William Rothstein\* Get the free RealPlayer to hear the audio examples. Like Falling off a Log: Rubato in Chopin's Prelude in <u>Comment on this article</u> A-flat Major (op. 28, no. 17)

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Ι

[1] Rubato is widely regarded as a purely intuitive art. While it may be true that most performers rely solely on intuition for their rubato, a conscious approach may also be helpful. For the teacher of "analysis for performers," a conscious approach is essential if rubato is to be discussed at all.

[2] Rubato is a difficult subject to theorize. The late David Epstein made an admirable attempt in his book *Shaping Time*, using recordings by performers he admired to construct quantitative models.<sup>(1)</sup> My approach here will be qualitative rather than quantitative, and introspective rather than empirical. Unlike Epstein, I will make no attempt to construct a general theory. Musicians in different times and places--even composers of the same generation, such as Chopin and Liszt--had distinctly different conceptions of rubato.<sup>(2)</sup> One is probably justified, therefore, in approaching the idea of a general theory with caution.

[3] A few nineteenth-century writers did try to develop something like a general theory of rubato. Carl Czerny's *Von dem Vortrage* was published in 1839, the same year as Chopin's Preludes, op. 28. <sup>(3)</sup> A relatively modest treatise, it deals mostly with the style of the generation preceding Chopin's. Mathis Lussy's ambitious *Treatise on Musical Expression* dates from 1874, a quarter-century after Chopin's death, but it describes a style that Lussy absorbed in the opera houses and concert rooms of Paris, from some of the same artists whom Chopin would have heard when they were young. When Lussy applies the same rules of rubato to *Don Giovanni* that he does to the operas of Donizetti and Meyerbeer, he reveals something about how Mozart's music was performed in the third quarter of the nineteenth century; but he also alerts us, unintentionally, to the dangers of over-generalizing about rubato. <sup>(4)</sup>

[4] I will avoid these dangers by focusing on one piece, Chopin's Prelude in A-flat Major from op. 28. This is a piece that I played, at my piano teacher's direction, when I was seventeen. I was going through an anti-Romantic phase at the time, so I didn't like the piece very much; but I knew that it was by Chopin and, therefore, I needed to apply rubato. I did this in an unusually conscious way, based on what I now recognize as aspects of grouping, meter, and tonal structure. I deliberately counted each acceleration and retardation that I made, trying to maintain what I felt to be a proper rate of tempo change. (Here is where my intuitions may have come close to Epstein's.) I now love the piece, and I think I hear it more deeply, but I also believe that my youthful thoughts on rubato were largely correct, in the sense that they highlighted real aspects of the music and contributed to what my piano teacher, at least, regarded as an effective performance. In discussing my more-than-thirty-year-old thoughts, I will use a vocabulary that was unknown to me when I was seventeen. I will discuss rubato on small, medium, and large scales. At the end, I will briefly discuss two other Chopin preludes by way of comparison.

## Π

[5] The form of the A-flat-major Prelude is simple. It is a five-part rondo, ABACA, framed by a two-measure introduction and a slightly longer coda. The second A section is incomplete, consisting of an antecedent phrase without its consequent; the third and final A section is heard over a tonic pedal. The form of the piece is diagrammed in my Example 1.

[6] A special feature of this Prelude is that the rhythm that governs its accompaniment also shapes its melody. This rhythm I will call the Ur-rhythm of the piece. In its simplest form, shown in Example 2a, the Ur-rhythm consists of an upbeat, or anacrusis, consisting of five eighth notes, starting just after the downbeat of one measure and leading to the downbeat of the next. There are six attacks; the final note is of variable duration.

[7] The Ur-rhythm is an example of the end-accented or abbetonte motive described by Hugo Riemann in his book *Musikalische Dynamik und Agogik*.<sup>(5)</sup> According to Riemann, the end-accented motive is naturally associated with *crescendo* and a slight *accelerando*. *Crescendo* expresses the motive's dynamic quality, *accelerando* what Riemann calls its agogic aspect.

[8] In two books by Schenker, *Free Composition* and *The Art of Performance*, repeated-note motives are discussed in a similar way.<sup>(6)</sup> As shown in Example <u>3</u>, Schenker's repeated-note motives drive toward the downbeat; his rightward-pointing arrows are meant to indicate acceleration. Schenker

was referring chiefly to repeated-note motives, but it is interesting that he segments these motives exactly as Riemann would have done, making them end-accented and, in long measures, subdividing them. We may conclude that there existed a tradition, at least in the late nineteenth and early twentieth centuries, whereby motives that begin with a long upbeat were felt to accelerate to their respective downbeats. This conclusion, as it happens, accords perfectly with my intuitions about Chopin's Prelude. In my performance of the piece, the accelerating *Ur*-rhythm controls rubato on the smallest scale.

[9] The Ur-rhythm has two important variants, shown in Examples 2b and 2c. That in Example 2b occurs only in the accompaniment, especially in the accompanying voices of the right hand. Here, following the five-note upbeat, the downbeat note is withheld, regardless of whether a rest is notated there. I will call this the *incomplete form* of the Ur-rhythm. The incomplete form is especially effective when (as often happens) the repeated chords contain a leading tone, a dissonance, or both; resolution is delayed by at least an eighth note, impelling motion forward while adding tension. For example, the right hand's eighth notes in m. 12 are tendency tones: C is a leading tone, G-flat the seventh of the chord. Resolution is delayed until the second eighth note of m. 13, where both tones resolve in the left hand. The player can physically *feel* the withheld resolution because the right hand does nothing while the left hand must travel downward to reach the new bass note, D-flat. In this piece, Chopin tends to assign active tones, both consonant and dissonant, to the right hand, as he does at the very beginning of the piece, although this often means that the two hands are physically intertwined.

[10] Example 2c shows a variant of the Ur-rhythm that is peculiar to the melody. Here the downbeat note, a dotted quarter, is followed by another note of similar value; the final note acts as an afterbeat and ends the two-measure group. <sup>(7)</sup> This variant contains seven attacks, with the strongest accent falling on the penultimate note. Compared to the Ur-rhythm's basic form (example 2a), this new form is, as Riemann would have called it, "over-complete" (*überkomplet*). Borrowing Riemann's terminology, Examples 2a through 2c might be termed, respectively, the complete, incomplete, and over-complete forms of the Ur-rhythm. <sup>(8)</sup>

[11] A different way of classifying the *Ur*-rhythm's forms is by analogy with Italian opera, which Chopin is known to have loved. By Italian standards, Example 2c, not 2a, represents the *Ur*-rhythm's basic form, because it features what Italians call a *piano* ending (*piano* in this context means "plain" rather than "soft"). In Italian poetry, a line normally ends with a strongly accented syllable followed by a single weak syllable--a *parola piana* ("plain word"), of which the word *piano* itself is an example. The ending in Example 2a, by contrast, corresponds to the *tronco* ("truncated") line-ending in Italian. (Notice that in Italian the "feminine" ending is the norm, the "masculine" a deviation.) In the Italian libretti of Chopin's time, *tronco* endings are typically used to mark the ends of stanzas. Example 2b, finally, does not form a satisfactory line; it lacks the required *accento commune* ("common accent") and is therefore seriously incomplete.<sup>(9)</sup>

[12] That the Italianate view is illuminating is suggested by Example 4. Here the Prelude's A section, a parallel period of sixteen measures, is arranged as a double quatrain of verse, as if this were an aria. (10) The "verse meter" of Chopin's melody corresponds approximately, but only approximately, to *settenario*, the seven-syllable meter of Italian poetry. (11) In each quatrain, three *piano* endings are followed by a *tronco* ending. Chopin's melodic "stanzas" are thus quite regularly formed.

[13] In the remainder of this essay I will follow the Riemannian classification outlined earlier, largely because it expresses my earlier view of the Prelude's rhythmic and motivic structure. I recommend, however, that the Italianate view be considered by readers when they analyze music by Italian composers, or by non-Italians who were strongly influenced by Italy: Handel, J. S. and J. C. Bach, Haydn, Mozart, and Chopin, to name only a few.<sup>(12)</sup>

[14] If one follows Chopin's changes of harmony, or even his pedal markings, one would conclude that the left hand begins a new group with each downbeat. I do not hear the left hand in this way; for the most part, I group the left hand according to the *Ur*-rhythm. In Lerdahl and Jackendoff's terms, my grouping is out of phase with the meter. My grouping of the accompaniment is certainly influenced by the melody, but it is also a matter of physical gesture: only a beginning pianist, I think, would take appreciable time after the last chord in a measure to find the next bass note; in most measures, the bass note *ends* the physical impulse rather than beginning it. This pattern changes in (for example) mm. 6 and 8, where the *Ur*-rhythm is absent; here the bass note begins each group. The same applies throughout most of the final A section, where the two-measure subphrases sound as long afterbeats to the recurring tonic pedal.

[15] To repeat, we have three forms of the *Ur*-rhythm: the complete form, the incomplete form, and the over-complete form. These three forms are deployed contrapuntally throughout much of the Prelude. In m. 12, for instance, we see the over-complete form ending in the melody while the remaining voices of the right hand sound the incomplete form; the left hand is grouped according to the complete form. All three forms accelerate

to the downbeat; the over-complete form relaxes, both dynamically and agogically, into its afterbeat.

[16] When I first played this Prelude I don't think I had ever heard it played, and I knew nothing of Riemann or Schenker, but I played the Ur-rhythm much as I imagine they would have done. This may have something to do with the way in which I experience musical meter. For most of my life I have both felt and visualized meter through the image of a bouncing ball. For me, motion to a downbeat is quite literally downward motion, and a downbeat is something you bounce off of. To put the matter another way: Where a rhythm is heard as anacrustic, moving *from* upbeat to downbeat, the downbeat exerts a kind of gravitational force, attracting notes of the upbeat to it. Since human beings experience gravity as a downward pull, Chopin's Ur-rhythm is readily felt as a downward fall or slide to the bottom of something. Downward slides are not constant in speed; they accelerate. And since any physical medium contains some friction, the rate of acceleration will not be constant, either; it will increase until the effect of friction is largely overcome. Hence the image in my title. Rubato in this prelude is as easy, and as natural, as falling off a log.

### III

[17] Example 5 ( $[\underline{D}jVu]$  [GIF]) offers a score of the entire Prelude, with annotations in mm. 1-36 to show accelerando (symbolized by rightward arrows) and ritardando (symbolized by leftward arrows). A simple illustration of falling-off-a-log may be found in mm. 34-35, the juncture between the B section and the second A. Here a crescendo is indicated by Chopin, and an accelerando to the downbeat faces no physical (i.e., pianistic) impediments such as large leaps. A feeling of falling to the bottom is physically reproduced in the motion of the left hand, which tumbles to what we think of as the bottom of the keyboard.

[18] The Ur-rhythm's over-complete form features the same gravitational pull toward the downbeat, but it adds a gliding motion at the end. This rhythm is associated with several motive-forms; two of these are shown in <u>Example 6</u>. Motive-form 1 is a seven-note idea, subdivided 3 + 4 by a descending leap in the middle; it articulates a pair of ascending thirds (bracketed in the example), of which the second is embellished with a long appoggiatura. The motive's subdivision implies a corresponding subdivision of the *accelerando*. I would first accelerate and *crescendo* to the third note, D-flat, which falls on the second-strongest point in the measure; then I would pull back slightly to accelerate and *crescendo* anew, climaxing on the appoggiatura. The melody; the corresponding

deceleration is accommodated by the accompaniment, which begins a new, accelerating statement of the *Ur*-rhythm in m. 12.

[19] Motive-form 2 places a shorter appoggiatura on the third note and descends from there to the downbeat; the afterbeat ascends one step. The placement of the appoggiatura suggests a 4 + 3 subdivision, but the listener is unlikely to hear it because there is no change of contour between notes 3 and 6, and because all melodic intervals are small. <sup>(13)</sup> Once the motive goes "over the top" with note 3, it tends to accelerate to the downbeat. I like to stress the appoggiatura function of note 3 by playing that note a little extra-quickly in some passages. This helps to clarify matters in m. 7, for example, where I hear G5, a tenth, as an appoggiatura to F5, a ninth. <sup>(14)</sup>

[20] There are exceptions to the Ur-rhythm's control of small-scale rubato. If we resume our metaphor of something sliding or falling in response to gravity, exceptions may be said to occur where there is some extra friction present—a protruding bit of bark on the log, so to speak, that slows our fall. Example 7 shows two instances of such friction. Example 7a, the beginning of the B section, is based on another variant of the Ur-rhythm. The second melodic statement, mm. 21–22, contrasts with the first in that one of the steps is an augmented second, B#-A; this A forms a minor ninth with the bass, an interval that we hear for the first time in this Prelude. <sup>(15)</sup> Chopin writes an accent mark over the A, expressing the suddenly frictive melodic and harmonic situation. I treat this as more an agogic than a dynamic accent; the extra time taken for the A may be given back by playing the ascending sixth G#-E a little more quickly.

[21] Example 7b shows no notational signs of friction. This is, however, one of several instances in which there is a change of chord, or a new note is added to a chord, during the accelerating phase of the *Ur*-rhythm. The F in the alto voice at the end of m. 9 might be described as an added sixth in a Rameauvian imperfect cadence to E-flat major; in terms of voice leading, F might be understood as a passing tone originating in the left hand's E-flat and forming another statement of the motivic ascending third: E-flat-F-G, imitating the melody's A-flat-B-flat-C. <sup>(16)</sup> The added sixth, being dissonant, represents musical friction; the concealed motive-statement--if one hears it and wishes others to hear it--requires a little time to sound. These considerations suggest that the final eighth note of m. 9 be slightly lengthened.

#### IV

[22] Rising and falling sequences occur in the B and C sections, where they affect rubato on what might be termed the medium scale. Chopin marks the rising sequences with *crescendos*, the falling ones with *diminuendos*. I will discuss descending sequences first; these begin at mm. 24 and 51. Here, in my own playing, I disregard the conventional correlation between *diminuendo* and *ritardando*; I accelerate during each descending sequence, because these seem to me like extended instances of falling-off-a-log. Having climbed to a peak in the preceding ascent, the music tumbles downward, accelerating as it goes.

[23] I accelerate in the ascending sequences as well, but, as Lussy would have advised, I treat the final approach to the climax as effortful, hence slower<sup>(17)</sup>—or, as I prefer to think of it, "thicker." In the experience of musical friction, time itself seems to thicken, whereas the act of falling and accelerating makes time seem thin. To express these sensations I am forced to change from a solid to a liquid metaphor. With apologies to Frank Samarotto's "temporal plasticity,"<sup>(18)</sup> I will term the phenomenon *temporal viscosity*.

 $\lfloor 24 \rfloor$  A viscous medium offers more resistance to a falling body than a non-viscous one. When viscosity, or friction, is minimized, acceleration in response to Earth's gravity approaches the theoretical ideal of 32 feet per second per second. I'm not sure what the musical equivalent of that constant is, but it's important to note that Chopin's descending sequences move through a surprisingly viscous medium. That is because, while his ascending sequences move quasi-diatonically, his descending sequences are chromatic. A sequence through any contextually normative pitch space (to use Fred Lerdahl's term<sup>(19)</sup>) is relatively friction-free, offering little resistance to the flow of time. But an abrupt change of space is frictive, it seems to me, if either of the following conditions obtains: (1) if the new space consists of more tones per octave than the normative space, so that it seems more complex;  $\frac{(20)}{2}$  or (2) if the new space is more differentiated internally, meaning that one has moved from an equal-interval space to one in which adjacencies are spaced unequally. The situation in the Prelude, where the normative space is diatonic, is mixed in this regard.

[25] The sequence that begins the B section ascends in diatonic thirds, tonicizing A major, then C# minor, then E major. A descending sequence follows, moving chromatically from I to V of E major; from one measure to the next, the sequence descends in whole tones. Extra friction is provided by German augmented sixth chords resolving, in eighth notes, to altered dominant sevenths (or, if you prefer, French sixths). The heightened chromaticism and dissonance, along with the faster harmonic rhythm, offer resistance to the uniform acceleration that might be appropriate to a simpler or more diatonic sequence, especially one without submetrical changes of harmony. On the other hand, the chromatic/whole-tone descent is undifferentiated internally until the sequence is broken. (A change in the melodic sequence emphasizes V of E major in m. 26.) We are told by the composer Ignaz Moscheles that Chopin played his remote modulations "with elfin lightness." (21) That is worth keeping in mind here, but it seems to me that the frequent chord changes require a little more time than repeated chords would have done.

[26] In section C, the descending sequence beginning at m. 51 is again more chromatic than the ascending sequence that precedes it. This time the sequence descends chromatically at the full-measure level, and there are no submetrical harmonic changes to slow the acceleration. The pattern changes, of course, with the expanding chromatic wedge in m. 54, where I give time to the augmented sixth chords at the beginning and end of the measure. Taking time at the end of m. 54 also follows the principle of "thickening" as one approaches a climax--in this case, the *forte* cadence in E-flat major.

V

[27] Sections B and C each begin with a common-tone modulation. In each case the new chord is a secondary dominant, and the common tone changes its status from root to leading tone. One might invoke Schenker's concept of the 5-6 shift, especially at m. 43. Metrically, there is at least a suggestion that the last measure of the respective A section is strong and the first measure of the new section is weak. The new sections also share similar melodic rhythms.

[28] Nowadays I emphasize these parallelisms in playing the two passages. I try to make the new beginning grow out of the previous ending, "breathing" not before but just after the new section's first note. This is meant to emphasize the 5-6 shift, with its implication of strong-to-weak. It also follows the principle that when a pitch is repeated in long-short rhythm, the long note tends to end a group at some level.<sup>(22)</sup>

[29] In mm. 17-19, the melody's A-flat is heard four times in succession, each time with a different tonal or metric function. I take extra time here so that the changes can be savored. A further anomaly at this juncture is that, to my ear, the repeated chords in m. 18 act for once as afterbeat, or end, rather than as upbeat. For this reason, too, I continue and even augment my cadential ritard into the first beat of m. 19--making this, in my performance, one of the slowest moments in the Prelude. <sup>(23)</sup>

[30] If this is where the tempo reaches one of its slowest points, where is it fastest? We know that performers in the early twentieth century felt

freer to accelerate above a basic tempo than performers after World War II, when "rushing" came to be considered the worst possible sin.  $\frac{(24)}{2}$  In this Prelude I rush happily, deliberately, and in good conscience. I rush mostly in passages of tonal stasis, such as the two-measure introduction, where I add an *accelerando-ritardando* to Chopin's *crescendo-diminuendo*. I rush most of all during the twin pedal points on E-natural and E-flat--the first at the end of the B section, the other at the end of section C. These two pedal points, which function as codettas, feature the same music, and they suggest a large-scale upper-neighbor motion from bVI (F-flat major) to V (E-flat). Playing both at accelerated tempos is one way of associating the two passages, which are separated by more than twenty measures of music. Over each pedal, harmonic and melodic motion is minimal; short-range goals have been reached, and the music celebrates their achievement. In the large-scale rubato of the Prelude, these for me are the twin peaks. Lacking significant pitch motion, the Ur-rhythm becomes the focus of attention. If we compare the two passages, we find an interesting difference: the pedal on E sounds a little less celebratory because Chopin uses the frustrated, incomplete form of the Ur-rhythm in the accompaniment; over the E-flat pedal he uses the complete form. The use of the Ur-rhythm's complete form also creates a duet with the melody that didn't exist in the earlier passage.  $\frac{(25)}{(25)}$ 

#### VI

[31] There are two other preludes from op. 28 in which the accompaniment is based on a six-note, end-accented motive in eighth notes. These are Preludes No. 13 in F# Major and No. 21 in B-flat Major. In these preludes, unlike No. 17, the *Ur*-rhythm is mostly (No. 21) or entirely (No. 13) confined to the accompaniment.

[32] For rubato, the fact that these preludes feature melodies in long notes is significant. In each case the melody moves in values as large as dotted halves. Thus a single melody note may correspond to one complete statement of the *Ur*-rhythm in the left hand. The music moves at two different speeds: the accompaniment repeats its pattern every three quarter notes, while the melody moves in cycles of at least four dotted halves. Rubato in these melodies is ruled by patterns of tension and release within the larger cycles, not the smaller ones.

[33] Let us begin with Prelude No. 21; mm. 1-8 are given in Example 8 ( $[\underline{DjVu}]$  [GIF]). The melody has local climaxes in mm. 3 and 7, the third bar of each hypermeasure; both climaxes feature long notes that might loosely be termed appoggiaturas. <sup>(26)</sup> The pianist would naturally "phrase" to these notes, meaning that they would be the goal of a slight *crescendo* and, simultaneously, the beginning of a slight *diminuendo*. <sup>(27)</sup> These dynamic

swells might be accompanied by a very slight *accelerando-ritardando*, which in this texture need not be coordinated precisely with the left hand.  $\frac{(28)}{}$ 

[34] Chopin's slurs make the *Ur*-rhythm explicit in the accompaniment. Two kinds of measures alternate in the left hand of mm. 1-4: measures in which motion to the downbeat is smooth and stepwise, encouraging a smooth acceleration to accompany the indicated *crescendo*; and measures in which the contour is more varied. Later in the piece, the distinction between the two kinds of measures is sometimes blurred.

[35] It is useful to think of the accompaniment as a three-voice texture: two tenor voices are in dialogue over a slowly moving bass. The "first tenor" is especially interesting; it is mostly based on the incomplete form of the Ur-rhythm. That is, the first tenor's last eighth note in a measure usually resolves to, or in some other sense is felt to move toward, the second eighth note in the measure following. The result is a feeling of frustrated resolution on the downbeat itself. The exception is m. 2, where the first tenor's motion ends with Bb3 on the third beat; at the same time, the second tenor has completed its characteristic chromatic descent with D3. This third-beat ending throws into relief the connective leap across the bar line, Bb2-Eb2. The six-note Ur-rhythm thus subdivides into 4 + 2. This subdivision suggests that acceleration to the downbeat of m. 3 might be similarly articulated.

[36] As in the A-flat Prelude, there are passages of harmonic stasis; see the G-flat-major passage beginning at m. 17 (not shown). In both preludes I would play these static passages at a slightly faster tempo. In the G-flat-major passage, the left hand follows a hemiola pattern that fits under the hand far more comfortably than the polyphonic accompaniment of the prelude's opening measures. As is often the case with Chopin, for whom the tactile quality of piano playing was enormously important, the physical ease of mm. 17ff. is connected with what I take to be the implication of increased speed.

[37] Prelude No. 13 (Example 9 [DjVu] [GIF]) has much in common with No. 21, above all in its texture and hypermeter. (Each hypermeasure contains four dotted-half-note beats.) Here the melody begins by climaxing on the fourth, rather than the third, beat of each hypermeasure. Since the melody begins with repeated notes, we would probably accelerate through these, following Schenker's dictum, even though B4 does not fall on a downbeat. In Riemann's terms, we would phrase to B4, accelerating slightly and adding an unwritten *crescendo*. Upon reaching B4 we would both decelerate and *diminuendo*.

[38] The left-hand accompaniment is more varied in contour than in either of the other preludes. Its internal grouping is not immediately obvious, but I believe it is best interpreted as shown in Example 10. After F#2--the bass note for all of m. 1--is sounded on the downbeat, a group of four "tenor" notes, E#3-G#3-F#3-A#3, is followed by a two-note group, C#3-F#2, bridging with an arpeggio the large distance between tenor and bass. In other words, the grouping closely resembles that of m. 2 in Prelude No. 21. A dissonant leap, initially the major seventh F#2-E#3, separates each bass note from the following tenor group. The latter subdivides in two different ways simultaneously: as two ascending thirds (E#-G#, F#-A#), and as an incomplete double-neighbor figure (E#-G#-F#) plus a singleton (A#).<sup>(29)</sup> The former grouping is obvious, but the latter corresponds better to the voice-leading. G# is an appoggiatura to F#, so I make it the dynamic high point of the four-note group. This dynamic shape stands in contrast to that of the repeated-note accompaniment in Prelude No. 17, where the downbeat represents both the dynamic and the agogic high point of the Ur-rhythm.

[39] For me, the left hand in the F#-major Prelude evokes the sound of a solo cello. If the Prelude were transposed to G major, the four-note group might or might not be played on a single string, <sup>(30)</sup> but the two-note group would inevitably involve string crossings (i.e., the open D and G strings; A3, the dynamic high point, might also be played on an open string). We might compare the opening of Bach's G-major Cello Suite, BWV 1007 (Example 11a), which similarly features a division into bass and tenor registers with arpeggios connecting them. Here the leaps are all consonant until m. 3, but Victor Zuckerkandl, at least, advised that the cellist make all groups end-accented. <sup>(31)</sup> Among other advantages, end-accented groups encompass the resolutions of the lower neighboring notes (A3 in m. 1, B3 in m. 2, etc.).

[40] Comparison might also be made to the main theme of Chopin's Barcarolle, op. 60, another piece in F# major (Example 11b), and to Prelude No. 3 in G Major (Example 11c). In the Barcarolle, the enormous leap across the bar line helps to clarify that F#2 begins a group at the measure level. One might, however, hear an end-accented group culminating on the second F#2 in each measure, with a grouping overlap on that note. The two equal leaps upward from F#2 help one to hear the grouping as *anbetont*--i.e., beginning with the strongest beat in the group. Although the sum of the two leaps is a ninth, each leap in itself is consonant--a perfect fifth. (There is a suggestion of hemiola in this example, but we will not pursue it here.)

[41] The story of the G-major Prelude is similar. The consonant arpeggio ascending from G2 tends to bind the bass note to the "tenor" B3 and to

the notes in between. The most ambiguous note in this pattern, from a grouping standpoint, is the final sixteenth note in each measure. Registral proximity suggests grouping this D3 with the following G2, and the occasional sixteenth note in the melody strengthens the suggestion. But some later versions of the left-hand pattern--in mm. 6-8, for example--distort the leap across the bar line to the extent that one might well treat the bar line as a grouping boundary, though only in the left hand. (32)

[42] Neither in Prelude No. 13 nor in the patterns of Example 11 would a seamless *accelerando* to the strong beat be appropriate. Each pattern requires its own dynamic and agogic shaping, but none represents the simple sliding into the downbeat—the falling—off—a-log—that one hears in Prelude No. 17 and at the beginning of Prelude No. 21. Patterns of pitch contour, implied polyphony, and voice leading affect (or should affect) the performance of the *Ur*—rhythm uniquely in every case.

# VII

[43] I return, at last, to my opening thoughts. Can principles of rubato be generalized? To some degree yes, but only within a given style, and we should take care not to define that style too broadly. Even within these limits, principles of rubato will have, at best, the status of Lerdahl and Jackendoff's preference rules, which often come into conflict in such a way that their resolution—the decision as to which rule governs a certain situation—is a matter of judgment.

[44] Some principles can be generalized further than others. For example, the idea of accelerating through an anacrustic motive is probably valid for much nineteenth-century music, especially solo and chamber music, so long as the motive contains little of what I have termed musical friction. The notion of friction itself, and the performative responses to friction that I have proposed here, are probably capable of broader generalization. What may be less generalizable is, for example, the extreme sensitivity to tactile aspects of playing that is characteristic of Chopin's piano music but not, say, of Beethoven's.<sup>(33)</sup>

[45] Finally, I wish to remind the reader that many of the conclusions I have advanced in this essay have been expressed, often more eloquently, by authors who experienced the nineteenth century at first hand: Czerny, Lussy, Riemann, and Schenker, among others. Although recorded performances have undeniable value as models of rubato playing, further research into rubato should also take note of what performers and teachers have said on the subject--especially those performers and teachers who participated more or less contemporaneously in the tradition they have sought to describe.