise* poems were originally slated for publication in the 1822 volume. Perhaps the publication of other “Wanderlieder” by Müller in the 1822 issue is the source of the confusion. In addition to “Lord Byron,” the 1822 volume contains many poems by Müller, including “Wanderlieder,” “Assonanzen von Wilhelm Müller,” and “Ländlich Lieder,” but these poems were never included in any of the versions of *Die Winterreise*. After *Urania*, Müller dropped the reference to Wanderlieder in the title of *Die Winterreise*, perhaps to differentiate the large lyric cycle from his other Wanderlieder. See *Urania: Taschenbuch auf das Jahr 1822* (Leipzig, F. A. Brockhaus, 1822), 119–126.

⁴ Wilhelm Müller, “Die Winterreise. Lieder von Wilhelm Müller,” *Deutsche Blätter für Poesie, Literatur, Kunst und Theatre*, March, 13 and 14, 1823: 161–162; 165–166.

are presented as a continuation of the original cycle and are numbered beginning with one. They are, in order: *Der greise Kopf*, *Letzte Hoffnung*, *Die Krähe*, *Im Dorfe*, *Der stürmische Morgen*, *Die Nebensonnen*, *Der Wegweiser*, *Das Wirthaus*, *Mut*, and *Der Leiermann*. There are minor wording differences between certain poems in this publication and in Müller's final version. This second publication of *Die Winterreise* is not often discussed in detail, presumably because most scholars assume that Schubert did not know it, since his finished cycle contains two additional songs and alternate wordings that appear only in the final version. Nevertheless, the *Deutsche Blätter* shows Müller's original conception of these ten poems as a continuation, which, if known to Schubert, may have influenced his ordering of the second half of his cycle.

The final version of Müller's *Die Winterreise* was published in the 1824 *Gedichte aus den hinterlassenen Papieren eines reisenden Waldhornisten II* (Poems from the Posthumous Papers of a Travelling French Horn Player II).⁵ Müller added the poems *Die Post* and *Täuschung*, and distributed the ten poems from the *Deutsche Blätter* throughout the original twelve published in *Urania*. While Müller merged the poems that appeared in the second publication with poems in the first publication, he did so without altering the order in which the songs were originally presented. Müller combined the two legs of his winter's journey into one.

⁵ Wilhelm Müller, *Gedichte aus den hinterlassenen Papieren eines reisenden Waldhornisten II* (1824; repr., Zeno.org: EBooks-Sammlung, 2010), 625–838.

Schubert's *Winterreise*

All three versions of Müller's *Die Winterreise* were published by 1824, over two years before Schubert discovered the first of these publications. Schubert's original *Winterreise* set Müller's twelve-poem lyrical cycle as it appeared in the 1823 *Urania*. Schubert dated the first page of the original twelve-song *Winterreise* February 1827, but it appears that Schubert began work on the cycle in the fall of the previous year. The only written account of Schubert's discovery of Müller's cycle is a recollection from his close friend Franz Schober in a letter, circa 1860, to Heinrich Kreißle von Hellborn, the author of the first substantial Schubert biography. Schober wrote: "In the small library, with which I had furnished him, Schubert came upon Wilhelm Müller's 'Winterreise,' felt attracted by the songs and, as with so many other poems, translated them, as was his wont, into terms of great musical appeal."⁶ Schubert lived with the Schober family at the end of the summer in 1826, first in their Währing home and later in their Vienna apartment on Bäckerstrasse. Schubert lived by himself for a few weeks at the end of the year, and then in March 1827 he again lodged with the Schober family in their new home in the Tuchlauben neighborhood, which included the entire second floor of a building called the Blue Hedgehog.⁷ Schober was likely referring to Schubert's discovery of *Urania*, the source for the first half of the cycle, since Schubert wrote part one when the

⁶ Otto Erich Deutsch, *Schubert: Memoirs by His Friends*, trans. Rosamond Ley and John Nowell (New York: W. W. Norton, 1968), 205. See also Heinrich Kreißle von Hellborn, *The Life of Franz Schubert*, trans. Arthur Duke Coleridge, 2 vols. (New York: Vienna House, 1972), 2:169.

⁷ The Schober family's building was called "The Blue Hedgehog" because it was next door to the building known as the "The Red Hedgehog," which was occupied by the Gesellschaft de Musikfreunde.

two lodged together, and they did not live together in the summer or fall of 1827 when Schubert was composing the second part of the cycle.⁸ Based on Robert Winter's studies of the manuscript paper used by Schubert for *Winterreise*, the earliest possible date of composition for part one is October 1826, which indicates that Schubert could have found *Urania* while lodging with Schober that fall.⁹

Schubert dated the fair copy for part two October 1827, the same month that part one was approved by the censorship office.¹⁰ According to Winter's paper studies the earliest compositional date for the two extant drafts from the continuation (*Mut!* and *Die Nebensonnen*) is June 1827, which implies that Schubert could have started working on the second part in the early summer of 1827.¹¹ Even though Schubert dated the fair copy of part two October of 1827, it appears that he did not submit it to Haslinger until fall of

⁸ Susan Youens discusses Schober's recollections in her introduction to *Franz Schubert: Winterreise: The Autograph Score* (New York: Pierpont Morgan Library in association with Dover Publications, 1989), viii. and *Retracing a Winter's Journey: Schubert's Winterreise* (Ithaca: Cornell University Press, 1991), 25. In the first publication she states "Schubert moved into lodgings with Schober at a house called The Blue Hedgehog in the Inner City at the beginning of March 1827. Since Schubert unquestionably began composing *Winterreise* before March, it must have been the *Waldhornisten-Gedichte II* that Schober owned and Schubert subsequently found in his friend's possession." Youens drew her conclusion from incomplete information, since she did not acknowledge that Schubert and Schober also lived together the previous summer, and so Schober's story could refer to Schubert's discovery of *Urania*. Upon her publication of *Retracing* two years later, she says "Schober and Schubert shared lodgings during the autumn of 1826, after which Schubert lived alone from the end of 1826 until February of 1827, when he once again moved in with Schober at 'The Blue Hedgehog.' Schober does not say when the discovery was made or which of the two sources Schubert found in the 'small library' - *Urania* or the *Waldhornisten* poems," 25.

⁹ Robert Winter, "Paper Studies and the Future of Schubert Research," in *Schubert Studies: Problems of Style and Chronology*, ed. Eva Badura-Skoda and Peter Branscombe (New York: Cambridge University Press, 1982), 240. The manuscript paper that Schubert used for the majority of *Winterreise* is what Winter labels as Vb, which the Kiesling firm manufactured beginning in the fall of 1826. The earliest compositions by Schubert on type V paper occur in October 1826, shortly after the paper became available.

¹⁰ In the manuscript it appears the Schubert began to write a capital S and then corrected it to the O in Oct., suggesting that the date was written shortly after September ended.

¹¹ Winter, "Paper Studies," 246, 248.

1828, nearly a year later. In a letter dated September 25, 1828 to Johann Baptist Jenger, pianist and friend, Schubert stated, “I have already handed the second part of the ‘Winter Journey’ to Haslinger.”¹² This phrasing implies that Schubert is speaking of an ordinary occurrence; there is no indication that Schubert disapproved of or was upset by this timeline, or that there was any animosity between Schubert and the publisher.¹³ The reason for the delay is unknown.¹⁴

Five individuals have recounted that Schubert corrected the proofs for the second half of *Winterreise* (no longer extant) on his deathbed, which his friends Spaun and Baurenfeld have said he took to on November 11, 1828, and his brother November 14, 1828.¹⁵ Schubert died shortly thereafter, on November 19, 1828. Haslinger released part two of the cycle on December 30, 1828, a little over a month after Schubert’s death. Table 5.1 provides a timeline for the events in the creation of *Winterreise*.

¹² Otto Erich Deutsch, *Schubert: A Documentary Biography*, trans. Eric Blom (London: J. M. Dent and Sons, 1946), 807.

¹³ Also in the letter Schubert states that the trip to Graz that he was planning with Jenger will not happen due to lack of money and poor weather. Perhaps Jenger had inquired if Schubert had funds coming for the submission of *Winterreise*. This is speculative, but it does not seem as if Haslinger is the focal point of this exchange.

¹⁴ On page 27 of *Retracing a Winter’s Journey*, Youens ponders if Haslinger may have placed a waiting period between the publications of parts one and two. Perhaps this was an idea that Schubert favored to help sales. Deutsch, in *Schubert: A Documentary Biography*, 807–808, has speculated that Haslinger returned the manuscript to Schubert for revision after his experience with the first part, but this seems unlikely since the manuscript that Schubert gave Haslinger in the fall of 1828 was the fair copy that he had prepared almost a year before.

¹⁵ Deutsch, *Schubert: A Documentary Biography*, 819.

Table 5.1: *Winterreise* timeline

16 January 1822	Müller sends the original 12-poem <i>Die Winterreise</i> to his publisher.
September/October 1822	Publication of “Wanderlieder von Wilhelm Müller. Die Winterreise. In 12 Liedern” in <i>Urania, Taschenbuch auf das Jahr 1823</i> .
March 1823	Müller publishes ten more poems as “Die Winterreise.*) Lieder von Wilhelm Müller” in <i>Deutsche Blätter für Poesie, Literatur, Kunst, und Theater</i> .
1824	Müller’s full 24 poem is published as “Die Winterreise” in <i>Gedichte aus den hinterlassenen Papieren eines reisenden Waldhornisten II</i> .
Autumn 1826	Schubert begins composing part one of <i>Winterreise</i> .
February 1827	Schubert dates the manuscript for part one of <i>Winterreise</i> .
Summer/Early Autumn 1827	Schubert begins composition on the continuation of <i>Winterreise</i> based on Müller’s <i>Gedichte aus den hinterlassenen Papieren</i> .
October 1827	Schubert dates the manuscript for the fair copy of part II of <i>Winterreise</i> .
24 October 1827	A copy of part I of <i>Winterreise</i> is received and approved by the Central Book Censorship Office.
14 January 1828	Tobias Haslinger publishes part I of <i>Winterreise</i> .
September 1828	Schubert gives part II to Haslinger.
November 1828	Schubert proofs and corrects part II.
19 November 1828	Schubert dies.
30 December 1828	Haslinger publishes part II.

The Manuscripts

The original manuscript and engraver’s copy for part one of *Winterreise*, as well as the fair copy of part two are still extant. The original manuscript for part one contains the most information about Schubert’s working process; Stephen Carlton classifies this manuscript as a hybrid score that layers the completed versions over the initial sketches.¹⁶

¹⁶ Stephen Carlton, “Sketching and Schubert’s Working Methods,” *Current Musicology* 37/38

The manuscript shows that Schubert conceived the twelve songs of part one as a unit; he sketched all of the songs in light brown ink before fleshing them out and finishing them in dark brown ink. While the nature of this manuscript reveals how Schubert worked through his original ideas shown in the light brown ink, he also removed many pages from the manuscript, and so many original sketches were not preserved.

Two songs in the manuscript are fair copies, *Gute Nacht* and *Rückblick*, and three other songs are partly in fair copy: the final two-thirds of *Gefrorne Tränen*, the end of *Auf dem Flusse*, and the last half of *Einsamkeit*. The manuscript is on a sixteen-stave paper manufactured by the Kiesling firm with the exception of *Rückblick*, which is on sixteen-stave paper produced by the Welhartiz firm. Winter's research has shown that the fair copy of *Rückblick* could not have been made before June 1827.¹⁷ I have recreated Youens's diagram of the manuscript in Figure 5.1, including her speculations about what material may have been removed and added a color key. To echo Youens, it is impossible to know how substantive Schubert's changes were to the songs that were removed from the manuscript.¹⁸ More transpositions may have occurred between the original sketches that were removed and the songs as they appear in the manuscript, but we will never know unless these discarded pages materialize.

(2002): 84. Carlton notes that the process seen in the part one manuscript of *Winterreise* is consistent with Schubert's working methods: "Schubert's procedure for putting a musical idea on paper for the first time was generally consistent—voice parts sketched in full before the piano part is completely notated—whether it resulted in an independent sketch or a sketch which was subsequently buried in a first draft."

¹⁷ Winter, "Paper Studies," 241.

¹⁸ Youens, introduction to *Winterreise: The Autograph Score*, x.

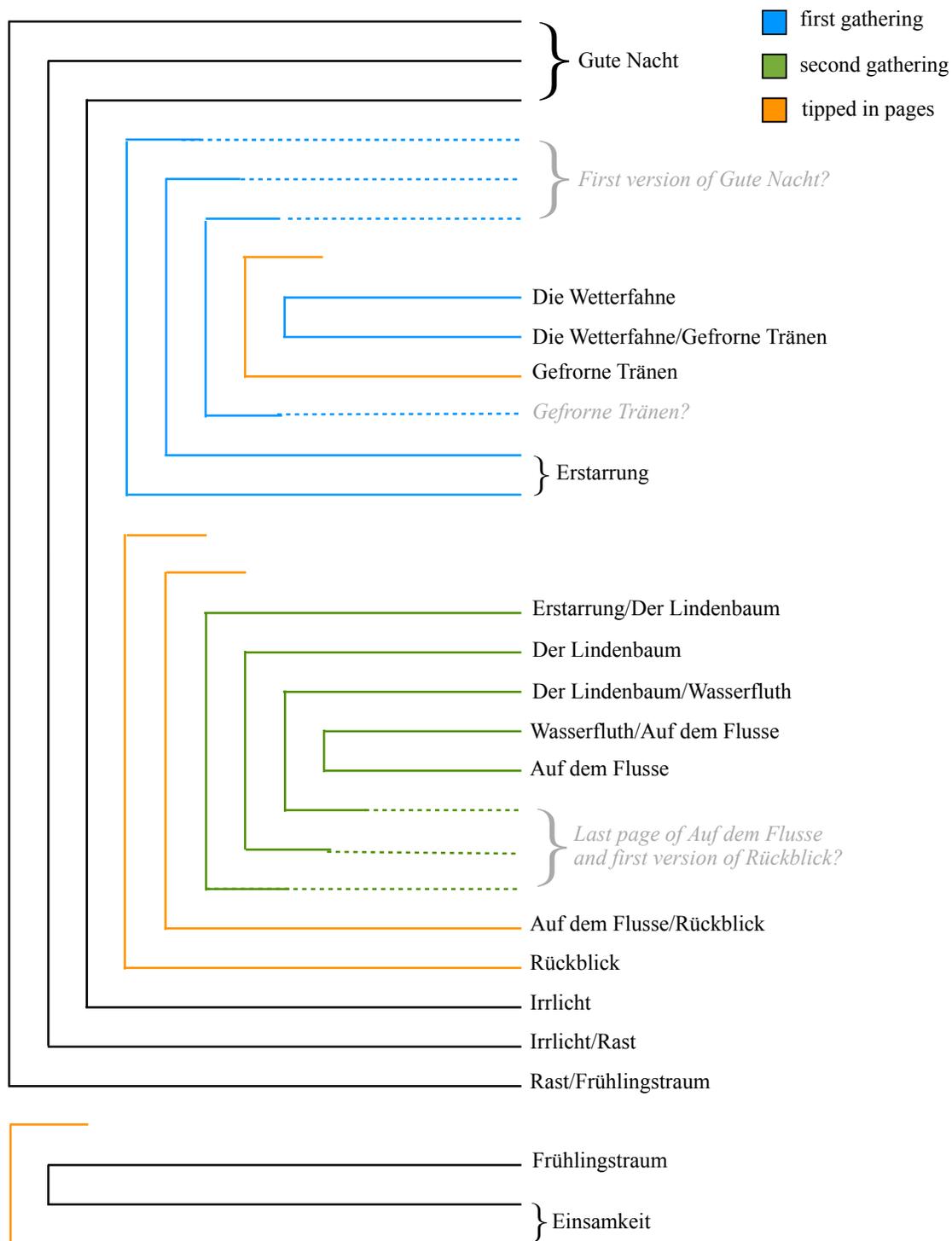


Figure 5.1: The gathering structure of *Winterreise* part I. Taken from Susan Youens's introduction to *Winterreise: The Autograph Score*, xi.

The engraver's copy for part one is marked by Schubert, Haslinger, and the copyists. *Rückblick* was copied entirely in a different hand from the rest of the songs, implying that it was completed after the other songs were copied out (this is also true for the fair copy of the same song in the original manuscript). Changes occurred between the manuscript and the engraver's copy that imply that there were communications, written or oral, between Schubert, the copyists, and/or Haslinger of which we do not have record.¹⁹ Additionally, Schubert did not limit himself only to proofing and correcting the engraver's copy; he also made substantial changes. An example of this is mm. 14–18 of *Die Wetterfahne* where he crossed out the original melody line and rewrote it (see Example 5.1). The engraver's copy was used for the printing of the first edition; nevertheless, Schubert was not reluctant to rethink and change elements of the songs, even at a relatively late stage in the publication process.

Example 5.1: *Die Wetterfahne*, engraver's copy mm. 14–18. Used with permission from Wienbibliothek im Rathaus (www.schubert-online.at).



The manuscripts that exist for the second part of *Winterreise* are two sketches of *Mut!* and *Die Nebensonnen* and the fair copy of part two. The sketches are very similar

¹⁹ An example of this is the melodic line in mm. 30 and 35 of *Rast*.

to the versions found in the fair copy (Schubert did add some measures in *Mut!*). The fair copy of part two was written on twelve-stave paper from the Welhartiz firm. There are mostly minor changes between the fair copy and the first edition, including two transpositions, and a change of the meter and tempo markings for *Der stürmische Morgen*. Additionally, the strophic songs *Mut!* and *Der Leiermann* are printed in full rather than strophically.

In spite of the wealth of information that these primary documents contain, they do not provide a complete picture. No other written documents or instructions are extant, and none of the verbal communication between Schubert, his publisher, and the copyists was documented. These manuscripts leave many questions unanswered, such as why Schubert chose to order the cycle the way that he did and who called for the transpositions that were not notated in Schubert's own hand.

Song Order

When Schubert added the twelve additional songs he found in the *Gedichte* to his initial version of *Winterreise*, he did not intersperse the new poems as Müller did; instead he added them after the ones he had already composed in the order in which they occurred, with the exception of moving the location of *Mut!* from the penultimate position to before *Die Nebensonnen*. Schubert's final version of *Winterreise* is distinctly in two parts; the second half begins with the designation "Fortsetzung der Winterreise von Wilh. Müller" (Continuation of Wilhelm Müller's winter journey), and the song

numbers restart at one. Table 5.2 juxtaposes the orderings of Müller's various publications with Schubert's cycle.

Table 5.2: Müller and Schubert's versions of (*Die*) *Winterreise*. Songs with an asterisk indicate those new to Müller's final version. Songs in bold illustrate where the additional songs were inserted into the original twelve. Song with a plus sign indicate where Schubert altered the order.

Müller, <i>Urania</i>	Müller, <i>Gedichte</i>	Schubert's <i>Winterreise</i>
1. Gute Nacht	1. Gute Nacht	1. Gute Nacht
2. Die Wetterfahne	2. Die Wetterfahne	2. Die Wetterfahne
3. Gefrorene Tränen	3. Gefrorene Tränen	3. Gefrorene Tränen
4. Erstarrung	4. Erstarrung	4. Erstarrung
5. Der Lindenbaum	5. Der Lindenbaum	5. Der Lindenbaum
6. Wasserflut	6. Die Post*	6. Wasserflut
7. Auf dem Fluße	7. Wasserflut	7. Auf dem Fluße
8. Rückblick	8. Auf dem Fluße	8. Rückblick
9. Irrlicht	9. Rückblick	9. Irrlicht
10. Rast	10. Der greise Kopf	10. Rast
11. Frühlingstraum	11. Die Krähe	11. Frühlingstraum
12. Einsamkeit	12. Letzte Hoffnung	12. Einsamkeit
Müller, <i>Deutsche Blätter</i>		<i>Fortsetzung</i>
1. Der greise Kopf	13. Im Dorfe	1. Die Post
2. Letzte Hoffnung	14. Der stürmische Morgen	2. Der greise Kopf
3. Die Krähe	15. Täuschung*	3. Die Krähe
4. Im Dorfe	16. Der Wegweiser	4. Letzte Hoffnung
5. Der stürmische Morgen	17. Das Wirthaus	5. Im Dorfe
6. Die Nebensonnen	18. Das Irrlicht	6. Der stürmische Morgen
7. Der Wegweiser	19. Rast	7. Täuschung
8. Das Wirthaus	20. Nebensonnen	8. Der Wegweiser
9. Mut	21. Frühlingstraum	9. Das Wirthaus
10. Der Leiermann	22. Einsamkeit	10. Mut! ⁺
	23. Mut	11. Die Nebensonnen ⁺
	24. Der Leiermann	12. Der Leiermann

One widely accepted theory for why Schubert did not change his song order to conform to Müller's final version is that Schubert did not want to lose the cohesiveness of the first twelve songs. This is a distinct possibility; however, there is evidence that

Schubert did modify part one to accommodate part two while correcting the engraver's copy, suggesting that if Schubert had thought it important to change the song order, he would have. One change that most scholars attribute to Schubert's desire to accommodate part two is the transposition of the final song of part one as a way to open up the tonal plan of the cycle. It is also possible that Schubert made changes to *Rückblick* because of his discovery of part two; as Winter's research has indicated, the fair copy of *Rückblick* is on a different kind of paper and could not have been written before June 1827, and the engraver's copy is in a different hand, implying that Schubert abandoned his original conception of the song after he had begun to work on the second half of the cycle.

The second widely held position on why Schubert did not revise his song order to match Müller's is that the pressures of publication prevented him from making modifications to the first half of *Winterreise*. John Reed has stated:

to postpone publication of the whole cycle until the additional songs were finished and the complete set rearranged in Müller's final order would have meant a lengthy delay, and possibly a long wait for the fee. So he set the additional poems as he found them, with one minor change in order...²⁰

Walther Dürr has suggested that Schubert could have made changes to the song order if he had wanted to, as long as it did not create financial loss for Haslinger.²¹ I agree with Dürr; I assert that Schubert's song order is not due to circumstance, but rather is an order

²⁰ John Reed, *Schubert: The Final Years* (London: Faber and Faber, 1972), 120–121.

²¹ Walther Dürr, *Das Deutsche Sololied Im 19. Jahrhundert* (Wilhelmshaven: Heinrichshofen's Verlag, 1984), 25.

that he found compelling.²² It is even possible that Schubert came across Müller's second publication and felt justified in presenting the songs in Müller's original order. Nevertheless, even if Schubert did not want to change the ordering of the first twelve songs that he had already composed, he was at liberty to change the order of the second twelve songs to create what he believed was the most convincing order, and he did so by exchanging *Mut!* and *Die Nebensonnen*.

The idea that circumstances prevented Schubert from reordering his cycle has caused many scholars to view the final song order as the result of chance.²³ Richard Kramer has stated that Schubert's ordering, with the exception of *Mut!* and *Die Nebensonnen* "can have arisen only as an accident of the formula through which Müller's poems are mechanically transposed into their position in part II of the cycle" and that the order is "derived by a process in which the sense of narrative is not itself the determinant,

²² Other scholars who support Schubert's ordering and whose ideas will be discussed in this section include Susan Youens, "*Winterreise*: In the Right Order," *Soundings* 13 (1986): 41–50 and Philip L. Miller, *The Ring of Words: An Anthology of Song Texts* (New York: W. W. Norton, 1966), 232, and Graham Johnson in liner notes to "Franz Schubert: *Winterreise*," Matthais Goerne and Graham Johnson, Hyperion CDA30021 (CD), 2–4.

²³ Reed has stated "the final order of Schubert's cycle is thus in part due to chance, which may account for the fact that the continuity of *Winterreise* is less convincing than that of *Die schöne Müllerin*." John Reed, *Schubert*, First American Edition (New York: Schirmer, 1997), 141. See also Reed, *Schubert: The Final Years*, 121. Richard Giarusso not only believes that the final ordering is less convincing but has asserted, "the *Fortsetzung* was very nearly devoid of any sense of 'constructed' ordering at all. It was not primarily the creative initiative of the composer that determined the layout of these songs but simply the influence of circumstance." Richard Giarusso, "Beyond the Leiermann: Disorder, Reality, and the Power of Imagination in the Final Songs of Schubert's *Winterreise*," in *The Unknown Schubert*, ed. Barbara M. Reul and Lorraine Byrne Bodley (Burlington, VT: Ashgate, 2008), 28. An opposing view is expressed by Graham Johnson, who, while also attributing the final song ordering to some sort of chance, has stated that *Winterreise* "is probably one of the greatest examples of necessity being the mother of sublime invention, for the line-up of poems which emerged was far superior for his musical needs than the poet's could ever be." Graham Johnson, "Franz Schubert: *Winterreise*," 3.

even if the resultant narrative can be said to tell its tale coherently.”²⁴ Many scholars believe that the narrative that Müller created is superior to Schubert’s and should be imposed upon the musical cycle; such scholars as A. Craig Bell, Günter Baum, Hans Joachim Moser, and Hartung Ulrich have gone as far as advocating for the performance of Schubert’s cycle in Müller’s order.²⁵

One of the reasons that scholars seem willing to reorder Schubert’s songs in performance is that the cycle does not have a traditional progression of key relationships. Giarusso has expressed the view that the second half of Schubert’s cycle is concerned with the “dissolution of cyclic form” because “the tonal and motivic connections that unify the first 12 songs of the cycle are noticeably absent in the second half, and the absence of such strategies may be seen as a direct result of the imposed textual disorder of the second half of the cycle.”²⁶ Giarusso is looking for the cyclic connections that a twenty-first-century listener would expect but that Schubert did not provide. Giarusso explains that in the original twelve-song cycle, songs are primarily related by dominant,

²⁴ Richard Kramer, *Distant Cycles: Schubert and the Conceiving of Song* (Chicago: University of Chicago Press, 1994), 173.

²⁵ A. Craig Bell, *The Songs of Schubert* (Lowestoft: Alston Books, 1964), 94. Bell refers to the original version of Müller’s cycle that Schubert picked up as a “mutilated version;” I do not think it is an accurate description for an earlier version of a lyric cycle. See also Günter Baum, “Schubert-Müllers ‘Winterreise’ - neu gesehen,” *Neue Zeitschrift für Musik* 128, no. 2 (1967): 80; Hans Joachim Moser, *Das Deutsche Lied seit Mozart*, 2nd ed. (Tutzing: Schneider, 1968), 137; Hartung Ulrich, “*Die Winterreise*: An Argument for Performing the Cycle of Songs by Franz Schubert in the Order of the Poems by Wilhelm Mueller” (PhD diss., New York University, 1992); and *Schubert: Winterreise*, David Wilson-Johnson, baritone, and David Owen Norris, piano, GMN.com, CD, 1995.

²⁶ Richard Giarusso, “Beyond the Leiermann,” 28–29. Even if Giarusso believes that Müller’s revised order is superior, is Schubert’s order, which closely coincides with Müller’s original order, disorderly?

sub-dominant, or mediant relationships, which result in a “sense of tonal ‘logic.’”²⁷

There is also no reason that the “imposed textural disorder” of which Giarusso speaks would have prevented Schubert from creating tonal and motivic connections between songs if he so desired. Indeed, other scholars have found evidence of motivic connections. Walter Everett has successfully used Schenkerian analysis to trace middleground motives throughout *Winterreise*, highlighting that Schubert decorates the fifth scale degree through the use of a semitone upper neighbor tone as a mean of evoking the protagonist’s grief.²⁸

I argue that Schubert primarily used *Temperaturfarben* as a means of creating cyclicism and that his tonal logic is based not on traditional tonal relationships found in functional harmony, but rather through *Temperaturfarben*. Schubert’s key choices were guided by which key he deemed best to express the mood and sentiment of the protagonist’s state of mind and the desire to create a dramatic arc through increasing and decreasing amounts of *Temperaturfarben*. There are some scholars, myself included, who assert the superiority of Schubert’s ordering over Müller’s.²⁹ Graham Johnson believes that in Schubert’s cycle “...the line-up of poems which emerged was far superior for his musical needs than the poet’s could ever be.” He states that Schubert’s “new order” concentrates the darker, more mournful poems towards the end of the cycle and

²⁷ Giarusso, “Beyond the Leiermann,” 29, fn 10.

²⁸ Walter Everett, “Grief in *Winterreise*: A Schenkerian Perspective,” *Music Analysis* 9, no. 2 (July 1990): 157. See also Walter Everett, “A Schenkerian View of Text Painting in Schubert’s Song Cycle ‘Winterreise’” (PhD diss., University of Michigan, 1988).

²⁹ See Susan Youens, “*Winterreise*: In the Right Order,” 41-50 and Philip L. Miller, *The Ring of Words: An Anthology of Song Texts*, 232. Miller has stated “I doubt that there could be much question that Schubert’s order is an improvement, though the poet’s sequence is followed here.”

better depicts “the ever-darkening landscape of the traveler’s mind.”³⁰ Schubert’s ordering is more authentic and realistic of a person in the protagonist’s broken-hearted and slightly unstable mental state; Müller’s ordering is more artificial because it turns the cycle into one that conforms to a more traditional dramatic structure rather than a real-life experience. Our protagonist’s journey is more of a psychological narrative than an event-driven narrative. Winter itself plays a role in the protagonist’s journey; it is as strong a force in this cycle as the brook is in *Die schöne Müllerin*. The protagonist spends the majority of his journey outside in the bitter cold, and I assert that he is suffering from varying degrees of hypothermia, which can cause confusion, delirium, and hallucinations.³¹ Schubert’s ordering depicts the non-linear journey of the protagonist, and *Temperaturfarben* is one of the main tools Schubert used to unify the cycle.

Transpositions vs. Original Keys

I contend that *Winterreise* should be examined based on the published keys, not the original keys, because Schubert either instigated or approved the transpositions in *Winterreise*. Most scholars believe that the majority of the transpositions came from Haslinger, not Schubert. David P. Schroeder has argued that the relationship between Schubert, Haslinger, and the copyist was more complicated than most scholars presume.³²

³⁰ Graham Johnson, “Franz Schubert: *Winterreise*,” 3.

³¹ University of Maryland Medical Center, “Hypothermia” University of Maryland Medical Center, <http://www.umm.edu/altmed/articles/hypothermia-000092.htm> (accessed July 20, 2011).

³² David P. Schroeder, “Schubert’s ‘Einsamkeit’ and Haslinger’s ‘Winterreise,’” *Music & Letters*

Schroeder has asserted that Schubert did not have a close relationship with the copyist because he was paid and employed by Haslinger, who probably initiated changes without Schubert's consent.³³ He also speculates that Schubert was given an altered score and did not object, making only small changes that would not result in the recopying of a song "possibly fearing that major corrections might actually jeopardize publication."³⁴

Schroeder has noted that there is no documentary evidence that suggests a difficult relationship between Schubert and Haslinger. I contend that the lack of documentation of the difficult working relationship between composer and publisher points more towards a normal working relationship rather than a contentious one. If Haslinger had pressured Schubert to make changes against his will, it seems like this would have merited mention in a letter, diary, or some other primary source material written by Schubert or his friends, for an antagonistic relationship is more often written about than an ordinary one.³⁵

71 (1990): 351–360.

³³ Ibid., 353.

³⁴ Ibid.

³⁵ The relationship between Schubert and Haslinger is difficult to decipher because there is not a single extant letter between the two, and there is only one letter (the September 25, 1828 letter discussed previously) in which Schubert mentions Haslinger. There are extant letters between Schubert and other publishers about conflicts regarding money, expediency, fees, and what music to publish; the lack of such correspondence with Haslinger suggests a more collaborative working arrangement. Schroeder notes that Schubert surely did not have the upper hand in the composer-publisher relationship as did Beethoven, which undoubtedly was true (353). While Beethoven's works could sell on name alone and probably had more clout than anyone, Schubert was not a brand new composer without a reputation. His relationship with Haslinger was rather new, but Schubert was at a point in his career where he had a reputation and was receiving solicitations from other publishers such as H. A. Probst and B. Schott's Sons (See Deutsch, *Schubert: A Documentary Biography*, 735–737).

One piece of evidence that Schroeder presents to support his view of Schubert and Haslinger's relationship is previous changes that Haslinger made to Schubert's work. Haslinger himself gave the title to Schubert's *Valses nobles pour le pianoforte seul*, and he changed the name of Schubert's Piano Sonata in G major (D. 894) to *Fantasie*.³⁶ Schroeder speculates that Haslinger was probably trying to create a more sellable product, and he is entirely correct; compositions with titles were selling better; as a post-script to a letter the publisher K. F. Peters wrote to Josef Hüttenbrenner regarding a "wider dissemination" of Schubert's works, he wrote, "If Herr Schub. should send songs, those with a name, like Beethoven's 'Adelaide,' and so on, are preferable to plain songs, for so many songs and partsongs appear now that such a title no longer attracts sufficient attention."³⁷

Changing titles and marketing music is not the same as making major musical changes to the composition, such as changing musical passages or keys, all of which occurred between the draft stage and the first edition of Schubert's work. There is evidence in the engraver's copy of part one of the kind of changes we expect from a publisher, such as instructions from Haslinger to engrave all verses of a strophic song, but there is no evidence that Haslinger was making substantive musical changes.

³⁶ Schroeder, "Schubert's 'Einsamkeit' and Haslinger's 'Winterreise,'" 353.

³⁷ Deutsch, *Schubert: A Documentary Biography*, 246. Josef Hüttenbrenner was the younger brother of Schubert's close friend Anselm. In 1919 Josef lived a floor below Schubert in the same house and acted as Schubert's assistant (often to Schubert's annoyance). See Elisabeth Norman McKay, *Franz Schubert: A Biography* (New York: Oxford University Press, 1996), 102–103, and Kreißle, *Schubert*, 1:130.

Schroeder cites as further evidence for Haslinger's interference changes made in the score that he finds hard to believe came from Schubert.³⁸ Yet our view of the changes that Schubert would or would not have sanctioned is invariably colored by our view as twenty-first-century musicians; we have yet to examine musical choices and changes that may have been impacted by *Temperaturfarben*. Scholars have misjudged which changes came from Schubert in the past. For many years the whereabouts of the fair copy of part one was unknown, causing scholars in the late nineteenth and early twentieth centuries to discuss what they believed were errors in the first edition because of the discrepancy between it and the original manuscript.³⁹ When the fair copy was discovered, it documented some of the changes in Schubert's own hand, making it clear that many of the changes thought to be mistakes or changes from the publisher came from Schubert himself.⁴⁰ In this instance there was written evidence that these changes came from Schubert, but it is important to remember that not every discussion and communication is written down. We need to be careful not to assume that we know what Schubert would have wanted and dismiss changes that are not in Schubert's own hand. While it is important to be aware of changes that may have been made by a publisher, especially in posthumous publications in which the composer was not able to object (e.g., *Schwanengesang*), the composer must be viewed as someone who is allowed to change

³⁸ Schroeder, "Schubert's 'Einsamkeit' and Haslinger's 'Winterreise,'" 353.

³⁹ See Max Friedlaender in the Peters edition (1884), Eusebius Mandyczewski in the Breitkopf & Härtel critical edition (1894–95), and Erwin Schaeffer, "Schubert's 'Winterreise,'" translated by Harold Spivack, *Musical Quarterly* 24 (1938): 39–57.

⁴⁰ Maurice J. E. Brown, *Schubert, a Critical Biography* (New York: St. Martin's, 1958), 257.

his or her own work in any way that he or she sees fit, and as someone who can accept or reject suggestions from publishers or anyone else who solicits an opinion.

While most scholars do not see the hostile relationship that Schroeder imagines, most believe that Haslinger instigated the majority of the cycle's transpositions for the purpose of lowering the range of the cycle in an attempt to make it more appealing to amateurs and potentially more profitable. In support of this view, scholars note that with the exception of *Frühlingstraum*, all of the transpositions are downward. There are, however, other reasons that could account for these downward transpositions. First, Schubert wrote in a rather high tessitura (scholars, like Youens, often note that the cycle does not seem to fit well into either the tenor or the bass voice type),⁴¹ and because of this tendency, it is much more probable that when Schubert transposed songs he would have to transpose them downward since transposing up would be impractical. Second, the downward transpositions in *Winterreise* do not narrow the overall range of the cycle. Many scholars, like Richard Giarusso, speculate that the transpositions were an attempt to remove high As from the cycle, but not all songs transposed down have high As, and not all of the high As were removed from the cycle.⁴² Giarusso has theorized that Haslinger wanted to transpose *Mut!* from A minor to G minor to remove the high F# in the vocal line.⁴³ Why would Haslinger pick a song with a high F# to transpose down when he could have chosen one with a high G, Ab, or the remaining A? *Auf dem Flusse* retains a high A as an ornament, but ossia notes are provided. Ossia notes would have been a

⁴¹ Youens, *Retracing a Winter's Journey*, 40.

⁴² Richard Giarusso, "Beyond the Leiermann," 33.

⁴³ *Ibid.*

viable alternative if Haslinger was worried about the high notes of certain songs, and obviously something that he was willing to do since they appear in the first edition.

Scholars have noted that Schubert's transpositions created relationships between songs that did not exist before, and strengthened ones that were already there. The most commonly cited examples are the transposition of *Wasserflut*, which creates a tonal unit in E major/minor with *Der Lindenbaum* and *Auf dem Flusse*; the transposition of *Mut* to G minor, which leads to a stronger connection to *Der Wegweiser* (also in the same key); and the transposition of "Der Leiermann," which creates a tonal group with *Die Nebensonnen*. In reference to these changes, Susan Youens has noted that "confronted with the necessity of lower transpositions, Schubert made the best of his circumstances."⁴⁴ Kurt Von Fischer sees these connections in a different light: "it is precisely the transpositions that suggest Schubert's conscious handling of keys."⁴⁵ I argue that Fischer is correct, and that the transpositions created changes in *Temperaturfarben* that enhanced the overall dramatic structure of the cycle.

Individual Transpositions

While we may never know how many songs Schubert actually transposed unless other primary sources surface, we are nevertheless fortunate to have documentary evidence regarding transpositions in *Winterreise* where there is none for *Die schöne Müllerin*. From the time of the original sketches in part one to the first edition of the

⁴⁴ Youens, *Retracing a Winter's Journey*, 40.

⁴⁵ Kurt Von Fischer, *Essays in Musicology*, ed. Tamara S. Evans, trans. Carl Skoggard (New York: The Graduate School and University Center, City University of New York, 1989), 129.

cycle, at least six songs were transposed. Table 5.3 lists these songs, the original and transposed keys, and when the transposition occurred.

Table 5.3: Transpositions in *Winterreise*

Song	Transposition	When
6. <i>Wasserflut</i>	F# minor to E minor (down)	in the engraver's copy
10. <i>Rast</i>	D minor to C minor (down)	indicated by Schubert in the autograph manuscript and by both Schubert and Haslinger in the engraver's copy
11. <i>Frühlingstraum</i>	G Major to A Major (up)	in the first draft
12. <i>Einsamkeit</i>	D minor to B minor (down)	in the engraver's copy
22. <i>Mut!</i>	A minor to G minor (down)	indicated by Haslinger in the fair copy
24. <i>Der Leiermann</i>	B minor to A minor (down)	indicated by Haslinger in the fair copy

The first documented transposition occurred in Schubert's initial draft stages of *Frühlingstraum*. In the autograph manuscript Schubert wrote the first four measures of the right hand melody in G major. He then added two more sharps to the key signature, rewrote the melody in A major, and added the left hand figuration (see Example 5.2).

Example 5.2: The first four measures from the engraver's copy of *Frühlingstraum*. Used with permission from The Pierpont Morgan Library, New York. CARY 215. Photography by Anthony Troncale.



All of these changes occur in light brown ink, indicating that Schubert transposed the song in the first stage of the compositional process.⁴⁶

While the manuscript documents Schubert's decision to transpose, it does not give any indication as to why. One likely reason is that Schubert decided that he preferred another key for expressing the extra-musical ideas that he wished to convey. Both the original key and the transposed key have links to dreams in Schubert's Lieder. Youens notes that Schubert used G major, the original key for *Frühlingstraum*, for his songs *Frühlingslied* (D. 398) and *Im Frühling* (D. 882).⁴⁷ Examining Schubert's other "spring" songs confirms that he had a palette of preferred keys for the theme of spring: F major, G major, B \flat major, A major, A \flat major, and D \flat major.⁴⁸ The purity rankings of these songs reveal that Schubert was fairly consistent with the level of *Temperaturfarben* that he used to express spring. The keys sort naturally into two groups: F major, G major, B \flat major, with purity rankings of two, three, and four, respectively, and A major, A \flat major, and D \flat major, with purity rankings of seven, eight, and ten, respectively. For the transposition of *Frühlingstraum*, Schubert chose A major, one of the more highly colored 'spring keys,' but also a key he associated with dreams. This transposition is fitting, since *Frühlingstraum* translates to "Spring Dream."⁴⁹ A major, the same key that he used to

⁴⁶ In Example 5.2 the tempo marking is an example of the dark brown that Schubert used later in the compositional process.

⁴⁷ Susan Youens, introduction to *Winterreise: The Autograph Score*, xvii.

⁴⁸ F major: *An den Frühling* (D. 283), *Am Bach im Frühlinge* (D. 361, fair copy); G major: *Frühlingstraum* (D. 911, original key), *Frühlingslied* (D. 398), *Im Frühling* (D. 882); B \flat major: *Frühlingsglaube* (D. 686 original key), and *Frühlingssehnsucht* (D. 957); A major: *An den Frühling* (D. 587, published key), *Frühlingstraum* (D. 911, published key); A \flat major: *Frühlingsglaube* (D. 686, transposed key), *Frühlingslied* (D. 919); D \flat major: *Am Bach im Frühlinge* (D. 361, published).

emphasize dreams in *Die schöne Müllerin*, also emphasizes the dream elements in *Winterreise*.

The other song marked for transposition in the original manuscript is *Rast*, originally in D minor. Schubert indicated that the song should be transposed to C minor with the note “NB ist ins C moll zu schreiben.” This note was written after the composition of the song was complete, occurring at a later stage than the aforementioned *Frühlingstraum*, which is the next song in the cycle.⁵⁰ *Frühlingstraum* and *Rast* were originally conceived in G major and D minor, respectively, which rank three and one on their respective purity scales (major and minor). Their transposed keys, A major and C minor, both have more *Temperaturfarben*, ranking at seven and five, respectively. Plausibly, Schubert wanted to adjust the amount of *Temperaturfarben* of *Rast* so that it better matched the increased color of the *Frühlingstraum*.

The note to transpose *Rast* occurs twice on the engraver’s copy, once in Schubert’s hand and once in Haslinger’s. Schubert’s note is in the same wording as the original manuscript. Haslinger’s note reads: “Schwarz soll dieses Lied in C moll

⁴⁹ Schubert’s dream keys: C major *Lebenstraum* (D. 35); A major: *Der Traum* (D. 213), the third tonal group of *Die schöne Müllerin* (see previous chapter), *Frühlingstraum* (D. 911); B major: *Nacht und Träume* (D. 827). There is also *Das Traumbild*, key unknown; lost.

⁵⁰ See Kramer, *Distant Cycles*, 166; he believes that Schubert’s decision to transpose this song was made when he was checking the engraver’s copy against his own manuscript; he notes that Schubert notated the transposition in both the manuscript and the engraver’s copy, and that Haslinger’s notation was an additional reminder to the copyist. It is possible that the instructions for transposition in the engraver’s copy were not followed because they were not yet written, but it is also possible that the note was overlooked; however, it appears that the ink in which Schubert wrote the instructions on his manuscript matches the darker ink of his revisions, but it is not confirmable without dating the ink. Yet, if Kramer is correct, why would Schubert have gone back and written the instruction on the manuscript instead of only writing it on the fair copy? Regardless, the question of when the transposition occurred is not as relevant to this discussion as is the question of why. Kramer believes that Youens, who believes that the copyist did not follow Schubert’s instructions for transpositions, misread the evidence. See Susan Youens, “Wegweiser in *Winterreise*,” *The Journal of Musicology* 5 (Summer 1987): 359.

schreiben” (See Example 5.3).⁵¹ Youens translates this instruction as “Schwarz should write this song in C minor,” and indicates that Schwarz, presumed to be one of the copyists, is an “unknown quantity.”⁵² Haslinger’s note is the only reference to someone named Schwarz; in fact, if Haslinger were referring to a person, it would be the only note in the manuscript directed at a specific person.⁵³ There is another possible reading of Haslinger’s note: that he is not referring to a person, but rather to a color. The word “Schwarz” means black, and in this context it is capitalized because it is the first word of the sentence. I hypothesize that Haslinger is referring to the blackened quality of the transposed key, or the change in color and *Temperaturfarben* that accompanies the transposition. Schubert transposed the song from D minor, which has the greatest overall purity, to C minor, which is ranked fifth in purity.

There are no written instructions for the remaining two transpositions in part one, *Wasserflut* and *Einsamkeit*. Since they appear already transposed in the engraver’s copy, the decision to transpose these songs must have been communicated before the manuscript was prepared. My hypothesis is that Schubert transposed these songs to modify the *Temperaturfarben* of the first half of the cycle in order to accommodate part

⁵¹ The engraver’s copy is held by the Wienbibliothek im Rathaus. A digitization can be found at <http://www.schubert-online.at>.

⁵² Youens, *Retracing a Winter's Journey*, 41.

⁵³ The only other person reference in Haslinger’s notes is a Johann Schönwalder. At the top of the first page of the manuscript (*Gute Nacht*), Haslinger wrote “NB: Joh. Schönwalder belieben den Stich so einzurichten, dass jedes Numer sich allein abdrucken läßt. -Haslinger” (NB: Joh. Schönwalder believes that it is best to set up the engraving so that each song prints alone. -Haslinger). The identity of Schönwalder is unknown. Note that Schönwalder was referenced, but Haslinger’s note was not directed at him or any other specific person.

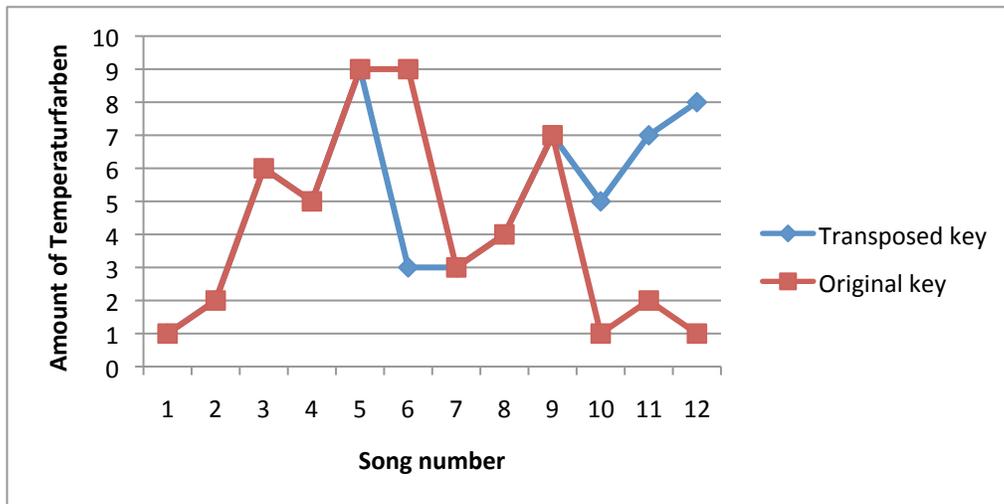


Figure 5.2: *Temperaturlin* map of *Winterreise* part I.

is no reason that Schubert could not have rethought the keys for the final songs upon reviewing the cycle for publication.

Like the transpositions for part one, the transpositions for part two are located at a structurally important place in the cycle (the end), and they change the contour of dramatic tension created through *Temperaturlin*. Schubert smoothed out the build to the penultimate song by changing the key of song twenty-two from the same key as song twenty-one to a new key whose *Temperaturlin* is in between its preceding and following songs. Additionally, more contrast as well as a greater release of tension occurs with the transposition of the final song to a key with less *Temperaturlin* (see Figure 5.3).

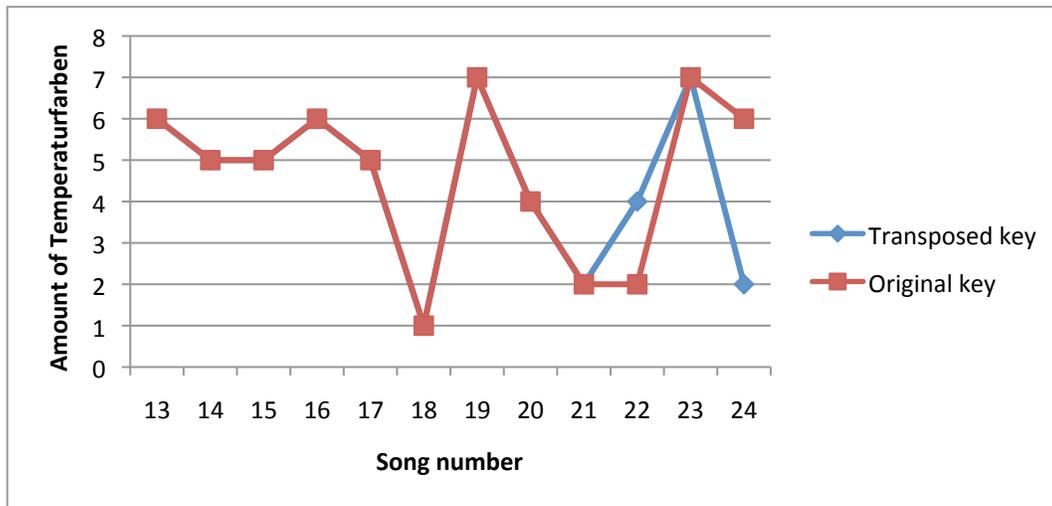


Figure 5.3: *Temperaturfarben* map of *Winterreise* part II.

The Conception of Key

Some scholars question how important key is to musical expression given that Schubert allowed for transpositions in *Winterreise*. Feil has puzzled over the transpositions of individual songs:

Weren't the keys chosen, one may ask, in keeping with an overall plan, which would be destroyed by these changes? Wouldn't a transposition of the whole cycle have been decidedly preferable to a transposition of individual songs? Certainly. Then, one will ask, doesn't each song have or require its particular key? Why would Schubert himself undertake such a glaring departure from the key characteristics of his songs?⁵⁴

Feil's series of questions evokes one more: until what point is a composer allowed to revise his work? This would seem to be the moment where the composer's tonal outline and key choices are made permanent. Until this point, the composer is still shaping the

⁵⁴ Arnold Feil, *Franz Schubert: Die Schöne Müllerin; Winterreise*, trans. Ann C. Sherwin, ed. Rolf Vollmann (Portland: Amadeus, 1988), 27.

composition and making choices about what he wants to express. Schubert transposed and made other musical changes until the last stages of the publication process. A letter from October 31, 1822 reveals Schubert's willingness to revise a work, including its key, after sending it to the publisher; Schubert wrote to Josef Hüttenbrenner, who was entrusted with the delivery of song manuscripts to the publishing firm of Sauer and Leidesdorf: "As I have to make very important alterations in the songs handed to you, do not give them to Herr Leidesdorf yet, but bring them out to me. Should they have been already sent, they must be fetched back immediately."⁵⁵ Schubert is referring to his first book of songs published with Sauer and Leidesdorf, Op. 20, which includes his well-known song *Frühlingsglaube* (D. 686).⁵⁶ There are three previous versions of this song dating from 1820 composed in B♭ major, but the published version is in A♭ major.⁵⁷ Schubert prepared a new manuscript in A♭ major on his own volition, before the publisher even saw the original manuscript. If this letter was not extant, scholars may have presumed that the publishers requested that the song be transposed, but it is clear that Schubert's decision to revise the song was his own, albeit a rather late one, and not requested by a publisher.

⁵⁵ In *Schubert: A Documentary Biography*, 239–240, Deutsch explains how after Schubert left the publishers Cappi and Diabelli, he entered into an agreement with the publishing firm of Sauer and Leidesdorf to provide them with songs over the course of two years for the sum of 1,200 florins, Viennese Currency.

⁵⁶ Deutsch, *Schubert: A Documentary Biography*, 239–240.

⁵⁷ Although there is a record of the publisher's copy being auctioned in Paris in 1881, the manuscript is now lost. Kreißle and Friedländer and Witteczek-Spaun list the publisher's manuscript as November 1822, after Schubert wrote this letter.

Rather than viewing Schubert's willingness to transpose as a desire to enhance or perfect what he wishes to express through key, Feil seems to have interpreted these transpositions as a reflection of the secondary importance of key characteristics and key meaning. Feil has stated:

As certainly as Schubert had certain keys and key relationships in mind in his cycles...his songs are just as certainly transposable, with only but a few exceptions, because true to their roots in the song genre, they are not bound to any particular voice range or register.⁵⁸

Feil has cited only one piece of evidence for his conclusion: on an autograph copy of *Des Müllers Blumen* from *Die schöne Müllerin*, Schubert wrote "NB Die Begleitung dieses Liedes kann füglich um eine Octave höher gespielt werden. Franz Schubert." (The accompaniment of this song can conveniently be played an octave higher. Franz Schubert.) The manuscript in question is one of three extant transpositions that Schubert completed for the cycle's dedicatee, Baron Carl von Schönstein.⁵⁹ Of these three songs, *Des Müllers Blumen* has the lowest range; it is possible that Schubert included the note because Schönstein had an older pianoforte that did not have a low enough range to play the left hand of the piano. Schubert's accommodations of his friend through transposition should not be viewed as an indication that key meaning was not important to Schubert; if we extend this line of thinking, it would mean that melody was also not important to

⁵⁸ Feil, Franz Schubert, 27.

⁵⁹ Feil states that the manuscript is lost, but it has been recovered. Digitized copies of the transposed manuscripts of songs 7, 8, and 9 of *Die schöne Müllerin* can be found at http://www.schubert-online.at/activpage/manuskripte_en.php?werke_id=488&herkunft=allewerke. 7. *Ungeduld* was transposed to F major, 8. *Morgengruss* to A major, and 9. *Des Müllers Blumen* to G major.

Schubert, for he allowed his friend and advocate, the baritone Johann Michael Vogl, to ornament and adapt melodies to his aging voice.

Richard Kramer has echoed some of the deeper sentiments of Feil's questions in his own: "Does it follow from this readiness to transpose from some original key that the concept of key, pure and absolute, has no primary place in Schubert's aesthetic but lies only at its periphery?"⁶⁰ Kramer has concluded, "in the conceiving of the song, the poetic idea and the idea of key belong to the inchoate creative impulse from which the song will emerge."⁶¹ I strongly disagree. Key is not something intrinsically linked to the genesis of a song or something that once conceived cannot be changed without harming the link between key and poetic sentiment. Composers are not mere recorders of divine songs that emerge into their consciousness; they are men and women who craft and polish their works until they are satisfied with the finished product. With *Frühlingstraum* Schubert abandoned his original conception of key early in the compositional process, but should we revere Schubert's original musical impulses more than his labored final version? If we were to follow Kramer's line of thinking, we should need to transpose *Frühlingstraum* back to the G major of the first four bars, for G major is the key linked to Schubert's "inchoate creative impulse."

In regards to the transposition of *Mut!* and *Der Leiermann*, Kramer has stated:

In the transposition of the song to A minor, the eloquent place of *Der Leiermann* in the cycle is compromised....a false sense of closure is propounded....The transposition of *Mut!* from an original A minor hopelessly confounds the sense of these last songs. No amount of speculation as to cause or effect can bring the

⁶⁰ Kramer, *Distant Cycles*, 165.

⁶¹ Ibid.

matter right—can justify what is in effect a tampering with the critical essence of the cycle⁶²

Why is it that if Schubert decided to transpose *Der Leiermann* in order to give the cycle more closure, he would be “tampering with the critical essence of the cycle?” Key is a compositional element on the same level as rhythm, structure, melody, harmony, et cetera, which composers are allowed to manipulate and alter to their liking. Even if a composer makes changes at the suggestion of another, especially a publisher, it is still the composer’s final decision that we must respect as such. As music critics we may prefer an earlier incarnation of the song to the composer’s finished product, but first ideas and impulses are not inherently superior to edited and reworked versions of songs, with regard to key or any other musical element.

Formal Structure and Key Meaning

The *Temperaturfarben* of Schubert’s key choices in *Die schöne Müllerin* reflect the clear narrative of the miller’s journey from a carefree wanderer to a suicidal man, but in *Winterreise* we are only privy to one small section of the protagonist’s narrative: the time of his grief. Figure 5.4, a composite of Figures 5.2 and 5.3, provides a *Temperaturfarben* map for all of *Winterreise*, complete with the original keys to better illustrate how Schubert altered the *Temperaturfarben* of the ending of parts one and two of the cycle. The transpositions of songs ten and twelve (song eleven was most likely

⁶² Kramer, *Distant Cycles*, 184.

transposed before Schubert's discovery of part two) avoid a premature resolution, create more dramatic tension, and provide more momentum for the continuation of the journey. The transposition of songs twenty-two and twenty-four provide a more gradual build and resolution at the end of the cycle.

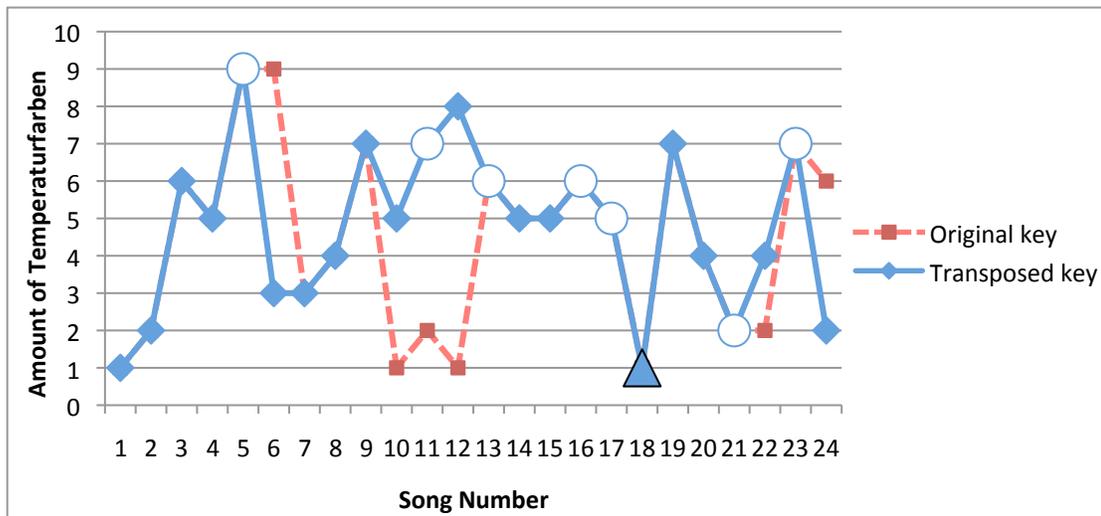


Figure 5.4: The amount of *Temperaturlfarben* for each song in *Winterreise* based on the purity rankings of the key signature. Markers that are circles designate major keys. The triangular marker represents a song (*Der stürmische Morgen*) that, due to non-diatonic harmony, has significantly more color than its key signature implies.

Upon examination of the figure, one notices that the internal songs of the cycle hover in the same general area rather than illustrating an ascent, descent, or specific climax. The internal songs reflect the lack of narrative in *Winterreise*; the protagonist's journey is not a linear one, and the progression of *Temperaturlfarben* reflect that. Nevertheless, the question remains, why did Schubert choose these specific keys? When examining the key signatures used in *Winterreise*, the most obvious trend is the prevalence of minor keys. Of the twenty-four songs, only about a quarter are in major. This is not surprising; minor keys traditionally are associated with sadness, and in

Winterreise, we encounter the protagonist after he has had his heart broken and witness the resulting feelings including grief, anger, and the desire to escape. Figure 5.5 shows the tonal palette of *Winterreise*.

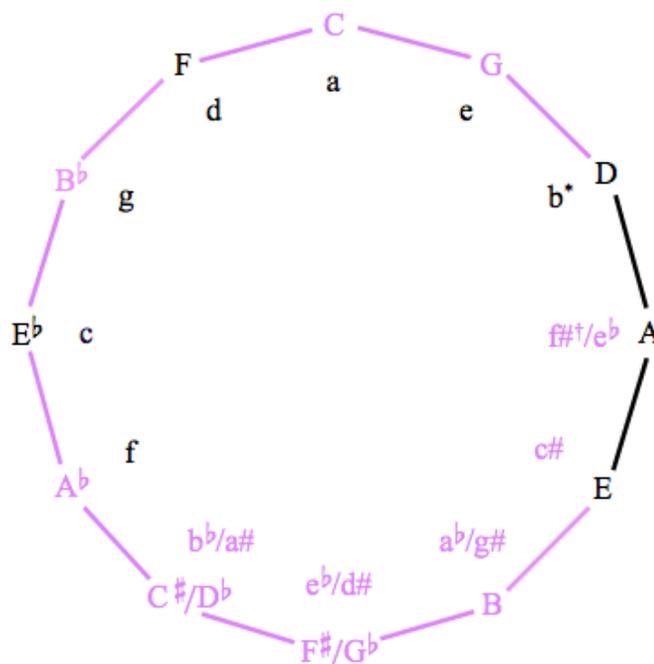


Figure 5.5: The key signatures used in *Winterreise*. Keys in black designate the key signatures. The asterisk indicates the original key of *Einsamkeit* and the cross indicates the original key of *Wasserflut*. The transposition of these two songs added and removed a key signature, respectively. This chart is restricted to key signatures and does not include modulations or significant tonicizations.

In addition to illustrating the prevalence of minor keys, this tonal chart provides other valuable information. Of the five major keys Schubert used, two of them are flat-major keys: F and E^b, and three of them are sharp-major: D, A, and E. Schubert used more sharp-major keys in *Winterreise*, and they are, on average, more highly colored than the flat-major keys he used. In sharp-major keys, the dominant chords are more highly colored than the tonic chords, which allows for the creation of greater tension and angst. With the exception of F major, all of the major keys that Schubert chose are

moderate to highly colored, which serves to emphasize the protagonist's constant pain even in the light of momentary happy memories and feelings of love. The love that the protagonist feels and remembers is not pure and carefree.

Schubert's selection of minor keys shows that he chose predominantly flat-minor keys and avoided the more highly colored minor keys. The use of major dominants adds another variable in minor keys; Figure 2.1 in the methodology chapter illustrated that in minor keys, G minor, the purest overall minor key, has a dominant whose *Temperaturfarben* is equal to its tonic's; moving clockwise around the circle of fifths until C# minor, all of those keys have dominants that are more colorful than their tonics. Moving counterclockwise around the circle of fifths until Ab/G# minor, all of those keys have tonics that are more colorful than their dominants. Schubert chose more minor keys with dominants that were more highly colored than their tonics. Also, while the more highly colored minor keys are not key signatures, many of them appear as significant tonal centers, such as Eb minor in *Die Post*.

While the choice of keys in *Winterreise* adds to the cycle's overall *Temperaturfarben* and helps create its dramatic structure, there are also some extra-musical meanings linked to some specific keys in the cycle. Even in equal temperament, it is hard to miss Schubert's contrast of major and minor in *Winterreise*. Many scholars have identified this practice as juxtaposing dreams or memories of happiness with a cold, present reality; William Kinderman has called it "Schubert's tragic perspective."⁶³ I

⁶³ William Kinderman, "Schubert's Tragic Perspective," in *Schubert: Critical and Analytical Studies*, ed. Walter Frisch (Lincoln: University of Nebraska Press, 1986), 65–83. See also Barbara R. Barry, "Time Levels and Tonal Structures in Schubert's *Die Winterreise*," *Music Review* 46, no. 3 (1985): 175; Hans Heinrich Eggebrecht, "Prinzipien des Schubert-Liedes," *Archiv für Musikwissenschaft* 27

postulate that in *Winterreise* it is more than just a pleasant dream that is represented by major, but actual feelings of love that resurface in the protagonist's heart. Sometimes these feelings are brought on by a memory and sometimes a dream, but it is love experienced that is evoked through the major keys, not just love remembered. Even if one is miserable after experiencing a broken heart, it takes a while for love to die, and from time to time it will surface amidst the pain and anger.

There are still more specific meanings within the keys of *Winterreise*.

Christopher Lewis has postulated the following associations based on significant elements common to all the songs in any one key (see Table 5.4). There are many weaknesses in Lewis's chart. The first is that he only addresses the published keys; if the keys were changed, then surely their extra-musical meanings change as well. Also, some of his descriptions are generic and could be applied to *Winterreise* as a whole, such as "alienation" and "longing." Another weakness is that he does not differentiate between major and minor. He has stated that changes in mode indicate a change in "temporal point of view."⁶⁴ This is an oversimplification of the major/minor dichotomy; while often there is a temporal shift, such as memory versus reality, there are fundamental differences in the emotion that the juxtaposed major and minor keys express. Often, they are opposites, such as in *Die Post* where E \flat major represents hope and E \flat minor represents hopelessness.

(1970): 96; Alfred Einstein, *Schubert: A Musical Portrait* (New York: Oxford University Press, 1951), 304; H. Lowen Marshall, "Symbolism in Schubert's *Winterreise*," *Studies in Romanticism* 12 (1973): 609; Youens, *Retracing a Winter's Journey*, 214.

⁶⁴ Christopher Orlo Lewis, "Text, Time, and Tonic: Aspects of Patterning in the Romantic Cycle," *Intégral 2* (1988): 62.

Table 5.4: Christopher Lewis's Key Meanings. From "Text, Time and Tonic," p. 64.

D: alienation
 A: love as delusion
 F: life as delusion
 C: search for death
 E & F#: summary
 G: longing
 B: art as illusion
 E \flat : lingering hope

Susan Youens has not assigned all keys meaning as did Lewis, but she outlined the following associations derived from the keys that correspond with specific dramatic themes:

A major: dance songs about the illusions of light and love
 C minor: death wishes
 B minor: the most intense mournfulness⁶⁵

Youens is more accurate in that she does not attempt to assign extra-musical meaning to all keys, and she differentiates between major and minor. She has not derived the same extra-musical meanings as did Lewis; out of the three keys she lists, her A major is similar to Lewis's, her C minor is the same, but her B minor is different. I agree with both scholars on C minor, and with Lewis's description of E \flat major; Table 5.5 provides my list of the most concrete key meanings in *Winterreise*. These are the only keys that I contend have specific extra-musical meanings. The rest of the keys are paired with emotions whose intensity corresponds to the *Temperaturfarben* of the given key, that is, the more pure keys express mild emotions, the moderately colored keys moderate

⁶⁵ Youens, *Retracing a Winter's Journey*, 75.

emotions, and the more highly colored keys more intense emotions. Youens is correct to observe that B minor depicts intense mournfulness at points in the cycle, but I contend that B minor more accurately depicts states of intense emotional pain or distress; “mournfulness” is too specific.

Table 5.5: Extra-musical meanings linked to specific keys in *Winterreise*

A major: dreams
A minor: reality
C minor: death wishes
E♭ major: hope
E♭ minor: hopelessness

Walther Dürr, who has stated that he has no doubt that Schubert chose keys according to some sort of affective quality, has approached key meaning in *Winterreise* in a different way.⁶⁶ Dürr has claimed D minor as the central key for the cycle and has asserted that the keys move away from D minor depending on the emotions of the protagonist. Even if Schubert had originally conceived D as the tonal center when he wrote part one, he appears to have abandoned this idea. One notes that there were four songs originally conceived in D minor; out of these four two of them (songs ten and twelve) were transposed to different keys, leaving only songs one and eighteen in D minor. Additionally, when the key signature is used in the second half of the cycle in *Der stürmische Morgen*, the many non-diatonic harmonies undermine the establishment of D minor and raise the song’s *Temperaturfarben*, consequently eroding the sense of D minor as a central key. Figures 5.6 and 5.7 are recreations of Dürr’s graphs.

⁶⁶ Walther Dürr, “Franz Schubert: Winterreise—Gedanken Zur Struktur Des Zyklus,” in *Meisterwerke Neu Gehört: Ein Kleiner Kanon Der Musik: 14 Werkporträts*, ed. Hans-Joachim Hinrichsen and Laurenz Lütteken (New York: Bärenreiter, 2004), 140.

Central key: D minor
 Originally design / key sequence in the autograph
 dotted line = published version

Light

E major (raptured)

A major (visionary)

Tenebrous

F# minor

B minor (death key)

E minor

Bitter Reality

A minor 2. Wetterfahne

D minor 1. Gute Nacht 10. Rast 12. (draft)

G minor

Despair

C minor

F minor

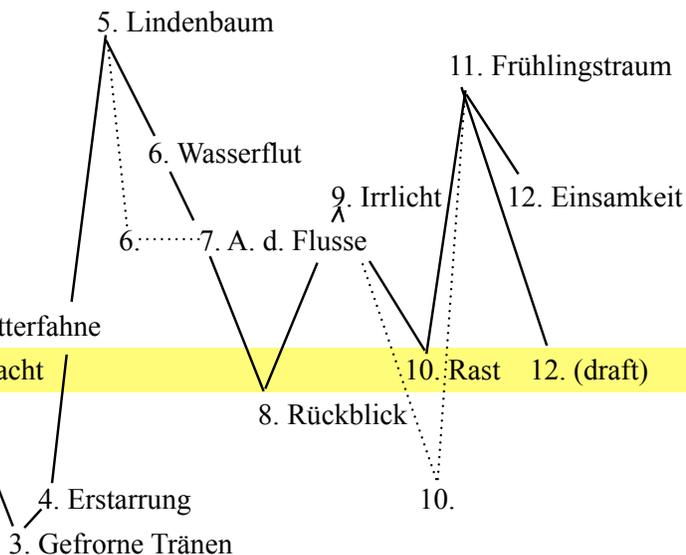


Figure 5.6: Dür's graph of the tonal relationships in *Winterreise* part I from "Gedanken zur Struktur des Zyklus," p. 139.

Light

A major (visionary)

Tenebrous

B minor

E minor

Bitter Reality

A minor

D Major (ironic)

D minor 18. Der stürmische Morgen

F major

G minor

Despair

C minor

E♭ Major (mail horn) 13. Die Post 16. Letzte Hoffnung

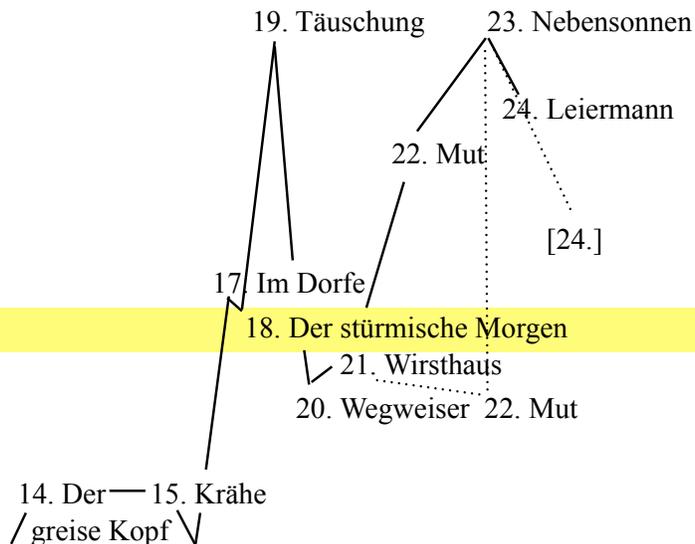


Figure 5.7: Dür's graph of the tonal relationships in *Winterreise* part II from "Gedanken zur Struktur des Zyklus," p. 139.

Dürer's categorization of keys spans from light-hearted feelings to those of despair. While many of Dürer's categorizations fit with the general quality of the keys in well temperament (like A minor for reality), there are keys that do not seem to fit into the categories he placed them. E \flat major is categorized as despair; this is problematic because Dürer combined the key signature of the song with the sentiment expressed by its relative minor; in *Die Post* and *Letzte Hoffnung*, E \flat major represents hope, and E \flat minor hopelessness. Additionally, some of the more highly colored minor keys that evoke death and severe pain are in Dürer's tenebrous or shady category, which is the second most positive emotional category in his diagram: F \sharp minor, B minor, and E minor are all linked with extreme emotions, not light or moderate ones. While Dürer is right that the key choices are based on affect, without factoring in the colors created by well temperament, we only have the partial picture of common poetic content to go on. How Schubert used keys and the meanings they convey are best seen in the context of the individual songs.

Chapter 6

Winterreise Individual Song Analyses

Part I

1. *Gute Nacht* (Good Night)

D minor, 2/4 time, *Mässig in gehender Bewegung* (moderate, walking movement)

Within the first measures of *Winterreise*'s opening song *Gute Nacht*, the piano depicts the harshness of the protagonist's circumstances and foreshadows his journey's end. The piano accompaniment's incessant staccato eighth notes create a sense of constant motion while the descending melodic line implies the downward direction of the protagonist's mental and emotional journey. The song is in D minor with the first fifteen measures consisting primarily of i, iv, V, and vii^{o7} chords. In the introduction, the combination of i and iv, along with the minimal use of the major dominant, creates an even, solemn accompaniment that is punctuated by fortepiano vii^{o7} chords over the tonic pedal. The vii^{o7} chords sound like a force, be it physical or emotional, acting upon the protagonist, like a strong gust of wind or a stabbing pang in his heart. The relative purity of the i and iv chords ring out more than faster-beating, less pure minor chords would. Their purity is also emphasized through the frequent open fifths in the left hand (see Example 6.1).

Example 6.1: *Gute Nacht*, mm. 1–7

The musical score for Example 6.1, *Gute Nacht*, measures 1–7, is presented in a 2/4 time signature. The key signature is D minor. The score consists of a piano introduction and the beginning of a vocal line. The piano part starts with a piano (*p*) dynamic, followed by fortissimo piano (*fp*) dynamics, and ends with pianissimo (*pp*). The vocal line enters at measure 8 with the lyrics "Fremd" and "Ich". The bass line is annotated with chord symbols: *d*, *c#°7₃/D*, *d*, *c#°/D*, *d*, *g*, *d#1*, *g⁶*, *d#1*, *A*, *d*.

The music for the first three stanzas appears to be derived from the words of the first verse. When the voice enters at the pick-up to m. 8, the singer confirms the emotional mood set by the piano by beginning the same descending melody presented in the introduction. The opening F to E half step in the melody also emphasizes the purity of D minor. In Young's well temperament, E-F (and also B-C) are the two widest half steps, both measuring 108 cents. These semitones are 8 cents larger than the equal-tempered half step but 4 cents smaller than a pure minor second. To the ear accustomed to equal temperament, the interval seems a bit wide. Nevertheless, the F to E half step is very close to pure, and its melodic context creates a relaxed quality that is not present with more highly tempered minor seconds or in equal temperament.

The first change in the tone established in the introduction occurs at the pickup to m. 16 when the relative major is tonicized as the protagonist sings "Das Mädchen sprach von Liebe, / Die Mutter gar von Eh'" (The girl spoke of love, the mother even of marriage). The shift from B \flat to B \sharp on the second half of the last beat of m. 16 creates the sensation of the minor mood lifting into the new major tonality; the B \sharp is the third in a G-major-four-three chord that ushers in the sweet sounds of the relative major, F. The

prevalence of open fifths further accentuates the purity of this passage. The sweetness of F major portrays the feelings that surface instinctively when the protagonist remembers his former beloved; although the love affair is over, his memories are still vibrant enough to bring a flood of positive feelings. This is the first instance in the cycle where a change to a major tonality coincides with the occurrence of a memory of the protagonist's beloved.

The protagonist repeats his recollection of love and the possibility of marriage in mm. 20–23, but the F-major sonority that was tonicized above begins to tonicize B \flat major by the time the protagonist finishes the repetition. The presence of B \flat major increases the tension of the passage very slightly; it is the flat-major triad closest to F major in color. The flood of positive emotion that filled the protagonist's heart was only temporary; both the protagonist and the listener are jarred away from his happy memory by the return of the fortissimo E-half-diminished-seventh chord that asserted itself during the introduction. Above the E-half-diminished-seventh chord, E-F-E sounds in octaves, which is the same minor second that was emphasized in the opening descending melody. These measures alternate with D-minor harmonies with A-B \flat -A in octaves in the right hand (see Example 6.2). The half step between A and B \flat is also wide; it measures 106 cents and along with F-G is the second widest and closest to the harmonic series next to E-F and B-C.

Example 6.2: *Gute Nacht*, mm. 23–27

23

Eh' mit, nun ist die Welt so trü - be, der...
und auf den weis-sen Mat - ten such'

B \flat e \flat \flat 7 - 6 d \flat 3 - 4 - 3 e \flat \flat 7 - 6 d \flat 3 - 4 - 3 d \flat

The return of the D-minor tonic coincides with the words “Nun ist die Welt so trübe, / Der Weg gehüllt in Schnee” (Now the world is bleak, The road shrouded in snow). The protagonist has been pulled out of his warm memory into the wintry reality of the world around him. The home key comes back with more severity; each down beat is accented, and a dotted rhythm in the right hand of the piano is heard above full, close position triads in the left hand, which accentuate the *Temperaturfarben* of the home key.

As the protagonist sings the phrase “Der Weg gehüllt in Schnee” in mm. 28–30, the melodic line rises to the tonic with la-ti-do: B \natural – C \sharp – D. This passage highlights the C \sharp -D semitone, which, unlike the wide semitones that have been emphasized previously, is the narrowest semitone in Young’s well temperament at 92 cents, and creates a greater pull towards the tonic. This melodic movement is harmonized by an A-dominant-seventh chord whose seventh and tonic scale degrees are placed in close position, creating a dissonant clash between notes G and A. In well temperament, the dissonance of m. 28 sounds striking (see Example 6.3).

Example 6.3: *Gute Nacht*, mm. 28–29

28

Weg ge - hüllt in Schnee, nun
ich des Wil - des Tritt, und

d⁴ A⁷ d

The music of the second verse repeats that of the first. With the third verse, the harmony remains largely the same, but the protagonist's descending vocal lines change into ones that descend and then ascend, highlighting the melodic C[#]-D half step over the G-A harmonic whole step that was introduced in mm. 28–29, as if musically depicting the anger that is mounting within him.

Significant changes in harmony occur in the fourth stanza where the key changes to D major and the tone of the poem shifts. The protagonist is now taking action; he is not just contemplating the past and thinking about love and loss, but he is describing what is happening in the present: how he is now taking his leave. The last two stanzas read:

Will dich im Traum nicht stören,
Wär schad' um deine Ruh'.
Sollst meinen Tritt nicht hören -
Sacht, sacht die Türe zu!

I will not disturb your dream,
It would be a shame to ruin your rest.
You shall not hear my footsteps -
Softly, softly, the door shuts!

Schreib' im Vorübergehen
An's Tor dir: Gute Nacht,
Damit du mögest sehen,
An dich hab' ich gedacht.

I write in passing
on your gate: Good Night
So that you may see,
That I thought of you.

The protagonist is not just leaving his beloved's house, but he is leaving stealthily. He does not want to disturb her dreams, but he seems to be close enough for her to hear his footsteps if he is not careful—is he in her room, watching her sleep? He exits through the door and then the gate. Did he sneak back into her house to see her, or is he sneaking away in the night to take his leave for the first time? Regardless of the answer, we can tell that there is something unusual about his actions. Yet, he still wants her to know that he is thinking of her, and he writes goodnight in the snow on the gate for her to see. The D-major tonality implies that he still loves her.

The contrast between the new D-major tonality and the original D-minor tonality is the most obvious contrast presented in the final two verses, but a more subtle contrast occurs between the E-half-diminished-seventh chords in the minor section and the third inversion E-dominant-seventh chords that occur in mm. 73, 77, 88, 90, and 94. The third of both intervals are wide compared to the same intervals in other keys in Young's well temperament (the minor third of the E-half-diminished-seventh chord measures 306 cents, the widest minor third encountered, and the major third of the E-dominant-seventh chord measures 404 cents, the third largest of all major thirds). The *Temperaturfarbe* of the third inversion E-dominant-seventh chords evokes a sense of longing and vulnerability rather than a sense of energy or excitement.

These two verses that the protagonist sings to his sleeping beloved do not contain highly colored chords. Instead, the final verses are in major, largely diatonic, and consist predominantly of major harmonies. These harmonies not only imply that the protagonist still has love in his heart, but also that he thinks he is doing the right thing by leaving. In

his mind he is giving his love what she wants or needs, which may be his disappearance so that he does not interfere with another suitor. In well temperament, the D-major tonality of this passage creates a sense that the protagonist's actions are noble.

The last two stanzas in D major have a similar harmonic pattern as the previous stanzas in minor, but they remain in D major without tonicizing any other keys until D minor returns at the end of the song. The final stanza of the poem repeats, and on the second iteration of the last line "An dich hab' ich gedacht" D minor returns, accentuated by a pianissimo dynamic marking and *un poco ritard*. The music of the piano postlude remains in D minor; the protagonist's sadness prevails. As triads, D major and D minor both rank third in purity out of all major and minor keys, respectively, and since they share the same major dominant, the transition between D major and minor at the end of the song is not one of increased color as much as a change of tone. What stands out most in the change from major to minor is the opening interval of descending melody; the mere-do of minor changes to the mi-re-do of major, removing the pure-sounding minor second between E and F and replacing it with a major second between E and F#, which in Young's well temperament measures 200 cents, the same size as an equal tempered second.

Susan Youens keenly observes that the protagonist's changes in mood during this song are a mini journey in themselves.¹ She identifies the major mode as the mode of "illusions, dreams, and imagination."² Scholar Martin Zenck has echoed a similar

¹ Susan Youens, *Retracing a Winter's Journey: Schubert's Winterreise* (Ithaca: Cornell University Press, 1991), 124.

² *Ibid.*, 129.

sentiment; he views D minor as the key of reality and D and F major as the keys of dreams.³ Yet there is another principle guiding the use of D major in this song, the idea that major tonalities often depict the memory of past happiness.⁴ Yet, it is more than just daydreams of happier times that bring forth the D-major sections in this song; rather, it is evoked by the love that he still feels for his beloved. When a love affair is over, the feelings do not die instantly, even if there is betrayal or anger towards a lover. Love is still very much alive in the protagonist's heart, mixed with frustration, anger, loneliness, and many other emotions. His recollection of love, dreams of love, and current feelings of love are often accompanied by major.

2. *Die Wetterfahne* (The Weathervane)

A minor, 6/8 time, *Ziemlich geschwind, unruhig* (Fairly quickly, anxious)

Although the harmony of *Die Wetterfahne* passes through many tonal centers, it begins and ends solidly in A minor. The song's continually changing harmony evokes the movement of a weathervane that may spin and shift direction but ultimately remains in the same spot. The protagonist views the weathervane as a symbol of his love's inconstancy, but it is also reflective of the protagonist's mental state. Different emotions flare up within him, but at the end of the song he is no closer to resolving his feelings than he was at the beginning.

³ Martin Zenck, "Die Romantische Erfahrung Der Fremde in Schuberts *Winterreise*," *Archiv für Musikwissenschaft* 44 (1987): 148.

⁴ See the section on Formal Structure and Key Meaning in chapter 5.

Die Wetterfahne opens with a linear melodic idea in A natural minor played in octaves by both hands of the piano. Even though A natural minor is one of the purest keys harmonically, it is the minor keys farther from A that have purer intervals and sound sweeter in a melodic context.⁵ The opening melody is stark with sixteenth- and eighth-note arpeggios that rise, fall, and circle around, evoking the image of gusting wind. The octave is the only pure interval in well temperament, and thus there is no beating between intervals until other chord tones appear beginning in m. 11.

The voice enters in m. 5 at a piano dynamic and sings in unison with the piano about the wind blowing the weathervane on top of his sweetheart's house. The *Temperaturfarben* of the song increases with the entrance of the voice because G# is introduced, which implies the more highly colored dominant tonality of E major. E major is ranked six out of seven in purity rankings for major triads, and A minor is ranked one out of six for minor triads; A minor is a high contrast key. The protagonist's first phrase further emphasizes the dominant because it ends on a half-cadence at m. 9.

At the anacrusis to m. 11 the protagonist begins to sing "Da dacht' ich schon in meinem Wahne, / Sie pfiff den armen Flüchtling aus" (Then I thought in my delusion, that it mocked the poor fugitive). The protagonist momentarily anthropomorphizes the weathervane and feels that it is knowingly mocking him. This moment is an early indication of the protagonist's mental state; his self-imposed isolation causes him to communicate with inanimate objects and animals instead of people. Starting at m. 11 the

⁵ These keys have the following pure intervals: F#/Gb: re, and sol; C#/Db: re, fa and sol; Ab: fa and sol; Eb: fa, sol, and te; Bb: fa and te.

texture becomes chordal and emphasizes the changing *Temperaturfarben* in the following section. First C major is tonicized in m. 11 with a C-b^{o7}/C-C progression, and the color increases with the tonicization of E minor that incorporates A⁷ and B⁷ chords in m. 13 (see Example 6.4). The tension rises as chords with greater degrees of *Temperaturfarbe* are introduced. The highly colored B⁷ chord in the last syllable of the word “Flüchtling” depicts the protagonist’s momentary anger at the inanimate weathervane. Nevertheless, this section is not the climax of the song, and Schubert mitigated the color of these chords accordingly. The seventh of the chord has much tension and color, but the third is absent from the A⁷ chord, and the third of the B⁷ chord is in the voice, and thus the color of these chords is not derived from the major thirds.

Example 6.4: *Die Wetterfahne*, mm. 10–14

The musical score for Example 6.4, *Die Wetterfahne*, mm. 10–14, is presented in 6/8 time. The vocal line (treble clef) and piano accompaniment (grand staff) are shown. The lyrics are: "Da dacht' ich schon in mein-em Wah-ne:sie piff den ar - men Flücht - ling aus Er". The piano accompaniment features a rolled eighth-note texture. Chord symbols are provided below the piano part: C, b^{o7}/C, C, c^{no1}, a^{7no3}, e⁶, B⁷, e. Dynamics include *p*, *cresc.*, and *f*.

With the second stanza the protagonist begins to chastise himself for not noticing his beloved’s fickleness earlier. Her fickleness is depicted by an ever-changing tonality; mm. 15–16 tonicize G major, mm. 17–18 A minor, and mm. 19–22 D minor. The first two tonicizations are of relatively pure triads by diminished chords in first inversion. Diminished chords in any well-tempered key have much more inherent dissonance than any highly colored major chord. The rolled eighth-note texture of the accompaniment

lightens the color of the chords in this section (see Example 6.5). The rolled texture disappears when D minor is tonicized, beginning at m. 19, by an A-dominant seventh chord in first inversion. In addition to the characteristic color of A major, dissonance is also present with the clash between the harmonic root and seventh of the chord in the left hand of the piano and the downward, dissonant melodic semitone motion of B \flat to A in the right hand. For the length of a thirty-second note G, A, and B \flat sound together, creating an intense dissonance. The same pattern is repeated with a D-dominant-seventh chord in first inversion at m. 20.

Example 6.5: *Die Wetterfahne*, mm. 14–22

aus. Er hätt' es e - her be - mer - ken sol - len des Hau - ses auf - ge -

steck - tes Schild, so hätt' er nim - mer su - schen wol - len im Haus ein treu - es Frau - en - bild.

Chord symbols: e, f \sharp °6, G \flat , f \sharp °6, G \flat , g \sharp °6, a \flat , g \sharp °6, a \flat , A \flat , d, D \flat °5, g, d \flat °5, g \sharp 7°3, d \flat , A \flat , d

This D-minor section harmonizes the words “So hätt’ er nimmer suchen wollen / Im Haus ein treues Frauenbild” (And so he would never have sought a faithful woman in this house). D minor is the tonality of *Gute Nacht*, and this section may allude to the tonality of the previous song and the house in which his love lives. Youens has identified

this section as a brief remembrance of *Gute Nacht*'s tonality and has stated that the words "house" and "faithful woman's image" in this song make a noticeable connection to the content of the previous song and serves as "proof, if any were needed, of Schubert's conception of tonalities as conveying dramatic meaning."⁶ In the last song the protagonist left through the gate of his love's house, but it is clear that he has not traveled far because her house is still within his sight.

The piano again imitates the sound of gusting wind followed by the singer beginning the third verse in octaves with the piano (this time the piano part is an octave lower). The harmony of the third verse is the same as the first until m. 30 where F major (the VI of the tonic) and then A major (the parallel major) are tonicized (see Example 6.6). The protagonist asks "Was fragen sie nach meinen Schmerzen? Ihr Kind ist eine reiche Braut" (What do they care of my pain? Their child is a rich bride). In mm. 30–31, a C-dominant-seventh chord tonicizes F major in a light, four-part texture punctuated by rests. The C-dominant-seventh and F chords all have thirds, creating two measures of sweetly ringing thirds before the *Temperaturfarben* intensifies again. The last chord of m. 31, a German sixth chord (which sounds like an F⁷ chord), transitions to the tonicization of A major. A major has significantly more *Temperaturfarben* than the preceding chords, creating a heightened sense of excitement that is emphasized with a denser, thicker texture. With this occurrence of A major, the third of the chord is no longer absent or in the voice; it is in the piano.

⁶ Youens, *Retracing a Winter's Journey*, 136.

Example 6.6: *Die Wetterfahne* 29–33

29 (laut)

Was fra-gen sie nach mei-men Schmerzen? ihr Kind ist ei - ne_ rei - che Braut.

cresc. *mf* *cresc.* *f* *p*

F₄ C⁷ F Gr⁺⁶(F⁷) A⁶ D A₄ E⁷ A

The A-major harmonies accompany the protagonist's declaration that their child is a rich bride. As the later songs in the cycle will reveal, A major is linked to the key of dreams. The heightened tension of A major is palpable. The final statement, "their child is a rich bride," implies that he is speaking of his love's parents. It seems as if they are the target of the protagonist's blame. Perhaps this is a projection in the protagonist's mind with no basis in actual reality; it may be a fabricated reason to justify his anger and self-imposed isolation. Nevertheless, if their child is already a rich bride, this implies that either a) he was in her house shortly before she was married to another, or b) much time has gone by and he is still hanging around, or has returned to, her house. Either way, it speaks to his unwillingness to live in the present and move on with his life.

Arnold Feil has commented that the tone painting and harmony of this song, as well as the previous one, is almost a type of physical portrayal of the protagonist's mood.⁷ He also links *Wetterfahne* with the previous song through the presence of F to E motion and half steps that were presented in *Gute Nacht*.⁸ I strongly agree with Feil's first point, and less so with his second. It appears to me that the purpose of this song is

⁷ Arnold Feil, *Franz Schubert: Die Schöne Müllerin; Winterreise*, trans. Ann C. Sherwin, ed. Rolf Vollmann (Portland: Amadeus, 1988), 92.

⁸ *Ibid.*, 92.

not to make obvious connections and ties to the previous song, but rather to musically depict the wild state of the protagonist's emotions. While the F to E interval certainly occurs in this song, it is not emphasized, and I doubt if the audience would have made an audible connection between the two songs because of that interval. It seems that the purpose of the half and whole steps is the creation of ever-changing tonal color rather than a link to the previous song. The F to E motion is a manifestation of what Everett has identified as the grief motive in *Winterreise*.⁹ This motive is not linked to specific pitches, but rather to the ornamentation of the fifth scale degree through semitone motion. The motion of this semitone motive may invoke grief, but it is the different sized intervals in well temperament that highlights the poignancy or intensity of the grief.

3. *Gefror'ne Tränen* (Frozen Tears)

F minor, cut time, *Nicht zu langsam* (not too slow)

The piano accompaniment for *Gefror'ne Tränen* is largely onomatopoeic. The song opens in F minor with alternating F-minor and C-major staccato block chords followed by accented half-note Cs evoking the sounds of both walking and teardrops. F minor is a key of high contrast with an overall purity ranking of six out of the twelve minor keys. The difference in purity between the C major and F minor chords is not overly apparent because the short duration of the chords minimizes the ringing and beating. At the anacrusis to m. 4 a D \flat -major chord sounds (the VI chord) and begins a musical progression that is striking in well temperament. The left hand piano notes

⁹ Walter Everett, "Grief in *Winterreise*: A Schenkerian Perspective," *Music Analysis* 9, no. 2 (July 1990): 157.

descend while the inner voices in the right hand move chromatically (see Example 6.7). D \flat ranks sixth out of seven in the sizes of major triads in terms of purity; the chord has a tense energy to it. Although the third of the D \flat major triad is highly colored, the fifth is pure at 702 cents. When the fifth of the chord is raised from A \flat to A on the second beat of m. 4, the chords sound as if they are being stretched out. The beating of the D \flat -augmented chord over a C in the bass sounds unsettling and suspenseful.

Example 6.7: *Gefror'ne Thränen*, mm. 1–7

The musical score for Example 6.7 consists of two systems of piano accompaniment. The first system covers measures 1 through 3, and the second system covers measures 4 through 7. The key signature is G-flat major (three flats). The time signature is 3/4. The score includes dynamic markings such as *pp* and *fp*. Chord symbols are provided below the bass line for each measure. The word "Ge-" is written under the final measure of the second system.

The measure moves through a B \flat -minor and B \flat -minor-half-diminished seventh chord before arriving on an E \flat -major-minor-six-five chord in m. 5. As with the change of the D \flat -major to D \flat -augmented chord, this change shows how Schubert altered chord tones to incrementally increase the tension of the passage. B \flat minor (along with D \sharp minor) is the most highly colored minor triad; the seventh added to it in the next beat

only adds to the chord's color and tension. The entirety of m. 4 sounds extremely fraught; when E \flat - and A \flat -major sonorities occur in the following measure, they sound animated, as if something or some idea has suddenly come to light. Yet, in m. 6 the piano plays a descending diatonic melody that ascends at the end, leading to a half cadence on C, which sounds subdued compared to the tension and edge present in the previous measures. Throughout this short introduction, chords of different *Temperaturfarbe* have been contrasted, musically depicting the vacillation of the protagonist's emotions.

The voice enters and sings over a repetition of the piano introduction with slight alterations. The protagonist observes that frozen teardrops are falling from his cheeks, and that he has not realized that he has been crying. The alignment of harmony and text implies that the C-major to F-minor section depicts the protagonist's objective observation (that he is crying) and the D \flat -major to B \flat -minor followed by A \flat -major section underscores his realization and astonishment that he had not noticed his own tears. A fourth C-major to F-minor chord progression is added in m. 10 to extend this tonality throughout the protagonist's first two lines. When the accompaniment reaches the alternation of E \flat -major and A \flat -major chords that was originally presented in m. 5 of the introduction, the harmonies are extended so that they last from m. 13 to m. 19, creating the sense of a repeated V⁷-I progression in A \flat major that continues through most of the interlude. A \flat major is ranked eighth out of the twelve major keys in purity, which is a similar intensity as the home key of F minor, but there is much less contrast than in the V-I progression in F minor.

At m. 20 the mood of the song darkens as the tessitura of the accompaniment and the vocal line shift downwards to repeating octave Cs and Dbs in the piano. The protagonist is addressing his tears and asking them why they are so tepid that they turn to ice. The harmony in this section is sparse in texture, evocative of the barren winter landscape, and unexpectedly dissonant, depicting the disconnect between the protagonist's mental awareness and the physical manifestation of his grief. The last chord of m. 22 is an Italian sixth chord that is contrasted with the following C-major chord, which is followed by a half cadence (b^{o7}-C) in mm. 23 and 24 (see Example 6.8). From the C-major chord emanates a rising melodic line in octaves between the voice and piano in which the E^b of the key signature returns.

Example 6.8: *Gefror'ne Thränen*, mm. 20–28

The musical score for Example 6.8 consists of two systems of music. The first system covers measures 20 to 22, and the second system covers measures 23 to 24. The vocal line is in the upper staff, and the piano accompaniment is in the lower staff. The key signature is three flats (B-flat, E-flat, A-flat), and the time signature is common time (C). The lyrics are written below the vocal line. The piano part includes dynamic markings of *pp* (pianissimo) in measures 20 and 21. Chord symbols are provided below the piano part: It⁶, C, b^{o7} in measure 22; C, F^{b6no5}(It⁶), E^b, d^{o7}, E^b in measure 23; and C in measure 24.

20
 Ei Trä - nen, mei - ne Trä - nen und seid ihr gar so
pp *pp*
 It⁶ C b^{o7}

24
 lau, daß ihr er - starrt zu Ei - se, wie küh - ler Mor - gen - tau?
 C F^{b6no5}(It⁶) E^b d^{o7} E^b

$E\flat$, the VII of the home key, is the new temporary tonal center. $E\flat$ is a moderately colored key, containing the same sized major third as an equal tempered third. The octave $F\flat$ s on the last beat of m. 25 imply the new tonal center as upper neighbor tones, and they occur again on the third beat of the following measure as part of an Italian sixth chord. The color of this passage is derived mainly from chromaticism, seventh chords, and the augmented sixth chord rather than the tonicized $E\flat$ major.

The third stanza begins a section in the relative major. The protagonist remarks that hot tears are bursting forth as if they wanted to melt the winter's ice. The texture of the accompaniment changes as the quarter-note rests begin to disappear around m. 30, depicting a change from staggered tear drops to a steady flow of tears (see Example 6.9). Again the protagonist seems to be in awe of his tears; he addresses them as if they did not originate from him, as if they have a mind of their own. It is as if he admires the tears for trying to melt away his figurative frozenness.

In m. 34, an A-diminished-seventh-chord over a descending bass line leads in the following measure to the Neapolitan chord of the home key, $G\flat$ major. Along with its enharmonic equivalent $F\sharp$ major, $G\flat$ major is the most highly colored major key in Young's well temperament, and it is emphasized in this passage through the use of its dominant seventh chord, $D\flat^7$. There is an audible roughness and tension present in this passage. The $G\flat$ -major harmony accompanies the words "Als wolltet ihr zerschmelzen / Des ganzen Winters Eis" (as if you would melt the entire winter's ice). This is one of the most intense moments of emotional expression for the protagonist. The protagonist is in a state of both physical and emotional winter. He has been crippled by his lost love, and

Example 6.9: *Gefror'ne Thränen* mm. 33–39

33
heiß, als woll - tet ihr zer - schmel - zen des
gan - zen Win - ters Eis, des gan - zen Win - ters Eis, ihr

36
gan - zen Win - ters Eis, des gan - zen Win - ters Eis, ihr

Ab^{add}F Ab⁶ c^{no 5} a^{0 2} 4 3 6 Gb⁶ fz

Db⁷ fz Gb⁶ fz Gr⁶ f⁴ bb⁷ f⁴ C a^{0 7} p

like the frozen ground, he is unable to be fruitful. F minor returns with the repetition of the last line of the stanza; it seems to signify the protagonist's realization that it is impossible to melt the ice with his tears, both figuratively and literally. The entire stanza repeats once more with the same harmony. The final repeat of the last line is marked "stark," and the voice remains in a high register. The song ends with a repeat of the introduction; the protagonist's emotional state has not changed.

4. *Erstarrung* (Congealment)

C minor, Common time, *Ziemlich schnell* (Fairly quickly)¹⁰

Erstarrung is usually translated as "numbness," but there may be translations better suited for this song. The protagonist is torn by the knowledge that his pain is the only thing he has left of his former relationship, and that if his pain ceases so will the

¹⁰ The original tempo indication was *Nicht zu geschwind* (not too fast).

memory of his beloved. *Erstarrung* also translates to setting, solidification, or congealment. The protagonist is faced with a decision here: does he try to move on, work through his pain, and let the memory of his beloved fade, or does he cling to the pain and the memory and never move forward? Does he choose to solidify his current emotional state for perpetuity?

Erstarrung is in ABA' form, and like any song that is not through composed, it has less direct connection between the lyrics and the *Temperaturfarben* for the sections where multiple lyrics share the same music. Due to its form, this song, even more so than the ones before it, reflects a circular nature to the protagonist's feelings; he finishes in the same state in which he began. The protagonist is repeatedly showing his unwillingness to work through his feelings, trying instead to hang onto his beloved's frozen image in his heart.

Erstarrung opens in C minor with eighth-note triplet figures in the right hand over quarter notes in the left. The left hand has a melodic line that presents an up and down motion every two bars as the right hand gradually descends until the voice enters at m. 7. C minor is a moderately colored minor key, ranking fifth out of twelve minor keys, and it is a low contrast key. C minor is also a key in which the tonic is slightly more colored than the dominant, and as a result the dominant does not create as much forward motion and tension. The moderate nature of the key paired with the rapid delivery of notes creates an overall mood that depicts a consistent level of agitation.

When the voice enters, it does so before the completion of the V-I cadence that ends the introduction. This speaks to the urgency with which the protagonist is searching

for any physical trace of his relationship with his beloved, although he knows it is in vain because no footsteps, flowers, or other mementos are present, just snow and frozen ground. The introduction and the first stanza of the song are largely diatonic; the moderate color of the key implies that the protagonist is not feeling an intense pain or emotion at this moment but is following an instinct to walk and search for mementos of his love.

The first swell of emotion occurs with the repetition of the last two lines of the first stanza, in which the protagonist recalls how he and his love walked arm-in-arm through the green meadows. As the protagonist lingers on the memory in m. 21–23, A \flat - and B \flat -sonorities are emphasized as E \flat major is tonicized (see Example 6.10). The A \flat - and B \flat -sonorities increase the tension of the song, and they depict the bittersweetness of the protagonist's memory; the happy feelings that he remembers are tinged with his longing and sorrow.

The second verse returns to minor beginning in m. 25, but it is G minor instead of the tonic minor. The key change is accompanied by a mezzoforte dynamic marking, the loudest dynamic in the song thus far, and a change in the musical texture; both of these changes highlight the change in *Temperaturfarben* of this passage. Overall, G minor is a slightly less colored minor key than the tonic C minor, but this passage emphasizes the second inversion D-dominant-seventh chords and F \sharp -diminished-seventh chords in mm. 26–27. The greater dissonance of diminished chords depicts the protagonist's increased emotional fervor; he is not just looking for traces of his former love anymore, but he is yearning to kiss the ground and melt away the snow with his hot tears in his desperation.

Example 6.10: *Erstarring*, mm. 19–23

19
Spur, wo sie an mei - nem

21
Ar - me durch - strich die grü - ne Flur

c c B^{b6} A^{b6} E^{b4} A^b E^{b4} B^b E^b

This section also has octaves in the right hand of the piano that emphasize the melodic elements of the key; since the G-minor scale does not have any pure intervals it sounds a bit grim.

C minor returns as the predominant tonality at the end of m. 28 before the second verse is completed, but like the first stanza the second repeats with more colorful harmony. Mm. 34–39 are comprised primarily of alternating B-diminished-seventh and D-half-diminished-seventh chords that add *Temperaturfarben*, building up towards the repetition of the stanza.

The shift to the third stanza in m. 47 is accompanied by the submediant A^b major, which is highlighted by a pianissimo dynamic marking and a change in the texture of the accompaniment: both hands of the piano are now playing triplets. Mm. 47–51 are limited

to I and V⁷ in A \flat major; by tonicizing the submediant instead of the dominant or the relative major more *Temperaturfarbe* is added to the passage. The tonicization of A \flat major may be linked to the flowers and green grass that serve as bittersweet mementos of the joyful times in his relationship.

In m. 52 the protagonist shifts from looking for flowers and grass to declaring that they are dead. In mm. 55 Schubert used *Temperaturfarben* to word paint. A measure of forte-piano arpeggiated C-major chords harmonizes the word “blass” (pale) (see Example 6.11). Schubert’s intention to word paint through *Temperaturfarben* seems quite clear, especially since this is the only C major chord that appears in the whole song, and it is part of the B section and thus not linked to any other word or words. The measure of C major sounds like a slight easing of emotion, but it ends up emphasizing, through contrast, the color of the first to second inversion A-diminished-seventh chord that follows in another swell of emotion.

Example 6.11: *Erstarrung*, m. 55

The musical score for Example 6.11, *Erstarrung*, m. 55, consists of a vocal line and a piano accompaniment. The key signature is A-flat major (three flats) and the time signature is common time (C). The vocal line begins with a whole note chord, followed by a fermata. The lyrics "blass, die" are written below the vocal line. The piano accompaniment features a C⁶ chord (C major with a sixth) and four triplet arpeggiated chords. The dynamic is marked *fp* (forte-piano). The score is numbered 55 at the beginning.

At the anacrusis to m. 56 the protagonist repeats the third and fourth lines of the stanza before repeating lines one and two, which is a different pattern from what is found in previous stanzas. The repetition of “Die Blumen sind erstorben, / Der Rasen sieht so blaß” (The flowers are dead, The turf is so pale) is accompanied by an elongated first-to-second-inversion A-diminished-seventh chord in m. 56–57 before the harmony begins to transition back to C minor via a tonicization of A \flat major with the repetition of lines one and two. In m. 59 the left hand of the piano begins to sustain notes starting with middle C and steadily moving downwards, first single notes and then octaves. The sevenths and diminished chords in this section create a sense of anticipation as the chords transition to the tonic C minor.

Stanzas four and five repeat the music of stanzas one and two, and in both cases the second of the two stanzas is the one with the greater emotion. In the fourth stanza that begins at m. 64, the protagonist is easing back from his emotional episode and beginning to frankly acknowledge the reality of the situation. His physical pain is the only memento he has. There is no more recollection; the protagonist’s mood has returned to that of the first stanza; he acknowledges that he is looking in vain for mementos. He is not ready to give up his grief for fear of forgetting.

The final stanza embodies the essence of this song, repeating the accompaniment of the second stanza with slight variation at the end. The protagonist states: “Mein Herz ist wie erstorben, / Kalt startt ihr Bild darin; / Schmilzt je das Herz mir wieder, / Fließt auch ihr Bild dahin!” (My heart is as if dead, her image frozen within it; if my heart ever

thaws again, her image will also melt away!).¹¹ The protagonist has a choice to make: let go of his pain and her memory, or hold on to both. This may be the point in the cycle where the protagonist takes charge of his own destiny and future pain. We are not informed of his choice, but the rest of the cycle implies that he has chosen to hold onto the memory of his beloved and thus solidify his state of pain and grief.

Youens has stated that “the realization of futility, the displacement of deluded imagination by reason and relativity, occur in major mode....”¹² I disagree. The protagonist never gives the impression of being unaware of the futility of his actions. He does not seem to get caught up in his imagination; instead he consciously partakes in an activity that he knows is futile because his strongest desire at the moment is to have some memento of his relationship. His love for her and his pain are forever linked, and he knows that he cannot get rid of one without getting rid of the other. The major tonicizations are not linked to specific words or events that represent a return to reality. The major sections are more closely related to the protagonist’s reminiscences of his love and formerly happy relationship. Since the love he feels is not dead, when it swells within him it first evokes joy, which is followed by the pain of knowing that his relationship is over.

¹¹ In Schubert’s setting he used the word “erstorben” (dead) instead of Müller’s “erfroren” (frozen).

¹² Youens, *Retracing a Winter’s Journey*, 147.

5. *Der Lindenbaum* (The Linden Tree)

E major, 3/4 time, *Mässig* (Moderate)¹³

The fifth song of the cycle is the first to begin with a happy mood. The song opens with triplet sixteenth notes in the right hand of the piano and open fifths in the left hand. E major is a highly colored key, ranking ninth of twelve major keys, but its color is softened in the opening measures because the root and fifth sound for all of mm. 1 and 3 and the third is placed in the rapidly moving triplets in the right hand, thus emphasizing the most pure interval in the triad. In Young's well temperament the fifth from E to B is only two cents narrower than pure. Nevertheless, E-major *Temperaturfarben* is one that evokes excitement and brightness.

The first four measures of the introduction are very bright and peaceful. The right-hand triplets gradually move downwards, and some expressive chromaticism and chords like the highly colored C#-major chord also appear in m. 5. The color in this section does not come off as harsh or tense, but rather like a swell of emotion. The arpeggiation prevents the chords from truly beating and being distressing.

In mm. 7–8, the two measures preceding the voice's entrance, the texture changes, and two horn calls sound. They both end on and emphasize the fifth between B and F#, which is two cents shy of pure. When the voice enters at the anacrusis to m. 9, the texture of the accompaniment changes to a more hymn-like texture. In the first stanza of the poem the protagonist speaks of the linden tree and how he dreamed in its shade. These thoughts are supported predominantly by tonic-dominant harmonies. The color of

¹³ The original tempo indication was *Mässig langsam* (Moderately slow).

the chords rings out because of the longer note values. The larger sized thirds in the E- and B-major triads add tension to the passage, which gives it a sense of edginess.

At the anacrusis to m. 17 the protagonist begins to sing about carving in the tree's bark and being drawn to it in happiness and sorrow. In mm. 17 an F#-dominant-seventh chord is followed by a B dominant seventh; F# major is the most highly colored major triad, and the seventh scale degree adds even more color to the chord. The tension is conveyed through a sense of excitement; the music feels like something is about to happen.

The tension of the highly colored chords builds up to the change of mode to E minor at m. 25, at which point the music of the introduction returns in the parallel minor. When the voice enters at the anacrusis to m. 29 a new rocking figure is heard in the accompaniment. Both hands of the piano are playing primarily in unison with the exception of the downbeats of some measures where the left hand plays the root and fifth of the chords while the right hand plays the third and fifth (see Example 6.12). This change accompanies the words of the third stanza, which reflect a change from thinking about the distant past (how the tree was a witness to life with his beloved) to the recent past (walking by it in the dark, just today).

E minor is one of the purest minor keys harmonically because its intervals are not as tempered as other minor keys, but it does not have any pure intervals. Mm. 29, 30, and 32-34 begin with a harmonic E-minor chord that lasts for one eighth note of the first triplet, and the melodic do-re-me-sol-me in octaves in the piano that follows the E-minor chord sounds much like equal temperament, with me seeming a bit high (Young's

Example 6.12: *Der Lindenbaum*, mm. 28–36

28

Ich muß' auch heu - te wan - dern vor - bei in tie - fer

pp

B e e B⁴ f[#]₃⁴⁼⁶ B⁷

32

Nacht, da hab ich noch im Dun - keln die Au - gen zu - ge-macht. Und

e e e B⁴ f[#]₃⁴⁼⁶ B⁷ e

temperament re is the same size as in equal temperament, but me is 6 cents wider than equal temperament). Since the majority of the harmonies are presented horizontally and not vertically, there is little beating of chords in this section. The result is a sad, solemn lullaby evoked by the rocking figuration.

In the fourth stanza, which begins at the anacrusis to m. 37, the protagonist continues to recall his experience with the tree that day. He tells of how the tree rustled as if calling to him and offering him rest. The home key of E major has returned; the vocal line is identical to stanza two (mm. 16–24), but the piano figuration and harmony have changed. The accompaniment maintains the rocking motion with ascending triplets and a descending dotted rhythm. There are no F#-major harmonies tonicizing the dominant; the harmony has returned to the basic V-I in E major. Here, the

Temperaturfarben of E major is used more to create dramatic tension rather than depict emotional turmoil. The tree is presenting the protagonist with a way to end his pain. Although E major has not been linked to any specific extra-musical meaning in *Winterreise*, it evokes the ending of *Die schöne Müllerin* where the miller achieves consolation in death through the brook in the same key. Schubert may have been alluding to a previously established key association.

M. 45 has the same figuration as the introduction and interlude, but the harmony has returned to E minor and implies a storm rather than a pleasant dream. This section contains much chromaticism and emphasizes I, V, and VI. The purity of the VI chord, C major, functions much like white paint used by an artist as an accent color to make the main colors pop. Since C major is the least colored of any major chord, it accentuates the colors of the other chords surrounding it. The protagonist is still recalling the recent past; he is speaking of how the winter wind blew into his face, yet he did not turn around to return to and seek solace in the linden tree.

The song transitions back to the home key of E major beginning at m. 53. The *Temperaturfarben* eases when, as in the introduction, the B-major chord has its third omitted in mm. 57–58. The wanderer has finally reached the present. He speaks of how he is now many hours away from the tree but can still hear it rustling the message “there you would find rest.” The accompaniment, while having returned to the home key of E major, is most similar in figuration to the E-minor section beginning at m. 29. While the piano is still mostly playing in octaves, the harmony is different. In the E-minor section the E-minor chord was the only vertical harmony, and it occurred at the beginning of

many measures in the section. In this passage, E major sounds at the beginning of many measures, but its root is held through the entire measure, creating a pedal against which the upper lines, doubled in octaves, can beat (see Example 6.13). The chord is not voiced completely at the beginning of each measure; instead, only the root and third sound, emphasizing the color the major third in the E-major chord. There is again an emphasis on V-I harmonies in E major, and the song ends with a repetition of the phrase “du fändest Ruhe dort” (you would find peace there).

Example 6.13: *Der Lindenbaum*, mm 57–62

The musical score for Example 6.13, 'Der Lindenbaum', measures 57–62, is presented in E major and 3/4 time. It consists of a vocal line and a piano accompaniment. The vocal line begins at measure 57 with the lyrics: "Nun bin ich man-che Stun - de ent-fernt von je-nem Ort, und". The piano accompaniment features a prominent pedal point on E in the bass line, which is held throughout the measures. The piano part includes dynamics such as *fp* and *ppp*, and articulation like accents and triplets. The chord progression is indicated below the piano part: B^{7no3}, B^{7no3}, E, E, B⁷, E.

Throughout the song, the protagonist has been addressing a specific linden tree that has been a witness to his relationship. He specifically says that he passed the tree today, which implies that he has not ventured far from his beloved’s house and the places that they frequented together. With the last stanza of the song the protagonist remarks that he is hours away and yet he can still hear it whispering. He is finally moving away from the town in which his beloved lives, but he is also moving away from the one thing that was offering him rest through death. In *Die schöne Müllerin*, E major is the key that depicts death and the miller’s escape from his heartache through death in the brook. The

linden tree also offers an escape and solace in death, but the wanderer does not choose to escape his pain; rather, he decides to hold onto it.

6. *Wasserflut* (Flood Water)

E minor (originally F# minor), 3/4 time, *Langsam* (slow)

Wasserflut is in strophic binary form (verses one and three have the same music, as do two and four). It was transposed from F# minor in the manuscript to E minor in the engraver's copy. The main changes in *Temperaturfarben* that result from the transposition are as follows. The contrast of the song increases: the original key is classified as a key of medium contrast, and the transposed key is classified as having the highest contrast. The purity of the tonic changes from a ranking of five out of six to a ranking of one out of six. The major dominant chords of both keys have the same rank: sixth out of seven in purity. The overall purity of the song increases dramatically. The song changes from a key with a purity ranking of nine out of twelve to one with a ranking of three out of twelve.

Transposed, *Wasserflut* better fits into the new emotional trajectory created with the addition of the twelve songs of part two. It has a new relationship with the previous song; it becomes closely related to the E major–minor dichotomy of *Der Lindenbaum* and thus maintains the current emotional state of the protagonist as established by the previous song instead of advancing him to a new emotional level. The cycle now has eighteen more songs that follow instead of the original six, and it is highly plausible that

Schubert would have wanted to prevent an emotional peak that was too early. The new key contains more contrast, depicting more of a struggle with feelings.

Wasserflut and the preceding songs are linked by the protagonist's tears. In the second song he cries tepid tears without knowing it, and by the time we arrive at *Wasserflut* his tears are abundant and hot. The song opens with alternating I and V $\frac{3}{4}$ harmonies with block chords in the left hand of the piano and a rocking melody in the right hand created through ascending eighth-note triplets and a descending dotted quarter note to an eighth note (see Example 6.14). This figure is reminiscent of sections of *Der Lindenbaum* (see Examples 6.12 and 6.13); the similarities in figuration illustrate that Schubert had already linked these two songs before the change of key. It is highly plausible that Schubert wanted to strengthen the link between these two songs when he chose the new key of E minor.

Example 6.14: *Wasserflut*, mm. 1–4

The musical score for Example 6.14, *Wasserflut*, measures 1–4, is presented in E minor, 3/4 time. The right hand (RH) plays a rocking melody consisting of an ascending eighth-note triplet (E4, F4, G4) followed by a dotted quarter note (G4) and an eighth note (F#4). The left hand (LH) plays block chords: e, B $\frac{3}{4}$, e, B $\frac{3}{4}$, e, B, B $\frac{7}{4}$, e. The first measure has a fermata over the right hand. The second measure has a fermata over the left hand. The third measure has a fermata over the right hand. The fourth measure has a fermata over the left hand.

When the voice enters it takes over the rocking figure that was in the right hand of the piano, which now plays close-position chords that evoke the sound of a labored, slow march. The voicing of the chords accents their *Temperaturfarben* because the third and root are in close position, causing the beating to be more prominent. The first

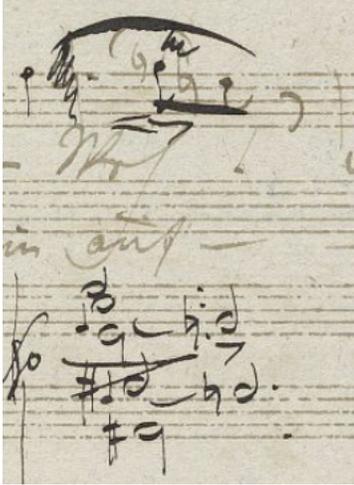
harmony other than V, V⁷, or I occurs at m. 12 (see Example 6.15). The harmony appears to be guided by the lyrics of the first verse; on the word “Weh” (grief) of “Seine kalten Flocken saugen / Durstig ein das heiÙe Weh” (Its cold flakes thirstily absorb my burning grief), an E-dominant-six-five progresses to a G[#]-diminished-seventh chord. In both the original and the transposed key, this chord will be strongly dissonant because of the suspensions that clash before moving to a diminished-seventh chord, which is dissonant in any key.

Example 6.15: *Wasserflut*, m. 12

The musical score for Example 6.15, m. 12, consists of a vocal line and a piano accompaniment. The key signature is D major (two sharps) and the time signature is 3/4. The vocal line begins with a half note G4, followed by a quarter note A4, and a quarter rest. The piano accompaniment starts with a forte (*fp*) dynamic and a crescendo. The right hand of the piano plays a chord of E9 (E, G, B, D, F) and the left hand plays a chord of g[#]o7 (G, B, D, F, A, C). The chords are labeled as E₉ and g[#]o₇ below the piano part.

Schubert changed the voicing of these chords when he transposed the song, making them less dissonant than they were in his original draft. This is further indication that he wanted to relieve some of the tension that he had built into the cycle to better accommodate part two. Schubert removed two accent marks and the bottom-most note in the right hand of the piano, which was a doubling of the seventh (see Example 6.16).

Example 6.16: *Wasserflut*, m. 12 in autograph. Used with permission from The Pierpont Morgan Library, New York. CARY 215. Photography by Anthony Troncale.



However, the beating of two notes a second apart will beat stronger than notes a ninth apart. Schubert's choice to lessen the dissonance of this chord is consistent with the change of key; both choices alleviate some of the dissonance of the song.

The song's introduction returns as the interlude between stanzas one and two, but it surprisingly cadences on III (G major) instead of i in m. 18. In m. 17, the voicing of the E-minor chord expands upwards before the following full measure of G major. The relative purity of the G major sonority seems to anticipate the second verse, which is involves the pleasant image of grass sprouting up in the spring.

The second and fourth stanzas are primarily in the relative major, but the diminished seventh chord used to begin these verses adds a melancholy element to the major section. In both the original key and the transposed key, the major dominants have the same purity ranking, so these verses sound similar in either key. The major harmony for verses two and four matches the sentiment of the stanzas; in verse two the protagonist is speaking of spring, and in the final stanza he speaks of his tears passing by his

beloved's house. Both of these subjects bring with them some of the happiness and hope associated with major, but there is also a bittersweet element that causes the verses to come back to minor at the end.

The last two lines of the final stanza are “Fühlst du meine Tränen glühen, / Da ist meiner Liebsten Haus” (When you feel my tears glow, there is my sweetheart's house). The ending of the song seems to be written with the final verse in mind. Youens has said of this final verse, “Lest he forget and his heart freeze in the emotional death he dreads, he will send his grief back to its source for renewal.”¹⁴ I agree that he is seeking to maintain his grief, but I contest that he does not fear emotional death. The protagonist's heart is already frozen with the memory of his love locked within. His unwillingness to love again, or even to interact with other humans again, is in itself a state of emotional death that he will do whatever he can to maintain.

7. *Auf dem Flusse* (On the River)

E minor, 2/4 time, *Langsam* (slow)¹⁵

Auf dem Flusse is in E minor; since the previous song was transposed to E minor, this is the last song in a three-song E major–E minor–E minor tonal grouping. The music of *Auf dem Flusse* is very closely related to the text. The introduction (marked staccato) evokes the sounds of walking with the left hand of the piano playing eighth notes on the first half of beats one and two and the right hand playing eighth-note triads in close

¹⁴ Youens, *Retracing a Winter's Journey*, 171.

¹⁵ The original tempo indication was *Mässig* (moderately).

position on the second half of beats one and two. The introduction to the song both firmly establishes the E-minor tonality of the home key and begins to build color and tension. The first two measures consist of the E-minor tonic and the C major VI chord; the purity of the C-major chord has a fresh sound in contrast with the E-minor triads and contrasts with the F#-half-diminished-seventh and B-dominant harmonies, which sound edgy compared to C major.

In the first two stanzas, set to the same music, the protagonist is marveling at the frozen state of the river. The harmony evokes both his wonder and the stillness and quietness of the river. When the voice enters at m. 5, the protagonist sings about how the river used to be clear and rolling. The notes of the bass line are in octaves with the vocal line for significant portions of the composition, drawing a parallel between the emotional state of the protagonist and the physical state of the river. E-minor harmonies alternate with B-major chords with four-three suspensions that evoke a sense of puzzlement. The first non-diatonic harmony occurs at m. 9 as the protagonist sings to the river “Wie still bist du geworden” (How quiet you have become). The dynamic marking changes to *pianississimo* and the words “Sehr leise” (very quiet) appear (see Example 6.17).

Mm. 9–10 are harmonized solely by D#-minor chords. Scholars have found this chord choice difficult to explain within the parameters of traditional functional harmony; it is a distant key and an unusual choice, one that was, in my assessment, motivated by *Temperaturfarben*. In all well temperaments, the minor third of the E-minor chord is significantly smaller than the minor third of D# minor. In Young’s well temperament, the minor third of an E-minor triad is 10 cents narrower than a pure third, and the minor third

Example 6.17: *Auf dem Flusse*, mm. 8–14

sehr leise

Fluß, wie still bist du ge - wor - den, giebst kei - nen Schei - de -

gruß! Mit har - ter, star - rer

Chord symbols: B⁴ - 3 B d#₄ g#⁷ d#₄ A#⁷ d# d#^o B B⁷ e₄ B⁴ - 3 e

of a D#-minor triad is 22 cents narrower (an equal tempered third is 16 cents narrower than a pure third; it lies halfway in between). The G#-minor-minor-seventh chord that follows the D#-minor chord also has a narrow minor third at 20 cents narrower than pure. The narrow thirds of these two chords make the music somehow contracting, adding eeriness to the sense of stillness and quietness.

Richard Kramer has argued that the E-minor section should be perceived as an upper neighbor to D# minor.¹⁶ D# minor undoubtedly has a relationship to the tonic key, but I disagree with Kramer's view of how this key would be perceived by the listener. When the song is played in well temperament, the unique character of each chord comes

¹⁶ Richard Kramer, *Distant Cycles: Schubert and the Conceiving of Song* (Chicago: University of Chicago Press, 1994), 153–154. Kramer has noted that the original autograph shows that Schubert originally wrote D# as E^b, which further downplays the conception of D# as subordinate to E minor. I do not think that the notation matters; while the spelling of the chord is important in a conceptual way, the *Temperaturfarben* of the chord is the same regardless of how it is spelled.

out, and there is more to major and minor chords than their relationship to one another in regards to pitch level. Schubert chose to contrast one of the purest minor chords in well temperament with one of the most highly colored minor chords in order to better depict a dream-like stillness and create the appropriate atmosphere.

After the second stanza, the music of m. 13 (shown in Example 6.14), is modified so that it incorporates E major instead of E minor and ushers in a change of mode to E major for the following two verses. In verses three and four, the protagonist sings of inscribing into the ice the name of his sweetheart with the date they met and the date they parted, all encompassed by a broken ring. The E-major tonality, paired with the change in the accompaniment to solid sixteenth notes for the last half of every measure, creates an atmosphere of ceremony and excitement. The E-major harmony is linked to the happiness the protagonist feels at the thought of his beloved, which is apparent through the protagonist's language: in the third stanza he refers to the girl affectionately as "Liebsten," not the less personal and objective "Das Mädchen" that he used in *Gute Nacht*.

The more highly colored chords in these verses depict a swell of love and longing rather than pain or loneliness. The phrase "meiner Liebsten" is harmonized by B-minor, C#-major, and D-major chords (see Example 6.18). D major, which in m. 28 is functioning as the IV⁶ of the tonicized A major triad, is historically associated with triumph, and the more highly colored chords create a tension that seems to arrive at the D-major chord on the "Lieb" of "Liebsten." The D-major chord is followed by a more

highly colored $E\flat_7$ chord, but the third of the chord is omitted, leaving only the tension of the seventh.

Example 6.18: *Auf dem Flusse*, mm. 27–28

27

Na - men mei - ner Lieb - sten und

E^6 b_4 $C\#^6$ D^6 E_7 A

In the fourth stanza the protagonist continues to be engrossed in his activity of carving details about his sweetheart into the frozen river. The harmony largely remains the same, but the accompaniment changes from four sixteenth notes on the last beat of every measure to two sets of triplet sixteenth notes. This change in accompaniment evokes a greater sense of excitement and concentration.

Mm. 38–39 transition back to E minor and are followed by a beat and a half of rest before the music for the final stanza begins at the anacrusis to m. 41. The words of the last stanza comprise the remainder of the song, which is only about halfway over. It reads:

Mein Herz, in diesem Bache
Erkennst du nun dein Bild?
Ob's unter seiner Rinde
Wohl auch so reiend schwillt?

My heart, in this stream
Do you now recognize your own image?
Does it appear that under its crust
There is also a raging torrent?

The rhythm of the accompaniment has again changed and seems to intensify as the song progresses. The left hand of the piano changes to a rising and falling bass line with dotted eighth notes and sixteenth notes, which David Lewin has likened to the river that flows underneath the frozen top layer.¹⁷ The harmony of this section begins much like that of verses one and two with E-minor harmonies alternating with B-major chords with four-three suspensions. The condensed-sounding D#-minor harmonies heard in the first two stanzas return, emphasized further by an octave drop in the left hand of the piano. The piano descends to the lowest depths of the song's tessitura when it plays the lowest note of a root-position G#-minor seventh chord in m. 46 (see Example 6.19). When the protagonist finishes asking his heart if it recognizes his own image in the stream in m. 47, the D#-minor chord changes into a D#-major chord, setting up the tonicization of the highly colored G# minor that will follow. D# minor is the most highly colored minor triad in Young's well temperament, and G# minor is ranked eleventh out of the twelve minor keys.

The D#-minor chord seems to transform to major as the protagonist's own awareness transforms. The D#-major chord tonicizes G# minor for mm. 47–51, emphasized by a crescendo to forte in m. 47. The G#-minor triad has a narrow minor third, second only to triads built on D# and Bb, and again creates the sense of pressure. G# minor is the second to last out of minor keys in degrees of purity. The tonic and dominant are two chords that most influence the color of any given key, and the above passage focuses on dominant-tonic progressions.

¹⁷ David Lewin, "Auf Dem Flusse: Image and Background in a Schubert Song," in *Schubert: Critical and Analytical Studies*, ed. Walter Frisch (Lincoln: University of Nebraska Press, 1986), 144.

Example 6.19: *Auf dem Flusse*, mm. 44–51

44

Ba-che er-kennst du nun dein Bild? Ob's un-ter sei-ner

ppp *cresc.*

B $d\sharp^4$ $g\sharp^7$ $d\sharp^4$ $A\sharp^7$ $d\sharp$ $D\sharp$ $g\sharp$

49

Rin-de wohl auch so rei-ssend schwillt

f

$D\sharp^4$ - 3 $g\sharp$ $D\sharp^4$ - 3

The suspensions in the $D\sharp$ -dominant chord add even more tension and color to the passage. In mm. 48–49 the voicing of the $G\sharp$ minor chord and the $D\sharp$ -major-sustained four chord contain two common tones, creating a level of consistency in the mood that is created: one of tense forcefulness, which is emphasized by the accompanying forte dynamic markings.

The tonicization of $G\sharp$ minor has been the focus of great musicological attention. Schenker has largely ignored the $G\sharp$ in his well-known graph of song.¹⁸ David Lewin has noted that the $G\sharp$ bass note in m. 48 can fit into the context of an E-major tonality, linking

¹⁸ Heinrich Schenker, *Free Composition*, trans. Ernst Oster (New York: Longmans, 1979), 4, Fig. 40-2. With Schenker's graph, $G\sharp$ minor is not presented as relating to E minor or E major, but rather it can be viewed as dividing the fifth between the tonic and the dominant into thirds.

the passage to the optimism of E major.¹⁹ Anthony Newcomb disagrees, noting that there is no point in the songs where a mediant relationship between G# minor and E major is established or suggested.²⁰ I agree with Newcomb. The *Temperaturfarben* created by the G#-minor chord would not create an aural link to E major or E minor harmony, but rather would be heard as a highly colored, striking minor sonority; the narrow third brings a palpable intensity to the chord.

The aforementioned harmonies underscore the last two lines of the poem in which the protagonist asks his heart if it recognizes its own image in the river and if it too has a raging torrent underneath. The protagonist is alluding to his own feelings of love for his beloved that are bubbling beneath the surface, waiting to burst forth and shatter him, as the flowing waters break up the surface ice in the spring. Even the accompaniment evokes sounds of stirring with the right-hand figures that alternate the full chord with one of its chord tones, as if the bass line is dangerously close to breaking through the surface. In m. 52 the note D# belongs to a D#-diminished-seventh chord, again returning the listener to E minor. The final stanza repeats, but this time the music stays in E minor.

David Lewin has argued that the two questions asked in the last verse are literal rather than rhetorical, with the word “Rinde” used to mean both the frozen crust of the river and the heart’s cortex.²¹ Anthony Newcomb strongly disagrees, noting that the

¹⁹ Lewin, “*Auf Dem Flusse*,” 136. Optimism is Lewin’s characterization of E major; I have identified E major as linked to the happiness that the protagonist feels when thinking of his beloved.

²⁰ Anthony Newcomb, “Structure and Expression in a Schubert Song: *Noch Einmal Auf Dem Flusse Zu Hören*,” in Frisch, 163.

²¹ Lewin, “*Auf Dem Flusse*,” 130.

protagonist “uses this proposed similarity [the frozen exteriors of both the river and his heart] to assert that his heart, though cold and scarred outside, is still seething beneath—that he is still warm with passion for his beloved.”²² The *Temperaturfarben* of the cycle supports Newcomb’s reading; the linking of major sonorities to present feelings of happiness and love that the protagonist has for his beloved is a concept that is central to the whole cycle. The color of the major sonorities suggests the purity of the protagonist’s happiness; more mildly colored major chords depict moments of utter joy while more highly colored major sonorities depict happiness tainted by something else such as knowledge that this happy moment is fleeting. When the protagonist appears to have a calm and still façade, emotion is ready to spring up through the cracks at the least provocation.

Auf dem Flusse is one of the songs from *Winterreise* that has gained much individual attention due to its non-traditional and varied tonal palette. As Richard Kramer states, “the chill motion between the phrase in E minor and its sequel in D# minor, much written about, is universally admired as the musical mimesis of an inner psychological stirring in the poem.”²³ The *Temperaturfarben* of these two keys further accentuate what has been attributed to these keys in equal temperament. The purity of the E minor chord adds to the “chill motion” and calm of the E-minor sections, and the intense color of D# minor adds another dissonant element to the sections of “psychological stirring.” Examining the *Temperaturfarben* of the song gives us clues as

²² Newcomb, “Structure and Expression,” 156.

²³ Kramer, *Distant Cycles*, 159.

to why Schubert chose these specific tonal centers—because of the contrast in their colors.

8. *Rückblick* (Backward Glance)

G minor, 3/4 time, *nicht zu geschwind* (not too fast)

The apparent stillness and quietness that the protagonist sang about in the previous song is gone. *Rückblick* opens with an accompaniment pattern that evokes the sounds of a storm. The left hand consists of eighth notes and the right of alternating sixteenth rests and sixteenth notes. In the first measure, the soprano and tenor lines repeat the same pitch while the alto and bass lines ascend, alternating with a measure of octaves. Tension is created through the rising action, chromaticism, the dissonance of major and minor seconds, and the rhythm. The measures solely of octaves are a way to break up the intense dissonance of the alternating measures; octaves are pure and do not beat. The resulting sound in well-tempered G minor is agitated, while in equal temperament it has a more muted effect.

As in *Der Lindenbaum*, *Rückblick* consists of different levels of time. The first and last stanzas frame the song in the present tense, the second stanza recalls the immediate past, and the third and fourth stanzas conjure up the distant past. The protagonist begins by singing about how his feet are burning and how he does not want to rest until the town is out of sight. It is difficult to know how long ago the protagonist left the village; the first stanza implies that he is continuing his departure even though his feet burn because he does not want to stop until he cannot see the spires; however, in *Der*

Lindenbaum he spoke of being hours away from a specific tree that was a witness to his life with his former beloved. How far has he travelled? Did he return, or did he not actually leave the town? Regardless, it is clear that the protagonist has not gained any geographical or emotional ground in his journey; he is still close to where he started.

The tempo of the song and the short rhythmic values place more emphasis on the overall *Temperaturfarben* of sections of the song rather than highlighting individual chords. When the voice enters at m. 11 it contains an ascending melodic line while the piano keeps the same rhythmic pattern as m. 1. With the first line of the voice the D-major dominant is tonicized through the introduction of A major at the end of mm. 12 and in 13. D major is followed by D minor, the overall purest key in Young's well temperament. The music of the first stanza paints the protagonist's determination to leave the town in the distance, which he is doing at the present moment.

At m. 17 the voice begins the second stanza right after finishing the first and is marked by an increase in *Temperaturfarben*. The E-dominant-seventh chord, the V⁷ of V in D minor, increases the tension and agitation of the accompaniment. In this stanza the protagonist speaks of the immediate past; he tells of how crows hurled ice and snow on him from every house as he exited the town. While E⁷ is a moderately to highly colored chord, this passage does not evoke strong emotions; the harmony consists primarily of major and minor chords and does not incorporate diminished, augmented, or other chords that are more traditionally associated with intense pain and discomfort. Later in the cycle, the crow will be an animal that the protagonist identifies as his closest companion; is the incident of crows throwing snow at the protagonist an event that can be viewed in a

positive light? The protagonist possibly views the crows as his one link to the sentient world, as the only witnesses to his existence.

The *Temperaturfarben* of the song change again at the anacrusis to m. 28 with the start of the third stanza. A piano dynamic highlights the key change to G major and the change in the accompaniment to octave sixteenth notes on D and single eighth notes in the left hand; the texture thins, and the sounds of storming are momentarily gone. The major mode corresponds with the protagonist's fond memories of entering the town for the first time. These memories still have the power to evoke love in him. G major is the purest sharp-major key next to C major, and it infuses the section with a sweetness that contrasts with the preceding tense D-minor section with its emphasis on A-major and E-dominant-seventh chords.

The third stanza flows right into the fourth. A shift in mood occurs at m. 40 when the accompaniment pattern returns to the rhythmic pattern belonging to the beginning of the song. The protagonist sings "Und ach, zwei Mädchenaugen glühten! / Da war's gescheh'n um dich, Gesell!" (And, oh, the two maiden's eyes glowed! Then you were done for, boy!). This phrase occurs twice, at m. 40 and 44, and both times B-dominant-seventh chords harmonize the measure that contains the word "Mädchenaugen" (see Example 6.20). B major is the most highly colored of any of the major sonorities used so far, and the seventh adds additional dissonance. The music sounds overwrought; this highly colored major chord is representative of the mix of positive and negative emotions that the protagonist is feeling; he is still feeling love, but it is mixed with anger as well.

Example 6.20: *Rückblick*, mm. 39–43

39
hell, und ach, zwei Mäd - chen-au - gen

cresc.

D D[#] B⁷

41
glüh - ten! da war's ge - scheh'n um dich, Ge - sell! und

p *cresc.*

d^{#o}₂ a^{#5} G₄ 6 4 D⁷ G

Although the B-dominant-seventh and D[#]-diminished-seventh chords imply E minor, the E-minor tonality never comes. I propose that Schubert's tonicization of E minor was primarily a means to feature the aforementioned highly colored chords. This section has the greatest amount of *Temperaturfarben* of the entire song thus far.

The original G-minor key signature returns at m. 49 as the voice begins to sing the fifth and final stanza:

Kömmt mir der Tag in die Gedanken,	When that day enters my thoughts
Möcht ich noch einmal rückwärts seh'n.	I would like to look back once more.
Möcht' ich zurücke wieder wanken,	I would like to stagger back again,
Vor ihrem Hause stille steh'n.	and stand still before her house.

The protagonist is openly admitting that the feelings that surface when he thinks of the day he met his beloved make him want to return to her. His emotions are a mix of anger, sadness, and love. When the stanza repeats at m. 58 the key changes to G major, where it

remains for the rest of the song. G major is representative of his feelings of love, which in this song, overpower his other feelings. Both the protagonist's vocal line and the piano end in the serenity of G major.

In *Rückblick*, Schubert's use of major and minor to depict different emotional states is evident, even in equal temperament. Nevertheless, when the *Temperaturfarben* of the minor and major keys he chose are examined, it is clear that the *Temperaturfarben* of the keys correspond with the type and severity of the emotion that the protagonist is feeling. Throughout this song he moves through resolve (D minor), conflict and pain (B-dominant-seventh chords and D#-diminished-seventh chords that imply, but never arrive on E minor), sadness (G minor), and love (G major).

Although in *Rückblick* the protagonist looks back in his memory to the time that he was happy with his beloved, I contend that the backwards glance to which the title refers is literal as well as figurative. This is not the only song in which the protagonist recalls the recent and the distant past, but it is the last song in the cycle in which he refers to the specific village in which he and his beloved lived and the landmarks near or in it, like the linden tree. The protagonist is moving quickly until he can no longer see the spires of the town when he looks back, and from this point on he is truly a wanderer.

9. *Irrlicht* (Will-o'-the-wisp)

B minor, 3/8 time, *Langsam* (slow)

In folklore, will-o'-the-wisp refers to the mysterious lights that would lead travelers off into dangerous situations, but the term can also be defined as a delusive or

elusive goal. In the context of this song I assert that the second definition is more apt; the protagonist is beginning to express his desire for death, and for the remainder of the cycle, he will seek and wait for it. Until this point, the protagonist has stayed close to the village in which he had lived. In the previous song he spoke of how the memory of his love compelled him to return, but in this song the protagonist speaks of a new force that compels him far away. The desire for death is what finally lures him away from where his former love lives, for he views it as his only escape from the emotions he feels.

Irrlicht marks a change in the protagonist's journey and his state of mind.

As in *Die schöne Müllerin*, B minor is associated with intense emotional suffering. Susan Youens has noted that in Schubert's output "B-minor tonality is used for songs with desolate poems."²⁴ In well temperament, B minor is an aurally striking key, largely due to it being one of the minor keys of highest contrast (the other is E minor, which is also a key associated with intense emotions and death and is tonicized towards the end of this song). The highly colored dominant creates a high degree to tension, which is released with the arrival on the plaintive minor tonic.

Irrlicht features contrasts. It begins by highlighting the high contrast between the relative purity of the tonic B minor and its highly colored major dominant, F# major. It also contrasts a sparse accompaniment evocative of slow, labored steps with faster-moving, dance-like measures, evoking the luring idea of death. The vocal line also contrasts recitative-like sections with more lyrical passages. Toward the end of the song, it contrasts the tonic minor with the pure major of its Neapolitan chord, C major.

²⁴ Youens, *Retracing a Winter's Journey*, 198.

The song opens with two descending fourths in octaves, depicting the protagonist's descent into the mountain chasms as well as his descent into a death-seeking depression. Octaves are the only pure interval in well temperament, and the fourths outlined in the first two measures are both very close to pure (at 2 cents wider than pure) and will not beat. In m. 3 the tension of F# major is emphasized by the first occurrence of vertical harmony. There are three harmonies presented in this measure, first F# major, followed by B minor, and then an F#-seventh chord with the third not occurring until the last sixteenth note. The delay of the third exemplifies Schubert's controlled use of *Temperaturfarben* in the first two stanzas of this song, which speaks to the protagonist's current emotional state. He is depressed, but depression is not a sharp stabbing pain but rather a constant, penetrating pain. The dominant is not tonicized; the primary purpose of the F#-major and major-seventh sonorities is to establish an overall color and mood for the song, not to depict sudden emotional changes.

The only other highly colored chord in the beginning of this song is the D-augmented chord at m. 9, which leads into a tonicization of D major (see Example 6.21). There does not seem to be any specific text painting, but rather the chord ushers in major chords with much less *Temperaturfarben* than the dominant. The IV-V⁷-I progression in D major in mm. 10-12 harmonizes the text "Wie ich einen Ausgang finde, / Liegt nicht schwer mir in dem Sinn" (How to find an exit does not concern me). The major tonalities could depict the protagonist's false courage (it is hard to believe that at this point in his journey he has reached the point of not caring about making his way back to civilization),

but it could also depict his detachment; he is happy not to have to face the world again because not facing the world would mean that he had obtained peace in death.

Example 6.21: *Irrlicht*, mm. 9–12

9
Wie ich ei - nen Aus-gang fin - de, liegt nicht schwer mir in dem Sinn,
D⁺6 G A⁷ D

The harmony for the second stanza is the same as the first with only the vocal melody changing. A significant change in texture accompanies the third and final stanza, which begins at m. 28. This is the verse that alludes to death. It reads:

Durch des Bergstroms trockne Rinnen	Down the mountain stream's dry channel
Wind' ich ruhig mich hinab,	I calmly make my way downward
Jeder Strom wird's Meer gewinnen,	Every stream will reach the sea;
Jedes Leiden auch sein Grab.	Every sorrow, too, will reach the grave.

The vocal line descends for the first two lines of the stanza, depicting the protagonist's downward journey (see Example 6.22). The piano, however, ascends, contrary to the voice. The first chord of the stanza, marked forte, is the major version of the tonic: a B-major flat-ninth that tonicizes E minor, the only other minor key that is ranked highest contrast and another minor key that is associated with extreme emotions; in *Die schöne Müllerin* it is associated with death, and it appears that a similar meaning is being established here.

Example 6.22: *Irrlicht*, mm. 28–36

28

Durch des Berg - stroms trock - ne Rin - nen wind' ich ru - hig mich hin -

b B⁹ e₄ c₄[#] F₃[#] G F₃[#]

32

ab je - der Strom_ wird's_ Meer ge - win - nen, je - des Lei - den_ auch_ sein Grab, je - der

B G⁷ C₄ G⁷ C C⁶ b₄ F₃[#] b G⁷

p *pp* *mf*

The mood has changed from one that depicts the dull pain of depression to one that is depicting an intense yearning for death. The B-ninth chord is extra dissonant with the added tone, and following a second inversion E-minor chord in m. 30, a first inversion C#-minor-seventh chord is followed by a highly chromatic and dissonant second inversion F#-dominant-seventh chord with a suspended G in m. 31 that leads to a B-major chord on the last word of the second line of the final stanza in m. 32. The intense *Temperaturfarben* of this section depicts the protagonist's difficult physical and emotional journey.

The harmonies of the last two lines of the final stanza tonicize C major, which is the Neapolitan chord of the tonic key of B minor. Two and a third measures of tonic and

dominant-seventh harmonies in C major sound sweet and pellucid compared to the highly colored chords, many with altered tones, that precede them. The purity of C major places the protagonist's words in a positive light; every river meets the sea, ashes to ashes, returning to the creator, comfort in death.

The pleasantness of the C-major section is contrasted with the color of the $i_4^6-V^7-i$ progression in the tonic key, which contrasts major against minor and purity against high amounts of *Temperaturfarbe*. The protagonist has turned from comforting thoughts of death to more realistic, gruesome ones. In m. 36 (and on the repeat at m. 40) the word "Grab" (grave) is harmonized with a B-minor harmony, establishing a firm link between B minor and the pain of death. The last two lines of the stanza repeat with the same harmony, juxtaposing the major and minor tonalities and purity of the Neapolitan chord with the highly colored dominant of the tonic minor.

Rückblick ends similarly to how it began, but the postlude has more color than the introduction because while the figuration is similar to the introduction, in the postlude the B-minor and E-minor harmonies are presented as full chords, thus adding even more color to the chords to depict the protagonist's heightened sense of anxiety and new resolution to seek death.

10. *Rast* (Rest)

C minor (originally D minor), 2/4 time, *Mässig* (Moderate)

Rast's transposed key of C minor contains more color than the original key of D minor. In Young's temperament D minor is the purest overall minor key, ranking one out

of twelve, and C minor is a moderately colored key with a rank of five out of twelve. C and D minor are the two keys in the low contrast category; both keys have the same degree of difference between their tonic and major dominant chords. The new, more highly colored key gives more momentum to the cycle, decreasing the placidity of the song, creating more dramatic tension, and thus accommodating part two.

The most significant difference that occurs with the transposition is that in the original key of D minor, the tonic is purer than the dominant, and in the new key of C minor this relationship is reversed. In D minor the tonic chord ranks second out of six types of minor chords, and the dominant A major ranks fourth out of seven types of major chords. In C minor the tonic ranks fourth and the dominant second. The major form of the tonic chord is also prevalent in *Rast*; in the original key D major ranks third, only one degree different from D minor, but C major ranks first, three degrees different from C minor. The major and minor forms of the IV chord are also important; in the original key G minor ranks third, and G major ranks second, while in the new key F minor ranks fifth and F major ranks second (the same as G). The major dominant and tonic chords in the revised key of C minor have less *Temperaturfarben* than in the original key of D minor, which makes these major chords sound more pleasant and peaceful.

Contrary to the image that the title evokes, *Rast* is more about the protagonist's inability to rest rather than the act of resting itself. The rhythm of the introduction evokes the sounds of walking and contrasts C- and F-major and minor chords (see Example 6.23). Both the tonic and dominant chords have minor versions with much more

Temperaturfarben than their major versions. This creates a contrast of light and dark, of the restful, pleasant sounding major chords with the stereotypically sad, more highly colored minor chords.

Example 6.23: *Rast*, mm. 1–6

There is a constant C in the bottom voice through the entirety of the introduction. The voicing of the C chords places the root and third in close position, which highlights the *Temperaturfarben* and the quality change between major and minor. Although C is maintained as the lowest note in the F triads, the inner voices also have the root and third of F major in close position, accentuating the triad's color.

In m. 6 the dominant chord appears for the first time, and it is marked with a fermata. The voice enters in this measure and begins to sing about how only now that he has stopped to rest has he noticed how tired he is. The opening measures contain similar harmonies to the introduction. There is a shift in mm. 13–14 with the incorporation of E \flat -major and B \flat -major-dominant-seventh chords; in m. 14 the word “unwirthbarem” (inhospitable) is harmonized with the following progression: E \flat ⁶–f \sharp ⁶–E \flat ⁶–B \flat ⁷. E \flat - and B \flat -major chords are ranked fourth and third respectively in purity rankings; the original key would have contained F- and C-major chords, which rank second and first,

respectively. The transposition adds to the word painting contained in this passage; the greater degree of *Temperaturfarben* in the new chords highlights the inhospitable nature of the road. The music sounds more uneasy than restful.

The *Temperaturfarben* of the song intensifies as the second stanza begins. The protagonist explains how his feet did not want rest, that it was too cold to stand still, how walking kept him cheerful, and that the storm helped move him onwards. The accompaniment paints an image of the inhospitable conditions through which the protagonist travels, in both the original and the published keys (see Example 6.24). On the word “Füsse” (feet) at the beginning of m. 17 there is an E-diminished-seventh chord; this is the first diminished-seventh chord of the song, and in any key a diminished-seventh chord is highly dissonant. This is followed by a C-dominant-seventh chord, which tonicizes an F major chord in the following measure. Although F does not have a lot of *Temperaturfarbe*, on the second half of the first beat a B-natural sounds, creating the clash of a second with both the third and fifth scale degrees. The B natural resolves upwards to the fifth scale degree on the second beat of the measure. A comparable pattern occurs in the next two measures, with a B \flat -dominant-seventh chord with an added fourth that resolves down to the third, and a C-minor chord that contains an added second that resolves to the third.

The chords in mm. 17–20 progress in descending fifths; each chord has more color and creates more tension than the previous one. Although the basic triads themselves increase in *Temperaturfarbe*, the primary cause of *Temperaturfarben* in this section is through the beats that result from the clashing of the seconds, which are highly

Example 6.24: *Rast*, mm. 16–25

16 *leise*

Die Fü - sse fru-gen nicht nach Rast, es war zu kalt zum Ste-hen; der

21 *stark*

Rü - cken fühl-te_ kei - ne_ Last, der Sturm half_ fort_ mich we - hen,

pp *cresc.* *f*

c *C₂* *F⁶* *B_b²* *E_b⁶* *b²* *Gr⁶* *c₄* *G⁷* *A_b*

dissonant in any well-tempered key, even with their slightly different beat rates. This factor may have influenced Schubert's decision to transpose this song; the essential elements of the clashing seconds would not be lost in another key, but the transposition overall adds more color to the song, thus creating the dramatic tension needed to keep the story going through part two.

The last eighth note in m. 20 is marked “*leise*” (quietly). The piano is marked pianissimo at m. 21, and a new dissonance pattern emerges. From m. 21 until the second half of beat two in m. 23, a B-diminished chord sounds in the left hand of the piano, and the right hand adds the diminished seventh. The piano crescendos in m. 23 to the German sixth chord on the second half of the last beat. The voice is marked “*stark*” (strong), and the piano is marked forte in m. 24. This last phrase speaks of the storm pushing the protagonist, and the increased tension of the German sixth chord depicts the

intensity of the storm. The German sixth is the enharmonic equivalent of an A-flat-dominant seventh chord, which is more dissonant in the transposed key of C minor than the equivalent in the original key (five out of seven in C minor vs. three out of seven in D minor).

The introduction returns, and the third stanza contains the same harmony as the first stanza until m. 43. In the third stanza the protagonist has found shelter in a small house, but his extremities ache and will not allow him to rest. Mm. 43 and 44 are almost identical to mm. 14 and 15, but a C flat has been substituted for C natural. This creates a progression that contains an F-half-diminished-seventh chord in first inversion instead of an F-minor-seventh chord. This gives the passage more color, painting the phrase “So brennen ihre Wunden” (Their wounds burn so).

The fourth stanza contains the same harmony as the second, but it seems as if Schubert wrote the music with the words of the last stanza in mind. It reads:

Auch du, mein Herz, in Kampf und Sturm	You, too, my heart, in strife and storm
So wild und so verwegen,	So wild and so bold,
Fühlst in der Still' erst deinen Wurm	Feel in the stillness only your worm
Mit heißem Stich sich regen!	Stir with burning sting!

The dissonant clashes harmonize the words about the worm in the stillness of his heart, and the dissonances evoke the stinging of which the protagonist speaks. The song ends the same way it began, with the sounds of the protagonist walking. He has not found rest for his body, mind, or heart.

11. *Frühlingstraum* (Dream of Spring)

A major, 6/8 time, *Etwas bewegt* (Somewhat agitated)

In the original twelve songs of *Winterreise*, *Frühlingstraum* was in the penultimate position. In that context, it functioned as the protagonist's last burst of happiness and hopefulness before entering into perpetual loneliness, much like the burst of energy often experienced by a dying person before he or she takes a turn for the worse. In the context of the entire twenty-four-song cycle, this is another memory of his love that he does not want to lose. He has distanced himself from the physical reminders of her, like the town and the linden tree, but his subconscious brings to him images of spring and a happier time, filling the protagonist with a happiness that does not immediately fade upon waking.

Frühlingstraum is another song that creates clear contrasts of tonal centers, emotions, and accompaniment patterns. The opening sounds of *Frühlingstraum* are light and sweet; the high tessitura and melody decorated with trills in the piano's right hand evokes the happy sounds of a music box. The left-hand supports this melody with eighth notes, and the two hands create full triads on beats one and four and on beat six of measure three. The opening key is A major with brief tonicization of F#-minor in m. 2 that increase the song's *Temperaturfarben* and the sense of excitement. In the first stanza the protagonist sings of how he dreamed of spring, including the flowers, meadows, and birdcalls of May. The accompaniment creates an overall color, but this passage does not contain specific word painting. A major already has a significant meaning in many songs in Schubert's oeuvre, including *Die schöne Müllerin*: it is linked to dreams, an

association that is evident in this song: the recollection of the dream is in A major, and bleak reality is in A minor. The diatonic nature of the song up to m. 14 depicts the emotionally stable world of dreams.

The first stanza ends with a fermata over a rest in m. 14. The pause makes the start of the second stanza more striking; the downbeat of m. 15 begins with the minor version of the v chord, ushering in a passage in the minor dominant key. The tempo changes to “Schnell” (fast), and the accompaniment texture changes to a more percussive sound, with fuller-voiced chords punctuated by rests. E minor is tonicized until a modulation to D minor occurs on the second half of m. 17.

In the second stanza that begins at the anacrusis to m. 15, the protagonist sings of the cocks awaking him to his cold, dark reality. One of the most striking dissonances in this passage occurs when a dominant-seventh chord with a flat five resolves to a minor chord a whole step below its root. For example, in m. 16 a forte F#-seventh chord with a flat five resolves to the tonicized E-minor chord over a decrescendo (see Example 6.25). The same pattern occurs at m. 18 with an E-seventh flat five chord that resolves to the newly tonicized D-minor chord, and again in m. 20 where an A-seventh flat-five chord resolves to a G-minor chord. The minor triads E, D, and G increase in *Temperaturfarben*; each minor triad is ranked one degree higher than the previous in purity rankings.

The last two lines of the second stanza repeat beginning at the anacrusis to m. 23. In the previous measure the accompaniment pattern changed to sixteenth-note octaves in the left hand and to block chords in the right. In mm. 22 and 24 sforzando B-seven flat-

Example 6.25: *Frühlingstraum*, mm 14–16

14 Schnell.

schrei. Und als die Häh - ne kräh - ten, da

A e⁶ f[#]o⁷ e⁶ F[#]7^{b5} e⁶

five chords resolve to A minor; perhaps this dissonance is depicting the sound of the ravens shrieking, to which the protagonist has awoken. Between the two progressions from E-seven flat-five chords to A minor, a B \flat -major chord, the Neapolitan of A minor, sounds for the entirety of m. 23 over the octave As. B \flat -major is not too highly colored, but since it occurs over the A bass, it contains additional color. The last two measures of the stanza (25–26) return to A major with a dominant-seventh chord over the tonic bass to I cadence.

Another rest with a fermata at the end of m. 26 separates stanzas two and three. A major returns with a tempo marking of “Langsam” (slow) and a new time signature: 2/4. The texture of the accompaniment is not the same as the first (happy) dream section in A major, but it still evokes a positive mood, as if the protagonist cannot help but feel buoyed by the images he saw in his dream. This section has more delicate sweetness than the happy, dancing first part of the dream. The section begins with staccato quarter note dyads in the left hand that accent A; the top voice chimes repeatedly as the bottom voice ascends and then descends. A major is again emphasized. The chord is built

gradually; first octaves are added, then the fifth, and then a seventh (see Example 6.26).

Like the introduction, a IV⁶ chord is used before the more highly colored dominant chord is introduced, decreasing the overall *Temperaturfarben* and momentarily sweetening the sounds of A major in mm. 27–30.

Example 6.26: *Frühlingstraum*, mm. 27–28

27 **Langsam.**

Doch

pp

ligato

A 8^{va} A 6^{no5} A₄ A₂^{no3}

At the anacrusis to m. 37 the protagonist begins the third verse with “Ihr lacht wohl über den Träumer, / Der Blumen im Winter sah” (Do you laugh at the dreamer, who saw flowers in winter). The dominant of A minor is introduced in m. 41, solidifying the key while adding a bit more tension. The singer repeats the second line of the text before he goes on to the remainder of the verse in an A-minor section that consists primarily of first-inversion tonic and subdominant chords in mm. 37–40, which create a strong sense of stability, although it is only temporary.

With the last two lines of the stanza the harmonies change to alternating D-minor and A-minor chords. The protagonist acknowledges the reality of his situation in contrast with his dream world, and thus the minor chords bring in a sense of melancholy. He

addresses a rhetorical “you,” asking if you would laugh at the dreamer who saw flowers in the winter.

The protagonist repeats the last line of the stanza, and the harmony firmly settles into A major; the protagonist has allowed himself to return to his dream. The music for the fourth stanza is the same as the first; this time the protagonist recounts how he was together with his beloved in his dream of spring, basking in reciprocated love. The fifth verse follows the same accompaniment pattern as the second and starts in a similar manner. The roosters wake him, and this time it is his heart that awakens. He notes how he is alone reflecting upon his dream. The sixth and final stanza begins at the anacrusis to m. 73 and follows the same harmony as the third. Stanzas one, two, four, and five contain a single overall feeling, but stanzas three and six are mixed. Happiness is followed by melancholy. In the final stanza the protagonist sings:

Die Augen schließ' ich wieder,	I close my eyes again,
Noch schlägt das herz so warm.	My heart still beats warmly
Wann grünt ihr Blätter am Fenster?	When will you leaves on the window turn green?
Wann halt' ich mein Liebchen im Arm?	When I hold my love in my arms?

After the final verse is complete, the octave As return and end with a full triad in A minor. Unlike many of the other songs, the protagonist does not end this song in the same emotional state that he started. His joyful dream has been replaced by emptiness and melancholy. Although dreams are not real-life experiences, dreams often impart real-life feelings when we wake. The protagonist is in a bit of a dream hangover after having relived the joy of his love. The answer to his last two questions would appear to be

“never;” however, perhaps this spring dream fuels his desire for death, because it would be an eternal dream.

12. *Einsamkeit* (Solitude)

B minor (originally D minor), 2/4, *Langsam* (slow)

Einsamkeit was the final song in the original twelve-song cycle, and there is no doubt that with this song the ending is much less ambiguous than it is with *Der Leiermann*. With this song the protagonist is painfully lonely, but he is neither at death’s doorstep nor mad. Indeed, with the original key this song would have created a closed cycle, and the last two lines of the poem offer a sense of closure as well: “Als noch die Stürme tobten, / War ich so elend nicht” (When the storms were still raging, I was not so miserable). These lines imply that the protagonist has made it through the figurative storm that was in his heart and finds his current state of solitude less desirable than when hot emotion flowed through him. Yet, with the following song, *Die Post*, another event occurs to awaken the storm within his heart, just like the dream of the previous song brought fresh feelings of love into his heart. With *Einsamkeit* the storm has momentarily abated, but it is not over.

In the overall purity rankings, the original tonic key, D minor, is the least colored minor key. B minor, the transposed key, is the eighth most colored key out of twelve. In both keys the dominant has more color than the tonic, but D minor is a low-contrast key, and B minor is one of the highest-contrast keys. The new key has a much greater difference in the purity of the minor tonic chord and the major dominant chord. All of

the differences between the original and the transposed key suggest that the motivation behind this key change was Schubert's desire to change the amount of the song's emotional tension at this point in the cycle. This is a significant change in mood for this song; the purity of the original key created a greater sense of finality, but the new key has greater tension and thus better anticipates the cycle's continuation.

The staccato-slurred eighth notes in the left and right hands of the piano at the opening of *Einsamkeit* evoke the sounds of labored steps. The previous songs focused on dreams and attempted rest, and now the protagonist has taken to walking again. The left hand consistently sounds the tonic note in the bass, with either a fifth or a sixth above it.²⁵ Despite the short duration of the notes, the fifths ring because the interval is only two cents shy of pure.

Throughout the introduction, attention is drawn to the quality and character of the thirds through the voicing (see Example 6.27). First the root and fifth of the tonic chord sound in the left hand of the piano followed by root and the third in the right hand. The characterization of the tonic chord builds, first by the fifth, then the third in open position, and then in close position in m. 2. Thirds are also emphasized through the inclusion of passing thirds in m. 3, placing further emphasis on the *Temperaturfarbe* of this interval.

The voice enters at m. 6, and like the introduction, the music for the first stanza consists primarily of tonic, submediant, and third-inversion supertonic-half-diminished-seventh chords. The protagonist sings of a dark cloud drifting through the sky and a faint breeze that rustles the tree tops. This verse is descriptive of his surroundings, but the

²⁵ Note that this is another manifestation of the grief motive discussed by Everett.

Example 6.27: *Einsamkeit*, mm. 1–6

The musical score for Example 6.27, 'Einsamkeit', measures 1–6, is presented in a two-staff format. The top staff is the vocal line, and the bottom staff is the piano accompaniment. The key signature is one sharp (F#), and the time signature is 2/4. The vocal line is mostly silent, with the word 'Wie' appearing at the end of measure 6. The piano accompaniment features a steady pattern of chords in the left hand and moving lines in the right hand. Dynamics range from *pp* to *fp*. Chord symbols are provided below the piano part: $b^{(no3)}$, $b^{(no5)}$, $b^{(no3)}$, $b^{(no5)}$, $c\sharp^2$, b , $c\sharp^2$, b .

lyrics do not yet focus on the protagonist's emotions. The harmony predominantly alternates open fifths in the left hand with sixths in the right, juxtaposing the sounds of the pure fifth with the minor third of the tonic chord, which is a relatively pure minor triad. The fifths and the voicing of the minor thirds (as sixths) cause this section to sound stark and hollow with the melancholy characteristic of minor.

With the beginning of the second stanza at the anacrusis to m. 15, the protagonist begins to express his feelings of loneliness and isolation. The tonic B minor sounded for the first fourteen measures of the song, but the repeated Bs now end, and the *Temperaturfarben* of the song intensify at m. 15 with the F#-major-dominant-seventh chord. M. 15 contains the first use of either the dominant or the dominant seventh sonority. In mm. 15 and 18, the notes of the triad sound within the first beat of the measure, establishing the character of the chord, and are followed not only by the chord's seventh on the second half of beats one and two, but also by an added sixth on beat two (see Example 6.28).

In Example 6.28, the *Temperaturfarben* of the major third built on the F#s in mm. 14–22 as well as the added dissonances of the seventh chord in mm. 15 and 19 and the non-chord tone in m. 19 result in a menacing sound. In m. 19 when a first inversion F#-

Example 6.28: *Einsamkeit*, mm. 14–22

14

weht: so zich' ich mei - ne Stra - sse da - hin mit trä - gem

b F#6 b e⁶ e

18

Fuss, durch hel - les, fro - hes Le - ben ein - sam und on - ne Gruss

F# F#6 b e⁶ e F#

major dominant seventh-chord with a D non-chord tone sounds, the protagonist is singing about having to go through life alone, and he describes life as “helles, frohes” (bright, cheerful). It is these positive words that are harmonized by the first inversion F#-major-dominant-seventh chord with a D non-chord tone, creating dramatic irony, since these sonorities do not sound bright and cheerful but rather create a *Temperaturfarben* that would be a fitting soundtrack to a Salvador Dalí painting.

With the exception of fa and sol, which are equivalent in size to equal-tempered intervals, all of the intervals in B minor are wide. The color of the dominant-seventh chord in these measures is emphasized through the voice’s ascending arpeggiation of the chord and a reduction to a more linear passage harmonized in octaves. The octave passages of mm. 17–18 and mm. 21–22 sound out of tune to the modern listener; E is raised to E#, creating a E-E#-F# passage that juxtaposes a wide minor second (108 cents)

between E and E# with a narrow minor second (92 cents) between E# and F#. With equal temperament, listeners are not used to hearing two intervals of the same quality with a 16 cents difference. The equal-tempered minor second falls halfway between the two.

The third and final stanza is infused with sarcasm. The text reads:

Ach, daß die Luft so ruhig!	Ah, that the air is so still!
Ach, daß die Welt so licht!	Ah, that the world is so bright!
Als noch die Stürme tobten,	When the storms were still raging,
War ich so elend nicht.	I was not so miserable.

At m. 24 when the protagonist laments that the air is still, the piano plays a tremolo G#-diminished-seventh chord. Both the chord and the manner in which it is played negate the stillness of which the protagonist sings. A diminished-seventh chord in any key creates a dissonance that an audience expects to be resolved, but this seventh chord is not diatonic and not expected. This G#-diminished-seventh chord tonicizes A major on the word “ruhig.” A major is the major VII chord of the tonic key, and it is not a usual choice for a tonicization in functional harmony. This unexpected harmony also contradicts the stillness and brightness.

The transposition of this song provides this section with added meaning. In the original key of D minor, C major would have been tonicized, evoking peacefulness through the lack of *Temperaturfarbe* in the chord. With the transposition, the key of A also evokes peacefulness, but it is the peacefulness that the protagonist experienced in his dreams.²⁶ The dynamic markings also emphasize the chord colors and the contrast between storms and peace. This change further supports the continuation of the cycle

²⁶ In Youens, *Retracing a Winter's Journey*, 221, she notes that the transposition creates within this section a short reference to *Frühlingstraum*. In the original key, A major was the dominant chord, which could be viewed as a more significant, original link to *Frühlingstraum*.

past this song. A major adds an additional layer of meaning, implying that the peacefulness of which the protagonist speaks is make-believe.

At m. 28 the texture of the accompaniment changes to block sixteenth notes that swell dynamically and expand outwardly to the lowest notes and the thickest texture so far in the cycle. The protagonist has begun to sing of storms that used to rage, and the accompaniment evokes these storms. The storm passes through different tonicizations, first with an I-V⁷-I on A, and then ends up tonicizing the Neapolitan from measures 31 to 32 (see Example 6.29).

Example 6.29: *Einsamkeit*, mm. 28–34

28

Als noch die Stür - me

cresc.

A E⁹_{no5} A⁺ F G c⁺ f⁹₇/G

30

tob - ten, war ich so e - lend, so e - land nicht.

p *fp* *cresc.*

G G⁷ C⁺ G⁷ C⁺ G⁺₆ b⁺₄ F⁷ b

The C-major tonicization underscores the last line of the stanza, in which the protagonist says that he was not as miserable before. This passage contains irony; the

concept of misery, “elend,” is aligned with the purest major triad. This passage provides the greatest change in character of the song from the original to the transposed key. The transposition mostly resulted in increased intensity and contrast with the published key, but in this section the harmony has much less *Temperaturfarben* than the first version. In the original key E major would be tonicized instead of C. E major has much more *Temperaturfarben* than the emotionally neutral, purer C major.

Although the severity of *Temperaturfarben* does not correspond proportionally from the original song to the transposed songs, the main harmonies that are used, II, VI, i, and VII are C major, G major, B minor, and A major in the transposed key and E major, B major, D minor, and C major in the original version. There is a similar mix of highlight-colored and purer chords, which ebb and flow like the storm itself. There is no specific word-painting here, just the depiction of the intensity and the easement of the storm.

The last stanza repeats, and the storm seems to peter out. The song ends with the reemergence of the walking sounds of the B-minor introduction. The similarity between the prelude and postlude again indicates that the protagonist is again in the same emotional state in which he began the song.

Part II

13. *Die Post* (The Post)

E♭ major, 6/8 time, *Etwas geschwind* (rather quickly)

Die Post is the first song of Schubert's Fortsetzung (Continuation). The song and its position in the cycle have received much attention in regards to the debate over whose order, Schubert's or Müller's, is superior. *Die Post* is one of two songs that only appear in the final edition of Müller's lyrical cycle. When readers first encounter *Die Post* in Müller's publication, it is positioned as the sixth song between *Der Lindenbaum* and *Wasserflut*. Müller's ordering places *Die Post* after a song that contains positive associations with dreams and ends in major, thus juxtaposing two songs in which external forces give rise to unexpected feelings of happiness in the protagonist. In the following poem the protagonist is contemplating a frozen river as well as his frozen heart, and he seems to have progressed to a different emotional space. For those who view Müller's placement of *Die Post* as proper or superior, it may seem out of place in Schubert's cycle, occurring at a point after the protagonist seems to have progressed beyond the ability to have happy memories flood his heart. In Schubert's ordering, the happy feelings come as a surprise, to both the audience and the protagonist, and it is this emotional surprise that launches the trajectory for the remainder of the cycle. Youens has stated, "the song acts to revitalize the journey at a point of low ebb after 'Einsamkeit' and shows the wanderer once again probing his heart, questioning the mystery of an unexpected strong reaction to

a sound he hears.”²⁷ I agree; the song serves multiple purposes: it functions as an interlude of sorts that punctuates the two halves of the cycle, and as a break from the built-up emotional tension. An external force awakens the protagonist’s heart; it will not be the last time in the cycle that this happens.

In *Einsamkeit*, the previous song in Schubert’s ordering, the protagonist spoke of his current loneliness as a more miserable condition than the previous storms in his heart. For the first twelve songs of the cycle he has managed to avoid human contact, speaking only of (and to) animals and nature. In *Die Post*, a human creation, the mail carriage, has surprised him with its horns. His heart reacts to the sound, excited at the prospect of potential mail, but his head reacts a moment later, reminding him that there are no letters for him. The reactions of his heart and his head are contrasted through E \flat major and E \flat minor.

Die Post contains the first occurrence of E \flat -major tonality in the cycle. E \flat -major is a key with a medium amount of *Temperaturfarben*; it is ranked sixth out of the twelve major keys in the purity rankings. The key has a historical association with horns because many early horn works were written for natural horns pitched in E \flat . The song opens with the sounds of the mail carriage, and the protagonist begins to sing in the same key. As in previous songs, a major tonality is used to accompany present feelings of happiness.

The song begins with six solid measures of E \flat major with repeated descending eighth notes in the left hand that evoke the sound of wheels turning. The right hand

²⁷ Youens, *Retracing a Winter’s Journey*, 224.

comes in at m. 3 with the mail carriage's horn call consisting solely of notes in the tonic triad. The introduction simultaneously establishes the sounds of the mail wagon and solidifies the *Temperaturfarben* of E \flat major.

In mm. 7–8 the horn call turns into repeated B \flat s and E \flat s, evoking the sound of a vamp over two V $\frac{4}{2}$ -I 6 progressions over a tonic pedal, anticipating the entrance of the voice two measures later. The texture thickens underneath the singer, and the eighth-note turning figure is abandoned for the more formal dotted rhythms of the horn call in a block-chord texture. V-I harmonies underscore the protagonist's first line in which he acknowledges the mail carriage. In the second line he asks his heart why it leaps at the sound of the horn, and the piano texture thickens at the second half of m. 12 from triads in the right hand of the piano to seventh chords. The tonic chord is turned into a dominant-seventh chord and progresses to an A \flat -dominant-seventh chord for mm. 13–14, which in turn progresses to a D \flat -major chord in mm. 15–16 (see Example 6.30). A \flat major is the fifth most highly colored major triad (made additionally colorful with the added seventh) out of seven and D \flat major is the sixth most highly colored. The D \flat -major chord is played at a forte dynamic, and when the chord is first sounded on the word “Herz,” it is emphasized by the piano sounding the lowest note of the song, the root of the D \flat -major chord, before jumping back up an octave. The two measures of D \flat -major sound charged and energetic.

Die Post is one of only two songs in flat-major key signatures (the other is *Die Wirtshaus* in F major). In flat-major keys it is the subdominant and not the dominant chord that adds more tension and color to the key. The tonicization of A \flat major and then

Example 6.30: *Die Post*, mm. 12–16

12
Was hat es, daß es so hoch auf-springt, mein Herz?

cresc. *f*

B \flat Eb 7 Ab 7 D \flat

D \flat major, the subdominant of the subdominant, instead of the dominant of the tonic key, suggests that the chord progression was guided by Schubert's desire to increase the *Temperaturfarben* of this section. The initial burst of happiness quickly becomes tenser until the protagonist begins to admonish his heart for how it feels.

The juxtaposition of the F-dominant-seventh chord in second inversion that follows the D \flat -major chord in m. 17 is striking. Even with the added dissonance of the seventh in the F-dominant-seventh chord, there is a perceptible difference in the major thirds of the two chords. The D \flat -major chord ranks sixth out of seven major triads in terms of color; F major ranks second. The size of the major third in the D \flat -major chord in Young's well temperament is 12 cents wider than the major third in an F-major chord. Although the exact cent measurements will differ, the basic relationship between these two triads will remain consistent in all well temperaments.

The tension created though the circle-of-fifths progression recedes as the last line of the stanza repeats with predominantly B \flat -major harmonies. When the last word of the stanza repeats, it is not preceded by a crescendo and has a forte-piano instead of a forte marking. At mm. 24 and 25 the texture shifts to a single B \flat in the right hand for the

second half of both measures, almost as if the carriage has come to a stop. A full measure of rest occurs at m. 26, and at m. 27 $E\flat$ minor emerges at a pianissimo dynamic level with a different rhythm. The protagonist begins to chastise his heart; he knows that there is no letter for him, but his heart still leapt at the sound of the post. Although $E\flat$ minor is not the tonic of this section (it functions as the vi of $G\flat$ major), the three full measures following the $E\flat$ -major tonality is enough to present an aural comparison between the tonic major and minor. Like its parallel major, $E\flat$ minor is a moderately colored key, ranking third in purity out of six sizes of minor chords. The $E\flat$ -minor chords sound deflated and flat even to the contemporary audience because the minor third is six cents narrower than an equal tempered third, and 22 cents narrower than a pure minor third.

Minor has a traditional association with sadness, which is apparent in the shift from unconscious hopefulness to disappointed self-rebuke. Although Schubert chose not to focus on $E\flat$ minor in this section, the major tonalities that he used to express the protagonist's angst have much color and tension. $G\flat$ major is the most highly colored key in Young's well temperament. Nevertheless, there is an undercurrent working against firmly establishing $G\flat$ major as a tonic, reflecting the resurgence of the protagonist's happy heart. After a V-I cadence on $G\flat$ major in mm. 32-33, there is a five-measure struggle of optimism and happiness verses pessimism and pain. $G\flat$ -major chords, the most highly colored major triads in Young's well temperament, alternate with A-diminished-seventh chords in third inversion. In equal temperament the diminished seventh chord has a smooth, symmetrical sound since each of the minor thirds measures

300 cents. In well temperament, each of the minor thirds are slightly different sizes, giving the chord a more jagged, harsh sound (A–C: 306 cents; C–E \flat : 298 cents; E \flat –G \flat : 294 cents; G \flat –A: 302 cents). This chord contains the narrowest and widest minor thirds in Young’s well temperament. At the anacrusis to m. 38 a B \flat -dominant seventh sounds and the bass drops down, accentuating the root of the chord. The B \flat -dominant-seventh chord alternates with the tonic chord in second inversion, functioning as a prolongation of the dominant. Since B \flat major is the dominant in a flat key, it has even less color and tension than the tonic.

The last two repetitions of “Mein Herz?” in this stanza are harmonized by V⁷/V–V⁷–I in the tonic key of E \flat major. The decreased *Temperaturfarben* of the chords add an air of celebration and triumph. In mm. 43–44 the voice sings a measure of F followed by almost a full measure of a high A \flat on “Herz.”

The introduction begins to repeat before the voice is finished singing, which seems to depict the mail carriage as it begins moving forward towards its next stop. The music of the first two stanzas repeats with lyrics for stanzas three and four. The basic sentiments remain the same: a stanza expressing hope and unexpected happiness is followed by a stanza expressing self-reproach and disappointment. The major sonorities and the protagonist’s happy feelings overpower the reality that his mind has pointed out, and the song ends firmly in major. Two E \flat -major chords punctuated by rests give the sense that the carriage has stopped. The song ends with a lingering feeling of happiness rather than feelings of isolation and sadness.

Richard Kramer has drawn parallels between *Die Post*'s tonal development and that of *Auf dem Flusse*, asserting that the two songs have inversionsal balance. He has remarked:

The perception of inversionsal balance appeals less to the senses than to some deep-rooted intuition that the tonal strategy of the one [*Auf dem Flusse*], in its motion along the sharp side, suggestive of ascent by dominants, is now checked through a motion in the opposite direction, along the flat side, descending through subdominants.²⁸

Kramer is right to notice the motion through subdominants in *Die Post*, but while this progression is in the opposite direction around the circle of fifths than that of *Auf dem Flusse*, both progressions are ultimately heading in the same direction, towards chords with greater degrees of *Temperaturfarben*. Schubert's choice of tonicizations were not mere intuition but rather devices that manipulated *Temperaturfarben* as an expressive tool in the song to achieve varying amounts of dramatic tension.

Although the protagonist has given the impression that he has traveled far, especially in *Irrlicht*, he is still remaining close to civilization. In the beginning songs he lingered in the proximity of the village; although he apparently left for good in *Rückblick*, throughout the course of the cycle he stays close enough to civilization to run across mail wagons, inns, and eventually a hurdy-gurdy man. His words express the desire to be isolated, but his actions express the desire to stay close to society.

²⁸ Kramer, *Distant Cycles*, 174.

14. *Der greise Kopf* (The Gray Head)

C minor, 3/4 time, *Etwas langsam* (somewhat slow)

Two songs ago in *Einsamkeit*, the protagonist seemed to accept his lonely state, but the sound of the mail carriage in *Die Post* made his heart flood with positive, joyful emotions that were outside of his control and that he thought he had moved past.

Although there is no clear indication of how much time has passed, *Der greise Kopf* is positioned as a reaction to *Die Post*. The protagonist's realization that he cannot control or will away the residual feelings of love and the accompanying turmoil has made him yearn for old age and death.

While *Der greise Kopf* contrasts with the upbeat, bouncy mood of *Die Post*, a link between the two songs is created through their tonalities: C minor is the relative minor of E \flat major. C minor was a logical choice to follow a song in E \flat major in regards to both tonality and *Temperaturfarben*. The tonal relationship between the two keys creates a stronger sense of narrative and a feeling of cause and effect between the two songs, placing them close to each other in time and proximity. Additionally, C minor is a key with moderate *Temperaturfarben* and low contrast, appropriate for expressing the protagonist's sad, yet level, feelings. He is left with a sense of emptiness after his happiness from the previous song has faded.

The song opens with an ascending melody in the right hand of the piano that evokes the sound of walking with double dotted rhythms that make the effort sound labored (see Example 6.31). In well temperament C minor does not have any pure intervals, and when presented melodically, it sounds very similar to minor in equal

temperament, with the noticeable difference occurring with ti, which is 8 cents narrower than equal temperament and only 4 cents wider than pure, sounding as if it has slightly less pull towards the tonic. The constant C in the bass paired with the starting and ending of each phrase on C minor infuses the song with a static quality that lacks forward momentum, as if the protagonist is walking in circles.

Example 6.31: *Der greise Kopf*, mm. 1–4

Etwas langsam.

The musical score for Example 6.31 consists of two staves: a vocal line and a piano accompaniment. The key signature is three flats (B-flat, E-flat, A-flat) and the time signature is 3/4. The tempo marking is *Etwas langsam.* The piano part begins in measure 1 with a piano (*p*) dynamic and a chord of C minor. In measure 2, the chord changes to G7/C. In measure 3, it changes to Bb7/C. In measure 4, it returns to C minor. The vocal line enters in measure 4 with the word "Der".

Although the introduction is played in a piano dynamic, the slow tempo and the measure-long chords highlight their beating. In well temperament the chords sound as if they have more depth and intensity to them, particularly due to the beating of the major seconds in mm. 2 and 3. The voice enters at m. 4 singing a slightly modified version of the melody from the introduction while the piano repeats the same chords, creating a recitative-like structure. The protagonist sings about how the frost has created a white sheen on his hair, and then the piano repeats the second half of the introduction. When the voice enters again at m. 11, the repeating C bass note ceases, and G major is tonicized in mm. 11–14 (see Example 6.32). The occurrence of G major is a response to the text; the protagonist sings of the happiness he felt upon thinking he was an old man. The

major/minor contrast is apparent in equal temperament; Youens has identified the tonicization of the dominant G major tonality as “joy in illusion.”²⁹ Nevertheless, in well temperament the contrast is more striking because of the lightness and relative purity of G major; the same effect would not be achieved with a more highly colored major chord.

Example 6.32: *Der greise Kopf*, mm. 10–16

The musical score for Example 6.32, *Der greise Kopf*, measures 10–16, is presented in two systems. The first system (measures 10–12) shows the vocal line and piano accompaniment. The piano part includes chords labeled *c*, *G*⁶, *g*^{#o7}, *a*⁶, and *E*₄. The second system (measures 13–16) continues the vocal line and piano accompaniment. The piano part includes chords labeled *a*⁶, *D*⁷, *D*⁷, *G*, *g*^{#o7D}, *a*⁶, *D*⁷, *D*⁷, and *G*. The vocal line includes lyrics: "da glaubt' ich schon ein Greis zu sein und hab' mich sehr ge-freu-et. Doch".

The protagonist’s feelings are not entirely happy; the G-major tonality is peppered with dissonances that create a bittersweet feeling. In m. 11 the right hand of the piano doubles the vocal line, and when they move to a G[#], the left hand moves to F, creating a clash between the two notes. In the following measure, the voice moves to an A^b immediately before the piano does, creating another dissonant clash. The tonicization of G major extends past the vocal line, with a first inversion G[#]-diminished-seventh chord

²⁹ Youens *Retracing a Winter’s Journey*, 238.

(with no fifth) harmonizing the beginning of a descending melody similar to that of the second half of the introduction, which does not return to the tonic but rather cadences on G.

At m. 17 the texture becomes recitative-like again, this time with rolled eighth-note chords on the second beat of the measure. At the beginning of this phrase C minor returns, only to give way to a tonicization of A \flat at the beginning of m. 19, ushering in the phrase “Daß mir's vor meiner Jugend graut” (So that I shudder at my youth) that begins at the anacrusis to m. 21. In m. 21 a D \flat -major chord (which ranks six out of seven in the purity rankings for major triads) expands outward to an Italian sixth chord, which in turn expands to an E \flat -major chord (see Example 6.33). The music seems to depict the shedding of ice and snow from the protagonist’s hair. The phrase takes an unexpected turn, ending with a half-cadence with an A \flat -minor instead of the expected A \flat -major chord interrupting the E \flat -major chord, and the listener is left with a sense not of triumph but of tragedy. A \flat minor is ranked fifth out of the six types of minor triads. This passage is the most emotionally intense of the entire song; if it cadenced with A \flat major, it could sound as if the protagonist were triumphing over a difficulty, but the use of A \flat minor makes the passage sound ominous.

C minor returns for the last line of the stanza (which is repeated twice), with the voice and piano performing in unison and octaves from m. 25 to m. 28. The protagonist sings about how far it is to the grave. The C-minor melody descends and ends with a G-dominant-seventh chord in root position. The descent to the lowest note yet in the song is symbolic of the grave. This passage is stark and emphasizes the melancholy

Example 6.33: *Der greise Kopf*, mm. 20–23

20
Haa - re, dass mir's vor mei - ner Jug - end graut

p *fz* *p*

Ab Ab₂₌₆ Db⁶ It⁶ Eb ab Eb

Temperaturfarben of C minor. The G-dominant-seventh chord sounds like a deep breath before a return to the original static mood and melody from the beginning of the song.

The third stanza begins with the same harmony as the first, but it changes with the second half. In the last two lines the protagonist manifests sincere astonishment that his hair has not turned gray, a sentiment that is expressed through a tonicization of C major interspersed with non-diatonic dissonances that reflect his anguish. The first C-major chord in this passage, at m. 36, is followed by a G[#]-diminished-seventh chord, which contrasts with the pristine sounding I, IV, and V chords in C major. The piano postlude contains the familiar descending half of the melody introduced at the beginning of the song.

15. *Die Krähe* (The Crow)

C minor, 2/4 time, *Etwas langsam* (somewhat slow)

Die Krähe is in the same key as the previous song, which creates a tonal unit comprised of songs thirteen (which was in the relative major), fourteen, and fifteen. In conjuncture with the thematic commonalities, the proximity of key helps creates a sense

of temporal closeness between these three songs. *Die Krähe* has a fast harmonic rhythm. Although the tempo marking of this song is *Etwas langsam*, the sixteenth-note triplets occur briskly, and the harmonic tempo is often a chord per eighth note in the 2/4 time signature. The light texture with constant arpeggiation, rapid delivery of the harmony, and short rhythmic values allows dissonances to be moved through quickly. The high tessitura also minimizes the perception of the song's *Temperaturfarben*. These elements combine on the macro level to create an overall atmosphere rather than focus on individual chords. The *Temperaturfarben* of this song is like that of a pointillist painting; the smaller units of color combine to make a larger overall picture.

The song opens with the right hand playing a melody evocative of a crow flying over arpeggiated sixteenth-note triplets in the left hand. The counterpoint of the introduction brings out the melodic qualities of C minor since there are no vertical harmonies. In well temperament, C minor sounds similar to equal-tempered minor. The arpeggiated chords in the left hand sound haunting. The Neapolitan chord, D \flat major, adds more color to the introduction; D \flat major is ranked sixth out of seven sizes of major triads in the purity rankings.

The first stanza is largely narrative; the protagonist sings of how the crow has followed him since he left the town and has been circling overhead. When the voice enters, the left hand of the piano plays an octave below it, representing the crow and the protagonist as companions. The voice sings the same melody presented in the first three measures of the introduction. In m. 8, a measure after the voice enters, the right hand begins to play dyads in addition to single notes. The melody is reharmonized; the most

significant change is the omission of the D \flat -major Neapolitan chord and its dominant (A \flat major), which are replaced by D-half-diminished-seventh chords in first inversion.

Although the latter chord sounds like a ii $^{\circ 7}$ -V progression in this context, it foreshadows the tonicization of E \flat major which is to come.

The harmony of the first verse is predominantly diatonic to the home key. On the last two syllables of the final word, “geflogen,” B \flat -dominant-seventh chords appear in m. 13, along with D-half-diminished- and fully diminished-seventh chords in the next measure and the tonicized relative major, E \flat . E \flat major is moderately colored and has a *Temperaturfarben* appropriate for the protagonist’s mixed feelings toward the crow: the protagonist recognizes the crow as a traditional symbol of death, and while death is what the protagonist wishes for, he does not yet approach the thought of death without mixed emotions. Yet, at the end of the song, he identifies the crow as a companion and asks for its loyalty.

Beginning at m. 15, the B \flat -major chord used to tonicize the relative major E \flat major is replaced by a B \flat -augmented chord in first inversion, which alternates with E \flat major until the beginning of measure 18 (see Example 6.34). The protagonist asks the crow if it will leave him alone and if it intends to soon prey upon his dead body. The repetitiveness of the accompaniment evokes the image of the protagonist standing in place while the crow circles above. The vocal line also loses its contour; it consists mainly of repeated B \flat s until the end of the second line when the vocal line rises to usher in a similar passage that tonicizes F major.

the protagonist implores the crow to be loyal, the protagonist sings the lowest note of the vocal part so far, C, and repeats it in a gesture of great sincerity, jumping up an octave and rising to a high G on the first syllable of the word “Grabe” (Grave) (see Example 6.35). The accompaniment also shifts; the left hand of the piano shifts to the bass clef, and the texture thickens from single notes to dyads and triads. The left hand, being lower in tessitura, highlights more of the section’s *Temperaturfarben*; the partials of the higher notes in the right hand are harder to distinguish, and thus come across as something that is over-wound and about to snap. F minor is tonicized for mm. 29–30; it has more color than the home key of C minor. An F-minor triad is ranked fifth out of six sizes of minor triads in the purity rankings, and is in the high contrast category due to its C-major dominant.

Example 6.35: *Die Krähe*, mm. 29–33

The musical score for Example 6.35, *Die Krähe*, mm. 29–33, is presented in a standard format. It consists of a vocal line and a piano accompaniment. The key signature is F minor (three flats) and the time signature is 3/4. The vocal line begins with the note C4 and features several triplets. The lyrics are: "Krä - he, lass' mich end - lich seh'n Treu - e bis zum Gra - - - be!". The piano accompaniment starts with a bass clef and features a steady eighth-note pattern in the right hand and a more complex pattern in the left hand. The lyrics for the piano part are: "cre - scen - do". Dynamic markings include *f* and *fz*. Below the piano part, a chord progression is indicated: F⁶, C⁴, F⁶, C⁴, F⁶, C⁴, F⁶, F, c⁴, d^{#4}, c⁴, c, G, G⁶, e^{#4}, e^{#4}, C, C[#].

Beginning in m. 31 C minor reemerges, and at the word “Grabe” the C-minor and G-major chords cause the listener to anticipate a cadence on C minor, but instead an E-diminished-seventh chord in second and then third inversion leads to a C-major and then a C-dominant-seventh chord, which in turn leads back to F minor. The contrast between the relatively pure sounding G- and F-major chords with the more highly colored C-

minor and E-diminished-seventh chords depict the protagonist's mixed feelings of relief and anxiety relating to death. The harmony returns to F minor when the protagonist repeats the last two lines of the stanza, but instead of ascending to a high G on "Grabe" the vocal line drops to the repeated C at m. 36. The C-minor introduction returns, complete with D \flat -major harmonies, with the right hand down an octave. The protagonist has settled deeper into the darker sentiments of the song.

16. *Letzte Hoffnung* (Last Hope)

E \flat major, 3/4 time, *Nicht zu geschwind* (not too fast)

The accompaniment of *Letzte Hoffnung* is like a vast example of word painting; as the protagonist pins his hopes on a leaf destined to fall from a tree, the music depicts the slightest movements of the leaf with harmony that seems to be waiting until the leaf falls to resolve. The notes of the introduction almost sound random; they are unified by a descending motion, depicting a leaf twisting this way and that. Although the key signature of *Letzte Hoffnung* is E \flat major, the song's introduction is neither consonant nor diatonic; neither the chord nor the pitch E \flat occurs in the introduction (see Example 6.36). The first note of the song is a non-diatonic C \flat , a pitch that is used frequently throughout the composition.³⁰ The combination of staccato short note values and the mix of vertical and horizontal harmony creates a pointillist effect similar to the previous song. This type of harmony creates a different type of *Temperaturfarben* than what is associated with

³⁰ As the flat sixth scale degree, the C \flat can be interpreted as another example of Everett's grief motive.

more diatonic major and minor keys; it does not evoke or link to any extra-musical sentiments outside of this song.

Example 6.36: *Letzte Hoffnung*, mm. 1–8

The musical score for Example 6.36, *Letzte Hoffnung*, measures 1–8, is presented in two systems. The first system (measures 1–4) shows a piano introduction with a melody in the right hand and a bass line in the left hand. The melody is marked with a forte 'f' dynamic, and the piano accompaniment is marked 'pp'. The harmonic analysis below the piano part shows chords: d°7, d°7 Bb7, A°7no3 Bb, d°7, d°7 Bb7, A°7no3 Bb, d°7. The second system (measures 5–8) shows the vocal line starting at measure 5 with the lyrics: "Hie und da ist am den Bäu - men man-ches bun - te Blatt zu seh'sn,". The piano accompaniment continues with a similar texture. The harmonic analysis below the piano part shows chords: d°7 Bb7, A°7no3 Bb7, F#4 Eb4, Bb7, Eb.

When the voice enters at m. 5 the protagonist sings of how there are a few colored leaves left on the trees and that he often stands by them absorbed in thought. Lines one and three of the first stanza are set over the music of the first half of the introduction, while lines two and four contain new musical material. The tonic harmony is first heard at m. 7, on the line “Manches bunte Blatt zu seh’n” (to see a colored leaf). The texture changes here to legato notes with a $V^7/V-I_4^b-V^7-I$ progression that cadences on the tonic right before launching back into staccato eighth notes. Although the tonic chord is present in this section, the overall harmony of this passage is not diatonic, and so the *Temperaturfarben* associated with E \flat major is not conveyed.

M. 8 connects the legato chords that feature $E\flat$ major with another repetition of the first half of the introduction. After the more traditional and mildly colored consonances in the legato measure, especially of the F-dominant-seventh and $E\flat$ -major chords, the linking eighth notes presented melodically sound particularly jarring and somewhat out of tune to the listener accustomed to equal temperament. Both of the melodic minor seconds, from $F\sharp$ to G and from A to $B\flat$, measure 106 cents in Young's well temperament, six cents wider than an equal-tempered minor second.

A new musical texture is introduced for the last line of the stanza, which reads "Oftmals in Gedanken steh'n" (Often, lost in thought). In m. 11 the accompaniment changes to a three-voice texture with a different harmony on every eighth note (see Example 6.37). This passage of legato, vertical harmony again hints at the tonic, but this time the fifth is omitted when the chord sounds on the downbeat of mm. 11. This voicing highlights the color of the third of the $E\flat$ -major triad. The non-diatonic chords in this passage create tension, and the subdominant $A\flat$ -major chord, not the dominant $B\flat$ -major, is used, potentially because in flat-major keys the subdominant, not the dominant, is the more highly colored chord.

With the second stanza the protagonist speaks of choosing a specific leaf, pinning his hopes on it, and then fretting when the wind rustles it. This stanza begins with a repeated G-dominant-seventh chord that is played in the detached style of the introduction, which implies C minor. The continued repetition of one chord helps to anchor the jittery *Temperaturfarben* of the song temporarily. The chord sounds with a melodic presentation of the root and ninth followed by the harmonic presentation of the

Example 6.37: *Letzte Hoffnung*, mm. 11–17

11

oft - mals in Ge - dan - ken stehn. Schau - e

15

nach dem ei - nen Blat - te, hän - ge mei - ne Hoff - nung

Eb^{ro5} G_3^4 c G^7 $A\flat$ $F^{(8va)}$ $F\sharp^{(8va)}$ G^7

D^7

third and fifth followed by the fifth and seventh (see Example 6.37). The voicing of the chord highlights the two minor thirds presented horizontally, both measuring 304 in Young’s well temperament. It is probable that Schubert chose this chord here more for its *Temperaturfarbe* than for its tonal implications.

The harmony shifts when the protagonist mentions his hopes: G major is tonicized with a D-dominant-seventh chord. The listener has encountered a now-familiar gesture: major chords are associated with positive, happy thoughts. Nevertheless, the depiction of hope is fleeting; D-diminished chords occur in mm. 18–19 and lead to a minor version of the tonic chord at the word “zitr’ich” (tremble) in m. 20. The accompaniment for the remainder of stanza depicts the protagonist’s trembling; in m. 21 the piano plays octaves underneath the vocal part and ends with rapidly repeating French-augmented sixth and B \flat -major chords, ending on a half cadence. This section has created the strongest sense

of *Temperaturfarben* associated with a specific tonal center so far in the song, but it is on the dominant, not the tonic.

At the anacrusis to m. 25 the familiar $C\flat$ to $A\flat$ motive sounds; the style, but not the harmony, of the introduction continues for the next measure. The voice enters with the final stanza at m. 26, addressing the possibility of the leaf falling. The accompaniment pattern changes, and the harmony becomes chromatic and descending, evoking $E\flat$ minor rather than $E\flat$ major. The same pitches are staggered in the left and the right hands in octaves, depicting the descent of the leaf. $E\flat$ minor is associated with hopelessness, and the leaf upon which the protagonist has pinned his hopes appears to be falling. This is the same extra-musical association seen in *Die Post*. At m. 29 the directions *Etwas Langsamer* and *un poco ritard* appear, and eighth notes alternate with eighth rests as $E\flat$ minor continues to be tonicized for the phrase “Fällt mit ihm die Hoffnung ab” (My hopes fall with it). The $E\flat$ -minor tonicization of the protagonist’s reference to lost hope evokes the same parallel between $E\flat$ -minor and hopelessness that was established in *Die Post*. On the word “Fällt” (fall), an immediate connection between lyrics and music occur as the protagonist sings the lowest note so far.

At m. 35 the song finally arrives solidly in the tonic major key when the protagonist sings the last line of the stanza: “Wein' auf meiner Hoffnung Grab” (Weep on the grave of my hope). With the first utterance of the word “wein” the music is transformed; an $E\flat$ -major harmony sounds for a half note, the longest note since m. 12. It is preceded by its dominant, further solidifying $E\flat$ major’s position as the tonic. The

chords in mm. 35–36 and again in mm. 39–40 are the fullest, most spread-out chords of the composition (see Example 6.38).

Example 6.38: *Letzte Hoffnung*, mm. 34–38

34

wein' wein' auf mei - ner Hoff-nung Grab,

desrec. *p*

Bb_4 Eb^6 Eb^{+6} $Ab^{4/3}$ Eb_4 Bb Bb^7 $c_4 - \frac{5}{3}$

The *Temperaturfarben* of the chords in these measures are highlighted by low octaves in the left hand and full, sustained chords. The tears that the protagonist anticipates if his hopes are dashed are depicted through the expansion of the tonic chord into an augmented chord and an incomplete subdominant chord with suspensions. The subdominant inherently has more color than the dominant in flat-major keys; in this instance the most pure interval, the fifth, is removed, and the dissonances of the suspensions add even more color and tension to the key.

In m. 38 the protagonist sings the word “Grab” (grave), harmonized by a C-minor chord, which first appears with a fourth and sixth above the root, both of which resolve downward to a root position C minor chord. In this instance the grave evokes the feelings of a sad surrender rather than dissonant harmonies that portray fear and pain. The protagonist then repeats the last line of the poem, with the harmony cadencing in Eb major instead of C minor.

The piano postlude begins by evoking the rhythms of the introduction, but the harmony has changed. At m. 43 an F \flat to E \flat motion occurs, again evoking Everett's grief motive with E \flat as the fifth of A \flat . At the anacrusis to m. 44 the harmony spells a G-diminished chord that ushers in an alternation of G-diminished-seventh chords and E \flat -dominant-seventh chords in first inversion. The G-diminished-seventh chords not only add more color and tension to the dominant chord, but they imply the tonicization of the more highly colored subdominant, A \flat major. The desire to keep the color and tension of the song high even though it has finally established a clear tonal center is indicated by the use of a plagal cadence to end the song instead of an authentic cadence, which would have less color and tension.

In spite of the many downward gestures that conjure up the image of falling leaves, the leaf upon which the protagonist has pinned his hopes has not yet fallen. His continued hope is depicted through the conclusion of the song in a major key, and the dissonances and tension within the major tonality portray the fragility of his hope. He is fully aware that the leaf's descent is inevitable; what he is truly hoping for is a miracle.

Letzte Hoffnung is a remarkable song that infuses into the accompaniment both the protagonist's sense of anxiety and the image of a teetering, descending leaf. Richard Kramer has spoken of how the piano postlude evokes other songs from *Winterreise*, including *Einsamkeit* in the original key.³¹ M. 42 in the original *Einsamkeit* contained a *sforzando* B \flat -major seventh chord, a chord to which, according to Kramer, the beginning of *Die Post* and the end of *Letzte Hoffnung* respond. When *Einsamkeit* was transposed,

³¹ Kramer, *Distant Cycles*, 178.

Schubert removed the *sforzando* marking on the new dominant chord. Kramer has suggested that in regards to *Einsamkeit*, it would be beneficial to have the song in its original key. He has noted "...it must be kept in mind that, while the transposition of *Einsamkeit* to B minor was clearly in deference to the *Fortsetzung* of the cycle into a part II, the moment at which, in the conceiving of part II, Schubert acted to transpose *Einsamkeit* cannot be established with any precision."³² Even if the song were performed in the original key, I do not think that the link between the B \flat -major-seventh chord in *Einsamkeit* and the end of *Letzte Hoffnung* is as strong as Kramer implies. In *Einsamkeit*'s original key of D minor, B \flat major is the submediant chord, and in both the original and published keys, the VI chord is used as a secondary dominant to tonicize and imply other tonal centers but is not a focal tonality. There are not enough similarities to link the occurrence of the B \flat -major-seventh chord in *Einsamkeit* to the postlude of *Letzte Hoffnung*, which, while in E \flat major, contains no B \flat -major-seventh chords in the postlude. Schubert's tonal palette is so varied that many such small links could be found in both original and transposed keys, but that does not mean that they are significant. There is not enough stylistic continuity to create a link, and what Schubert consciously chose to do is, in my opinion, more significant than any coincidental similarities created by his subconscious. There is no significant gain to transposing *Einsamkeit* back to its original key.

³² Ibid.

17. *Im Dorfe* (In a Village)

D major, 12/8 time, *Etwas langsam* (somewhat slow)

Im Dorfe, in D major, opens in stark contrast to the disjointed, staccato texture of the previous song. The mood is most like that of *Gute Nacht*; the protagonist is contemplative and observant of his surroundings, but he seems detached rather than entrenched in intense emotions. He is in a village, but there is no reason to believe that this is the village of his beloved; he seems to have left there for good. Nevertheless, the protagonist is travelling a road that leads him to encounters with populated areas, in spite of his outward remarks that seem to shun civilization. He still appears to be looking for some sort of connection to someone or something.

Im Dorfe has a distinct tonal palette that is consistent, yet non-traditional.

Although we are in a major key, the major tonic and a majority of chords in the A section of the song have added tones or incomplete voicings that undermine the sweetness traditionally associated with major. The introduction consists of harmonies essential in the A section of the song: D-major chords, E-half-diminished-seventh chords, E-dominant-seventh chords, and A-dominant-seventh chords. What results is an ebb and flow of tension: D major is a moderately colored triad, ranking third out of seven types of major triads, while E major ranks fifth out of seven, and A ranks fourth. The tension peaks at the E-dominant-seventh chord with an alternating F* non-chord tone in the bass at m. 4 and lessens with the D-major chord in second inversion, which extends the dominant function for the following A-dominant-seventh chord until the D major of m. 1

returns in m. 7. The non-diatonic chords and added chord tones create an ominous atmosphere.

The voice enters and over the same texture and similar harmonies as the introduction sings about dogs barking and chains rattling while people snore and dream in their beds. At m. 12, halfway through the first verse, the left and the right hands trade accompaniment patterns. This puts the block chords in the left hand, which emphasizes the ringing and *Temperaturfarbe* of these chords since lower notes have more audible partials. The final two lines of the stanza are “Träumen sich manches, was sie nicht haben, / Tun sich im Guten und Argem erlaben” (Dreaming of many things they do not have, refreshing themselves in good and bad). Mm. 12–17 contains a constant A in the bass until the left hand regains the alternating figure at m. 18. A, associated with dreams, underscores the section in which the protagonist describes the people’s dreaming. The most symbolic sonorities that appear in this section are E minor, which is emphasized when the protagonist speaks about what people do not have, and A major, the key of dreams.

At m. 16, the D-major sonority of the previous measure changes to D minor, and the protagonist begins the second stanza with the words “und morgen früh ist alles zerfließen” (and tomorrow morning all will vanish). The D minor of m. 16 alludes to the fact that wakefulness is not as happy or refreshing as the dream world. In the following measure there is a ritard, and the right hand plays in unison with the voice for “all will vanish.” M. 18 is marked *allegro*, and the rumbling D-C# figure appears in the bass

without any other chord tones, creating an uncertainty as to whether the line has cadenced in D major or D minor.

Repeated eighth-note Ds in the right hand of the piano at m. 19 introduce a new, lighter texture that continues in the B section, which begins in m. 20 by tonicizing G major. The right hand has incessant staccato eighth notes on D while the left hand plays triads or dyads underneath. In this section the protagonist seems to be idealizing dreams as a way for people to continually escape their troubles. G major appears at m. 20, and as the subdominant of the tonic, it has less *Temperaturfarbe* of any chord heard thus far. Additionally, in this section, the more dissonant harmonies are shorter in duration than in the A section, creating a buoyant, happy sound.

At m. 29 the alternating second in the piano returns with the harmony of the introduction, again evoking the growling of dogs. The protagonist commands them not to let him rest in sleep. At m. 35 he sings “Ich bin zu Ende mit allen Träumen” (I am finished with all dreams). On the word “Ende” D major turns to D minor, a fairly pure minor chord, followed by the word “allen” on an F-dominant-seventh chord in first inversion, which tonicizes B \flat major. B \flat flat major is the same number of fifths away from C as is D major; in any well temperament D-major and B \flat -major chords will be roughly equivalent in their degrees of *Temperaturfarben* due to their symmetrical position in the circle of fifths. The protagonist says that he is finished with dreams, but he still associates them with positive, good feelings, which is depicted with the least colored chords of the whole composition.

With the last line of the stanza the protagonist asks “Was will ich unter den Schläfern säumen?” (Why should I linger among the sleepers?). The pull of dreams are still strong; I believe that he would probably love something to give him a reason to linger in the dream world, one that is full of love and happiness. Nevertheless, he is not asleep or dreaming. When he utters this phrase it is over pure, full, D-major and G-major harmonies. Mm. 38–39 and 43–44 contain full, sustained chords that contrast with the teetering motion of the surrounding measures and ring out beautifully due to the purity of the chords (see Example 6.39). The song only gets less colored towards the end with B \flat chords and the emphasis on IV, G, a chord that is less highly colored than the dominant. The protagonist repeats the penultimate line over B \flat -major harmonies and then repeats the final line with an extended “säumen” over a V-I cadence. Dreams are sweet, even if the protagonist has forsaken them.

Example 6.39: *Im Dorfe*, mm. 37–39

The musical score for Example 6.39 consists of three systems. The first system is the vocal line in treble clef, 12/8 time, with lyrics: "Träu - men, was will ich un - ter den Schlä - fern säu -". The second system is the piano accompaniment, with a right-hand part in treble clef and a left-hand part in bass clef. The piano part features a steady eighth-note accompaniment in the left hand and chords in the right hand. Chord symbols are provided below the piano part: B \flat ⁽⁷⁾, g⁶, D \sharp , G⁶, D \sharp , G \sharp , and A⁴⁻³. A bracket underlines the first two chords (B \flat ⁽⁷⁾ and g⁶), and another bracket underlines the last three chords (D \sharp , G \sharp , and A⁴⁻³).

18. *Der stürmische Morgen* (The Stormy Morning)

D minor, Common time, *Ziemlich geschwind, doch kräftig* (Fairly quickly, but strong)

Der stürmische Morgen is like a quick storm passing through; it contains fewer than twenty measures and lasts less than a minute. It is set in D minor, but the ascending unison melody that opens the piece starts by outlining D major, linking the song tonally and temporally to the previous song. The tonic key of D minor is the overall purest minor key in Young's well temperament because it is a low contrast key, and the tonic and dominant chords are both relatively pure. However, it has no pure melodic intervals, and only one note, le, measures the same as equal temperament. The resulting sound is bleak.

In the first stanza the protagonist describes how the storm has transformed the sky. At m. 7 on the word "Streit" (conflict), F# octaves sound, greatly intensifying the *Temperaturfarben* and depicting conflict (see Example 6.40). The second stanza starts on the VI, chord B \flat major. The protagonist sings of the red flames that dart between the gray clouds. B \flat major is tonicized beginning at the anacrusis to m. 10, and the accompaniment changes to full chords with a dotted rhythm, creating a regal feeling. B \flat major is a moderate-to-low colored key, which provides the necessary tension and beating to create an exciting sound. The diminished chords add to the dark feeling of the storm, but the rhythm creates a feel of splendor. The protagonist is taking pride in this storm, calling it a morning after his own heart. In *Einsamkeit* the protagonist said that he preferred the storms to the sense of loneliness; perhaps he is trying to get the physical storm to again infuse his heart with feeling.

Example 6.40: *Der stürmische Morgen*, mm. 7–8

her in mat - tem Streit, um- her in mat- tem Streit.

The transition between stanzas two and three consists of repeated octave Bbs in the second half of m. 13. The protagonist sings a D-minor melody that is doubled in octaves by the piano as he proclaims that his heart sees its own image painted in the sky. His heart is not feeling the emotional storm that it has felt in previous songs, but rather he is viewing the storm and wishing to absorb some of its passion and reawaken his preferred state of being. The last two lines read “Es ist nichts als der Winter, Der Winter kalt und wild!” (It is nothing but winter, Winter, cold and fierce!). Block chords (without the regal dotted rhythm) return in this section. This chordal section sounds much more dissonant than the previous one due to the F#-diminished-seventh chord in m. 16 that harmonizes the last line of the poem, lasts for the whole measure, repeatedly pounds away, and is marked with a fortissimo sforzando. The F#-diminished-seventh chord sounds less stable than it does in equal temperament because each minor third is a different size (F#–A: 302 cents; A–C 306 cents; C–Eb: 298 cents; Eb–F#: 294 cents), creating a rougher sound. The chord is followed by a repetition of the above line with a full measure of A-dominant-seventh chords (see Example 6.41). A major is also a moderately colored key, and with the addition of the seventh it infuses the accompaniment with a greater energy.

Example 6.41: *Der stürmische Morgen*, mm. 15–19

15
 malt sein eigenes Bild, es ist nicht als der Win-ter, es ist nicht als der Win-ter, der
 Win - ter kalt und wild!

ffz *ffz*

$f\sharp^{\circ}4$ $gm4 A\flat$

18
 A d

The texture changes to octaves and then cadences on D minor with the last word. The postlude is not a reiteration of the introduction, but rather it is a return of the music that occurred between stanzas one and two: a hurried, descending line of triplets in the right hand that leads to a perfect authentic cadence. The descending line in the postlude evokes the sense that the protagonist is not coming out of his grief and despair, but rather spiraling further into it. The perfect authentic cadence seems to punctuate the decent with a sense of finality.

19. *Täuschung* (Illusion)

A major, 6/8 time, *Etwas geschwind* (rather quickly)

As Susan Youens has pointed out, *Täuschung* is contrafactum; the music was taken from a second-act aria “The Song of the Cloud Maiden,” from Schubert’s own *Alfonso und Estrella*.³³ In the original aria King Froila tells the story of a huntsman who falls to his death in pursuit of a beautiful woman, but in *Winterreise*, the protagonist is singing of his own present experiences. “The Song of the Cloud Maiden” was originally set in B major with orchestra, but *Täuschung* is set in A major, which, in the context of *Winterreise*, is the key of dreams. The protagonist sings of following lights that lure him here and there, but he claims that he is glad to fall for the trick, which implies that he has not fallen for any trick but instead has consciously chosen to follow the lights he sees. At the end of the song it is clear that the enchanting light is from a house and that the true illusion is a loving soul that he imagines within. The house, like his spring dream and the mail carriage, has led him once again to resurrect feelings of love for his beloved. The protagonist is indulging in his daydream.

The song opens with octaves in the right hand of piano with rising arpeggios in the left hand that evoke the sounds of a graceful dance. This texture is maintained throughout the song with the exception of mm. 28–30, which contain repeated triads in the left hand instead of the ascending arpeggios. This is one of the most harmonically and texturally consistent songs in *Winterreise*. The introduction begins with two solid measures of A major before a C#-dominant-seventh chords appears in m. 3, tonicizing the

³³ Youens, *Retracing A Winter’s Journey*, 268.

vi chord, F# minor, which then leads into a V⁷-I cadence to finish the introduction. A major is the key that sounds closest to our equal temperament, but this song contains C# major and B major as secondary dominants, which increases the tension and *Temperaturfarben* in the song. This combination of chords creates a sense of wonder and anticipation.

The voice enters at m. 5 and sings over the same basic harmonies presented in the introduction about following the dancing light. The vocal phrases alternate ending in half and full cadences, which highlight the added tension of the dominant-seventh chord. At m. 22 the tonic major turns to minor as the protagonist starts to sing “Ach! wer wie ich so elend ist, / Gibt gern sich hin der bunten List” (Ah, only someone as miserable as I is happy to fall for the colorful trick) (see Example 6.42). Like previous songs, the minor mode provides a break from the protagonist’s daydream as he momentarily allows rational thoughts to interrupt the happiness he feels. Yet A minor is a very pure triad; his misery is not too intense; he outright stated that he was happy to be deluded and quickly pushes the negative feelings out of his mind.

While A-minor harmonies accompany the protagonist’s misery, the dominant of the dominant is harmonized at the mention of the “bunten List.” In m. 26 the F#-dominant-seventh chord–B-dominant-seventh–E major progression sounds colorful and exhilarating, thus creating word painting for the “colorful trick.” F# major is the most highly colored major triad in Young’s well temperament; the added seventh creates an even more intense moment.

Example 6.42: *Täuschung*, mm. 21–33

21

Ach! wer wie ich so e-lend ist, gibt gern_ sich hin der bun- ten

A a a E E⁴ F[#]/B B⁷

27

List, die hin-ter Eis und Nacht_ und Graus_ ihm weist_ ein hel- les, wär-mes Haus_

E F[#]₂⁴no6 F[#]₂⁴no6 E E⁺ A A E⁵

cresc. *p*

At m. 28 the protagonist begins to sing of the place beyond the horrors of the winter night to which the light leads him. On the word “Eis” (Ice) an F[#]-seventh chord with no fifth (the aural equivalent to an E-diminished chord) harmonizes the dominant, and on the word “Graus” (horror), the dominant chord becomes augmented (see Example 6.42 above). The music sounds as if the protagonist is placing all his energy into restoring the happy world of his daydream; the A chords that introduced the section were overcorrected with highly colored major chords, which are now returning to the primarily tonic-dominant texture that was established earlier in the song. With the words “ein helles, warmes Haus” (a bright, warm house) the harmony returns to I and V⁷ chords.

The remainder of the song contains the same harmonies as the beginning. The protagonist declares in the last stanza that “Nur Täuschung ist für mich Gewinn!” (Only illusion lets me win!). While some scholars view this as an indication that the protagonist

is going mad, this song falls firmly into the pattern established in previous songs where the protagonist is consciously indulging in happy feelings triggered by a dream, sound, or in this case, sight. Youens has stated “The ‘beloved soul and bright house’ are mad illusions; the light is deception; and the dance is a claustrophobic entrapment within the narrowest of boundaries.”³⁴ I do not believe that the bright house is an illusion any more than the mail carriage was. The true illusion is the beloved soul, the thought that someone beloved to the protagonist is within. What is different in this experience from previous dreams is the protagonist’s reaction; he does not react to this daydream with passionate, highly colored minor sections as in *Frühlingstraum* and *Die Post*. There is no sense of anger or self-reproach; he is happy to create and indulge his own daydream. In this song the protagonist equates illusion with winning. In order to “win,” he must find a way to perpetuate his detachment from reality.

20. *Der Wegweiser* (The Signpost)

G minor, 2/4 time, *Mässig* (Moderate)

Although *Der Wegweiser* has a different mood from *Täuschung*, both songs have a strong sense of emotional consistency and make use of pitch repetition in the accompaniment; *Täuschung* contains repeated octaves, and *Der Wegweiser* contains eighth notes that pulse on repeated pitches throughout the majority of the song. The mood of *Der Wegweiser* is resigned and somber compared to the dreamy music of the previous song, but it is still within the same emotional palette. In *Täuschung*, A minor

³⁴ Youens, *Retracing a Winter’s Journey*, 271.

depicted the protagonist's negative thoughts regarding himself and reality; in *Der Wegweiser* his reality is depicted in G minor, which, like A minor, is still a relatively pure minor key, ranked fourth out of twelve in terms of purity. G minor is categorized as having no contrast because the tonic and the dominant have the same amount of purity. Additional contrast and color is added to the introduction through the use of seventh chords and suspensions in all chords other than the tonic.

The other tonal center in the song, G major, is ranked third out of twelve in terms of purity. The minor tonic and its parallel major are keys with roughly the same amount of *Temperaturfarben*, so moving between the two tonal centers does not create the sense that the protagonist's feelings are oscillating wildly. The text has an air of determined finality, and the song evokes a sense of emotional stability, as if the protagonist might soon find some resolution to his pain.

The opening of *Der Wegweiser* evokes the sound of slow-paced walking laced with pauses (see Example 6.43). The tonality of the song is clearly established in the introduction through two measures of the tonic minor followed by a traditional harmonic progression cadencing on the tonic. The voice enters at m. 6 as the protagonist asks himself why he avoids the roads that other travelers take. The piano accompaniment doubles the vocal line with added thirds, and at the anacrusis to m. 7 the left hand of the piano partakes in a contrapuntal answer to the voice's opening statement. The music for the first stanza is mainly diatonic and creates a static atmosphere through the repeated tones in both the vocal line and the accompaniment.

Example 6.43: *Der Wegweiser*, mm. 1–5

The musical score for Example 6.43, 'Der Wegweiser', measures 1–5, is presented in a 2/4 time signature with a key signature of two flats (B-flat and E-flat). The score consists of a vocal line and a piano accompaniment. The piano part begins with a *pp* dynamic marking. The chord progression is indicated by symbols below the piano part: *g*, $f\sharp o_2$, $F r^{+6}$, $D^{4+3-2-3}$, and *g*. The vocal line starts with a fermata and the lyrics 'Was ver'.

The first significant change in *Temperaturfarben* accompanies the first statement of the last line of the first stanza, which reads “Durch verschneite Felsenhöh’n” (Through snowy mountain tops), at m. 13. The D-dominant-seventh chord in m. 12 progresses not to the tonic but to a B \flat -minor chord (see Example 6.44). A progression follows that emphasizes F-minor, C-minor, and G-minor chords. The B \flat -minor chord at first seems to be out of place since the other minor chords create a circle of fifths progression; however, B \flat minor has the same *Temperaturfarben* ranking as C minor; they are both equidistant from the central, more pure A- and E-minor triads in the circle of fifths. What results is a smooth progression through minor chords that have increasing amounts of *Temperaturfarben*, creating the feeling that the tension level is ascending and descending, simultaneously evoking the imagery of the mountain tops. The B \flat -minor chord also functions as the iv^6 of F minor, adding to the tonicization of F minor in mm. 15–16.

The verse ends solidly in G minor, but an incessant G sounding in the right hand of the accompaniment smoothly transitions to the relative major at m. 23. In the second verse the protagonist contemplates why he shuns mankind and asks himself what foolish longing drives him into isolation. The opening harmony is diatonic and pure, consisting

Example 6.44: *Der Wegweiser*, mm. 12–19

12 Ste - ge durch ver - snei - te Fel - sen - hohn? su - che mir ver - steck - te...

16 Ste - ge durch ver - schnei - te Fel - sen - höhn, durch Fel - sen - hohn?

Chord symbols: D⁷, b^{b6}, C⁷, f, C, C⁷, f, C, c, g⁶, D^{4 - 3}, g⁶, D^{4 - 3}, g, D^{4 - 3}

of I, IV, and V chords in G major that ring out like a sweet hymn. The *Temperaturfarben* seem to portray the protagonist's genuine wonder at his own actions and feelings.

Beginning at the second half of m. 27, a B-dominant-seventh chord sounds without preparation, ending the passage of purely ringing harmonies by introducing a new sense of anxiety (see Example 6.45). His wonderment has become more angst-ridden, and the last line of the stanza is presented in a declamatory style in unison and octaves with the piano.

In equal temperament we hear the contrast between the C-major and B-major chords in this passage as two major chords a half-step apart, but in well temperament there is an audible alternation between a pure chord and a highly colored chord. C major is the most pure out of seven kinds of major chords and B major is sixth out of seven.

Example 6.45: *Der Wegweiser*, mm. 27–33

27

scheun, weleh ein thör - rich - tes Ver - lan - gen treibt mich

G B \flat B⁷ C B^{no5}

30

in die Wü - ste nei - en, treibt mich in die Wü - ste - nein?

C B^{no5}

fp *pp*

The B-major chord also lacks a fifth, taking away the more consonant interval of the triad and thus focusing the listener's attention on the third between B and D#. The harmony is depicting the struggle between light and darkness taking place in the protagonist's mind. B major is emphasized temporarily (as the V of E minor); in m. 34 the piano plays the full B-major chord, which is immediately followed by a B-minor triad for two full measures. Both B major and B minor have associations with extreme suffering and pain in Schubert's cycles.

The tonic G minor is reestablished for the third stanza, which begins at the anacrusis to m. 41. The harmony of the third stanza is only slightly modified from the first, with the most significant change occurring with the vocal line at the words "suche Ruh" (seeking rest), at which point the voice ascends to a G \flat . Schubert chose not to use a

purser sonority; the moderate color emphasizes the protagonist's inability to obtain the rest he seeks.

The fourth stanza begins at the anacrusis to m. 57. It contains greater intensity and more harmonic variety than the previous three stanzas. The text reads:

Einen Weiser seh' ich stehen	A guidepost I see standing
Unverrückt vor meinem Blick;	Remains fixed before my eyes;
Eine Straße muß ich gehen,	I must travel a road,
Die noch keiner ging zurück.	From which no one has returned.

The vocal line contains continuous Gs for four measures before it slowly ascends, continuing to repeat notes. On the word "Weiser," in m. 57, an unexpected C#-diminished-seventh chord occurs; one would expect for the chord to lead to the dominant D major, but D major is not heard again until m. 65. Instead, G-minor and E \flat -dominant-seventh chords follow. Tonal ambiguity is created, with the E \flat -dominant-seventh chord implying a tonicization that never comes. In m. 64 a stronger tonicization of the dominant occurs with an A-dominant-seventh chord, which leads to a V $\frac{5}{4}$ -i progression in the following measure. From looking at the score, one may speculate that the E \flat -major dominant chord would be in stark contrast to the sharp-major dominant sevenths of A and D, but E \flat adds variety without increasing the *Temperaturfarben* of the section. It is not tonicized in a way that brings out the unique qualities of flat-major keys. In Young's temperament it has the same sized major third as an A-major triad, and in other well temperaments the triads are similar in size due to their symmetrical position in the circle of fifths. This consistency of *Temperaturfarben* coincides with the repetitive, intense, trance-like quality apparent in the texture, voicing, and vocal line.

The C# sonority returns in m. 63 as a minor chord in second inversion on the word “Strasse,” which is followed by an A-dominant-seventh chord before the dominant D major is reached at the word “keiner.” The A-major harmony implies that the imperative that the protagonist sees before him, that he must travel the road of no return, may be his own fantasy. The emotional peak of this section occurs at mm. 65–66 when the protagonist reaches the highest note in his vocal ascent and sustains it on the word “keiner” (no one) before descending back to G. These measures accentuate the clash between the seventh and the root of the D-dominant-seventh chord in m. 65, adding to the emotional intensity. After G minor is heard on the downbeat of m. 66, A \flat major, the Neapolitan chord, sounds, followed by a i_4^6 –V–i cadence in the tonic. A \flat major is the most highly colored major chord heard so far in the song; it is fleeting, but it adds to the emotional swell that underscores the powerful image of a road from which no one returns.

The final stanza repeats with the same incessant Gs emphasized in the piano in a lower octave and surrounded with sustained pitches above and below. C major is a prevalent harmony on this repetition of the stanza, which, due to the purity of the chord, creates a sensation that the tension and color of the previous chords are momentarily released. The purity of the C-major chord highlights the dissonance of the ascending chromatic bass line and the descending soprano line in the right hand of the piano. At mm. 74–75 a first inversion C-dominant-seventh chord leads into a first inversion D-dominant-seventh chord that ushers in a repeat of the same harmonic progression as m. 65. The protagonist repeats the final line of the stanza one last time, firmly in G minor.

The solemnity of G minor, the slower harmonic rhythm (quarter notes instead of eighth notes) and the block chords evoke the feeling of a funeral hymn. While the song began and started in the same key, the piano does not repeat the music of the introduction as it did in many of the previous songs. The voicing and texture of the G-minor tonality at the end of the song is not lilting, staccato, or light; the protagonist seems to have committed to the tonality with new resolve, as he is newly committed to following his own path.

21. *Das Wirtshaus* (The Inn)

F major, Common time, *Sehr Langsam* (very slow)

The previous song was one of quiet intensity and resolve. Although it was unlike some of the more frantic and intense songs of the cycle, it presented an emotional turning point. *Das Wirtshaus* is a calm response to *Der Wegweiser* that provides a slight break in the emotional tension, similarly to how the songs in B \flat -major provided an interlude in *Die schöne Müllerin*. In *Das Wirtshaus*, the protagonist is conveying a narrative in which the strongest emotion conveyed is weariness. It is the only song in *Winterreise* in F major, which is also the purest major key signature used in the entire cycle (only about a quarter of the songs are set in major). Its dominant chord is C major, the purest triad in most well temperaments. Youens has noted that historically F major is associated with pastoral imagery, which is the epitome of tranquility.³⁵ Thrasybulos Georgiades has linked the F-major tonality and the protagonist's melody to the *Kyrie* from the Gregorian

³⁵ Youens, *Retracing a Winter's Journey*, 280.

Requiem, saying that both seem at ease and consecrated.³⁶ Both of these interpretations of F major's meaning correspond with the sweetness and purity of F major's *Temperaturfarben* in well temperament.

The *Temperaturfarben* of *Das Wirsthaus* is less varied than the songs with stronger or oscillating emotions. This song is very consistent in its color; although it is laced with individual chords that create momentary swells or decreases in color, an increased or decreased overall level of *Temperaturfarben* is never established. The consistency of the song's *Temperaturfarben* adds to the feeling of resignation that the protagonist feels.

In *Das Wirsthaus* the protagonist comes across a graveyard that he equates to an inn with no vacancy. The song's introduction is consonant with a church hymn-like texture and emphasizes the tonic and dominant in the first three measures. In the second half of the third measure, the tonic chord becomes a dominant-seventh chord and tonicizes the IV chord, B \flat major. The IV of the tonic has more color than the V in flat-major keys, further intensifying the amount of color and *Temperaturfarben* created through the tonicization.

Before the music returns to F major, there is a momentary tonicization of D minor in mm. 4–5. The tonicization is unusual with the progression vii^{o7}–i–V in D minor. The A-major chord is the most highly colored major chord encountered in the introduction; it is followed by a C-dominant-seventh chord that, even with the added dissonance of a seventh, is very pure. The shift between the two chords is striking. Plausibly, Schubert

³⁶ Thrasybulos Georgiades, *Schubert: Musik und Lyrik* (Göttingen: Vandenhoeck & Ruprecht, 1967), 379.

wished to convey the link between dreams and the protagonist's day dream of eternal rest in the graveyard.

In the first two lines of the stanza a solemn atmosphere is created through an emphasis on minor chords, including the minor version of the v chord (which functions as the iv of G minor), as well as a tonicization of G minor. G minor links this passage with the previous song, and by doing so it helps to strengthen the sense of narrative by creating continuity and sense of temporal closeness. With the second half of the first stanza the IV chord is again tonicized, increasing the color of the passage. The verse has gentle swells of color but no drastic or abrupt changes in *Temperaturfarben* as was common in some of the earlier, more emotionally laden songs.

The harmony for verses one and two have only minor differences. Verse three begins at the anacrusis to m. 18; in m. 20, the tonic F major appears as a dominant-seventh chord, briefly tonicizing a second inversion B \flat -major chord on the third beat of the measure (see Example 6.46). This begins the section with the most *Temperaturfarben* in the entire song. An F-major chord with an added flat sixth in both the voice and the piano sounds on the downbeat of m. 21; the added sixth (grief motive) resolves on the second syllable of the word "tödlich" (mortal). The text painting here is apparent in any key, but the harmonic choices that follow, a tonicization of the pure dominant C major through a G-dominant-seventh chord in first inversion appear to be chosen for their *Temperaturfarben*; the increased purity of this progression contrasts and highlights the dissonance in mm. 20–21.

Example 6.46: *Das Wirsthaus*, mm. 20–24

20

matt zum Nie - der - sin - ken, bin töd - lich schwer ver - letzt.

F⁷ B^b₄⁶ e^{o7}/F F^{b6-5} F C C

22

O un - barm-herz'-ge Schen - ke, doch weis - est du mich ab? Nun

G^{7(no5)} b^{o7} f₄⁶ C C f b^b₄⁶ f f₄⁶ C f E^b₇ c₄⁶ E^{b+} A^b

M. 22 is the interlude between stanzas three and four, and its purity also contrasts with another example of word paining that follows. On the third beat of m. 22, a second-inversion F-minor chord is substituted for the tonic F major. In the following measure, on the word “unbarmherz’ge” (merciless), the voice repeats the flatted third of the chord, further emphasizing the change in mode. F minor is highly colored, ranking fifth out the six types of minor thirds in the purity rankings. It has a minor third that is narrower than the equal-tempered minor third. Since the chord is sustained, the quality of the chord can easily be heard, and the measure sounds forlorn.

The remainder of the fourth stanza never leaves F major, but the harmonies suggest F minor, A^b major, and C minor. Following the measure that highlighted F minor, there is a cadence on A^b major that Youens suggests is representative of the

protagonist being turned away from the graveyard.³⁷ Indeed, the measure harmonizes the protagonist's question "doch weisest du mich ab?" (yet you reject me?) and includes not only an E \flat -dominant-seventh chord but also a E \flat -augmented chord, both of which tonicize A \flat major. I assert that the harmony is not representative of being turned away, but rather is the protagonist's emotional reaction to being turned away. A \flat major is ranked eighth out of the twelve major keys in the purity rankings and has much more color than the home key of F major, which ranks second. It takes a while to firmly return to diatonic harmonies; the protagonist seems to be trying not to let himself be rattled.

On the mention of wandering in m. 26, the tonality returns to F major, but F major briefly changes back to F minor at the end of the measure. F major sounds on the downbeat of m. 28, the purity of which is immediately contrasted by the tonicization of the ii chord with an F \sharp -diminished-seventh chord, the secondary leading tone of the supertonic. This progression creates a poignant contrast between the F \sharp -diminished-seventh chord and the tonic F major.

The song ends with a repetition of the second half of the introduction, but the passage ends firmly with a V⁷-I cadence instead of tonicizing the vi chord as before. Again in this song, the protagonist has ended in the same emotional state in which he began; in this case, he did not find the rest he sought, but he has not yet abandoned his acquiescent mood.

³⁷ Youens, *Retracing a Winter's Journey*, 283.

22. *Mut* (Courage)

G minor (originally A minor), 2/4 time, *Ziemlich geschwind, kräftig* (Fairly quickly, powerfully)

Mut translates to courage, which seems to be the emotion that the protagonist believes that he is embodying in this song. Nevertheless, an alternate title for the poem could be “denial.” The protagonist is attempting to ignore his feelings, both physical feelings of cold and discomfort as well as the feelings of his heart.

Along with *Die Nebensonnen*, *Mut* is one of two songs from part two for which drafts are extant.³⁸ The draft for *Mut* is in A minor and contains the music as it appears in the final version for stanzas one, two, and the first twelve measures of stanza three, excluding the change in key signature. In October 1827, Schubert finished setting the third stanza and added the postlude, which is a repetition of the introduction. The song was transposed to G minor for publication. This change in key shifts the song from the second-purest to the fourth-purest minor key. In addition to the new key having more *Temperaturfarben*, there is also a change in the contrast rankings; G minor is the only key in which the major dominant has the same purity ranking as the minor tonic, and so it is categorized as having no contrast, where as the original key of A minor is categorized as a key of high contrast, with the color of the dominant contrasting with the purity of the tonic. Nevertheless, in both keys the song contains *Temperaturfarben* contrasts created through tonicizations. The overall result of the key change is a song that has slightly less overall *Temperaturfarben* in the transposed key than in the original key, but a tonic that is

³⁸ See Alexaner Weinmann, “Zweineue Schubert-Funde,” *Österreichische Musikzeitschrift*, 27 (1972): 75–78 for a facsimile and commentary.

less pure than in the original key. Why would Schubert have transposed this song to have less *Temperaturfarben*, since the cycle is building up to its conclusion? I postulate that Schubert had established A major as the key of dreams, and since *Mut* has an official key change to the tonic major, he wanted a key that did not already have specific extra-musical associations linked to it. The protagonist is not dreaming here; he is giving himself a pep talk of sorts in an attempt to distract himself from both the cold and his feelings. Additionally, the final song was also transposed to a key with less *Temperaturfarben*, and the transposition of *Mut* creates a more gradual build to the less intense final song.

The opening four bars establish the tonality with diatonic i, iv, and V chords. When the voice enters at m. 5, the piano momentarily rests and then doubles the voice in octaves until m. 7. Throughout the song the voice and piano participate in a type of call and response with the piano echoing the protagonist's assertions. In the first two stanzas the protagonist sings about how he shakes off the snow when it flies in his face and how he sings in order to ignore what his heart is saying. A larger portion of the two stanzas address the physical cold, and a smaller portion address his heart. The first phrase of stanzas one and two ends with a half cadence, which is E major in the original key and D major in the published key. D major is significantly purer than E major; it is ranked third out of seven major triads, and E major is ranked fifth out of seven triads.

Both stanzas one and two end in the parallel major: A major in the original key and G major in the published key. The first two verses contain *Temperaturfarben* that consist primarily of the tonic key with an emphasis on the dominant and the parallel

major. The emphasis on major tonalities depict the protagonist's attempt to pretend that he is not cold or heartbroken.

The last stanza is preceded by a key change to the parallel major. It reads:

Lustig in die Welt hinein	Happily into the world
Gegen Wind und Wetter!	Against wind and weather!
Will kein Gott auf Erden sein,	If there is no God on earth,
Sind wir selber Götter!	We ourselves are Gods!

From just the text of the third stanza one may expect a jaunty melody to evoke the happy façade that protagonist has put on and more highly colored harmonies to underscore the rather deep statement at the end of the poem. Yet that is not what Schubert wrote. The third stanza repeats twice; on the first iteration it is mainly diatonic to G major, with no word painting. With the second iteration there is a slight change in *Temperaturfarben*, which comes in the lines that speak of the weather, not of God or Gods. In m. 31, the dominant leads to the original tonic minor in the following measure, and then the dominant is followed by a major III chord, B \flat , in m. 33 (see Example 6.47). The III chord is followed by its V⁷, an F-dominant-seventh chord over a B \flat bass; in both the transposed key and the original key, the major III chord has less color than the major tonic chord. The relative purity of the chord in conjunction with the dissonance of the dominant-seventh chord over the root of the chord it is tonicizing evokes the strain with which the protagonist is trying to assert his positive attitude. His attempt to maintain the attitude inspired the purer harmonies, but not without dissonance. Schubert's harmony choices in this section depict the protagonist's struggle with maintaining a happy façade rather than the façade itself. The protagonist ends the verse firmly in G major, but the

piano postlude that follows is in the tonic key of G minor. The protagonist's attempts at courage have not been successful.

Example 6.47: *Mut*, mm. 31–36

31

Lu - stig in die_ Welt hin - ein ge - gen Wind und_ Wet - ter!

mf

f

D D g g⁶ D B^b F⁷/B^b B^b B^b B^b₄^{6toB^b} F⁷ B^b

23. *Die Nebensonnen* (The Mock Suns)

A major, 3/4 time, *Nicht zu langsam* (not too slow)

Die Nebensonnen, which translates to parhelia, also known as “mock suns” or “sundogs,” are brightly colored spots on both sides of the sun that appear from the refraction of sunlight through ice crystals in the earth’s atmosphere. The protagonist begins the song by recounting how he saw three suns in the sky that stayed for so long that they seemed as if they did not want to leave him. The protagonist’s tone does not imply that he is attributing this natural phenomenon to something more significant or that these suns are a figment of his imagination. Nevertheless, the song’s harmony implies, through the key of A, that he is dreaming. These suns are not an illusion or an indicator of madness, but rather a focal point for the protagonist’s daydreams. They remind him of

companionship, and of his beloved. Indeed, scholars such as Youens have stated that the suns are a metaphor for the beloved's eyes.³⁹

This song is the last time in the cycle that something unexpectedly reminds the protagonist of his beloved. Since the cycle ends with the next song, *Die Nebensonnen* is a breaking point. Repeatedly throughout the cycle, the protagonist has accepted his state (*Einsamkeit*) or resolved to overcome it (*Mut*), but again something external brings back his memories and the love he still has for his beloved.

Like many previous songs in the cycle, especially in the second part, this song has a hymn-like texture. It opens in A major with predominantly I, V⁷, and IV harmonies, firmly establishing the home key and the dream connotations that accompany A major. In m. 1 the tonic chord becomes a dominant seventh, tonicizing the IV chord D major, lessening the *Temperaturfarben*.

The first two lines of the first stanza are sung over the same music as the introduction. The protagonist is telling, in the past tense, of how he saw three suns in the sky and gazed at them. In m. 10 when he speaks of how long they stayed and that they seemed unwilling to leave him, the vi chord, F# minor, sounds and then morphs into an F#-major chord at the end of m. 10, which is followed in m. 11 by the dominant C# major. C# major and F# major are ranked fifth and sixth respectively out of six sizes of major triads in Young's well temperament. These strained, yearning harmonies dominate until m. 16 and accompany the protagonist's statement that the suns did not want to leave him.

³⁹ Youens, *Retracing a Winter's Journey*, 291.

At m. 16 the tonality shifts to the parallel minor, A minor. V-i harmonies underscore a change in tense. The wanderer has changed from talking about the suns in past tense to addressing them in the present. He declares that the suns are not his and commands them to go look into someone else's face. Yet, even with this command, the fight in the protagonist seems to be lacking. A minor is sad but pure; this section is slightly more recitative-like than the other more chordal textures, but the protagonist's inflection is more of resignation than actual command. His tiredness or lack of fight seems apparent.

The language that the protagonist uses to address the mock suns supports the view that the suns symbolize his beloved's eyes. He does not tell the suns to shine or illuminate elsewhere; he commands them to "Schaut ander'n doch ins Angesicht!" (Look into someone else's face!). The protagonist is treating the suns as if they were eyes with the word "Schaut," which translates to view, look, or behold. He is also addressing the place where eyes look: at his face. If he were not projecting the attributes of eyes onto the suns, he would probably tell them to shine on someone else, rather than telling them to look someone else in the face.

M. 19 introduces C-major harmonies as the protagonist sings "Ja, neulich hatt' ich auch wohl drei" (Yes, recently I too had three). This sentiment momentarily fills the protagonist with serenity as can be seen through the C- and G-major harmonies. His happy memories once again evoke feelings of love, now through some of the purest major chords in well temperament. In the following line, "nun sind hinab die besten

zwei” (now the best two have gone down), the protagonist acknowledges reality, and the harmony evokes A minor.

The last lines are sung over music that begins identically to the introduction in A major. The meaning of the last two lines is clear: “Ging nur die dritt’ erst hinterdrein! / Im Dunkel wird mir wohler sei.” (If only the third one would go, too! In the darkness I will feel better.) The third sun is the protagonist himself; his dream is to die. Again, this is not an angst-ridden section, not by *Temperaturfarben*, rhythm, nor any other melodic or harmonic means. The harmony diverges from what was heard in the introduction at m. 28 where there is word painting on “Dunkeln” (darkness) with a C#-dominant-seventh chord in first inversion, a very highly colored major chord, progressing to an F#-minor chord. These sonorities have been heard throughout the song as a swell of pain for the protagonist. This powerful C#-major chord is heard again in m. 30 at the beginning of the piano postlude, followed by an E-dominant-seventh chord that begins three V⁷-I progressions in A major. The protagonist has not been able to escape from his memories and dreams.

24. *Der Leiermann* (The Organ Grinder)

A minor (originally B minor), 3/4 time, *Etwas langsam* (somewhat slow)

Der Leiermann was published in A minor but originally composed in B minor.

The mood with which the cycle ends shifts with the key changes of songs twenty-two and twenty-four. Originally songs twenty-one and twenty-two had the same *Temperaturfarben* ranking (although the songs are in major and minor, respectively),

with the *Temperaturfarben* increasing significantly with song twenty-three and only decreasing slightly with song twenty-four.⁴⁰ With the transposed keys, song twenty-two has more *Temperaturfarben*, creating a more gradual ascent to the intensity of song twenty-three, and the final song returns to the *Temperaturfaben* of song twenty-one, creating a greater sense of resolution because of the moderate *Temperaturfarben* of the key.

Richard Kramer has expressed deep disappointment in Schubert's acquiescence to transpose *Der Leiermann* to A minor, which Kramer has perceived as initiated by Haslinger. He has claimed that the song as conceived in B minor was intended to be "outside the main tonal argument in the journey, to be understood literally and in a metaphysical sense as an extreme harmony—its extremity defined in the unfolding of the journey."⁴¹ Kramer has noted the link between *Der Leierman*'s original key of B minor and *Irrlicht*, which is also in the key of B minor. Yet, how can the original *Der Leiermann* be perceived as outside of the cycle when B minor is a key that has been heard as a key signature and a significant tonal center in previous songs? Kramer does not address that *Einsamkeit* was transposed to B minor, a transposition that further weakens his argument that B minor is a tonal center outside of the cycle. Since *Einsamkeit* is the final song of part one and most scholars agree that the song was transposed to accommodate the composition of songs thirteen through twenty-four, it is probable that Schubert had decided to transpose *Einsamkeit* before he wrote *Der*

⁴⁰ See the *Temperaturfarben* graph of the second half of *Winterreise* on p. 242.

⁴¹ Kramer, *Distant Cycles*, 184.

Leiermann, indicating that he did not conceive of B minor as a tonality outside of the cycle when he composed *Der Leiermann*.

Kramer is correct that B minor is “an extreme harmony,” but he is mistaken in his claim that the transposition to A minor creates a false sense of closure.⁴² The transposition to A minor creates a true sense of closure; why should it be perceived as false? The end of the cycle is open to interpretation, but the transposition indicates that Schubert wanted to end the cycle with a greater sense of closure and serenity, and the fact that this was not Schubert’s initial conception does not mean that the decision is not valid. Kramer has lamented that “no amount of speculation as to cause or effect can bring the matter right—can justify what is in effect a tampering with the critical essence of the cycle.”⁴³ In response to this statement I return to an earlier point: the conception of key and the initial drafts of the cycle are not more valid or divine than a revised draft. This line of thinking seems antiquated; it seems to fall into the old perception of composer as genius or divine muse instead of composer as artisan whose editing and crafting are as important as his initial ideas.

Der Leiermann has a consistent texture and harmony throughout. Open fifths on the root and fifth of the tonic repeatedly sound with each measure, creating a drone as the voice and piano take turns presenting a haunting melodic line over open sonorities that evoke a V-i progression. The song calls to mind both the sounds of a hurdy-gurdy and a funeral drone. The original key of B minor is a more highly colored key, ranking eighth

⁴² Ibid.

⁴³ Ibid.

out of twelve in the purity rankings of minor keys, while the transposed key of A minor ranks second. While B minor is categorized as a key of highest contrast, A minor is only slightly less contrasting, falling into the high contrast category. This key change maintains the overall qualities of the original harmony (e.g., the contrast between the more highly colored dominant versus the minor tonic, unlike the changes that occur with the change of key with song twenty-two). Through transposition, Schubert decreased the *Temperaturfarben* of the final song, creating a more neutral feeling; there is less angst, yet still a sense of numbness.

The song's introduction presents the majority of the harmonic material for the entire song (see Example 6.48). The two main components that make up the material of this song are a) measure-long units that are either comprised of the drone fifth under a melodic idea consisting of four sixteenth notes followed by four eighth notes, and b) measure-long units in which an eighth-note–sixteenth-note figure leads to a full triad over the drone with an extra doubling that descends to a dissonant note. The only full chords that occur in this song are A minor, E major, and E dominant seventh. The measure-long units with full triads seem to be simulating an uneven vamp; sometimes there is one in a row, or two, or, at m. 52, four. This song has the most consistent *Temperaturfarben* of all the songs in the cycle.

Example 6.48: *Der Leiermann*, mm. 1–8.

1

pp

pp

a^{no3} a^{no3} a a E/A a E/A a E7/A E7/A

The voice and the right hand melody in the piano function in a type of call and response, presumably between the protagonist and the organ grinder. The protagonist notes that the hurdy-gurdy man is “Drüben hinterm Dorfe” (Over there, behind the village). Once again the protagonist has ended up near civilization. In spite of claiming that he shunned mankind and that he must take the road from which no one returns, this is not the choice he made. He did not have the courage to choose the route of death.

With the same mood and harmony as the rest of the song, the protagonist ends the cycle with these questions:

Wunderlicher Alter!	Strange old man!
Soll ich mit dir geh'n?	Should I go with you?
Willst zu meinen Liedern	Will you play your hurdy-gurdy
Deine Leier dreh'n?	To my songs?

Richard Kramer has stated that *Der Leiermann* is about not past or future but a “timeless present.”⁴⁴ This is a very apt label for the song; the protagonist is presently in a place free of both the memories of his past love and preoccupation with death. He is in the present moment, confronted with the presence of another human being and the option to change his current trajectory. He seems taken by the idea of the hurdy-gurdy man, who seems unaffected by the growling dogs and the world around him. The protagonist sees the hurdy-gurdy man as a kindred spirit who could serve as his companion and witness to his life.

⁴⁴ Kramer, *Distant Cycles*, 182.

Conclusion

Because *Winterreise* has no clear narrative and the final poem is ambiguous, many different interpretations of the cycle's ending have been published by numerous scholars. Some call the protagonist an atheist, a secular Christ figure, a man whose soul dies, a man who dies, a man who goes mad, and so on.⁴⁵ Song ordering and the acceptance of transpositions have influenced scholars' views on how the cycle ends; John Reed, for instance, has said, "there is no denying that it [Schubert's ordering] presents more effectively the wanderer's steady decline into hallucination, madness, and death."⁴⁶ Still, scholars have not been able to agree on the fate of the protagonist, and some have presented unique readings; John Duffy has asserted that the songs of *Winterreise* are interior songs that only exist in the mind of the hurdy-gurdy player.⁴⁷ Youens has postulated that in the final song the protagonist fully realizes and accepts his calling as a musician, and that his joining forces with a fellow musician is a beautiful end to his

⁴⁵ Jacques Chailley, *Le Voyage d'hiver de Schubert* (Paris: A. Leduc, 1975) has posited the idea of the protagonist as an atheist; Klaus Günther Just, "Wilhelm Müller's Liederzyklen *Die schöne Müllerin* und *Die Winterreise*," *Zeitschrift für deutsche Philologie* 83 (1964), has described the protagonist as a Christ-like figure who is haunted by a Doppelgänger and whose journey corresponds to the stations of the cross; Alan P. Cottrell, *The Lyrical Song Cycles of Wilhelm Müller* (Chapel Hill: University of North Carolina Press, 1970) has claimed that the protagonist is alienated and experiences the death of his soul; Charles Rosen, *The Romantic Generation* (Cambridge, MA: Harvard University Press, 1995) has labeled the organ grinder as death incarnate; and Richard Capell, *The Songs of Schubert*, 2nd ed (New York: Macmillan, 1957) believes that the protagonist is a madman who entrusts his future to a beggar.

⁴⁶ John Reed, *Schubert: The Final Years* (London: Faber and Faber, 1972), 122.

⁴⁷ John Duffy, "Illusion and Reality in Schubert's Song Cycle," *Schubert Society of the USA Newsletter* 6, no. 1 (2008): 9.

loneliness.⁴⁸ I do not agree with any of the above interpretations, but Youens has made some important points that have influenced my own interpretation of the poem: until the end of the cycle, the protagonist has been engaging in pathetic fallacy; he addressed animals and inanimate objects, but the last song in the cycle is the first time that he addresses another human being.⁴⁹ The protagonist has found someone who shuns society yet seems to function in it, someone with whom he feels he can find companionship with understanding and with minimal risk for heartache. I agree with Youens that this ending is a favorable one; the *Temperaturfarben* of the published key of A minor accurately depicts that the protagonist's feelings are neither excessively joyous or painful.

Elisabeth Norman McKay has stated that both madness and death have rejected the protagonist throughout the cycle, and that his final questions are a sane, honest request to the hurdy-gurdy man.⁵⁰ I agree that the protagonist's final questions are sincere and sane, but I question whether death rejected the protagonist, or whether the protagonist never really wanted death in the first place. In *Der Lindenbaum*, the linden tree offers the protagonist rest, or more accurately, death. Schubert used the same key to depict peace in death that he did in *Die schöne Müllerin*: E major. The protagonist rejects nature's offer to release him from his pain and he presses on, continually finding himself close to civilization. The song *Im Dorfe* is set in D major with a tonicization of

⁴⁸ Susan Youens, "Retracing a Winter Journey: Reflections on Schubert's 'Winterreise,'" *19th-Century Music* 9 (1985): 135.

⁴⁹ *Ibid.*, 129.

⁵⁰ Elisabeth Norman McKay, "Schubert's *Winterreise* Reconsidered," *Music Review* 38, no. 2 (May 1977): 96, 100.

B \flat major; the major modes and mild *Temperaturfarben* of these keys suggest that the protagonist derives happiness from being near people. Schubert set *Täuschung* in A major, a song in which the protagonist momentarily deludes himself that there is a loving soul awaiting him in a house. A major is the key of pleasant dreams, and the extra-musical meaning associated with the key suggests that having a loving soul would make the protagonist happy. He makes no reference to his former beloved but seems to be living in the present time. In *Die Nebensonnen*, set in A major, the protagonist demands that the suns “go look into someone else’s face,” a statement that is harmonized by A minor, the key that represents reality. The suns are symbolic of his beloved’s eyes; he seems to be vanquishing her memory instead of clinging to it. Then E minor is tonicized, a key that is associated in *Die schöne Müllerin* with death; could Schubert have been hinting at the death of the protagonist’s love? If so, he would be ready to seek the companionship of another human being.

Kurt von Fischer has noted that the transposition of *Der Leiermann* into A minor has symbolic significance: A major is the key of dreams, and its parallel minor is the key of harsh reality.⁵¹ I disagree that reality is always harsh; Schubert used the same association in *Die schöne Müllerin*, and while reality is not as pleasant for our protagonists as the dreams worlds, it is not a key that represents any intense suffering or discomfort. The protagonist has found contentment and a different kind of peace.

⁵¹ Kurt von Fischer, “Einige Gedanken zur Tonartenordnung in Schuberts Liederzyklen,” *Muzikološki Zbornik* 17 (1981): 93.

Chapter 7:

Schwanengesang

On December 17, 1828, about a month after Franz Schubert's death, his brother, Ferdinand, wrote a letter documenting the sale of Schubert's "last thirteen songs" to Tobias Haslinger (the publisher of *Winterreise*).¹ Ferdinand listed the songs individually; there were seven songs on poems by Ludwig Rellstab and six songs on poems by Heinrich Heine. These songs were contained in a single fair copy manuscript. The last two Rellstab songs and the first five Heine songs share the same bifolio, indicating that it was Schubert's intent to put these songs together in a manuscript and that it was not done by a publisher. Nevertheless, there is no title for the manuscript or any other indication that Schubert intended these songs to be published as a cycle. Only the first song is dated: August 1828.

On December 20, 1828, Haslinger announced in the *Wiener Zeitung* that he had purchased fourteen unknown Schubert songs composed in August 1828 as well as three sonatas composed in September 1828. The fourteenth song that he had acquired was *Die Taubenpost*, a setting of a poem by Johann Gabriel Seidel.² This song, dated October 1828, was written on a different type of paper and sewn onto the back of the manuscript, presumably by Haslinger, who appears to have used the fair-copy manuscript as the

¹ Otto Erich Deutsch, *Schubert: A Documentary Biography*, trans. Eric Blom (London: J. M. Dent and Sons, 1946), 842.

² *Ibid.*, 844.

engraver's copy (he or a copyist added continuous pagination to the manuscript).³ The contents of this manuscript were published in May 1829 as *Schwanengesang*,⁴ a publication that has been praised for the care and precision with which Haslinger prepared both the text and music.⁵

There are only three extant sketches for *Schwanengesang*: *Liebesbotschaft*, *Frühlingssehnsucht*, and *Die Taubenpost*, which Chusid describes respectively as “a skeleton score,” “a preliminary sketch fragment,” and “a continuity draft.”⁶ As Chusid's descriptors indicate, these sketches are very incomplete and do not offer the same wealth of information as the hybrid sketches and first drafts from *Die schöne Müllerin* or the extant sketches from *Winterreise*. Without more primary sources, many questions surround *Schwanengesang*, including why the Rellstab and Heine songs were grouped together in a single manuscript, what guided the ordering of the songs, and whether any songs were transposed.

³ For more information on paper type see Robert Winter, “Paper Studies and the Future of Schubert Research,” in *Schubert Studies: Problems of Style and Chronology*, ed. Eva Badura-Skoda and Peter Branscombe (New York: Cambridge University Press, 1982), 253–254.

⁴ Both the manuscript and a printing of the first edition are held at the Pierpont Morgan Library in New York.

⁵ J. Rigbie Turner, “Notes on the Provenance of the Manuscript,” in *Franz Schubert: Schwanengesang: Facsimiles of the Autograph Score and Sketches, and Reprint of the First Edition*, ed. Martin Chusid (New Haven: Yale University Press, 2000), ii. See also Walther Dürr, introduction to *Franz Schubert: ‘Schwanengesang.’ 13 Lieder nach Gedichten von Rellstab und Heine D 957. Faksimile nach dem Autograph aus dem Besitz der Pierpont Morgan Library New York* (Hildesheim: Gestenberg, 1978), 4a:xv.

⁶ Chusid, *Franz Schubert: Schwanengesang: Facsimiles of the Autograph Score*, 43. The sketches for *Liebesbotschaft* and *Frühlingssehnsucht* are at the Gesellschaft de Musikfreunde in Vienna, and the sketch for *Die Taubenpost* is at the Wienbibliothek im Rathaus.

Origins of *Schwanengesang*: the Rellstab and Heine Songs

There are two contrary accounts of how Schubert obtained the Rellstab poems. The first version is from the poet himself. In his memoirs Rellstab wrote that he had given Beethoven copies of some of his lyric poems, but that Beethoven was too unwell to set them. Rellstab claims that Beethoven then passed the poems on to Schubert.⁷ Anton Schindler, Beethoven's employee, shared a different story. He claimed that during a visit, Schubert discovered the Rellstab poems that had been sent to Beethoven and was drawn to them. According to Schindler, Schubert "put these poems in his pocket" and set three of them (*Liebesbotschaft*, *Kriegers Ahnung*, and *Aufenthalt*) within two days.⁸ These two accounts cannot both be true, but scholars have tended to put more weight in Schindler's account for two primary reasons. First, Schindler was known to have done unauthorized sorting in Beethoven's *Nachlaß*, and second, Schubert did not start working on the Rellstab poems until the spring of 1828, after Beethoven's death, which would imply that Schubert waited to work on the song, which would seem unlikely.⁹ Nevertheless, Schindler has not proven to be reliable, and there is still a third possibility: Schubert may have come across the poems on his own,¹⁰ as the poems were published in

⁷ Otto Erich Deutsch, *Schubert: Memoirs by His Friends*, trans. Rosamond Ley and John Nowell (New York: W. W. Norton, 1968), 303.

⁸ *Ibid.*, 313.

⁹ Walburga Litschauer, "The Origin and Early Reception of *Schwanengesang*," in *A Companion to Schubert's Schwanengesang: History, Poets, Analysis, Performance*, ed. Martin Chusid (New Haven: Yale University Press, 2000), 5.

¹⁰ Deutsch suggested this possibility; *Documentary Biography*, 843.

1827 in Rellstab's collected works.¹¹ However Schubert obtained the Rellstab poems, he composed them separately from the Heine poems.

Less contradictory evidence exists for when and where Schubert discovered the Heine poems. The Heine poems are from his *Die Heimkehr* (The Homecoming), which was published in 1826 in *Reisbilder* (Travel Pictures) and again in 1827 in *Buch der Lieder*. Carl von Schönstein, the dedicatee of *Die schöne Müllerin*, recounted, "When Schubert was still living at Schober's unter den Tuchlauben...I found he had in his possession Heine's *Buch der Lieder* which interested me very much. I asked him for it and he let me have it, remarking that *in any case he did not need it any more.*"¹²

Schönstein also noted that the poems that appeared in *Schwanengesang* were dog-eared in the borrowed book. Deutsch has noted that Schubert lived with Schober "unter den Tuchlauben" from March 1827 to August 1828, and it is presumed that Schubert composed these songs towards the end of his time there.¹³

Haslinger's Role in the Creation of a Faux Song Cycle

By publishing the songs by Rellstab, Heine, and Seidl together under the title *Schwanengesang*, Haslinger has been blamed for creating a song cycle that Schubert did not envision. *Schwanengesang* has been the focus of an extended debate over whether or not to classify all of the songs or some of the songs as a cycle. Many scholars cite a letter

¹¹ Ludwig Rellstab, *Gedichte* (Berlin: Friederich Laue), 1827.

¹² Deutsch, *Memoirs*, 103. Italics from original.

¹³ *Ibid.*, 104.

Schubert wrote to the Leipzig publisher Heinrich Probst on 2 October 1828 in which Schubert offered the publisher, among other pieces, his Heine songs.¹⁴ There was no mention of the Rellstab songs in the letter, which serves as evidence that Schubert did not intend for the Rellstab and Heine songs to be a cycle. Nevertheless, the premise that Haslinger himself intended the songs to be considered a cycle has been accepted without examination, when in truth, there is no indication that Haslinger labeled or marketed the songs as a cycle or even as a collection that had any unifying factor other than being some of Schubert's last songs.

With the exception of *Die Taubenpost*, Haslinger published *Schwanengesang* in the order in which the songs appeared in the document that he acquired; the Rellstab and Heine songs had already been copied into a single manuscript. Scholars do not know why Schubert created this single manuscript, but one possible reason is that when Probst replied to Schubert's offer of the Heine songs (along with piano sonatas D. 958–960), the publisher asked only for the songs.¹⁵ Schubert never sent the songs, presumably because of his illness; however, it is possible that he was preparing the manuscript of Rellstab and Heine songs to send to Probst in hopes that he would publish all of the songs, since he was more interested in songs than the instrumental works Schubert offered. Regardless of why Schubert put these songs together in one manuscript, it is clear that it was he, and not Haslinger, who created the integrated manuscript.

¹⁴ Deutsch, *Documentary Biography*, 811

¹⁵ *Ibid.*, 814

Haslinger's original plan was to publish the songs of *Schwanengesang* in four volumes, the first two comprised of Rellstab songs and the latter two of Heine songs.¹⁶ Haslinger ended up publishing the collection in two volumes instead, as outlined by his announcement for *Schwanengesang* that appeared on 31 January 1829 in the *Wiener Zeitung*.¹⁷ The beginning of the announcement reads:

Pränumerations-Anzeige
auf
Franz Schubert's
SCHWANEN-GESANG,
mit Begleitung des Pianofortes.
Seinen Gönnern und Freunden geweiht.
Letztes Werke,
In 2 Abtheilungen.

(Advance payments notice for Franz Schubert's *Schwanengesang*, with piano accompaniment. Dedicated to his patrons and friends. Last works, in two volumes.) Haslinger's announcement contains multiple references to the fact that the collection is comprised of multiple works; for example, he calls Schubert's "last works" rather than last work (*Werk*), indicating that Haslinger was not treating the songs as a single work or cycle.¹⁸ Walburga Litschauer has noted, "according to this appeal for subscriptions, the

¹⁶ Deutsch, *Memoirs*, 385.

¹⁷ Till Gerrit Waidelich, *Franz Schubert: Dokumente 1817–1830*, ed. Renate Hilmar-Voit and Andreas Mayer (Tutzing: Hans Schneider, 1993), I:478.

¹⁸ The ad continues with the text, "Den zahlreichen Freunden seiner classischen Muse werden unter obigem Titel die letzten Blüthen seiner edlen Kraft gebothen. Es sind jene Tondichtungen, die er im August 1828, kurz vor seinem Dahinscheiden, geschrieben." (Under the above title are offered to the many friends of his classical muse the last flowers of his noble spirit. They are tone poems that he wrote in August 1828, shortly before his passing.)

title selected by Haslinger does not mean a cycle...but merely denotes Schubert's last songs."¹⁹

When Haslinger printed the score, each song had its own title page, and blank pages were inserted when necessary so that each song started on a recto, creating the opportunity for the songs to be sold in the complete volume or individually. Table 7.1 lists the titles and keys of the songs published as *Schwanengesang*.

Table 7.1: The songs of *Schwanengesang*

By Ludwig Rellstab:	
1. <i>Liebesbotschaft</i>	G major
2. <i>Kriegers Ahnung</i>	C minor
3. <i>Frühlingssehnsucht</i>	B \flat major
4. <i>Ständchen</i>	D minor
5. <i>Aufenthalt</i>	E minor
6. <i>In der Ferne</i>	B minor
7. <i>Abschied</i>	E \flat major
By Heinrich Heine:	
8. <i>Der Atlas</i>	G minor
9. <i>Ihr Bild</i>	B \flat minor
10. <i>Das Fischermädchen</i>	A \flat major
11. <i>Die Stadt</i>	C minor
12. <i>Am Meer</i>	C major
13. <i>Der Doppelgänger</i>	B minor
By Johann Gabriel Seidl:	
14. <i>Die Taubenpost</i>	G major

Nowhere in Haslinger's advertisements, the printed edition, or in the published reviews and commentary at the time of its publication did Haslinger or any of his contemporaries refer to *Schwanengesang* as a cycle.²⁰ Carl von Schönstein's commentary about whether

¹⁹ Litschauer, "Origin and Early Reception," 7.

²⁰ For an overview of the reception see Litschauer, "Origin and Early Reception," 5–13.

or not the Heine songs are some of Schubert's last songs indicates that the songs were not perceived as a cycle:

After Schubert's death a number of songs, which were found among his manuscripts, were published in two volumes; they were given the title *Schwanengesang* because it had been assumed that these songs, found in his lodgings and still unknown, must have been composed shortly before his death, and consequently were to be considered as the swan song of the great songwriter.²¹

Haslinger may be reprimanded for inaccurately labeling the songs in *Schwanengesang* as Schubert's last works, but he should not be criticized for creating a song cycle.²²

Temperaturfarben and Cyclicism in Schwanengesang

Even if the scholarly community absolves Haslinger from his perceived role in creating a cycle, we are still left with the question of why Schubert grouped the Rellstab and Heine songs together in one manuscript. Was this done for convenience, or is there a cyclic element to these songs that has eluded scholars? There is no universal definition of a song cycle, which makes the attempt to prove or disprove that *Schwanengesang* is a cycle difficult. Romantic song cycles are heterogeneous; Ruth O. Bingham has stated, "the only unqualified characteristics [of all song cycles] are multiplicity – three or more poems – and coherence – achieved through the poetry, the music, or the interaction

²¹ Deutsch, *Memoirs*, 103.

²² Haslinger was clearly trying to capitalize on the claim that he had Schubert's last songs. He had yet to release the second half of *Winterreise*, and other publishers were promising to publish unknown Schubert works, like Czerny who acquired eighteen songs from Schubert's estate and in an announcement in the *Wiener Zeitung* on 31 December 1828, claimed that the works would appear in print during 1829. See Deutsch, *Documentary Biography*, 849–850. The eighteen songs were Opp. 110–12, 116, 126, and 130.

between them. Inevitably, collections approach cycles, particularly if the collector possesses some skill.”²³ This dissertation has examined how *Temperaturfarben* helped shape *Die schöne Müllerin* and *Winterreise* and contributed to the cohesiveness of these cycles; what can *Temperaturfarben* reveal about the cyclical elements *Schwanengesang*?

***Temperaturfarben* as a Guide for an Overall Tonal Plan**

One of the ways that *Temperaturfarben* enhances the cyclical nature of *Die schöne Müllerin* and *Winterreise* is by shaping and giving cohesion to the overall tonal plans of the cycles. *Die schöne Müllerin* has a clear narrative in which the miller’s emotional state progresses from optimistic and open, then to in love and jittery, and finally to aggrieved and suicidal. The tonal groups in *Die schöne Müllerin* reflect this progression through an increase in *Temperaturfarben* as the cycle progresses. The miller begins the cycle in the realm of relatively pure keys around C major and ends in more highly colored keys like B major, E minor, G minor, and E major. In *Winterreise*, the protagonist’s journey is less linear, yet it is clear that *Temperaturfarben* also shaped the tonal plan of this cycle, as evidenced in the clear build, maintenance of dramatic tension, and resolution. In both cycles, Schubert’s key choices echoed the emotional state of the protagonist and shaped the overall tonal plan for the cycles. The songs of *Schwanengesang*, in the order in which they appear in Schubert’s manuscript and the first edition, do not contain a narrative or a single protagonist; yet, does the

²³ Ruth O. Bingham, “The Early Nineteenth-Century Song Cycle,” in *The Cambridge Companion to the Lied*, ed. James Parsons (New York: Cambridge University Press, 2004), 104.

Temperaturfarben of the songs reveal a large-scale tonal plan that would add cyclicism and unity to the songs?

Schwanengesang, totaling fourteen songs, is 65–70% of the length of *Die schöne Müllerin* and 54–58% of the size of *Winterreise*. With substantially fewer songs, each would play an important role in creating a dramatic arc. Figure 7.1 charts the *Temperaturfarben* of the first thirteen songs' key signatures in *Schwanengesang*. This chart excludes *Die Taubenpost*, which was added to the manuscript later and conceived separately from the Seidl and Heine songs.

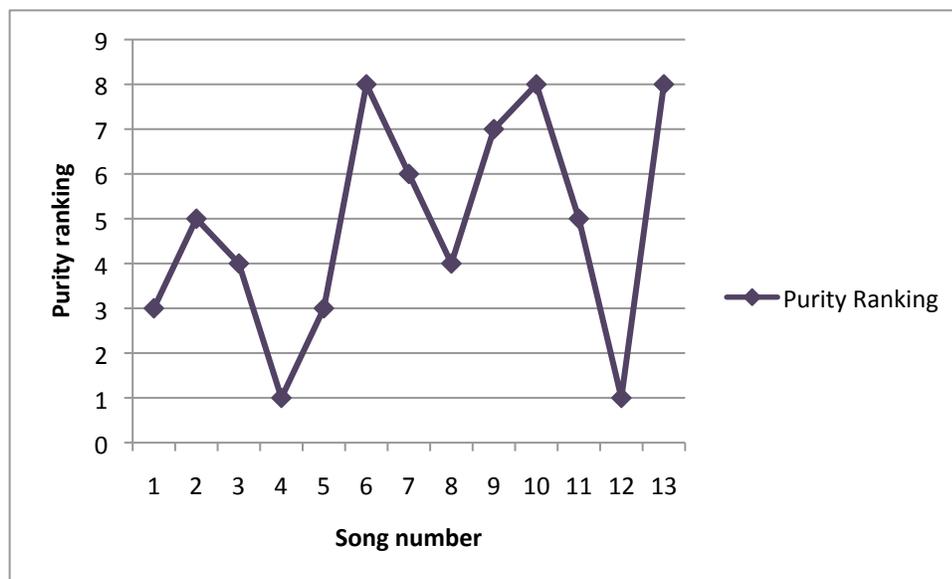


Figure 7.1: Purity rankings of individual songs in *Schwanengesang*

The chart shows no clear dramatic structure. There are three songs with key signatures that have a *Temperaturfarben* ranking of eight. The greatest degree of *Temperaturfarben* should represent a climax, but *Schwanengesang* would have three. There is no gradual ascent to these climaxes, no consistency in emotion in the internal songs, and no

resolution. *Temperaturfarben* does not reveal an overall cohesion to the Rellstab and Heine songs.

Key Meanings

While it does not appear that *Temperaturfarben* influenced an overall tonal plan in *Schwanengesang*, another way that Schubert used *Temperaturfarben* to add cohesion to his cycles was by assigning certain keys specific extra-musical meanings that recurred throughout the cycle. Within *Schwanengesang*, there are keys, tonal centers and sonorities that recur and are emphasized in numerous songs. Table 7.2 below lists the songs in *Schwanengesang* that have the same keys as well as brief description of the poetic content.

Table 7.2: Songs with shared key signatures in *Schwanengesang*

Key	Song	Shared idea
G major	<i>Liebesbotschaft</i> <i>Taubenpost</i>	message of love
C minor	<i>Kriegers Ahnung</i> <i>Die Stadt</i>	lost love
B minor	<i>In der Ferne</i> <i>Der Doppelgänger</i>	lost love

One notices that there are similarities in theme that may have influenced Schubert's key choice. Both of the songs in G major involve a messenger of love (a brook and a pigeon); in *Die schöne Müllerin*, many of the miller's addresses to the brook were also in G major. Nevertheless, *Taubenpost* was not part of the original

Schwanengesang manuscript; if it had been, one could argue that Schubert began and ended the cycle with similar poetic ideas in the same key. Although it is clear that Schubert has used G major consistently with other songs in his output, the appearance of G major in *Schwanengesang* does not provide a structural or cyclical element to the opus.

In *Winterreise*, C minor was associated with a death wish. This specific idea does not apply here; neither of the protagonists in *Kriegers Ahnung* and *Die Stadt* wants to die. The common element between the two songs is that they both deal with lost love; nevertheless, the presence of a common poetic idea in the poems is not reason enough to assign that meaning to a key. It is not difficult to find some commonalities in different poems if that is what we want to find. Additionally, the poetic idea of lost love is prevalent throughout the opus and is not expressed solely through the key of C minor. In *Schwanengesang*, C minor does not express a common poetic idea, but rather it depicts a degree of emotion consistent with its moderate *Temperaturfarben*.

The shared idea in the B-minor songs *In der Ferne* and *Der Doppelgänger* is also lost love. This is the same commonality of the songs in C minor, further evidence that neither key specifically expresses this idea. B minor was used in *Die schöne Müllerin*, *Winterreise*, and other Schubertian Lieder to express an intense emotional or physical pain, even more intense than C minor. This is true in *Schwanengesang* as well; the key expresses an intensity of emotion rather than a specific musical idea.

Of the other significant keys and sonorities that recur in *Schwanengesang*, none is linked to a specific extra-musical meaning, but rather to a consistency in the emotional intensity of the individual protagonists' experiences. For example, A \flat major occurs as a significant sonority in both *Kriegers Ahnung* and *Frühlingssehnsucht*, but the

protagonists are in very different situations; in the first the soldier protagonist is separated from his love by war and imminent death, and in the second the protagonist aches for a future person/love to take away is pain. Pain is a common element, but like the theme of lost love mentioned above, it is too prevalent in the opus for one key to be defined as the one that depicts pain.

Individual Song Commentary: The Rellstab Songs

In Schubert's cycles he not only used the *Temperaturfarben* of the key signatures of individual songs to create cohesion and cyclicism, but he also used recurring tonal centers and significant sonorities within individual songs to create links and establish extra-musical key meanings. The following section provides commentary that examines the keys, significant sonorities, and any links between key and poetic expression in the individual songs. Since *Die Taubenpost* was physically added to the manuscript after Schubert's death, it will not be factored into this discussion.

1. *Liebesbotschaft* (Message of Love)

G major, 2/4 time, *Ziemlich langsam* (fairly slow)

Many scholars have noted that *Liebesbotschaft* has a similar feel and theme as the opening songs in *Die schöne Müllerin*. Similarities include the key, G major, which fits into the tonal grouping of the opening songs of *Die schöne Müllerin*; the subject matter, in which the protagonist addresses and seeks counsel from a brook and asks it to be a

messenger to his beloved; and the accompaniment, which evokes the sound of rushing water.

The song is largely diatonic with tonicizations prompted by the poetic content. The first shift away from the tonic G major occurs at m. 12 when the music begins to tonicize E minor, the third purest overall minor key, as the protagonist reveals that his beloved is far away. E minor evokes a sense of distance primarily through the change of mode, and the relative purity of the minor key does not express extreme discomfort or suffering.

In the second verse, which begins at m. 18, the protagonist asks the brook to refresh the flowers that adorn his beloved's garden and her clothing. This verse mixes tonicizations of C major and D minor, the overall purest major and minor keys, evoking a mix of happy memories with a sense of the protagonist's yearning to return. Again, the choice of D minor, a relatively pure minor key, does not express any severe emotional pain or distress.

In the third stanza the protagonist's beloved is dreaming of him, and he asks the brook to comfort her. Although in Schubert's two main cycles A major is linked to dreams, there is no occurrence of the sonority here, even though it was used previously in the song during the tonicization of D minor, and theoretically, if Schubert had wanted to use A-major chords with the reference to dreams here, he could have. B major, which is ranked eleventh out of the twelve major keys in the purity rankings, is established as the tonal center about halfway through the stanza and remains there until the stanza is completed. The intensity of the B-major tonality evokes a sense of the beloved's despondency and her need for comfort.

The final stanza begins in the tonic key of G major with harmony similar to that of the first verse. The protagonist asks the brook to rock his beloved to sleep and whisper dreams of love. The postlude ends firmly in G major, concluding the song with the same optimistic feel with which it opened.

2. *Kriegers Ahnung* (Warrior's Premonition)

C minor, 3/4 time, *Nicht zu langsam* (not too slow)

Martin Chusid has noted that *Kriegers Ahnung* follows Schubert's practice of using minor keys to reflect reality and major keys to represent an escape from reality.²⁴ In *Kriegers Ahnung*, war is keeping the protagonist from his beloved. The text depicting the harsh reality of his situation is set in minor while his memories and pleasant thoughts of his beloved are set in major. Still, the protagonist's memories are set in highly colored major keys such as A \flat major and D \flat major, both of which add an element of tension that evokes the sense that the protagonist's situation is dire, a thought that seem to remain in the back of his mind. Note that Schubert did not choose the purer major keys as he did in the previous song where there are no perceived obstacles to that protagonist's return to his beloved. In *Kriegers Ahnung*, reunion seems improbable, and death more likely.

The song opens in C minor, a key of moderate *Temperaturfarben*; it is ranked fifth out of the twelve minor keys in the purity rankings. The music of the introduction and the first stanza is solemn and dominated by dotted rhythms and block chords; the

²⁴ Martin Chusid, "Texts and Commentary," in *A Companion to Schubert's Schwanengesang: History, Poets, Analysis, Performance*, ed. Martin Chusid (New Haven: Yale University Press, 2000), 100.

soldier describes the surrounding silence while he and his comrades lie in wait. His heart is both anxious and hot with longing.

In the second stanza the soldier is consumed with dreams and warm memories of his beloved. At m. 29 a tonicization of the submediant A \flat major and a lighter accompaniment pattern consisting of arpeggiated triplets in the right hand and single notes in the left reflects the protagonist's shift in thought. A \flat major is ranked eighth out of the twelve major keys in the purity rankings, evoking the heartache that accompanies these pleasant memories. Beginning on the last beat of m. 39, G \flat major, which is ranked twelfth out of the twelve major keys, creates still more tension, evoking the sense that the soldier's memories pain him in the light of his present circumstances.

In stanza three, the protagonist's thoughts return to his present situation and the weapons that surround him. An agitated-sounding accompaniment highlights the first two lines of the stanza while tonicizing F \sharp minor, which is ranked ninth out of the twelve minor keys, from mm. 44 to 48. The *Temperaturfarben* of the song decreases in mm. 49–52 when A minor is tonicized as the soldier first remarks that he is alone; A minor is a relatively pure minor key, evoking the feeling that this sense of aloneness has just registered with the soldier. Mm. 53–60 tonicize F minor as the protagonist begins to cry. The *Temperaturfarben* of these tonal centers depicts the ebb and flow of emotional intensity by starting out with F \sharp minor, ranked ninth, to A minor, ranked second, to F minor, ranked sixth. These tonal centers correspond to poetic ideas: F \sharp minor evokes the protagonist's present, dire situation, which is followed by the less-highly colored A minor, which evokes his sense of aloneness through its purity, and then the moderately colored F minor evokes the more emotive act of crying.

The remainder of the song is comprised of the final stanza. A clear *Temperaturfarben* is not established at the beginning of this verse; mm. 61–67 imply C minor through the appearance of G-dominant-seventh and B-diminished-seventh chords, both in third inversion, but the anticipated C-minor chord never sounds. A minor is tonicized beginning at m. 68 with a root position chord, but in mm. 69–71 it appears as a second inversion, or rather, as an extension of the dominant E major and not as a tonic triad in root position. In mm. 73–74, C major harmonizes the word “ruh” (peace), creating word painting. The protagonist then bids his love goodnight, first in a highlycolored A \flat major and again in a purer F major, the first evoking the protagonist’s intense heartache (A \flat major is the same key in which his first bittersweet thoughts of his love occurred), and the second a sense of acceptance.

Mm. 89–107 repeat the words and music of mm. 63–81. With the last two iterations of “Herzliebste, gute Nacht!” (My love, good night!), the original tempo, figuration, and tonic key return. The moderate *Temperaturfarben* of C minor depicts the soldier’s current sorrow, which has leveled out from the highs and lows represented through other keys in the song.

3. *Frühlingssehnsucht* (Spring longing)

B \flat major, 2/4 time, *Geschwind* (Fast)

Many scholars have noted how, like *Liebesbotschaft*, *Frühlingssehnsucht* seems to fit into the mood and sentiment of *Die schöne Müllerin*. Indeed, *Frühlingssehnsucht*’s key, B \flat major, is used as a key of narration in *Die schöne Müllerin*, and it is also the key of the first song of the *Die schöne Müllerin: Das Wandern*. The protagonist in

Frühlingssehnsucht begins with a yearning not unlike that expressed by the miller; he is entranced by nature and looking for love and a sense of purpose.

Frühlingssehnsucht is largely diatonic. The first four stanzas are set strophically, and each ends with a question. Although C minor is tonicized briefly in mm. 17–18, the most significant tonicizations in the first four verses occur at the end of each stanza. A \flat major, which ranks eighth out of the twelve major keys, increases the song's *Temperaturfarben* when it is tonicized in mm. 39–41. D minor is tonicized for the repetition of the penultimate line in mm. 46–49, and A \flat minor is tonicized for the question that ends each verse in mm. 50–53. D minor is the purest key and evokes a melancholy that is not indicative of emotional pain; however, A \flat minor, the enharmonic equivalent to G \sharp minor, is ranked eleventh out of twelve minor keys, giving the end of the verses a poignant twist; the sonority is emphasized as the triplets in the piano give way to sustained block chords. Nevertheless, the A \flat -minor chord only occurs for one measure and is mitigated by its purer dominant, E \flat major. Both A \flat major and A \flat minor are highly colored and work to evoke the sense of not a gentle longing, but a distressing, deep one. Although A \flat -major and A \flat -minor sonorities are present in this section, there does not appear to be the link between dreams and reality that so often accompanies major–minor pairings in Schubert's *Lieder*.

In the fifth and final stanza, the protagonist shifts from addressing nature to addressing his restless, longing heart. The figuration is similar to the previous four stanzas, but the harmony is different; the verse begins in m. 58 by tonicizing the relative minor, B \flat minor, which continues to be tonicized until m. 68 when the first two lines of the stanza repeat with D \flat -major harmony. D \flat major ranks tenth out of the twelve major

keys. The prominence of V-I progressions establishes the quintessential quality of this tense, dark key, which evokes the “Tränen, Klage und Schmerz” (tears, lamentation, and pain) of which the protagonist sings.

B \flat major returns on the second beat of m. 77 with the third line of the stanza, in which the protagonist speaks of his growing urge. Like the first four verses, tonicizations of A \flat major and D minor follow. With the final stanza the question is replaced by a declaration, “Nur du befreist den Lenz in der Brust, / Nur du!” (Only you can release the spring in my chest, only you!). Instead of tonicizing A \flat minor as Schubert did for the final question of verses 1–4, the E \flat -major chord in m. 95 is followed by an E \flat -minor chord, and then an F-dominant-seventh chord that cadences to the tonic B \flat major (see Example 7.1). The postlude contains mostly B \flat -major chords with the exception of the E \flat -minor chord in m. 102. In *Winterreise*, E \flat major and minor had specific extra-musical associations of hope and hopelessness. Although *Frühlingssehnsucht* alone does not explicitly point to these specific emotions, the notion could be applied here, for it is clear that some emotion of doubt or sadness is invading the protagonist’s optimism that someone will quiet his desires.

Example 7.1: *Frühlingssehnsucht*, mm. 94–99

The musical score for Example 7.1 consists of a vocal line and a piano accompaniment. The key signature is B \flat major (two flats) and the time signature is 2/4. The vocal line begins at measure 94 with the lyrics "Brust, nur du nur du!". The piano accompaniment features a series of chords: a whole note chord 'd' (D minor), a half note chord 'B \flat 7' (B \flat dominant seventh), a half note chord 'Eb' (E \flat major), a half note chord 'eb' (E \flat minor), a half note chord 'F7' (F dominant seventh), and a whole note chord 'B \flat ' (B \flat major). The piano part includes a forte (*ff*) dynamic marking and a crescendo hairpin over the Eb and eb chords. The vocal line has a melisma over the final "du!".

Chusid has asked if the protagonist's insecurity is grounds for the tonicization of D minor in each stanza.²⁵ In this poem the protagonist declares that "Nur du befreist den Lenz in der Brust" (Only you can release the spring in my breast); the insecurity that Chusid alludes to seems to stem from the fact that the "you" to which the protagonist alludes does not appear to be a person whom he has met or shared time with, but rather the yet-unmet person whom the protagonist hopes will fulfill his urge and desire for love. He mourns this lack of love, and as Chusid has pointed out, the final strophe of the song seems to evoke the greatest sense of insecurity through the use of the tonic minor.²⁶ B \flat minor is a high-contrast key with a highly colored tonic and less highly colored major dominant, and it ranks seventh in the overall purity rankings. I agree with Chusid's observations, but I do not agree with Chusid's statement that the protagonist's pain "will be overcome by the positive response of the beloved...set in D \flat major."²⁷ Not only do I contend that there is no actual beloved, but D \flat major is not a key that Schubert has linked with hope in previous songs; it is highly colored and not suitable for the expression of an uplifting emotion like hope. The D \flat -major section occurs on the repetition of the first two lines of the final stanza, which are about the protagonist's pain. He has not yet shifted to a more hopeful state, and the tense, dark *Temperaturfarben* of D \flat major depicts the conflict within him.

At first listen, *Frühlingssehnsucht* seems lighthearted. Yet, more highly colored sonorities like A \flat major and D \flat major, the same chords that appeared to underscore the

²⁵ Chusid, "Texts and Commentary," 107.

²⁶ *Ibid.*, 108.

²⁷ *Ibid.*

soldier's distress in *Kriegers Ahnung*, occur here as well. The dark *Temperaturfarben* of these chords give the song another layer of meaning; they provide a sense that this song will not have a happy ending. This interpretation may be lost in equal temperament because all major keys have the same quality. In all of its similarities to songs from *Die schöne Müllerin*, one has to wonder if Schubert had that cycle in mind when he set this song, for it could be viewed as a prequel that foreshadows the pain and death that wait for the miller after he follows the brook to the woman for whom he longs.

4. *Ständchen* (Serenade)

D minor, 3/4 time, *Mässig* (Moderately)

Ständchen begins in D minor, the overall purest minor key, which evokes the protagonist's love and longing. The accompaniment creates a sense of waiting through the repetition of staccato eighth notes. Unlike other more narrative songs, *Ständchen* does not evoke the sounds of nature (like water) or any other object in motion.

Ständchen is similar to the first song *Liebesbotschaft* because in both the protagonists express a longing for their beloveds that are characterized by relatively pure minor keys; this protagonist's longing is a mild discomfort, unlike the more excruciating pain of the protagonist of *Winterreise* or the soldier in *Kriegers Ahnung*.

Ständchen is five stanzas long; one and three are set to the same music, as are two and four. Stanza five is set to new music. Tonicizations of major chords are characteristic elements of this song. The protagonist's longing is cause for the song's minor key, but his overwhelming love for his beloved overpowers his longing and evokes tonicizations of major chords. This is a different view from the one held by Chusid, who

suggests that the major/minor oscillations in this song are indicative of the protagonist's shift between hope and insecurity (aka reality).²⁸ Although dreams/reality is a meaning commonly assigned to major and minor in Schubert's Lieder, we must still explore other meanings. This song seems to stand alone; the relationship between major and minor that was established in *Winterreise* and *Kriegers Ahnung* does not apply here; there is nothing within the song to suggest that the protagonist's minor musings are insecurity based on potential unrequited love instead of longing due to a forced separation.

The first tonicization of a major chord occurs in m. 14 when the first stanza ends on an F-major chord, and the piano echoes with a V⁷-I on F major. F major is a relatively pure key that embodies a happy, joyful mood. The second stanza immediately returns to the tonic D minor for mm. 17–18, but again tonicizes F major for mm. 19–22, and then tonicizes D major for mm. 23–41. D major ranks fifth out of the twelve major keys in the purity rankings and is often associated with excitement and triumph. The protagonist's expression is becoming more intense, as indicated by the change in music for the final stanza, which begins at m. 38 and remains in D major until B minor is tonicized from mm. 42–45 with the words "Bebend harr' ich dir entgegen!" (Trembling, I await you!). B minor is the most highly colored key tonicized in the song, and it is clearly linked to the protagonist's physical trembling. The remainder of the song is in D major, with hints of the original D minor. The protagonist is still longing, but the predominant emotion at the end of the song is one of joyful love.

²⁸ Ibid.

5. *Aufenthalt* (Resting Place)

E minor, 2/4 time, *Nicht zu geschwind, doch kräftig* (Not too fast, but strong)

In *Aufenthalt* the protagonist is describing a storm akin to his perpetual pain. The song begins in E minor (third in the purity rankings for minor keys), with block triplets in the right hand depicting a raging storm. The first verse is in the tonic key, but when it repeats at m. 15, E-major chords begin to mix in with the tonic E-minor chords. This juxtaposition of major and minor does not fit into the concept of illusion verses reality; both tonalities harmonize the same words. The E-major chords are highly colored and evoke the protagonist's endurance and fortitude through his pain.

In the second stanza the protagonist sings of his tears; upon the third statement of the words "fliessen die Thränen" beginning at m. 44, B minor which ranks eighth out of the twelve minor keys, is tonicized. B minor creates a significant increase in the song's *Temperaturfarben*, evoking the intensity of the protagonist's pain. The B-minor sonorities are prevalent when the protagonist sings of being "ewig erneut" (eternally renewed) in mm. 46–47; this sonority is associated with death in both *Die schöne Müllerin* and *Winterreise*.

The third verse starts with a tonicization of G major, a relatively pure major key, before returning to E minor, which contains one of the purest minor triads in Young's well temperament, when the protagonist is momentarily describing the outside thunder instead of the internal state of his heart. The lightening of the song's *Temperaturfarben* seems to reflect the protagonist's shift from looking inside himself to looking at more objective elements of nature. The beginning of the fourth verse is in the home key of E minor. The harmony begins to shift, and B minor emerges as a tonal center for mm. 95–

102, underscoring the protagonist's enduring pain. The interlude in mm. 102–110 evokes the sounds of a storm and contains an interesting contrast between first inversion C-major and C#-major chords over a B pedal, adding to the contrast of more and less highly colored sonorities.

E minor is firmly reestablished by m. 111 as the first stanza is repeated. E minor remains the tonal center until m. 118 when E major substitutes for E minor. At first E major appears to be tonicizing A major with an A-major chord in second inversion occurring in m. 120, but an A-minor chord in second inversion occurs in the following measure (see Example 7.2). This juxtaposition of A major and minor is followed by a juxtaposition of E major and E minor in the following two measures. This tonal ambiguity is only increased when C minor unexpectedly sounds *fff* from mm. 124–127. C minor is more highly colored than either A minor or E minor and sounds jarring. E minor returns and closes out the song. In this song, the contrast between major and minor and the frequently changing tonal centers seem to depict the raging storm rather than a dream–reality dichotomy.

6. *In der Ferne* (In the Distance)

B minor, 3/4 time, *Ziemlich langsam* (fairly slow)

In der Ferne presents a protagonist who labels himself a fugitive after fleeing due to a broken heart. The opening contrasts the tension and darkness of F#-major triads (the most highly colored major triad) with a relatively pure G-major triad (which is second in the purity rankings), resulting in an oscillation between dark and light. The tonic B minor is implied in mm. 2 and 6, but it does not occur fully until the voice enters; mm. 8–

Example 7.2: *Aufenthalt*, mm. 117–124

119
rau - schen - der Storm, brau - sen - der Wald,
E⁵ A⁴ a⁴ E

123
star - ren - der Fels,
e c c c

fff

12 contain alternating tonic and dominant harmonies and end with a half cadence, which both establishes the gloomy mood of B minor while emphasizing the highly colored dominant, F# major. The emphasis on the dominant continues in mm. 13–15 where dyads are placed over a dominant pedal. While Schubert often uses B minor in association with intense pain and despair, the protagonist in this poem expresses a sentiment that is usually not explicitly stated: hate (*Mutterhaus hassenden*). It is plausible that the emphasis on F# major aids in expressing the protagonist's hate-filled sorrow. Nevertheless, on the word “*hassenden*,” the relatively pure B \flat -major chord appears; this could be read as indicating that the protagonist is happy in his hate.

For the second stanza, the harmony and voicing is almost identical, but the melodic line is different; it remains in a higher tessitura. The harmony does not coincide

with the lyrics of the second verse in the same way. In this verse the fugitive has lost his hard edge and is weeping. When the B \flat -major chord is reached at m. 47, it harmonizes the word “wallende” (flowing) rather than “hassenden,” a word with very different meaning. It is plausible that Schubert wanted to create an overall mood rather than link sonorities to different words, but it seems odd that he would create the same musical mood for two verses with such different poetic content.

After a third repeat of the introductory music, the key changes to B major and the accompaniment figuration becomes appoggiated, depicting the breezes and waves of which the protagonist sings. B major is ranked eleventh out of twelve in the purity rankings; this key implies that nature is not pleasurable for the protagonist. On the first statement of the word “Schmerze” (agony) B minor returns in mm. 75–77. The most interesting harmonic excursion occurs at m. 100 where G \sharp minor is tonicized from mm. 100–105, followed by a tonicization of C \sharp minor for mm. 106–108 (see Example 7.3). G \sharp and C \sharp minor rank eleventh and tenth, respectively, out of the twelve minor keys in the purity rankings, and give the protagonist’s words a sense of extreme sorrow and pity. In m. 109, B major appears as a second inversion chord, and G major follows. As if to contrast the darkness and extreme pain associated with B major, the Neapolitan chord, C major, sounds at m. 112. *In der Ferne* uses the most highly colored chords encountered so far in *Schwanengesang*. Hearing the song in well temperament brings another dimension to the songs and gives the listener a new understanding of the depths of the protagonist’s anger, pain, and heartache.

Example 7.3: *In der Ferne*, mm. 100–111

The image shows a musical score for three systems of music, each with a vocal line and a piano accompaniment. The key signature is E-flat major (three flats) and the time signature is common time (C). The score includes lyrics in German and dynamic markings such as *p*, *cresc.*, and *f*. Chord symbols are provided below the piano part for each system.

System 1 (mm. 100-103): The vocal line begins with the lyrics "der: Die mir mit Schmer - ze, ach!". The piano part starts with a piano (*p*) dynamic. Chord symbols below the piano part are D#6, D#6, D#6, and G#9-8/4-3.

System 2 (mm. 104-107): The vocal line continues with "dies treu - e Her - ze brach, grüsst von dem Flie - hen - den,". The piano part includes a *cresc.* marking. Chord symbols below the piano part are D#6, G#9-8/4-3, G#7, and C#9-8/4-3.

System 3 (mm. 108-111): The vocal line concludes with "Welt hin - aus Zei - - - hen den,". The piano part includes a *f* dynamic and a *decresc.* marking. Chord symbols below the piano part are C#, Bb, F#7, and G.

7. Abschied (Farewell)

E♭ major, Common time, *Mässig geschwind* (moderately fast)

None of the *Die schöne Müllerin* songs are in E♭ major, but in *Winterreise* E♭ major is contrasted with its parallel minor to symbolize hope and hopelessness, as in *Die Post*. Hopelessness could be attributed to the E♭ minor in *Frühlingssehnsucht*.

Nevertheless, the meaning of hope and hopelessness does not apply in *Abschied*; in this song, the protagonist is trying to maintain a cheerful façade; the protagonist states “Du hast mich wohl niemals noch traurig gesehn, / So kann es auch jetzt nicht beim Abschied

geschehn” (You've never even seen me sad / So it cannot happen now at our parting).

Through the six stanzas of this song the protagonist is having varied success at maintaining his happy demeanor, and this struggle is evoked through different *Temperaturfarben*.

Verses one, three, and five of *Abschied* are in the tonic key, and verses two and four are in the subdominant, A \flat major. In flat keys it is the subdominant that brings more color and tension to the key, and tonicizing the subdominant evokes the sense that the protagonist is having to increase the effort and energy that he is putting into suppressing his darker feelings in order to maintain his cheerful demeanor.

The final verse begins at the anacrusis to m. 134. C \flat major is the predominant tonality in mm. 132–144 before the music moves through tonicizations of A \flat minor, E \flat minor, C minor, A \flat major, and F minor, finally returning to the tonic on the second syllable of the protagonist’s last “Ade” in m. 156. C \flat major is the enharmonic equivalent of B major, a major key that Schubert associates with emotional distress or discomfort. The key is ranked eleventh out of the twelve major keys, compared to the ranking of six for E \flat major and eight for A \flat major. The various tonicizations of the last stanza evoke the sense that the protagonist is trying to maintain control over his feelings but is having increasing difficulty.

Individual Song Commentary: The Heine Songs

Two main issues have generated extensive scholarship on Schubert’s Heine songs. The first questions Schubert’s interpretive skills when it comes to Heine’s poetry.

Scholars have asked to what extent Schubert understood Heine's sense of irony, and to what extent we should expect Schubert's interpretation to remain true to Heine's intent.²⁹ While Schubert's interpretation of Heine is secondary to the discussion of *Temperaturfarben* and cyclicism in the Heine songs of *Schwanengesang*, Schubert's choice of *Temperaturfarben* undoubtedly adds valuable information on how Schubert perceived the poems and what meaning he hoped to express. Without engaging in a discussion of how well Schubert understood Heine or whether or not his settings do (or should) express Heine's essence, I will point out when a key choice seems to be used to create irony and discuss how *Temperaturfarben* may change the interpretation of a text. The second question, which will be addressed after the song commentaries, is: are the Heine songs a cycle in and of themselves, if rearranged into the order in which they were published in *Die Heimkehr*?

8. *Der Atlas* (Atlas)

G minor, 3/4 time, *Etwas geschwind* (rather quickly)

Der Atlas alludes to the titan Atlas who was burdened with carrying the heavens on his shoulders; in this poem the protagonist carries a world of pain. The song begins in G minor, which ranks fourth in purity out of the twelve minor keys, with the tremolo in the piano adding to the song's intensity. Brian Newbould has commented, "the G minor

²⁹ Charles Brauner, "Irony in the Heine Lieder of Schubert and Schumann," *Musical Quarterly* 67 (April 1981): 261–281; Gernot Gruber, "Romantische Ironie in den Heine-Liedern," in *Schubert-Kongress Wien, 1978: Bericht*, ed. Otto Brusatti (Graz, 1979) 321–334; Douglass Seaton, "Interpreting Schubert's Heine Songs," *Music Review* 53 (May 1992): 85–99; Jack M. Stein, "Schubert's Heine Songs," *Journal of Aesthetics and Art Criticism* 24 (1966): 559–566; Francis Davis Stovall III, "Schubert's Heine Songs: A Critical and Analytical Study" (DMA diss., University of Texas, 1967); and Susan Youens *Heinrich Heine and the Lied*, (New York: Cambridge University Press, 2007).

of *Der Atlas* permits gravity without opacity.”³⁰ By setting the song in a moderately colored minor key, Schubert was able to create more intense moments of pain than if the whole song were set in a highly colored key because he can incorporate even more highly colored sonorities at different points in the song.

With the words “Ich trage Unerträgliches” (I bear the unbearable) at the end of m. 15, the tonic G minor is followed by a G[#]-diminished-seventh chord which begins to erode G minor as the tonal center (see Example 7.4). On the word “Leibe” (body) in mm. 19–20, B minor, which is ranked eighth out of the twelve minor keys, is tonicized. The intensified *Temperaturfarben* of B minor evokes the pain of Atlas’s body; Schubert often uses B minor and major to depict intense emotional or physical suffering.

Example 7.4: *Der Atlas*, mm. 15–20

The musical score for Example 7.4 consists of two systems of music. The first system covers measures 15-17, and the second system covers measures 18-20. The vocal line is in the treble clef, and the piano accompaniment is in the bass clef. The key signature is G minor (two flats). The time signature is 3/4.

System 1 (Measures 15-17):

- Measure 15: Vocal: "ich tra - ge Un - er - träg - lich - es und". Piano: Chords B^b+⁶/₄ and g.
- Measure 16: Vocal: "ich tra - ge Un - er - träg - lich - es und". Piano: Chords g and g.
- Measure 17: Vocal: "ich tra - ge Un - er - träg - lich - es und". Piano: Chords g and g[#]07. Dynamics: *cresc.*

System 2 (Measures 18-20):

- Measure 18: Vocal: "bre - chen will mir das Herz im Lei - - - - be.". Piano: Chords g[#]07, F[#]=^b/₄, and F[#].
- Measure 19: Vocal: "bre - chen will mir das Herz im Lei - - - - be.". Piano: Chords F[#] and b. Dynamics: *fff*.
- Measure 20: Vocal: "bre - chen will mir das Herz im Lei - - - - be.". Piano: Chords b. Dynamics: *fz*.

³⁰ Brian Newbould, *Schubert, the Music and the Man* (Berkeley: University of California Press, 1997), 311.

At m. 22 the accompaniment changes to a more perky, dance-like rhythm tonicizing B major. Chusid labels G minor and B minor as the keys that represent the “temporal distance between the painful agony of the present” and B major as representative of a past that embodied Atlas’s wish to be “infinitely happy.”³¹ In equal temperament, B major sounds just as stereotypically happy as any other major key, but in well temperament it contains great tension. Schubert did not tend to use B major for expressions of happiness, recollections of happiness, or wished happiness. In this context, Atlas seems to be mocking his former thinking. Brian Newbould has broached this idea; although not discussing well temperament, but rather alluding to observable extra-musical connotations, Newbould has insightfully stated that “B major and a rollicking accompaniment for the lines which refer back to the protagonist’s bold bid for happiness...is a powerful irony.”³² I agree; this irony becomes more apparent in the context of well temperament where B major has an audibly agitated quality. In this context, B major implies that the protagonist is mocking his heart/himself rather than feeling lamenting or resigned, since this major key is highly colored and tense rather than sweet sounding.

At m. 36 the tonic G minor returns right before the protagonist utters the last line “Und jetzo bist du elend” (and now you are miserable) for the first time. The song remains in G minor as the first two lines of the first stanza are repeated with some modifications. The protagonist ends where he began, and where he will remain.

³¹ Chusid, “Texts and Commentary,” 127.

³² Ibid.

9. *Ihr Bild* (Her portrait)

B \flat minor, cut time, *Langsam* (slowly)

The sparse accompaniment of *Ihr Bild* matches the bare, raw feelings expressed by the protagonist. The last stanza of the poem reveals that he has lost his beloved, but at the beginning of the song the only indication that she is gone is the solemnity of the accompaniment, which, at this point, could be interpreted as reverence. The song begins with a linear melody in B \flat minor, which is ranked seventh out of the twelve minor keys in purity rankings. Although harmonically highly colored, B \flat minor has two intervals that are pure: fa (E \flat) and te (A \flat). One notices that Schubert does not use E \flat during the linear opening, but he does use A \flat once (after having used A \natural previously), on the second syllable of the word “Bildniss” (portrait) at the end of m. 5. Schubert aligns a pure interval with the image of the beloved.

At the words “und das geliebte Antlitz / Heimlich zu leben begann” (and the beloved face surreptitiously came to life), B \flat major is tonicized. Christopher Wintle has stated his belief that the change to B \flat major at m. 9 is ironic because we know that it is an illusion that has temporarily eased the protagonist’s pain.³³ In this instance, the major mode is clearly associated with the protagonist’s happy memories. B \flat major is ranked fourth out of the twelve major keys, and it is a key that Schubert has used for narration and gentle, pleasant emotions. The accompaniment is reminiscent of a devotional hymn.

B \flat major remains as the tonic through the interlude between the first and second stanzas. In m. 15 octave B \flat s in the piano diverge to create a B \flat pedal over a descending

³³ Christopher Wintle, “Franz Schubert, *Ihr Bild* (1828): A Response to Schenker's Essay in *Der Tonwille*, Vol. 1,” *Music Analysis* 19 (2000): 15. Wintle also notes that Schubert’s use of B \flat major and minor correspond to C.F.D. Schubart’s key characteristics.

diatonic line in octaves. As the protagonist begins to sing of the “Lächeln wunderbar” (wonderful smile) that has come over her lips, G \flat major is tonicized from mm. 16–22. G \flat major is the most highly colored major triad; its intensity does not evoke happiness but rather foreshadows the revelation of the final stanza that the beloved is lost.

In m. 24, a fifth between B \flat and F sounds without a third to indicate chord quality. The B \flat -minor melody heard in the beginning of the song returns for the last stanza in which the protagonist reveals that he has lost the girl. This literal repeat of the harmony from the first stanza creates an apparent inconsistency between the harmony and words of the final stanza. When the block chords return in m. 31, they are again in major, but this time the protagonist is not speaking of his beloved’s beautiful image but of his disbelief that he has lost his love. “Und ach, ich kann’s nicht glauben, / Daß ich dich verloren hab!” (And oh, I can not believe that I’ve lost you!); the mild, major tonality does not seem to fit with these words. This inconsistency in mood is apparent in equal temperament because it is unusual for a major key to underscore such a sorrowful sentiment, but in well temperament it is clear that Schubert could have chosen a more highly colored major key to express distress or sorrow. Lawrence Kramer has discussed the possible interpretations of the last couplet of Heine’s poem, one of which is “does it literally encode a denial of what he [the protagonist] knows to be true?”³⁴ Schubert’s choice of a pure key such as B \flat major instead of minor or a more highly colored major key implies that his interpretation is one of literal denial. A more highly colored major

³⁴ Lawrence Kramer, “‘Little Pearl Teardrops’: Schubert, Schumann, and the Tremulous Body of Romantic Song,” in *Music, Sensation, and Sensuality*, ed. Linda Phyllis Austern (New York: Routledge, 2002), 63.

key would have expressed more pain and suffering. The song ends not in the traditionally optimistic major, but rather in B \flat minor.

10. *Das Fischermädchen* (The Fisher Maiden)

A \flat major, 6/8 time, *Etwas geschwind* (rather quickly)

Unlike many of the protagonists encountered in *Schwanengesang*, the protagonist in *Das Fischermädchen* is not suffering from a broken heart, but rather he is wooing a fisher maiden. Chusid has articulated one of the major questions that scholar contemplate in regards to *Das Fischermädchen*: how sincere is the singer of this love song?³⁵ The protagonist's tone and words imply that he is possibly a Don Juan-type who is poised to break the maiden's heart; the *Temperaturfarben* of the song supports this reading.

The song opens with jaunty, trochaic rhythm in A \flat major. A \flat major is ranked eighth out of the twelve major keys and is a major key that Schubert usually associates with bittersweet or intense emotions; it is an unusual choice for a lighthearted love song, that is, unless the key is depicting the ill intentions of the protagonist. The first time that the harmony veers away from the diatonic home key is on the last eighth note of m. 13 at the beginning of "komm zu mir" (come to me) when E \flat minor sounds. While the chord lasts only for an eighth note, the substitution of E \flat minor for the major dominant is noticeable. The E \flat -minor triad has a purity ranking of three out of six sizes of minor triads. Perhaps this substitution is a subtle hint, like covert irony, that there is reason for the fisher maiden to be wary. The protagonist utters the phrase again at m. 17; this time

³⁵ Chusid, "Texts and Commentary," 132-133.

B \flat minor is tonicized (it was introduced in mm. 14–15), which ranks sixth out of six sizes of minor triads, further suggesting that the protagonist's intentions may be less than pure.

At m. 28 the second stanza begins with a tonicization of C \flat major. In this stanza the protagonist tells the fisher maiden not to be afraid and to trust him. C \flat major is the enharmonic equivalent of B major and will have the same *Temperaturfarben*, ranking eleventh out of twelve in purity for major keys. In all of the songs discussed so far, Schubert has not used B major to accompany happy experiences or mild longing or discomfort. He reserves B major for more intense, negative emotions. The combination of B major with the protagonist's words creates irony; the darkness of B major indicates that she should fear. Additionally, D \flat minor, which is ranked tenth in purity out of the twelve minor keys, is tonicized in mm. 35–36 and 39–40, casting a further gloom over the protagonist's words. A \flat major returns for the last stanza and contains the same harmony as the first verse.

Schubert chose to tonicize chords with high amounts of *Temperaturfarben*, which undermines the sweetness of the light-hearted accompaniment. These dark, tense sonorities cause the audience to interpret the protagonist's words in a different light; it gives us reason to doubt what he says because his sentiment does not match the mood established. The intensity and color of these major chords as well as the interpretative insights they provide are lost in equal temperament.

11. *Die Stadt* (The City)

C minor, 3/4 time, *Mässig geschwind* (moderately fast)

The opening of *Die Stadt* evokes a supernatural feel with arpeggiated F#-diminished chords over octave Cs. Schubert returns to this sonority and uses it like he does major and minor tonal centers in other songs. Many commentators have labeled this song as impressionistic and ahead of its time; one has to wonder if Schubert would have placed greater emphasis on non-functional harmony and the *Temperaturfarben* of individual chords aside from the traditional major and minor had he lived longer. Since Schubert's treatment of the diminished-seventh chord in this song is unlike any of the songs in his other cycles, there is no precedent for extra-musical meanings associated with it. The poem is different from most that Schubert set about lost love; Chusid has observed that illusions, dreams, and allusions to past contentment are missing,³⁶ and Gernot Gruber has observed that the major–minor dichotomy found in many songs of lost love is absent.³⁷ The harmony of *Die Stadt* still provides contrast of *Temperaturfarben*, but, like the poem, the music does not reference past happiness. Nevertheless, the music does seem to express something that the poem does not; the poem focuses on the gloom of the protagonist's environment, but Schubert's contrast of C minor and F#-diminished seventh chords seems to contrast between external and internal gloom.

The texture changes to dotted rhythms and block chords when the voice enters at the anacrusis to m. 7. The protagonist describes the surreal appearance of the town on the horizon obscured by gloom. The first stanza is set in the home key of C minor, which is

³⁶ Chusid, "Texts and Commentary," 136.

³⁷ Gernot Gruber, "Romantische Ironie in den Heine-Liedern" in *Schubert-Kongress Wien, 1978: Bericht*, ed. Otto Brusatti (Graz: ADVA, 1979), 326.

ranked fifth out of the twelve minor keys. Mm. 9–11 tonicize F minor (as the iv of C minor), ranked sixth. The first stanza creates a consistent *Temperaturfarben* of moderate color that evokes the sounds of good that the protagonist says surrounds the town.

The second stanza is set over the arpeggiated F#-diminished chords that were first encountered in the introduction. In equal temperament the diminished-seventh chord has a smooth, symmetrical sound since each of the minor thirds measures 300 cents. In well temperament, each of the minor thirds are slightly different sizes, giving the chord a more jagged, harsh sound (F#–A: 302 cents; A–C 306 cents; C–Eb: 298 cents; Eb–F#: 294 cents). This chord contains the narrowest and widest minor thirds in Young’s well temperament. The chord sounds murky, effectively creating the atmosphere that the protagonist describes in the second stanza: damp air, green water, and the mournful rhythm of the rowing.

The last stanza begins at the anacrusis to m. 28 and reveals that the protagonist has lost his beloved in the town. This revelation is not as shocking as other twists in Heine’s poetry because the poem had clearly established a sense of gloom surrounding the town, which creates the expectation that it is the source of some kind of affliction. Although in a different octave, the harmony for the last stanza is the same as the first until the second beat of m. 32 when D \flat is substituted for D \sharp , creating a D \flat -major chord instead of the D-diminished chord found in m. 11. D \flat major is ranked sixth out of the seven sizes of major triads in the purity rankings. This chord does not word paint, but rather depicts misery mixed with love, which anticipates Heine’s final line in which the loss is revealed.

12. *Am Meer* (By the Sea)

C Major, cut time, *Sehr langsam* (Very slow)

Although in C major, the opening of *Am Meer* is a bit ominous; a German sixth chord resolves to C major, but it is the German sixth that is emphasized rather than the major tonic. The introduction foreshadows that this song will not have a happy ending, despite that when the voice enters at the anacrusis to m. 3, the harmony consists largely of I, IV, and V in C major, which sound sweet while the protagonist describes the serene scene where he sat alone with his love.

The measures occurring between verses one and two (mm. 11–12) juxtapose the serenity of C major with a stormy C minor, creating a more agitated sound for the second stanza. In this verse the protagonist sings of the fog rising and the tears of his beloved. C minor, which is ranked fourth out of six sizes of minor triads in the purity rankings, adds a sense of despair to the storm. Mm. 13–14 juxtapose G major and G minor, and as with C major and C minor, the harmony contrasts a relatively pure major chord with its parallel minor. The minor sonorities seem to displace major, much as distress is replacing the protagonist's happiness. The tonicizations in this stanza add to the dramatic atmosphere. Mm. 15–17 tonicize D minor, which is the overall purest minor key; the situation is distressing, but not yet desolate.

C major returns momentarily for mm. 18–20, but D minor is tonicized again (as the ii of C major) in m. 21. In mm. 22–23 C major is again followed by C minor, but in this instance the major tonality prevails as the third stanza begins with the serene music of the first stanza. The prevalence of C major seems odd at first; the protagonist is now

describing the tears of his beloved. Nevertheless, the sweet, pure harmony implies that these tears are, for now, perceived as happy tears that result from love.

The harmony of the final stanza is almost identical to the music that accompanied the second stanza. In this verse the protagonist expresses how his body is consumed with yearning and that “das unglücksel'ge Weib” (the wretched woman) has poisoned him with her tears. Here is Heine’s twist, but what does it mean? Is it as negative as the word “poison” suggests? Or is the woman wretchedly unlucky? The song ends in C major, which implies that in Schubert’s reading, love prevails. The protagonist had told of his encounter in the past tense, but uses the present perfect at the end. Perhaps the protagonist’s love endures, to his dismay, past the point of their parting.

13. *Der Doppelgänger* (The Double)

B minor, 3/4 time, *Sehr Langsam* (Very slow)

David Løberg Code wrote about how Schubert’s key choices in *Der Doppelgänger* correspond with C.F.D. Schubart’s key characteristics.³⁸ As in the songs of *Die schöne Müllerin*, many of the characteristics do correspond because the *Temperaturfarben* of the different keys lend themselves to similar types of expression; for example, the purity of C major will be used for light hearted sentiments and B major for more tense sentiments because of their expressive qualities. Thus, it is expected that there would be correlation between published key characteristics and the sentiments expressed in Schubert’s songs through *Temperaturfarben*.

³⁸ David Løberg Code, “Listening for Schubert’s ‘Doppelgängers’,” *Music Theory Online* 1, no. 4 (July 1995): <http://mto.societymusictheory.org/issues/mto.95.1.4/mto.95.1.4.code.html>.

Der Doppelgänger opens with four measures comprised of dotted half notes (none of which contains a full triad). This four-measure unit establishes an ostinato that is the basis for the accompaniment for the majority of the song. Even without the characteristic minor third in the opening tonic chord, the key of B minor is made apparent through the inclusion of a major third above the D in the third measure. The major third can be interpreted to imply a D major chord, which is diatonic to B minor, not B major. The first stanza, although in B minor, emphasizes the dominant, F#, the most highly colored major triad in Young's well temperament. The chord often appears as a dominant-seventh chord, adding even more tension and melancholia to the chord. In the first verse, the protagonist describes a quiet night and the house in which his beloved used to live, but the air is thick with the impending appearance of the *Doppelgänger*.

The harmony for verse two begins the same way as for verse one, but instead of the F#-dominant-seventh chord in second inversion that sounded at m. 12, a French-augmented-sixth chord sounds instead at m. 32, increasing the *Temperaturfarben* of the passage. The chord sounds sinister and highlights the word "Schmerzensgewalt" (anguish). Like the D \flat -major chord in *Die Stadt*, this chord foreshadows the development that is just ahead: the protagonist is horrified when he realizes that the face of the man standing outside his beloved's house is his own.

Beginning at m. 38, at the beginning of the final stanza, the octaves outlined in the piano begin to rise chromatically. The final stanza emphasizes German-sixth chords as well as A#-major chords, and the vocal line ends with a V-i cadence in the home key of B minor, but the song still has a harmonic surprise for its listener. At m. 49 a C-major chord sounds, the most pure major triad, setting in motion a N-V⁷/IV-iv $\frac{6}{4}$ -I progression

that ends with a Picardy third, creating a B-major chord. The purity of C major contrasts with the intense *Temperaturfarben* of the F#-major chord in second inversion and the B-dominant-seventh chord. The sustained nature of the chords highlights their beating; the beating of the more highly colored chords is palpable, as is the pure ring of the C-major chord. Nevertheless, in this instance, the *Temperaturfarben* of the piano postlude does not seem to shed light on the poetic interpretation. There is an alternation between colored and relatively pure chords, but it is unknown which will ultimately triumph. The plagal cadence in B minor at the end of the song does not give a sense of resolution.

Summary

The individual song commentaries illustrate that in *Schwanengesang* in general tonalities express a degree of intensity rather than a specific extra-musical idea, and because of this, recurring tonal centers and significant sonorities do not reference or link and thus do not add cyclical cohesion. In his examination of *Schwanengesang*, Martin Chusid has often noted which songs exhibit Schubert's common practice of juxtaposing major and minor to represent a pleasant past with a harsh present.³⁹ Some, like *Kriegers Ahnung* and *Ihr Bild* do, and others, like *Aufenthalt* and *Ständchen*, do not. Schubert is not as consistent in his symbolic use of major and minor in *Schwanengesang* as he was in *Winterreise*; in this cycle, major most often evokes the protagonist's feelings of love and happiness, and minor evokes his more painful present. Also, in both *Die schöne Müllerin* and *Winterreise*, there are major and minor pairs with specific extra musical meanings,

³⁹ Martin Chusid, "Texts and Commentary," 90–155.

like A major and A minor (dreams and reality), and E \flat major and E \flat minor (hope and hopelessness). Schubert did not assign a specific enough meaning to major and minor in *Schwanengesang* to have it be a cyclical or unifying element.

When looking at Schubert's key choices in *Schwanengesang*, some seem to fit with the light-hearted opening of *Die schöne Müllerin* (e.g., *Liebesbotschaft* and *Frühlingssehnsucht*), and some with the gloomier tonal palette of *Winterreise*, like *Kriegers Ahnung* and *Aufenthalt*. The cohesiveness that exists in *Schwanengesang* is due more to Schubert's consistency in his choice of *Temperaturfarben* for the common tones and moods in the poetry of *Schwanengesang*, rather than an attempt to create cyclical unity.

A Heine cycle?

Schubert's use of *Temperaturfarben* in *Schwanengesang* provides further evidence that the Rellstab and Heine songs do not constitute a cycle. Yet questions of cyclicism still surround the Heine songs. Scholars including Maurice Brown, Harry Goldschmidt, and Richard Kramer have postulated that if the Heine songs were put into the order in which they occur in *Die Heimkehr*, they could arguably be a cycle.⁴⁰ Brown was the first to float this idea, although, as Martin Chusid has noted, neither Goldschmidt

⁴⁰ See Maurice Brown, *Schubert Songs* (Seattle: University of Washington Press, 1967), 61; Harry Goldschmidt, "Welches War Die Ursprüngliche Reihenfolge in Schuberts Heine-Liedern?" *Deutsches Jahrbuch für Musikwissenschaft* 17 (1974): 52–62; and Richard Kramer *Distant Cycles, Schubert and the Conceiving of Song* (Chicago: University of Chicago Press), 125–147.

nor Kramer reference Brown in their discussion.⁴¹ Brown has stated, “It is doubtful if the order in which [the Heine songs] appear in *Schwanengesang* is according to Schubert’s wish, for it differs considerably from the order in *Die Heimkehr*. . . . The most casual glance shows that they were published in the wrong order. . . .”⁴² Yet the songs were clearly not published in the wrong order since they were taken exactly as they appeared in Schubert’s fair copy.

In Goldschmidt’s discussion of restoring the songs to Heine’s order, he illustrated that if the songs were reordered a tonal organization emerges: that of a chromatic descent.⁴³ Table 7.3 shows Schubert’s and Heine’s ordering with the corresponding keys.⁴⁴ Goldschmidt further proposed that the publisher transposed *Der Atlas* from the original key of A minor to G minor at the request of the publisher. If this were true, it would certainly support Goldschmidt’s theory, but *Der Atlas* appears in the manuscript in G minor, which was sent to the publisher only after Schubert’s death. While there is documentary evidence of the communication between Schubert and the publisher Probst regarding the Heine songs, there is no record that Probst knew anything about the range or poems of the original songs. There no reason to believe that there was any publisher input on the Heine songs before Schubert died.

⁴¹ Martin Chusid, “The Sequence of the Heine Songs and Cyclicity in *Schwanengesang*,” in *A Companion to Schubert's Schwanengesang: History, Poets, Analysis, Performance*, ed. Martin Chusid (New Haven: Yale University Press, 2000), 159.

⁴² Brown, *Schubert's Songs*, 59–61.

⁴³ Chusid has noted that “relations by half step between the principal keys of three or more successive songs (or dances, or movements of larger instrumental works) [don’t] occur with sufficient frequency in Schubert’s music to warrant altering his own arrangement of the Heine songs in the manuscript.” See Chusid, “Sequence of the Heine Songs,” 160.

⁴⁴ A similar table appears in Chusid, “Sequence of the Heine Songs,” 160.

Table 7.3: The ordering of the Heine songs in *Schwanengesang* and *Der Heimkehr*.
Ordering in *Schwanengesang* **Ordering in *Der Heimkehr***

<i>Der Atlas</i>	G minor	<i>Das Fischermädchen</i>	A \flat major
<i>Ihr Bild</i>	B \flat minor	<i>Am Meer</i>	C major
<i>Das Fischermädchen</i>	A \flat major	<i>Die Stadt</i>	C minor
<i>Die Stadt</i>	C minor	<i>Der Doppelgänger</i>	B minor
<i>Am Meer</i>	C major	<i>Ihr Bild</i>	B \flat minor
<i>Der Doppelgänger</i>	B minor	<i>Der Atlas</i>	G minor/A minor*

*Goldschmidt's proposed original key.

Richard Kramer abandoned the idea of a transposition of *Der Atlas*, but he still finds the reordering convincing. He has postulated that restoring the Heine songs to the original order creates both a loose plot and also a type of song cycle fragment that progresses from \flat VI to V.⁴⁵ Goldschmidt and Kramer's arguments for rearranging the Heine songs center around two primary reasons: first, they believe that it creates more of a narrative, and second, they believe it contains more tonal logic. While there are many points that could be made regarding these arguments, I will focus on whether or not the *Temperaturfarben* of the reordered Heine songs supports Goldschmidt and Kramer's claims.

Der Heimkehr has a loose plot, so it is not surprising that one could also be imposed upon Schubert's Heine songs if placed in Heine's order. *Temperaturfarben* alone cannot create a poetic narrative, but it can highlight one if it exists. Figure 7.2 shows the *Temperaturfarben* for the Heine songs in Schubert's order and Figure 7.3 shows the Heine songs in Heine's order. Although the order of the songs is not entirely reversed, since *Das Fischermädchen* (A \flat major) and *Der Doppelgänger* (in B minor)

⁴⁵ Kramer, *Distant Cycles*, 125; 137–138.

have the same purity rankings on their respective scales, the *Temperaturfarben* progression in Heine's order does end up being a mirror image of Schubert's.

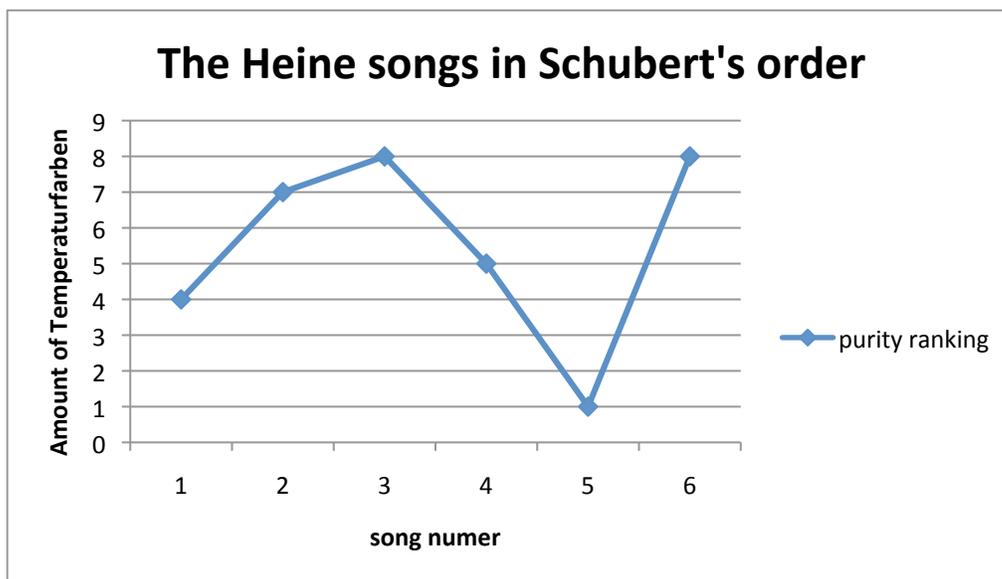


Figure 7.2: The *Temperaturfarben* of the Heine songs as they occur in *Schwanengesang*

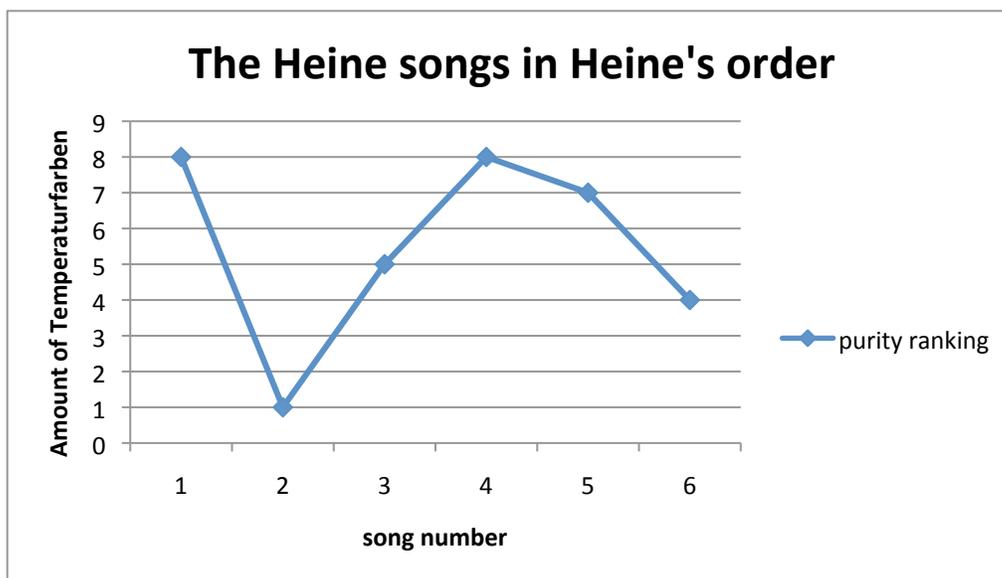


Figure 7.3: The *Temperaturfarben* of the Heine songs as they occur in *Der Heimkehr*

Regardless of the song order, no typical dramatic structure emerges. Both orderings contain an arc, but both have a juxtaposition of a highly colored key with a song in the pure C major, which creates a sharp ascent at the end of Schubert's ordering and a sharp descent at the beginning of Heine's ordering. Surely we could reorder the songs again to create a more appropriate dramatic arc, but this would ruin the narrative that Goldschmidt and Kramer are trying to preserve.

Kramer, having abandoned Goldschmidt's idea of transposition, provides more convincing musical evidence for the tonal pattern that emerges, a decorated \flat VI to V progression. Nevertheless, this is not a pattern that occurs often in Schubert's song cycles or instrumental works. This dissertation has shown how the tonal plans of Schubert's cycles were guided by *Temperaturfarben* rather than by functional harmony; if Schubert had intended the Heine songs to be in Heine's order, it is more likely that a pattern of *Temperaturfarben* would emerge rather than a rare \flat VI to V. The figures above illustrate that this is not the case.

Kramer does not suggest publisher interference for the random ordering of the Heine songs as did Goldschmidt, but rather he has berated Schubert for rejecting Heine's sequence.

It is tempting to consider whether this rejection was provoked by a failure of nerve, for it must have struck Schubert that he had profoundly violated Heine's text, infusing an intimacy into these six poems, imposing a psychological drama, and finally distorting the fragile, ambivalent web of connections in *Die Heimkehr*. The fixing of narrative tone in Heine's cycle is no simple matter. Poetic "voice" is a delicate business with Heine, and it can be said that Schubert plays somewhat indelicately with it.⁴⁶

⁴⁶ Kramer, *Distant Cycles*, 138.

Kramer chastises Schubert for altering Heine's work while Kramer does the same to Schubert's. Arranging the songs so that they create a plot, tonal scheme, and thus a cycle, seems to violate Schubert's wishes as a composer, disrespect how he conceived the songs, and value Heine's creative force over Schubert's. The *Temperaturfarben* of the revised cycle does not illustrate any more tonal coherence than did Schubert's ordering. The reordering of the songs does bring in more cyclical elements enabling a plot to be extracted and a tonal plan to emerge, but the cycle that is created has Brown, Goldschmidt, Kramer, and Schubert as composers instead of Schubert alone.

Conclusion

There are many arguments against reading *Schwanengesang* as a cycle, the most fundamental of which is that neither Schubert nor his publisher Haslinger intended the songs to be perceived or performed as a cycle. Nevertheless, Schubert's use of *Temperaturfarben* in *Schwanengesang* also presents evidence against reading *Schwanengesang* as an unintentional cycle and against reordering the Heine songs into a mini cycle. In *Schwanengesang*, *Temperaturfarben* was not used to create cyclical elements as it was in *Die schöne Müllerin* and *Winterreise*. In both true cycles *Temperaturfarben* influenced the conception of the larger form and overall tonal scheme of the cycle, certain keys had specific extra-musical meanings that recurred throughout the cycle, and significant sonorities and tonal centers referenced other songs within the cycles. Schubert's use of *Temperaturfarben* in *Schwanengesang* creates contrast and

irony, highlights the emotion of the different protagonists, and expresses poetic meaning, but all within the confines of individual songs.

Conclusion

Using temperament analysis to examine the song cycles *Die schöne Müllerin* and *Winterreise*, in addition to the song collection *Schwanengesang*, reveals the numerous ways in which Schubert used *Temperaturfarben* to create musico-literary devices. In all three works there are examples of *Temperaturfarben* evoking mood, painting words, creating irony, exposing a character's façade, foreshadowing events, establishing extra-musical meanings, increasing and decreasing tension, and creating musical interest through contrast. Schubert's use of major and minor serves as a good demonstration of his varied approaches to *Temperaturfarben*. The juxtaposition of major and minor is one of the few devices noticeable when Schubert's Lieder are performed in equal temperament; however, the nuance of meaning is often lost outside the context of well temperament. For example, scholars have noticed that one way Schubert used the major–minor dichotomy was to create a contrast between present and past. In well temperament, the quality of the major key (whether is it pure or more highly colored) reveals how the past memory is impacting the protagonist. Memories are often accompanied by different feelings of love; in *Winterreise*, memories in D major evoke a swell of joyful love in addition to the memories of the protagonist's beloved in *Im Dorfe*, while E major evokes a combination of love and anger in *Erstarrung*.

The varying meanings that Schubert assigned to the major–minor dichotomy illustrate that he did not limit himself to encoding one specific meaning to the musical devices he derived from *Temperaturfarben*. In addition to creating a sense of memory,

remembered love, and time through juxtaposing major and minor, Schubert also linked some major and minor keys to specific extra-musical meanings. This use of major and minor occurs more often in the song cycles than the individual Lieder because a large-scale form allows for the establishment of meaning through repeated use. In *Die schöne Müllerin* he contrasted E \flat major for hope and E \flat minor for hopelessness and A major for dreams and A minor for reality. The latter association is found in *Winterreise* as well.

Indeed, A major is often used with songs about dreams in Schubert's Lieder, which has been observed by such scholars as Youens, Reed, and others with an extensive knowledge of Schubert's Lieder output.¹ Nevertheless, without knowledge of Schubert's vast catalogue one may not know of this dream association. Schubert's consistent use of A major within the song cycles and within the entirety of his Lieder illustrates two things: first, within the context of the cycles, an audible link between A major, A minor, and extra-musical meaning is established that is perceptible during the experience of a cycle. Second, Schubert's consistent use of A major in individual Lieder implies that Schubert found something compelling in the essence of the well-tempered key of A major for expressing dreams. Nevertheless, just as all dreams are not the same and do not have the same mood, not all dream songs in Schubert's oeuvre are in the same key. Schubert was not arbitrarily assigning keys and meanings and creating a universal hermeneutics of key; rather, he was choosing the key with the *Temperaturfarben* that he thought would best express a sentiment or idea in an individual song, and he did so consistently.

¹ See page 239 for a discussion of dream songs in the key of A major.

One of the effects created through *Temperaturfarben* that is most easily lost in equal temperament is irony. Schubert created irony in *Die schöne Müllerin*, *Winterreise*, and *Schwanengesang*, but the types of irony differ. In the cycles, Schubert mostly uses dramatic irony by revealing to the audience through *Temperaturfarben* the significance of the protagonist's words or actions when it is not clear to the protagonist himself, such as using accompaniment with a dark *Temperaturfarben* in *Der Neugierige* when answering the miller's question of whether or not the maid loves him. In *Schwanengesang*, specifically the Heine songs, Schubert uses *Temperaturfarben* to help express Heine's irony. For example, in *Das Fischermädchen*, scholars have questioned how Schubert wished to portray the fisher maiden's suitor; Schubert's use of *Temperaturfarben* creates a sense of insincerity and causes the audience to question the suitor's intentions. *Temperaturfarben* reveals that there is more to Schubert's interpretation of Heine than meets the eye; further examination of Schubert's Heine Lieder through temperament analysis would be an invaluable addition to the scholarly literature.

One of the benefits of applying temperament analysis to other works within Schubert's oeuvre and that of other nineteenth-century composers is the development of a better understanding of *Temperaturfarben* as a musical element and compositional device. Kramer's book *Distant Cycles* does not deal with well temperament, but his intriguing study touches upon issues and misconceptions that can be clarified through a better understanding of the role of *Temperaturfarben* in a composition. The first issue manifested in Kramer's work stems from the way in which some of Schubert's uses of

Temperaturfarben, like juxtaposing major and minor and establishing extra-musical ideas through repeated links between poetic ideas and key, are observable in equal temperament, but others like sarcasm, irony, and word painting are most often lost. In equal temperament, Schubert's emphasis on *Temperaturfarben* manifests only as a sense of the importance of key in Schubert's Lieder, which has led scholars to inquire as to what certain keys "mean." Throughout the book, Kramer often returns to a discussion of B minor, of which he has stated, "Schubert in B minor is Schubert at the depths of his soul."² In a discussion of *In der Ferne*, Kramer has added that "whether or not B minor can be shown to enjoy some immanence of universal appeal, the evidence for 'how B minor means' must be rigorously scrutinized in those single cases that seems [sic] intuitively to be the right ones."³ What is universal about B minor is its hierarchy in the circle of fifths and the amount of color it has in well temperament in relation to other keys in the cycle. The acoustical quality of the key is a more likely reason why Schubert and other composers chose B minor rather than historical or arbitrary links to key characteristics. *Temperaturfarben* needs to be viewed in the same way as the musical elements of melody, harmony, and rhythm; while each can have meaning assigned to them, there is no set definition for what an arpeggiated triad or an eighth note-quarter note combination means. Similar accompaniment patterns effectively evoke the brook in *Die schöne Müllerin* and the spinning wheel in *Gretchen am Spinnrade*, just as the well-tempered key of E minor can evoke death in one song and suffering in another. The keys

² Richard Kramer, *Distant Cycles, Schubert and the Conceiving of Song* (Chicago: University of Chicago Press), 102.

³ *Ibid.*, 119.

in well temperament are like colors that the composer can mix and use to express a myriad of emotions and ideas.

The second issue apparent in Kramer's book that can be reexamined through the study of *Temperaturfarben* is epitomized in a quote used previously in this dissertation: "in the conceiving of the song, the poetic idea and the idea of key belong to the inchoate creative impulse from which the song will emerge."⁴ The belief that there is more value in initial conceptions than modifications has led to Kramer accuse Schubert of "tampering with the critical essence of the cycle"⁵ through his transpositions of *Winterreise*. In the same vein, he has claimed that Schubert's ordering of Heine's songs "violated Heine's text."⁶ I contend that Kramer's arguments value initial creative ideas (the conception of key and Heine's intent) over crafted, conscious changes (transpositions, Schubert's interpretation of Heine). I postulate that the idea perpetuated by Kramer and like-minded scholars that key is intuitive rather than a musical element that can be manipulated and refined by the composer has clouded the general view on issues such as transpositions. When key is viewed as instinctive and unchangeable, scholars have a hard time finding convincing reasons why Schubert would have transposed his songs (the exception being the final song of the first part of *Winterreise*, which scholars often view as an attempt to open what was originally a closed cycle), and as a result, the publisher is often blamed for defying Schubert's sacred conception of key (or in the case of *Einsamkeit*, Schubert is responsible for violating his own conception of

⁴ Kramer, *Distant Cycles*, 165.

⁵ *Ibid.*, 184.

⁶ *Ibid.*, 138

key). Temperament analysis can provide scholars with a new way to approach the study of transpositions while exposing unexamined assumptions; most scholars are not aware that reasons of *Temperaturfarben* may have motivated Schubert's transpositions.

Of the works studied in this dissertation, only *Winterreise* has extant manuscripts documenting the transpositions that occurred between certain songs' conceptions and publication. If one proceeds from the assumption that key is intrinsically linked to the conception of the cycle, these transpositions make Schubert appear as if he did not prioritize key as one of the essential elements of his compositions. I argue that these transpositions illustrate the opposite: that key was truly important to Schubert, and that he transposed songs so that he could achieve a dramatic structure that satisfied him. Through transpositions Schubert created changes in temperament that modified the dramatic arc and the meaning of the cycle, sustaining the dramatic tension to accommodate part one and creating a more gentle, optimistic ending.

How integral *Temperaturfarben* was to key choice, dramatic structure, and expression in both *Die schöne Müllerin* and *Winterreise* could serve as an argument that Schubert's songs should not be freely transposed by performers. While ideally they should not be, discouraging singers from performing transposed versions of the cycle would nevertheless limit the performance of his Lieder to the voice part for which it was originally conceived, preventing a large number of singers from performing Schubert's Lieder and in turn decreasing the number of performances of this beautiful music. Nevertheless, the transposed editions of the songs should be examined. The

transpositions available for different voice types usually transpose all songs down by the same interval, which may generally decrease or increase the overall *Temperaturfarben* of the cycle; if this is the case, the singer may be able to compensate for the increased or decreased tension through his or her performance. What is more likely to happen in *Winterreise*, which contains many songs in minor keys whose *Temperaturfarben* is not as systematic because of the incorporation of the major dominant, is that the transposing of all of the keys down the same amount may place some songs into keys that, when performed in well temperament, no longer match the poetic or emotional idea that the song expresses. Thus, new editions of the song cycles should be created with transpositions that best preserve the *Temperaturfarben* of the original keys or tonal groups.

The strongest argument in favor of transpositions comes from Schubert himself, who was known to transpose songs for friends. Three transpositions from *Die schöne Müllerin* that he made for Carl von Schönstein are still extant. No. 7, *Ungeduld*, was transposed from A major to F major, No. 8, *Morgengruss*, was transposed from C major to A major, and No. 9, *Des Müllers Blumen*, was transposed from A major to G major. These songs are all from tonal group three, which is centered on A major. Schubert transposed the song in the more pure key of F major to A major, which is the defining tonality of the group, and the more highly colored songs in A major were transposed to purer keys. This maintains the overall *Temperaturfarben* of the group; Schubert did not introduce the more highly colored keys prevalent in the last tonal grouping of the cycle. Without the rest of the cycle, it is difficult to deduce how Schubert approached

transpositions in general, but we can tell from these three songs alone that he did not simply pick an interval and transpose the songs down the same amount.

A logical extension of the desire to experience and recreate Schubert's works as nineteenth-century audiences experienced them, complete with all the nuances created through *Temperaturfarben*, would be to argue that the songs should only be performed on period instruments tuned in well temperament; however, this is not practical at this point in time. The main obstacles in trying to create historically accurate performances of Schubert's Lieder are the lack of period instruments and the difficulty of changing tunings on modern pianos. While it is possible to tune modern pianos to historical tunings, tuning is most often done by professional technicians instead of by the performers themselves, and it would not be feasible to change tunings frequently. Today's musicians often perform music from multiple composers in a single recital, and it would be difficult to shift between temperaments in a single performance. However, with modern technology such as digital pianos, it would be easier to shift between temperaments quickly and easily, although the timbre is not ideal. Although logistical problems currently prevent widespread historically accurate performances of Schubert's Lieder, creating a historically accurate recording of Schubert's Lieder on a period instrument in well temperament would allow for twenty-first-century musicians and audiences to hear Schubert's works in a new way.

While other authors have written on the subject of well temperament and expression, this dissertation is the first to provide a methodology for examining how a

composer used temperament as an expressive device in a way that is applicable to the vast majority of well temperaments. Although this dissertation has focused primarily on Schubert's song cycles, temperament analysis can be applied to his individual songs (as shown in the *Schwanengesang* chapter) and could be used to examine cohesion in his song sets. Although Schubert's instrumental works do not use *Temperaturfarben* as a musico-literary device, they can still be examined to see which key and chord choices seem to be inspired by *Temperaturfarben*.

This dissertation creates a new model for the analysis of one of the most significant genres of the nineteenth century. The Lied binds music and poetry together, so new insights into this genre will deepen our understanding of nineteenth-century German aesthetics, poetry, and literary movements. Temperament analysis provides a new way to analyze how literary techniques can be translated into music. My analytical model allows for the examination of key contrast beyond the major–minor dichotomy, the association of key and extra-musical meanings, and key choice outside of the context of traditional functional harmony; it provides an additional analytical model for examining how Schubert's songs and cycles work, and it could be applied to other nineteenth-century composers as well.

While the link between well temperament and Romantic composers' works has been long neglected, so has the examination of how *Temperaturfarben* impacts expression in musical compositions from earlier eras that were known to have been composed and performed in well temperament. While it is acknowledged that earlier composers did compose and perform in well temperament, and many performances occur

on historical instruments with historically accurate tuning, the music has not been analyzed through the lens of well temperament to investigate how composers exploited and utilized the unique colors of the keys. The system of temperament analysis presented in this dissertation can be applied to the works of composers like Bach, whose *Well-Tempered Clavier* was unarguably written to highlight the unique qualities of each key in well temperament. Bradley Lehman has postulated that Bach drew a diagram on the title page of the *Well-Tempered Clavier* that encoded his own formula of well temperament.⁷ Bach was known for infusing his works with numerical and symbolic meanings, and if the system of well temperament analysis is applied to Bach's works, a wealth of new meaning may emerge. Nevertheless, Bach is only one possibility; the application for temperament analysis is limitless for pre-equal-temperament music.

While the potential applications of temperament analysis are many, there is still much to learn by examining the remainder of Schubert's Lieder as well as his entire vocal and instrumental output. Schubert has long been viewed as a composer who had an instinctual approach to key, and *Temperaturfarben* has the potential to explain many key and chord choices as well as illuminate further connections between extra-musical meaning and key. This study has highlighted Schubert's use of *Temperaturfarben* as a musico-literary tool, a structural device, and a means to create musical interest within *Die schöne Müllerin*, *Winterreise*, and *Schwanengesang*. These works are only a small portion of his more than six-hundred Lieder; the discoveries awaiting us are plentiful.

⁷ Bradley Lehman, "Bach's Extraordinary Temperament: Our Rosetta Stone," *Early Music* 33 (February 2005): 3.

Appendix: Calculating Beats

Beats come from a variety of sources, including notes close in frequency, harmonics, mistuned consonances, and combination tones. When beats are too fast for the ear to decipher individually, they create what acousticians refer to as “roughness.” Notes close in frequency beat at a rate of $f_1 - f_2$. (*frequency 1 - frequency 2*). For example, in equal temperament, if C 130.183 Hz and G 391.995 Hz are both sounded, the C will also produce a G that sounds at 392.449 Hz as its third harmonic.¹ The two Gs will beat at a frequency of $f_1 - f_2$, or .454 bps, or approximately one beat every half second.

A different formula must be used to determine the number of beats per second that occur between tempered consonances, also referred to as mistuned consonances (opposed to pure) in acoustical studies. The beat rate equals the difference between the pure and tempered intervals, represented by ϵ (epsilon), times the lower number of the frequency ratio (what would be the denominator of the fraction).² Thus, if C 261.626 Hz and G 391.995 Hz are sounded in equal temperament, the beat rate would be derived as follows:

¹ All hertz calculations are rounded to the nearest thousandth.

² Llewelyn Southworth Lloyd, *Music and Sound* (New York: Oxford Univeristy Press, 1937), 53. The basis of these calculations uses the bottom note of the interval as the frequency that stays constant and is the basis of the calculation. The beat rate can also be calculated if the bottom note of the interval is mistuned and the top note stays constant. In this case, the rate of beating corresponds with the top number of the frequency ratio or what would be the numerator of the fraction.

$$\begin{aligned}f_2 &= 3/2 f_1 \pm \epsilon \\391.995 &= 1.5 \cdot 261.626 \pm \epsilon \\391.995 &= 392.439 \pm \epsilon \\\epsilon &= .444\end{aligned}$$

$$\begin{aligned}\text{beat rate} &= \epsilon \cdot 2 \\\epsilon \cdot 2 &= .888 \text{ bps}\end{aligned}$$

Thus, the beat rate is close to one beat per second.

The two calculations above account for beats that occur between two tones.

Although accurate, these calculations cannot account for beats that occur from simultaneous notes and other sound wave interactions.

Bibliography

- Agawu, Kofi. "On Schubert's 'Der Greise Kopf.'" *In Theory Only* 8 (July 1984): 3–21.
- _____. "Theory and Practice in the Analysis of the Nineteenth-Century 'Lied.'" *Music Analysis* 11 (March 1992): 3–36.
- _____. "Review: Perspectives on Schubert's Songs." *Music Analysis* 16 (March 1997): 107–122.
- Albertsen, Leif Ludvig. "Schuberts Müllerlieder." *Augias* 50 (1997): 3–23.
- Anson-Carthewright, Mark. "Chromatic Features of E \flat -Major Works of the Classical Period." *Music Theory Spectrum* 22 (Autumn 2000): 177–204.
- Archer, Thomas. "The Formal Construction Of 'Die Schöne Müllerin.'" *Musical Quarterly* 20 (1934): 401–407.
- Aristotle. *Politics*. Translated by H. Rackham Loeb. London: W. Heinemann, 1932.
- Armitage-Smith, Julian. "Notes on 'Winterreise.'" *Musical Times* 113 (1972): 766–767.
- _____. "Schubert's 'Winterreise', Part I: The Sources of the Musical Text." *Musical Quarterly* 60 (1974): 20–36.
- Auhagen, Wolfgang. *Studien zur Tonartencharakteristik in theoretischen Schriften und Kompositionen vom späten 17. bis zum Beginn des 20. Jahrhunderts*. Frankfurt am Main: Peter Lang, 1983.
- _____. "Zur Entstehung der Tonartencharakteristik im 18. Jahrhundert." In *Perspektiven und Methoden einer systemischen Musikwissenschaft; Bericht über das Kolloquium im Musikwissenschaft Institut der Universität*, edited by Klaus Wolfgang Niemöller and Bram Gätjen, 89–96. Frankfurt am Main: Peter Lang, 2003.
- Baggett, Bruce Arlington. "Analytical Guide to the Understanding and Performance of Selected Song Cycles of Franz Schubert." EdD diss., Columbia University, 1964.
- Barbieri, Patrizio. "Temperaments, Historical." In *Piano: An Encyclopedia*, edited by Robert Palmieri and Margaret Palmieri, 402–409. New York: Routledge, 2003.
- Barbour, James Murray. *Tuning and Temperament: A Historical Survey*. 1951. Reprint, New York: Dover, 2004.

- Barry, Barbara R. "Sehnsucht and Melancholy: Explorations of Time and Structure in Schubert's *Winterreise*." In *The Philosopher's Stone: Essays in the Transformation of Musical Structure*, 181–202. Hillsdale, NY: Pendragon, 2000.
- _____. "Time Levels and Tonal Structures in Schubert's 'Die Winterreise.'" *Music Review* 46 (August 1985): 170–178.
- Bartel, Dietrich. *Musica Poetica: Musical-Rhetorical Figures in German Baroque Music*. Lincoln: University of Nebraska Press, 1997.
- Baum, Günter "Schubert - Müller's *Winterreise* - Neu Gesehen." *Neue Zeitschrift für Musik* 128, no. 2 (February 1967): 78–81.
- Beach, David. "An Analysis of Schubert's *Der Neugierige*: A Tribute to Greta Kraus." *Canadian University Music Review* 19 (1998): 69–80.
- _____. "The Harmonic Theories of Johann Philipp Kirnberger: Their Origins and Influences." PhD diss., Yale University, 1974.
- _____. "Modal Mixture and Schubert's Harmonic Practice." *Journal of Music Theory* 42 (Spring 1998): 73–100.
- Bell, A. Craig. *The Songs of Schubert*. Lowestoft: Alston, 1964.
- Bellman, Jonathan. "Toward a Well-Tempered Chopin." *Chopin in Performance: History, Theory, Practice*. Proceedings of the 5th International Chopin in Performance Conference 2004, edited by Artur Szklener, 27–40. Warsaw: Narodowy Instytut Fryderyka Chopina, 2005.
- Benade, Arthur H. *Fundamentals of Musical Acoustics*. Corrected ed. New York: Dover, 1990.
- Berke, Dietrich. "Mutmaßungen über den Leiermann." In *Schubert und das Biedermeier: Beiträge zur Musik des Frühen 19. Jahrhunderts. Festschrift für Walther Dürr zum 70. Geburtstag*, edited by Michael Kube, Werner Aderhold, and Walburga Litschauer, 83–90. New York: Bärenreiter, 2002.
- Bilson, Malcolm. "Schubert's Piano Music and the Pianos of His Time." *Studia Musicologica Academiae Scientiarum Hungaricae* 22 (1980): 262–271.
- _____. "The Future of Schubert Interpretation: What Is Really Needed?" *Early Music* 25 (1997): 715–722.
- _____. "The Viennese Fortepiano of the Late 18th Century." *Early Music* 8 (1980): 158–162.

- Bingham, Ruth Otto. "The Early Nineteenth-Century Song Cycle." In *The Cambridge Companion to the Lied*, edited by James Parsons, 101–119. New York: Cambridge University Press, 2004.
- _____. "The Song Cycle in German-Speaking Countries, 1790–1840: Approaches to a Changing Genre." PhD diss., Cornell University, 1993.
- Blom, Eric. "His Favourite Device." *Music & Letters* 9 (October 1928): 372–380.
- Boethius, Anicius Manlius Severinus. *Fundamentals of Music*. Translated by Calvin M. Bower. Edited by Claude V. Palisca. New Haven: Yale University Press, 1989.
- Booth, Wayne C. *A Rhetoric of Irony*. Chicago: University of Chicago Press, 1974.
- Brauner, Charles. "Irony in the Heine Lieder of Schubert and Schumann." *Musical Quarterly* 67 (1981): 261–281.
- Bretscher, Paul Martin. "The History and Significance of the Taschenbuch *Urania*." PhD diss., University of Chicago, 1936.
- Brinkman, Reinhold. "Schubert's Political Landscape." In *A New History of German Literature*, edited by David E. Wellber, 540–546. Cambridge, MA: The Belknap Press of Harvard University, 2004.
- Brown, Jane K. "The Poetry of Schubert's Songs." In *Schubert's Vienna*, edited by Raymond Erickson, 183–213. New Haven: Yale University Press, 1997.
- Brown, Maurice J. E. *Essays on Schubert*. New York: St. Martin's Press, 1966.
- _____. *Schubert, A Critical Biography*. New York: St. Martin's Press, 1958.
- _____. *Schubert Songs*. BBC Music Guides. Seattle: University of Washington Press, 1967.
- _____. "Schubert's 'Winterreise', Part I." *Musical Quarterly* 39 (1953): 215–222.
- Brown, Maurice J. E., and Julian Armitage-Smith. "Songs: A Catalogue and a Review." *Musical Times* 117 (March 1976): 310–313.
- Brown, Maurice J. E., and Eric Sams. *The New Grove Schubert*. New York: W.W. Norton, 1983.
- Buelow, George J. "Johann Mattheson and the Invention of the Affektenlehre." In *New Mattheson Studies*, edited by George J. Buelow and Hans Joachim Marx, 393–407. New York: Cambridge University Press, 1983.

- Budde, Elmar. *Schuberts Liederzyklen: Ein musikalischer Werkführer*. München: C.H. Beck, 2003.
- Bukofzer, Manfred. "Allegory in Baroque Music." *Journal of the Warburg and Courtauld Institutes* 3 (October 1939–January 1940): 1–21.
- Burns, Edward M. "Intervals, Scales, and Tuning." In *The Psychology of Music*, edited by Diana Deutsch, 215–264. New York: Academic Press, 1982.
- Capell, Richard. *Schubert's Songs*. 2nd ed. New York: The Macmillian Company, 1957.
- Carlton, Stephen. "Sketching and Schubert's Working Methods." *Current Musicology* 37/38 (2002): 75–88.
- Cazden, Norman. "Sensory Theories of Musical Consonance." *Journal of Aesthetics and Art Criticism* 20 (1962): 301–319.
- Chafe, Eric. "Allegorical Music: The 'Symbolism' of Tonal Language in the Bach Canons." *Journal of Musicology* 3 (1984): 340–362.
- _____. "Aspects of Durus/Mollis Shift and the Two-System Framework of Monteverdi's Music." *Schütz Jahrbuch* 12 (1990): 171–206.
- _____. *Monteverdi's Tonal Language*. New York: Schirmer, 1992.
- Chailley, Jacques. "Le 'Winterreise' et l'énigme de Schubert." *Studia Musicologica Academiae Scientiarum Hungaricae* 11 (1969): 107–112.
- Chusid, Martin. "The Poets of *Schwanengesang*: Rellstab, Heine and Seidel." In *A Companion to Schubert's Schwanengesang: History, Poets, Analysis, Performance*, edited by Martin Chusid, 14–49. New Haven: Yale University Press, 1989.
- _____. "The Sequence of the Heine Songs and Cyclicity in *Schwanengesang*." In *A Companion to Schubert's Schwanengesang: History, Poets, Analysis, Performance*, edited by Martin Chusid, 159–173. New Haven: Yale University Press, 1989.
- _____. "Texts and Commentary." In *A Companion to Schubert's Schwanengesang: History, Poets, Analysis, Performance*, edited by Martin Chusid, 90–155. New Haven: Yale University Press, 1989.
- Clausen, Bruce E. "Beethoven and the Psyches of the Keys." PhD diss., University of Southern California, 1988.

- Clive, Peter. *Schubert and His World: A Biographical Dictionary*. New York: Oxford University Press, 1997.
- Code, David Løberg. "Listening for Schubert's 'Doppelgänger.'" *Music Theory Online* 1, no. 4 (July 1995) <http://mto.societymusictheory.org/issues/mto.95.1.4/mto.95.1.4.code.html> (accessed June 22, 2008).
- Cohn, Richard L. "As Wonderful as Star Clusters: Instruments for Gazing at Tonality in Schubert." *19th-Century Music* 22 (1999): 213–232.
- Cone, Edward T. "'Am Meer' Reconsidered: Strophic, Binary, or Ternary?" In *Schubert Studies*, edited by Brian Newbold, 112–126. Brookfield, VT: Ashgate, 1998.
- _____. *The Composer's Voice*. Berkeley: University of California Press, 1974.
- _____. "Repetition and Correspondence in *Schwanengesang*." In *A Companion to Schubert's Schwanengesang: History, Poets, Analysis, Performance*, edited by Martin Chusid, 53–89. New Haven: Yale University Press, 1989.
- _____. "Schubert's Promissory Note: An Exercise in Musical Hermeneutics." In *Schubert: Critical and Analytical Studies*, edited by Walter Frisch, 13–30. Lincoln: University of Nebraska Press, 1996.
- Cottrell, Alan P. *Wilhelm Müller's Lyrical Song-Cycles; Interpretations and Texts*. Chapel Hill: University of North Carolina Press, 1970.
- Damschroder, David. *Harmony in Schubert*. New York: Cambridge University Press, 2010.
- Daverio, John. "The Song Cycle: Journeys Through a Romantic Landscape (revised and with an Afterword by David Ferris)." In *German Lieder in the Nineteenth Century*, 2nd ed, edited by Rufas Hallmark, 363–404. New York: Schirmer, 1996.
- Deutsch, Otto Erich. *Schubert: A Documentary Biography*. Translated by Eric Bloom. London: J. M. Dent and Sons, 1946.
- _____, ed. *Franz Schubert's Letters and Other Writings*. Translated by Venetia Savile. 1928. Reprint, Westport, CT: Greenwood, 1970.
- _____. *Schubert: Memoirs by His Friends*. Translated by Rosamond Ley and John Nowell. New York: W. W. Norton, 1968.
- _____. *Schubert: Thematic Catalogue of All His Works in Chronological Order*. Translated by Donald R. Wakeling. New York: W. W. Norton, 1951.

- Dijk, J. H. W. van. "Schubert's 'Nebensonnen.'" *Music & Letters* 37 (1956): 314.
- Dittrich, Marie-Agnes. "The Lieder of Schubert." In *The Cambridge Companion to the Lied*, edited by James Parsons, 85–100. New York: Cambridge University Press, 2004.
- Donahue, Thomas. *A Guide to Musical Temperament*. Lanham, MD: Scarecrow, 2005.
- DuBois, Ted Alan. "Christian Friedrich Daniel Schubart's 'Ideen zu einer Aesthetik der Tonkunst:' An Annotated Translation." PhD diss., University of Southern California, 1983.
- Duffin, Ross W. *How Equal Temperament Ruined Harmony and Why You Should Care*. New York: W. W. Norton, 2006.
- Duffy, John. "Illusion and Reality in Schubert's Song Cycles." *Schubert Society of the USA Newsletter* 6, no. 1 (2008): 8–19.
- Dürr, Walther. "'Ausweichungen ohne Sinn, Ordnung und Zweck': Zur Tonart und Tonalität bei Schubert." In *Franz Schubert: Der Fortschrittliche? Analysen--Perspektiven--Fakten*, edited by Erich Wolfgang Partsch, 73–103. Tutzing: Hans Schneider, 1989.
- _____. *Das Deutsche Sololied im 19. Jahrhundert*. Wilhelmshaven: Heinrichshofen, 1984.
- _____. "Franz Schubert: *Winterreise*--Gedanken zur Struktur des Zyklus." In *Meisterwerke neu gehört: Ein kleiner Kanon der Musik: 14 Werkporträts*, edited by Hans-Joachim Hinrichsen and Laurenz Lütteken, 131–155. New York: Bärenreiter, 2004.
- _____. "Die Lieder-Serie der neuen Schubert-Ausgabe." *Musica* 40 (1986): 28–30.
- _____. "Die Neue Schubert-Ausgabe: Über einige Probleme des Herausgebens von Musik." *Österreichische Musik Zeitschrift* 24 (1969): 553–563.
- _____. "Die Neue Schubert-Ausgabe: Zum editorischen Konzept einer kritischen Gesamtausgabe." *Musica* 32 (1978): 131–6.
- _____. "Notation and Performance: Dynamic Marks in Schubert's Manuscripts." In *Schubert the Progressive: History, Performance Practice, Analysis*, edited by Brian Newbold, 37–52. Burlington, VT: Ashgate, 2003.

- _____. "Schuberts *Winterreise*: Zur Entstehungs- Und Veröffentlichungsgeschichte-- Beobachtungen am Manuskript." In *Resonanzen: Festschrift Für Hans Joachim Kreutzer Zum 65. Geburtstag*, edited by Waltraud Maierhofer, Peter Philipp Riedl and Sabine Doering, 301–315. Würzburg: Königshausen und Neumann, 2000.
- Eggebrecht, Hans Heinrich. "Prinzipien des Schubert-Liedes." *Archiv für Musikwissenschaft* 27 (1970): 89–109.
- Einstein, Alfred. *Schubert: A Musical Portrait*. New York: Oxford University Press, 1951.
- _____. *Schubert. The Man and His Music*. London: Cassell, 1951. Reprint, London: Granada, 1983.
- Ellis, Alexander J. "Additions by the Translator." In *On the Sensations of Tone as a Psychological Basis for the Theory of Music* by Herman Helmholtz, 430–556. 1895. Reprint, New York: Dover, 1954.
- _____. "On the History of Musical Pitch." *Journal of the Society of Arts* 28 (March 5, 1880): 293–336.
- Everett, Walter Tripp. "Grief in 'Winterreise': A Schenkerian Perspective." *Music Analysis* 9 (July 1990): 157–175.
- _____. "A Schenkerian View of Text Painting in Schubert's Song Cycle 'Winterreise.'" PhD diss., University of Michigan, 1988.
- Feil, Arnold. *Franz Schubert: Die schöne Müllerin; Winterreise*. Translated by Ann C. Sherwin. Edited by Rolf Vollmann. Portland: Amadeus, 1988.
- Fischer, Kurt von. "Einige Gedanken zur Tonartenordnung in Schuberts Liederzyklen." *Muzikološki Zbornik* 17 (1981): 87–96.
- _____. *Essays in Musicology*. Edited by Tamara S. Evans, translated by Carl Skoggard. New York: The Graduate School and University Center, City University of New York, 1989.
- Fischer-Dieskau, Dietrich. *Schubert: A Biographical Study of His Songs*. Translated by Kenneth S. Whitton. London: Cassell, 1976.
- Flothuis, Marius. "Schubert Revises Schubert." In *Schubert Studies: Problems of Style and Chronology*, edited by Eva Badura-Skoda and Peter Branscombe. New York: Cambridge University Press, 1982.

- Forbes, Elliot, ed. *Thayer's the Life of Beethoven*. Vol. 1. Princeton: Princeton University Press, 1967.
- Palmieri, Robert and Margaret W. Palmieri, eds. *Piano: An Encyclopedia*. New York: Routledge, 2003.
- Friedländer, Max. "Die Entstehung der Müllerlieder: Eine Erinnerung an Frau von Olfers." *Deutsche Rundschau* 73 (1892–1893): 301–307.
- Fürbeth, Oliver. "Schubert's Doppelgänger." In *Musik-Konzepte. 97-98 (1997): Franz Schubert: Todesmusik*, edited by Rainer Riehn and Heinz-Klaus Metzger, 66–74. Munich: Kritik München, 1997.
- Fyk, Janina. "Tolerance of Intonation Deviation in Melodic Intervals in Listeners of Different Musical Training." *Archives of Acoustics Quarterly* 7, no. 1 (1982): 13–27.
- Gauldin, Robert. "Intramusical Symbolism in the Last Strophe of Schubert's 'Der Wegweiser.'" *In Theory Only* 3, no. 12 (March 1978): 3–6.
- Georgiades, Thrasybulos. *Schubert: Musik und Lyrik*. Göttingen: Vandenhoeck & Ruprecht, 1967.
- Gerstenberg, Walter. "Schubertiade: Anmerkungen Zu Einigen Liedern." In *Festschrift Otto Erich Deutsch zum 80. Geburtstag am 5. September 1963*, edited by Walter Gerstenberg, Jan LaRue, and Wolfgang Rehm, 232–239. New York: Bärenreiter, 1963.
- Giarusso, Richard. "Beyond the Leiermann: Disorder, Reality, and the Power of Imagination in the Final Songs of Schubert's *Winterreise*." In *The Unknown Schubert*, edited by Barbara M. Reul and Lorraine Byrne Bodley, 25–41. Burlington, VT: Ashgate, 2008.
- Gibbs, Christopher H. "'Poor Schubert': Images and Legends of the Composer." In *The Cambridge Companion to Schubert*, edited by Christopher H. Gibbs, 36–55. New York: Cambridge University Press, 1997.
- _____. *The Life of Schubert*. New York: Cambridge University Press, 2000.
- Glofcheskie, John. "Schubert and the 'Gentle' Fortepiano." *Musick* 11, no. 3 (January 1990): 2–9.

- Goertz, Harald. "Der Mühle Lied: Mythen um Mühle und Müllerin." In *Schubert und das Biedermeier: Beiträge zur Musik des Frühen 19. Jahrhunderts. Festschrift für Walther Dürr zum 70. Geburtstag*, edited by Michael Kube, Werner Aderhold and Walburga Litschauer, 73–81. New York: Bärenreiter, 2002.
- Goldschmidt, Harry. "Welches war die ursprüngliche Reihenfolge in Schuberts Heine-Liedern?" *Deutsches Jahrbuch für Musikwissenschaft* 17 (1974): 52–62.
- _____. "Schubert's Wanderers and the Autonomous Lied." *Journal of Musicological Research* 14 (1995): 147–68.
- Gruber, Gernot. "Romantische Ironie in den Heine-Liedern." In *Schubert-Kongress Wien, 1978: Bericht*, edited by Otto Brusatti, 321–334. Graz, ADVA: 1979.
- Hall, Michael. *Schubert's Song Sets*. Cornwall: Ashgate, 2003.
- Hawkins, John. *A General History of the Science and Practice of Music*. Vol. 5. 2nd ed., 1776. Reprint, New York: Dover, 1963.
- Haynes, Bruce. *A History of Performing Pitch: The Story Of "A."* Lanham, MD: Scarecrow, 2002.
- Head, Matthew. "Schubert, Kramer, and Musical Meaning." *Music & Letters* 83 (2002): 426–440.
- Helmholtz, Hermann L. F. von. *On the Sensations of Tone as a Psychological Basis for the Theory of Music*. Translated by Alexander J. Ellis. 1895. Reprint, New York: Dover, 1954.
- Heuss, Alfred. "Franz Schuberts and Friedrich Zöllners 'Das Wandern ist des Müllers Lust.'" *Zeitschrift für Musik* 96 (1929): 5–10; 65–70.
- Hirsch, Marjorie Wing. *Schubert's Dramatic Lieder*. Cambridge: Cambridge University Press, 1993.
- Holschneider, Andreas. "Zu Schuberts 'Frühlingsglaube.'" In *Festschrift Otto Erich Deutsch zum 80. Geburtstag am 5. September 1963*, edited by Walter Gerstenberg, Jan LaRue, and Wolfgang Rehm, 240–249. New York: Bärenreiter, 1963.
- Houben, Heinrich Hubert. *Der gefesselte Biedermeier: Literatur, Kultur, Zensur in der guten, alten Zeit*. 1924. Reprint: Hildesheim: H. A. Gerstenberg, 1973.
- _____. *Verbotene Literatur von der klassischen Zeit bis zur Gegenwart*. Vol. 2. Bremen: K. Schünemann, 1828.

- Houtsma, Adrianus J.M. "Discrimination of Frequency Ratios." *Journal of the Acoustical Society of America* 44, no. 1 (July 1968): 383(A).
- Hummel, Johann Nepomuk. *A Complete Theoretical and Practical Course of Instructions on the Art of Playing the Piano Forte*. London: T. Boosey, 1829.
- Isacoff, Stuart. *Temperament: How Music Became a Battleground for the Great Minds of Western Civilization*. New York: Vintage, 2003.
- Jeans, Sir James Hapwood. *Science and Music*. New York: Cambridge University Press, 1953.
- Johnson, Douglas, Alan Tyson, and Robert Winter. *The Beethoven Sketchbooks: History, Reconstruction, Inventory*. Edited by Douglas Johnson. Berkeley: University of California Press, 1985.
- Johnson, Graham. "Bringing *Winterreise* to Order." In the liner notes for *The Hyperion Schubert Edition: Winterreise*, vol. 30 London: Hyperion, 1997. CD.
- Jorgensen, Owen Henry. *The Equal Beating Temperaments*. Raleigh: Sunbury, 1981.
- _____. "In Tune with Old Tunings." *Clavier* 17 (November 1978): 26–28.
- _____. *Tuning. Containing: The Perfection of Eighteenth-Century Temperament, the Lost Art of Nineteenth-Century Temperament and the Science of Equal Temperament. Complete with Instructions for Aural and Electronic Tuning*. East Lansing: Michigan State University Press, 1991.
- _____. *Tuning the Historical Temperaments by Ear: A Manual of Eighty-Nine Methods for Tuning Fifty-One Scales on the Harpsichord, Piano, and Other Keyboard Instruments*. Marquette: Northern Michigan University Press, 1977.
- _____. "Which Tuning for Which Music? Applying the Historical Temperaments." *Piano Technician's Journal* 21, no. 1 (1978): 14–20.
- Kelletat, Herbert. *Zur Musikalischen Temperatur III: Franz Schubert*. Berlin: Merseburger, 1994.
- Kerman, Joseph. "A Romantic Detail in Schubert's *Schwanengesang*." In *Schubert: Critical and Analytical Studies*, edited by Walter Frisch, 48–64. Lincoln: University of Nebraska Press, 1996.
- Kinderman, William. "Schubert's Tragic Perspective." In *Schubert: Critical and Analytical Studies*, edited by Walter Frisch, 65–83. Lincoln: University of Nebraska Press, 1996.

- Kirnberger, Johann Philipp. *Die Kunst des reinen Satzes in der Musik*, Trans. David Beach and Jürgen Thym. New Haven: Yale University Press, 1982.
- Koch, Heinrich Christoph. *Musikalisches Lexikon*. 1802. Reprint, New York: Kassel, 2001.
- Kramer, Lawrence. "‘Little Pearl Teardrops’: Schubert, Schumann, and the Tremulous Body of Romantic Song." In *Music, Sensation, and Sensuality*, edited by Linda Phyllis Austern, 57–74. New York: Routledge, 2002.
- _____. "Miller’s Tales." *Times Literary Supplement* (1995): 18.
- _____. "The Mirror of Tonality: Transitional Features of Nineteenth-Century Harmony." *19th-Century Music* 4 (Spring 1981): 191–208.
- _____. *Music and Poetry, the Nineteenth Century and After*. Berkeley: University of California Press, 1984.
- _____. "The Schubert Lied: Romantic Form and Romantic Consciousness." In *Schubert: Critical and Analytical Studies*, edited by Walter Frisch, 200–237. Lincoln: University of Nebraska Press, 1996.
- Kramer, Richard. "Against Recycling." *19th-Century Music* 20 (1996): 185–189.
- _____. *Distant Cycles: Schubert and the Conceiving of Song*. Chicago: University of Chicago Press, 1994.
- _____. "Posthumous Schubert." *19th-Century Music* 14 (Autumn 1990): 197–216.
- _____. "Schubert’s Heine." *19th-Century Music* 8 (Spring 1985): 213–225.
- Kravitt, Edward F. "The Lied in 19th-Century Concert Life." *Journal of the American Musicological Society* 18 (1965): 207–218.
- Kreutzer, Conradin. *Frühlingslieder and Wanderlieder*. 1820. Reprint, Facsimilie edition, with new translations and an introduction by Luise Eitel Peake. Stuyvesant, NY: Pendragon, 1989.
- Lehman, Bradley. "Bach’s Extraordinary Temperament: Our Rosetta Stone." *Early Music* 33 (February 2005): 3–23.
- Lenneberg, Hans, and Johann Mattheson. "Johann Mattheson on Affect and Rhetoric in Music (I)." *Journal of Music Theory* 2 (April 1958): 47–84.

- _____. "Johann Mattheson on Affect and Rhetoric in Music (II)." *Journal of Music Theory* 2 (November 1958): 193–236.
- Lester, Joel. "The Recognition of Major and Minor Keys in German Music Theory: 1680–1730." *Journal of Music Theory* 22 (Spring 1978): 63–103.
- Levin, Robert D. "Performance Perogatives in Schubert." *Early Music* 25 (1997): 723–727.
- Lewin, David. "Auf Dem Flusse: Image and Background in a Schubert Song." In *Schubert: Critical and Analytical Studies*, edited by Walter Frisch, 126–152. Lincoln: University of Nebraska Press, 1996. Originally Published in *19th-Century Music* 6 (1982): 47–59.
- Lewis, Christopher Orlo. "Text, Time, and Tonic: Aspects of Patterning in the Romantic Cycle." *Intégral* 2 (1988): 37–73.
- _____. "Tuning and Intonation." In *Performance Practice: Music after 1600*, edited by Howard Mayer Brown and Sranley Sadie, 169–185. Basingstoke: MacMillan, 1989.
- Lippman, Edward Arthur. "Symbolism in Music." *Musical Quarterly* 4 (October 1953): 554–575.
- Litschauer, Walburga. "The Origin and Early Reception of *Schwanengesang*." In *A Companion to Schubert's Schwanengesang: History, Poets, Analysis, Performance*, edited by Martin Chusid, 5–13. New Haven: Yale Univeristy Press, 2000.
- Litterick, Louise. "Recycling Schubert: On Reading Richard Kramer's 'Distant Cycles: Schubert and the Conceiving of Song.'" *19th-Century Music* 20 (1996): 77–95.
- Lohre, Heinrich, ed. *Wilhelm Müller als Kritiker und Erzähler: Ein Lebensbild Mit Briefen an F.A. Brockhaus und anderen Schriftstücken*. Leipzig: F. A. Brockhaus, 1927.
- Makeig, Scott. "Affective Versus Analytic Perception of Musical Intervals." In *Music, Mind and Brain*, edited by M. Clyunes, 227–250. New York: Plenum, 1982.
- Marshall, H. Lowen. "Symbolism in Schubert's *Winterreise*." *Studies in Romanticism* 12 (1973): 607–632.
- Marsoner, Karin. "Tränen in und über Schuberts *Winterreise*." In *'Dialekt ohne Erde...': Franz Schubert und das 20. Jahrhundert*, edited by Otto Kolleritsch, 296–309. Graz: Universal Edition, 1997.

- Marston, Nicholas. "Schubert's Homecoming." *Journal of the Royal Musical Association* 125 (2000): 248–270.
- Mattheson, Johann. *Johann Mattheson's "Der Vollkommene Capellmeister."* Translated by Ernest C. Harriss. Ann Arbor: UMI Research Press, 1981.
- _____. *Das neu-eröffnete Orchestre*. 1713. Reprint, New York: G. Olms, 1993.
- McClelland, Clive. "Death and the Composer: The Context of Schubert's Supernatural Lieder." In *Schubert the Progressive: History, Performance Practice, Analysis*, edited by Brian Newbold, 21–35. Burlington, VT: Ashgate, 2003.
- McGeary, Thomas. "German-Austrian Keyboard Temperaments and Tuning Methods, 1770–1840: Evidence from Contemporary Sources." *Journal of the American Musical Instrument Society* 15 (1989): 90–118.
- McKay, Elisabeth Norman. *Franz Schubert: A Biography*. New York: Oxford University Press, 1996.
- _____. *The Impact of the New Pianofortes on Classical Keyboard Style: Mozart, Beethoven, and Schubert*. West Hagley, West Midlands: Lynwood Music, 1987.
- _____. "Schubert's *Winterreise* Reconsidered." *Music Review* 38 (1977): 94–100.
- Melia, Tom. "Beethoven's Fifth 'Sine'-phony: The Science of Harmony and Discord." *Contemporary Physics* 48 (September–October 2007): 291–295.
- Mendel, Arthur. "Pitch in Western Music since 1500. A Re-Examination." *Acta Musicologica* 50 (January–December 1978): 1–93, 328.
- Miller, Phillip. *The Ring of Words: An Anthology of Song Texts*. New York: W.W. Norton, 1966.
- Miller, Willis G. "The Effects of Non-Equal Temperament on Chopin's Mazurkas." PhD diss., University of Houston, 2004.
- Mobbs, Kenneth. "Special Effects on the Early Piano." *Early Music* 12 (November 1984): 471–476.
- Montgomery, David. "Franz Schubert's Music in Performance: A Brief History of People, Events, and Issues." In *The Cambridge Companion to Schubert*, edited by Christopher H. Gibbs, 270–283. New York: Cambridge University Press, 1997.

- _____. *Franz Schubert's Music in Performance: Compositional Ideas, Notational Intent, Historical Realities, Pedagogical Foundations*. Hillsdale, NY: Pendragon, 2003.
- _____. "Modern Schubert Interpretation in the Light of the Pedagogical Sources of His Day." *Early Music* 25 (February 1997): 101–118.
- Moore, Gerald. *The Schubert Song Cycles: With Thoughts on Performance*. London: Hamish Hamilton, 1975.
- Motte, Diether de la. "Die Aufhebung von Zeit in Schuberts endlosen Liedern." In *Franz Schubert: Der Fortschrittliche? Analysen--Perspektiven--Fakten*, edited by Erich Wolfgang Partsch, 201–212. Tutzing: Hans Schneider, 1989.
- Müller, Wilhelm, "Die Winterreise. Lieder von Wilhelm Müller." *Deutsche Blätter für Poesie, Litteratur, Kunst und Theatre* 41 (13 March 1823): 161–162.
- _____. "Die Winterreise. Lieder von Wilhelm Müller," in *Deutsche Blätter für Poesie, Litteratur, Kunst und Theatre* 42 (14 March 1823): 165–166.
- _____. *Gedichte aus den hinterlassenen Papieren eines reisenden Waldhornisten II: Lieder des Lebens und der Liebe; Herausgegeben von Wilhelm Müller*. Kindle Edition. Dessau: C.G. Ackermann, 1824.
- _____. *Sieben und siebenzig Gedichte aus den hinterlassenen Papieren eines reisenden Waldhornisten*. Kindle Edition. Dessau: C.G. Ackermann, 1821.
- _____. "Wanderlieder von Wilhem Müller. Die Winterreise." *Urania, Taschenbuch auf das Jahf 1823* 5 (1823): 207–22.
- Mustard, Helen Meredith. "The Lyric Cycle in German Literature." PhD diss., Columbia University, 1946.
- Muxfeldt, Kristina. "Schubert Song Studies." PhD diss., State University of New York at Stony Brook, 1991.
- _____. "Schubert's Songs: The Transformation of a Genre." In *The Cambridge Companion to Schubert*, edited by Christopher H. Gibbs, 121–137. New York: Oxford University Press, 1997.
- _____. *Vanishing Sensibilities: Critical Essays in Reception and Historical Restoration: Schubert, Beethoven, Schumann*. New York: Oxford University Press, 2012.

- Neighbor, Roger. "The Doppelgänger Revealed?" In *Schubert the Progressive: History, Performance Practice, Analysis*, edited by Brian Newbold, 139–149. Burlington, VT: Ashgate, 2003.
- Newbould, Brian. *Schubert, the Music and the Man*. Berkeley: University of California Press, 1997.
- Newcomb, Anthony. "Structure and Expression in a Schubert Song: *noch Einmal Auf Dem Flusse zu Hören*." In *Schubert: Critical and Analytical Studies*, edited by Walter Frisch, 153–174. Lincoln: University of Nebraska Press, 1996. Originally published in *19th-Century Music* 6 (1982): 47–59.
- Peake, Luise Eitel. "The Song Cycle: A Preliminary Inquiry into the Beginnings of the Romantic Song Cycle." PhD diss., Columbia University, 1968.
- _____. "Kreutzer's *Wanderlieder*: The Other *Winterreise*." *Musical Quarterly* 45 (1979): 83–102.
- Pierce, J. R. "Attaining Consonance in Arbitrary Scales." *Journal of the Acoustical Society of America* 40 (July 1966): 249.
- Perraudin, Michael. *Heinrich Heine, Poetry in Context: A Study of 'Buch der Lieder.'* New York: Oxford University Press, 1989.
- Platinga, Leon B. *Schumann as Critic*. New Haven: Yale University Press, 1967.
- Plato. *Republic*. Translated by I. A. Richards. New York: Cambridge University Press, 1966.
- _____. *The Laws*. Translated by Trevor J. Saunders. Harmondsworth: Penguin, 1970.
- Plomp, Reinier. *Aspects of Tone Sensation: A Psychophysical Study*. New York: Academic Press, 1976.
- _____. "The Ear as Frequency Analyzer." *Journal of the Acoustical Society of America* 36 (September 1964): 1628–1636.
- Plomp, Reinier, and W. J. M. Levelt. "Tonal Consonance and Critical Bandwidth." *Journal of the Acoustical Society of America* 38 (October 1965): 548–560.
- Pollens, Stewart. "Early Nineteenth-Century German Language Works on Piano Maintenance: A Review of Published Information Concerning the Stringing, Tuning, and Adjustment of the Fortepiano." *Early Keyboard Journal* 8 (1990): 91–109.

- Porter, Ernest G. *Schubert's Song Technique*. London: D. Dobson, 1961.
- Ramalingam, Vivian S. "Arcadian Elements in *Die Winterreise*: Bringing Sidney's Sundogs to Light." In *Encomium Musicae: Essays in Memory of Robert J. Snow*, edited by David E. Crawford and George Grayson Wagstaff, 693–715. Hillsdale, NY: Pendragon, 2002.
- _____. "Schubart, Tonality, and *Die schöne Müllerin*." In *The Creative Process*, edited by Charlotte B. Winsor. New York: Broude Brothers, 1992: 201–216.
- Rasch, Rodolf A. "Tuning and Temperament." In *The Cambridge History of Western Music Theory*, edited by Thomas Christensen, 193–222. Cambridge: Cambridge University Press, 2001.
- Reed, John. "Die schöne Müllerin Reconsidered." *Music & Letters* 59 (1978): 411–417.
- _____. *Schubert*. First American Edition. New York: Schirmer, 1997.
- _____. *Schubert: The Final Years*. London: Faber, 1972.
- _____. *The Schubert Song Companion*. London: Faber, 1993.
- Reintjes, Mikki. "Aspects of Cyclical Structure in Schubert's *Schwanengesang*." MA thesis, University of Victoria, British Columbia, 1990.
- Rellstab, Ludwig. *Gedichte*. Berlin: Friederich Laue, 1827.
- Roederer, Juan G. *The Physics and Psychophysics of Music*. 4th ed. New York: Springer, 2008.
- Ronyak, Jennifer. "'Serious Play,' Performance, and the Lied: The Stägemann *Schöne Müllerin* Revisited." *19th-Century Music* 34 (2010): 141–167.
- Rosen, Charles. *The Romantic Generation*. Cambridge, MA: Harvard University Press, 1995.
- Ross, Alex. *The Rest is Noise: Listening to the Twentieth Century*. New York: Farrar, Straus and Giroux, 2007.
- Rysavy, Robin M. "Selected Piano Compositions of Beethoven and Schubert, and the Effect of Well Temperament on Performance Practice." DMA diss., University of Missouri–Kansas City, 1997.
- Sargent, George. "Eighteenth-Century Tuning Directions: Precise Intervallic Determinations." *Music Review* 30 (1969): 27–34.

- Schaeffer, Erwin. "Schubert's 'Winterreise.'" Translated by Harold Spivake. *Musical Quarterly* 24 (1938): 39–57.
- Schenker, Heinrich. *Free Composition*. Vol. 2. Translated and edited by Ernst Oster. New York: Longmans, 1979.
- _____. "Ihr Bild (August 1828): Song by Franz Schubert to a Lyric by Heinrich Heine." Translated by Robert Pascall. *Music Analysis* 19 (2000): 3–9.
- Schroeder, David P. *Our Schubert: His Enduring Legacy*. Lanham, MD: Scarecrow, 2009.
- _____. "Schubert the Singer." *Music Review* 49 (1988): 254–266.
- _____. "Schubert's 'Einsamkeit' and Haslinger's 'Winterreise.'" *Music & Letters* 71 (1990): 352–360.
- _____. *Complete Song Cycles: Die schöne Müllerin, Die Winterreise, Schwanengesang*, Edited by Eusebius Mandyczewski. New York: Dover, 1970.
- _____. Complete works. Edited by Eusebius Mandyczewski. Critical edition vols. 8–9. Leipzig: Breitkopf & Härtel, 1894–95.
- _____. *Fortsetzung Der Winterreise. 16 Folios [Part II; Bound with the Autograph Copy, Part I.]*: In the Mary Flagler Cary Music Collection of the Pierpoint Morgan Library, New York City, 1827.
- _____. *Gesänge für eine Singstimme mit Klavierbegleitung*. Edited by Max Friedländer. Leipzig, C.F. Peters, 1884.
- _____. *Lieder on Record, 1898–1952*, Volume I: 1898–1939, EMI Classics CDHC 66150, CD. 1997.
- _____. *Neue Ausgabe sämtlicher Werke*. Vol. 4a and 4b. Edited by Walther Dürr. Kassel: Bärenreiter, 1979.
- _____. *Die schöne Müllerin*. Performed by John Elwes and Kenneth Slowik. Program notes by Kenneth Slowik and Susan Youens. Dorian Recordings DSL-90702. CD. 2007.
- _____. *Die schöne Müllerin: Ein Cyclus von Liedern gedichtet von Wilh. Müller*. Vienna: Ant. Diabelli, 1830.
- _____. *Die schöne Müllerin: Ein Cyclus von Liedern gedichtet von Wilhelm Müller*. Vienna: Sauer & Leiesdorf, 1824.

- _____. *Die schöne Müllerin; Ein Cyclus Von Liedern Gedichte Von Wilhelm Müller für eine Singstimme mit Begleitung des Pianoforte. Op 25. Original-Ausgabe.* Leipzig: C. F. Peters, [1867].
- _____. *Die schöne Müllerin. Ein Zyklus von Liedern gedichte von Wilhelm Müller.* In *Musik gesetzt von Franz Schubert.* Edited by Max Friedländer. Leipzig: C.F. Peters, 1922.
- _____. *Die schöne Müllerin von Franz Schubert: Faksimilie der bei A. Diabelli & Co. Erschienenen Ausgabe von 1830.* Edited by Walther Dürr. New York: Bärenreiter, 1996.
- _____. *Die schöne Müllerin; Winterreise; Schwanengesang.* Edited by Dietrich Fischer-Dieskau and Elmar Budde. New York: C.F. Peters, 1985.
- _____. *Schubert: Die schöne Müllerin.* Performed by Christoph Prégardien and Andreas Staier. Deutsche harmonia mundi 055472-77273-2. CD. 1992.
- _____. *Schubert: Die schöne Müllerin.* Performed by Mitsuko Uchida and Ian Bostridge. EMI Classics B0006Z1ZPI. CD. 2005.
- _____. *'Schwanengesang': Facsimilies of Autograph Score and Sketches, and Reprint of the First Edition.* Edited by Martin Chusid. New Haven: Yale University Press, 2000.
- _____. *Winterreise. [First Edition of Part I]* Vienna: Tobas Haslinger, January 1828.
- _____. *Winterreise. [First Edition of Part II]* Vienna: Tobas Haslinger, December 1828.
- _____. *Winterreise: The Autograph Score.* Edited by Susan Youens. The Pierpont Morgan Library Music Manuscript Reprint Series. New York: Pierpont Morgan Library in association with Dover Publications, 1989.
- _____. *Winterreise Von Wilh. Müller [Autograph Manuscript] Part I. 21 Folios:* In the Mary Flagler Cary Music Collection of the Pierpoint Morgan Library, New York City, Febr. 1827.
- Schumann, Robert. "Characteristics of the Keys (1835)." In *The Musical World of Robert Schumann: A Selection from His Own Writings.* Edited by Henry Pleasants. New York: St. Martin's Press, 1965.
- _____. *Gesammelte Schriften über Musik und Musiker.* 2 vol. 1854. Reprint, Wiesbaden: Breitkopf & Härtel, 1985.

- Schwarz, David. *Listening Subjects*. Durham: Duke University Press, 1997.
- _____. "The Ascent and Arpeggiation in *Die Stadt, Der Doppelgaenger, and Der Atlas* by Franz Schubert." *Indiana Theory Review* 7 (Spring 1986): 38–50.
- Seaton, Douglass. "Interpreting Schubert's Heine Songs." *Music Review* 53 (May 1992): 85–99.
- Seiffert, Wolf-Dieter. "Franz Schuberts Heinelied *Ihr Bild*." *Die Musikforschung* 43 (1990): 124–135.
- Siegmund-Schultze, Walther. "Betrachtungen zu den Heine-Liedern von Franz Schubert." *Wissenschaftliche Zeitschrift der Martin-Luther-Universität Halle* 31 (1982): 107–111.
- Spohr, Luis. *Violinschule*. 1832. Reprinted as *Louis Spohr's Celebrated Violin School*. Translated by John Bishop. London: R. Cocks, 1843.
- Steblin, Rita. *A History of Key Characteristics in the Eighteenth and Early Nineteenth Centuries*. 2 ed. Rochester: University of Rochester Press, 2002.
- _____. "Towards a History of Absolute Pitch Recognition." *College Music Symposium* 27 (1987): 141–53.
- Steffen, Ralph. "Text and Form in Schubert's *Die schöne Müllerin, Wohin?*: A Schenkerian Perspective." *Music Research Forum* 11, no. 2 (1996): 44–59.
- Stein, Jack M. "Schubert's Heine Songs." *Journal of Aesthetics and Art Criticism* 24 (1966): 559–566.
- Stovall, Francis Davis, III. "Schubert's Heine Songs: A Critical and Analytical Study." DMA diss., University of Texas, 1967.
- Sulzer, Johann Georg. *Allgemeine Theorie der schönen Künste in einzeln, nach alphabetischer Ordnung der Kunstwörter aufeinanderfolgenden, artikeln Abgehandelt*. Edited by C. F. Blankenburg. 1792. Reprint, Hildesheim: G. Olms, 1967.
- Sundburg, Johan. "Acoustic and Psychoacoustic Aspects of Vocal Vibrato." *Department for Speech, Music and Hearing Quarterly Progress and Status Report* 35, no. 2–3 (1994): 45–67.
- Thayer, Alexander Wheelock. *Salieri: Rival of Mozart*. Kansas City: The Philharmonia of Greater Kansas City, 1989.

- Thomas, J. "Schubert's Modified Strophic Songs with Particular Reference to *Schwanengesang*." *Music Review* 34 (May 1973): 83–99.
- Tovey, Donald F. "Tonality." *Music & Letters* 9 (1928): 341–363.
- Tunbridge, Laura. *The Song Cycle*. New York: Cambridge University Press, 2010.
- Turchin, Barbara. "The Nineteenth-Century Wanderlieder Cycle." *Journal of Musicology* 5 (1987): 498–525.
- Ulrich, Hartung. "'Die Winterreise': An Argument for Performing the Cycle of Songs by Franz Schubert in the Order of the Poems by Wilhelm Mueller." PhD diss., New York University, 1992.
- Urania. Taschehbuch auf das Jahr 1822*. Leipzig: P.A. Brauckhaus, 1822.
- Urania. Taschehbuch auf das Jahr 1823*. Leipzig: P.A. Brauckhaus, 1823.
- Van Tassel, Eric. "'Something Utterly New': Listening to Schubert Lieder. 1: Vogl and the Declamatory Style." *Early Music* 25 (November 1997): 703–714.
- Veroli, Claudio Di. *Unequal Temperaments: Theory, History and Practice (Scales, Tuning and Intonation in Musical Performance)*. 2nd revised edition. Bray: Bray Baroque, Ireland 2009.
- Vogler, Georg Joseph. *Betrachtungen Der Mannheimer Tonschule, 1778/81*. Reprint: Hildesheim: Olms, 1974.
- Von Hellborn, Kreissle. *The Life of Franz Schubert*. Translated by Arthur Duke Coleridge. 2 vols. 1865. Reprint, New York: Vienna House, 1972.
- Vos, Joos. "The Perception of Pure and Mistuned Musical Fifths and Major Thirds: Thresholds for Discrimination, Beats and Identification." *Perception & Psychophysics* 32 (1982): 297–313.
- _____. "Subjective Acceptability of Various Regular Twelve-Tone Tuning Systems in Two-Part Musical Fragments." *Journal of the Acoustical Society of America* 83 (1988): 2383–2392.
- _____. "Spectral Effects in the Perception of Pure and Tempered Intervals: Discrimination and Beats." *Journal of the Acoustical Society of America* 35 (1984): 173–185.

- Vos, Joos and Ben G. van Vianen. "Thresholds for Discrimination between Pure and Tempered Intervals: The Relevance of Nearly Coinciding Harmonics." *Journal of the Acoustical Society of America* 77 (1985): 176–187.
- Waidelich, Till G., ed. *Franz Schubert: Dokumente: 1817–1830*. Edited by Renate Hilmar-Voit and Andreas Mayer. 2 vols. Tutzing: Hans Schneider, 1993.
- Ward, W. D. and D. W. Martin. "Psychophysical Comparison of Just Tuning and Equal Temperament in Sequences of Individual Tones." *Journal of the Acoustical Society of America* 33 (1961): 586–588.
- Wellek, Albert. "The Relationship between Music and Poetry." *Journal of Aesthetics and Art Criticism* 21 (1962): 149–156.
- West, Ewan Donald. "Schubert's Lieder in Context: Aspects of Song in Vienna 1778–1828." PhD diss., Oxford University, 1989.
- White, William Braid. *Theory and Practice of Pianoforte Building*, 1906. Reprint, *Theory and Practice of Piano Construction*, New York: Dover, 1975.
- _____. *Piano Tuning and Allied Arts*. 5 ed. Boston: Tuners Supply Company, 1946.
- Wiggins, Donald G. "Franz Schubert, C. F. D. Schubart, and *Die schöne Müllerin*." *The NATS Bulletin* 40 (May/June 1984): 12–15.
- Wigmore, Richard. *Schubert: The Complete Song Texts with English Translations*. London: Victor Gollancz, 1992.
- Williamson, Charles. "The Frequency Ratios of the Tempered Scale." *Journal of the Acoustical Society of America* 10 (1938): 135–136.
- Winter, Robert. "Keyboards." In *Performance Practice: Music after 1600*, edited by Howard Mayer Brown and Stanley Sadie, 323–373. New York: W.W. Norton, 1989.
- _____. "Paper Studies and the Future of Schubert Research." In *Schubert Studies: Problems of Style and Chronology*, edited by Eva Badura-Skoda and Peter Branscombe, 240–241. New York: Cambridge University Press, 1982.
- Wintle, Christopher. "Franz Schubert, *Ihr Bild* (1828): A Response to Schenker's Essay in *Der Tonwille*, Vol 1." *Music Analysis* 19 (2000): 10–28.
- Youens, Susan. "Behind the Scenes: *Die schöne Müllerin* Before Schubert." *19th-Century Music* 15 (1991): 3–22.

- _____. *Heinrich Heine and the Lied*. New York: Cambridge University Press, 2007.
- _____. “‘Der Lindenbaum’: The Turning Point of Winterreise.” In *The Romantic Tradition: German Literature and Music in the Nineteenth Century*, edited by Frederick Albert Hall, Gerald Chapple, and Hans Schulte, 309–322. Lanham, MD: University Press of America, 1992.
- _____. “Poetic Rhythm and Musical Meter in Schubert’s ‘Winterreise.’” *Music & Letters* 65 (1984): 28–40.
- _____. “Retracing a Winter Journey: Reflections on Schubert’s ‘Winterreise.’” *19th-Century Music* 9 (1985): 128–135.
- _____. *Retracing a Winter’s Journey: Schubert’s Winterreise*. Ithaca: Cornell University Press, 1991.
- _____. “Schubert and His Poets: Issues and Conundrums.” In *The Cambridge Companion to Schubert*, edited by Christopher H. Gibbs, 99–117. New York: Oxford University Press, 1997.
- _____. *Schubert, Die schöne Müllerin*. Cambridge Music Handbooks. New York: Cambridge University Press, 1992.
- _____. *Schubert’s Late Lieder: Beyond the Song-Cycles*. New York: Cambridge University Press, 2002.
- _____. “Schubert, Mahler and the Weight of the Past: ‘Lieder Eines Fahrenden Gesellen’ and ‘Winterreise.’” *Music & Letters* 67 (1986): 256–268.
- _____. *Schubert, Müller, and Die schöne Müllerin*. Cambridge: Cambridge University Press, 1997.
- _____. *Schubert’s Poets and the Making of Lieder*. New York: Cambridge University Press, 1996.
- _____. “Wegweiser in *Winterreise*.” *Journal of Musicology* 3 (1987): 357–379.
- _____. “*Winterreise*: In the Right Order.” *Soundings* 13 (1986): 41–50.
- Young, James O. “Key, Temperament and Musical Expression.” *Journal of Aesthetics and Art Criticism* 49 (Summer 1991): 235–242.
- Young, Thomas. “Outlines of Experiments and Inquiries Respecting Sound and Light.” *Proceedings of the Royal Society of London* 1 (1800): 8–10.

Young, Thomas. "The Blossoms of 'Trockneblumen': Music and Text in the Early Nineteenth Century." *Music Analysis* 18 (1999): 307–345.

Zenck, Martin. "Die romantische Erfahrung der Fremde in Schuberts 'Winterreise.'" *Archiv für Musikwissenschaft* 44 (1987): 141–160.