SaLaTa

SaLaTa provides new names for tones and intervals.

It simplifies by letting an equal-tempered tone always go by the same name. The names are also interval consistent in that the vowels correlate to the two whole-tone scales. The new names are also easier to sing.

Here are the new names, and how they relate to the traditional names:

\[
\begin{array}{ccccccccccccc}
\text{S} & \text{a} & \text{L} & \text{a} & \text{T} & \text{a} & \text{c} & \text{i} & \text{m} & \text{p} & \text{i} & \text{f} & \text{a} & \text{l} & \\
\text{ Do} & \text{ Pa} & \text{ Ro} & \text{ Na} & \text{ Mo} & \text{ Fa} & \text{ Vo} & \text{ Sa} & \text{ Go} & \text{ La} & \text{ Bo} & \text{ Ta} \\
\end{array}
\]

C   C#  D   D#  E   F   F#  G   G#  A   A#  B
Db  Eb  Gb  Ab  Bb

The two whole-tone scales comprise these tones:

\[
\begin{array}{cccccccc}
\text{ Do} & \text{ Ro} & \text{ Mo} & \text{ Vo} & \text{ Go} & \text{ Bo} & \\
\text{ Pa} & \text{ Na} & \text{ Fa} & \text{ Sa} & \text{ La} & \text{ Ta} & \\
\end{array}
\]

The equivalent of a C major scale becomes:

\[
\begin{array}{cccccccc}
\text{ Do} & \text{ Ro} & \text{ Mo} & \text{ Fa} & \text{ Sa} & \text{ La} & \text{ Ta} & \text{ Do} \\
\text{ Pa} & \text{ Na} & \text{ Vo} & \text{ Go} & \text{ Bo} & \\
\end{array}
\]

The black keys on the piano are:

\[
\begin{array}{cccccccc}
\text{ Pa} & \text{ Na} & \text{ Vo} & \text{ Go} & \text{ Bo} \\
\text{ Fa} & \text{ Sa} & \text{ La} & \text{ Bo} & \text{ Do} & \text{ Ro} & \text{ Mo} & \text{ Fa} \\
\end{array}
\]

Notice that in a major scale you always have three tones with one of the vowels, followed by four tones with the other vowel.

Intervals are also consistent. For example, traditional perfect fifths always have differing vowels:

\[
\begin{array}{cccccccc}
\text{ Do} & \text{ Sa} & \text{ Fa} & \text{ Do} & \\
\end{array}
\]

Traditional major thirds have vowels that are alike:

\[
\begin{array}{cccccccc}
\text{ Do} & \text{ Mo} & \text{ Pa} & \text{ Fa} & \\
\end{array}
\]

Traditional minor thirds have differing vowels:

\[
\begin{array}{cccccccc}
\text{ Do} & \text{ Na} & \text{ Pa} & \text{ Mo} & \\
\end{array}
\]

Here is the equivalent of a C7 chord (C E G Bb):

\[
\begin{array}{cccccccc}
\text{ Do} & \text{ Mo} & \text{ Sa} & \text{ Bo} & \\
\end{array}
\]

SaLaTa intervals

In SaLaTa, an interval is referred to as a step. The size of a step can vary. A step consists of "step units"; that is, semitones. A traditional semitone is now called a 1-step. A major second is a 2-step, and so on.

The note we start from is always 0. Numbers 10 and 11 will be replaced by X and Y, respectively. When we get to the octave, instead of 12, we write '0' (could be pronounced "prime zero").

\[
\begin{array}{cccccccccccc}
\text{ Do} & \text{ Pa} & \text{ Ro} & \text{ Na} & \text{ Mo} & \text{ Fa} & \text{ Vo} & \text{ Sa} & \text{ Go} & \text{ La} & \text{ Bo} & \text{ Ta} & \text{ Do} & \text{ Pa} & \text{ Ro} & \text{ Na} & \ldots \\
0 & 1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & X & Y & 0 & 1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 & X & Y & \ldots \\
\end{array}
\]

The equivalent of two octaves is "0" (double prime zero), and so on.
Extended SaLaTa tone names

Extended SaLaTa makes it possible to also describe intervals that correspond to Pythagorean tuning. This allows us to retain all information from traditional nomenclature. It can provide intonation cues, and shows how everything relates to the spiral of fifths, instead of just the circle of fifths. It also allows microtonality.

n = natural, b = bright, d = dark, xb = extra bright, xd = extra dark, xxb = extra-extra bright, etc.

The vowels in the tone names are left out.

SaLaTa’s natural tones

<table>
<thead>
<tr>
<th>nF</th>
<th>nD</th>
<th>nS</th>
<th>nR</th>
<th>nL</th>
<th>nM</th>
<th>nT</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>C</td>
<td>G</td>
<td>D</td>
<td>A</td>
<td>E</td>
<td>B</td>
</tr>
</tbody>
</table>

SaLaTa’s bright tones

<table>
<thead>
<tr>
<th>bV</th>
<th>bP</th>
<th>bG</th>
<th>bN</th>
<th>bB</th>
<th>bF</th>
<th>bD</th>
<th>bS</th>
<th>bR</th>
<th>bL</th>
<th>bM</th>
<th>bT</th>
<th>xBV</th>
<th>xBP</th>
<th>xBG</th>
</tr>
</thead>
<tbody>
<tr>
<td>F#</td>
<td>C#</td>
<td>G#</td>
<td>D#</td>
<td>A#</td>
<td>E#</td>
<td>B#</td>
<td>F##</td>
<td>C##</td>
<td>G##</td>
<td>D##</td>
<td>A##</td>
<td>E##</td>
<td>B##</td>
<td>F###</td>
</tr>
</tbody>
</table>

SaLaTa’s dark tones

<table>
<thead>
<tr>
<th>...</th>
<th>xdB</th>
<th>xDN</th>
<th>xDB</th>
<th>dF</th>
<th>dD</th>
<th>dS</th>
<th>dR</th>
<th>dL</th>
<th>dM</th>
<th>dT</th>
<th>dV</th>
<th>dP</th>
<th>dG</th>
<th>dN</th>
<th>dB</th>
</tr>
</thead>
<tbody>
<tr>
<td>...</td>
<td>Bbbb</td>
<td>Fbb</td>
<td>Cbb</td>
<td>Gbb</td>
<td>Dbb</td>
<td>Abb</td>
<td>Ebb</td>
<td>Bbb</td>
<td>Fbb</td>
<td>Cb</td>
<td>Gb</td>
<td>Db</td>
<td>Ab</td>
<td>Eb</td>
<td>Bb</td>
</tr>
</tbody>
</table>

By concatenating darks, naturals and brights, in that particular order, we get the 7-step sequence that corresponds to the traditional sequence of perfect fifths.

The difference between, for example, bV and dV is that bV has a slightly higher intonation than dV in Pythagorean tuning.

Extended SaLaTa intervals

The most common intervals:

<table>
<thead>
<tr>
<th>n0</th>
<th>d1</th>
<th>b1</th>
<th>n2</th>
<th>d3</th>
<th>b3</th>
<th>n4</th>
<th>n5</th>
<th>d6</th>
<th>b6</th>
<th>n7</th>
<th>d8</th>
<th>b8</th>
<th>n9</th>
<th>dX</th>
<th>bX</th>
<th>nY</th>
<th>n'0</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1</td>
<td>m2</td>
<td>+1</td>
<td>M2</td>
<td>m3</td>
<td>+2</td>
<td>M3</td>
<td>P4</td>
<td>−5</td>
<td>+4</td>
<td>P5</td>
<td>m6</td>
<td>+5</td>
<td>M6</td>
<td>m7</td>
<td>+6</td>
<td>M7</td>
<td>P8</td>
</tr>
</tbody>
</table>

Example:

The step between nD and dG is d8, but the step between nD and bG is b8.

*The interval between C and Ab is m6, but the interval between C and G# is +5.*

Negative SaLaTa intervals

A negative interval can be expressed with a positive interval that is octave transposed downwards. A small circle indicates downward octave transposition, and could be pronounced "sub".

*Ta* Do Pa Ro Na Mo Fa Vo Sa Go La Bo Ta Do Pa ...  
*°°Y* °0 °1 °2 °3 °4 °5 °6 °7 °8 °9 °X °Y °0 °1 ...

Extended intervals could also be negative. Note: d0 is not considered a negative interval, and b0 is not considered a positive interval, since in both cases the difference is 0 step units. Attributes such as d and b only affect intonation, which in turn depends on the tuning system in use.
SaLaTa chord symbols

A chord symbol can have intervals in subscript. Signs in superscript represent the following interval combinations:

\[ \nabla \quad 47 \\
\triangle \quad 37 \\
\wedge \quad 57 \\
\bullet \quad 36 \\
\]

SaLaTa chord symbols are very specific about the intervals to include. Numbers in subscript should be written in numerical order. The vowels in the tone names are left out. Here are some examples:

\[
D^\nabla \quad C \\
D^\triangle \quad C6 \\
D^\wedge \quad C7 \\
D^\bullet \quad C9 \\
D_{2X} \quad C11 \\
D_{25X} \quad C13 \\
D_\wedge \quad Cm \\
D^\wedge \quad Cm7 \\
D^\bullet \quad Cm7(b5) \\
D^\nabla \quad Csus4 \\
D^\wedge \quad C9sus4 \\
D^\bullet \quad Cdim7 \\
D^\nabla \quad Cmaj7 \\
D_{2X} \quad C/Bb \quad (\text{both the added note name and its interval is shown})
\]

A chord symbol with an asterisk could be anything you specify:

\[
D^* \quad \text{Write, for example, *158Y above the stave.}
\]
**Analyzing music with SaLaTa**

The method presented here is an alternative to traditional Roman numeral analysis.

- **Fixed reference (always 0)**
- **Intervals in relation to the fixed reference**

We are basically only replacing the note names in SaLaTa chord symbols with intervals that relate to a fixed reference.

The fixed reference is normally equal to the key signature.

For various modes that begin on steps other than 0, in the natural scale of the key signature, it is still recommended to use the key signature as the fixed reference. This should make things more uniform and easier to handle. Major chords that stay within the key signature are thus on steps 0 5 7, while minor chords are on steps 9 2 4.

Below is an excerpt from Bach's Chorale #300. Traditional analysis is shown along with SaLaTa analysis.

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**Chorale #300, phrase 1**

a: i 6 5 V\(^4\)\(^{-3}\) viio\(^7\)/iv iv viio\(^7\)/V V

D\(^\flat\): 9° 9° 9\(_3\) 4\(~\) 4\(^\#\) 3\(^\#\) 2\(~\) 3° 4\(^\#\)