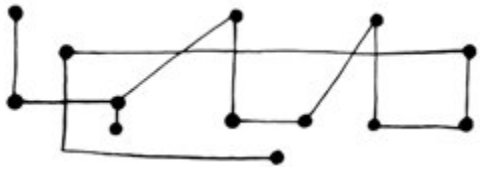
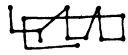


SOME CHARACTERISTICS OF STRAVINSKY'S DIATONIC MUSIC

PIETER C. VAN DEN TOORN



Stravinsky's music has seemed stubbornly to resist binding theoretical legislation. That this may be considered curious is owing to the conviction—voiced by those familiar with the literature—that there *is* a consistency, an identity, or distinctiveness here that certainly *ought* to lend itself to such legislation. Curious, too, because the attention accorded this music over the past fifty years has been staggering: the elusive (if at times highly suggestive) imprint of tonally functional relations has been circumvented in appeals to a "basic cell" rationale whereby "coherence" is attributed to the unfolding of some intervallically conceived cohesiveness; "neo-Classical" ventures have been juxtaposed with models drafted from Baroque and Classical C-scale literature in an effort to track down the contamination, the departure from traditional (tonal) form, or the "impurities" or "wrong notes" with which Stravinsky has been cited. Roy Travis, apropos the first pages of the Introduction to *Le Sacre,* has suggested that, by substituting "tonic sonority" for "tonic triad", we might find techniques analogous to those of tonal practice (as interpreted by Heinrich Schenker); and Allen Forte has subjected the whole of *Petroushka* (with its sizable "chunks" of diatonic material) to a Schenker-type analysis.[1] But I think it questionable whether the analytical methods in even the most revealing of these and similar endeavors can be considered all that appropriate with respect to the bulk of Stravinsky's work (or with respect to any concern for consistency, identity, or distinctiveness), whether, respecting the last of these, the

[1] Roy Travis, "Towards a New Concept of Tonality?", *Journal of Music Theory* (November, 1959); Allen Forte, *Contemporary Tone Structures* (New York: Columbia University Press, 1955); or, for an example of the model approach, see Edward Cone's "The Uses of Convention: Stravinsky and his Models", *Stravinsky,* ed. Paul Henry Lang (New York: W. W. Norton, 1963).

transfer of terms and concepts intimately associated with tonal practice to a music which is at least problematic in this respect does not confuse rather than illuminate, jeopardizing at the same time any binding, "particularizing" understanding this analytic-theoretical reckoning might have afforded the literature for which it was intended. Moreover, apart from the philosophical or psychological understanding to which some have addressed themselves, existing attempts to bind in semi-technical terms have had the most frightful of results, a dialogue so misleading, so full of contradiction as to stupefy, frighten, or otherwise offend the most conscientious of readers. And we might cite the general confusion which permeates the pages of Paul Collaer's discussion as exemplary in this respect.[2] For here, as in other such documents, a bewildering succession of descriptive terms and explanatory notions, invariably left un- or under-defined, deprives the undertaking of all meaning and consequence: Stravinsky's music, everywhere and at once, is made to represent or encompass every conceivable technique. And the descriptive terms and explanatory notions associated with this literature may now seem symptomatic of confusion rather than of any understanding or coming to terms: "pantonality" and "pandiatonicism" appear, in the presence of "diatonicism", merely to suggest the absence of tonally functional relations; and "poly-" or "bi-tonality"—horrors of the musical imagination—have widely (and mercifully) been dismissed as too fantastic (unreal) or too illogical to warrant serious consideration.[3]

So we might take heed of these discomforting signs. It may be that this literature, with its multiplicity of "styles", its diverse and seemingly conflicting orientations ("Russian", "neo-Classical", "serial", the—in Arthur Berger's words—"congenital" one toward traditional harmony), its (unfortunate?) sandwiched position between the pillars of tonality and twelve-tone ordering procedures (pillars which, admittedly, might not eventually prove as pillar-like as they now seem), is quite incapable of yielding (or succumbing to) a truly useful set of binding theoretical propositions. Moreover, as long as this literature continues to attract the kind of interest and attention it has in the past, the likelihood of such a design seems, ironically, all the more improbable. In our quest for a theoretical framework and an accompanying analytical approach (or approaches) which will satisfy our binding instincts—substantiate our sense of a distinctive presence—and prove effective in dealing with the specificity of individual

[2] *A History of Modern Music,* trans. Sally Abeles (Cleveland: World, 1961).

[3] See, for example, Allen Forte, *op. cit.,* p. 137; or, Benjamin Boretz, "Meta-Variations, Part IV: Analytic Fallout (I)", PERSPECTIVES OF NEW MUSIC, Vol. 11, No. 1, p. 149.

works or groups of works, we may have to contend not with consistency, identity, or distinctiveness, but with consistencies, identities, and distinctivenesses, several preoccupations which may or may not correspond to the familiar orientation categories or "stylistic trends", each of these suggesting theoretical formulations with (perhaps slightly) different approaches in analytical method.

Which brings us to Arthur Berger's classic discussion of "Pitch Organization in Stravinsky" [4] where "binding theoretical legislation"—a "self-contained theory" as he puts it—is wisely forsaken (or left to some future date) in favor of a method of classification which deals with what appear to be usefully definable consistencies, identities, or distinctivenesses: 1) diatonic writing (music accountable to the diatonic pitch collection) where pitch-class priority may assert itself by means other than tonally functional, so that, in addition to the familiar C-scale or "major scale", this assertion may implicate alternative interval orderings with respect to the collection (e.g., E-scale or D-scale), this latter terminology introduced by Berger for purposes of circumventing tonal and modal implications where they are clearly irrelevant; 2) octatonic writing (music accountable to the octatonic pitch collection) based on a kind of "background" (0, 3, 6, 9) symmetrical partitioning of the 1, 2, 1, 2, 1, 2, 1, (2) interval ordering of the scale; 3) octatonic-diatonic *interaction* which, in Berger's words, "produces a curious alchemy which brings tonal functionality in its wake", circumstances demonstrated by his analysis of the *Symphony of Psalms,* first movement, where octatonic "blocks" are juxtaposed with diatonic "blocks" referable to the E-scale on E, through which G, as a symmetrically-defined octatonic partitioning element, steadily asserts itself to provide, via the "half-cadence" which concludes the first movement, the grounds for "the tonal bias that obviously governed its [the *Symphony's*] conception." And while it is the first of these ("diatonic writing") which is of concern here, I shall want briefly to discuss implications regarding the latter two classes, "octatonic writing" and "octatonic-diatonic interaction". For it is the persistence of "octatonic writing" in this literature—or the partitioning that may handily be inferred on its behalf—that seems most to justify the kind of classification Berger indicates. Moreover, the very "characteristics" here to be examined apropos "diatonic writing" can best be understood as they interact with referentially octatonic material. So, following these preliminary remarks on octatonic construction, we can, in Part II, begin to explore the regularities governing this interaction which, in Part III, should provide an adequate foundation for a discussion of *Histoire* where the octatonic collection figures only slightly.

[4] "Problems of Pitch Organization in Stravinsky", PERSPECTIVES OF NEW MUSIC, Vol. 2, No. 1, pp. 11–42.

I

Now surely no one—not even the most rabid of accountability buffs (among whom I include myself)—would want to infer *everywhere,* or claim that the octatonic collection is active referentially in even the majority of Stravinsky's works (although, were we to limit these to the lengthiest or "most significant"—the ones we care most about, say, twenty or twenty-five—such a claim would by no means be inconceivable: see Lists 1 and 2, pp. 108ff.). Beyond contention, however, is the fact that, beginning with *The Firebird* Introduction (wholly octatonic, excepting a few measures) and extending through works like *Petroushka* (1911), *Le Sacre* (1913), *Les Noces* (1917), *Symphonies of Wind Instruments* (1920), the *Symphony of Psalms* (1930), *Babel* (1944), and the *Symphony in Three Movements* (1945) where the heaviest concentration is to be found, numerous "blocks", passages, and sections of material lie scattered throughout this literature where confinement is *explicit* (of substantial duration, relatively unimpaired by outside "interference", and with the collection complete or nearly so: List No. 1). And, while slight changes or adjustments may be detected and correlated with the "Russian", "neo-Classical", and (early) "serial" categories, Stravinsky appears in general to have been remarkably consistent in his partitioning habits. Berger alludes to the various (0 3 7/0 4 7/0 4 7 10/0 4 7 10 1) triadic and (0 1 3 4) tetrachordal articulative complexes which, implicating the 1, 2 interval ordering of the scale, are available, in symmetrical formation, at pitch numbers 0, 3, 6, and 9, a partitioning perspective which he credits "for the uniqueness of the relations Stravinsky employed". But while a preference respecting this perspective seems unmistakable when the literature is viewed as a whole (a preference possibly symptomatic of the lengthy "neo-Classical" period, the (0 3 7/0 4 7) triads of this 1, 2 interval ordering obviously constituting a more lucrative foundation for accommodation in this "neo-Classical" respect than the (0 2 3 5) tetrachords of the reverse 2, 1 ordering), there is sufficient evidence, particularly in material of the "Russian" variety, to suggest the opposite: the (reverse) 2, 1, 2, 1, 2, 1, 2, (1) interval ordering of the scale, implicated, for the most part, by the (0 2 3 5) articulative complex with interval order 2, 1, 2, this (0 2 3 5) articulation available, in symmetrical formation, at pitch numbers 0, 3, 6, and 9 with respect to this (reverse) 2, 1 ordering. So respecting these alternative interval orderings (and the partitioning that may be inferred or referred to them), I have sketched two comprehensive models, Models A and B, the partitioning formats inferrable from (or applicable to) the "blocks", passages and sections of Lists 1 *and* 2. And, having proceeded this far, I might briefly entertain certain conditions regarding the structure of the scale and the partitioning outlined in these models.

LIST NO. 1

2) *The Firebird* (1910)	Introduction: *excepting* mm. 10–12, 16–18.
3) *Petroushka* (1911)	Second *tableau*: Nos. 48–52. Third *tableau*: Nos. 77–81. (1911 version.)
4) *Le Sacre du Printemps* (1913)	Part I: Introduction, Nos. 6 (and near repeats), 8; *Danses des adolescentes,* Nos. 16–18, 22–24; *Jeu du rapt,* Nos. 38–40, 40 + 6–43, 44. Part II: *Action Rituelle des Ancêtres,* Nos. 131–135, 138.
5) *The Nightingale* (1914)	Act III: No. 108.
7) *Renard* (1915)	Nos. 9 + 1–11, 20–26, 41 + 1–43, 53–56.
8) *Les Noces* (1917)	First *tableau*: Nos. 1 (and near repeats), 11. Second *tableau*: *Nos.* 35–40. Third *tableau*: Nos. 68–72, 82–87.
10) *Symphonies of Wind Instruments* (1920)	Nos. 0–6 (and near repeats at Nos. 9, 26, 37 and 39). (1947 version.)
12) *Symphony of Psalms* (1930)	First Movement: Nos. 0–2, 3–6, 7–9.
14) *Babel* (1944)	Nos. 0, 16–24.
15) *Scènes de Ballet* (1944)	Nos. 0–2.
16) *Symphony in Three Movements* (1945)	First Movement: Nos. 5–16, 22–38, 88–96. Second Movement: Nos. 125 + 1–130, 131. Third Movement: Nos. 152–154, 156–157 + 1, 161–164, 191–194.
17) *Concerto in D* (1946)	Nos. 0–5.

LIST NO. 2

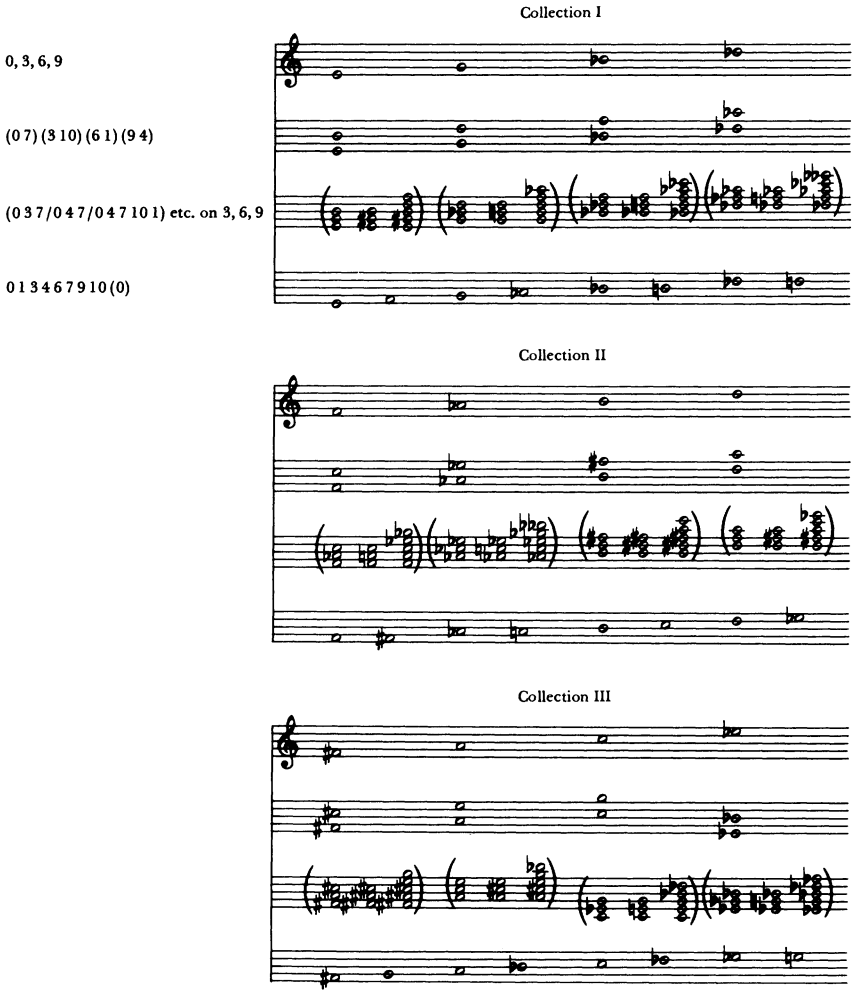
1) *Fireworks* (1908)	Nos. 0–9, 16–21.
2) *The Firebird* (1910)	Introduction; Kastchei section: Nos. 9–11.
3) *Petroushka* (1911)	Second *tableau*: Nos. 48–52, 59–62. Third *tableau*: Nos. 77–81. Fourth *tableau*: No. 125–finish. (1911 version.)
4) *Le Sacre du Printemps* (1913)	Part I: *excepting Danses des adolescentes* at Nos. 28–30, and *Rondes printanières* at Nos. 48–57. Part II: *Glorification de l'elue,* Nos. 104–121; *Evocation des ancêtres,* Nos. 121–129; *Action rituelle des ancêtres,* Nos. 129–142.
5) *The Nightingale* (1914)	Act III: Nos. 108–112.
6) *Three Pieces for String Quartet* (1914)	No. 1.
7) *Renard* (1915)	Nos. 9–11, 20–26, 41–56.
8) *Les Noces* (1917)	First *tableau*: *excepting* Nos. 9, 12–13. Second *tableau*: Nos. 29, 31–40, 53–62. Third *tableau*: Nos. 67–72, 78–80, 82–87. Fourth *tableau*: Nos. 87–106.
9) *L'Histoire du Soldat* (1918)	Music to Scene II. The Devil's Dance.
11) *Octet* (1923)	*Tema con variazioni*: Nos. 24–56.
12) *Symphony of Psalms* (1930)	First Movement. Third Movement: Nos. 1–6, 8, 15–20, 29.
13) *Concerto in E♭* "Dumbarton Oaks" (1938)	Third Movement: Nos. 52–58.
14) *Babel* (1944)	Nos. 0–8, 16–30.

LIST NO. 2 (*cont.*)

15) *Scènes de Ballet* (1944)	Nos. 0–5.
16) *Symphony in Three Movements* (1945)	First Movement: Nos. 0–38, 58–69, 88–97, 105–112. Second Movement: Nos. 112–118, 125–140. Third Movement: Nos. 142–164, 191–195.
17) *Concerto in D* (1946)	Nos. 0–5.
18) *Orpheus* (1947)	Nos. 4–47.
19) *Canticum Sacrum* (1955)	Section I: mm. 10–17 (and near repeats). Section II. Section V: mm. 307–312 (and near repeats).
20) *Agon* (1957)	*Prelude*: mm. 122–145. *Interlude*: mm. 254–277 (and near repeat at mm. 387–410). *Bransle Simple*: mm. 278–309. *Bransle Gay*: mm. 310–335. *Bransle Double*: mm. 336–386. *Pas-de Deux*: mm. 411–462.
21) *Threni* (1958)	Mm. 1–7; mm. 35–44 (and near repeats); mm. 204–17.

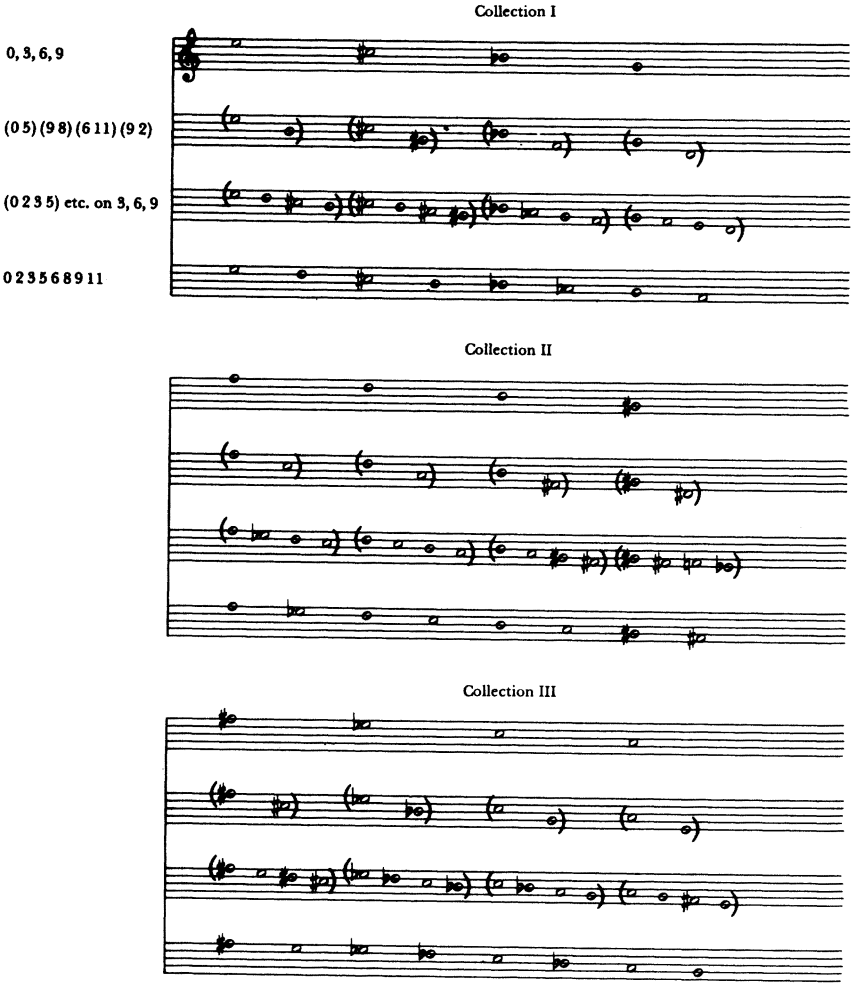
MODEL A

	i	ii	iii	iv	v	vi	vii	viii	(i)
Collection I:	E	f	G	a♭	B♭	b	D♭	d	(E)
Collection II:	F	f♯	A♭	a	B	c	D	e♭	(F)
Collection III:	F♯	g	A	b♭	C	d♭	E♭	e	(F♯)
pitch numbers:	0	1	3	4	6	7	9	10	(1)
intervals:		1	2	1	2	1	2	1	(2)



MODEL B

	i	ii	iii	iv	v	vi	vii	viii	(i)
Collection I:	E	d	C♯	b	B♭	a♭	G	f	(E)
Collection II:	F	e♭	D	c	B	a	G♯	f♯	(F)
Collection III:	F♯	e	E♭	d♭	C	b♭	A	g	(F♯)
pitch numbers:	0	2	3	5	6	8	9	11	(1)
intervals:		2	1	2	1	2	1	2	(1)



1) The octatonic scale may be defined as any collection of eight distinct pitch classes which, when confined to the octave and thus arranged in scale formation, will exhibit the interval ordering of alternating whole and half steps.

2) When holding a particular passage accountable to the collection, the collection may be designed to incorporate essential data regarding pitch and/or construct priority. And with this in mind, it will be useful always to distinguish between the *referential collection,* the total pitch-class content inferrable from the passage in question, and the *referential ordering of intervals* the collection will assume on the basis of the pitch class to which priority is assigned. (The pitch class of priority, pitch number 0, will also determine, in semitonal count, the numbering of the remaining seven pitch classes.)

3) Given the symmetrical nature of such a collection of alternating whole and half steps, *it follows that there are but three collections distinct with respect to total pitch-class content;* or, to put it another way, the collection is limited to three transpositions.[5] Thus, were we to continue transposing beyond the initial transposition from E to F and F♯ in Model A, these further "transpositions", beginning at pitch number 3, would merely duplicate the initial statements with respect to pitch content and interval ordering.

4) In addition, *it follows that such an arrangement of alternating whole and half steps yields but two possible interval orderings,* the one with its second scale degree at an interval of a semitone from the first, the other with its second scale degree at an interval of a whole tone: 1, 2, 1, 2, 1, 2, 1, (2) as in Model A; 2, 1, 2, 1, 2, 1, 2(1) as in Model B.

And it is at this point that the critical distinction arises. For it is on the basis of these competing interval orderings—or, more readily, on the basis of differences in the partitioning of the collection which are referable to (or may, in turn, be inferred from) these orderings—that Models A and B have been constructed to comprehensively represent two distinct kinds of construction or partitioning that emerge from an examination of the literature. And for those acquainted with some of the passages listed, these models may already be of service in that known passages and relations may be "hooked up" perhaps in a "structural-level" manner similar to that pursued in this inquiry. But for the uninitiated—and perhaps for the "already acquainted" as well—it seems advisable to proceed with these

[5] Hence Olivier Messiaen's classification of the scale among the various "modes of limited transposition": *Technique de mon langage musical* (Paris: Leduc, 1944).

further observations and instructions in mind, all of which pertain to the structure of the scale and the partitioning outlined in Models A and B, and all naturally pertinent in various ways to the analytical endeavors to be undertaken.

So with respect to the symmetrical discipline in the interval orderings of the scale exhibited by Models A and B:[6]

1) The alternating whole and half steps divide the octatonic octave into four numerically equal partitions at pitch numbers 0, 3, 6, and 9. Pitch number 6, the fifth scale degree and at the interval of a tritone from 0, is an axis around which the two halves of the octave are symmetrical; and at pitch numbers 3 and 9 there is another axis around which two quarters of the octave (halves of the tritone) are analogously symmetrical.

2) But the interval ordering initiated at 0, 3, 6, and 9 in Model A is 1, 2, while that in Model B is 2, 1. Hence it is this variance in the interval ordering which permits, beyond the more "background" (0, 3, 6, 9) partitioning common to both models, the critical distinction between Models A and B to become readily apparent at the "foreground" surface-articulative level: (*0 3 7/0 4 7*) *triadic partitioning of the scale at 0, 3, 6, and 9 in Model A and* (*0 2 3 5*) *tetrachordal partitioning of the scale at 0, 3, 6, and 9 in Model B.* In Model A, pitch numbers 0, 3, 6, and 9 are bequeathed not only the interval of 7 (the "supporting fifth"), but are "roots" of (0 3 7/0 4 7) "major" and "minor" triads as well as of (0 4 7 10) "dominant seventh" and (0 4 7 10 1) "dominant minor ninth" chords, the entire succession of pitch classes, with much overlapping, still referable to any given collection. So the assertion of Model A on behalf of any particular passage will naturally reflect a preoccupation with (0 3 7/0 4 7) triadic partitioning. (Traditional terminology is here invoked in a supplementary manner for purposes of identification, there being no intent to implicate tonally functional relations.) On the other hand, pitch numbers 0, 3, 6, and 9 in Model B are bequeathed the interval of 5 and the (0 2 3 5) tetrachord with interval order 2, 1, 2, so that the assertion of Model B on behalf of any particular passage will in turn reflect a preoccupation with (0 2 3 5) tetrachordal partitioning at the articulative level.

[6] See Berger, *op. cit.*, p. 21. In addition to quoting directly from Berger in these preliminary remarks, I am also paraphrasing liberally, seeing, on the one hand, no reason to alter what has already been presented in a thoroughly efficient manner, but, on the other, an occasional need to revise in accordance with the findings of this inquiry. And it should be noted in this connection that Berger, in contrast to these findings, finds little use for the 2, 1 interval ordering of the scale and (0 2 3 5) tetrachordal partitioning (Model B).

And, with respect to pitch-class and/or construct priority in Models A and B:

> ... Within any given octatonic collection ... the first element of any of the partitions of the octave at 0, 3, 6, and 9 has the potentiality of being the pitch class of priority in an identical ordering referable to the same given octatonic collection ... That is to say, not only is each of the partitions a "transposition" of the other, in a sense, but the interval ordering of the total collection defined in relation to the first element of each partition is also identical; hence, each of the four possible orderings is also a different "transposition" of the octatonic scale. (Strictly speaking, this is really "rotation", since the collection has only three transpositions ...) Therefore, in the interval ordering of the scale there are, loosely speaking, four potential "tone centers" of equal weight and independence ...[7]

What this means is that, given the symmetrical four-part partitioning and the reproduction in content and interval ordering of the scale when "transposing" from pitch number 0 to 3, 6, and 9 ("rotation"), there exists an identity, or, with respect to tritone partitioning, a numerical equality between the elements of this partitioning, so that in order for one pitch class and/or construct to assert priority over the others it must eliminate this identity, equality, or potential for "equal weight and independence". And such elimination—the assertion of pitch class and/or construct priority—will occur by means of contextual articulation, tonally functional relations (dominant and subdominant relations) being unavailable to these octatonic partitioning elements, "potential priorities" or "accented tones": persistence, octave reinforcement, metric accentuation, influence of surrounding material, etc.[8]

And already it may be possible to envision here a condition peculiar to Stravinsky's octatonic contexts, one wherein two or more of these symmetrically defined partitioning elements or "potential priorities", generally with (0 3 7/0 4 7) or (0 2 3 5) articulative "support", assert themselves to a degree that relations assume a deadlocked character, and particularly in cases where emphasis is placed on the (0, 6) tritone partitioning of the scale, that these relations impose themselves all the more forcefully in the form of an inert, self-contained, tension-clinched *complexe sonore* within which no selection of pitch-class priority seems legitimate, and, indeed, the search for one somewhat beside the point. Berger, in a brief analysis of the

[7] Berger, *ibid.*

[8] This will not mean, however, that in juxtaposition or interpenetration with non-octatonic material (or even in passages where octatonic reference is unimpaired), tonally functional relations, even if judged parenthetical, will not somehow impose themselves. See Berger's discussion of the *Symphony of Psalms* (*op. cit.*, p. 32).

"Petroushka chord" at Nos. 49 and 51 of the score (1911 version), invoked Stravinsky's use of "polarity" in describing the nature of these contexts, a term which, to Berger, seemed to reflect an awareness on the composer's part:

> ... of the special properties of the tritone which make it possible for pitches at 0 and 6 ... by virtue of similitude or equal and thus independent weight, to remain in equilibrium or—to the end that a tone center is asserted by neither—to stand in a certain opposition. This speculation might easily take flight in a direction which would establish, as a necessary condition of "polarity", the denial of priority to a single pitch class precisely for the purpose of not deflecting from the priority of the whole *complexe sonore*.[9]

So given the scale's inherent ability to foster (symmetrically defined) multiple priorities—and, naturally, the tendency for Stravinsky's material to reflect this ability—attempts to determine single pitch-class and/or construct priorities in contexts referable to the scale will entail certain hazards. And even when a pitch class or construct does assert priority, it will be the sense of deadlock that is immediately striking and deserving of analytical attention. And so, with the symmetrical nature of the scale in mind, we might feel inclined to attach special significance to (0, 3, 6, 9) "background" partitioning when examining a particular passage, or to consider a recognition of the pitches or constructs which delineate a two, three, or four-part partitioning of the scale with respect to (0, 3, 6, 9) symmetrically-defined partitioning far more critical than any designation as to which of these might ultimately qualify as pitch number 0 (i.e., as the most likely candidate for pitch-class priority status according to the criteria noted above: persistence, octave reinforcement, metric accentuation, etc.).

Moreover, respecting Models A and B, it should be noted in this connection that the partitioning elements or "potential priorities" in these displays (e.g., E, G, B♭, D♭ in Collection I) are interchangeable with respect to pitch-class and/or construct priority. While allowing for the assertion of priority, these models are, by definition, comprehensive or *panoramic,* providing the reader with the full potential of (0 3 7/0 4 7) triadic and (0 2 3 5) tetrachordal partitioning as that potential is reflected in the literature. And they are adaptable with respect to the number of (0, 3, 6, 9) partitioning elements that might actually be stipulated by a particular passage. For Stravinsky's octatonic settings, while frequently approaching a realization of the potential for "equal weight and inde-

[9] Berger, p. 25. "Polarity" emerges from Berger's own translation of a passage from Stravinsky's *Poetique Musicale* (Cambridge: Harvard University Press, 1942), p. 26.

pendence" among two or more of the (0, 3, 6, 9) partitioning elements—or their (0 3 7/0 4 7) triadic or (0 2 3 5) tetrachordal complexes—seldom encompass all four at the same time, and then seldom on an equal footing: configurations tend to gravitate around two or three of these elements within any significant period of time.[10] To take but one example: Nos. 48–52 from *Petroushka,* and, in particular, the *"Petroushka* chord" at Nos. 49 and 51. Were we here to accept the interpretation of this "chord" as containing two (0 4 7) triadic sub-complexes (one based on C, the other on F♯), to apportion greater weight to the (0 4 7) triad on C (and hence to the pitch-class C) by virtue of its isolation and reinforcement in succeeding passages (despite, obviously, the potential for "equal weight and independence" yielded by (0, 6) tritone partitioning in an octatonic setting), but to disregard "interference" in the piano figuration at No. 50 and the vertical dyads at No. 49 of which the A♯/C dyad is conspicuous since it refers to relations of significance in the first *tableau* and might therefore have prompted, with respect to a more "global" perspective, a different kind of "background" partitioning, the following "structural-level" format might apply, stipulating (0, 6) tritone partitioning of Collection III in terms of C and F♯, Model A, where pitch numbers 3 and 9 are inoperative as partitioning elements, and, indeed, are absent from the configuration:[11]

1) 0
2) 0, 6
3) (0 4 7)
3a) (0 4 7) (6 10 1)
4) (10 1 6) (0 4 7)
5) 0 1 (3) 4 6 7 (9) 10 (0)

And, apart from the partitioning that may be inferred from the "blocks" and passages of Lists 1 and 2 and comprehensively defined via Models A and B, it should by now be apparent that it is with reference to this partitioning—Stravinsky's octatonic settings—that the most useful of

[10] Exceptions may be found in *Le Sacre* at No. 42 (*Jeu du rapt*), in *Renard* at No. 24, and in *Les Noces* at Nos. 35–40, 68–72, and 82–87. But with respect to "equal footing", a strong case can be made for an E♭ pitch-class priority (or a (0 4 7 10) "dominant seventh" complex on E♭) in *Le Sacre* as a result of its prominence "in and about", while in *Renard* a G pitch-class priority is unmistakable despite the "harmonization" of a melody with all (0 4 7) triads of Collection I (on G, B♭, D♭, and E) present in succession.

[11] And that Stravinsky was conscious of these referential implications seems indicated by the return of the *"Petroushka* chord" at No. 77 in the third *tableau,* where the (0 4 7) triadic "sub-complexes" are articulated at E♭ and A, an articulation which thus neatly completes (0, 3, 6, 9) "background" partitioning of Collection III in terms of C, E♭, F♯, and A, Model A.

notions (e.g., "harmonic stasis", "polarity", "superimposition", "juxtaposition") achieve their sharpest definition. Indeed, while accountability to the collection is consistently ignored (or, more probably, overlooked) by proprietors and propagators alike, these terms are invariably invoked (unknowingly))on behalf of octatonic activity, the "blocks" and passages of Lists 1 and 2 (where relations are just as invariably dubbed "typical" or "characteristic"), prompted by readings, for example, of *Le Sacre* and *Les Noces* which abound with such activity. Thus, the notion of "polarity", following its appearance in *Poetique Musicale,* appears in Pierre Boulez's celebrated discussion of rhythmic organization, where it is conceived—anachronistically vis à vis *Le Sacre,* where octatonic activity not only abounds but is as unsullied by tonal implications as any in the literature—in terms of a subdominant-tonic-dominant relation;[12] whence it emerges in Berger's discussion, interpreted in terms of the (0, 3, 6, 9) symmetrically defined partitioning elements of the octatonic collection, elements which assume, apropos "polarity", a degree of (symmetrically defined) "equal weight and independence" and "stand in a certain opposition".

And "superimposition" and "juxtaposition" bring similar case histories to mind. In the writings of Boulez, superimposition is viewed, contemptuously, as an "irreducible aggregation", a "coagulation" which creates for the "superimposed" fragments a "false counterpoint", all of this "eminently static in the sense that it coagulates the space-sound into a series of unvarying stages . . . and in the sense that it annuls the entire logic of the development."[13] But this "coagulation" is attributed—anachronistically, again—to "complexities grafted onto the old organization", these "complexities" constituting a mere "surcharge of an existent [tonal] language",[14] a perspective perhaps not wholly unreliable since the (0 3 7/ 0 4 7) triads and (0 4 7 10) "dominant sevenths" of Model A, as complexes of pitch elements, are not only part of that "existent (tonal) language", but their (0, 3, 6, 9) symmetrical definition, given proper "voice-leading", may be considered as having been available at least *in succession* (although, apropos *Le Sacre,* implications of this sort are completely irrelevant, there being, in addition, no tonally functional threat à la *Symphony of Psalms,* first movement, so that any attempt to define these "complexities" along tonal lines—something Boulez eschews beyond the casual equation of "polarity" with the subdominant-tonic-dominant relation—would most assuredly "confuse rather than illuminate"), but a perspective which fails to consider the referential basis, the (octatonically conceived) sym-

[12] *Notes of an Apprenticeship,* trans. Herbert Weinstock (New York: Alfred A. Knopf, 1968), p. 74.

[13] Boulez, p. 248.

[14] Boulez, p. 74.

metrical nature of the deadlock, "coagulation", or "superimposition". For superimposition is only superficially (or partially) viewed as the grafting of articulative fragments which, in typical Stravinskian fashion, remain "fixed" in registral distribution. The notion will seem apt insofar as "a certain opposition", "contradiction", or "polarity" is defined with respect to *content,* a content which, octatonically speaking, would project this "opposition," "contradiction," or "polarity" among the fragments being superimposed (possibly (0 3 7/0 4 7) triadic or (0 2 3 5) tetrachordal) in the (0, 3, 6, 9) partitioning sense indicated.[15] And so I trust that Boulez's lively description of superimposition (forwarded in however condescending a manner) will be interpreted and understood with reference to Models A and B, there being, manifestly, nothing in Stravinsky's music quite so conducive to the production of "superimpositions" which "coagulate the space-sound" than the (0, 3, 6, 9) symmetrically defined (0 3 7/0 4 7/0 4 7 10) triads and (0 2 3 5) tetrachords of Models A and B (Boulez's neglect of these referential implications in *Le Sacre* notwithstanding).

Finally, juxtaposition brings us to within range of pending concerns, raising, as it does, the issue of octatonic-diatonic interaction. For List No. 1 is composed of "blocks" and passages of material, these "blocks" and passages subject generally to repeats (or near repeats) in their respective contexts, each of these "blocks" exhibiting an unusual degree of stability, distinctiveness, self-sufficiency, and insulation. Quite so. For, as here defined, symmetrical construction within "blocks" defies internally motivated "development" along traditional tonal lines (the sense of "harmonic progression", "resolution", and "cadence" associated with tonality and the

[15] At the articulative level, maximum "opposition", "contradiction", or "polarity" —and hence maximum content differentiation—is afforded by the (0, 6) tritone-related (0 3 7/0 4 7) triads of Model A—as in the "*Petroushka* chord"—and by the (0, 6) tritone-related (0 2 3 5) tetrachords of Model B—as at No. 134, *Action rituelle des ancêtres,* in *Le Sacre.* And, to avoid possible confusion here, it should be borne in mind that "reconciliation" or subsumption of "contradictory" or "polarized" pitch elements (or articulative fragments) in terms of the symmetrically cohesive octatonic reference collection *does not eliminate* the respect in which, at another level of determinacy, separate entities in the partitioning of this collection—or, in the case of (0, 3, 6, 9) symmetrical partitioning, "a certain opposition", "contradiction", or "polarity" manifested by these entities—are recognized. To follow Benjamin Boretz in this regard, the "levels" of a structural-level conceptualization constitute (re)interpretations of the passage or piece in question in terms of the particular entity or grouping forwarded (expressions of particular kinds and degrees of determinacy), each of these (re)interpretations added to or superimposed on (rather than replacing or superseding) preceding (or succeeding) levels of (re)interpretation, all this constituting "the essential basis of that functional multiplicity exhibitable by musical entities . . ." "Meta-Variations, Part II", PNM, Vol. 8, No. 2, p. 68. See, also, by the same author, "Musical Syntax (II)", PNM, Vol. 10, No. 1.

C-scale), change, progress, or "development" possible only by abruptly cutting off the deadlock, only by terminating activity and *juxtaposing* it with something new in the collectional reference or in the partitioning thereof (through which, however, some relation, possibly "continuously operative", might be "left hanging" as a connecting link or "thread"). In other words, juxtaposition, like superimposition, is no mere formality, no mere architectural curiosity to be understood solely in terms of meter, dynamics, instrumentation, or register. Juxtaposition is *content motivated,* prompted by the conditions of balance, "equilibrium", "polarity", deadlock or locked confrontation which typify Stravinsky's octatonic settings,[16] the results discernible, in the most conspicuous of cases, in terms of a *shifting* in the collectional reference (possibly from octatonic to diatonic), each of the juxtaposed "blocks" acquiring, in the process, a collectional identity. And while it is quite true that, as a procedure, juxtaposition transcends its applicability to octatonic construction (having been, like superimposition, perhaps rather deeply rooted in Stravinsky's inventive processes), octatonic construction seems nevertheless to propel the most incisive formulation.

But further. Even with juxtaposition conveniently investing the "blocks" and passages of octatonic (or diatonic) reference with a degree of distinctiveness, self-sufficiency and insulation (conveniently lending itself, in other word, to the *selective* analysis that underlies Berger's classification and the octatonic partitioning formats outlined above), analysis, pursued with a vengeance, is seldom a dead end, seldom exceptionally tidy or accommodating. By which I mean that the observer, having digested the passages of *explicit* reference (List No. 1) by way of all the various testing devices known to musicians (transposing, inverting, altering a given registration or pitch distribution: in short, *improvising* as a means of "getting into" the material), would have to be exceptionally deliberate were he/she not at some point to apprehend, beyond *explicit* reference, the still more numerous "blocks" and passages exhibiting forms of octatonic-diatonic *interpenetration,* passages where the octatonic collection, given some prior familiarity, might reasonably be inferred whatever the "interference" from conflicting sets (or systems) of reference (see List No. 2).[17]

[16] "Deadlock" or "locked confrontation" in that there is always this sense of a "pulling and tugging" or of an "opposition" among the participating, superimposed, registrally "fixed" (0, 3, 6, 9) symmetrically defined partitioning elements or articulative fragments (a felt "opposition" in which the variance in rhythmic periods defined by the reiterating articulative fragments naturally plays a role), so that the balance or "equilibrium" is seldom passive or frictionless but surging with an inner, self-contained tension.

[17] Obviously, the criteria applied in this selection and classification allow for considerable flexibility in the drawing of inference: *explicit* reference ("of substantial duration, relatively unimpaired by outside 'interference', with the collection

To put it another way: octatonic-diatonic interaction poses the question not only of a juxtaposition of "blocks" referentially octatonic or diatonic, but of an intermingling of these references. And so, apropos the *Symphony of Psalms:* while we might generally describe the first movement as a piece wherein octatonic "blocks" referable to Collection I (Model A, with a generally (0, 3, 6) "background" partitioning in terms of E, G, and B♭) are juxtaposed with diatonic "blocks" referable to the E-scale on E through which E, or the (0 3 7) triad on E (the "*Psalms* chord"), is punctuated as the principal connecting link (that which is shared, not to mention the gradual ascendancy of G and its (0 4 7 10) articulation, also shared), there are nevertheless critical points where these references *interpenetrate* by virtue of the coming together, the simultaneous engagement, of elements *not* held in common. And all this is scrupulously acknowledged in Berger's analysis, Berger calling attention to the interpenetrating, non-octatonic (non-Collection I) C at Nos. 3 and 6, the implication being

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complete or nearly so") for List No. 1; partial accountability (cases, generally, of octatonic-diatonic interaction via abrupt "block" juxtaposition or interpenetration) for List No. 2. And this is necessarily so given the extent and variety of the material at hand. Thus, apropos the middle section of the *Symphony in Three Movements* (1945): Nos. 125 + 1–130 are octatonic (accountable to Collection I, Models A and B partitioning) except for the "interference" of a single pitch, G♭, which is first articulated in the harp as part of a (0 4 7) triad "rooted on" G♭, "first inversion". Now, in order to acknowledge octatonic hegemony but to account at the same time for the slight here-and-there "interference" of this element and of the (0 4 7) triad it articulates (of which, however, the B♭ and D♭ are accountable to Collection I), it seemed appropriate to include the passage on both lists. On the other hand, a more determined effort to isolate octatonic passages of *explicit* reference (List No. 1) from those exhibiting "interference", partiality, or octatonic-diatonic interpenetration (List No. 2) was made on behalf of *Le Sacre* (1913), *Les Noces* (1917), and the *Symphony of Psalms* (1930), all these works heavily endowed with lengthy "chunks" of octatonic concentration. Thus, while the entire Introduction of *Le Sacre* was included on List No. 2 as a case of partial accountability (or, with respect to the accumulatively climactic Nos. 10–12, a case of obvious octatonic-diatonic interpenetration), only certain rehearsal numbers or "blocks" of this section were included on List No. 1. And so it will often be the case that the "blocks" and passages of List No. 1 (*explicit* reference) are situated within lengthier contexts where the collection is inferrable on a partial or octatonic-diatonic interpenetration basis (List No. 2). And it follows: 1) that the lists should be regarded as comprising "blocks" and passages with symptoms *in the direction of* the classification indicated (since, obviously, even the question of *explicit* reference is here a question of degree), and 2) that the lists should not be regarded as "complete" since it will always be possible to infer further or differently respecting either the classification indicated or perhaps some slightly altered perspective, it being therefore inevitable that certain passages will be found disregarded (or overlooked), and possibly certain others, listed, questionable—at least at this stage—as to their octatonic credentials. The lists are intended as handy guides to octatonic penetration in Stravinsky's music.

that the dominant-tonic-like resolution concluded by the second movement on behalf of the "half-cadence" on G in the first is anticipated at the outset by a suggestive "feel" in this direction. (Similar "global" conditions govern the *Symphony in Three Movements,* first movement, where the opening material, wholly octatonic (Collection I: Model A, with a generally (0, 6) "background" partitioning in terms of G and D♭), is "superimposed" over an interpenetrating C-scale on C reference in the trombones at No. 1 and over interpenetrating C-scale passages in the strings at Nos. 4 and 16–20, so that the (tonally incriminating) C-ending to which this Collection I material resigns itself in the final measures—a (0 4 7) triad on C, riddled, to be sure, with a telling peculiarity or "impurity": a B is positioned so as to preserve the earlier (octatonically inspired) assertions of priority on the part of both G and E (E at No. 29)—may also be said to have been anticipated by an earlier suggestive "feel".)

But octatonic-diatonic interpenetration—the "curious alchemy" as Berger calls it—is not limited to "neo-Classical" material, nor need it "bring tonal functionality in its wake" à la *Symphony of Psalms,* first movement. For the whole of this literature is saturated with the most varied exhibitions of octatonic-diatonic interpenetration, exhibitions discernible already in *Fireworks* at Nos. 0–9 and 16–21 and subsequently in *Le Sacre, Renard,* and *Les Noces,* exhibitions which, even when later of the "neo-Classical" variety, by no means invariably prompt the tonally incriminating behavior noted by Berger. And this brings us to what I clearly perceive as a series of misinterpretations in Berger's concluding remarks, misinterpretations which betray a "neo-Classical" bias (quite understandable, of course, this orientation encompassing the bulk of Stravinsky's output, and the Model A partitioning perspective does predominate), misinterpretations which could have been overlooked (since they do not seriously detract from the import of Berger's message), but which I prefer to recite since, by directly contradicting findings critical to this inquiry, they very conveniently bring these to the fore:

> . . . The [0 2 3 5] tetrachord with interval order 2, 1, 2 . . . is one that proliferates in manifold folktune-derived motives and melodic fragments throughout Stravinsky's "Russian" period. . . What could be more natural than a merger of two predilections—the other being his well-known one for the tritone—out of which would issue a new scale: D, e, F, g; G♯, a♯, B, c♯, two tritone-related tetrachords thus bringing the D-scale into the orbit of the octatonic scale? The answer to this question is fundamental: if such were the case the octatonic scale would suffer a severe loss of identity. Thus, in terms of the important first degree (or of each "accented" element of the disjunct dyads in the normal representation of the scale), the succession of

consecutive scale degrees would yield nothing different from any referential ordering of intervals in the familiar white-note vocabulary until the fifth degree were reached—and even this, in terms of Classical practice, could be a so-called "tendency tone." It is the new "rhythm," in the ordering of intervals, that defines the uniqueness of the relations Stravinsky employed, namely, an ordering that gives up its secret, not at the fifth, but at the *fourth* degree, defining a tetrachord whose first and fourth elements are related by the interval of 4 semitones.[18]

For Berger's conclusions notwithstanding, the "blocks" and passages of Lists 1 and 2—especially those of the "Russian" era, some of these to be examined—provide sufficient evidence for frequent analytical "assertions" of Model B with respect to (0 2 3 5) partitioning and the 2, 1 interval ordering of the scale implicated. Relations in *Le Sacre*—which I assume are as uniquely Stravinskian as any in the literature—frequently exemplify (0 2 3 5) articulative partitioning by way of the "two tritone-related tetrachords" Berger mentions, these (0, 6)-related (0 2 3 5) (6 8 9 11) tetrachords spanning the interval of 11 (a "major seventh"), a 0–11 "inter-fragmental" ("between" fragments) vertical interval span which not only accounts for much of the static "vertical chromaticism" in the piece but is very nearly "continuously operative" or "globally" determinate with respect to octatonic activity generally, the elements of this (0, 11) partitioning, 0–11 interval span or relation, asserting from one "block" or section to the next, degrees of priority, degrees of "equal weight and independence", and standing "in a certain ("fixed" or polarized) opposition": as just two of the many examples, see No. 64 toward the end of the *Jeux des cités rivales* where the "upper" G-F-E-D complete (0 2 3 5) tetrachord stands "in opposition" to the "lower" C♯-A♯-G♯ incomplete (6 8 9 11) tetrachord; or, in Part II, No. 134 in the *Action rituelle des ancêtres,* where the "upper" C♯-B-A♯-G♯ complete (0 2 3 5) tetrachord stands "in opposition" to the "lower" G-F-E-D complete (6 8 9 11) tetrachord, the (0, 6)-defined (0 2 3 5) (6 8 9 11) partitioning in both these "blocks" referable to Collection I, Model B, and representing, in pitch and interval content, precisely the one to which Berger refers. (The uppermost pitch element and the "upper" of the two (0, 6)-related (0 2 3 5) (6 8 9 11) tetrachords—complete or (0 2 5/0 3 5) incomplete—generally "preside" in *Le Sacre,* the "lower" (6 8 9 11) tetrachord less persistently pursued and often represented merely by pitch number 11, this predominance being just one of the many reasons why, in case of (0 2 3 5) articulative partitioning, I generally prefer a *descending* scale representation and pitch numbering, a "reading down" situation to the customary

[18] Berger, p. 36.

ascending approach. I shall discuss this further in Part II.) Moreover, at Nos. 13–30 in the *Danses des adolescentes,* the octatonic contribution, conspicuous at Nos. 14–18 and 22–24, is accounted for in terms of the persistent E♭-D♭-B♭ incomplete (0 2 3 5) ostinato which stands "in opposition" to the (0 2 3 5) tetrachord or (0 4 7) triad on C, a (0, 3) "background" partitioning of Collection III in terms of E♭ and C, Model B; and, to the extent that the elements of this contribution gradually give way to an unimpaired diatonic D-scale on E♭ reference at Nos. 28–30 (where the (0 2 3 5) tetrachord in terms of E♭-D♭-C-B♭ serves as the principal connecting link, that which is shared between Collection III and the D-scale on E♭), the transaction is manifestly one wherein "the D-scale is brought into the orbit of the octatonic scale". (I know of no more accurate description of these *Danses* proceedings.)

And, respecting any "loss of identity" incurred by (0 2 3 5) partitioning and the 2, 1 interval ordering of the scale implicated vis à vis the diatonic pitch collection, we might note that, as the collection stands engaged, the 1, 2 interval ordering, implicated by the various (0 3 7/0 4 7), (0 4 7 10), and (0 1 3 4) articulative complexes, is far more vulnerable with respect to "tendency tone" behavior, there being numerous instances of octatonic reference in Stravinsky's "neo-Classical" ventures where the (0 1 3 4) complex is conceived in terms of (0 3 4/3 4 7/3 6 7) "major-minor third" emphasis where pitch numbers 3 and 6 of this 1, 2 ordering, regardless of their potential for "equal weight and independence" in the (0, 3, 6, 9) symmetrical partitioning of the collection outlined in Model A, are more conventionally conceived as (or can, in my estimation, best be described as) "tendency tones" or "melodic leading tones" to pitch numbers 4 and 7 of the (0 4 7) triad, this "tendency tone" potential naturally available to each of the (0 4 7) triads at 0, 3, 6, and 9, Model A.[19] In other words, I quite often find it advantageous to regard (or hear) cases of "major-minor third" emphasis—or of the (0 3 4/3 4 7/3 6 7) "clash", perhaps the most persistently pursued of all "impurities", certainly the most frequently cited—as octatonically inspired, as a species of octatonic-diatonic interpenetration, so that, apropos the C-scale on D reference at Nos. 112–118 in the second movement of the *Symphony in Three Movements,* pitch numbers 3 and 6, the F and G♯, may serve conventionally as "leading

[19] Berger's interpretation of pitch number 6 as a (possible) Classical "tendency tone" in the 2, 1 interval ordering of the scale (Model B) seems grossly abstract (or completely irrelevant) with respect to (0 2 3 5) tetrachordal partitioning in Stravinsky's music, there being, to my knowledge, no instances of such partitioning where this pitch number 6, reading "up" or "down", is not readily identified with the (6 8 9 11) tetrachordal articulative unit, standing thus in a (0, 6) symmetrically defined ("fixed" or polarized) "opposition" to pitch number 0 or the (0 2 3 5) tetrachord.

tones" to 4 and 7 of the (0 4 7) triad on D, but also as intruding "impurities" in the C-scale setting where the (0 3 4) "clash" signals the elevation of these pitch classes—and particularly of F—from "dependency tones" to independent pitch elements on a par with their neighbors warranting accountability at the collectional level, an accreditation which the C-scale cannot properly confer. And so I would interpret in terms of an interpenetration between the C-scale on D and Collection II, where 0 = D, noting: 1) that D assumes "overall" priority, and serves, with its (0 4 7) triad, as the principal connecting link (that which is shared), and 2) that a duality is manifested in the functional behavior of pitch numbers 3 and 6, but that, respecting the octatonic (Collection II) contribution, the F and G♯, while asserting independence, do not really act as symmetrically defined partitioning elements of priority with a degree of "equal weight and independence" vis à vis the D in the sense demonstrated in Model A, there being no (0 3 7/0 4 7) articulative "support" at F or G♯ to implement this potential, a circumstance which naturally undermines the "identity" of the contribution, placing Collection II at a rather severe disadvantage vis à vis its diatonic counterpart, the C-scale on D.

And, among countless similar examples, the introductory passage from the "Basel" Concerto in D (1946) seems exemplary in these respects, the total pitch content inferrable at Nos. 0–5, D, F, F♯, A, B, as octatonic (Collection II) as it is diatonic (C-scale on D)—as diatonic, of course, *only* by virtue of the "leading tone" interpretation of F, pitch number 3. For, here again, the "point" of the passage would seem to rest in the dual nature of E♯/F, pitch number 3—or in the dual nature of the (0 3 4/3 4 7) "major-minor third" complex—the E♯/F occasionally articulated as a "leading tone" to the F♯, pitch number 4 of the (0 4 7) triad on D, and occasionally as an intruding "impurity" by virtue of the (3 4 7) simultaneities and the (0 3 4/3 4 7) figuration, all of this, incidentally, pursued without the slightest trace of tonally functional behavior. And so, in addition to tonal functionality à la *Psalms,* the (0 3 4/3 4 7/3 6 7) "major-minor third" phenomenon strikes me as just another way in which octatonic partitioning (Model A) and traditional C-scale conventions or inflections interrelate, so that, were we to investigate from a diatonic perspective, we could credit the interpenetrating octatonic collection for systematically "subverting" the C-scale with (0 3 4/3 4 7/3 6 7) "impurity"; or, from an octatonic perspective, acknowledge the manner in which Model A partitioning is modified by a "neo-Classical" concern for C-scale conventions and "tendency tone" inflections. And, of course, the attraction of this perspective is that it allows for a hearing, understanding, or definition of certain "neo-Classical" phenomena in terms of a lifelong preoccupation with octatonic partitioning, a consistency, identity or distinctiveness in pitch organization transcending the considerable changes

in "stylistic" orientation from *Firebird* (1910) to *Agon* (1957). And by extending accountability to these phenomena, the "literature" perspective afforded allows, at the same time, for a more penetrating account of peculiarity in the exhibition of these phenomena from one piece to the next.

But to return to the "Russian" era: the "neo-Classical" (Model A) bias underlying Berger's conclusions may have been prompted by a commitment to the familiar ascending approach in scale representation and pitch numbering. Thus, at Nos. 35–40 and 82–87 in *Les Noces* (*explicit* reference: List No. 1), Berger infers (0, 6) "background" partitioning in terms of A and E♭; and, given the pitch content (Collection III), this approach naturally yields the 1, 2 interval ordering for the scale at A or E♭: A-B♭-C-D♭-E♭-E-F♯-G-(A). But the problem with this determination (and the pitch numbering it implies) is that it obscures the essential (0 2) reiterations and the (0 2 5) "basic cell" articulated by way of A-G/E♭-D♭ and A-G-E/E♭-D♭-B♭ (reading down, with the uppermost pitch generally "presiding" as the more insistent), these (0 2) and (0 2 5) groupings very nearly "continuously operative" in *Les Noces* with respect to both diatonic and octatonic activity. And the only means of recording (0, 6) tritone partitioning in terms of A and E♭ *and* this "global" articulation (at A and E♭ here) would be via a *descending* formulation which would, far more conveniently than the ascending form, expose the priorities, associative factors, connecting links or "threads" discernible "above" the "blocks" of varied referential implications: A-G-F♯-E-E♭-D♭-C-B♭-(A), reading down (or, from E♭, also reading down).

So questions regarding the "identity" of the collection or the "uniqueness of the relations Stravinsky employed" are not as clear-cut or as easily defined as Berger would have us believe. But we have, it seems to me, in this roundabout fashion, come to some understanding as to what to expect from an examination of Stravinsky's diatonic (or octatonic) writing particularly as it relates to the "Russian" category: juxtaposed "blocks", at times referentially octatonic, at times diatonic, and at times exhibiting an interpenetration between these references. Moreover, juxtaposition itself affords an invaluable clue as to analytical method. For, confronted with the kind of "discontinuity" it imposes—confronted with the "sudden breaks" which, in Edward Cone's words, "affect every musical dimension" —why burden ourselves with analytic-theoretical schemes of "continuity" or "coherence" which, if not entirely inapplicable, cannot be the most advantageous (the most compelling or instructive) since they ignore this most telling and conspicuous feature?[20] Why not accept abrupt "block" juxtaposition and the referential implications, and proceed accordingly?

[20] "Stravinsky: The Progress of a Method", PNM, Vol. 1, No. 1, p. 18.

These questions (or propositions) underlie the particular analytic-theoretical approach of this inquiry.

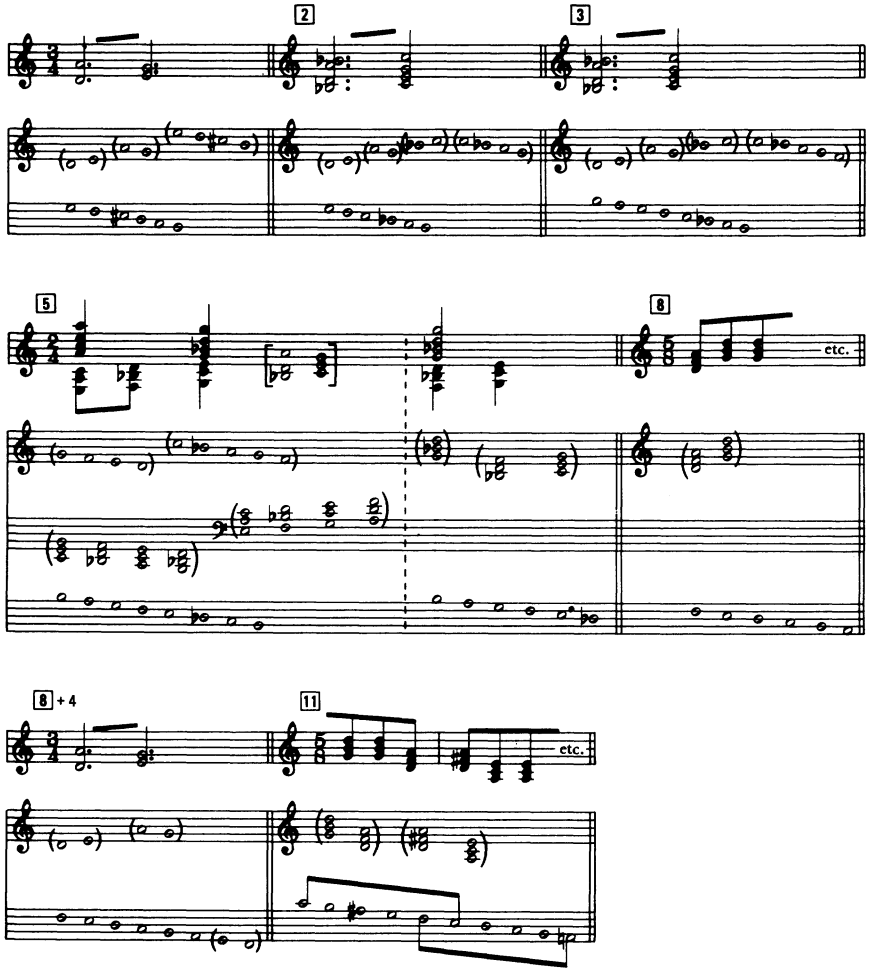
II

Attention will now be drawn to the diatonic hexachordal segment with a pitch numbering of 0 2 3 5 7 9 (0) reading down (interval order: 2, 1, 2, 2, 2, (3)), and the D-scale with a pitch numbering of 0 2 3 5 7 9 10 (0) also reading down (interval order: 2, 1, 2, 2, 2, 1, (2)).[21] And while these references—or the partitioning manifested on their behalf—may occasionally be apprehended in material of the "neo-Classical" persuasion, like (0 2 3 5) partitioning of the octatonic collection and the 2, 1 interval ordering of the scale implicated (Model B), I tend to associate them with the "Russian" period generally, an association which I attribute in part to Stravinsky's addiction at the time to all manner of (0 2 3 5) folkish fragments (some genuine, most ingeniously pseudo), again, Berger's conclusions notwithstanding. Indeed, were the "Russian" label to wield a legitimacy transcending the preoccupation with these (0 2 3 5)

[21] Apropos the (0 2 3 5 7 9) diatonic hexachord, see Benjamin Boretz's analysis of *Petroushka,* first *tableau,* in "Meta-Variations, Part IV: Analytic Fallout (II)", PNM, Vol. 9, No. 1. Boretz infers the (0 2 3 5 7 9) hexachord in terms of the (E-D-C♯-B-A-G) collection at No. 1, and discusses *Petroushka*'s diatonicism independent of tonal considerations. But some non-correspondences with the present analysis are noteworthy. While Boretz, as here above, equates abrupt "block" juxtaposition with "pitch-collection change", he interprets the juxtaposed "blocks" as "time spans"; and his reference to the symmetry that obtains from the pattern or patterns of these "spans" is a facet of abrupt "block" juxtaposition not here taken into account. More significantly, Boretz's "referential" diatonic hexachord is the (D-E) (A-G) (B♭-C) collection first introduced at No. 2(—2), from which he subsequently at m. 27 derives an "extension" in the form of a "superimposition of *two* hexachords inversionally related . . . producing the 'diatonic collection' *as their union*", with respect to which he interprets succeeding "blocks" or "time spans"; however, in the present study, the (0 2 3 5 7 9) hexachord is the "referential" diatonic hexachord, with respect to which succeeding "blocks" are interpreted. Moreover, Boretz does not subscribe to any "local" assertion of pitch-class priority (the "inversionally related" hexachords merely produce the diatonic collection "as their union"), while the present study's D-scale on G determination at Nos. 3–6 obviously does. Thus, a certain significance is here attached to the (0 2 3 5 7 9) hexachord, the nature of its "incompleteness", the nature of its affiliation with the D-scale, the pairs of (0 2)'s which encircle it, and (0 7)-defined adjacency or "overlapping", concerns which relate ultimately to the interaction, intervention, or "intrusion" of referentially octatonic material, a matter alluded to only briefly in Boretz's discussion. And these special (0 2 3 5 7 9) hexachordal considerations may have been prompted by a Stravinsky-"Russian"-period hearing and understanding, a hearing and understanding of consistency, identity, and distinctiveness for this particular body of works.

fragments (and with Russian popular verse), this legitimacy would have to reside, it seems to me, in this to-be-examined partitioning and in the regularities governing octatonic-diatonic interaction, some of this between-reference (or between-"block") connecting link regularity perhaps already vaguely discernible in the pitch numbering. Moreover, while the integrity of the (0 2 3 5 7 9) hexachord will naturally hinge on the absence (or peripheral behavior) of a 7th pitch element—a closing of the gap, so to speak, with pitch number 10 (reading down) completing the diatonic collection—it harbors a partitioning strategy that will often ensure it a measure of referential cohesiveness even where such an element does insinuate itself. Indeed, a circumstance tending to underscore (0 2 3 5 7 9) integrity is the flexibility often reserved for 7th pitch-class identity, so that, of the two pitch elements that might "close the gap", the "intrusion" of a pitch number 10 (reading down) would render (0 2 3 5 7 9) surroundings fully diatonic—tending to implicate the D-scale, but with the hexachord's partitioning formulae often intact—and the "intrusion" of a pitch number 11 (reading down), (0 2 3 5 6 8 9 11) octatonic-(0 2 3 7 9) diatonic, a species of octatonic-diatonic interpenetration. And this flexibility, in turn, allows many (0 2 3 5 7 9) contexts to act as "go-betweens" with respect to (more) fully committed diatonic, octatonic, or octatonic-diatonic frameworks, with the elusive 7th pitch element acting as a kind of pivot. (Only pitch number 7 resists the (0 2 3 5 6 8 9 11) octatonic order, Model B, and only the omission of a pitch number 10, the diatonic collection. And the 7th pitch may intrude pivot-like "elsewhere", of course, although the (0 2 3 5 7 9) "gap" seems most vulnerable in this respect.)

Very well. We begin with a passage where the credentials for (0 2 3 5 7 9) inference seem impeccable: the opening passage or "block" of *Petroushka* at Nos. 0–2 (−2) and its abbreviation at No. 2 + 3 (see Ex. 1). For here, the omission of a 7th pitch element—indeed, the adverse consequences that accrue from any forced "closing of the gap" with an F or F♯—testify to (0 2 3 5 7 9) integrity in terms of the (E-D-C♯-B-A-G) collection, foreclosing any referral of this "block" to the A-scale on D, or to the "Key of D-minor" (in the sense, perhaps, of an "ascending minor scale" at No. 1, or a "descending minor scale" at No. 2), there being, in addition to this very critical absence of a—in my estimation—truly unthinkable F, no tonally functional transactions. (F as the "missing" 7th pitch element—pitch number 11 with respect to the (0 2 3 5 7 9) numbering at Nos. 0–2 (−2)—does not appear until No. 3; and here the (0 2) and (0 2 3 5) articulation, in terms of C-B♭-A-G, accentuates G rather than D (or A), circumstances which implicate the D-scale on G rather than the A-scale on D, and which thus provide the opening (2 0) and (7 9) reiterations, D-E and A-G, with a new referential framework and



Ex. 1

consequent pitch numbering.) Indeed, of the two pitch elements that might "close the gap" at Nos. 0–2 (−2) and 2 + 3, F♯ seems by far the more "thinkable"; but try imposing *either one,* the F or the F♯, into these (E-D-C♯-B-A-G) surroundings, and the effect is manifestly ruinous. And so, straight away, we perceive in this critical withholding of a 7th pitch element the "open" quality Stravinsky means to impart with respect to any potential leanings toward a (more) fully accredited diatonic, octatonic, or octatonic-diatonic framework, it being left for future "blocks" to implement this potential, to decide the (0 2 3 5 7 9) hexachord's fate, and very often by way of an "intruding" outside 7th pitch element.

Of course, F does appear on the first beats of subsequent (near) repeats of the No. 0 "block": at Nos. 8 + 4 and 11 + 5 (see Ex. 1), and in the instrumental "fill" accompanying the final (near) repeat at No. 27. And, indeed, it is my understanding that this imposition does alter the referential implications. For not only does F (or the (0 3 7) triad on D) intervene, but the (0 2 3 5) tetrachord in terms of E-D-C♯-B (articulated by the cello at Nos. 1 and 2 + 5) is omitted. Moreover, in these subsequent (near) repeats, the F (or the (0 4 7) triad on D) may clearly be apprehended as a continuation of the material of the No. 8 "block", material which invariably precedes these No. 0 "block" (near) repeats, and from which a (0 3 7/0 4 7) triadic partitioning of the (D-C-B-A-G-F) collection may be inferred with respect to (0 2 3 5 7 9) hexachord reference. Consequently, respecting these subsequent No. 0 "blocks" (near) repeats, I would interpret referentially in terms of the (D-C-B-A-G-F) collection or the A-scale on D.

But before coming to any conclusions regarding (0 2 3 5 7 9) activity in the first *tableau* (conclusions which would view the (0 2 3 5 7 9) hexachord as a referential "norm" or "home base" from which subsequent "blocks" diverge, often, as we have indicated, by way of a 7th pitch "intrusion"), we might retreat to a somewhat more long-range, "global", or "continuously operative" perspective. For I have found it useful in this respect to interpret *Petroushka* as a piece wherein two simultaneities move "back-and-forth" (accordian-like, as so many have observed, a feature by no means limited to *Petroushka,* but one which may seem unusually conspicuous); and from here to determine that the two simultaneities which move "back-and-forth" very often jointly number six pitch elements, three to each simultaneity. (Thus, respecting this "global" number-of-elements approach, our (0 2 3 5 7 9) hexachord of the first *tableau* appears as just one of several hexachordal collections or orderings.) And from here to suggest that, either "on top" or "on the bottom" (or both), the simultaneities are often related by the interval of 2. And, respecting successive "block" (pitch-identity) content realizations of these simultaneities, to conclude that of the three (0 2) reiterations (A-G, D-E, B♭-C) which define the two oscillating simultaneities (A/D/B♭)-(G/E/C), reading down, at Nos. 2, 3 and subsequent (near) repeats of these "blocks", at least one of these (content-defined) (0 2) dyads survives "globally" (on a more-or-less "continuously operative" basis), especially respecting material of the first, second, and fourth *tableaux*.

Still, apropos the "global" attitude, I prefer to leave inferences regarding (content-defined) dyadic "survival" to the reader, finding it sufficient for our purposes merely to record, from one "block" to the next, the two simultaneities which move "back-and-forth". Thus, at Nos. 0–2(−2) and 2 + 3, these simultaneities are (A/D)-(G/E), numbering four elements,

not six; and, beneath this stipulation, a different kind of partitioning is recorded in recognition of the (2 0) and (7 9) reiterations, D-E and A-G, and the (0 2 3 5) tetrachord, E-D-C♯-B, these articulative groupings jointly yielding the (E-D-C♯-B-A-G) hexachordal collection with the pitch numbering of (0 2 3 5 7 9). (I prefer, as well, to leave inferences regarding "local" (or sectional) assertions of pitch-class and/or dyad priority to the commentary, reserving for analytical representation the articulative partitioning and the consequent referential implications, this latter constituting the focus of our concern even though "local" definitions of priority are critical to our deliberations and may *sometimes* be inferred from the assigned scale representations and pitch numberings. *Sometimes,* because E is scarcely the most likely candidate for pitch-class priority status as pitch number 0 at Nos. 0–2(−2) and 2 + 3; D is, owing primarily to metric accentuation. However, the two pitch classes which encircle the (0 2 3 5 7 9) hexachord on each side (four in all: the D-E, A-G (2 0) and (7 9) reiterations at Nos. 0–2(−2) and 2 + 3) will soon be found, from one piece to the next, to exercise a uniquely (0 2 3 5 7 9) conceived life of their own respecting pitch-class priority, an exercise often foreclosing rulings as to (single) pitch-class priority even on a purely "local" basis.)

Then, at No. 2, the oscillating simultaneities number six elements. And a B♭-C reiteration is here added to the D-E and A-G reiterations (which serve as between-"block" connecting links), this B♭-C unit inserted in place of the C♯-B dyad of the opening E-D-C♯-B (0 2 3 5) tetrachord. And these three (0 2) reiterations, together with the (0 2 3 5) tetrachord now articulated in terms of C-B♭-A-G (with G accentuated rather than D) yield the (E-D-C-B♭-A-G) collection, a retrograde inversion of the opening hexachordal ordering, so that the reference collection is altered with respect to total pitch-class content and referential ordering. Then, at No. 3, following an abbreviation of the Nos. 0–2(−2) opening "block" at No. 2 + 3 (not shown), F, withheld up to this point as the "missing" 7th pitch element— pitch number 11 with respect to the two preceding referential orderings—is introduced in an extension of the C-B♭-A-G (0 2 3 5) tetrachordal fragment of the No. 2 "block". And this imposition completes the diatonic collection, the (0 2) and (0 2 3 5) articulation accentuating G and implicating the D-scale on G with respect to referential ordering. And I would extend this determination as to reference to the following "block" at No. 5 as well, the borrowed folk melody bursting forth here as a final destination, with respect to which the preceding "blocks" assume, retroactively, a preparatory-like character.

Still, we might consider the tonal alternative to our interpretation of No. 5 in Ex. 1. For an observer could claim that the G is as readily identified with the (0 4 7) triad on C as it is with the (0 3 7) triad on G, and

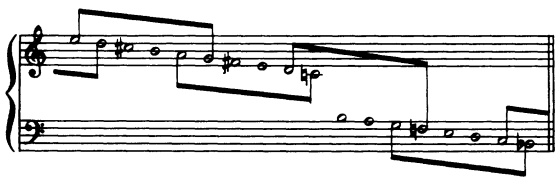
that this identification suggests a "harmonization" of the borrowed melody "in the key of F-major" (with "added notes"): VI-IV-V-VI-IV(II)-V. And, indeed, I find myself by no means unsympathetic to such a reading (or hearing): the (A/D/B♭)-(G/E/C) simultaneities reinterpreted at No. 5 in terms of a "half-cadence" or IV(II)-V progression "in F". The only problem, of course, is that the dominant-tonic resolution (the tonal "imperative", as Berger calls it), the "tonic" (0 4 7) triad on F which must in some sense underlie such a perspective (be at least conceivable at some point, if not actualized), is not only scrupulously avoided but seems about as inconceivable (as unlikely or as undesirable) in these surroundings as was the "missing" 7th pitch element, the F, in the opening (0 2 3 5 7 9) preparatory "blocks". And so the tonal reading seems predicated on an entirely "local" (No. 5 "block") reckoning of affairs.

But further. Were we to abstract from the "harmonization" at No. 5 the three (0 3 7/0 4 7) triads which are the foundation of the display, we might discover in the referential implications probable cause of the inconceivable (or undesirable) "tonic" (0 4 7) triad on F: the—in my estimation—predominating (0 3 7) triad on G and the oscillating (0 4 7) triads on B♭ and C "underneath" refer to the (G-F-E-D-C-B♭) collection with respect to (0 2 3 5 7 9) hexachordal reference, and thus provide the setting with a similar (0 2 3 5 7 9) conceived "harmonic stasis" (the (0 2 3 5 7 9) incapacity for real "harmonic progression" beyond the accordion effect) as was realized in the opening passages or "blocks". In other words, from within the (completed) diatonic collection at No. 5 where the articulation implicates the D-scale on G, we may infer a "foundational" (0 3 7/0 4 7) triadic articulative partitioning accountable to the (0 2 3 5 7 9) hexachord where G may be identified with the (0 4 7) triad on C, with the (0 3 7) triad on G, or may be inferred as "centric" with respect to the compound simultaneity, in which case the concept of "added notes" need not be invoked. (Notice, too, the (7 3 0/7 4 0) "second inversion" of the triads at No. 5 + 4, a circumstance which naturally reinforces G as *the* pitch class of priority.) This inferrable (0 3 7/0 4 7) partitioning of the (0 2 3 5 7 9) hexachord at No. 5 is of consequence since it may again be inferred—unimpaired—at No. 8 (and at subsequent (near) repeats of this "block") in terms of the (D-C-B-A-G-F) collection.

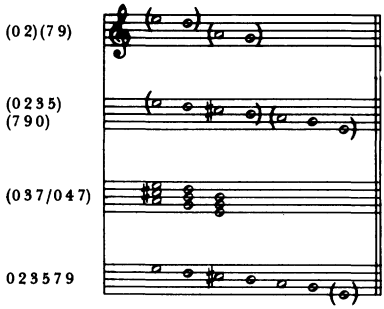
Thus, the "breaking-up" passage at No. 7 (see Ex. 3, below) is interpreted in terms of the (A-G-F♯-E-D-C) collection where B♭—not F—serves as the "intruding" outside 7th pitch element as pitch number 11. (I infer C from the (0 4 7) triad on C which directly precedes the "breaking-up" at No. 7, and from the E-D-C grace-note sequence; and, respecting B♭ as the outside 7th pitch element vis à vis the (A-G-F♯-E-D-C) collection, I shall presently discuss the octatonic implications of this pitch number 11 "intrusion" when turning to No. 35 in the *Danse Russe*.)

Then, at No. 8, the oscillating simultaneities, a (0 3 7) triad on D and a (0 4 7) on G (a kind of "harmonization" of the opening flute interval) implicate the (D-C-B-A-G-F) collection; and at No. 11 this oscillation alternates with identical (0 3 7/0 4 7) relations expressed in terms of the (A-G-F♯-E-D-C) collection. And notice, at No. 11, that the overlapping of (0 2 3 5 7 9)'s produces a (0 3/0 4) "major-minor third" play in terms of F/F♯ with a quite different "feel" to it than the "neo-Classical" examples referred to earlier. And I attribute this difference in "feel" to the question of reference generally, noting that the (0 3 4) phenomenon at No. 11 results from this simple (0 7)-defined (0 2 3 5 7 9) overlapping (as it does conspicuously again in Scene I of *Histoire*), while in the "neo-Classical" examples it derives from (or can best be interpreted in terms of) a species of octatonic-diatonic interpenetration, where the referential ordering of the diatonic collection is that of the C-scale which interpenetrates with the octatonic scale, 1, 2 interval ordering (Model A), the latter being credited as the source for the "impurity" via its "intruding" pitch numbers 3 and 6. And, naturally, this insight constitutes, to my mind, just one of the many useful distinctions that can be drawn respecting ("locally" defined) identical phenomena (or "habits") inferrable from material of the "Russian" and "neo-Classical" categories, a distinction which relates to the question of reference, or, more readily, to the partitioning formulated on its behalf.

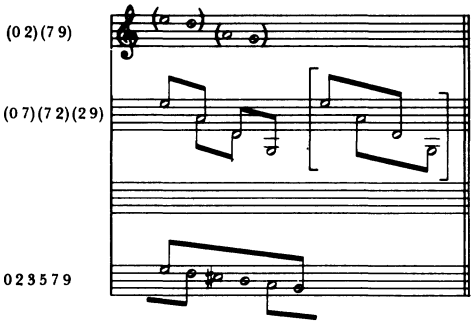
More critical to our deliberations, however, is the clue this No. 11 (0 2 3 5 7 9) overlapping affords as to overall (0 2 3 5 7 9) planning in the first *tableau*. For we may now assemble the four content-distinguishable (0 2 3 5 7 9) collections inferrable from this section, and, owing to their (0 7)-defined or "circle-of-fifths" adjacency, arrange these according to the chain, sequence or "spread" of overlapping (0 2 3 5 7 9)'s suggested by No. 11 (see Ex. 2). And, apropos this compression of (0 2 3 5 7 9) strategy, we can begin to confront in the consequent exemplification (Exx. 2–4b) what I consider to be the three key issues regarding (0 2 3 5 7 9) activity in the "Russian" period generally: 1) the (0 2) (7 9), (0 2 3 5) (7 9 0), and (0 3 7/0 4 7) partitionings inferrable on behalf of the single (0 2 3 5 7 9) collection, Ex. 2a; 2) the "uniquely



Ex. 2



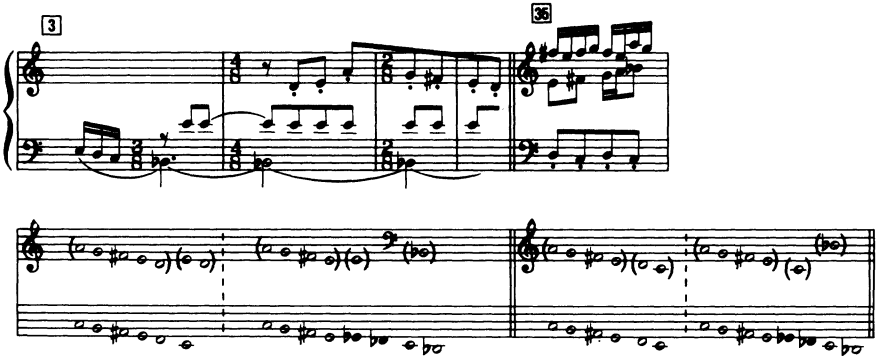
Ex. 2a



Ex. 2b

(0 2 3 5 7 9) conceived" exercise in pitch-class priority, where the pairs of (0 2)'s which encircle the hexachord—each of these pairs defining the point of overlap respecting (0 7) or "circle-of-fifths" adjacency—constitute (or may be constituted as) a series of (0 7)'s or "fifths", an abstraction which allows additional insight into the question of "harmonic stasis" or the "coming together" (by "superimposition") of elements formerly interpretable in terms of a subdominant-tonic-dominant relation (but available, formerly, only in succession),[22] and thus further insight into the seeming irrelevance of (single) pitch-class priority rulings in many (0 2 3 5 7 9) contexts, but an abstraction which does not deny the encircling (0 2) and (7 9) units a certain articulative cohesiveness in many of these contexts, a cohesiveness evidenced already by the (2 0) and (7 9) reiterations, D-E and A-G, which enclose the (E-D-C♯-B-A-G) collection at Nos. 0–2(—2), Ex. 2b; 3) the regularities governing octatonic-diatonic interaction or interpenetration with respect to (0 2) or (0 2 3 5) partitioning of the octatonic scale, 2, 1 interval ordering (Model B), and the (0 2 3 5 7 9) hexachord. And while I shall defer momentarily the question of pitch-class priority, Nos. 7 and 35 in the first *tableau* do afford an opportunity to examine octatonic-diatonic interaction where the above discussed outside 7th pitch element—B♭ as pitch number 11 respecting the (A-G-F♯-E-D-C) collection and ordering inferrable at Nos. 7 and 35—signals, pivot-like in place of pitch number 10, a "leaning" toward octatonic-diatonic interpenetration (the B♭ is not accounted for in terms of diatonic collection), this pitch number 11 "intrusion" therefore constituting a first "regularity" in octatonic-diatonic interaction with the be-

[22] Thus, Boulez's interpretation of "polarity" in terms of a subdominant-tonic-dominant relation in *Le Sacre* may not be entirely unwarranted, at least insofar as the brief and scattered passages of unimpaired diatonicism (generally D-scale or (0 2 3 5 7 9) hexachordal) are concerned.



Ex. 3

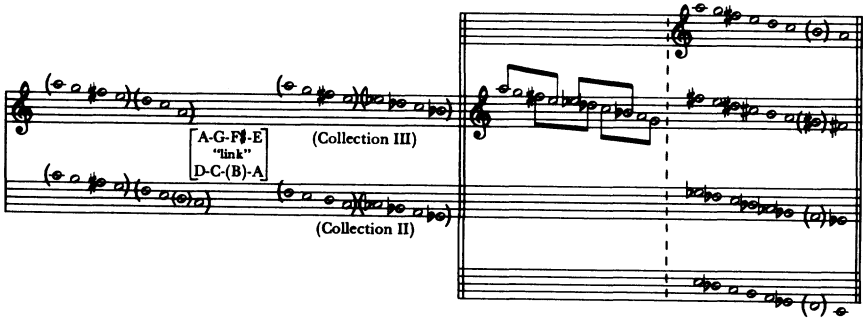
tween-reference connecting link discernible in terms of the (0 2 3 5) tetrachord, A-G-F♯-E here.

For, respecting these "blocks" at Nos. 7 and 35 and the inferred (0 2 3 5 6 8 9 11) octatonic- (0 2 3 5 7 9) diatonic interpenetration (see Ex. 3), I find it instructive to consider how very close we are here to the illustrious "*Petroushka* chord" at Nos. 49 and 51 of the second *tableau,* a compound simultaneity containing (0, 6) tritone-related (0 4 7)'s on C and F♯ (six elements in all, accountable to Collection III) where the (0 4 7) triad on F♯ is (4 7 0) "first inversion", preserving the B♭-C reiteration of the first tableau.[23] (After all, to follow Stravinsky's own account, *Petroushka* was initially conceived with this referentially octatonic, second *tableau,* material.) For only the D of the (A-G-F♯-E-D-C) collection at Nos. 7 and 35, pitch number 7, resists the interpenetrating octatonic Collection III (however critical this D is to (0 2 3 5 7 9) identity, it constituting, with the C, one of the pairs of (0 2)'s which enclose the (A-G-

[23] How close we are, indeed, to the "sound" of *Le Sacre,* where the static "vertical chromaticism" becomes interpretable in terms of an octatonically conceived (0–5, 11) "global" partitioning unit, with an "upper" (0 2 3 5) tetrachord standing "in opposition" to a "lower" pitch number 11. Still, the B♭ and the E-D-C grace-note sequence at No. 7 could be interpreted, alternatively, in terms of a continuation of the (G-F-E-D-C-B♭) hexachord, in terms of a superimposition of the predominating (A-G-F♯-E-D-C) hexachord over this (G-F-E-D-C-B♭) collection, and thus in terms of (0 7)-defined (0 2 3 5 7 9) adjacency "once removed" (see Ex. 2). And, indeed, a similar alternative in hearing and understanding presents itself on behalf of the "low" A♭ in the very opening ostinato pattern of *Renard.* But while I can—at least partially—subscribe to this alternative, the octatonic implications of pitch number 11—or the A-G-F♯-E-C-B♭ span—are, at No. 7, in my estimation unmistakable, in view not only of the (pending) "*Petroushka* chord", but of the exemplification or realization of these implications in Stravinsky's subsequent "Russian" works.

F♯-E-D-C) collection); and with the referentially octatonic (Collection III) B♭ (A♯ in the "*Petroushka* chord"), only C♯ is missing. (So we have, then, in this Collection III-(A-G-F♯-E-D-C) interpenetration at Nos. 7 and 35, at least a hint of coming attractions.) And, below, in Ex. 4a, I have merely "summarized" this first—and in my estimation typically "Russian"—"regularity" in moving from a diatonic to an octatonic or octatonic-diatonic context: the referentially octatonic pitch number 11 respecting the interpenetrating (0 2 3 5 7 9) diatonic and (0 2 3 5 6 8 9 11) octatonic orders, "intrudes", while the between-reference connecting link (that which is shared) is realized in terms of the "upper" (0 2 3 5) tetrachord, A-G-F♯-E here.

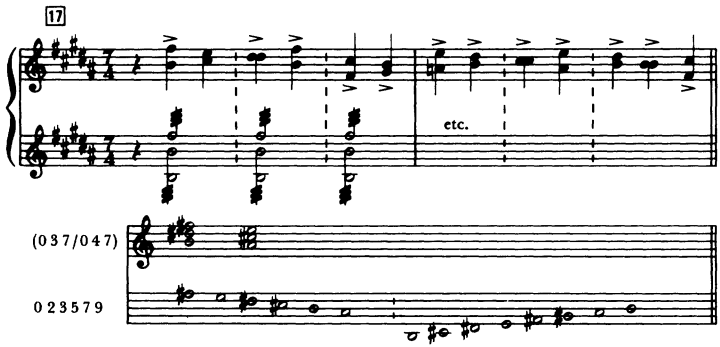
But note, in Ex. 4a, that the (7 9) or (7 9 0) unit of the (0 2 3 5 7 9) hexachord (or the "lower" (7 9 10 0) tetrachord of the (completed) D-scale) may serve as the connecting link to still another octatonic collection (Collection II here); and in this second possibility, pitch number 6 (the E♭ here) often becomes the "intruding" 7th pitch element. (Still, in restructuring the octatonic scale accordingly, this number 6 merely becomes another pitch number 11; and, apart from the interval of 11, what is immediately striking in these referentially octatonic pitch number 11 "intrusions" is the (0 6) tritone relation defined by pitch numbers 5 and 11 —with a pitch number 11 "intrusion"—and by pitch numbers 0 and 6— with a pitch number 6 "intrusion". Furthermore, note in Ex. 4a that a pitch number 6 "intrusion" may implicate Collection III as well as II.) Accordingly, respecting any given (0 2 3 5) (7 9(10)0) partitioning of the (0 2 3 5 7 9) hexachord or D-scale, two of the three content-distinguishable octatonic collections ((0 2 3 5) partitioning, Model B) may be implicated in octatonic-diatonic interaction. And, were we to reverse this procedure by commencing with an octatonic framework (see Ex. 4b), any



Ex. 4a Ex. 4b

given octatonic collection may implicate, via its four content-distinguishable (0 2 3 5)'s, four content-distinguishable (0 2 3 5 7 9)'s or D-scales in interacting proceedings. (I note this "reversal" in anticipation of *Le Sacre*.)

Still, the tonally inclined observer could interpret the B♭ at Nos. 7 and 35 as the "flatted sixth degree" respecting the predominating (0 4 7) triad on D (presumably implicating the G-scale on D), an interpretation perhaps particularly apropos at No. 35 where conventional "voice-leading" may be inferred on behalf of B♭. And, again, I find myself not unsympathetic to such a reading. For were we to turn to the Finale of *The Firebird* (1919 concert suite), we would find that a "harmonization" of the folk melody at No. 17 is similarly accountable to the (0 2 3 5 7 9) hexachord (the (F♯-E-D♯-C♯-B-A) collection), implicated by a "foundational" alternation of (0 4 7) triads on B and A (see Ex. 5). And, indeed, preceding this "block" at No. 17, a similar flexibility manifests itself with respect to 7th pitch class identity, the "closing of the (F♯-E-D♯-C♯-B-A) gap" with a G♯ or G; and, G, as pitch number 11, does "behave" in a more or less conventional "flatted sixth degree" fashion, a "resolution" to the F♯ of the (0 4 7) triad on B quite unmistakable over the barline at No. 14. But tonally conceived "voice-leading" of this sort seems irrelevant at No. 7 in *Petroushka*; the "low" B♭ stands, rather, in an "unresolved", "fixed", or polarized "opposition" to the "upper" A-G-F♯-E tetrachord or (0 4 7) triad on D, a "deadlocked" situation. And I therefore find it fitting to interpret Nos. 7 and 35 in terms of a (0 2 3 5 6 8 9 11)-(0 2 3 5 7 9) interpenetration, not only because B♭—apropos tonal conventions—"behaves" unconventionally (and cannot, without reference to such conventions, be accounted for in terms of the inferred diatonic collec-



Ex. 5

tion), but because its "behavior" is suitably accounted for in terms of the symmetrically defined (0 2 3 5) (6 8 9 11) partitioning of Collection III (Model B), a partitioning that anticipates, to some extent, the (more) fully committed (Collection III) octatonic framework of the "*Petroushka* chord" in the second *tableau*.*

* The second part of this paper will appear in the next issue of PERSPECTIVES. —Eds.