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PYTHAGORAS AND PIERROT

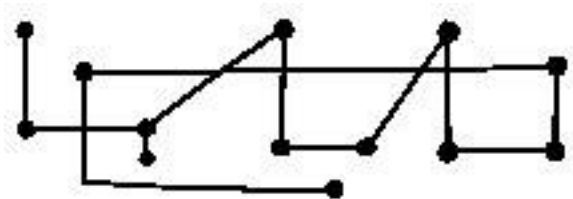
an approach to Schoenberg's use of numerology in the construction of 'Pierrot lunaire'

Colin C. Sterne

"It is not superstition, it is belief."¹ Thus did Arnold Schoenberg defend the importance he attached to the power of numerology and to its influence on his life. His fear of the number thirteen is common knowledge. So, too, is the way in which that number marked his birth (September 13, 1874) and death (Friday, July 13, 1951, at age 76). Schoenberg is said to have observed the flagging of his creative energy during the compositional process at measures whose numbers were thirteen or its multiples, a circumstance that reportedly led to his numbering of measures in his manuscripts as 12, 12a, 14. We are told that even the choice of a name for his son, Lawrence Adam, was made only after Roland, the name originally intended for him (and an anagram of his father's first name), was found to be numerologically unfavorable. Schoenberg's almost pathological fear of the number thirteen produced forebodings of his death, and, one suspects, may even have contributed to bringing it about.

Nor has the number symbolism of Schoenberg's *Pierrot lunaire* been completely overlooked. It has been noted that for his Opus 21 Schoenberg chose 21 of Albert Giraud's fifty poems as texts (translated from French into German by Otto Erich Hartleben), giving the work the complete title *Dreimal sieben Gedichte aus ALBERT GIRAUDs Pierrot lunaire*, and beginning to compose it in the third month of a year containing the symbolic digits 21 in reverse order, 1912. In spite of all this, surprisingly little attention has been focused on the part that the

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PYTHAGORAS AND PIERROT

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"It is not superstition, it is belief."¹ Thus did Arnold Schoenberg defend the importance he attached to the power of numerology and to its influence on his life. His fear of the number thirteen is common knowledge. So, too, is the way in which that number marked his birth (September 13, 1874) and death (Friday, July 13, 1951, at age 76). Schoenberg is said to have observed the flagging of his creative energy during the compositional process at measures whose numbers were thirteen or its multiples, a circumstance that reportedly led to his numbering of measures in his manuscripts as 12, 12a, 14. We are told that even the choice of a name for his son, Lawrence Adam, was made only after Roland, the name originally intended for him (and an anagram of his father's first name), was found to be numerologically unfavorable. Schoenberg's almost pathological fear of the number thirteen produced forebodings of his death, and, one suspects, may even have contributed to bringing it about.

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numbers 3 and 7 play as structural determinants within the work—something Schoenberg's title obviously suggests.²

Pierrot lunaire is indeed governed by numbers, not by the crisp, bright numbers of mathematics, but by the more shadowy, moonlit numbers of numerology. Some knowledge of basic numerological procedure is essential, then, before approaching the music.³

The numerologist is convinced that numbers and number relationships govern the universe and that the well-being of an individual depends upon his being in accord with cosmic vibrations. He traces his belief back to antiquity—to the Egyptians, Hebrews, Chaldeans, Phoenicians, Chinese, and Hindus—but it is Pythagoras to whom he gives credit for establishing the system in the West. As to the power of numbers on individuals, a person's name and birthdate are the two areas where the influence of numbers is most strongly felt. To determine the several number vibrations in a person's name, the letters of the alphabet are numbered consecutively from 1 through 26. In all aspects of numerology, however, double-digit numbers are reduced to single-digit numbers by adding the digits. The tenth letter of the alphabet, J, for example, is not numbered 10, but 1. The following chart will demonstrate the procedure.

1	2	3	4	5	6	7	8	9
A	B	C	D	E	F	G	H	I
J	(K)	L	M	N	O	P	Q	R
S	T	U	(V)	W	X	Y	Z	

Note that two letters, K and V, are parenthesized. They are the 11th and 22nd letters of the alphabet respectively, and they retain those values. Exceptions to the general rule, 11 and 22 are never reduced in traditional numerology and are referred to as master numbers.

The application of the chart may be demonstrated by using Schoenberg's name:

A	R	N	O	L	D	S	C	H	O	E	N	B	E	R	G
1	9	5	6	3	4	1	3	8	6	5	2	5	9	7	
(= 28 = 10 =) 1 +						(= 51 =) 6 =									

The process is that of assigning each letter in the name its number value, arriving at two sums, one for the first name and one for the last, reducing those sums by adding digits, and arriving at the final sum, 7—the basic number value for Schoenberg’s name. “Expression number” is the numerological term. But there are additional numbers to be derived from a person’s name. Here is a list of those pertaining to Arnold Schoenberg:⁴

	<u>First Name</u>		<u>Last Name</u>	<u>Total</u>
Basic number (expression)	1	+	6	= 7
Consonants (quiescent self)	3	+	8	= 11
Vowels (soul urge)	7	+	7	= 5
First initial (cornerstone)	1			= 1
Total number of letters (name cycle)	6	+	1	= 7

The procedure for arriving at the birth date number is not pertinent to the matter immediately at hand. Nor are the numbers associated with the planets, with colors, with gems, etc. But numbers are also associated with the notes of the scale. The traditional procedure, one geared to the diatonic scale, was obviously of little use to Schoenberg. His modification, to be substantiated presently from its application in *Pierrot*, results in the following set of number values for the chromatic scale:

C	C#	D	D#	E	F	F#	G	G#	A	A#	B
1	2	3	7	5	6	7	8	9	1	11	3

It will be seen that Schoenberg’s procedure of assigning number values to scale degrees is similar to that used for the alphabet. A, the tenth note in the chromatic scale, is reduced to become 1, and B, the twelfth note, becomes 3. A#, as expected, is not reduced, but retains its master number, 11.

Totally unexpected, however, is the assigning of 7 to D#, the fourth

note. Schoenberg's derivation of 7 for that note is not difficult to discover: D# is not only the fourth note in a chromatic scale built on C, but the sixteenth as well. And $16=6+1=7$. But that can Schoenberg's reason be? The most logical explanation has to do with that fateful number, 13. In reduction, $13=4$. And Schoenberg seems determined to avoid 13, even in its reduction. An additional factor may be that D# as E $\flat$ has particular significance for the composer: as Es in German it is his signature note, representing the initial of his last name. To give this important note a 4 value would be unthinkable. (There will be occasion to return to D#-E $\flat$ and Schoenberg's musical signature later.) Two additional bonuses result from the banishment of 4 from the canon: (1) the scale is thus made consistent with the alphabet, both having a total number value of 9, and (2) the scale contains a double portion of Schoenberg's favorite numbers, 1, 3, and 7.

In the title of *Pierrot* Schoenberg indicates the importance in the work of two numbers, 3 and 7. The importance of their product, 21, is also implied, and although 21 does indeed assume some importance in *Pierrot*, it must be remembered that numerologically $21=3$. It has been pointed out, for example, that the opus number of *Pierrot*, 21, is reversed in the last two digits of the year of its composition, 1912. But this is not the point. The term "retrograde" is not a part of the numerologist's vocabulary. Rather are 12 and 21 related because both are 3 values. On the other hand, the *sum* of 3 and 7 is important in *Pierrot*. The addition of numbers is, after all, an essential part of numerology: $7+3=10=1$. Numerologists often point out, though, that a number arrived at by reduction never completely loses its original imprint. A 1 arrived at through 10, for example, still retains the vibrations of 10. This fact will figure to some extent in the analysis of *Pierrot*.

There are, then, three numbers that assume primary importance in *Pierrot*: 3, 7, and 1. Numbers 21 and 10 lurk in the background, making their presence felt, but not being put to use except as 3 and 1.

Two other numbers figure in *Pierrot* that are not singled out in the title of the work: the master numbers, 11 and 22. There are several reasons for their appearance. The first of these has to do with their numerological significance. It must be kept in mind that 3, 7, and 1 are not merely numbers to numerologists. They are not even "lucky" numbers. Rather are they powerful forces for good or evil, exerting their influence on the universe and profoundly affecting the lives of individuals. Or at least

they were that for Arnold Schoenberg. Here are meanings for 3, 7, and 1 that are generally agreed upon by numerologists:

- 3 — artist, the realm of artistic expression
- 7 — priest, the realm of spirituality
- 1 — creator, innovator, pioneer, the realm of invention, of innovation

The three numbers may be seen as appropriate to Arnold Schoenberg. But more important, they are particularly appropriate to *Pierrot lunaire*, where the art-artist relationship and the spiritual aspect of that relationship is a primary theme.

11 and 22 have these meanings:

- 11 — idealist, visionary, dreamer, the realm of artistic inspiration
- 22 — practical idealist, one who uses his power to benefit mankind

Again, the appropriateness of these numbers to the subject matter of *Pierrot* is apparent. The strong flavor of 11 and 22 throughout the final section of “Mondestrunken,” the first song in *Pierrot*, suggests Schoenberg’s view of the Poet-Pierrot-Schoenberg figure described there.⁵

Number 11 is also important because it figures among Schoenberg’s own name numbers. And finally, it is of some interest to note that it is associated with someone else who figures in Schoenberg’s work: Pierrot himself, whose total name number is 11, whose initial number is 7, and whose name contains 7 letters.

The 3×7 poems of Albert Giraud which Schoenberg selected for *Pierrot* are each thirteen lines long. However, the poetic form, that of the rondeau, saves the composer from ever having to come to grips with 13, since lines one and two of each poem are repeated as lines seven and eight, and line one is repeated again as line thirteen. The result is only 10 (=1) *different* lines in each poem. Schoenberg’s composition, his Opus 21 (=3), was composed in 1912 (=3), when the composer was 37 years old (=10=1). He commenced work on the composition on Tuesday (day 3 of the week), March (month 3) 12 (=3), and he had completed 20 of the 21 songs by May 30. He delayed completing the work, however, until he could complete the remaining song on Tuesday (day 3), July (month 7) 9—the numbers of the two dates, 12 and 9, adding up to 21 (=3).⁶ In his otherwise German title, Schoenberg retains the French “Pierrot lunaire”—with 7 letters in each word. Five instrumentalists and a reciter are called

for to perform the work, and they, plus a conductor, form a group of 7. With the three specified alternate instruments (piccolo, bass clarinet, and viola), this number becomes $7+3=10=1$.

A most impressive display of *Pierrot* numbers is presented on the 1914 edition's title page, the format of which must certainly have been overseen by the composer. The number of letters and of words in each of its lines is used to produce the significant numbers of the composition:

words per line		letters per line
3	DER ERSTEN INTERPRETIN	20=2
3	FRAU ALBERTINE ZEHME	18=9
3	IN HERZLICHER FREUNDSCHAFT	24=6
		$\overline{17=8}$
$=22$		
3	DREIMAL SIEBEN GEDICHTE	21=3
3	AUS ALBERT GIRAUDS	16=7
2	PIERROT LUNAIRE	14=5
5	(DEUTSCH VON OTTO ERICH HARTLEBEN)	28=1
		$\overline{16=7}$
		$\overline{10=1}$
3	Für eine Sprechstimme	19=1
7	Klavier, Flöte (auch Piccolo), Klarinette (auch Bass-	41=5
6	Klarinette), Geige (auch Bratsche) und Violoncell	40=4
$=16=$		$\overline{10=1}$
7		
$=11$		
1	(MELODRAMEN)	10=1
1	von	3
2	ARNOLD SCHÖNBERG	15=6
$=4$		$\overline{10=1}$

Even the individual poems of *Pierrot* share, for the most part, in this number play with words and letters, and one factor in the composer's choices from Hartleben's fifty translations would seem to have been whether or not their numbers fitted his own scheme. The text of "Mondestrunken," the first of the songs, fits extremely well:

<i>words per line</i>		<i>letters per line</i>
7	Den Wein, den man mit Augen trinkt,	27=9
7	Giesst Nachts der Mond in Wogen nieder,	32=5
4] 7	Und eine Springflut überschwemmt	29=11
3] 7	Den stillen Horizont.	18=9
	16=	<u>34=7</u>
	7	
4] 9	Gelüste, schauerlich und süß,	25=7
5] 9	Durchschwimmen ohne Zahl die Fluten!	31=4
7	Den Wein, den man mit Augen trinkt,	27=9
7	Giesst Nachts der Mond in Wogen nieder.	32=5
		<u>25=7</u>
6] 25=7	Der Dichter, den die Andacht treibt,	29=11
6] 25=7	Berauscht sich an dem heiligen Tranke,	31=4
5] 25=7	Gen Himmel wendet er verzückt	25=7
8] 25=7	Das Haupt und taumelnd saugt und schlürft er	37=1
7	Den Wein, den man mit Augen trinkt.	27=9
		<u>32=5</u>
		19=10= <u>1</u>

"Mondestrunken" will also serve to demonstrate the musical procedure of Arnold Schoenberg. The three stanzas of Giraud's poem impose on the piece its overall design of three musical sections, the close of each section being marked by a *ritard*. Section I is 14 (=5) measures in length. Section II also consists of 14 (=5) measures, and Section III is

11 (=11) measures in length. The total length of the piece is 39 (=12=3) measures, but its numerological length is $5+5+11=21=3$. The influence of the five numbers, 1, 3, 7, 11, and 22, is felt, however, not only in the total length of the piece and in the lengths of its three sections, but in the length of every one of its component phrases as well. The time span of each phrase (and each rest) is measured in units of eighth notes, sixteenth notes, or, less frequently, quarter notes. Schoenberg's choice of the unit of measure seems to depend on the predominant activity within a phrase. At times the activity of the lines concurrent with a phrase will determine its unit of measure.

Within each phrase each note will have a pitch number value, and the sum of these values, in appropriate reduction, will be the pitch number value of the phrase as opposed to its time span value.

Two additional sets of number values are generated by the music. The first of these derives from the measurement of distances between the individual pitches of a phrase. Applied to chords, the measurement is that of the distance between each of the pitch components of the chord. These intervallic values are normally measured in semitones. The second set is a simple quantitative numbering of the pitches that go to make up a particular segment of a line.

To sum up, there are four elements in the closed number-system used by Schoenberg in *Pierrot*:

1. Pitch values, derived from the numbers as assigned by Schoenberg to the twelve notes of the chromatic scale
2. Time span values, derived from measuring the length of a musical statement (or rest) in eighth notes, sixteenth notes, or quarter notes
3. Intervallic values, derived from measuring the distances between pitches, in either a melodic line or a chord formation, the unit of measurement normally being the semitone
4. Quantitative pitch values, derived from counting the number of pitches that go to make up a particular musical statement

The process will be clarified by actually applying it to Schoenberg's music. A score of "Mondestrunken," containing a numerological analysis, forms an integral part of the present article. In pursuit of clarity, only slurs and phrase markings have been retained with the notes of each part, such markings as those of dynamics and tempo having been eliminated. The

part for the reciter has been beamed in order to make phrases more apparent, and Schoenberg's note stem cancellations in that part have been removed.

Number values for the time span of each phrase have been placed below the staff, those for pitches have been placed above, with totals circled for emphasis. In extended phrases, particularly those of the reciter, subtotals of smaller units have been calculated where they are appropriate. Each subtotal is marked with a semicircle. Final totals have been computed from them and circled.⁷

"Mondestrunken" begins with a quasi-ostinato figure played by violin and piano. The violin figure is one of 3 notes. Each of the two pitches in the figure, F# and D#, has a pitch value of 7, and $3 \times 7 = 21 = 3$. The 3 eighth notes of the figure, with their initial eighth rest (=1), are repeated four times, thereby occupying a time span of $16 = 7$ eighth notes. The range of the figure (D#-F#) is 3 semitones.

Meanwhile, the piano is playing a figure of 7 notes (preceded by a single sixteenth rest =1). The pitch value of these notes is $9 + 5 + 1 + 3 + 11 + 2 + 8 = 39 = 12 = 3$. The four repetitions of the figure occupy a time span of $16 = 7$ eighth notes. The range of the figure, c''#-g'''#, measured in semitones, is $19 = 10 = 1$. Alternatively, the interval C#-G# if considered within an octave, represents a distance of 7 semitones. The unreduced sum of the pitches is 39—the same figure as the total number of measures in "Mondestrunken." And its intervallic value, measured in semitones, is $4 + 4 + 2 + 4 + 9 + 6 = 29 = 11$. But in this particular instance, an interesting alternative measurement can be made with the unit of the whole tone: G# to E=2 whole tones, E to C=2 whole tones, C to D=1 whole tone, and D to Bb=2 whole tones. With the sum thus far at 7, a switch is then made to the second of the two available whole tone scales, and the final C# to G=3 whole tones. The result is $7 + 3 = 10 = 1$. Accepting this division of the 7 notes into 5+2 leads to another revelation. The pitch value of the first five notes is $9 + 5 + 1 + 3 + 11 = 29 = 11$, and that of the final two notes is $2 + 8 = 10$. $11 + 10 = 21$.

Before the violin and piano figures are concluded, the flute makes an entry following a rest with a time span of 10 (=1) eighths. His line occupies a time span of 10 (=1) eighths, and the pitch value of his five notes is $1 + 11 + 1 + 7 + 1 = 21 = 3$. The intervallic value of his phrase (measured in semitones) is $14 = 5$, a subtotal which, when added to the 7 value of his second phrase, results in $12 = 3$.

The reciter delays for a time span of 7 eighths before entering with a phrase whose time span is 21 (=3) eighths. Its pitch value is $11+4=15=6$, but that of the following phrase is $22+6=28=10=1$, the total of the two phrases being $6+1=7$. The intervallic value of the first phrase is $34=7$, while that of the second phrase is $49=13=4$. $7+4=11$. The second phrase, incidentally, since it begins with three sixteenth notes following a sixteenth rest, must have its time span measurement made in sixteenths. That value is $39=12=3$.

The quantitative pitch values in Section I of "Mondestrunken" are as follows;

Flute

$$5+(13=)4+(14=)5+(16=)7=21=3$$

Violin

$$(12=)3+(28=)1+1+11=16=7$$

Reciter

$$(31=)4$$

Piano

$$(28=)1+(19=)1+9+(34=)7+(12=)3+(14=)5=26=8$$

The part for the reciter in Section I contains 31 pitches, a figure which at first seems disappointing. In measure 8, however, Schoenberg takes an unusual action: he inserts an eighth rest between the syllables "Spring" and "flut." This caesura not only produces an unexpected pitch value of 22 at that point, but also divides the line into 21 pitches plus 10 pitches. 3 and 1 are thus the two quantitative values.

The total quantitative value for the section is 22. The total for Section II is also 22, and that for Section III is 11. $22+22+11=55=10=1$.

Both the flute and the reciter begin and end their phrases at the beginning of "Mondestrunken" on the note A (=1) and pivot around that pitch. Of more interest is the very first note of the piece—the piano's opening G#. That note marks the beginning of each of the three sections of the song. Its number value is 9, and it functions thus. G# is, however, not only the ninth chromatic note, but note 21 as well—a fitting keynote, then, to the song and to the entire composition.

The procedure to be observed in "Mondestrunken", as it continues to unfold, is the procedure for the whole of Arnold Schoenberg's *Pierrot lunaire*. 1, 3, 7, 11, and 22 retain their control throughout the composition. What is fascinating, however, is the rich variety of approaches to those key

numbers. Part II, that journey into the dark night of the soul, summons up, as might be expected, frequent appearances of 13. The malevolence of that number is felt only briefly, however, before it is swiftly transformed into something less sinister. Examples are the opening piano notes of No. 8 ($5+8$), the first two notes of the reciter in No. 9 ($8+5$), the first two string chords of No. 10 ($8+5$), the first two notes of the reciter in No. 12 ($5+8$), and the first two notes of the reciter in No. 13 ($6+7$).

As befits the poetry, there are more felicitous appearances of number 5 (freedom, change, according to numerology) in Part III. Two of them ($5+5=10=1$) in the piano part are the last instrumental sounds of the piece. They are preceded by one of Schoenberg's musical signatures, in this instance a multi-layered one (A, S, AS, and A. SCHoenBERG) played by the piano and occurring in measure 28 ($=10=1$) of the final song.

But certainly by now the point has been made: number symbolism plays a crucial role in the organization of this extraordinary composition, a role that Schoenberg was careful to point out in the title, and one that cannot be ignored in any thorough study of the work's structure.

Finally, in spite of the fact that the title of *Pierrot lunaire* is the single instance of its composer indicating his use of numerology in the structuring of a work, the procedure is not at all peculiar to that composition. Used systematically at least as early as the Chamber Symphony, Opus 9, numerology continued to be used by Schoenberg as a structural device in his music until the very end of his life. Throughout the period Schoenberg remained loyal to the numbers used in *Pierrot lunaire*: 1, 3, 7, 11, and 22. But with astonishing versatility this meager troupe assumes innumerable roles in constantly varied settings and with an ever changing supporting cast. That their contribution to Schoenberg's music has gone unnoticed is most unfortunate. Overlooking the prevailing number euphony in a work such as *Erwartung*, for example, has led to frustration on the part of those critics whose diligent search has been for a more conventional system of order.

Perhaps most astonishing of all, even Schoenberg's twelve-tone music retains this indispensable second layer of numerological order. The row may propose the sequence in which pitches are to be used in a particular composition, but rhythms, phrase lengths, cadence points, section lengths, note repetitions, chord formations, and row transpositions are all regulated, not by the row, but by the number values of numerology. Indeed, an examination of Schoenberg's rows themselves will reveal them

to be, not arbitrary arrangements of twelve notes, but the careful integration of the number values of those notes. It follows, then, that to emphasize the numbers of the row in this later music, as has been done, and to ignore the mystical figures of numerology is to project a seriously distorted image of the composer and his work.

NOTES

- (1) Quoted by Walter Rubsamen in "Schoenberg in America," *The Musical Quarterly*, vol. XXXVII, no. 4, October, 1951.
- (2) George Perle, for instance, (in his article "Pierrot lunaire," published in *The Commonwealth of Music*, edited by Gustave Reese and Rose Brandel, The Free Press, New York, 1965) makes the statement that "Schoenberg's use of magic numbers has, of course, no musical significance. Since each of the poems consists of thirteen lines, an unlucky number, perhaps he thought it well to organize the whole according to two lucky numbers, three and seven."
- (3) Much of the information on numerology is supplied from *Your Days Are Numbered* by Florence Evelyn Campbell, M.A., The Gateway, Ferndale, Pennsylvania, 1931. There are many more modern, more systematic handbooks on the subject, but this rather quaint publication, a classic in its field, reflects numerology as it was practiced during the first quarter of the century, the period when Schoenberg must have first become interested in it.
- (4) The composer used the original spelling of his name, "Schönberg," during the period of the composition of *Pierrot*. The change to "Schoenberg" was evidently made soon after his arrival in the United States in 1933. The name numbers for the original spelling are presented below for comparison. In computing the expression number, raw values have been used rather than reduced ones in order not to conceal the important total, 11. Arnold Franz Walter Schönberg, his rarely used full name, has a consonant number value of 13.

A R N O L D	S C H Ö N B E R G
1 9 5 6 3 4	1 3 8 6 5 2 5 9 7

	First Name	Last Name	Total
Expression	28 (=10)	+ 46 (=10)	= 74=11
Quiescent self	3	+ 8	= 11
Soul urge	7	+ 11	= 18=9
Cornerstone			=1
Name cycle	6	+ 9	= 15=6

- (5) That Schoenberg identifies with the poet is strongly suggested by the music. First of all, the cello, having remained mute during the first two sections of "Mondestrunken," enters with an impassioned song at the first mention of the poet. Solidly grounded by a 3-note pedal (10=1), and with the violin soaring airily above it, this line is saturated with 11's until it finally comes to rest with five pizzicato chords. The four-note chord of the final bar, played twice, consists of the notes C, B (H in German), D $\sharp$ (read as E $\flat$, S in German), A—forming the signature A. SCH. Recalling that reduced numbers still retain some of their original flavor, the temptation is strong to assign A the value of 10 here, thereby reading the chord as 1+3+7+10=21—a summation, as it were, of the numbers that have controlled the piece. In the analytical score, that temptation has been yielded to on the final chord, a chord that then has, not only a pitch value of 21, but an intervallic value of 21 as well.
- (6) The dates are from Joseph Rufer, *The Works of Arnold Schoenberg: a Catalogue of His Compositions, Writings, and Paintings*, D. Newlin, tr., St. Martin's Press, New York, 1962.
- (7) Neither the intervallic nor the quantitative number values have been entered in the analytical score. To have done so would have been to produce an indecipherable jumble of numbers. Then too, the procedures for counting notes and measuring intervals are, after all, simple enough so as to hardly call for guidance. This action is not to be interpreted as an attempt to minimize the importance of either intervallic or quantitative values. On the contrary. There are instances in *Pierrot*, for example, where the intervallic value would seem to take precedence over the pitch value. Such a situation exists in the passacaglia theme of No. 8, where the head motive of the theme, E-G-E $\flat$, has a pitch value of 5+8+7=20=2. Two is not a significant number in *Pierrot*. The intervallic value of the same motive, however, is 3+4=7.

Mondestrunken **a numerological analysis**

SECTION I

FLUTE

1 11 1 7

10 ♭ = ①

10 ♭ = ①

7 7 7 = ③

21 = ③

-x4 = 12 = ③

VIOLIN

16 ♭ = ⑦

CELLO

1 3 11 9 1 1 3 9 = 1

38 = ①

RECITER

DEN WEIN, DEN MAN MIT AUGEN TRINKT, GIESST

7 ♭ = ③

21 ♭ = ③

9 5 1 3 11 2 8 = ③

59 - 12 = ③

-x4 = 12 = ③

PIANO

7 ♭ = ③

16 ♭ = ⑦

9 1 3 8 2 6 1 $7^f = 55 = 10 = \textcircled{1}$

16 $\textcircled{7}$ 22 $\textcircled{7}$

11 7 2 5 6 3 1 2 11 9 7 7 7 2 3 3 9 1 8

22 $\textcircled{7}$

1 3 11 7 = 3 2 1 7 3

UND EINE $\textcircled{22}$ SPRING - FLUT ÜBER - SCHWEIMT DEN

6 $10 = \textcircled{1}$ 3 1 = 10 = 9 5 8 6 2 3 3 9 1 11 8 2 6 $5^7 = 85 = 13 = \textcircled{4}$

9 5 8 6 2 3 3 9 1 11 8 2 6 6 6 6 6 6

25 $\textcircled{7}$

3 7 5 1 3 11 2 8 6 1 5 9 7 6 = 3 11 2 8
74 = 11

25 = 7 11 = 7

11 = 8 = 172 = 10 = 1 6 5 1 2 11 1 7 6 3 7 7 = 56 = 11

FLAG (p) 7 7 11

5 8 9 1 3 = 42 = 6 = 43 = 7

10 STIL - LEN HORI - ZONT 12 15

22 22 22 = 66 = 7 12 = 3

109 = 10 = 1 6 5 7 2 3 6 7 = 36 = 9 3 = 21 = 3 = 12 = 3

2 1 3 1 8 5

1 = 21 = ③

1 2 3 7

10 ♭ = ①

9 8 7 7 7 5 1

10 ♭ = ① 7 ♭

8 7 3 2 6 2 1 1 = ④

NACHTS DER MOND IN WO - GEN NIE - DER,

9 7 1 9 5 7 6 5 6 2 1 3 11 2 8 = 12 = 10 = ① +

8 7 5 7 = 27 = ⑨ + - - - - - = 10 = ①

29 ♭ = ⑪

3 11 2 8 11 5 7 7 3 6 2 5 =
92 = ⑪

⑦ ♩ —————

10 ♩ = ① —————

SECTION I = 14 BARS = 5
TIME SPAN = 64 1/2 = 10 = 1

SECTION II

9 6 5 1 3 11 2 8 6 7 7 7 7 = 9 5 1 3 11 2 8 = 7
 79 = 16 = ⑦ 39 = 12 = ③

FLUTE

10 ♭ = ① ① ♭ ⑦ ♭

5 3 1 2 = 6 11

VIOLIN

③ ♭ 21 ♭ = ③

RECITER

16 ♭ = ⑦

7 6 9 5 1 3 3 1 6 5 = 7 7 7 5 3 11 1
 46 = 10 = ①

PIANO

9 5 7 7 5 = 9 11 7 3 = 2 3 1 9 8 1
 58 = ⑪ 50 = ③

⑪ ♭

1 1 1 2 2 2 1 1 1 - 7⁹ 9¹¹ 11³ = 50 = ③ 1 8 5 7 7 3 3 7 7 -
 19 = 10 = ① 50 = ③ 48 = 12 = ③

1 9²⁷ = ③ 10 = ① = 19 = ① 1 11 8 7 11 9 = 48 = 12 = ③

5 1 11 = ③ 5 9 7 1 5 2 11
 GE - LÜ - STE, SCHAU - ER LICH UND SÜSS, DURCH -

4 3 7 7 4 9 4 7 6 5 7 5 5 2 7 6 5 7 5 3 2 1 = 154 = 10 = ①

4 4 1 1 6 2 7 3 4 7 1 1 = 65 = ⑦

19¹ = 10 = ①

$6^{\circ} =$
 $74 = 3$

$7 \ 7 \ 7 \ 8 \ 9 \ 3 \ 2 \ 3 \ 5 \ 6 \ 9 = 1 \ 9 \ 7 \ 1 \ 8 \ 5 \ 1 \ 9 =$
 $66 = 12 = 3 \ 41 = 5 = 22$

$38 \text{ ♩} = 11$

$5 \ 6 \ 8 \ 7 \ 11 \ 1 = \ 9 \ 7 \ 3 \ 2 \ 6 \ 3 \ 7 =$
 $58 = 11 \ 37 = 10 = 1 \ 6 \ 3 \ 7 \ 7 =$
 $30 = 3$

$34 \text{ ♩} = 7$

$9 \ 7 \ 3 \ 6 \ 3 \ 5 \ 5 \ 76 = 13 = 2 = 4 \ 5 \ 2 = 3 \ 1 \ 9 \ 8 \ 6$

SCHWIMMEN OHNE ZAHL DIE FLU - TEN! DEN WEIN, DEN MAN MIT AUGEN

$34 \text{ ♩} = 7 \ 1 \text{ ♩} \ 7 \text{ ♩}$

$7 \ 9 \ 4 \ 7 \ 8 \ 7 \ 6 \ 1 \ 3 \ 1 \ 6 \ 2 \ 1 \ 7 \ 5 \ 1 \ 11 =$
 $92 = 11 \ 1 \ 7 \ 9 \ 6 \ 9 \ 6 =$
 $58 = 11$

$5 \ 1 \ 3 \ 1 \ 8 \ 3 \ 1 \ 11 \ 8 = 39 = 12 = 3$

$10 \text{ ♩} = 1 \ 7 \text{ ♩}$

$11\ 9\ 7\ 11\ 9 = 3^f = 55 = 10 = \textcircled{1}$
 $9\ 5\ 1\ 3\ 11\ 2\ 8 = 39 = 12 = \textcircled{3}$
 $5\ 1\ 9\ 11\ 7\ 1\ 7 = 41 = \textcircled{3}$

$8\ 5\ 6 = 21 = \textcircled{3}$
 $1\ 7\ 7 = 21 = \textcircled{3}$
 $3\ 3\ 3 = 9$
 11

$5 = 32 = \textcircled{5}$
 $1\ 9\ 6\ 9\ 5\ 8\ 7\ 3\ 57 = 12 = \textcircled{5} = 23 = \textcircled{5}$

TRINKT, GIESST NACHTS DER MOND IN WÖGEN NIE - DER.

$4\ 8\ 7 = 19 = 10 = \textcircled{1}$
 $9\ 5\ 1\ 3\ 11\ 2\ 8 = 39 = 12 = \textcircled{3}$
 $5\ 1\ 9\ 11\ 7\ 1\ 7 = 41 = \textcircled{5}$
 $1\ 9\ 8$

30 $\textcircled{3}$

1 9 5 7 3 6 3 = 5 1 9 = 1 9 5 = 9 5 1 =

34 = 7 15 = 6 15 = 6 15 = 6

① ⑦ ① ③ ① ③ ① ③

8 11 = 7 7 7 = 3 3 3 7 1 3 6

30 = 3 21 = 3

82 = 10 = ①

27 28 7 DER

19 = 10 = ①

7 3 6 3 = 3 11 2 8 11 7 1 7 7 3 6 3 3 11 2 8 =

34 = 7 = 10 = ① 95 = 12 = ③

16 = ⑦ = 10 = ①

SECTION II = 14 BARS = 5
TIME SPAN = 70 = 7

SECTION III

9 5 1 2 11 2 8 = 1 6 2 7 1 3 9 = 11 7 3 5 2 7 1 = = 6 4 = 10 = ①

38 = ⑪ 29 = ⑪ 36 = ⑨

FLUTE

1 = 27 = ⑨ 5 1 9 11 8 1 7 30 = ⑧ = 38 = ⑪

VIOLIN

11 9 7 11 1 5 8 9 8

CELLO

8 26 = ⑪ = 1 3 2 3 7 = 5 7 10 = ⑩ = 7 = 6 7 2 1

RECITER DICTER, DEN DIE AN- DACT TREIBT, BE- RAUSCHT SICH AN DEM HEILIGEN

5 7 26 = ⑦ 3 7 = 7 2 5 21 = ⑧

PIANO

1 = ⑪

22

28 $\flat = 10 = \textcircled{1}$

7 9 3 2 3 2 3 2 11 7 3 1 8

1 75 = 12 = $\textcircled{4}$ 8 7 8 11 7 5

7 6 = 27 = $\textcircled{11}$ 7 5 7 1 9 3 2 6 50 = 7 = $\textcircled{5}$

TRANKE, GEN HIMMEL WENDET ER VER- ZÜCKT DAS HAUPT

12 $\flat = \textcircled{3}$ 8 9 5 7 = 29 = $\textcircled{11}$ 9 1 14 = 4 = $\textcircled{5}$ - 21 = $\textcircled{3}$

5 9 2 1 1 11 = 29 = $\textcircled{11}$ 9

16 $\flat = \textcircled{7}$

1 3 11 8 7 7 5 3 3 2 1 1 7 7

7 6 7 5

59 = 12 = ⑤

1 8 6 7 = ③

2 3 1 5 3 7 5 1 11 = 58 = ⑪ 9 8 5 6 5

UND TAUMELND SAUFT UND SCHLURFT ER DEN WEIN, DEN MAN MIT AUGEN

35 21 = ③ 30 = ⑤

7 5 4 19 = 10 = ① 3 9 1 2 3 5

5 1 3 11 2 8 = 59 = 12 = ⑤ 9 5 1 3 11 2 8 6 2 5 11 9 8 = 80 = ⑪

③ ⑦

$3 \quad 2 = 7$
 $9 \ 5 \ 1 \ 3 \ 11 \ 2 \ 8 = 39 = 12 = 5$

$6^{\circ} = 102 = 3$
 $7 \ 7 \ 7 \ 7 \ 7 = 35 = 8 = 11$

$5 \ 9 \ 11 \ 28 = 10 = 1$
 (21)

$7 = 40 = 4 = 47 = 11$

TRINKT.

$1 = 16 = 7$
 $1 = 25 = 7$
 $9 \ 5 \ 1 \ 3 \ 11 \ 2 \ 8 = 39 = 12 = 3$
 $5 = 11$

SECTION III = 11 BARS
 TIME SPAN = $56 \text{ } \flat = 11$

NOTES ON THE ANALYTICAL SCORE

- | <i>Bar</i> | <i>Beat</i> | |
|------------|-------------|---|
| 7 | 1 | 7 (flute) against 3 (violin) |
| 7 | 1, 2 | Throughout the score, chord formations receive their pitch values from the sum of their components. The piano chord on the second beat of this bar, a 10=1 chord with an intervallic value of 11 (and thus the implication of 21), will later serve as the 22-♭ pedal in Section III. |
| 10 | 1 | “stillen” receives special emphasis by being the single word sung in “Mondestrunken.” Its pitch value is $5+8=13$, implying, perhaps, that the horizon is not only still, but, lacking the saving grace of moonlight, sterile and lifeless as well. Such an interpretation is supported by the phrase in the right hand of the piano part beginning on the last sixteenth note of measure 7. Its pitch value is 13 (=4). Dovetailing with the 13 of “stillen,” the piano 13 is transformed into a 7, after a dramatic break, by the mysterious 3×22 chords of measure 10. |
| 10 | 2 | As noted in the score, the piano chord here has a pitch value of 22. Its intervallic value is also 22. And with the numbers of its component pitches, it becomes a veritable compendium of <i>Pierrot</i> number values: $1+3+7+11=22$. In addition, this series draws attention to the process by which the original two numbers of the title, 3 and 7, generate the others in the set: $3+7=1$; $3+7+1=11$; $3+7+1+11=22$. |

- 10 2 The isolation of the violin G and the fact that it is the only harmonic called for in the song both give the note special prominence. Its function, too, is significant: as 8 it transforms the phrase which precedes it from a pitch value of 11 to one of 10. "Power" is the numerological meaning for 8. Meanings for 11 and 10 (1) have been suggested in the body of the text.
- As must be apparent from the several comments made on the activity in this measure (appropriately, measure 10 of the piece), its significance could best be explained by referring to the numerological meanings of numbers and to Schoenberg's personal interpretation and use of them. A thorough examination of this subject would be extraordinarily revealing, not only for *Pierrot lunaire*, but for the entire corpus of Schoenberg's work. Such a project is, of course, quite beyond the scope of the present study.
- 26 2 The 5 value as the total for the reciter's pitches in Section II is equivocal. Adding it to the 7 total of Section I results in $12=3$, whereas combining it with the total of Section III produces $16=7$.
- 29 1 The number of notes in the first phrase of the cello line is 11, and that of the second phrase is 10. $11+10=21=3$. With the semitone as the unit of measure, the intervallic value for the first phrase is $34=7$. That for the second phrase is 22. $7+22=29=11$.
- 29 1 The time span for the right hand of the piano part from the second half of this beat until the end of bar 34 is $29\flat=11$.
- 37 3 11 (flute) against 3 (piano)