

new dark art **treatise**

Corey Mwamba

Introduction

new dark art works on the principles of stress-timed rhythm and tonic suggestion.

Stress-timed rhythm is based on the timing between stressed elements in a phrase being equal or almost equal¹. Although tonic suggestion had been conceived independently, it has some semblance to the thinking around polyphony that developed in Europe from the eleventh century².

Each piece has a melody, which everyone plays. There is no indication of speed, pitch register or time signature. Instead, a malleable pulse is created by the combination of the phrasing of the melodic line and the tonal suggestions.

1 P. H. Matthews, 'Stress-Timed', *The concise Oxford dictionary of linguistics*, Oxford Paperback Reference (Oxford; New York: Oxford University Press, 2005), p. 355.

2 Guido D'Arezzo and Leone Bernice La Duke, 'Micrologus' (University of Oregon, 2009).

Rhythm

Every musical phrase has its own pulse. This pulse is the combination of stress and silence within and around the phrase.

An unstressed or *short* sound is shown using \sim above a pitch, and a stressed or *long* sound is shown using $\bar{\quad}$. Here are the common pulse patterns.

pattern	name
$\sim \bar{\quad}$	iamb
$\bar{\quad} \sim$	trochee
$\bar{\quad} \bar{\quad}$	spondee
$\sim \sim$	pyrrhus
$\sim \sim \sim$	tribrach
$\bar{\quad} \sim \sim$	dactyl
$\sim \bar{\quad} \sim$	amphibrach
$\sim \sim \bar{\quad}$	anapest
$\sim \bar{\quad} \bar{\quad}$	bacchius
$\bar{\quad} \bar{\quad} \sim$	antibacchius
$\bar{\quad} \sim \bar{\quad}$	cretic
$\bar{\quad} \bar{\quad} \bar{\quad}$	molossus

The length of these time units is felt internally, within each musician and the group as a whole, as a phrase is played: but the timing between the *longs* is usually constant.

A phrase is a collection of time units terminated by a symbol called a *prosodic sign*. There are two types of prosodic sign: rhythmic signs and affective signs.

The **rhythmic signs** indicate how much silence to leave between each phrase.

sign	name	length
//	caesura	medium to long
.	period	long
:	colon	medium
;	semi-colon	short
,	comma	very short

The period phrase has the longest ending and ends with one full-stop. The colon phrase is slightly shorter than the period: this is again longer than the semi-colon; and that is longer than the comma, which is slightly longer than a natural space between sounds. There is also the general pause (the caesura), which has a flexible length, but marks a section.

Affect

Sound can and does evoke meaning for the listener, even if that sound has no meaning. Although the musician cannot always predict the exact meaning that will be evoked in a listener, we can try to locate a meaning for ourselves within the sound, and communicate this. This meaning is called an *affect*³.

Older forms of music have achieved this by assigning moods and temperaments to specific notes or scales; but this music uses timbre and the internal resources of the musician for this role.

The *general affect* for a piece is written as simple trigger words, for example

joyful	irreverent	energetic	calm	drunken
sad	solemn	lethargic	raging	fearful

The creative musician then interprets the words for the *general affect* in the music.

³ This is said *ā*ffect, rather than the verb *af*fect.

This will have an impact on the speed and dynamic range of the music.

The **affective signs** lend expression to a phrase in context with the *general affect*.

sign	name	action	length	volume	pitch	timbre
!	exclamation	to shout	any	increases	raises or lowers	harsh
?	question	to ask	any	flat	raises	smooth
.../..?/..!	ellipses	to drift	very long	decreases	dependent on final sign	dependent on final sign
-/-?/-!	hyphen	to interrupt	very short	flat	dependent on final sign	dependent on final sign

The exclamation mark affects the whole phrase, increasing its volume towards the end and possibly “roughening” the note. The question mark slightly raises the pitch of the phrase towards the end. The ellipses gently reduces the volume of the last note, and lengthens the silence (it could be longer than a period). The hyphen shortens the last note almost to the point that it is not played.

Phrasal rhythm

The combination of the rhythmic signs gives each phrase a rhythm of its own.

The chromatic series and its intervals

For most pitched instruments using equal temperament, there are twelve possible pitches. The arrangement of these twelve pitches in ascending order of frequency is *the chromatic series or scale*. The name for the space between any two pitches in a series is called *an interval*. The distance between one pitch and its nearest neighbour in the chromatic series is called a semitone (**S**). Two semitones equal a tone (**T**). The other intervals are additions of these two smaller units: so from a starting note to another seven semitones above it is $7 \div 2S = 3T + 1S = 3\frac{1}{2}T$. A table of the intervals with their names and signs is shown.

name	spacing	sign
unison	0S	U
lesser ⁴ second	1S	ii
greater second	2S = 1T	II
lesser third	1½T	iii
greater third	2T	III
fourth	2½T	IV
tritone	3T	tt
fifth	3½T	V
lesser sixth	4T	vi
greater sixth	4½T	VI
lesser seventh	5T	vii
greater seventh	5½T	VII
octave	6T	O

These thirteen intervals are arranged to give the table of tonic suggestions:

- The octave and the unison are **absolute**: they define a tonic with no ambiguity.
- The fifth is **resolute**: it strongly suggests the lower note as the tonic.
- The fourth is **resolute**: it strongly suggests the upper note as the tonic.
- The greater and lesser thirds are **medial**: they suggest the lower note as the tonic.

4 “lesser” and “greater” are used only to note the relative distance of a note from the starting note.

- The greater and lesser sixths are **medial**: they suggest the upper note as the tonic.
- The greater second is **subtle**: it **hints to** the upper note as the tonic.
- The greater and lesser sevenths are **subtle**: they **hint to** the lower note as the tonic.
- The tritone and semitone are **vague**: they **give no suggestion** of a tonic.

This is shown in the following table.

	tonic in upper note (u)	tonic in lower note (l)	
absolute (a)	unison, octave		diatonic
resolute (r)	fourth	fifth	
medial (m)	sixths	thirds	
subtle (s)	tone	sevenths	
vague (v)	semitone, tritone		chromatic

With harmonies of more than two voices, there is a *tension of tonality* within the voices. The combinations of intervals create forces on the lowest note (here this is termed *the root*), either strengthening or weakening it as the perceived tonic, or *key*. This means that the root and the key are not always the same pitch.

Using these characteristics, an ensemble can shift the tonality of a piece by moving through suggestions.⁵

The diatonic series

The vague intervals are less tied to their tonic, while the subtle, medial, resolute and absolute intervals are more closely bound to the tonic.

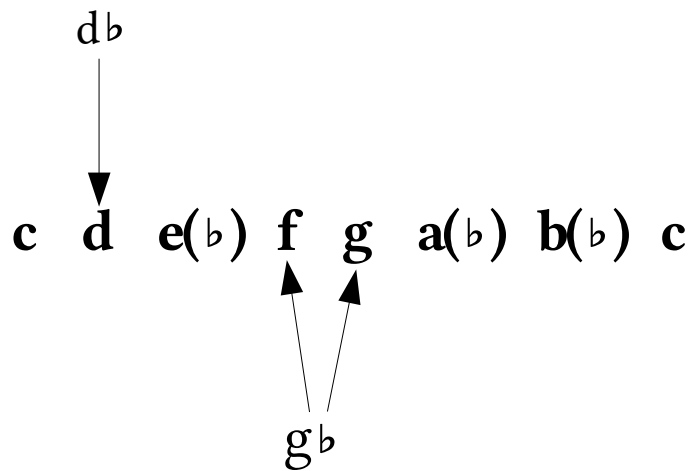
This knowledge allows us to arrange all the closer-bound (termed *diatonic*) interval pitches (the unison, octave, greater second, the thirds, the fourth and the fifth, the sixths and the sevenths – or U, II, iii, III, IV, V, vi, VI, vii, VII, O) based from a single

⁵ For early polyphony, the predominant concern was to resolve towards the fourth and fifth intervals, particularly for *organum duplum* and *discantus*. For major-minor tonality, the music is led towards a tonic major or minor tertian chord. The advances of twentieth-century harmony in European and American art music (with the influences of music from Asia and the African diaspora) lessened the necessity for tertian tonic resolution, but popular listening practices has retained the principles created from the previous eras: hence the “power chord” commonly used in rock and metal genres is the same as the thirteenth century *trina harmoniae perfectio*.

root pitch into a series called **the greater diatonic series**. So, if the root is *c*, then the diatonic notes are *c, d, e^b, e, f, g, a^b, a, b^b*, and *b*. In this series, the greater and lesser intervals are equivalent⁶ so we can condense this to

c d e(^b) f g a(^b) b(^b)

From the greater diatonic series we can derive other diatonic scales by skipping any of the diatonic pitches; and by substituting or adding the semitone or the tritone to the scale. So for the diatonic series on C we could replace the *d, f* and/or *g*.



The tritone can replace either or both the fourth and fifth. Adding both the semitone and the tritone to the greater diatonic series results in the chromatic series.

⁶ This equivalence – especially in the thirds – can be heard in black American music such as the blues, jazz and funk.

Suggestions as modes

Using combinations of the suggestions, we can create a harmonic mode for a melody. The suggestions used are related to the prosodic marks of a piece. Each prosodic mark can carry one suggestion or more. The period phrase always takes the absolute. For example, we can set a period phrase to have a resolute interval as its final harmony;

r.

or a semi-colon to have a subtle or medial interval as its final.

sm;

Let us take the melody

b^b c d; g a b c[#] d: d e f; e, d.

The suggestive mode is a series of prosodic marks connected to tonal suggestions. So if the suggestive mode was { **r. m: s; v,** } we would use absolute and resolute intervals for the period, medial interval for the colon, subtle intervals for the semi-colon and vague intervals for the comma. The second line could thus be

b^b c d; g a b c[#] d: d e f; e, d.
e^b f g b^b a

This second melodic line can then be embellished using the musician's natural language, paying attention to the phrasing of the main melodic line. The second musician can choose to keep the line the same, or change the pitches each time.

With more musicians, the suggestive mode can be used against the harmonisations heard as well as the main line. So for three musicians playing the same line with the same mode, the following melodic framework could result:

f a e f d
b^b c d; g a b c[#] d: d e f; e, d.
e^b f g b^b a

Here, the upper line first harmonises *subtly* with the e^b from the lower part; then *medially* with the lower part; *subtly* with the main line; *vaguely* with the main line and then *resolutely* with the lower line (and *absolutely* with the main line).

If the musician is advanced enough, the main line can have its notes substituted for the harmonisations: this new line can then be harmonised against, using the same mode.

b^b c c#; g a b c# a: d e e_b; f, a.

Again, the musician can then embellish these lines using their own language, by moving diatonically from each note, or by direction from the hand.

Melody by the hand

It is usually enough to describe only the first four spacings of a musical series, which will give a series of five notes or pentachord. This gives sixteen different arrangements, or modes:

S S S S	S S S T	S S T S	S S T T
S T S S	S T S T	S T T S	S T T T
T S S S	T S S T	T S T S	T S T T
T T S S	T T S T	T T T S	T T T T

SSSS gives the chromatic scale. TSSS gives the beginning of the diatonic series.

These modes can be shown in the hand by the fingers, where a finger touching the thumb represents a semitone, while an extended finger is a tone. The performers read the hand of a director from the index finger to the little finger.



T S T S



S S S S



T S T T

The musician can then use the indication to create a melody. The hand only indicates the first five notes, so any arrangement can be made above the fifth note. As the hand gives no indication of vertical direction, the more creative musician does not have to play a series of ascending notes: so TSTT could either be **d e f g a** (diatonic in d, f, g, a, e and c) or **d c d^b e^b f** (diatonic in f, b^b and e^b).