



## Protectorate XX:XX – YY:YY\*

*Bill Dietz*

\*The "XX:XX" and "YY:YY" in the Title should be replaced in each performance with the start and end times of the piece on a given program (if, for example, the Ex.1 concert program below would begin at 20:00, the piece would begin at 20:31 and end at 20:41, making the title Protectorate 20:31 – 20:41)

*for Kirsten Fuchs and Jessie Marino*

### 1. The Time Structure

The time structure of the entire concert is proportionally reduced into the given duration of the work. Critical to these calculations is the inclusion of the time spaces between, before, and after pieces on the concert program. If all of these timings cannot be to a certain degree fixed before the concert, these should be estimated as accurately as possible.

*Ex. 1: Time Structure of a 1-hour long Concert and the proportional time structure of a 10-minute piece (Ratio: 1/6)*

The Concert (60:00)			**1/6 <sup>th</sup> of the Concert (10:00)		
I.	Opening, Set-up	5:00	I.	Opening Pause	0:50
II.	First Piece	15:00	II.	First Section	2:30
III.	Applause, etc	2:00	III.	Second Pause	0:20
IV.	Second Piece	8:00	IV.	Second Section	1:20
V.	Applause, etc	1:00	V.	Third Pause	0:10
VI.	Third Piece**	10:00	VI.	Third Section**	1:40
VII.	Applause, etc	2:00	VII.	Fourth Pause	0:20
VIII.	Fourth Piece	5:00	VIII.	Fourth Section	0:50
IX.	Applause, etc	2:00	IX.	Fifth Pause	0:20
X.	Final Piece	6:00	X.	Final Section	1:00
XI.	Applause, Closing	4:00	XI.	Closing Pause	0:40

\*\*The space of the piece within "itself" is an exceptional space discussed below under heading #7.

### 2. Ratio of Sections to the Whole

Necessary to the calculations of the remainder of the work are the relations of the individual sections to the whole (these proportions being of course identical in the concert and the piece).

*Ex. 2: Ratios of the Sections to the Whole as in the Ex. 1, an 11-Part Structure*

#### *Percentages (100%)*

I.	8 1/3%
II.	25%
III.	3 1/3%
IV.	7 1/2%
V.	1 2/3%
VI.	16 2/3%
VII.	3 1/3%
VIII.	8 1/3%
IX.	3 1/3%
X.	10%
XI.	6 2/3%

### 3. “Tempi”/Divisions of the Individual Sections

Each section’s correspondent ratio to the whole determines its own internal division into equal segments in relation to the second. Thus the “First section” of the Example (also indicated by “II.”) is further divided into 10 0:15 long segments (or metronome marking beat=4), and the “Second Section” (“IV.”) is divided into 26  $\frac{2}{3}$  0:04.5 long segments (or metronome marking beat=13  $\frac{1}{3}$ ).

#### *Ex. 3: Divisions/“Tempi” of the 5 Sections*

I. Opening Pause	0:50
II. First Section, 10x0:15, Beat=4	2:30
III. Second Pause	0:20
IV. Second Section, 17 $\frac{7}{9}$ x0:04.5, Beat=13 $\frac{1}{3}$	1:20
V. Third Pause	0:10
VI. Third Section**	1:40
VII. Fourth Pause	0:20
VIII. Fourth Section, 10x0:05, Beat=12	0:50
IX. Fifth Pause	0:20
X. Final Section, 10x0:06, Beat=10	1:00
XI. Closing Pause	0:40

### 4. “Ranges” of the Individual Sections

As with the “tempi”, the ratio of section to whole determines the frequency range of each individual section, in this case in relation to the standard playable range of the given instrument(s)\*\*\*. Thus the range of the “First Section” (“II.”) is 25% of the entire range of the instrument, whereas the range of the “Second Section” (“IV.”) is 7  $\frac{1}{2}$ % of the entire range of the instrument, etc.

These “range segments” may be “placed” anywhere throughout the instrument’s range for the duration of the corresponding section, but in any given piece these ranges may not overlap. That is, if in a given piece a performer uses the uppermost 25% of her/his range in the “First Section”, pitches from this range may not occur in any of the other sections of the piece (with the exception of the “piece within the piece”\*\*).

\*\*\*By standard is indicated not the “textbook” range, but rather the entire range of an instrument producible using “standard” playing techniques – thus no harmonics, extended techniques, etc. The entire heard range should thus be as timbrally uniform as possible.

### 5. Coordination of Temporal and “Tonal” Divisions

As the “First Section” (“II.”) is made up of 10 0:15 long segments within which 25% of a given instrument’s range is “represented”, this means that over the 2:30 of this “First Section” the 25% of an instrument’s range is to be divided into 10 equal divisions and 1 of these is to be articulated every 15 seconds in ascending order.

In the “Second Section” (“IV.”) this means the 7  $\frac{1}{2}$ % of an instrument’s range must be divided into 17  $\frac{7}{9}$  equal divisions, one of which is articulated in ascending order every 4.5 seconds.

Etc.

### 6. Performance

The sections of the piece representing sections of the concert between, before, or after other pieces are to remain “outside” performance (thus indicating sectional divisions of the piece by changes in performance posture/stance). The sections of the

piece representing “performed” sections of the concert are to be performed by articulating the temporal and tonal divisions described above on the given instruments.

If possible, all performers in the given concert should perform in the piece. In the case of a performance with multiple interpreters, the performers need not coordinate their tonal materials (i.e., “placement” of a range segment in a given section), but should maintain temporal coordination (see “8. Notes on Accuracy”).

In the case of a single vocalist’s participation, he or she should articulate each “tone” on the American English phoneme “La.” In the case of multiple vocalists’ participation, they should articulate each “tone” on the American English phoneme “Oo.”

The performance “style” need not attempt to be “neutral”, but should avoid clichés of historical performance practice. Most important is the communication of the given structural “information”. In this sense, the loudness of the piece should remain relatively constant and moderate throughout.

### **7. The “Piece within the Piece”**

This “Piece within the Piece” section (in the Example, the “Third Section”, “VI.”) is a special case in which the entire range of a given instrument is to be articulated via the relation of the second to the entire duration of the section in ascending order from the lowest playable tone to the highest. Thus as the exemplary “Third Section” lasts 1:40, this means that the entire range of given instrument is to be articulated in 100 equal divisions at a rate of 1 tone per second.

### **8. Notes on Accuracy**

All calculations should be carried out as precisely as possible based on the initial concert structure data.

However, as actual durations of the concert structure will undoubtedly vary, and as the self-referential logic of the piece’s structure is to a large degree arbitrary, there is no necessary demand that one perform the resulting material as precisely to the letter as possible. As stated above, “most important is the communication of the given structural ‘information.’” This could mean, for example, that one interprets the “equal divisions” of the range segments to the nearest semitone, quartertone, or what have you, depending on the given situation (rehearsal time, concert context, etc). Further, in the case of the coordination of temporal divisions, this suggests that only the beginnings of individual sounds are needed to articulate a given time interval (for example, every 4.5 seconds). Thus one need not sustain an individual sound throughout a given time interval and thus a “tone’s” end within that interval is at the discretion of the performer. In the case of a performance with multiple interpreters however, endings should be simultaneous and thus coordinated.

