

Appendix

Key Distribution in the Principal Works of Beethoven

THE SYMPHONIES

Symphony	<i>C minor</i>	E \flat Major	B \flat Major	<i>D minor</i>	F Major	C Major	D Major	A Major
1						*		
2							*	
3		*						
4			*					
5	*							
6					*			
7								*
8					*			
9				*				

The range of the symphonies is from three flats to three sharps, with two of the nine symphonies (22 percent) in minor keys. There is a leaning to the flat side, with six symphonies in flat keys, two in sharp keys. Mozart's symphonies range from three flats to three sharps, with only two in minor keys (K. 183 and K. 550, both in G minor). Haydn, with a greater number of symphonies (over a hundred), encompasses four flats (No. 49 in F minor), four sharps (Nos. 12 and 29 in E Major), and even five sharps (No. 46 in B Major). (However, Symphony No. 46 is a special case, since, as James Webster has pointed out, it is one of a pair with the "Farewell" Symphony and may also be programmatic.¹) Eleven of Haydn's symphonies are in minor keys, with three in C minor, three in D minor, and two in G minor. Only two are in sharp minor keys: the special "Farewell" and the symphony immediately adjacent to it, Symphony No. 44 in E minor.

¹ See Webster, *Haydn's "Farewell" Symphony and the Idea of Classical Style*, 267–87.

THE STRING QUARTETS

Opus	<i>F</i> <i>minor</i>	<i>C</i> <i>minor</i>	<i>E^b</i> Major	<i>B^b</i> Major	<i>F</i> Major	<i>A</i> <i>minor</i>	<i>C</i> Major	<i>E</i> <i>minor</i>	<i>G</i> Major	<i>D</i> Major	<i>A</i> Major	<i>C[#]</i> <i>minor</i>
18, 1					*							
18, 2									*			
18, 3										*		
18, 4		*										
18, 5											*	
18, 6				*								
59, 1					*							
59, 2								*				
59, 3							*					
74			*									
95	*											
127			*									
130				*								
131												*
132						*						
135					*							

The range is from four flats to three sharps, but there are more quartets in flat keys (nine) than in sharp keys (five). Five of the sixteen quartets are in minor keys (31 percent). Haydn's quartets range from four flats to four sharps, although more than half are in major keys with no more than two flats or two sharps. As in Beethoven, there is a preference for the flat side. Twelve of Haydn's sixty-eight quartets are in minor keys; four of these are in D minor. Only three are in sharp minor keys. Mozart's range is three flats to three sharps, with only a slight preference for the flat side. Of Mozart's twenty-three quartets, two are in D minor: K. 173 and K. 421.

THE PIANO CONCERTOS

Concerto	<i>C minor</i>	<i>E♭ Major</i>	<i>B♭ Major</i>	C Major	<i>G Major</i>
1				*	
2			*		
3	*				
4					*
5		*			

The range is from three flats to one sharp, with an emphasis on the flat side. Only one concerto out of the five is in a minor key. Adding the Triple Concerto (in C Major) and the Violin Concerto (in D Major) to the list, the balance between the flat side and the sharp side is more even, but the single concerto in the minor now counts as only 14 percent of the total.

Opus	<i>F minor</i>	<i>A^b Major</i>	<i>C minor</i>	<i>E^b Major</i>	<i>G minor</i>	<i>B^b Major</i>	<i>D minor</i>	<i>F Major</i>	C Major	<i>E minor</i>	<i>G Major</i>	<i>D Major</i>	<i>A Major</i>	<i>E Major</i>	<i>C[#] minor</i>	<i>F[#] Major</i>
2, 1	*															
2, 2													*			
2, 3									*							
7				*												
10, 1			*													
10, 2								*								
10, 3												*				
13			*													
14, 1														*		
14, 2											*					
22								*								
26		*														
27, 1				*												
27, 2															*	
28												*				
31, 1											*					
31, 2							*									
31, 3				*												
49, 1					*											
49, 2											*					
53									*							
54								*								
57	*															
78																*
79											*					
81a				*												
90										*						
101													*			
106							*									
109														*		
110		*														
111			*													

THE PIANO SONATAS

The range of keys among the piano sonatas, a genre more personal and more experimental for Beethoven, is far wider than that for the other genres. The sonatas cover a range of sixteen keys, from four flats to six sharps, though the flat side is still somewhat favored (seventeen as opposed to thirteen). Six minor keys are employed, with nine of the thirty-two sonatas (28 percent) in minor keys. If one includes the “Kurfürst” Sonatas of WoO 47, in E \flat , F minor, and D, the range is the same, and the number of keys employed remains the same, but the percentage of minor keys (ten sonatas out of thirty-five) rises to 29 percent. For Haydn’s over fifty piano sonatas, the range is from four flats (A \flat Major, Nos. 43 and 46) to five sharps (B Major, Hob. XVI: 2c). Seven are in minor keys, and five of these are sharp minor. Mozart’s piano sonatas range from C minor to A Major, with only two out of eighteen sonatas in minor keys (K. 310 in A minor and K. 457 in C minor); none are in sharp minor keys.

THE PIANO TRIOS

Opus	<i>C minor</i>	<i>E♭ Major</i>	<i>B♭ Major</i>	<i>G Major</i>	<i>D Major</i>
1, 1		*			
1, 2				*	
1, 3	*				
70, 1					*
70, 2		*			
97			*		

The piano trios range from three flats to two sharps, favoring the flat side, and only one out of six works is in a minor key. The three piano quartets of WoO 36 are in *E♭*, *D*, and *C Major*. Haydn's piano trios range from six flats (Piano Trio No. 31 in *E♭ minor*) to four sharps (No. 28 in *E Major*). Eight (of forty-one) are in minor keys with only two in sharp minor. Mozart's Piano Trios range from two flats to one sharp. All are in major keys.

THE VIOLIN SONATAS

Opus	<i>C minor</i>	<i>E♭ Major</i>	<i>F Major</i>	<i>A minor</i>	<i>G Major</i>	<i>D Major</i>	<i>A Major</i>
12, 1						*	
12, 2							*
12, 3		*					
23				*			
24			*				
30, 1							*
30, 2	*						
30, 3					*		
47				*			
96					*		

The violin sonatas range from three flats to three sharps, equally distributed on the flat and sharp sides, but with three out of ten works (33 percent) being in minor keys. Only one of Mozart's thirty-three violin sonatas is in a minor key (K. 304 in *E minor*). Haydn's only original violin sonata is in *G Major*.

THE CELLO SONATAS

Opus	<i>G minor</i>	F Major	C Major	D Major	A Major
5, 1		*			
5, 2	*				
69					*
102, 1			*		
102, 2				*	

The cello sonatas, ranging only from two flats to three sharps, are equally distributed from flat side to sharp side, and only one of the five works is in a minor key.

THE OVERTURES

Overture	<i>F minor</i>	<i>C minor</i>	E \flat Major	C Major	G Major	E Major
<i>Prometheus</i> , Op. 43				*		
<i>Coriolan</i> , Op. 62		*				
<i>Leonore</i> No. 2, Op. 72a				*		
<i>Leonore</i> No. 3, Op. 72b				*		
<i>Leonore</i> No. 1, Op. 138				*		
<i>Fidelio</i> , Op. 72						*
<i>Egmont</i> , Op. 84	*					
<i>The Ruins of Athens</i> , Op. 113					*	
<i>Namensfeier</i> , Op. 115				*		
<i>King Stephen</i> , Op. 117			*			
<i>Consecration of the House</i> , Op. 124				*		

Over half of the overtures (six out of eleven) are in C Major. This number is artificially enhanced by the three versions of the *Leonore* overture, but nonetheless the proportion is striking. There are two minor overtures (18 percent). Eight of the eleven overtures (73 percent) are on the neutral or sharp side.

THE CHORAL WORKS

Work	<i>C minor</i>	C Major	D Major
Choral Fantasy	*		
<i>Christus am Ölberge</i>		*	
Mass in C		*	
<i>Meerestille</i>			*
<i>Missa Solemnis</i>			*
<i>Der glorreiche Augenblick</i>		*	

Five out of six (83 percent) of the major choral works are on the neutral or sharp side. If one adds the two early cantatas (“On the Death of Emperor Joseph II,” WoO 87, in C minor, and “On the Accession of Emperor Leopold II,” WoO 88, in D Major), the proportion changes to six out of eight (75 percent). Haydn’s full Masses are all in major keys with the exception of the *Missa in Angustiis* (1798). Five of the thirteen are in B♭ Major; five are neutral or sharp.