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MUSI 332: Dr. Green

### The Evolving Keyboard of the Seventeenth and Eighteenth Centuries

“You will have seen from my last letter that I was to play at another concert. The Emperor was there too. I played my first concerto which I played at my concert. I was asked to repeat the rondo. So I sat down again; but instead of repeating it I had the conductor’s rostrum removed and played alone. You should have heard how delighted the public were with this little surprise. They not only clapped but shouted ‘bravo’ and ‘bravissimo’. The Emperor too stayed to hear me to the end and as soon as I left the piano he left his box; evidently he had only remained to listen to me.”

W.A. Mozart, Vienna, March 29, 1783<sup>1</sup>

The effect of Mozart as a composer-pianist in his reception with the public, the aristocracy, and ongoing musical influence, highlights the classical era and development of the piano’s popularity. Keyboard music and instruments before and during the eighteenth century gave a voice for this influential and far reaching musical genius, and from a traditionally accompanimental role, the keyboard quickly became a solo instrument which expressed changing philosophies and aesthetics of the Enlightenment in late-eighteenth century European culture. The evolution of keyboard instruments in the seventeenth and eighteenth centuries allowed composers such as C.P.E. Bach and later, Mozart, to significantly develop the overall musical language and style of the Classical period.

The harpsichord was a primary keyboard instrument of the sixteenth and seventeenth centuries, and remained largely unaltered from its invention in Italy. Italian harpsichords were

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<sup>1</sup> Quoted in H.C. Robbins Landon, *Essays on the Viennese Classical Style* (New York: The Macmillan Company, 1970), 132.

small and mainly used for vocal accompaniment, constructed with a thin case usually without stops.<sup>2</sup> Northern Italy was the world center of harpsichord making during the sixteenth century, and instruments were sent all over Europe. Still, Charles Burney wrote that early Italian builders paid little attention to the instrument, neglecting finer details of harpsichord construction due to its simple accompanimental role. Consequently a quieter, dampened sound was aesthetically preferred, and its design remained constant and relatively unchanged over two centuries. Solidifying the harpsichord's accompanimental role in music, early Italian instruments could not change dynamics or textures because of its standardized singular keyboard with two unison strings.<sup>3</sup>

The Flemish made significant changes to the instrument in the late seventeenth century, most heavily under the work of Hans Ruckers. Its octave range was expanded and the harpsichord and strings themselves were elongated, an extra manual and two sets of strings were added for textural and dynamic differentiation, stops were added to change tone color, and a thicker case integral was used to produce a powerful and brilliant tone.<sup>4</sup> The harpsichord was further altered by the French and English, but were designed as modifications to the original Flemish model. These modifications over the seventeenth and eighteenth centuries allow for a greater variety of music to be written for the harpsichord. The instrument's role as a continuo instrument diminished as its solo potential was explored by composers like J.S. Bach, Couperin, and Froberger. In early Italian harpsichords, a marked attack and brittle timbre can be heard among an ensemble, and blends well by punctuating continuo texture.<sup>5</sup> The later addition of stops and manuals on the harpsichord in the eighteenth century expressed the changing aesthetics

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<sup>2</sup> Frank Hubbard, *Three Centuries of Harpsichord Making* (Cambridge: Harvard University Press, 1967), 2-3.

<sup>3</sup> Hubbard, *Three Centuries of Harpsichord Making*, 4-7.

<sup>4</sup> Richard Allen Schulze, *How to Build a Baroque Concert Harpsichord* (New York: Pageant Press, 1954), 34-35.

<sup>5</sup> Hubbard, *Three Centuries of Harpsichord Making*, 13.

of music through the keyboard: a heavier focus on timbral, textural, and dynamic contrasts (a desire for louder and softer volumes on a spectrum) that move away from the linear texture of the Baroque era. This shift in musical aesthetics can be attributed to influence on composition due to the developing keyboard instruments of the late Baroque.

The mechanical functions of the harpsichord stylistically influenced composition and aesthetics of eighteenth century music. The harpsichord's mechanism consists of a keylever and jack that is lifted to pluck a string with quill for a bright and percussive effect that can not be changed in dynamic quality regardless of finger pressure on the key. However, two dynamic levels could later be expressed through a double manual harpsichord and stops.<sup>6</sup> Technique and compositional style therefore reflected this instrument's aesthetic capabilities by focusing on articulation, ornamentation, and polyphonic texture.<sup>7</sup> Early technique on the harpsichord instructed for use of the three middle fingers with solely the weight of the fingers; C.P.E. Bach was the first written essay encouraging the use of newer fingerings using the thumb and pinky.<sup>8</sup> The harpsichord's early fingerings were employed best under continuo roles in the orchestra to punctuate the texture, but as musical aesthetics developed, the instrument's technique separately moved towards a model closer to that the early piano eventually developed. This change in thought of fingerings carries through the early piano, and therefore directly relates to the type of music composed during the Classical period, including greater use of arpeggiation and scales over larger octave ranges, due to an accepted use of the thumb and pinky.<sup>9</sup>

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<sup>6</sup> Schulze, *How to Build a Baroque Concert Harpsichord*, 35.

<sup>7</sup> Robert Donnington, *The Interpretation of Early Music* (New York: W.W. Norton, 1989), 575.

<sup>8</sup> Carl Philipp Emanuel Bach, *Essay on the True Art of Playing Keyboard Instruments* (New York: W.W. Norton, 1949), 42.

<sup>9</sup> Carl lei Breckenridge, "Rediscovering Classical Keyboard Style," *American Music Teacher* 55, no. 5 (April 2006): 18-19, accessed February 21, 2016, <http://www.jstor.org/stable/43544672>.

While the invention of the early piano and its changes in structural design significantly shaped the Classical style, the piano was not popular until decades after its creation. The early piano, or fortepiano, was invented in 1709 by Bartolomeo Cristofori, but was not widely used until the late eighteenth century due to its frequent early design flaws. Its unique action mechanism differentiates the instrument from harpsichord: a felt hammer strikes the string rather than plucking it, and variability of finger pressure on the key results in dynamic contrasts. The new mechanism was prone to error in its early stages, such as the hammer's failure to hit a string or bounce back loudly if pressed too hard and, consequently, was not popular during its onset.<sup>10</sup> Until the instrument was further developed, the harpsichord remained the primary keyboard instrument, and was not widely popular until the English and Viennese heavily altered the action mechanism in the 1770s. Johann Stein and other Viennese builders developed a new escapement mechanism in 1773, the *Prellmechanik* action, that allowed an easier repetition of notes and more accurate hammer placement on the string. This mechanism led to a quiet, articulate, controlled, and shimmering style of music that reflects the harpsichord in many ways.<sup>11</sup> English mechanisms conversely began to include heavier hammers and large strings for a sonorous, legato, and powerful tone, greatly developed by John Broadwood in 1772. Geographical and cultural distinctions between fortepiano building birthed varying styles and aesthetics, creating a fundamental basis for later cosmopolitan styles of music. Mozart's use of the Viennese fortepiano and style was affected by its light construction in his compositional devices: rapid passages, extended trills, intimate control over notes and sound, rapid, clear, brilliant, precise articulation. A greater emphasis on the use of arm and more weight in pressing down a key

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<sup>10</sup> Rachel A. Lowrance, "Born to Conquer: The Fortepiano's Revolution of Keyboard Technique and Style," *Musical Offerings* 5, no.1 (June 2014): 1-3, accessed February 19, 2016, <http://dx.doi.org/10.15385/jmo.2014.5.1.1>.

<sup>11</sup> Richard Maunder, "Mozart's Keyboard Instruments," *Early Music* 20, no. 2 (May 1992): 212, accessed February 19, 2016, <http://www.jstor.org/stable/3127878>.

slowly develops with the early piano's key action that demands it, shifting from the traditional finger-based technique of harpsichord. These variants in fortepiano mechanism shaped a composer's musical ideas, and strongly influenced the classical style.

The changing aesthetics of the the Enlightenment during the seventeenth century are reflected in the changing style of keyboard music. During the Baroque period and the Scientific Revolution, philosophy on emotions and music were codified into the "Theory of Affects," describing music's role to communicate specific and singular emotional states.<sup>12</sup> However, Donnington argues this philosophy existed well before the Enlightenment, and was not an original invention of the Classical period. Still, the period's developing "galant" style of simple melodic gestures and homophony brought multiple emotional states and characters in juxtaposition, a reflection on changing aesthetics on the expression of human emotions that was provided by the fortepiano's new abilities. H.C. Landon argues that galant keyboard music was written with a facile form and language that produced hundreds of works quickly and easily that aimed to please a wide audience.<sup>13</sup> Classical composers, such as Mozart, frequently studied Baroque fugal keyboard works of great depth, and consequently set the stage for the *Sturm und Drang* style. The style initially began in the composer's desire to make the galant style more complex and dramatic. Fugal and contrapuntal textures, based traditionally in keyboard literature, were introduced into traditionally galant musical forms while minor keys became a new vehicle for the style to develop. The use of minor keys in the Italian Baroque did not signify as much anguish and passion as the *Sturm und Drang* style of Austrian composers in the 1770's, with large dynamic and textural contrasts.<sup>14</sup> While a musical style of complex polyphony, similar texture, and older rhythmic and melodic patterns fade out of vogue, new opinions on

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<sup>12</sup> Donnington, *The Interpretation of Early Music*, 111.

<sup>13</sup> Landon, *Essays on the Viennese Classical Style*, 13.

<sup>14</sup> Landon, *Essays on the Viennese Classical Style*, 12-14.

musical aesthetics develop out of the Enlightenment.<sup>15</sup> Focusing on natural right and equality of man, music began to serve a public and higher individual emotional purpose. The fortepiano, breaking away from singular textures, gave the composer a solo and accompanimental instrument that easily facilitated quick dynamic changes and sustain of tone for use in expressing these quickly changing philosophies and styles of the eighteenth century.

Writers on music during the eighteenth century began to codify these philosophical changes in musical terms, and express these ideals in their philosophies on music itself. Johann Quantz, a famous theorist and educator, writes that musical purpose has a greater role of communication: “Musical execution may be compared with the delivery of an orator....to arouse or still their passions, and transport them now to this sentiment”.<sup>16</sup> This connection to music to a spoken language (as codified by Quantz) affected the Classical musical tradition, and aimed for broad appeal and convincing rhetorical musical ideas. Out of a formulaic and simple galant style, the unpredictable and sharply contrasting “empfindsam” style begins to emerge, later evolving to the *Sturm und Drang* style. C.P.E. Bach, composing and performing during this shift, discusses a musician’s role as a performer for an audience which further describes changing aesthetics: “A musician cannot move other unless he is too moved. He must of necessity feel all of the affects that he hopes to arouse in his audience, for the revealing of his own humor will stimulate a like humor in the listener”.<sup>17</sup> The changing aesthetics of philosophy in the Enlightenment shaped keyboard music of the eighteenth century, out of a tonal language of the Baroque period.

Surrounded by new aesthetic ideas of music, the fortepiano provided a unique technical role to composers that guided the Classical style. However, older views on technique and style

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<sup>15</sup> Breckenridge, “Rediscovering Classical Keyboard Style”, 18-19.

<sup>16</sup> Johann Joachim Quantz, *On Playing the Flute* (Boston: Northeastern University Press, 2001), 119.

<sup>17</sup> Bach, *Essay on the True Art of Playing Keyboard Instruments*, 152.

of the harpsichord conflicted with the changing fortepiano. Technique on the harpsichord is centered on the release of the note: it defines the articulation, its main mode of expression. However, for the fortepiano, the attack of the note entirely defines its expression.<sup>18</sup> This shift in focus, regarding how a note is *pressed* rather than *released*, fundamentally changed where articulation and beat patterns lie in the music and consequently affected music outside of just the keyboard itself. The interplay of a focus on frontal attack and phrase slowly developed rhythmically and melodically in the early galant style.<sup>19</sup> These expressive concepts were birthed out of Enlightened views of natural law and simplicity, and the fortepiano further developed these concepts further explored in the *empfindsam* and *Sturm und Drang* styles. Breckenridge discusses a stylistic approach of “gestural playing,” that the greatest effort comes from the beginning of an action or emotion when gesturing on the piano with the hands and is strongest at its front. Therefore, Breckenridge argues, musical emphasis on the first tone of each slur or phrase gave music in the Classical period its vitality, even outside of the keyboard.<sup>20</sup> This musical quality was birthed from both the mechanical designs of the new fortepiano as well as changing aesthetic thought--the ability of the piano to create motivic gestures with sharp dynamic contrast and large sonorities impacted music as a whole, and provided for the the qualities demanded by evolving philosophies surrounding the eighteenth century.

C.P.E. Bach’s compositional devices on the keyboard shaped the musical language of the Classical period. Born in 1714, C.P.E. Bach entered a changing musical world of opposing styles: the Baroque of his father’s time, and new changing galant styles of expression. Favoring the clavichord, Bach asserted that a full mastery of technique on the clavichord was necessary

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<sup>18</sup> Lowrance, “Born to Conquer”, 3.

<sup>19</sup> Breckenridge, “Rediscovering Classical Keyboard Style”, 19-20.

<sup>20</sup> Breckenridge, “Rediscovering Classical Keyboard Style”, 22.

first to gain musical sensibilities on other keyboard instruments.<sup>21</sup> Gluck and Haydn referred to his composition as a leading representative of German musical taste by influencing the Classical Viennese style with thematic development and an idiomatic use of instruments.<sup>22</sup> The development of piano literature during his time came primarily from the newly developing support of upper middle-class citizens in music. Chamber music and solo keyboard sonatas also became widely popular and standardized for serious composition during this time.<sup>23</sup> A key figure in the development of the *empfindsam* style through the fortepiano's new expressive capabilities, C.P.E. Bach freed himself from the traditional Baroque form and harmony and can be considered the first composer to successfully write "affecting keyboard music freed from the suite tradition."<sup>24</sup> C.P.E. Bach employed free harmony in creating a style with juxtaposed melodic and emotional gestures, constantly and abruptly changing the affects and phrase lengths of a piece using the fortepiano's dynamic capabilities in his later works. Frequently shifting keys, modes, and gestures of greatly contrasting dynamic and stylistic character are expressed in his music--for example, a stark and abrupt contrast between major and minor.

In his *Sonaten für Kenner und Liebhaber, Sonata No. 3/I*, Bach juxtaposes two distinct characters in the key of B minor, showcasing abrupt dynamic contrast, complex rhythm and ornamentation, and strong sense of tonic. This characteristic *Sturm und Drang* style was developed through Bach's views on a performer's role of stirring juxtaposing and powerful emotions. This new distinction was explored by C.P.E. Bach; his music showcasing the dynamic abilities of keyboard instruments (played on clavichord and fortepiano) by uniquely developing the stormy and *empfindsam* styles through sharp harmonic and rhythmic surprises coupled with

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<sup>21</sup> John Koster, "Review: German Keyboards", 127.

<sup>22</sup> Christoph Wolff, "Carl Philipp Emanuel Bach," *Grove Music Online*: Section 8, accessed February 21, 2016, <http://www.oxfordmusiconline.com/subscriber/article/grove/music/40023pg12>.

<sup>23</sup> Landon, *Essays on the Viennese Classical Style*, 12.

<sup>24</sup> Wolff, "Carl Philipp Emanuel Bach", Section 6.



dynamic changes. Towards the end of the exposition of this sonata, Baroque influences are evident in the bass line (similar to a continuo bass line), but with advanced harmonic figuration in the right hand and quick shifts in rhythmic character. Bach exploits the fortepiano's ability to perform complex rhythms and quickly change dynamic texture in his characteristic *empfindsam* style, further extending the stylistic role of the fortepiano. Abrupt changes in style are given most weight in his fantasias, which C.P.E. Bach further explains in his essay: "The principal key must not be left too quickly at the beginning nor regained too late at the end. At the start the principal key must prevail...and again before the close it must be well prolonged as a means of preparing the listener for the end of the fantasia and impressing the tonality upon his memory."<sup>25</sup> This view on form of music, with a recognizable key center at the beginning and end, clearly refers back to Baroque tradition and explains the form he composed in. However, his treatment of harmony, melody, and homophonic texture in his fantasias are composed in a completely new style that was driven by the fortepiano's capabilities.<sup>26</sup> The *Fantasia in F-sharp Minor, Wq. 67* best expresses this sentiment: it begins with two pianissimo phrases in F-sharp minor, and quickly moves to a forte B major chord (an unusual major four chord in the key context), and eventually returns to the home key in an unexpected *largo*:<sup>27</sup>



This piece showcases the fortepiano's distinct abilities separated from the harpsichord in its opening gesture: extreme scalar and rhythmic patterns, complex harmonies, shifting dynamics, and multiple tempi drive the *empfindsam* style and its popularity on the fortepiano.

<sup>25</sup> Bach, *Essay on the True Art of Playing Keyboard Instruments*, 431.

<sup>26</sup> Wolff, "Carl Philipp Emanuel Bach", 6.

<sup>27</sup> Bach, Carl Philipp Emanuel. *Fantasia in F-sharp minor*.

C.P.E. Bach inspired composers of future generations, such as Mozart, using his aesthetic preference for shifting passions, keyboard virtuosity, and free expression of harmonic gestures.

Mozart's influence on the keyboard and Western art music itself is defining and revolutionary. His music arguably captured the era as a whole, and represents a successful cosmopolitan style of the late Classical period. Also born to a musical family in 1756, Mozart grew up surrounded by a new and developed musical language, full of idioms from galant and empfindsam styles.<sup>28</sup> The harpsichord was prevalent in his youth, and his early works consequently reflect a less dynamically active texture than his later works. Mozart was introduced to a fortepiano around 1777, and wrote in a letter of his preference for more resonant dampers, even tone, and escapement mechanisms on his instruments.<sup>29</sup> Mozart travelled all over Europe and absorbed Italian music, Mannheim symphonies, and J.C. Bach's piano concertos in London. When returning to Vienna from July to September of 1773, the *Sturm und Drang* style was highly evident in musical culture (such as the symphonies of Haydn) and directly affected his output, specifically found in his six quartets.<sup>30</sup> His aesthetic preference continues to push the ideas set forth by earlier composers, and was heavily influenced by the ideals of the Enlightenment. Composition from this point on centered around the fortepiano, which Mozart made a lasting and permanent impact on literature for the instrument. The cosmopolitan and dynamically active music Mozart composed was showcased in his piano sonatas, concertos, fantasia, variations, any many other pieces showcasing the new instrument. These pieces became the staple of Viennese Classicism, distinct in its popular melodic figures, elegance, form,

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<sup>28</sup> Cliff Eisen, "Wolfgang Amadeus Mozart," *Grove Music Online*: Section 1, Accessed February 21, 2016, <http://www.oxfordmusiconline.com/subscriber/article/grove/music/40258pg3>.

<sup>29</sup> Maunder, "Mozart's Keyboard Instruments", 214.

<sup>30</sup> Landon, *Essays on the Viennese Classical Style*, 15.

texture, idiomatic use of the fortepiano, and influence of Italian opera.<sup>31</sup> Mozart set a new stylistic standard for the piano concerto with his earliest Viennese concertos (K.413-415), varying in tone and substance from intimate chamber music to a grand symphonic style (K.415). His concertos for the fortepiano, given its new textural and dynamic possibilities, would instantly vary in orchestration from light chamber music to a large symphonic texture. Mozart's bold and unique dialogue between the piano and orchestra introduced further exploration in compositional possibility for the new instrument, and contributed greatly to the Viennese classical style.<sup>32</sup> Writing in the *Sturm und Drang* style reminiscent of C.P.E. Bach, Mozart composes using cantabile melodies, heightened dynamic contrasts, and shifting organizations of form as a fundamental technique in much of his later work that highlight the fortepiano's distinct and idiomatic possibilities. The *Piano Concerto No. 20 in D minor (I), K. 466* fragments contrasting and dark motifs over unconventional orchestration of low instruments in the introduction. The theme presented in the bass, unusual in rhythmic character and melodic contour, exploits an audience's expectations on melodic function and orchestration provided by the fortepiano's possibilities of soft dynamics and texture in the lower register (impossible with the harpsichord): Johann Stein's *Prellmechanik* fortepiano action<sup>33</sup> that Mozart favored allowed the composer to showcase the instrument's quick responding articulation and sensitive touch in the concerto's semiquaver octave leaps coupled with abrupt dynamic changes in the bass line for virtuosic effect written near the end of the movement.<sup>34</sup>

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<sup>31</sup> Eisen, "Wolfgang Amadeus Mozart", Section 1.

<sup>32</sup> Landon, *Essays on the Viennese Classical Style*, 19.

<sup>33</sup> Maunder, "Mozart's Keyboard Instruments", 212.

<sup>34</sup> W.A. Mozart, *Concerto in D Minor* (Leipzig: Steingräber Verlag, 1896).



Mozart used the idea of dynamically juxtaposing characters found in C.P.E. Bach in extreme ways: not only in just dynamic, harmonic, and rhythmic character, but by referencing cosmopolitan styles in his keyboard works as well. In his *Piano Sonata No. 12 in F major*, K.332, Mozart writes contrast not only in each individual phrase (dealing with dynamics and accentuation), but references many characteristic musical idioms across Europe. The opening, with a typical arpeggiated chord function in the accompaniment and singing-style melody in the right hand, is quickly juxtaposed with a melody based in counterpoint and imitation:



The *Sturm und Drang* style is evident in the relative minor, highlighting sforzandi and accented passages by the fortepiano:<sup>35</sup>



This imitative structure and exploitation of counterpoint stylistically references older Germanic musical traditions rooted in the keyboard,<sup>36</sup> while Mozart juxtaposes these themes

<sup>35</sup> W.A. Mozart, *Sonata VII* (New York: Schirmer, 1893).

with *Sturm und Drang* style arpeggiations and a greater homophonic structure. The success of Mozart's music can be defined from his reference to a greater cosmopolitan figuration of themes through the fortepiano--Mozart referenced early German composers in structure and harmonic form, with brilliant motifs from newer keyboard styles of eighteenth century Viennese. The Viennese fortepiano's quick action and response with a heightened legato tone, originally developed from the harpsichord, led Mozart to writing music with characters of great variety as a driving force behind his musical genesis. The instrument's possibilities entirely drove Mozart's music by allowing a complex key action for a solo performer that drastically changed dynamic and textural possibilities of the keyboard.

The fortepiano provided an instrument in which composers easily spoke through--its construction and revolutionary new methods of producing music heavily defined musical ideas of the Enlightenment ever since its creation. The keyboard instrument grew from its accompanimental role into a powerful solo instrument over the course of less than two hundred years. The keyboard instrument and its idiosyncratic mechanisms developed quickly across Europe as compared to other instruments, and continues to affect musical traditions outside of a Western concept of musical composition. Composers most often improvise at a piano before writing, even for an orchestra, and the instrument's developed technique and vast history strongly affected the musical output of the Classical period, and our musical culture to this day.

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<sup>36</sup> Eisen, "Wolfgang Amadeus Mozart", Section 8.

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