

The *Three Japanese Lyrics* were composed at an extremely interesting time in Stravinsky's creative life and indeed in the creative life of the early twentieth century. The following quotation will serve to put the piece and Stravinsky's thoughts about it in perspective.

"At the same time as I was completing the orchestration of *Le Sacre du Printemps*, I worked on another composition that became dear to me. That summer I read a collection of Japanese poetry made up of short poems by writers long since dead. The impression they made on me was similar to that of Japanese engravings in their graphical solution to the problems of perspective and volume. I tried to find an analogy in music. Nothing lent itself better for this purpose than the Russian translation, because Russian poetry is based on tonic stresses. I harnessed myself to the task in hand using a metric and rhythmic method that would be too complicated to explain."\*<sup>1</sup>

We will, for the moment ignore Stravinsky's tantalizing challenge concerning the metric and rhythmic mysteries of the work and begin with an investigation of the music's harmonic relations and pitch structure and proceed later to an examination of various methods of musical organization which Stravinsky has employed in this very rich musical miniature. We will begin with an analysis of the third movement entitled, "A Maurice Ravel".\*<sup>2</sup>

As scholarship of the last two decades has revealed, the harmonic language of much of Stravinsky's music up through *The Rake's Progress* is based to a large extent on the octatonic scale. This symmetrical scale will provide us with an invaluable reference point and musical framework on

which to begin constructing our analysis. This is not to suggest that an octatonic analytical approach is a blanket solution to understanding Stravinsky's pre-serial music, but rather that knowledge of his predilection for the musical potential of this scale will significantly increase our ability to probe more deeply into the complexities of the music.\*3 Though we will use the octatonic scale as the primary basis for much of the analysis to be offered here it must be stressed that Stravinsky does not confine himself to a strictly octatonic framework but, as we shall see, operates by alternately blending and juxtaposing elements of tonality, diatonicism and octatonicism and it is hoped that this discussion will illustrate the various interactions of these musical features. Specifically we will examine in detail the melodic and harmonic organization of two contrasting phrases in this movement. (The basic AABA phrase structure of the music in which all the A sections contain the same basic harmonic and melodic patterns permits the adoption of such a convenient approach.) The analysis will proceed from the vantage point of five unique but related compositional elements common to all of Stravinsky's pre-serial music: 1.)Centricity, 2.)Aggregate completion, 3.) Polarized harmonies, 4.) Stratified musical layers, 5.) Motivic interaction. Let us briefly define each of these elements and then see how Stravinsky establishes them in the first phrase and varies and/or expands them in the contrasting phrase.

1.) **Centricity**- Because of the symmetrical nature of this scale no pitch can naturally assume a sense of priority or centricity; that is a task left to the composer's ingenuity and our analysis will show that through employment of our above-mentioned five compositional techniques

Stravinsky creates a musical environment in which  $pc\ 11$ , most often spelled as  $B$ , is emphasized as the centric or quasi-tonic note of the music.

2.) **Aggregate completion**- While this element appears in many guises in all of Stravinsky's music we will consider the aggregate here to consist of all twelve pitches of the total chromatic. Stravinsky often withholds a particular pitch or collection of pitches for a period of time thereby creating a feeling of expectancy or tension in the music. In the movement under consideration here the tetrachordal complement of the operative octatonic collection will be shown to be a crucial element for effecting aggregate completion and that its complete instantiation occurs at significant points in the music.

3.) **Polarized harmonies**- As in the harmonic language of the great trilogy of ballets of 1910-1913, Stravinsky often partitioned the octatonic scale by highlighting or juxtaposing tritone-related elements; in effect, bisecting the octatonic structure. We will see how Stravinsky uses these polarized elements, most notably represented by the harmonic content of the famous "Petrouchka chord", as integral components of phrase structure and harmonic motion.

4.) **Stratified musical layers**- Stravinsky's music is often easily divided into separate layers or fields of operation. That is, various instrumental combinations frequently maintain a uniqueness of character and harmonic and melodic content but yet are related by what can be an extensive vocabulary of musical associations. These compositional layers may connect to only one other layer or all layers may share (a) common element(s) lending a background cohesion to a diverse musical surface.

5.) **Motivic interaction**- The use of particular motives by all operative layers in a work is naturally a powerful binding force and in general this

element is almost impossible to discuss apart from "Stratified musical layers", however, the motives we will discuss here are presented in transpositionally significant ways adding an added degree of structural harmonic cohesion to the music and also warranting a degree of individual attention.

With our five compositional elements identified and defined we will now turn our attention to specific musical examples which show each of their uses in the opening eight measures of this movement. (For the following discussion please refer to the analyzed full score given as example 1m (music) and the voice leading graph which is example 2m.)

1.)**Centricity**- Weighing the individual associational strengths of the pitches in the first eight measure phrase, the pitches which form a defensible referential collection constitute a 2,1 ordering of the octatonic scale. based on B.

**B--C#--D--E--F--G--G#--A#**

An appoggiatura-like figure dominates the string and bass clarinet parts of mm.1-5 and is designated for this analysis as motive A. In each appearance of the A motive the first note is regarded as a non-structural tone. In the case of the viola and cello parts this non-structural tone is also a non-harmonic tone (C), that is to say, a note outside the referential octatonic collection we have deemed operative for this section. Thus B is established as a type of structural "drone" pitch in the bass voices (viola and cello) and is sustained with only one interruption (which will be discussed shortly) through the first five measures. Certainly B gains a degree of centric strength by virtue of being both the dominant bass voice and the note of

longest duration in this passage, these qualities alone provide it with considerable associational strength, however, B also receives support from two other pitches which act in a sort of "mock tonal" relationship with B that further strengthens its centric hand. From the reduction (2m) we can see that the two structural pitches in the opening three measures are B and D, suggesting a type of "b minor" emphasis being established at the outset if we consider this recurring dyad as a "tonic B chord with missing fifth". In measure 3 what we will refer to as the "cherry blossom" motive is played by the bass clarinet. All pitches within this figure are members of our referential collection with the exception of the final pitch, E flat. If we read this pitch enharmonically as D<sup>#</sup>, we then discern a change of mode being interjected within the prevailing b minor harmony. That is, combined with the viola's B in ms.4, the E flat/D<sup>#</sup> can be heard as the major third in a first inversion B major harmony with missing fifth. This creates major/minor vascillation, or to put it in set-theoretical terms, a conflict between (037 /047) trichordal emphases within the prevailing B-centered harmony.\*<sup>4</sup> Measure 4 forces a return to the minor,(037)side of the coin with the D in the violin I and the restatement an octave lower by the bass clarinet. (See example 1m.)

This major/minor fluctuation will be seen to be a pervasive element throughout this movement and one intimately bound to the aforementioned technique of aggregate completion as the essential pitch class for this trichordal effect, pc 3, is taken from the octatonic scale's complement, [0369]. In these opening five measures therefore, we see B established not only as a centric pitch but also as the root tone of competing, tonally-conceived harmonies,(b minor and B major), constituting a (037/047) conflict the maintainence of which is central to B's centric position.

2.) **Aggregate completion**- In ms.6 the emphasis on B-centered harmonies is displaced by the prominent use of pitches from the complement of our octatonic collection, D<sup>#</sup>, F<sup>#</sup>, and A. (It will be recalled that C has already been introduced.) In mm.6-7 through to the downbeat of ms.8 Flute II and viola combine to render a type of "melody with accompaniment" to close the opening phrase. The viola's motive C in ms.6 contains the first appearance of the non-harmonic tone A in layer 2 which is sustained until the downbeat of ms. 8. The melodic figure of Flute II in ms.6 adds our by now familiar D<sup>#</sup> transposed down an octave which combines harmonically with the A of the viola on the last eighth note of the measure. Here we see non-harmonic tones, or more descriptively, notes from the complement of our operative octatonic set (C, E flat, F<sup>#</sup>, A) used in conjunction with one another, suggesting something more than a casual treatment of these tones by Stravinsky. As the A in the viola is sustained through measure 7 the melodic figure in Flute II continues to unfold adding the final tone needed for a full statement of our complement, F<sup>#</sup> which appears as a passing tone between G<sup>#</sup> and E. It is important to remember that this use of non-harmonic tones new and old occurs over the sustained non-harmonic tone A in the viola. If we use the admittedly "loaded" terms consonance and dissonance respectively to describe tones of our octatonic collection and the tones of its complement, the cadential formula of mm.6-7 shows a very carefully balanced manner of introducing these non-harmonic tones. This cadential figure is shown graphically in example 3.

how about referential and non-referential  
 member and non-member  
 collection and non-collection

### Example 3

				mm.6-7					
					(3)	(6)	(3)		
Flute II:	C	C	C	D	C	D	C	D	
Viola :	C	C		D-----					
				(9)					

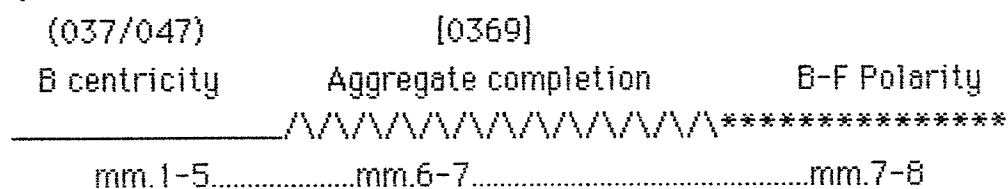
Over the sustained "dissonant" A in the bass voice the D<sup>#</sup> and F<sup>#</sup> are added with elegant symmetry completing the entries of every member of our complement set and, of course, also completing the aggregate which gives this cadential point an added feeling of completion and structural weight. (The idea of symmetry in this music is one that will be developed in greater detail later in this discussion.)

3.) **Polarized harmonies**—Now that we have set the stage for the completion of this cadence we can put the final note of ms.7 into context. Flute II finishes its melodic fragment on E<sup>#</sup> which we will again take the liberty of reading enharmonically as F in order to more clearly illustrate the polarized harmonic motion Stravinsky has created. Combined with the above mentioned sustained A in the viola we finish our cadence on a type of F major chord, with missing fifth; a technique we saw in the opening measures of this movement with "fifthless" chords based on B, albeit the F chord here is in first inversion. Stravinsky articulates the opening phrase by effecting motion from a centric B harmony to its tritone-related counterpart F thereby employing a pattern of harmonic relations particular to the characteristics of the octatonic scale mentioned earlier and one which effectively blows the harmonic implications of the "Petrouchka chord" apart over a substantial portion of the music. (Again, refer to the

voice-leading graph in example 2 for an illustration of these properties of harmonic motion.)

This opening phrase then, is essentially constructed around the succession of our first three highlighted compositional elements, Centricity, aggregate completion, and (B-F) polarized harmonies, with the cadential point being the simultaneous employment of the latter two. Example 4 shows the succession of elements 1-3.

#### Example 4



4. and 5.) **Stratified musical layers and motivic interaction**—The reader has doubtlessly noticed that many notes in mm.1-8 have not been accounted for in the analysis thus far. It is hoped that the following discussion will begin to tie the entire score together and to show the connections which exist among what appear at first to be disparate parts. As mentioned earlier, the concepts of musical layers and motivic interaction are very closely related and so will be paired together in this section until certain features of motivic usage warrant separate treatment later in this paper.

This movement may best be approached by regarding it as being divided into three layers or fields of operation in which the voice is basically diatonic in nature (layer X), the strings operate in an octatonic environment (layer Z), and the winds act as a bridge between the two outer layers (layer Y), at times owing allegiance more to one than the other but usually maintaining some harmonic or motivic relationships that enable it



to operate as a moderator or even a "glue" between the voice and the strings. Of course, the links which exist between the three layers are not completely dependent on the winds for their coherence and examples demonstrating this will be presented in due course, but the idea of a central element balancing two separate yet related elements is a potent one and will serve us well in this discussion. Example 5 lists the essential motivic and harmonic content for each layer in mm.1-6 where all three layers are active on the horizontal axis. A vertical reading of the chart shows the common elements or connections between and among layers. The (025) trichordal and (0257) tetrachordal formations as well as motive A constitute the principal motivic connections among the layers while the employment of notes from the [0369] octatonic complement and elements of B-centricity as represented by some degree of participation in the (037/047) [D,D\*] conflict comprise the primary harmonic links in this section. (Example 1m shows the pc segmentation.)

**Example 5-Motivic and harmonic connections among layers mm.1-5.**

<b>Layer X</b>		(025)(0257)	[0369]	(037/047)	<i>Basic</i>
<b>Layer Y</b>	motive A	(025) "Cherry Blossom"	[0369]	(037/047)	
<b>Layer Z</b>	motive A		[0369]	(037/047)	

From this example, the motivic (025) trichord relationship is a clearly visible connection between layers X and Y. The vocal entrance beginning in ms.4 is particularly interesting for the strong motivic

relationship it also holds with the "cherry blossom" motive of layer Y. While it is certainly a diatonic melodic line it is linked strongly to the basic octatonicism of layer Y by an emphasis on (025) trichords. While layer Y retains motivic (motive A) and octatonic connections with layer Z, it concurrently holds a strong motivic (025) relationship with layer X thereby demonstrating its above advertised quality as a type of "connector". In ms.6 motive D in Flute II comprises a skeletal version of the "cherry blossom" motive and outlines a (0257) tetrachord thus continuing the motivic consistency of layer Y and creating a tetrachordal link with the (0257) formation of layer X. In addition, it can be seen that all three layers interrelate by featuring different combinations of notes (underlined in example 3) from the 0369 octatonic complement and by participating in the B-centered (037/047) vascillation where layers X and Y provide the essential pc 3 in opposition to the b minor dyad of layer Z. It is also interesting to note that while layer X introduces pc 4 only and layer Z provides only pc3, layer Y contains both of B's major and minor thirds (pc's 3 and 4) further stressing Y's central function as it acts as a sort of harmonic pivot between layers X and Z. While at first glance these three layers we have identified appear to be so different in character and content as to be almost mutually exclusive, we can see, with the help of example 3, how Stravinsky creates a web of connecting elements giving the music an overall unity and cohesiveness.

Now that we have seen how our five compositional elements were realized in the opening phrase, let us examine the contrasting third phrase, mm.13-18, and see how Stravinsky recasts them but yet manages to maintain interconnections among the three layers. We will again proceed by examining each of the compositional elements in turn.

1.) **Centricity**- While the B centricity of the opening phrase was essentially a vertical consideration, that is to say maintained by a succession of B minor and B major dyads, the second phrase horizontalizes the predominant B harmonies in arpeggios. Also worthy of note is the fact that the "B's" of the first phrase's centric harmonies were located solely in layer Z where in mm.13-18 the centric issue takes place principally in layers X and Y. Let us examine specific musical examples. (Refer to full score.)

In mm.16-18 of layer X the voice presents a chain of arpeggiated minor-major triads centered on B. Thus again we see this modal (037/047) ambiguity used as a crucial means for effecting B's centricity. This ambiguity can also be seen by examining the beginning, middle, and endpoints of layer X in mm.14-18. The first note of the vocal entrance is pc 3 (E flat), the last note in ms.18 is pc 2 (E double flat), and the central in ms.16 is pc 11 (C flat). Stravinsky has essentially contained the entire vocal line within the confines of this B-centered major/minor conflict.

The (0134) tetrachords of layer Y also contain the essential pitches of this conflict, E flat(D\*), B and D and appear to be a conflation of the boundary and central pitch arrangement of layer X mentioned above occurring not incidentally in an identically ordered presentation, (Pc 3-11-2). In addition, Stravinsky has joined a fully-realized b minor arpeggio to the second of these (0134) tetrachords extending into ms.16 further emphasizing B's harmonic centricity. It is interesting to note also that this B arpeggio occurs during rests in the vocal part lending it added associational strength. This arpeggio, of course, also connects to the above mentioned arpeggio "chain" of layer X (mm.16-18) thereby creating an unbroken succession of B-centered triads beginning on the second beat of

ms.15 in layer Y through to the final note of layer X in ms.18. The only vertical support that can be found for this new horizontally-conceived centric approach is the b diminished-seventh chord which appears simultaneously with the succession of B-centered arpeggios beginning on beat 2 of ms.16. It is important to bear in mind, however, that unlike the first phrase, there is no consistent vertical harmonic support for B centricity in this passage. Instead, Stravinsky has shifted his approach and placed his centric B harmonies on a horizontal plane reinforced by the techniques and formations we have discussed. While the chorale-like texture of layer Y is superficially appealing to anyone searching for a meaningful succession of verticalities, the "harmonies" are really no more than a confluence of linearly conceived lines masquerading as harmonic counterpoint.

2.) **Aggregate completion**- Although we refer here to aggregate completion, this is actually a misnomer for mm.13-18. The notes of the octatonic complement, [C,D\*,F#,A], pc's [0369], were used in mm.6-8 to give added weight to the phrase ending by completing the total chromatic in ms.7, but in mm.14-18 there can be no convincing case made for the process of aggregate completion. Rather, Stravinsky uses the pitch classes [0369] in a new way which continues to emphasize their function as a unique compositional unit.

Let us examine all the notes in the upper row of the "wedge" of entries in layer Z, mm.14-16. By extracting these pitches we produce a diagonal row of the following pitch classes:

1 3 6 9 0 2  
|—————|

From this it is apparent that Stravinsky has, for the first time in this movement, utilized all four members of the octatonic complement,[0369], in one compositional layer and does so in a sort of timbral melodic succession which ascends from the cello through the viola and violin II to violin I. These four pitch classes are also placed in associationally strong positions (tessitura) in all three layers but in those instances they are more involved in matters of B-centricity, thus it is in this diagonal "wedge" that Stravinsky gives the most telling evidence of the importance he attaches to these four pitch classes. Also, while the use of these pc's was accomplished in a vertical harmonic construction in the first phrase, here, like the case of B-centricity, Stravinsky reverses compositional planes by using a horizontal(melodic) axis.

**3.) Polarized harmonies (B-F)-** The treatment given to B-F polarity in this section forms a sharp contrast with that given to B centricity and aggregate completion. Unlike these two elements, B-F polarity was not realized vertically in the first phrase but was a temporally separated event which articulated the boundaries of the initial eight-measure phrase. True to his apparent fondness for reversing the orientation of his compositional material, however, Stravinsky compresses what was formerly on a horizontal plane to the vertical. On the second beat of ms.15 a first inversion F chord occurs simultaneously with the b minor arpeggio of Flute I mentioned earlier. This chord is, of course, the same inverted F chord (albeit fully-voiced) used to complete the cadence of the first phrase. The fact that this F chord occurs in conjunction with Flute I's b minor arpeggio would seem to be much more than a coincidence and strongly recalls the B-F polarity of mm.1-8 as well as anticipating the harmony of the movement's close. (The final phrase, mm.20-24, progresses from the

familiar B-centered harmonies to a fully-voiced first inversion F chord.) Stravinsky has essentially verticalized and fused what was, in the first phrase, a temporally separated linear event, a technique which also creates a strong musical bond between layers Y and Z.

4. and 5.) **Stratified musical layers and motivic interaction**- One of the most readily discernible features of mm.14-18 is the change in tetrachordal emphasis from (0257) to (0134). The analyzed full score shows the strong presence of this new tetrachordal motive as well as various subset formations.

A comparison of mm.1-8 and mm.14-18 shows that while much has changed with regard to the harmonic and motivic content, the same basic compositional elements are held in common although altered in the various ways we have described. Example 6 attempts to summarize in the same manner as Example 3, the interconnections of our five compositional elements in this phrase. (It will be remembered that (037/047) represents the presence of some element(s) of B-centricity.)

**Example 6 Motivic and harmonic connections among layers mm.13-16.**

<b>Layer X</b>			<u>(037/047)</u>	[0369]
<b>Layer Y</b>	(0134)	B-F polarity	<u>(037/047)</u>	[0369]
<b>Layer Z</b>	(0134)	B-F polarity	<u>(037/047)</u>	[0369]

In these two contrasting phrases we have seen Stravinsky employ techniques peculiar to his general octatonic vocabulary (polarized harmonies, (037/047) tension) as well as methods seen throughout his entire oeuvre (stratified musical layers, motivic interactions, centric harmonies.) We saw the various ways these ideas were realized and transformed and how the varied retention of these five compositional elements between these two phrases lent the music structural coherence and unity. One element, warrants further attention at this point, however, because of its effect on the harmonic and melodic organization of the entire movement. We will examine the simple technique of motivic repetition which is seen so often in this music for the transpositional levels at which these repetitions occur proves to be a way in which Stravinsky manages to inject this music with a degree of harmonic organization more far-reaching than any others we have discovered. In what is essentially linearly conceived music, that is to say music in which vertical harmonic progression does not seem to play a dominant role, Stravinsky creates long-range motivic and harmonic unity in the music by projecting the intervallic content of the thematic/motivic (0257) tetrachord and (025) trichord through all sections of the movement. Let us designate [G#,A#,C#,D#] and [G#,A#,C#] as T0 for our tetrachordal and trichordal units and examine the transposition levels which Stravinsky employs.

**Example 7**

**(025) and (0257) transpositions mm.1-13**

	mm.4-5	ms.6	mm.8-12	ms.13
(0257)	G*A*C#D#	G*A*C#D#	same as 4-6	C*D#F#G#
(025)	G*A*C#	A*B#D#		C*D#F#
Level of transposition	T0/ T0	T0/ T2		T5/ T5

From this example it is obvious that Stravinsky has employed transposition levels which enable him to extend the intervallic content of his basic pc sets over a relatively large portion of the music. It is also interesting to note that these transpositional levels along with T7 and T10 { for (0257)} and T7,T9, and T10 {for(025)} are unique in that they preserve two common pitches repectively thus maintaining a degree of pitch class invariance with the T0 form.

In mm.13-18 Stravinsky employs the above mentioned transposition levels in a different way. It will be recalled that mm.19-24 feature a change from an emphasis on (025/0257) to one on (0134) and its trichordal subsets. (We will limit ourselves to the (0134) tetrachord here.) Let us regard the (0134) [A,Bflat,C,C#] of the cello part of Flute I as T0 and proceed as before.



**Example 8**

**mm. 14-17**(lower case letters indicate  
flatted pitches.)

	ms.14	ms.14	mm.16-17	mm.16-17
(0134)	A b C C <sup>#</sup>	B C D e	f F G a	c C D e
Level of transposition	T0	T2	T7	T2

In this section Stravinsky employs transpositional levels derived from the interval content of the (0257) tetrachord even though the prevailing pitch class set has been changed in this section to (0134). Stravinsky utilizes these levels of transposition despite the fact that they produce a minimum of invariance with the T0 form (only one common tone at T2 and no common tones at T7) thereby retaining a motivic link, however tenuous, with the preceding two phrases.

In the final section Stravinsky again makes striking use of the (0257) pc set's interval content to determine large scale transpositional levels. The following example shows the transpositional levels present in the final three measures relative to T0=[G<sup>#</sup>,A<sup>#</sup>,C<sup>#</sup>,D<sup>#</sup>].

**Example 9**

mm.22-24

	ms.22	ms.23	ms.24
(0257)	G*A*C*D*	G*A*C*D*/ C*D*F*G*	D*E*G*A*
Level of transposition	T0	T0/T5	T7

Just as the two previous examples showed, there are again transpositional levels derived from the (0257) tetrachord the employment of which maintains a continuity and unity of musical thought throughout the entire movement and shows Stravinsky's concern for making maximum use of his motivic materials. This pattern of transpositional levels is perhaps another compositional element which might be productively added to the five employed in our analysis of mm.1-8 and 14-18 and indeed for Stravinsky's music in general.

Now that we have seen the many ways in which Stravinsky manipulates and unifies his pitch structures let us proceed to another technique of musical organization prevalent in his music, that of symmetry. As we shall see, Stravinsky makes use of three different yet related types of symmetrical organization in this music: 1.) Rhythmic symmetry in which a passage is constructed around the employment of a particular rhythm or rhythmic grouping, 2.) Pitch symmetry in which symmetrical patterns of pitch usage appear, the determination of which is based on the relationships

within the operative harmonic collection(s), and 3.) Proportional symmetry in which the presentation of separate compositional elements is achieved through temporal symmetrical balance. The musical examples which follow will illustrate the characteristics of these symmetrical types and the fact that they are not mutually exclusive. It must also be mentioned that symmetrical organization in Stravinsky is not an idle technique of extending compositional blocks but rather, as will be shown, is employed in such a way as to highlight a particular harmonic or motivic event.

Let us turn to specific musical examples that illustrate these various types of symmetry. Example 9m shows the bass clarinet part from mm.1-5. Here we can see the combination of proportional and rhythmic symmetries. The element labeled **B** is the important "cherry blossom" motive which is framed by two A groupings which are motivically and rhythmically identical. (The slight discrepancy in duration between the two A elements and other such minor imbalances in future examples will not be regarded as being musically significant.)

Now let us combine this single line symmetry with the music of all the string parts in mm.1-5. If we regard the initial C-B of the cello as a type of introductory or upbeat gesture and examine the combined music of the strings and bass clarinet parts which occurs between the already discussed outer elements of the bass clarinet figure, we can see a larger symmetrical grouping present itself. Viewed in this fashion, the "cherry blossom" motive can now be seen as being preceded and followed by four A elements. (See examples 10m and 11.)

**Example 11**      -   +   -   +                    +   -   +   -  
                           A   A   A   A   B            A   A   A   A

Notice also the palindromic quality of the A elements' melodic contours (marked with "+" and "-" signs ) which creates yet another layer of symmetry in these opening measures.

Let us continue for the moment with our examination of the "cherry blossom" motive to see how Stravinsky treats it in its next two appearances. In mm.8-11 we again see the central motive accompanied by the familiar string figuration though it has been slightly altered. (See examples 12m and 13.)

While the antecedent group of four A's is still present, the consequent grouping has been halved.

**Example 13**

                          A   A   A   A   B   A   A

In its third and final appearance, the cherry blossom motive is stripped of any consequent groupings yet retains the initial precedent grouping of four elements. (See example 14m and 15.)

**Example 15**

                          A   A   A   A   B

At the risk of being too interpretive, it is the position here that Stravinsky utilizes the initial symmetry around the "cherry blossom" motive to suggest the frozen surroundings of the blossoming cherry trees. As the snow gradually melts away, so too does the musical symmetry framing the

"cherry blossom" motive begin to disappear.\*<sup>5</sup> Thus, it would seem that one could make a case for the idea that Stravinsky utilizes symmetrical properties here not only in a developmental way but also in a manner which transcends the purely musical aspect of composition in order to beautifully illustrate the the expressive content of the poem

Another notable feature of the "cherry blossom" motive is its role in highlighting pc 3. Reexamination of three preceding examples, 10m, 12m, and 14m, will show the importance accorded pc 3 within the overall symmetrical structure described earlier. Pc 3 is, of course, vitally involved in the b minor/B major (037/047) conflict Stravinsky has created and certainly its central location in the opening 5 measures can be no coincidence. It is interesting to follow Stravinsky's treatment of this locally powerful pitch class for it seems to work in a type of inverse relationship with the symmetrical structure which originally contains it. In mm. 1-5 Stravinsky places pc3 in a more or less temporally central position though it is given only brief harmonic support by the viola's pc 11 of ms.4. It is also important to note that the pc 3's that appear in the voice and flute parts away from the symmetrical center (mm. 5 and 6 repectively) are completely denied B support. (Example 10m.)

In the second appearance of the "cherry blossom" motive the pc 3 in mm. 10-11 of the Clarinet 1 and the pc 3 of the Voice and Viola in ms. 11 receive brief yet undeniable B support from the cello of ms. 11. Thus, as the symmetry of the "cherry blossom" motive begins to erode, B major influence begins to assert itself ever so lightly. (Example 12m.)

It is the third and final appearance of this important motive, however, that contains the most telling evidence of this (037/047) "B/b conflict. In measure 21, pc 3 is played by the Clarinet I and given B support by the bass clarinet. And, as if to emphasize the heightened role of this tonally conceived dyad in relation to the decreased symmetry of its surroundings, Stravinsky gives both notes a fermata thereby lending this gradually developed harmonic idea added weight. In measure 22, both the pc 3 of Clarinet I and pc 11 of the bass clarinet move to pc 2 thus not allowing us to be too hasty in concluding that B major has completely unseated the initially dominant b minor. To be sure, however, B major, by virtue of its final temporal stress, would seem close to having the final tonal "word". (Example 14m.)

It is also important to note that the (037/047) conflict of ms.22 is centrally situated in a proportional symmetry which encompasses mm. 19-24. Here we can see the simultaneous appearance of two of the works crucial compositional elements, the (037/047) issue as well as the associationally stressed (0257) tetrachord of Flute II labelled S, symmetrically framed between two roughly temporally equivalent musical sections referred to here as R and T. The music for this passage along with the proportional value of the three sections of this symmetry is shown in example 14m.

Section R is the familiar "cherry blossom" motive plus its standard four member antecedent group which includes the final eighth note of ms.18. Section T acts as a type of codetta in which the (0257) tetrachord reasserts the musical dominance it enjoyed in the beginning of the work as well as

restating the tritone (0-6) polarity of the b/F centricities so crucial to the phrase structure of the opening . It is also interesting to note that Stravinsky alters the usual rhythmic presentation of the pitch-specific (0257) tetrachord of the Flute in ms.22 by eschewing the usual downbeat rest of its previous appearances in favor of extending the first note of the figure by an eighth note creating a small-scale proportional symmetry (values in eighths) of 3 (pc 10) and 3 (pcs 1,8,3) within the larger symmetry already described.

Let us now backtrack a bit and examine mm.13-18. In this section we can see Stravinsky's symmetries working on a more extended level than the previously discussed examples but present nonetheless. The music is shown in example 16m.

This is a case where the symmetries require a bit more creativity than has been necessary up to now in order to clearly expose the organizational principles at work in the music. If we consider contour to be a determinant of symmetrical construction we might consider measures 14-16 of layer 2 to be a conjunct central section with ms.17 being a break in the pattern and belonging to the outer "framing units" which would be ms.13 and mm.17-18. This reading of the passage also greatly emphasizes the interconnections of our three compositional layers. (See example 19, note values in eighths.)

#### **Example 19**

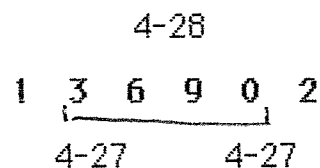
<b>6</b>	<b>12</b>	<b>6</b>
disjunct	disjunct conjunct	disjunct
ms.13	mm.14-16	mm.17-18

As has been mentioned, Stravinsky employs symmetrical relationships not just for symmetry's sake but in order to highlight particular compositional events and as should be no surprise by now, there are smaller scale symmetries at work here as well which are deserving of mention.

The Flute part contains two central occurrences of the (0134) tetrachord which is the dominant harmonic unit of this passage. Overlapping with the second of these (0134's) is an arpeggiation of a b minor triad which is made significantly more prominent by the rests in the vocal part which last for its entire presentation and by its precise central position within the entire symmetrical figure. Here again we see Stravinsky making pointed references to the (037/047) conflict by having b minor seem to "pop" out of the melodic flow because of the voice's rests and also being echoed immediately by the voice precisely at the moment the Flute changes harmonic direction.

Layer Z also contributes an inner symmetry to this formation by highlighting the [0369] nodes of the operative octatonic collection. If we again refer to the diagonal "wedge" of mm.14-16 we obtain the structure shown below.

### Example 20





Here we can see the symmetrical balance surrounding the first and only melodic or harmonic appearance of these four crucial pitches as a unit as they appear in an accompanying figure for both the above mentioned (0134's) and the b minor arpeggio of the Flute part. It is also worthy of note that Stravinsky utilizes pc's 0 and 9 during the rests of the vocal part which prominently featured pc's 3 and 6 thus reserving the right of presenting all four members of the [0369] tetrachord to the octatonically oriented layer Z which, of course, has the closest relationship to it. Notice also the symmetrical basic interval pattern {bip}, 23332, of the diagonal row itself and that it essentially frames the complement set 4-28 between two ordered forms of 4-27.

To summarize, Stravinsky employs symmetrical arrangements at many different levels throughout this composition as well as other works within his oeuvre. Unlike many, however, who have likewise utilized properties of symmetrical organization in their compositions, Stravinsky does not use it simply as a way of extending his musical material but more importantly he uses it as a means to highlight or underscore important compositional elements and events. It seems quite possible that the various properties of symmetrical organization we have discussed here may also provide some clues to the "...metric and rhythmic method...too complicated to explain...", which Stravinsky claims to have employed in this composition. Like the works of Olivier Messiaen, the wealth of small and particularly large-scale symmetrical organization in the music of Stravinsky appears to be an attempt at creating structural coherence and inner logic without relying on established formal schemes but rather there would seem to be evidence here for the early stages of a concept of musical form in which,

under a superficially simple formal structure, there exists a second level of formal organization based on calculated symmetrical arrangements of rhythmic and pitch materials. We saw how these ideas of symmetry were accomplished in *Three Japanese Lyrics* in three basic ways with degrees of variation within each of three broad categories.

Though this movement is no more than 24 measures long, it is truly a microcosm of Stravinsky's compositional technique from the first part of this century. We have seen how Stravinsky unifies his musical space through the use of referential collections, highly charged motivic and harmonic interconnections and symmetrical arrangements of various types. There can be no question that the methods of pitch organization in this work show Stravinsky attempting to develop a new way of addressing the problem of writing coherent harmonic progressions which make reference to but avoid a reliance on hackneyed tonal formulae. Coming at such a crucial turning point in Stravinsky's compositional career, it may not be unreasonable to regard this little piece as a type of laboratory in which Stravinsky began developing the unique harmonic language and sense of balance and symmetry that would become the hallmarks of his neo-classic period. Taken as such, *Three Japanese Lyrics* certainly warrants further study and it is hoped that the material presented in this initial investigation will be of use to those wishing to deepen their understanding of Stravinsky's musical language and its development.