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# SOME CHARACTERISTICS OF STRAVINSKY'S DIATONIC MUSIC (II)* 

PIETER G. VAN DEN TOORN



Now in Le Sacre the situation is reversed. Instead of a pervading diatonicism, a pervading "vertical chromaticism" is likely to attract our attention, with respect to which we might view the patches of unimpaired diatonicism as subsidiary and as diverging. Yet, "above" the "blocks" or sections of varying referential implications, the ( $\left.\begin{array}{llll}0 & 2 & 3 & 5\end{array}\right)$ tetrachord-complete or ( $025 / 035$ ) incomplete-may still be apprehended as the principal articulative between-reference (or between"block") connecting link. And, respecting the "global" approach generally, I find: 1) that this static-oriented "vertical chromaticism" is defined with remarkable consistency in terms of a $0-11$ "inter-fragmental" interval span, "inter-fragmental" in the sense that, rather than being "melodic" or fragmental, it is habitually "harmonic" in defining the vertical span between pitches of unmistakable priority among principal "superimposed" (or registrally "fixed") articulative fragments) ;24 2) that this $0-11$ interval span, or ( 0,11 ) partitioning, is persistently octatonic (or octatonically conceived, "hooking up" to Model B) in the sense that, reading down, it very often contains (or is articulated by means of) an "upper" (0235) tetrachordal fragment-again, complete or incomplete -which stands "in a certain ("fixed" or polarized) opposition" to a

[^0]
## MODEL A

|  | i |  | ii | iii |  |  |  |  |  |  | vii | viii | (i) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Collection I: | E |  | f | G |  |  |  |  |  |  | Db | d | (E) |
| Collection II: | F |  | f\# | Ab |  |  | B |  |  |  | D | eb | (F) |
| Collection III: | F\# |  | g | A |  |  |  |  |  |  | Eb | e | (F\#) |
| pitch numbers: | 0 |  | 1 | 3 |  |  |  |  |  |  | 9 | 10 | (1) |
| intervals: |  | 1 | 2 |  |  | 2 |  | 1 |  | 2 |  |  |  |

$0,3,6,9$
$(07)(310)(61)(94)$
$(037 / 047 / 047101)$ etc. on $3,6,9$


Collection II


Collection III


| MODEL B |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | i |  | ii | iii |  | iv |  | v |  | vi | vii |  | viii | (i) |
| Collection I: | E |  | d | C\# |  | b |  | Bb |  | ab | G |  | f | (E) |
| Collection II: | F |  | eb | D |  | c |  | B |  | a | G\# |  | f\# | (F) |
| Collection III: | F\# |  | e | Eb |  | db |  | C |  | bb | A |  | g | (F\#) |
| pitch numbers: | 0 |  | 2 | 3 |  | 5 |  | 6 |  | 8 | 9 |  | 11 | (1) |
| intervals: |  | 2 | 1 | - | 2 |  | 1 |  | 2 |  |  | 2 |  |  |



Collection II


Collection III

"lower" pitch number 11, the "lower" of Model B's $(0,6)$ tritone-related $(0235)(68911)$ tetrachords, (68911), less frequently in evidence: in the Introduction at No. 6 (and subsequent repeats), see the "upper" Bb-G-F (035) incomplete (0 235 ) tetrachord "in opposition" to the "lower" B; in the Danses des adolescentes at No. 13, the "upper" Eb-DbBb (025) incomplete (0235) tetrachord "in opposition" to the "lower" E ; in the Jeux des cités rivales at No. 64, the "upper" G-F-E-D complete (0 235 ) tetrachord "in opposition" to the "lower" G\#; in the Action rituelle des ancêtres at No. 131 (Part II), the "upper" C\#-B-A\#-G\# complete ( 0235 ) tetrachord "in opposition" to the "lower" D; and these are only a few of the more conspicuous examples of this "global" $(0-5,11)$ partitioning; 3) that the diatonic side to octatonic-diatonic interaction is most often accounted for in terms of the D-scale or the (023579) hexachord, where, as indicated by Exx. 3-4b,* a shared (0 2435 ) tetrachord serves as the principal articulative between-reference connecting link. So I consider Le Sacre primarily octatonic (inferred singly or with reference to some form of octatonic-diatonic interpenetration: cf. Lists 1 and 2), "globally" approachable with this $(0-5,11)$ partitioning unit in mind, a partitioning (0 235 )-tetrachordal in conception-articulated by means of Model B's $(0,6)$ tritone-related (0235)(68911) tetrachords with a generally greater emphasis placed on the "upper" of the two-but which, owing to the frequently articulated (025) incompleteness of the tetrachords, lends itself to (04710) "dominant seventh" articulation as well. And the "dissonance", "vertical chromaticism", or "primitivism" associated with Le Sacre thus becomes an octatonically conceived "dissonance", "vertical chromaticism", or "primitivism", qualified at points by diatonic penetration often in the form of the D-scale or the 02357 9) hexachordal segment. And while the first of the Three Pieces for String Quartet, Renard, Les Noces, and L'Histoire du Soldat continue to exhibit a preoccupation with (0235) partitioning and the 2 , 1 interval ordering of the scale implicated (Model B), never, in these ensuing works, does this preoccupation manifest itself with such persistence. And so, finally, whatever else Le Sacre may be presumed to represent, it can-in my esti-mation-unquestionably be regarded as the most extensive and varied account of Model B partitioning in the literature, perhaps in any literature.

Of course, space scarcely permits a detailed "block"-by-"block" explanation of these conclusions. But there are a few passages in Part I which bear on our probing of Stravinsky's diatonic writing (or on his

[^1]octatonic-diatonic writing), passages which will naturally also reflect this octatonically conceived ( $0-5,11$ ) "global" determinacy. And in the first of these, the Danses des adolescentes from the No. 13 "block" to Nos. 2830 (see Ex. 6), I have recognized, first of all, the $\mathrm{E} b-\mathrm{Db}-\mathrm{Bb}(025)$ incomplete ( 0235 ) tetrachordal ostinato as the between-reference connecting link; second, the "global"-and octatonically conceived-(0-5, 11) partitioning as "locally" interpreted; and, third, the partitioning inferrable on an entirely "local" or "block" basis. And, naturally, the point here is that the passage very appropriately demonstrates the "reversal" of Le Sacre. For in contrast to the diatonic framework of Petroushka with respect to which, at Nos. 7 and 35, pitch number 11 could be viewed as an occasional referentially octatonic "intrusion", the Danses des adolescentes is primarily octatonic to begin with (as is the preceding Introduction) ; and so the unimpaired diatonic D-scale on Eb reference at Nos. $28-30$ is reached via the gradual elimination of an already persistently present pitch number 11-the E here, referable to Collection III—and its substitution, anticipated already at No. 24, by pitch number 10, the F; reached, as well, by the substitution of the remaining (non-D-scale on $E b$ ) octatonic elements, the A and G by Ab and Gb.

And I might briefly review these circumstances with the idea of shedding some additional light on the descending approach in scale representation and pitch numbering as it so very appropriately applies to Stravinsky's (0 23 5)-tetrachordally oriented music, referentially octatonic or diatonic.

For the question arises here in the Danses des adolescentes: how do we stand with respect to pitch-class and/or (0235) priority? For once ( 0 , 11) partitioning is acknowledged and its pitch numbers are assumed to encompass priority, it should be obvious that, insofar as "local" ("block" and/or sectional) content realization is concerned, should either of these pitch numbers assert priority over the other while conforming to the ( $0-5$, 11) format over a significant period of time, the resultant $(0,3,6,9)$ symmetrically defined partitioning would be different in each case. This "problem" does not really arise in the Introduction, there being insufficient evidence, in my view, for a settlement in favor of either 0 or 11 both with respect to individual "blocks" (the Bb or B at No. 6, for example) and with respect to the section as a whole. And so pitch number 0 is simply the "upper" pitch element in the ( $0-5,11$ ) partitioning or $0-11$ interval span, the successive "blocks" of the Introduction realizing the potential for "equilibrium", "opposition", or "equal weight and independence" with respect to pitch numbers 0 and 11 , priority extending no "further" than varying content realizations of the $(0,11)$ or $(0-5,11)$ partitioning units-or, with respect to the Introduction as a whole, no "further" than the relation asserted by this partitioning. (The same holds

for Le Sacre as a whole, of course: "global" partitioning is assertible in terms of the $(0,11)$ or $(0-5,11)$ relation so that, in the "global" part of the analysis, pitch notation will merely represent varying local ("block", sectional, or inter-sectional) content realizations of this relation.) But at Nos. 13-30 in the Danses, at Nos. 37 and 40 in the triadically oriented Jeu du rapt, and certainly in the first part of the Rondes printanières, there is little doubt that the uppermost pitch, pitch number 0, and, at Nos. 1330, its ( 0235 ) tetrachord, acquire a sectional and even inter-sectional advantage, one that should properly be taken into account. And beginning at No. 13, this pitch number 0 is Eb . For already at No. 16 -and certainly at Nos. 28-30-its priority is assured, becoming less assertive in the Jeu du rapt, but unmistakable again in the first part of the Rondes printanières.

But were we now, in the Danses at No. 13, to recognize $\mathrm{E} b$ as pitch number 0 (and to recognize the extra "weight" of the "upper" $\mathrm{E} b-\mathrm{Db}-\mathrm{Bb}$ incomplete tetrachord), the resultant interval ordering, given the pitch content (Collection III) -and given the customary ascending approach in scale formation and pitch numbering-would be the 1,2 triadic form of Model A. And for the time being this "triadic ordering" is out of the question. ( 0235 ) tetrachordal partitioning predominates until the Jeu $d u$ rapt, and is only obscured by resorting to Model A's ascending 1, 2 interval ordering. So if we are to account for (0235) tetrachordal partitioning via Model B, Collection III, and the gradual ascendancy of Eb and the $\mathrm{E} b-\mathrm{Db}-\mathrm{Bb}$ "upper" incomplete tetrachord in the Danses at Nos. 13-30, the only proper means of representation would be a descending 2,1 scale beginning on $\mathrm{E}_{b}$ at No. 13. And by descending from $\mathrm{E} b$, the symmetrically defined partitioning elements would be $\mathrm{E} b, \mathrm{C}, \mathrm{A}$, and $\mathrm{F} \#$ (as stipulated by both Models A and B for Collection III)-not E, G, $\mathrm{B} b$, and $\mathrm{D} b$ when ascending from $\mathrm{E}-\mathrm{a}$ most appropriate and telling representation by virtue of the following circumstances: 1) the unmistakable assertion of C as a "local" partitioning element in the reference collection (Collection III) by virtue of its consistent exclusion or isolation from the $\mathrm{E} b-\mathrm{D} b-\mathrm{B} b$ incomplete (0235) tetrachordal ostinato at Nos. $12+4,14$, $16-18$, and 22-28, and by virtue of the C-Bb-A-G tetrachord at Nos. 1618 , where C is obviously the "accented" partitioning element (not G), owing, among other things, to the sustained C's in the oboes and bassoons; 2) without tetrachordal support (the $A$ and $F \#$ being relatively inactive at Nos. 13-30), the reduction in intensity (except for the "block" at No. 13 and its successive repeats) of $\mathbf{E}$ as a potent "opposition" element to $\mathrm{E}_{b}$ (the ( 0,11 ) partitioning), or as a potent "opposition" element to the "upper" $E_{b}-\mathrm{D} b-\mathrm{B} b$ incomplete tetrachord (the ( $0-5,11$ ) partitioning), a weakening which coincides with the gradual assimilation of E into a (0 4 7) triad on C at Nos. 14, 16-18, and 23 (scrupulously (470) "first
inversion", however, with E metrically accented to sustain, however minimally, the ( 0,11 ) articulation), a "low-key" accompaniment assimilation here, but prophetic in terms of the $\mathrm{Eb}, \mathrm{C}(04710)$ "dominant seventh" partitioning ultimately reached in the Jeu du rapt at No. 37; 3) the mostly (Model A) triadically octatonic Jeu du rapt at Nos. 37 and 3943 will refer to Collection III (excepting one "block" at $40+6$ ), where the symmetrically defined partitioning elements via Model $A$ are, of course, $\mathrm{E} b, \mathrm{C}, \mathrm{A}$, and $\mathrm{F} \#$, so that a descending 2, 1 scale beginning at No. 13 would allow the content connection between ( 02335 ) tetrachordal partitioning in the Danses and (04710) triadic partitioning in the Jeu $d u$ rapt to be defined with respect to the reference collection (Collection III) and the "accented" partitioning elements. Hence, beginning at No. 13, reconstruction (modeling) should exhibit a descending numbering and 2, 1 scale formation for purposes of identifying an Eb pitch-class priority and ( 02335 ) tetrachordal partitioning accountable to Collection III.

And, needless to say, those passages or sections indifferent to these temporary Danses and Jeu du rapt expressions of priority (e.g., No. 6 in the Introduction) are not in the least misrepresented when we extend, for purposes of uniformity, this descending $(0-5,11)$ "global" determination to the whole of Le Sacre. ${ }^{25}$ (In other words, the determination may at certain points reflect priority on the part of pitch number 0 , but, more

[^2]often than not, merely a "globally" persistent ( $0-5,11$ ) registral distribution or vertical interval span, with respect to which priority extends no "further" than varying "local" content realizations of the relation asserted by this grouping.)

Accordingly, in the Jeu du rapt at No. 37 (see Ex. 7), we note, first, the return to Collection III and "local" ( 0,3 ) partitioning in terms of Eb and C (as inherited from the Danses) ; and, second, that "block" partitioning alters (or reinterprets) the articulative appearance of the ( $0-5,11$ ) "global" unit in terms of a thoroughly ( 04710 ) "dominant seventh" orientation (Model A). Thus-as anticipated by the No. 13 "block"-the "upper" Eb-Db-Bb ( 025 5) incomplete ( 02035$)$ ostinato figure is articulated vertically as part of a (04710) "dominant seventh" on Eb ; and E's earlier Danses affiliation with the ( 047 ) triad on C is fully confirmed, the ( 470 ) articulation now (0 47 (10)) "root position".

Still, while this (04710) re-orientation obscures the (0235) tetrachordally oriented "global" ( $0-5,11$ ) format, note how carefully pre-served-and thus re-affirmed-is the registral distribution or vertical span of the ( $0-5,11$ ) "global" unit at No. 37, how the (47100) "first inversion" articulation of the "upper" (0 4710 ) "dominant seventh" ( Eb / $\mathrm{D} b / \mathrm{B} b / \mathrm{G}$ at No. 37) preserves, in simultaneity, the "upper" $\mathrm{E} b-\mathrm{D} b-\mathrm{Bb}$ (025) incomplete (0235) tetrachord which still stands "in a certain opposition" to the "lower" pitch number 11, the E. ${ }^{26}$ And, indeed, we may apprehend in this preservation a certain logic or rationale behind the persistent incompleteness of the "upper" ( 02355 ) tetrachord. For it is by virtue of its (025) incompleteness that the (0235) tetrachord becomes readily adaptable to both ( 0235 ) tetrachordal and (04710) "dominant seventh" partitioning of the octatonic collection, its pitch numbers, in the process of transformation, merely becoming pitch numbers 0,10 , and 7 (reading up) of a (0 4710 ) "dominant seventh" complex. And this same point seems apropos respecting Stravinsky's "Russian" period generally: ( 025 ) incompleteness renders the ( $\begin{aligned} & 0\end{aligned} 235$ ) tetrachord more flexible with respect to articulative partitioning, so that, in adapting itself to both ( 0235 ) tetrachordal partitioning (Model B) and (0 47 10) "dominant seventh" partitioning (Model A), it may not only define the

[^3]

articulative connecting link in octatonic-diatonic interaction, but the connecting link respecting these differing modes of articulative partitioning of the single octatonic collection as well. (It may also explain, somewhat, the preponderance of-or apparent predilection for-the ( $\left.\begin{array}{llll}0 & 4 & 7 & 10\end{array}\right)$ "dominant seventh" complexes of Model A, at least insofar as the "Russian" era is concerned; and when "extended", conceptually, to include the "lower" (790) incomplete (79100) tetrachord of the ( 023579 ) hexachord, (0 25 ) "incompleteness" may indeed be envisioned, even when inferred on a relatively "foreground" articulative level (as the "basic cell" of Les Noces, for example), as reflecting something fundamentally distinctive about "Russian" thought.) Thus, in "moving" from No. 14 in the Danses to Nos. 37 and $39-43$ in the Jeu du rapt, this (0 235 ) tetrachord in its ( 025 ) incomplete form as $\mathrm{E}_{b}-\mathrm{D} b-\mathrm{Bb}$ is first an ostinato fragment accountable to Collection III; second, a melodic fragment accountable to the D-scale on Eb at Nos. 28-30; and, third, pitch numbers 0 , 10, and 7 (reading up) of a ( 04710 ) complex again accountable to Collection III at No. 37. And, in Ex. 8, I have sketched another "summary" to encompass this sequence of "events", this time from the vantage point of the between-reference connecting link itself (the Eb-Db-Bb incomplete ( 0235 ) tetrachord here) ; and we note in this conceptualization that the ( 0235 ) tetrachord "passes through" the ( $\begin{aligned} & 0 \\ & 2\end{aligned} 5$ ) or (025) (11) incomplete-and "globally" determinate-"stage" before it branches off toward the committed (04710) framework of the Jeu du rapt.

But to return, briefly, to No. 37 (see Ex. 7) : "local" (0, 3) partitioning is extended to $(0,3,6,9)$ partitioning owing to the $F \#$ punctuated in the timpani and the A-G-F \#-E (0235) tetrachord of the interpenetrating (or "superimposed") (A-G-F\#-E) (D-C-B-A) D-scale fragment articulated "above" the compound simultaneity containing the $(0,3)$-related (04710)'s on Eb and C. (Hence, No. 37 is ultimately interpretable in terms of a Collection III-D-scale on A interpenetration, notwithstanding the predominance of the octatonic contribution.) And, at climactic points such as at No. 42, this $(0,3,6,9)$ extension is articulated by (04710)'s at Eb, C, A, and F\#. Furthermore, this climactic ( 04710 ) articulation of ( $0,3,6,9$ ) octatonic partitioning is transposed at No. 44 to within Collection II: F-Eb-D-C-B-A-G\#-F\#. And, as might be expected, the "upper" F-Eb-C (025) incomplete (0235) tetrachord inferrable from the "upper" F/Eb/C/A "dominant seventh" complex at No. 44 serves to connect this ( $0,3,6,9$ ) Collection II partitioning with the No. 37 D-scale fragment which is re-introduced at No. 46 in terms of the (F-Eb-D-C) ( $\mathrm{B} b-\mathrm{Ab}$-G-F) D-scale collection.

Finally, the (F-Eb-D-C-B-A-G\#-F\#)-Collection II ordering of the Jeu


Ex. 8
$d u$ rapt at Nos. 44 and 47 presides again in the Jeux des cités rivales at Nos. $57+2$ and $57+4$ (and at ensuing (near) repeats of these "blocks") where an "upper" (047) triad on F stands "in opposition" to a "lower" $G \#-F \#$ reiteration. And, in the return to $\left(\begin{array}{ll}0 & 2\end{array} 35\right)$ tetrachordal partitioning at No. 64 (see Ex. 9), an "upper" (0 2335 ) complete tetrachord, G-F-E-D, stands not only "in opposition" to a "lower" pitch number 11, the G\#, but "in opposition" to the "lower" of Model B's $(0,6)$ tritonerelated (0235) (68911) tetrachords, C- $\# \mathrm{~A} \#-\mathrm{G} \#$ here, articulated by the trombones and tubas. Still, this Collection I realization of the (0-5, 11) "global" unit at No. 64 is qualified by the interpenetrating (0 235 7 9) diatonic hexachordal segment. And so, No. 64 becomes interpretable in terms of a (G-F-E-D-C $\#-B-A \sharp-G \#)$ octatonic-(G-F-E-D-C-Bb) diatonic interpenetration, with the "upper" (0235) tetrachord, G-F-E-D, serving as the between-reference connecting link. And, in Ex. 10, I have again "summarized" by inserting this G-F-E-D fragment in the ( 0235 ) tetrachordal connecting link "slot" of Ex. 8; and the following "summary" resorts to pitch numbering for a ready "literature" access. Still, the (0-5, 11) "global" unit of Le Sacre is retained in the final "summary" of Ex. 11 in recognition of those instances where, in moving from right to left

(from a diatonic to an octatonic or octatonic-diatonic context), it is most often pitch numbers 6 and/or 11 which "intrude" to signal the intervention of octatonic relations.

Thus, respecting all these varied "summaries", we may note that Ex. 4a demonstrates "the regularities governing octatonic-diatonic interaction" (or interpenetration) in moving from a (023579) or (023579100) diatonic to a ( 023568911 ) octatonic context (or octatonic-diatonic context), where any content realization of this transaction will allow, via the two content-distinguishable (0235) (79(10)0) tetrachords of the (023579) hexachord or D-scale, two possibilities for octatonic penetration coming often by way of a pitch number 6 and/or 11 "intrusion"; and that Ex. 4b examines these same "regularities"-the connection remains the same-but in moving from an octatonic to a diatonic context, so that, of the four content-distinguishable ( 02335 )'s available to any


Ex. 10
given octatonic collection, four possible (023579)'s or D-scales may be implicated. And, finally, the point of Exx. 8, 10, and 11 is the exhibition of these "regularities" from the standpoint of the ( $035 / 025 / 0235$ ) connecting link itself, so that, in moving from left to right or vice versa (from an octatonic to a diatonic passage or vice versa), we need merely "realize" the connecting link in order to "activate" the conceptualization. And so each "summary" demonstrates the same type of linkage in octa-tonic-diatonic interaction from a slightly different angle; and, when "laid against the data", they jointly afford, it seems to me, a fair indication as to what Stravinsky's "Russian" period material is all about. ${ }^{27}$

And the perspective adopted on behalf of the diatonic framework of Petroushka, first tableau, may again seem tempting with Les Noces. For, here again, a (0 23579 ) passage-however uniquely conceived in the form of a Collection II-(F\#-E-D\#-C\#-B-A) interpenetration at Nos. 10, 17, 20, and 67-serves as a mediating "go-between" (or transition) in moving from a diatonic context to a variety of octatonic or octatonicdiatonic settings (see Exx. 13-15) ; and, in lengthy passages at Nos. 62-65 and 75-82 in the second and third tableaux (see Exx. 17 and 18), the (023579) hexachord-or the partitioning manifested on its behalfserves as a referential "home base" with respect to which a "closing of the gap", pivot-like, renders the surroundings fully diatonic with a pitch number 10 -but with the hexachord's partitioning formulae intact (e.g., Nos. 80-82, Ex. 17) -or signals a "leaning" toward octatonic penetration with a pitch number 11 (e.g., Nos. 58 or 62-65, Ex. 18).

But already the first page affords a stunning illustration of these maneuvers: the E-D-B fragment, "open" and uncommitted even with respect to (0 23579 ) identity owing to its ( 025 ) incompleteness, "becomes" octatonic (Collection I) at No. 1 with the "intrusion" of pitch numbers 6 and 11, the E-D-B unit serving, in this "moving" from a diatonic-or "open"-framework to an octatonic arrangement, as the articulative connecting link (see Ex. 12; and the reader may insert E-D-B into the (0 2 $35)$ connecting link "slot" of Ex. 11 for a "summary"). And while pitch number 11, the F, is situated in an "upper" position at No. 1 (and at ensuing (near) repeats of this "block"), and thus articulates the interval of 7 rather than of 5 with pitch number 6 , the Bb , I prefer to retain Model B's descending scale representation and pitch numbering so as not only to correlate pitch number 0 with the "presiding" E-Model A's ascending formulation could apply equally-but, more significantly (or

[^4]

Ex. 12
more determinately), to identify and expose, in the representation and corresponding pitch numbering, E-D-B as the ( 025 ) connecting link in this octatonic-diatonic interaction, as that which is articulatively shared between-or that which is sustained conceptually "above"-the "blocks" of varying referential implications. Still, the experience of Le Sacre prompts us to view the (025) "basic cell" of Les Noces as an incomplete (0235) tetrachord, incomplete in the same (025) fashion as was the persistent "upper" Eb-Db-Bb ostinato of the Danses des adolescentes. For, again, ( 025 ) incompleteness will constitute the associative factor respecting not only octatonic-diatonic interaction, but the differing modes of articulative partitioning represented by Models A and B.

The transition passage in Exx. 13-15 occurs four times throughout the first and third tableaux. And, in the three occurrences furnished by the exemplification, it serves to unite a "presiding" (F\#-E-D\#-C\#-B-A) hexachordal framework with a fully committed octatonic framework at Nos. 11 and 68 (Exx. 13 and 15), and with an octatonic-diatonic framework at No. 21 (Ex. 14). And, in all three examples, it is pitch numbers 7 and 9 —or the "lower" (790) incomplete (79100) tetrachord of the "presiding" (F\#-E-D\#-C\#-B-A) collection, B-A-F\#-which serves as the connecting link to the fully committed (B-A-G\#-F\#) (F-Eb-D-C) Collection II "blocks" at Nos. 11 and 68, and to the Collection II-D-scale on A "block" at No. 21. (The "upper" F\#-E-D\#-C\# (0 2 3 5) tetrachord, as the connecting link, would naturally have implicated Collection III.)

Still, as the successive analyses of this passage indicate, the transition is only partially accounted for in terms of this "presiding" ( $\left.\begin{array}{l}0 \\ 2\end{array} 3 \begin{array}{lll}5 & 7 & 9\end{array}\right)$ hexachord. For while the (F\#-E-D\#-C\#-B-A) collection "presides" on top (or is "central" to the activity especially when, at Nos. 10 and 67, the preceding tenor fragment is included), the entire framework contains (or is articulated by means of) three "superimposed" ( 023579 )'s (see Ex.


Ex. 13


Ex. 14
16). And each of these "superimposed" ( $\left.\begin{array}{llllll}0 & 2 & 3 & 5 & 7 & 9\end{array}\right)$ 's is represented vertically (or triadically) by its (02) -related (047) triads, each of these pairs of (047) 's naturally exhausting the ( $\left.\begin{array}{lllll}0 & 2 & 3 & 5 & 7\end{array}\right)$ collection to which it is accountable. Moreover, respecting the linear perspective, Collection III seems favored in any potential octatonic interaction owing to the F\#-E-D\#-C\# and A-G-F\#-E "upper" (0 235 )'s of the (F\#-E-D\#-C\#-$\mathrm{B}-\mathrm{A})$ and (A-G-F\#-E-D-C) hexachordal collections. But Collection I is also implicated in the transition, by the G-F succession-or the G-F-D unit-and the (047) triad on G of the (D-C-B-A-G-F) hexachord; and,


Ex. 15


Ex. 16
subsequently at No. 18 (not shown), the transition does proceed to a Collection I passage.

So the question arises: why Collection II at Nos. 11, 21, and 68? How does it acquire the advantage in this "moving" to an octatonic framework? And the answer, of course, is that it is the triadic articulation of these three superimposed ( 023579 )'s, the succession of six ( $\left.\begin{array}{l}704\end{array}\right)$ "second inversion" (047)'s "rooted on" D, C, B, A, G, and F (note the "upper" D-C-B-A tetrachord of this (023579), accountable to Collection II) which tips the balance in favor of Collection II, to an extent that the transition becomes interpretable in terms of a Collection II-(F\#-E-D\#-C\#-B-A) interpenetration, with the seeds of the succeeding Collection II settings thus firmly imbedded in the transition itself. In other words, three of the six ( 047 ) 's are accountable to Collection II; and the ( 047 ) succession is flanked by $(047)$ 's on D and F, both of these accountable to Collection II. Moreover, that Stravinsky was conscious of this transitional commitment seems evident in the (near) repeat at No. 21: a (04710) "dominant seventh" complex on Ab is outlined in Piano IV to complete the "background" $(0,3,6,9)$ symmetrical partitioning of Collection II in terms of a (047/04710) articulation at B, D, F, and Ab. So in Exx. 13, 14, and 15, I would interpret the transition in terms of a Collection II-(F\#-E-D\#-C\#-B-A) interpenetration, noting that the be-tween-reference connecting link is discernible not only in terms of the B-A-F\# (790) incomplete (79100) tetrachord, but in terms of the (047) triad on B.

But the octatonic setting at Nos. 68-70 merits further consideration. For while the instrumental contribution at Nos. 68-70 is accountable to Collection II (explicit reference, List No. 1: the G\#-F-B-D ostinato of Piano IV articulates the $(0,3,6,9)$ symmetrically defined partitioning elements of Collection II, these elements constituting the "roots" of the (04710) complexes introduced by Pianos I and III), the vocal contribution is represented by a succession of (025)'s at $\mathrm{E}, \mathrm{C} \#, \mathrm{~B} b$, and G . And while pitch numbers 2 and 5 of these $\left(\begin{array}{l}0 \\ 2\end{array} 5\right)$ 's are accountable to Collection II (and are, indeed, metrically accented-especially pitch number 2-in this 2-2-5-5-2-2-5-2-0-2-2-5 rendition of the (0 25 ) "basic cell", a rendition introduced in the first tableau at Nos. 9 and 16 within
a diatonic framework), pitch number 0 , as $\mathrm{E}, \mathrm{C} \#, \mathrm{Bb}$, and G , lies outside Collection II. In fact, the vocal ( $0,3,6,9$ ) defined succession of (025)'s is, in its entirety, accountable to Collection I. And so the Collection II passage at Nos. 68-70 moves very smoothly into a Collection I passage at Nos. 70-72 (not shown), where Piano IV's G\#-F-B-D ostinato may continue as the shared "diminished seventh" chord of Collections II and I (although the elements of this G\#-F-B-D "diminished seventh" ostinato pattern do not represent, for Collection I, the "background" ( $0,3,6,9$ ) symmetrically defined partitioning elements they do for Collection II, the "roots" of the (0 $37 / 047 / 04710$ ) complexes of Model A or the "accented" tones of the ( 0235 ) complexes of Model B). And so, too, Nos. 68-70 are ultimately interpretable in terms of a Collection II-Collection I interpenetration (despite Collection II's "advantage"), an interpenetration which proceeds to the fully committed Collection I passage at Nos. 70-72 via Collection I's contribution, its succession of (025)'s at E, C\#, $\mathrm{B} b$, and $G$. And we might note, in passing, how impressively Nos. 68-70 demonstrate the ( $0,3,6,9$ ) octatonically conceived conditions of balance, "equilibrium", "opposition", and deadlock alluded to earlier. And the poised equilibrium exhibited by the varying rhythmic periods (e.g., the ostinato's regular period versus the irregular ( 04710 ) "dominant seventh" interruptions) is exquisite here, a triumph of the octatonic imagination. Indeed, there are few passages in the literature that can match the invention here, the subtle play of symmetrical confinement, of locked confrontation and deadlock.

Finally, Exx. 17 and 18 condense two passages from the second and third tableaux where the (A-G-F\#-E-D-C) hexachordal collection may be inferred as "central" to the activity, activity with respect to which a pivoting 7 th pitch element may render the surroundings either fully diatonic or signal the intervention of octatonic relations as pitch number 11. Thus, at Nos. 78-80, I infer the (A-G-F\#-E-D-C) hexachord despite the presence of-in my estimation-a "peripheral" pitch number 10, the B. (Note, in this connection, the "circle-of-fifths" articulation of the pairs of (02)'s which encircle the (A-G-F\#-E-D-C) collection: C-G-D-A.) And Collection II's (0 4710 ) complexes, introduced earlier at Nos. 68-70, "intrude", so that Nos. 78-80 become interpretable in terms of a Collection II-(A-G-F\#-E-D-C) interpenetration where, again, the "lower" (7 90 ) incomplete ( 79100 ) tetrachord of the ( 023579 ) hexachordal collection, D-C-A here, serves, along with the shared (047) on D, as the between-reference connecting link. And, at No. 80, the reiterating (A-G-F\#-E-D-C) fragment is articulated by way of (047) triads on D and C, with B-in my estimation-still "peripheral". And, at Nos. 82-87, the "peripheral" B, pitch number 10, "becomes" Bb, pitch number 11 , and the diatonic (A-G-F\#-E-D-C) framework of Nos. 78-82 gives way to a


Ex. 17


Ex. 18
fully committed octatonic (Collection III) framework (explicit reference, List No. 1), with A and the "upper" A-G-E ( 025 ) -or the "upper" A-G-F\#-E complete ( 0235 ) -serving as between-reference connecting links. And, while Berger, in his analysis of this Collection III material at Nos. 82-87, cites E's presence as supportive of A as the pitch class of priority (over a contending $\mathrm{E} b / \mathrm{D} \#$, a priority perhaps already established in the preceding "blocks"), his recourse to an ascending scale representation and pitch numbering from A again misses the mark. ${ }^{28}$ For it is not E's-irrelevant or anachronistically conceived, in my estimation-"support" of A which is of special significance here, but the preserved A-G-E (025) "basic cell" (or the preserved complete A-G-F\#-E (0235) tetrachord) which $\mathbf{E}$ defines with the A and G, this A-G-E (025) "basic cell" -or (025) connecting link from the preceding (A-G-F\#-E-D-C) diatonic framework-standing, octatonically now, "in a certain ( $(0,6)$ defined "fixed" or polarized) opposition" to the $\mathrm{E} b-\mathrm{D} b-\mathrm{Bb}$ unit. Hence, the "intrusion" of pitch number $11, \mathrm{Bb}$, relates articulatively in this (025)

[^5]"basic cell" conception to the $\mathrm{E} b-\mathrm{D} b-\mathrm{B} b$ unit (see brackets in Ex. 17), and the framework is fundamentally (0235) tetrachordal (Model B). And these are the relations which seem to me of consequence (or most deserving of analytical attention) at Nos. 82-87.

But the entire passage at Nos. 78-87 (Ex. 17) exemplifies, in a most telling fashion, the "summary" of Ex. 4a: the ( $\begin{array}{lllll}0 & 2 & 3 & 5 & 7\end{array}$ 9) hexachord or D-scale, via their two content-distinguishable (0 235 ) ( 79 (10) 0) tetrachords, may implicate two of the three content-distinguishable octatonic collections. And here, A-G-F $\#-E$ and D-C-A of the (A-G-F\#-E-D-C) hexachord implicate Collections III and II. And, as an additional "summary", we may insert these (0 235 ) or (79(10) 0) connecting links in the connecting link "slot" of Ex. 11, noting, of course, that Nos. 78-87 constitute a reading from right to left where the (A-G-F\#-E-D-C) diatonic framework moves toward-or is "intruded upon" by-octatonic relations. Noting, too, that the between-reference ( $037 / 047$ 7)'s would have to be included in this "insertion" so that, at No. 82, the connecting link "slot" would include, as that which is articulatively shared between Collection III and the (A-G-F\#-E-D-C) hexachord, not only the A-G-F\#-E (0235) unit but the (047) triad on $C$ and the (037) on $A$ as well.

And the reader should find the (A-G-F\#-E-Eb-Db-C-Bb) Collection III-(A-G-F\#-E-D-C) hexachordal interpenetration at No. 59 (Ex. 18) reminiscent of the "blocks" at Nos. 7 and 11 in Petroushka, first tableau. For, apropos No. 11 in Petroushka, the (A-G-F\#-E-D-C) hexachord is implicated by a fragment outlining a (047) on D and a (0 37 ) on A ; and, as at No. 7, this (047/037) articulation-or the (047) on Dstands "in a certain ("fixed" or polarized) opposition" to the "lower" referentially octatonic (Collection III) pitch number 11, the Bb . And while we may note the inclusion of pitch number 10 , the $B$, in an accompanying tremolo, this inclusion in no way undermines (A-G-F\#-E-D-C) hexachordal integrity at No. 58. For the principal fragment's (0 $37 / 04$ 7) articulation of the (A-G-F\#-E-D-C) hexachord remains "central" to the activity at No. 58, with respect to which pitch number 10, the B, assumes a "peripheral" role; and the simultaneous appearance of both pitch numbers 10 and 11, the "diatonic B " and the "octatonic $\mathrm{B} b$ ", underscores the previously noted "flexibility reserved for 7th pitch-class identity" in ( 023579 ) hexachordal contexts, the "closing of the ( 023579 ) gap" with pitch number 10 or 11. (And note that the (04710) complex on Eb in the simultaneity just prior to No. 59 enhances Collection III's contribution to the octatonic-diatonic interpenetration.)

Finally, at No. 59 (not shown), a Collection III (C-A-C\#/Bb/A ostinato is introduced in Piano IV which persists in the lengthy passage at Nos. 62-65 (and concludes the second tableau), interpenetrating with the
(A-G-F\#-E-D-C) hexachord which is implicated by both the vocal contribution and by the material in Pianos I, II, and III (primarily an alternation between ( $04 \begin{array}{l}4\end{array}$ )'s on D and C , and an outlining of the ( $\left.\begin{array}{lll}0 & 3 & 7\end{array}\right)$ triad on A). And, in the lengthy vocal contribution at Nos. 62-65, there occurs not a single transgression of the (0 23579 ) hexachord; not even a "peripheral" pitch number 10 , the B , may here be inferred.

## III

Now the question of pitch-class priority in many of these D-scale, (023579) hexachordal or (02356911) octatonic-diatonic contexts of the "Russian" period strikes me as problematic. For, obviously, (0 23 579 ) or ( 023568911 ) confinement precludes tonally functional relations, many of the familiar harmonic progressions and cadential formulae associated with tonality and the C-scale becoming unavailable. And while the (0 3 7/0 4 7/0 4710 ) triadic complexes are naturally a part of tonality and the C-scale (vis-à-vis "vocabulary"), their confinement to these references subjects them to behavior of a different sort, to a self-enclosed, repetitive, oscillating, circular, or symmetrical kind of construction which engenders the conditions of balance, "equilibrium", "opposition", "harmonic stasis", and deadlock of which we have spoken, conditions which relate to those "deeply rooted" techniques of repetition, juxtaposition, and superimposition where "block" juxtaposition is defined as an abrupt shifting in the collectional reference (or in the partitioning thereof). And so priority (or centricity) becomes a matter of stress or metric accentuation, occasionally of octave reinforcement or "fifth" support, but perhaps most significantly of survival, a matter of the persistence of a given pitch class or grouping from one "block" or section to the next, a persistence we have been interpreting in terms of shared or betweenreference (or between-"block") connecting links.

Of course, in addition to the articulative partitioning cited in connection with ( 023579 ) hexachordal reference (Ex. 2a), we have singled out the pairs of (02)'s which encircle this diatonic segment as exercising a critical role in the assertion of pitch-class priority. And, apropos the (02) reiterations of Petroushka, Le Sacre, Renard, and Les Noces, or the (02)(79) articulative contour of the opening G-F-C-Bb fragment of Renard (Ex. 19), ${ }^{29}$ we may note, as before, that the relation expressed

[^6]by these encircling (02) (79) units of ten acquires articulative cohesiveness and integrity. (In other words, (02) or (79) proximity, defined by the scalar ordering, is not merely "conceptual".) And, this presented


Ex. 19
(02) (79) articulation naturally relates to the fundamental 2,1 interval ordering of the octatonic scale (Model B, (0235) partitioning) of the "Russian" category, an ordering appropriately expressed in the form of a descending 2,1 scale representation. But the question as to which of these four encircling pitch elements "presides" varies from one ( $\begin{array}{llll}0 & 2 & 3 & 5\end{array}$ 9) context to the next. Thus, from within the diatonic G-scale on B framework of The Firebird Finale at Nos. 11-14 and 17, we may infer a "foundational" (F\#-E-D\#-C\#-B-A) hexachordal collection owing to a "harmonization" of the borrowed folk melody in terms of a "foundational" alternation of (047) triads on $B$ and $A$, with respect to which $B$, as pitch

[^7]number 9, evidently assumes priority. ${ }^{30}$ Thus, in Petroushka at Nos. $0-2(-2)$, we may infer the (E-D-C\#-B-A-G) hexachord where, in contrast, the $D$, as pitch number 2, seems the most likely pitch class for priority status. And thus, too, in Renard at Nos. 0-9 (see Ex. 19), we may infer, from within a predominating D -scale on G framework, an opening (G-F-E-D-C-Bb) hexachordal "foundation", where G, as pitch number 0, acquires a degree of pitch-class centricity. Consequently, quite apart from the ambiguity respecting pitch-class priority in many (023579) contexts, there is this variance vis-à-vis those ( 023579 ) contexts where a sense of pitch-class priority does seem to arise.

And, while the encircling (02) (79) units may acquire articulative cohesiveness as the ( 023579 ) hexachord stands engaged, I suspect that it is ultimately to the (07) (72) (29) "circle-of-fifths"-or circle-of-(07)'s -conception of these units (see Ex. 2b), and to the (07)-defined overlapping of (023579)'s (see Exx. 2 and 21), that we must turn in order further to probe this ambiguity or variance. Moreover, all these factors respecting ( 023579 ) hexachordal reference-the partitioning formulae, the question of fragmental enclosure, the encircling (02)(79) units and their role in the expression (or confounding non-expression) of pitchclass priority-take on, it seems to me, a special urgency as we approach, finally, those interminable ostinatos of The Soldier's March and the Music to Scene I (and their successive (near) repeats) in L'Histoire du Soldat. And, pursuant to the "circle-of-fifths" conception, we might briefly entertain, via Wilfrid Mellers, the tonal approach to the ostinato of The Soldier's March, an approach which, as we have indicated, Boulez evi-

[^8]dently shares with Mellers in confronting Stravinsky's music, but one which has at any rate been advanced in countless publications: ${ }^{31}$

Here, there is an unceasing ostinato in the bass consisting of the note G followed by D and E sounded together, a ninth apart. This seems to suggest the key of G. But the fragmentary tootling tune, nearly always out of step with the ostinato, is unambiguously in D. . . This suggests that the $\mathrm{D}-\mathrm{E}$ in the ostinato is really the tonic and dominant of D major elided together and that the G of the ostinato represents the subdominant. Traditional harmony revolves between the poles of tonic, dominant and subdominant. In telescoping two or even all three of these chords Stravinsky places in space, as it were, chords that would normally progress into one another. Instead of a resolved argument, we have a tension clinched, suspended in time.

For even were we, in the absence of anything remotely resembling tonally functional behavior, to shun the specter of "keys", "chords", and a subdominant-tonic-dominant relation (to shun, especially, that reference to the opening "tootling tune" being "unambiguously in D", the concept of "D-major" not only wholly inapplicable here-C-scale on D would do -but, even if applicable, hardly "unambiguously" without cadential clarification, the "tootling tune" outlining-and coming to rest on-a (047) triad or (07) on A), and to replace this specter with the "circle of fifths" defined by the encircling (02) (79) units of the (023579) hexachord, these (07)'s or "fifths" constituting an adequate "explanation" for the "harmonic stasis" or "tension clinched"), the point Mellers raises seems well taken: a fundamental ambiguity does manifest itself with respect to pitch-class priority, in the opening March at least until No. 5 where the ostinato pattern is temporarily discarded and there arises, for the first time, a sense of pitch-class priority inferrable on behalf of the $D$, this priority implicating, given the pitch content, the C-scale on D. Moreover, as Mellers notes, the "elision", merging, or "coming together" of elements interpretable in terms of a subdominant-tonic-dominant relation-all of which we re-interpret in terms of the "elision", merging, or "coming together" of the four encircling pitch elements of the ( 023579 ) hexa-chord-does constitute a kind of "superimposition", with respect to which we might invoke the same kind of descriptive terminology invoked on behalf of Stravinsky's octatonic settings: balance, "equilibrium", "opposi-

[^9]tion", "equal weight and independence", "harmonic stasis", deadlock, etc.
But questions linger as to the enunciation of this "coming together", the partitioning formulae which engender these conditions. And, in answer to these, I find it insightful (and reassuring) to interpret the ostinatos of Histoire in terms of the (02) ( 79 ) units of the ( 023579 ) hexachord, a reference that will not only enable us to "situate" these phe-nomena-and the core of the "superimposed" material-within the wider "literature" framework we have been following, but to account, far more incisively than can the tonal approach, for peculiarity in the articulation. For it seems to me unquestionable that these ostinatos have as their origin Stravinsky's (0 23579 ) contexts, that their invention stems from Stravinsky's "Russian" preoccupation with ( 0235779 ) hexachordal construction. ${ }^{32}$

Thus, as in Petroushka at Nos. $0-2(-2)$ and $2+3$, I infer, straight away, the (E-D-C\#-B-A-G) hexachord (see Ex. 20). And Petroushka's D-E (20) reiteration respecting this (023579) hexachordal reference is here "sounded together" as E/D in the ostinato. And this E/D (0/2) "sounding together" alternates with a G, pitch number 9 . And pitch number 7's participation in this hexachordal (0 2) (79) encirclement is furnished by the "tootling tune"'s outlining of a (047) triad on A and its "coming to rest" on a E-A (07) "fifth" at No. 3, at which point the bassoon reiterates A over the continuing G-E/D (9-0/2) ostinato. Thus, from within the fully accredited diatonic framework, I infer the (E-D-C\#-B-A-G) hexachordal segment-or the partitioning manifested on its behalf-as "central" to the activity; and, from within this hexachordal segment, I infer $\mathrm{E}, \mathrm{D}, \mathrm{G}$, and A as pitch elements of priority, these elements constituting the encircling (02) (79) units of the (E-D-C\#-B-A-G) hexachord, an encirclement with an articulation nearly identical to that provided by the D-E and A-G (2-0 and 7-9) reiterations of Petroushka. And there is also exhibited, in the E/D "sounding together", a degree of articulative cohesiveness on the part of the (02) unit in this (02)(79) encirclement or partitioning.

Then, at No. $2+3$, the second March fragment in the clarinet, by outlining ( 047 )'s on $A$ and $B$, implicates the ( $F \#-E-D \#-C \#-B-A$ ) hexa-

[^10]

Ex. 20
chordal collection, so that, apropos the (07)-defined overlapping of (023579)'s outlined in Ex. 2 on behalf of Petroushka, we might, in Ex. 21, outline another format for Nos. 0-5 in Histoire, noting, however, that the "lower" (E-D-C\#-B-A-G) hexachord "presides" with respect to which the ( 023579 )'s of the clarinet appear as "extensions". For, at Nos. 4 and 7 (not shown), the clarinet fragment is transposed by the interval of 7 from A to $E$, so that, pursuant to a more "global" perspective, (07)-defined (0 23579 ) overlapping would have to be extended further "upward" to include the (C\#-B-A\#-G\#-F\#-E) hexachord as well.


Ex. 21

Still, while the marching tunes of The Soldier's March and Scene I are fragmentary (left "open") and repetitive in the same sense as are the "tunes" of Le Sacre, Renard, and Les Noces, they are, as Mellers notes, "related to clichés common to European art music". And it may be indicative of this reference that, in place of the D-scale so often implicated by Stravinsky's (0 235 ) fragments, the referential ordering of the fully accredited diatonic framework at No. 5 (not shown) appears to be that of the C -scale, the C-scale on D, D assuming a degree of pitch-class priority. For the G-E/D ostinato is replaced at No. 5 by a reiterating "low" D, while G's participation seems diminished; and the accentuation of $F \sharp$ in the bassoon fragment-this $\mathrm{F} \#$ merely a "peripheral" pitch number 10 respecting the earlier "tootling tune"'s outlining of a (047) triad on A-appears to expose a predominating (047) triad on D at least through No. 7. Moreover, apropos the "circle-of-fifths" conception of (02) (79) encirclement (Ex. 2b), we can envision the A-D (72) "fifth" as centric (without necessarily invoking Mellers's specter of a subdominant-tonic-dominant relation). But note the qualification that must accompany the "C-scale on D" ruling at No. 5: 1) the (E-D-C\#-B-A-G) hexachordal outline in the bass over the reiterating "low" D; 2) the sustained "upper" $E$ in the clarinet and in the violin jeté interruptions which continue to outline or accentuate E's (0 2) affiliation with D; 3) the (047) triad on A "superimpositions" outlined by the clarinet and violin jeté interruptions; 4) the D-G (29) "fifths" in the violin accompaniment to the "chromatic" transformation of the "tootling tune" at No. 10. And so ambiguity respecting (single) pitch-class priority persists. And we may wonder whether we are not ultimately better off accepting and defining it in terms of this (02) (79) encirclement of the ( 023579 ) hexachord-or the "circle-offifths" conception of this encirclement; resigning ourselves, in other words, to an inability to establish a referential ordering for the "fully accredited diatonic framework".

And, just prior to Scene I, the final simultaneity of the March, A/E/ G/C reading down, constitutes a transposition, by the interval of 7, of the corresponding simultaneity at No. 1, E/B/D/G (see Ex. 22) ; and this (07) transposition signals a transposition of the March's "presiding" (E-


Ex. 22


Ex. 22 (cont.)

D-C\#-B-A-G) hexachordal collection "down" to the next (07)-defined overlapping ( 023579 ), (A-G-F\#-E-D-C). Accordingly, the (0 2) unit of the March's ostinato, the E/D "sounding together", becomes an A-G reiteration in Scene I's ostinato; and pitch number 9, the G in the March, is replaced by a pitch number 7, the D respecting this new (A-G-F\#-E-D-C) hexachordal reference. But while the (A-G-F\#-E-D-C) hexachord "presides" at first, Scene I is ultimately more flexible respecting (023579) hexachordal reference. And I attribute this flexibility-or greater ( 0234579 ) maneuverability-to Scene I's ostinato. For in Scene I's ostinato it is pitch number 7 which alternates with pitch numbers 0 and 2 (vis-à-vis the (A-G-F\#-E-D-C) collection), not pitch number 9 which alternates with pitch numbers 0 and 2 (vis-à-vis the (E-D-C\#-B-A-G) collection of the March). And these encircling pitch numbers 0, 2, and 7 of Scene I's ((A-G-F\#-E-D-C) hexachordal) ostinato represent the encircling pitch numbers 7, 9, and 2 of the "presiding" (E-D-C\#-B-A-G) hexachord of the March. Consequently, Scene I's ostinato is really "open" or uncommitted respecting (02)(79) encirclement of these two (07)defined overlapping ( 023579 ) hexachordal collections, (E-D-C\#-B-

A-G) and (A-G-F\#-E-D-C). ${ }^{33}$ Moreover, this encircling (0 2) (7 9) "neutrality" of Scene I's ostinato allows for a ready alternation between (A-G-F\#-E-D-C) contexts-such as that noted just before No. 3, where C replaces $\mathrm{C} \#$, where (047) triads are outlined on D and C , and where B, as pitch number 10, is either missing or "peripheral"-and (E-D-C\#-B-A-G) contexts-such as that noted at No. $5+1$ where $C$ becomes C $\#$, where a ( 047 ) triad on A "merges" with the ostinato's D-G (2 9) "fifth", and where F\#, as pitch number 10, is either missing or "peripheral". And this (A-G-F\#-E-D-C)-(E-D-C\#-B-A-G) alternation engenders an incessant (0 3/0 4) "major-minor" play respecting $\mathrm{C} / \mathrm{CH}$, a "play" similar to that noted at No. 11 in Petroushka (see Exx. 1 and 2), and a "play" which can therefore similarly be attributed to (or can again best be heard and interpreted as a manifestation of) (07) -defined (0 2357 9) adjacency or overlapping.

But further. The bassoon's F-G reiteration at No. 9, anticipated in the violin at Nos. 6-9, implicates an extension of (07)-defined (023579) overlapping further "downward" to include the (D-C-B-A-G-F) hexachordal collection (F-G constituting the (79) unit of this (D-C-B-A-GF) hexachord), an extension which prompts additional (0 3/04) "majorminor" play vis-à-vis F\#/F. Thus, as in Exx. 2 and 22, we may again "compress" (0 23579 ) strategy by sketching the "spread" of engaged (07) -defined (0 23579 ) overlapping. And I need scarcely reiterate how very handily this "compression" (or conceptualization) reflects the circumstances surveyed: the "neutrality" of the ostinato pattern respecting (02) (79) encirclement of the (E-D-C\#-B-A-G) and (A-G-F\#-E-D-C) hexachordal collections; the various (E-D-C\#-B-A-G) and (A-G-F\#-E-D-C) contexts to which this "neutrality" lends itself; and the C/C\# "major-minor" play which this (07)-defined (0 23579 ) alternation generates. Finally, note how the "spread" of (07)-defined (023579) overlapping extends "upward" in the March via the clarinet fragment's (023579)'s, but "downward" in Scene I from the "presiding" (E-D$\mathrm{C} \#-\mathrm{B}-\mathrm{A}-\mathrm{G})$ hexachord of the March. And, needless to say, it is, as always, the presented cohesiveness-the presented articulation and accentuation of the (02) and (79) overlapping defined by these "spreads" of (07)defined (023579)'s (notwithstanding the "circle-of-fifths" conception), and the presented articulation of (0235) (790) and (037/047) partitioning manifested on behalf of the single (023579) collections-

[^11]that merits, as the most accommodating analytic-theoretical approach, the (023579) perspective indicated.

Finally, the tranquil sigh of the dejected soldier in Scene II-surely one of Stravinsky's most poignant utterances-condenses the most pressing (023579) relations of the preceding sections. For that lengthy, drawnout $A b-G b$ (or $G \#-F \#)(02)$ reiteration in the bassoon, articulated "below" an Ab-Gb-F-Eb ( 023 5) tetrachordal fragment in the clarinet at Nos. $1-1+6$ and $6-6+6$, constitutes nothing but a continuation of the (02) reiterations of the preceding ostinatos; and a continuation, more determinately, of the G/A-E/G-G/A (2/0-5/2-2/0) articulation of the A-G-E (025) fragment in the violin at Nos. 3-5 in Scene I (see brackets in Ex. 22) in terms now of a $G b / A b-E_{b} / G b-G b / A b$ articulation of the Ab-Gb-Eb (025) fragment (see brackets in Ex. 23).


But Scene II's "sigh"-never to be repeated, a circumstance which invests it with special significance-opens with a (B-A-G\#-F\#-) (F-C) Collection II octatonic-(B-A-G\#-F\#-E-D) hexachordal interpenetration, where the $\mathrm{B}-\mathrm{A}(02)$ reiteration articulated jointly by the clarinet's triplet figure and the violin's sustained B (or the $\mathrm{B}-\mathrm{A}-\mathrm{G} \#-\mathrm{F} \#(0235)$ fragment articulated by the clarinet and bassoon) is the between-reference connecting link. And the octatonic contribution to this interpenetration is once again conspicuously marked by the "intrusion" of a pitch number 11, Collection II's C in the violin's simultaneity; by the "intrusion" of Collection II's (and Model B's) 0-11 interval span, the B/C of the violin's simultaneity; and by the "intrusion" of Collection II's pitch number 6, the F in the bassoon. (How familiar are these circumstances now; with what consistency can we account for "chromaticism" in these works in terms of the persistent "intrusion" of specific referentially octatonic pitch elements and intervals; and how remarkably consistent does Stravinsky now appear to have been in his "moving", during the "Russian" era, from one piece to the next.)

Then, in the third measure, the bassoon's $\mathrm{F} \#-\mathrm{C} \#-\mathrm{G} \#$ fragment and violin's $B$ delineate the encircling pitch numbers $0,2,7$, and 9 of the ( $\mathrm{Ab}-\mathrm{Gb}$ -$\mathrm{F}-\mathrm{E} b-\mathrm{D} b-\mathrm{Cb}(\mathrm{B}))$ hexachordal collection, the $\mathrm{B}-\mathrm{A}(02)$ reiteration of the opening measure thus being replaced by an $A b-G b$ (or $G \#-F \#$ ) (0 2) reiteration. And, following this replacement, the clarinet and bassoon lapse into that lengthy $A b-G b(02)$ reiteration or $A b-G b-F-E b(0235)$ tetrachordal articulation noted above. Then, with the "intrusion" of a D at No. $1+6$, pitch number 6 respecting the ( $\mathrm{A} b-\mathrm{Gb}-\mathrm{F}-\mathrm{E} b$ ) ( 023 5) tetrachord, the clarinet descends by way of a D-C-B-A succession-by way of Collection II's $(0,6)$ tritone-related ( 68911 ) tetrachord-and returns in this manner to the B-A (02) reiteration of the opening triplet "sigh" and the inferred octatonic-diatonic interpenetration. In Ex. 24, I have merely indicated that the trumpet and clarinet at Nos. 3-5 (-2) articulate the $\mathrm{A} b-\mathrm{G} b-\mathrm{E} b(790)$ and the $\mathrm{E} b-\mathrm{D} b-\mathrm{C}-\mathrm{Bb}(0235)$ partitioning units of the ( $\mathrm{E} b-\mathrm{D} b-\mathrm{C}-\mathrm{B} b-\mathrm{A} b-\mathrm{G} b)$ hexachordal collection, and that this articulation is "superimposed" over violin simultaneities which delineate the previously noted D-C-B-A tetrachord. Thus, with the $A b-G b-E b$ (790) unit of the ( $\mathrm{E} b-\mathrm{D} b-\mathrm{C}-\mathrm{B} b-\mathrm{A} b-\mathrm{G} b$ ) hexachord as the articulative between-reference connecting link, Collection II may be inferred at Nos. $3-5$ in terms of an (Ab-Gb-(F)-Eb) (D-C-B-A) articulation, Model B's $(0,6)$ tritone-related (0235) (68911) tetrachords.

And-as a final "finally"-I have wanted to draw the reader's attention to a "neo-Classical" passage (see Ex. 25). For while it is my judgment that the articulative "habits" examined here on behalf of the D-scale, the (023579) hexachord, and the ( 023568911 ) octatonic scale are characteristically "Russian"-that, indeed, Stravinsky's "neo-Classicism"


Ex. 24


Ex. 25
entailed a re-structuring (or "re-hearing") of the octatonic scale in terms of its 1, 2 interval ordering, Model A, a re-structuring implicated by (0 $37 / 047$ ) triadic and ( 0134 ) tetrachordal partitioning which coincided with an interpenetrating preoccupation with C-scale conventions and inflections (see Lists 1 and 2) -the ( $\begin{aligned} & 0 \\ & 2\end{aligned} 3579$ ) hexachord-its (02) (79), (0235) (790) and (037/047) partitioning formulaemay still illuminate from time to time. Thus, were we to recognize $G$ as the pitch class of priority at Nos. 78-80 in Les Noces (and to disregard, momentarily, the "presiding" A and "harmonization" of the reiterating fragment in terms of an alternation of (047) triads on C and D at No. 80, articulative circumstances which, far more readily than those infer-
rable at No. 22 in the final movement of the Symphony of Psalms, identify (023579) hexachordal reference), the correspondence between this passage and No. 22 (or No. 26) from the final movement of the Symphony of Psalms becomes striking. And even were we, apropos Psalms, to interpret the "circle of fifths" defined by the encircling (02)(79) units of the ( 023579 ) hexachord (the C-G-D-A articulation vis-à-vis the (A-G-F\#-E-D-C) hexachord in Les Noces; the Ab-Eb-Bb-F articulation vis à vis the (F-Eb-D-C-Bb-Ab) hexachord in Psalms) as a subdominant-tonic-dominant relation with the $\mathrm{E} b-\mathrm{Bb}$ (27) "fourth" (or the Bb - Eb (7 2) "fifth") centric respecting this interpretation or a possible C-scale on $\mathrm{E} b$ or even " $\mathrm{E} b$-major" determination, this interpretation in no way qualifies the resemblance. For pitch organization remains fundamentally the same in these passages: a reiterating fragment-with pitch number 2 assuming a degree of pitch-class priority as the point of departure-is repeated over an ostinato "circle-of-fifths" articulation of the encircling (02) (79) units of the (023579) hexachord. (Note the opening G/C (29) "fifth" of Les Noces which corresponds to the opening Eb/Ab (29) "fifth" of Psalms, although Ab, pitch number 9, is not part of Psalms' ostinato pattern but is merely sustained throughout.) And, upon each successive (near) repeat, the "point of departure", the G in Les Noces and the Eb in Psalms, takes on a slightly altered "harmonic complexion" as a result of the variance in rhythmic periods defined by the reiterating fragment and the "circle-of-fifths" ostinato, a variance which allows for a different (07), (72), or (29) "sounding together" on each occasion, but a variance (or alteration in "harmonic complexion") which is "local" within the larger self-enclosed, repetitive, circular, or deadlocked "circle-of-fifths" framework, a framework with respect to which each of the "circle-of-fifths" pitch elements stands "in a certain ("fixed" or polarized) opposition" and assumes a degree of "equal weight and independence." 34

So we come to the end of a lengthy discourse: an approximation of one observer's hearing and understanding of consistency, identity, or distinctiveness apropos Stravinsky's diatonic writing. But I do not believeas the title of this essay may suggest, but as its analytic-theoretical perspective most assuredly contradicts-that pitch organization can be dealt with by treating the octatonic and diatonic "blocks" independent of each other, however much abrupt "block" juxtaposition may seem to tempt

[^12]such an approach. (This approach would have to forsake those many instances where the octatonic and diatonic pitch collections interpenetrate; and it is just such instances which provide the most valuable clues as to how Stravinsky's octatonic perspective influences his diatonic perspective and vice versa.) The distinction with respect to reference exists, of course, as I believe it did for Stravinsky. Only, there is exhibited in so many of the "Russian" and "neo-Classical" works, by "block" juxtaposition or interpenetration, such a persistent and thorough going octatonicdiatonic interplay, that a satisfying and useful understanding of Stravinsky's diatonic writing would seem to hinge on a corresponding (mutually arrived at) understanding of his "octatonicism".


[^0]:    * The first part of this paper appeared in Vol. 14, No. 1, 1975, pp. 104-38.
    ${ }^{24}$ Thus, unlike Petroushka, pitch number 11 respecting the (0 23 5) ( 689 11) tetrachordal numbering (reading down) is with us, octatonically (Model B), from the very beginning, and inferrable on a more or less "global" or "continuously operative" basis. And my reasons for citing the $0-11$ interval span-or ( 0,11 ) partitioning-as "globally" more "basic" or "fundamental" than, say, the (0 6) tritone relation defined by pitch numbers 5 and 11 in the ( $0-5,11$ ) format, are owing primarily to the metric accentuation invariably accorded this $0-11$ span or $(0,11)$ partitioning unit, an accentuation which, apart from its persistence, renders the span or unit highly conspicuous from one "block" or section to the next.

[^1]:    * See Vol. 14, No. 1 for Exx. 1-5 and List No. 1.

[^2]:    25 Note that the symmetry which underlies ( 02335 ) partitioning of the octatonic scale (Model B) and the D-scale extends to the ( $\begin{array}{lll}0 & 2 & 3\end{array} 5$ ) tetrachord itself, making the "switch" from the customary ascending approach to a descending approach in scale representation and pitch numbering (a "reading up" to a "reading down" situation) far less burdensome or problematic than might at first be expected. And while a certain awkwardness may be felt in adhering to a descending formula with Model B's ( 022355$)$ partitioning and an ascending formula when referring to Model A's (0 $37 / 047 / 04710$ ) complexes (where the scale may still descend, however), the greater illumination the descending formula affords in exposing $\left(\begin{array}{l}0\end{array} 235\right)$ partitioning and the essential connecting link relations vis-à-vis octatonicdiatonic interaction in Stravinsky's "Russian" period material outweights-obviously, in my judgment-any awkwardness incurred by the discrepancy. And note, further, that by resorting to a descending formula with Model B's (0 235 ) partitioning, the "accented" symmetrically defined partitioning elements, pitch numbers $0,3,6$, and 9, are identical in Models A and B for each of the three content-distinguishable octatonic collections (e.g., the Eb, C, A, and F $\#$ partitioning elements for Collection III) ; and this identity-or "link" between Model A and Model B partitioning-is critical not only in the Danses and Jeu du rapt sections of Le Sacre, but in much of Stravinsky's "Russian" material. And, yes, as Models A and B and the various "summaries" in the exemplification of these pages indicate, I do tend to associate Model B's ( 02335 ) partitioning with a more "melodic", linear, fragmental, or contrapuntal attitude (or framework), and Model A's (0 7/047/04710) triadic complexes with a more "harmonic" or vertical perspective (at least insofar as the "Russian" period is concerned).

[^3]:    ${ }^{26}$ At Nos. 38 and $40+6$ (not shown in Ex. 7), the (0, 3)-related (0 47 10) complexes on Eb and C are transposed "down" to within Collection II: (04710)'s on B and $\mathrm{A} b$, implicating a (B-A-G\#-F\#-F-E $b-\mathrm{D}-\mathrm{C}$ ) octatonic ordering. And the "global" $0-11$ interval span in terms of B-C is punctuated in the timpani, horn, and bass clarinet, one of the few instances where this "globally" determinate "interfragmental" $0-11$ interval span becomes fragmental or linear. Another instance is the opening "block" of the Jeux des cités rivales, where the tuba and timpani again punctuate, fragmentally, the B-C (Collection II) 0-11 interval span.

[^4]:    ${ }^{27}$ The phrase, "laid against the data", occurs in Benjamin Boretz's "Musical Syntax (II)", pnm, Vol. 10, No. 1, p. 236.

[^5]:    28 Arthur Berger, "Problems of Pitch Organization in Stravinsky", PNM, Vol. 2, No. 1, p. 18.

[^6]:    ${ }^{29}$ Apart from this (0279) articulative contour, note the G-F (0 2) reiteration in Renard's ostinato (respecting either the (G-F-E-D-C-Bb) hexachord or the Dscale on G), and the referentially octatonic (Collection I) pitch number 11, the Ab. For these relations do prompt a fully octatonic (G-F-E-D-C\#-B-Bb-Ab) setting

[^7]:    at Nos. 24-26 (explicit reference, List No. 1), with the seeds of this Collection I context thus embedded in the opening passage at Nos. $0-9$ via pitch number 11or via Collection I's (and Model B's) 0-11 interval span, G-Ab. Still, the ostinato's Ab could be heard and interpreted as a "downward" extension of (07) defined (023579) overlapping, the (F-Eb-D-C-Bb-Ab) hexachord inferrable merely as the next ( 023579 ) "in line" following the (C-Bb-A-G-F-Eb) hexachord implicated by the imitation of the opening G-F-C-Bb (0279) fragment, C-Bb-F-E $b$ in the bass. But a more immediate "octatonic connection" materializes earlier: the A-G-E succession of the clarinet fragment as Nos. 0-9 "becomes" octatonic in the English horn at No. $9+1$ owing to the $\mathrm{F} \#$ and the $\mathrm{E} b-\mathrm{D} b-\mathrm{C}-\mathrm{B} b\left(\begin{array}{lll}0 & 2 & 3\end{array}\right)$ tetrachord articulated by the bassoon: (A-G-F\#-E-Eb-Db-C-Bb), Collection III.

[^8]:    ${ }^{30}$ Obviously, ( 02 ) -related ( 047 ) triads- ( 047 ) 's alternating a "whole-tone" apart-figure persistently as an articulative partitioning formula in Stravinsky's (023579) hexachordal contexts. And, in addition to the exemplification afforded by The Firebird Finale, Petroushka, Les Noces, and Histoire, see "Tilimbom" from Trois histoires pour enfants (1915-1917), where (0 4 7)'s alternating on D and C and a D-C-A (790) vocal fragment at mm. 1-5-with a "missing" pitch number 10, the B-implicate the (A-G-F\#-E-D-C) collection. And this (A-G-F\#-E-D-C) reference is "superimposed" over the next "downward" (07)-defined overlapping (023579), the (D-C-B-A-G-F) hexachord, implicated by the vocal part at m. 5 and by the G-C-G/F (7-2-7/9) ostinato in the bass, a (07)-defined (023579) overlapping which prompts ( $03 / 04$ ) "major-minor third" play respecting $\mathrm{F} / \mathrm{F} \#$, a "play" identical to that already noted in Petroushka at No. 11. And see, also, the first of the Four Russian Peasant Songs ("Saucers"), 1917. For while Stravinsky's 1954 addition of fanfare-like flourishes (with four horns) implicates the D-scale on D, the song outlines an alternation of (047)'s on G and F, this alternation implicating the (D-C-B-A-G-F) hexachord, this (D-C-B-A-G-F) hexachord naturally inferrable from within the fully accredited diatonic D-scale framework.

[^9]:    31 Wilfrid Mellers, Romanticism and the 20th Century (New Jersey: Essential Books, 1957), p. 202. Or, see Henry Boys, "Stravinsky: The Musical Materials", The Score (January 1951), p. 15; Roman Vlad, Stravinsky (London: Oxford University Press, 1960), p. 51; or, G. W. Hopkins, "Stravinsky's Chords", Tempo (Spring 1966), p. 6.

[^10]:    32 Indeed, prior to Histoire, pitch elements of the encircling (0 2) and (7 9) units of the ( 023579 ) hexachord are on several occasions conceived as ostinatos. Thus, in addition to the ( $7-2-7 / 9$ ) ostinato of "Tilimbom"-and apart from the (0 2) or (79) reiterations in Petroushka, Le Sacre, Renard, and Les Noces which, I suppose, are interpretable as ostinatos-see Stravinsky's Berceuse of 1917, published in Expositions and Developments (London: Faber \& Faber, 1962). And for further comment, see Eric Walter White, Stravinsky (Berkeley and Los Angeles: University of California Press, 1966), p. 225.

[^11]:    ${ }^{33}$ In other words, pitch number 9 , along with pitch numbers 0 and 2 , identifies or "fixes" a given ( 023579 ) hexachord, as E, D, and G as pitch numbers 0,2 , and 9, do for the (E-D-C\#-B-A-G) hexachord of the March. And thus, had Stravinsky opted for a literal transposition of the March's ostinato, C as pitch number 9 , along with $A$ and $G$ as pitch numbers 0 and 2 , would immediately have identified or "fixed" the (A-G-F\#-E-D-C) hexachord in Scene I.

[^12]:    ${ }^{34}$ Another "neo-Classical" undertaking favorably approached in terms of (0 23 579 ) hexachordal reference is the opening Pas-de-Quatre of Agon. Read through the first nine measures with the ( 07 )-defined overlapping ( 023579 )'s, (D-G-B-A-G-F) and (A-G-F\#-E-D-C), in mind. And note the articulation, the singling out for special emphasis, of pitch numbers $0,2,7$, and 9 , the $D, G, G$, and $F$ of the opening (D-C-B-A-G-F) hexachord, in the simultaneities at mm. 7 and 19 and in the concluding simultaneity of the Pas-de-Quatre.

