## Web Feature 29.1

## Examples of twelve-tone music in jazz

Milton Babbitt, All Set The 1950s saw an interesting convergence between jazz and certain styles of "serious" contemporary music; the composer Gunther Schuller, who had backgrounds in both styles, coined the term Third Stream to describe these efforts in a 1957 lecture at Brandeis University. That year the serialist composer Milton Babbitt composed All Set for Brandeis’s Arts Festival.

All Set is scored for a small jazz ensemble of alto and tenor saxophone, trumpet and trombone, bass, vibraphone, piano and drums. Its punning title refers to Babbitt's use of the (012678) hexachord, which is an all-combinatorial hexachord—capable of forming an aggregate with any of its basic transformations (T, R, I, RI). The original row ( $\mathrm{P}_{0}$ ) of All Set, along with its $\mathrm{I}_{7}$ form, is shown in Web Example 29.1. The opening hexachord of $P_{0}$, based on the unordered set $\{4,5,6, t, e, 0\}$, can be transformed to its complement $\{1$, $2,3,7,8,9\}$ at $\mathrm{T}_{3}$ and $\mathrm{T}_{9}$ (and their retrogrades), and at $\mathrm{T}_{1} \mathrm{I}$ and $\mathrm{T}_{7} \mathrm{I}$ (and their retrogrades). The opening eight measures of the piece present $P_{0}$ in the brasses and $I_{7}$ in the saxes; $\mathrm{R}_{0}$ and $\mathrm{RI}_{7}$ may be found, split registrally (as played by the right and left hands) in the vibraphone.


Web Example 29.1. Milton Babbitt, All Set, $\mathrm{P}_{0}$ and $\mathrm{I}_{7}$ row forms.

All Set also makes use of a rhythmic series using the same "binary-digital" technique ( $1=$ sound, $0=$ silence ) as Semi-Simple Variations (discussed in the text). Here, the durational unit being parsed is not the quarter note, but the half note in cut time (see Web Example 29.2). In measures 1-8 this series is expressed in the attack points of the full ensemble; it is heard again in the drums (small tom-tom) in measures 9-16. Elsewhere the rhythmic series appears in inversion (for example measures 17-24 in the drums), in retrograde (for example measures 25-32 in the small tom-tom) and in retrograde inversion (for example measures 25-32 in the large tom-tom).


Web Example 29.2. Babbitt, All Set, basic rhythmic series.

Although there are no provisions for jazz-style improvisation, All Set uses jazz stylistic idioms in several respects. It is in three large sections (followed by a coda), each beginning with an eight-measure "head," in the tradition of a jazz performance consisting of a "head" followed by any number of "chorus" variations (see Chapter 22). In addition, the prevailing rhythmic grid of eighth notes in the composition encourages a treatment in performance of "swinging" the eighth notes.

Bill Evans, "T. T. T. T. (Twelve Tone Tune Two)" (The Tokyo Concert, 1973). As its title implies, this is one of two tunes Evans composed using a twelve-tone row; this composition displays its row more obviously, at the outset. The row is shown in Web Example 29.3; its first hexachord is of set class (012346), which is I-combinatorial (inversion combinatorial) at $\mathrm{T}_{7} \mathrm{I}$.


Web Example 29.3. Bill Evans, "T. T. T. T. (Twelve Tone Tune Two)," original ( $\mathrm{P}_{7}$ ) row.

Evans' treatment of this row does not employ other row forms. Instead, in the introduction certain pitches in the piano's row statement are first subjected to octave displacement. Then, through syncopation and changes in phrasing, a fair amount of subtle variety is generated (Web Example 29.4).


Web Example 29.4. Evans, "T. T. T. T. (Twelve Tone Tune Two)," development of row statement in introduction (0:31-0:44).

The Bad Plus, "Semi-Simple Variations" (For All I Care, 2009). Our third example is a jazz-trio treatment of Babbitt's composition Semi-Simple Variations for piano (discussed in Chapter 29). In adapting Babbitt’s "Semi-Simple Variations" to a jazz trio format, pianist Ethan Iverson writes, they needed to address two problems: First, "how do you fit real, grooving drumming into the context of harmonically advanced and rhythmically disjunct modern classical music?", and second, "how do you bridge the gulf harmonically between really modernist classical music and what a normal jazz musician can improvise?" ${ }^{1}$ The first question was neatly answered by Babbitt’s fitting all musical events onto a steady sixteenth-note grid, as described in Chapter 29. The second question is more difficult; Iverson admits that the "improvisation" here (which begins at 1:07, after

[^0]a complete performance of the theme and all five variations) is not strictly twelve-tone, and in fact it comes across as rather rudimentary, relying on clusters for effect. It is interesting, however, that the group recognized that Babbitt used his twelve-tone row across the so-called "theme" and first variation (the "theme" uses only the first hexachord). Babbitt's "theme" and first variation return at the end (at 2:07) as the "head." The "head" of The Bad Plus's jazz version, then, is the row, not only the "theme" as identified by Babbitt.


[^0]:    ${ }^{1}$ Ethan Iverson, "TBP Video: "Semi-Simple Variations" by Milton Babbitt + TBP Explains Its Modernist Covers." http://thebadplus.typepad.com/dothemath/2009/03/tbp-video-semisimplevariations-by-milton-babbitt.html, accessed 4 April 2009.

