

Eastman School of Music

Different “Translation Devices,” Same Destination:
Pat Metheny’s Use of the Roland GR-300 Guitar Synthesizer

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Table of Contents

Introduction.....2

The Roland GR-300 and G-303.....3

Metheny’s General Improvisational Approach.....5

Metheny’s Improvisational Mindset When Using the GR- 300.....10

Circumstances Under Which Metheny Chooses to Use the GR-300.....11

Metheny’s GR-300-Specific Expressive Techniques.....15

Conclusion.....22

Appendix A: Metheny’s GR-300 solo on “As It Is”.....24

Appendix B: Metheny’s Standard Jazz Guitar solo on “The Gathering Sky”.....27

Bibliography.....32

Introduction

Guitarist Pat Metheny's (b. 1954) influence on the course of jazz is apparent in a number of specific areas, including orchestration, improvisation, composition and technology. In particular, Metheny's use of the Roland GR-300 guitar synthesizer (paired with the Roland G-303 guitar MIDI controller) to alter his tone contributed to the establishment of a new precedent for sonic experimentation in jazz and normalized the use of electronic sounds in improvised music. While the "translation device"¹ of all Metheny improvisations is the guitar, Metheny's approach to improvisation is influenced by the timbre of his instrument, suggesting that there are stylistic differences between Metheny's playing when using a standard jazz guitar and when using the GR-300. This paper examines the ways in which Metheny uses the GR-300 to achieve greater expression when improvising and how his GR-300-specific techniques, approach and language differ from those of his standard jazz guitar improvisations.

Pat Metheny was born on August 12, 1954 in Kansas City, Missouri. He began playing guitar at the age of 12 and performing professionally at age 15. After attending the University of Miami for one year from 1972-1973, he moved to Boston, MA, where he taught at Berklee College of Music and joined vibraphonist Gary Burton's band. Metheny released *Bright Size Life*, his first album as leader on ECM Records in 1976. Since then, Metheny has recorded dozens of albums as a leader in numerous settings, won twenty Grammy awards and collaborated with artists as wide-ranging as Steve Reich, Ornette Coleman, Brad Mehldau, Joshua Redman, Sonny Rollins, David Bowie and more.² He was named an NEA Jazz Master in 2018³

¹ Ratliff, Ben. *The Jazz Ear: Conversations over Music*. London: Macmillan, 2008. pg. 15.

² Niles, Richard. *The Pat Metheny Interviews*. Milwaukee, WI: Hal Leonard Corporation, 2009. pp. xvii-xix.

³ DownBeat. "Metheny, Reeves, Barkan, Brackeen Named 2018 NEA Jazz Masters." Downbeat.com. <http://downbeat.com/news/detail/metheny-reeves-barkan-brackeen-named-2018-nea-jazz-masters> (Retrieved April 3, 2019).

The Roland GR-300 and GS-303

Throughout his career, Metheny has used the Roland GR-300 guitar synthesizer and GS-303 guitar MIDI controller in both studio and live situations. The Roland GR-300, released in 1980, represents a major technological innovation that allowed guitarists to produce electronic sounds from their instruments without sacrificing nuanced expression. The device collects analog information (pitch, articulation, dynamics, etc.) from a specially-designed electric guitar (either the Roland GS-303 or GS-808), then converts this information into a digital signal and routes it through a series of filters and oscillators before sending the synthesized information through an amplifier. The original owner's manual explained the device's capabilities as follows:

“Any guitarist can play the GR-300, using all standard guitar playing techniques, including: hammering, glissandos, harmonics, chopping, etc. The GR-300 produces effects and nuances which keyboard synthesizers cannot easily produce. To produce the effect of the GR-300, you would need: 6-octave shifters + 6-compressors + 6-chorus machines + 6-distortion units + 6-phase shifters + waw + etc. + etc..... It is very easy to produce anything from simple or complex solo sounds to the sounds of a huge band or orchestra. All major functions are controlled with foot switches and require no hands.”⁴

The original GR-300 included a voltage-controlled high-pass filter, a compressor, a voltage-controlled oscillator (for vibrato), voltage-controlled pitch shift, six independent string selection shifters (allowing users to play synthesized sounds on some strings and unprocessed sounds on others) and a distortion channel. The accompanying G-303 guitar controller included

⁴ Roland Corporation. (1980). GR-300 Polyphonic Guitar Synthesizer: Owner's Manual. pg. 2. Retrieved from http://cdn.roland.com/assets/media/pdf/GR-300_OM.pdf.

six further on-board potentiometers (controlling master volume, guitar tone, guitar/synthesizer balance, high-pass filter cutoff frequency and resonance, and vibrato depth) and a distortion switch.⁵ Figure 1 shows the schematic of the GS-303 control panel and an overhead view of the GR-300.⁶

STANDARD SETTING

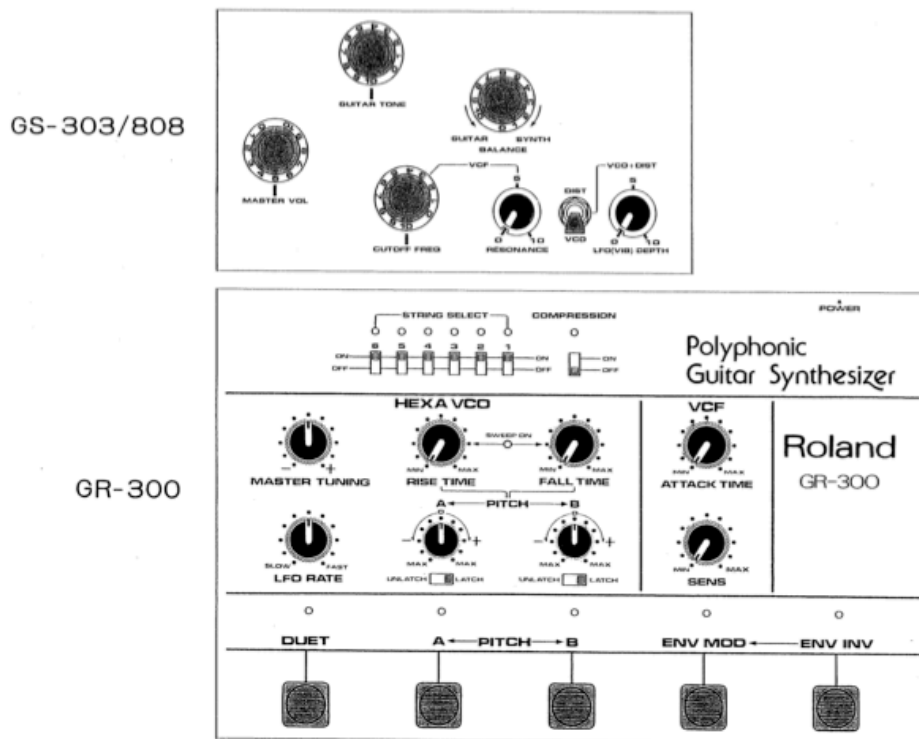


Figure 1.1: Schematic of the GS-303 control panel and an overhead view of the GR-300.

When recording Pat Metheny Group’s 1982 album “Offramp,” Metheny used the GR-300 and GS-303 to perform melodies and improvised solos on the tracks “Barcarole,” “Are You Going With Me?,” “Offramp,” and “The Bat Part 2,”⁷ making Metheny the first guitarist in any genre to use such a device as a front-line melodic instrument on a recording.⁸ Since then, Metheny has consistently used the instrument in both studio and live situations and become the

⁵ Roland, “Owner’s Manual.” pp. 4-19.

⁶ Roland, “Owner’s Manual,” pg. 4.

⁷ Pat Metheny Group. *Offramp*. ECM Records ECM1216, 1982, digital album.

⁸ Cooke, Mervin. *Pat Metheny: The ECM Years, 1975-1984*. Oxford, England: Oxford University Press, Incorporated, 2017. pg. 192.

device's most prominent user. In his book "Pat Metheny: The ECM Years, 1975-1984," Mervyn Cooke notes that "because Metheny became so inextricably linked with its [the GR-300's] sonority, it has remained a challenge for younger players not to sound like his example."⁹

Metheny's General Improvisational Approach

Before discussing the variances between Metheny's standard jazz guitar and GR-300 improvisational styles, it is important to identify the elements of Metheny's unique voice that transcend his choice of instrument. While Metheny's major influences include "straight-ahead" improvisers such as Wes Montgomery, Miles Davis and Jim Hall, his voice is characterized by a balance of traditional jazz language (including bebop, hard bop and the blues) and a melodic strain that is rooted in popular music (as evidenced by his frequent citations of another major influence, the Beatles).¹⁰ Figure 2 shows the first eight bars of his solo on the title track of his 1976 debut album *Bright Size Life*, a strong example of Metheny's lyrical style.^{11 12} It features vocal-like lines with mostly step-wise motion and a variety of rhythmic subdivisions.

The musical notation for Figure 2 is as follows:

- Staff 1 (Bars 1-4):
 - Bar 1: Gmaj7
 - Bar 2: Gmaj7
 - Bar 3: Bbmaj7(b5)/A
 - Bar 4: Bbmaj7(b5)/A
- Staff 2 (Bars 5-8):
 - Bar 5: D
 - Bar 6: D/C
 - Bar 7: Bbmaj7/A
 - Bar 8: G/A

The melody in the second staff features triplets in the final three bars (bars 7, 8, and 9).

Figure 2: The first eight bars of Metheny's solo on "Bright Size Life" from the record *Bright Size Life*

⁹ Cooke, *The ECM Years*, pg. 195.

¹⁰ Niles, *Interviews*, pg. 17.

¹¹ Transcribed from Pat Metheny. *Bright Size Life*. ECM Records ECM1073, 1976, digital album.

¹² Chord changes from *The Pat Metheny Songbook*. Milwaukee, WI: Hal Leonard Corporation, 2000. pg. 15.

In addition to its melodic nature, Metheny's improvisational voice is motive-driven. Often, Metheny begins a solo by introducing a musical idea, repeating it, and then developing it rhythmically or additively. Metheny commented on this approach in *Musician* magazine in 1997:

“When I think of the best improvisers I've been around, they all have one thing in common: Every idea that they have, they let it fully be itself, right up to its natural conclusion... The best solos that I've played, it's really one idea. You take that one idea, and you find a way of going with it to the end. That's something that I always encourage musicians to think more about, because that's something that non-musicians can respond to, a style that expands on single ideas so that anyone, musician or not, can follow the line.”¹³

Figure 3 shows the first chorus of his solo on “All the Things You Are” from the 1989 record *Question and Answer*.¹⁴ The three-note descending motive introduced at the beginning of his break (the first three notes) is repeated and developed throughout this chorus. The included transparent overlay indicates occurrences and variations of this motif throughout the solo.

It is also important to take note of two motives that he has been recorded playing on both the standard jazz guitar and the GR-300. These phrases transcend the instrument on which they are played, and have become characteristic of Metheny's improvisational voice. Metheny also articulates them in consistent and specific ways whenever he uses them on both a standard jazz guitar and the GR-300, providing evidence that Metheny doesn't make any major changes to his articulation when switching between the instruments.

¹³ *Songbook*, pg. 447.

¹⁴ Transcribed from Pat Metheny. *Question and Answer*. Geffen Records 9 24293-2, 1990, digital album.

The musical score is written in 4/4 time and consists of ten staves. The primary motif, which is a descending eighth-note line (Bb, Ab, G, F, E, D, C), is highlighted with a transparent overlay across all staves. The chord changes for each staff are as follows:

- Staff 1: N.C., Fm⁷, Bbm⁷
- Staff 2: Eb⁷, Abmaj⁷, Db⁷, Dm⁷, G⁷
- Staff 3: Cmaj⁷, Cm⁷, Fm⁷
- Staff 4: Bb⁷, Ebmaj⁷, Abmaj⁷, Am⁷, D⁷
- Staff 5: Gmaj⁷, E⁷, Am⁷, D⁷
- Staff 6: Gmaj⁷, F#m⁷, B⁷
- Staff 7: Emaj⁷, C⁷, Fm⁷, Bbm⁷, Eb⁷
- Staff 8: Abmaj⁷, Dbmaj⁷, Gb⁷, Cm⁷, B^{o7}
- Staff 9: Bbm⁷, Eb⁷, Abmaj⁷, C⁷

Figure 3: The first chorus of Metheny’s solo on “All the Things You Are” from the record *Question and Answer*. The included transparent overlay indicates every occurrence of the solo’s primary motif throughout the chorus.

The first key motif is a three-string, four-note pattern that Metheny sequences diatonically and chromatically, often traveling more than an octave in either direction. The pattern begins with a picked note on the middle string of the three-string set (Metheny uses this pattern on all four sets of three adjacent strings), followed by a picked higher note on the top string of the three-string set (usually at the interval of a sixth to the first note). The original note is then “ghosted” on the middle string (by hammering on without picking) and the pattern is completed with a picked lower note on the bottom of the three strings (often a seventh below the highest note of the pattern). Metheny’s articulation is critical – “ghosting” the middle note makes this motif sound fluid when alternate or economy picking.¹⁵ Figure 4 shows an example of this motif as played on a standard jazz guitar, transcribed from Metheny’s solo on “Have You Heard” from the Pat Metheny Group record *Letter From Home* (beginning at 3:30).¹⁶ Figure 5 shows an excerpt of Metheny’s GR-300 solo on “Roofdogs” from the 2016 live record *The Unity Sessions* featuring a similar motif that is articulated in the same way.¹⁷

(3:30)
C#m7 G#7

C#m7

Figure 4: An excerpt of Metheny’s standard jazz guitar solo on “Have You Heard” from the record *Letter from Home*, featuring his signature three-string, four-note pattern

¹⁵ “Alternate picking” refers to the technique of attacking the strings with the pick in a consistent “down-up-down-up” right-hand motion. “Economy picking” refers to the technique of attacking two adjacent strings with the pick with one continuous and unidirectional motion.

¹⁶ Transcribed from Pat Metheny Group. *Letter From Home*. Geffen Records 9 24245-2, 1989, CD.

¹⁷ Transcribed from Pat Metheny Unity Group. *The Unity Sessions*. Nonesuch Records and Metheny Group Productions 554569-2, 2016, CD.

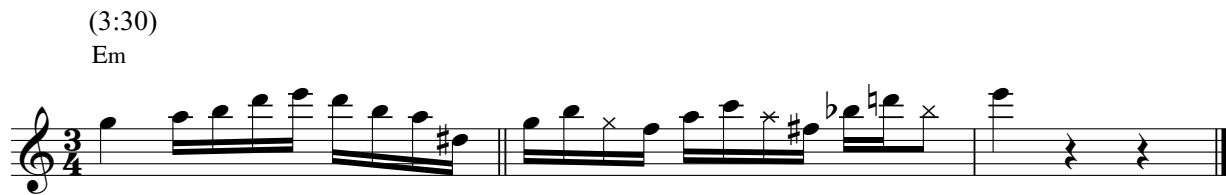


Figure 5: An excerpt of Metheny's GR-300 solo on "Roofdogs" from the record *The Unity Sessions*, featuring his signature three-string, four-note pattern

The second motif that is key to understanding Metheny's style is a two-string, two-note side-slipping pattern that he also sequences chromatically or diatonically. The pattern consists of an articulated note on the top string of the two-string set, followed by a ghosted note on a lower string (usually at the interval of a third below the original note). This pattern is then sequenced downwards in pitch, with each iteration occurring one step below the previous iteration. Often, Metheny uses this pattern to connect two chord tones. Figure 6 shows an excerpt of Metheny's standard jazz guitar solo on "Slings and Arrows" from the 1996 Michael Brecker record *Tales From The Hudson* (beginning at 1:28).¹⁸ Metheny uses the side-slipping motif in the fourth bar of this transcription to connect the natural fifth and minor third of the underlying D minor harmony. Figure 7 shows an excerpt of Metheny using this motif on the GR-300 in a live performance of "Are You Going With Me?" at the Montreal International Jazz Festival on July 3, 1989.¹⁹ In this example, Metheny connects the fifth and third of C major over a Bbmaj7/C harmony. Metheny articulates the phrase in the same way in both examples.



Figure 6: An excerpt of Metheny's standard jazz guitar solo on "Slings and Arrows" from the Michael Brecker record *Tales From The Hudson*, featuring Metheny's signature side-slipping motif

¹⁸ Transcribed from Michael Brecker. *Tales From The Hudson*. Impulse! Records IMPD 19, 1996, digital album.

¹⁹ Transcribed from "Pat Metheny Group – Are You Going with Me? – 1989." Published on August 11, 2009. <https://www.youtube.com/watch?v=14jIbLYE3gQ>. 9:35.



Figure 7: An excerpt of Metheny’s GR-300 solo on “Are You Going With Me?” live at the Montreal International Jazz Festival on July 3, 1989, featuring Metheny’s signature side-slipping motif

When playing both of these motives on either a standard jazz guitar or the GR-300, Metheny uses ghost notes and a combination of downstrokes and upstrokes to achieve varied articulation and a fluid sound. His specific and careful approach to articulation is largely unaffected by the instrument he is playing, making his improvisational voice unmistakable regardless of his instrument.

Metheny’s Improvisational Mindset When Using the GR-300

While Metheny is one of the jazz guitar’s most recognizable figures, he actively resists categorization as a guitarist. As he told interviewer Ben Ratliff,

“The guitar for me is a translation device. It’s not a goal. And in some ways jazz isn’t a destination for me. For me, jazz is a vehicle that takes you to the true destination – a musical one that describes all kinds of stuff about the human condition and the way music works.”²⁰

In addition to this statement, Metheny tells Richard Niles in The Pat Metheny Interviews that he views his whole recorded output as being connected, as if it were “one long tune” or “one long set.”²¹ Considering these quotes, Metheny’s consistent use of two different instruments (the

²⁰ Ratliff, The Jazz Ear, pg. 15.

²¹ Niles, Interviews, pg. 103.

standard jazz guitar and the Roland GR-300) suggests that he views each as a means to a different improvisational end, and as such plays each instrument in different ways that can be observed and quantified.

Metheny has noted that the sonic characteristics of the GR-300 cause him to approach it differently than he does the guitar:

“...when I’m using it I tend to not think like a guitar player, but rather like a horn player and have always done so, even in my guitar playing, in the sense that I like to have natural ‘breaths,’ which sound natural [as] if I were playing a wind instrument. All that was immediately translated, but there were even a lot of phrasing things which might sound all right on a guitar, but on a trumpet they would sound real stiff. You have to think in those terms.”²²

Circumstances Under Which Metheny Chooses to Use the GR-300

An examination of Metheny’s catalog shows that he typically chooses to use the GR-300 to improvise on pieces with slow harmonic rhythms and diatonic harmony. Figure 8 shows the chord changes that Metheny improvises over when performing “Are You Going With Me?,” a piece that Metheny has released on a record twice (on *Offramp* and *Travels*), both times using the GR-300, and is representative of pieces that feature the GR-300 throughout Metheny’s repertoire. The harmony moves regularly every four bars (with two slight deviations) and all chords are diatonic in the key of C# minor. After improvising on this chord progression, Metheny continues his solo on the same changes transposed up one semitone to the key of D minor. Other notable examples of pieces that feature the GR-300 include “Song for Bilbao,”

²² Webb, Nicolas. “Interview with Roland GR User Pat Metheny.” *Guitarist* 12 (1986), 28-31.

“Yolanda, You Learn,” “The Heat of the Day,” “Question and Answer,” “As It Is” and “Roofdogs,” all of which also feature slow harmonic rhythms and largely diatonic harmonies.

The musical score consists of seven staves, each containing six measures of music. The notes are represented by diagonal slashes. Chord symbols are placed above the staves:

- Staff 1: C#m7 (measures 1-2), Amaj7 (measures 3-6)
- Staff 2: Amaj7/B (measures 1-6)
- Staff 3: Amaj7 (measures 1-3), Amaj7/B (measures 4-6)
- Staff 4: Amaj7 (measures 1-4), G#7(b9) (measures 5-6)
- Staff 5: C#m7 (measures 1-3), Bbm7(b5) (measures 4-6)
- Staff 6: Amaj7 (measures 1-6)
- Staff 7: G#7alt. (measures 1-3), G#7 (measures 4-6)

Figure 8: The solo changes to “Are You Going With Me?”²³

²³ Songbook, pg. 135.

Metheny also chooses to use the GR-300 when he wishes to drive a piece to its climax. Because of its bright timbre, sustain and pitch shift capabilities, the instrument is an effective tool for raising the intensity of a performance. Often, Metheny opens a piece on a standard instrument and switches to the GR-300 to improvise, sometimes switching back to his original instrument after his solo is over. Figure 9 shows a formal analysis of the piece “As It Is” from the 2002 Pat Metheny Group record “Speaking of Now,” with thematic material and instrumentation for each section noted. Throughout the first four sections, Metheny plays acoustic guitar, mandolin and jazz guitar before switching to the GR-300 for his solo in Section 5. The end of Metheny’s solo (see Appendix A for full transcription) coincides with the climax of the piece, after which he returns to the acoustic instruments that he used at the beginning of the recording.²⁴ Metheny executes similar switches on recordings such as “Ring of Life” from *Metheny Mehldau*, “The Heat of the Day” from *Imaginary Day*, and “To The End of the World” from *We Live Here*.

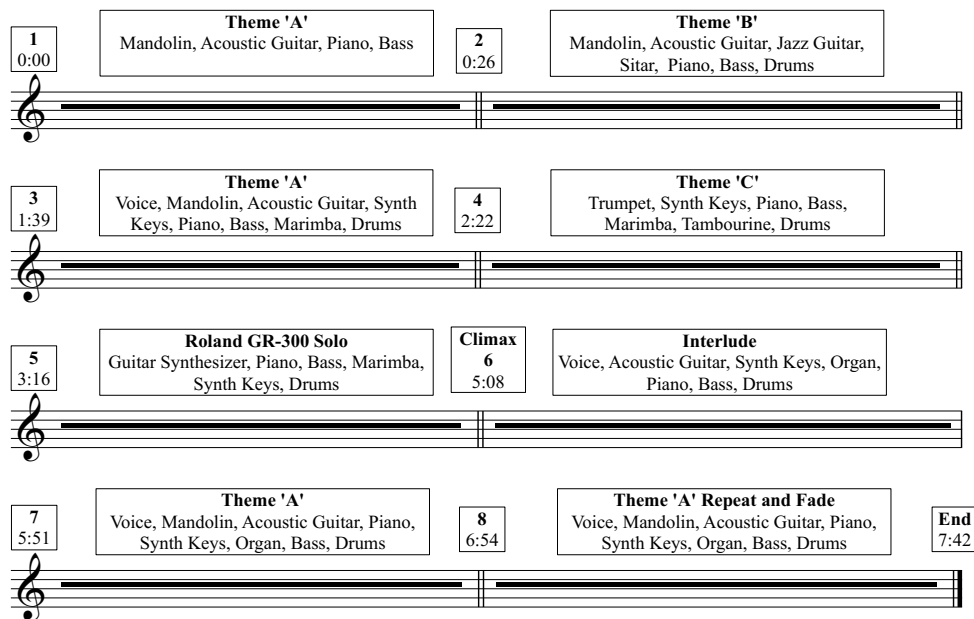


Figure 9: Formal analysis of “As It Is” from the record *Speaking of Now*

²⁴ Transcribed from Pat Metheny Group. *Speaking of Now*. Warner Brothers Records 9 48025-2, 2002, digital album.

Metheny also places GR-300 solos at the ends of pieces, creating a continuous build from beginning to end and placing the climax at the piece's conclusion. Figure 10 shows a formal analysis of the Pat Metheny Trio's performance of "Question and Answer" from the 2000 record *Trio Live*. Metheny uses a standard jazz guitar for the introduction, melody, first guitar solo and bass solo before switching instruments to the GS-303 during the drum solo. He then performs the theme on the GS-303 without engaging the synthesizer. After the theme's restatement, Metheny engages the GR-300 and improvises on it until the conclusion of the piece, during which time the performance reaches its climax (at the beginning of Section 9).²⁵ Other examples of GR-300 solos ending pieces can be found on "Praise" from *First Circle*, "Are You Going With Me?" from *Offramp* and "The Truth Will Always Be" from *Secret Story*.

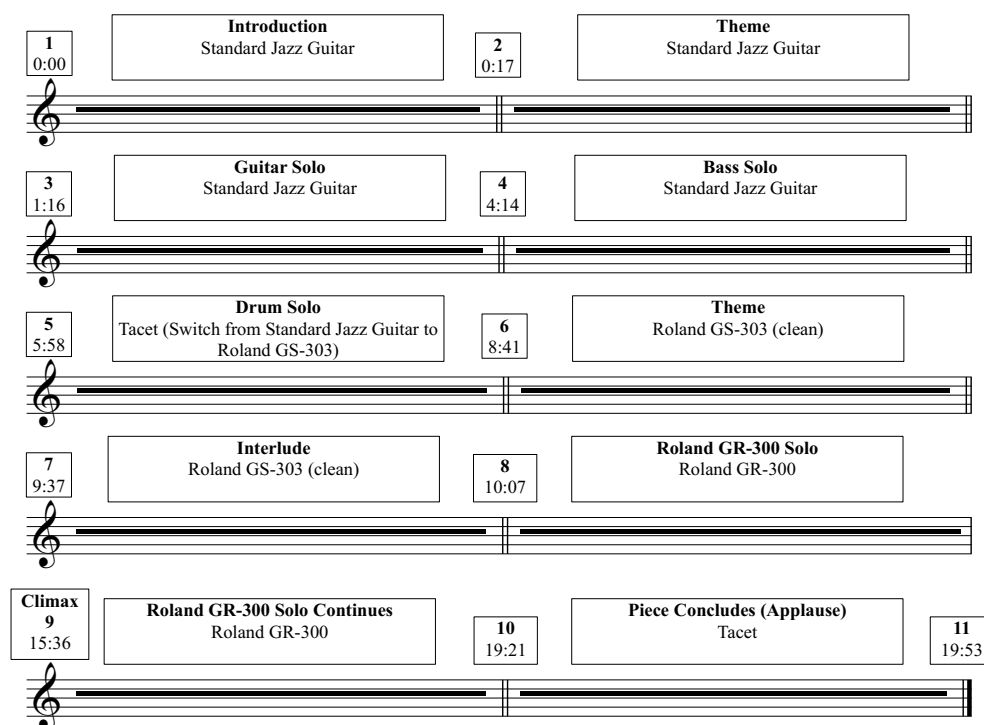


Figure 10: Formal analysis of "Question and Answer" from the record *Trio Live*

²⁵ Transcribed from Pat Metheny. *Trio Live*. Warner Brothers Records 9 47907-2, 2000, digital album.

Metheny's GR-300-Specific Expressive Techniques

While Metheny's rhythmic and harmonic language make him immediately identifiable regardless of the instrument he is playing, there are several noticeable differences between his GR-300 improvisations and his standard jazz guitar improvisations. A number of these differences represent capabilities of the GR-300 that are not available to Metheny on a standard jazz guitar. One such capability is the GR-300's sustain, which allows the user to hold a note almost indefinitely. When improvising with the GR-300, Metheny takes advantage of this feature by holding long notes more frequently than he does when playing a standard jazz guitar. This adds a "horn-like" element to Metheny's GR-300 improvisations that is impossible to achieve on a standard jazz guitar, which can only sustain a note for a maximum of several seconds. Figures 11 and 12 show the openings of two Metheny solos from the record *Speaking of Now*. The first, "The Gathering Sky," was recorded with a standard jazz guitar, and the second, "As It Is," was recorded with the GR-300.^{26 27} (Complete transcriptions of both solos can be found in the Appendix). The two pieces have similar harmonic rhythms, tempos and accompaniment instrumentations. While Metheny uses shorter note values to create rhythmic intensity with a standard jazz guitar on "The Gathering Sky," his GR-300 solo on "As It Is" features long-value notes and a more "laid-back" rhythmic feel, instead creating intensity with larger intervallic leaps, colorful note choices and held-out notes.

²⁶ Transcribed from Pat Metheny Group. *Speaking of Now*. Warner Brothers Records 9 48025-2, 2002, digital album.

²⁷ Transcribed from Pat Metheny Group. *Speaking of Now*. Warner Brothers Records 9 48025-2, 2002, digital album.

The Gathering Sky

Pat Metheny's guitar solo from the record "Speaking of Now"

The musical notation is presented in three staves, each in 3/2 time. The first staff begins with an Abm11 chord and contains a melodic line with various intervals and slurs. The second staff starts with an Fm11 chord and includes a triplet of eighth notes. The third staff continues the melodic development with more complex rhythmic patterns and slurs.

Figure 11: The opening of Metheny's standard jazz guitar solo on "The Gathering Sky" from *Speaking of Now*

As It Is

Pat Metheny's Roland GR-300 guitar synthesizer solo from the record "Speaking of Now"

The musical notation is in 4/4 time and consists of three staves. The first staff starts with an Abm7 chord and features a melodic line with triplets. The second staff continues the melody with more triplets and slurs. The third staff includes three distinct chord changes: Db/F, Dmaj7(#11), and Amaj7(#11)/C#, each followed by a melodic phrase containing triplets.

Figure 12: The opening of Metheny's standard jazz guitar solo on "As It Is" from *Speaking of Now*

Another technological capability of the GR-300 that Metheny exploits when improvising is the instrument's pitch shift feature, which Metheny uses to extend his range upwards a full octave upwards beyond the range of the standard jazz guitar. This also allows upper register guitar lines to resonate more clearly and be easier to play - since notes sound an octave higher than played, Metheny can play lines in the comfortable and spacious mid-range of the instrument to achieve the same register as the narrow and thinner-sounding upper range. Metheny often engages the pitch shift feature in the middle of a GR-300 solo (usually at a key point in the composition, such as a key change or as he approaches the climax of the piece), immediately increasing the intensity of the performance. Figure 17 shows a transcription of an excerpt of Metheny's live GR-300 solo on "Are You Going With Me?" from the Pat Metheny Group record *Travels*.²⁸ The excerpt begins four measures before the end of Metheny's first chorus (at timestamp 5:13). Here, Metheny is improvising in the key of C# minor in the range of a standard jazz guitar. When the piece modulates to D minor in measure five of the transcription, Metheny continues to improvise in a standard guitar register before engaging the GR-300's pitch shift feature in measure nine of the transcription. It is apparent that Metheny engages the pitch shift at this point for two reasons. First, the F6 in measure nine of the transcription is the first note of his solo that is beyond the natural range of a standard 22-fret jazz guitar, and second, Metheny's tone becomes noticeably brighter in this measure (at 5:30). Aligning the leap in range with the key change of the piece dramatically increases the intensity of Metheny's solo and continues to drive the piece towards its climax.

²⁸ Transcribed from Pat Metheny Group. *Travels*. ECM Records PRO-A-2059, 1983, digital album.

The image shows a musical score for a guitar solo in treble clef, consisting of five staves. The key signature has three sharps (F#, C#, G#).
 - Staff 1: Labeled with a time signature of (5:13) and the chord G#7alt. It contains a series of eighth-note runs.
 - Staff 2: Labeled with the number 3 and the chord G#7. It features a triplet of eighth notes.
 - Staff 3: Labeled with the number 5 and the chord Dm. It contains eighth-note runs and a triplet of eighth notes at the end.
 - Staff 4: Labeled with the number 7. It features two triplets of eighth notes and a melodic phrase.
 - Staff 5: Labeled with a time signature of (5:30), the number 9, and the chord Bbmaj7. It includes a bracketed triplet of eighth notes labeled 'engage pitch shift' and a dashed line above the staff labeled '8va' indicating an octave shift. The staff ends with a double bar line.

Figure 17: An excerpt of Metheny’s GR-300 solo on “Are You Going With Me?” from the record *Travels* featuring a mid-solo engagement of the GR-300’s pitch shift function

In addition to sustained notes, several “horn-like” gestures appear in Metheny’s GR-300 improvising that are absent in his standard jazz guitar improvising. One such gesture is a rapidly ascending scale that covers several octaves and is repeated multiple times, sometimes separated by melodic material between iterations. The GR-300’s compressor allows each note in this gesture to speak clearly, and its sustain causes each note to bleed slightly into the next, creating a sweeping effect that is difficult to achieve on a standard jazz guitar. Figure 14 shows the conclusion of Metheny’s solo on “As It Is” from *Speaking of Now* (beginning at 4:58) that

includes this technique.²⁹ Figure 15 shows an excerpt of John Coltrane’s tenor saxophone solo on “Cousin Mary” from the record *Giant Steps* (beginning at 1:15) that also features this technique.³⁰ While Metheny sometimes uses this scale “flourish” while playing a standard jazz guitar, he only repeats them in succession when using the GR-300. Other examples of this technique can be found in Metheny’s solos on “The Heat of the Day” from the record *Imaginary Day* and “Are You Going With Me?” from the live record *Travels*.

(4:58)

Figure 14: The conclusion of Metheny’s GR-300 solo on “As It Is” from the record *Speaking of Now*. Measures 60-63 feature the horn-like scale “flourishes” that are typical of Metheny’s GR-300 improvisation

(1:15)

Figure 15: An excerpt from John Coltrane’s tenor saxophone solo on “Cousin Mary” from the record *Giant Steps* (written here in concert pitch), featuring scale “flourishes” similar to those used by Metheny

²⁹ Transcribed from Pat Metheny Group. *Speaking of Now*. Warner Brothers Records 9 48025-2.

³⁰ Transcribed from John Coltrane. *Giant Steps*. Atlantic 1311, 1960, digital album.

Another “horn-like” gesture that appears in Metheny’s GR-300 improvisation is repetition of melodic idea that isn’t symmetrical with the meter of the piece, creating polyrhythmic textures. While Metheny often repeats bluesy phrases on a standard jazz guitar, those examples are typically symmetrical with the meter, spanning exactly one or two beats in common time. Metheny’s asymmetrical repetition on the GR-300 creates rhythmic tension and elicits intensity from accompanying musicians. Figure 16 shows an excerpt of Metheny’s GR-300 solo on “Ring of Life” from the 2006 record *Metheny Mehldau* (beginning at 4:37) that exhibits this technique.³¹ In this example, Metheny repeats a group of five sixteenth-notes with no rest between them, creating a 5:4 polyrhythm with the rhythm section. Other examples of this technique in Metheny’s improvisation can be found in his GR-300 solos on “As It Is” from the record *Speaking of Now* and “To The End of the World” from the record *We Live Here*.

(4:37)
C(add4)

8^{va}

E \flat 7(sus4)
(8)

B \flat 6
(8)

D \flat maj7
(8)

Figure 16: An excerpt of Metheny’s GR-300 solo on “Ring of Life” from the record *Metheny Mehldau*, exhibiting Metheny’s polyrhythmic riff technique

³¹ Transcribed from Pat Metheny and Brad Mehldau. *Metheny Mehldau*. Nonesuch Records PRO 301949, 2006, digital album.

Another distinct difference in Metheny's GR-300 and standard guitar styles is particularly apparent when Metheny is playing in a trio setting. While Metheny comps sparsely for himself when improvising on a standard jazz guitar, he never uses the GR-300 to comp for himself in a traditional manner, even when there are no other chordal instruments in the ensemble. However, in lieu of traditional comping, Metheny often plays drone notes above or below his lines when improvising with the GR-300, creating a denser texture, clarifying the harmony and building tension. This technique is especially conducive to pieces performed in the keys of E, A, D, G, or B (the pitches of each guitar string in standard tuning) since those notes can be held as open-string drones. Figure 13 shows an excerpt of Metheny's GR-300 solo on "Roofdogs" from the 2016 live record *The Unity Sessions* (beginning at 3:48) that features open E and B string drones beneath Metheny's lines.³² In this example, Metheny is accompanied only by bassist Ben Williams and drummer Antonio Sanchez, with no chordal instrumentalists playing other than Metheny himself. He is nearing the end of his solo and has engaged the pitch shift feature on the GR-300, raising his range by one octave. Other examples of this drone-note technique can be found in Metheny's solos on "Roofdogs" from the record *Unity Band*, his concluding solo on "Question and Answer" from the live record *Trio Live*, his solo on "End of the Game" from the record *First Circle* and his solo on "Arthurdoc" from the live record *The Move to the Groove Session featuring Jimmy Heath*. Metheny occasionally uses this technique between chords when improvising with a standard jazz guitar as well, but less frequently than he uses it when improvising with the GR-300.

³² Transcribed from Pat Metheny Unity Group. *The Unity Sessions*. Nonesuch Records and Metheny Group Productions 554569-2, 2016, CD.

(3:48)

Em A¹³

C⁷ Em

A¹³

Figure 13: An excerpt from Metheny’s GR-300 solo on “Roofdogs” from the 2016 live record *The Unity Sessions* featuring open-string drones beneath Metheny’s melodic line

Conclusion

While Metheny’s approach to the GR-300 is similar to his approach to the standard jazz guitar, he uses the device to accomplish specific musical goals that would be impossible with a standard jazz guitar, including those related to formal architecture, tone, vocabulary and texture. The differences in his approach can be quantified through Metheny’s GR-300 specific language, improvisational concept, and what he uses the device to achieve formally. Examining the differences between his standard jazz guitar playing and his GR-300 playing are useful for studying Metheny’s influence on the course of improvised music, determining how different tones and electronic sounds can be used effectively in different improvisational scenarios, and for applying the language and concepts of his GR-300 playing in improvisation.

While this paper examines a number of distinct points of interest, several topics in the study of Metheny’s GR-300 style fall beyond the scope of this work. Namely, the author encourages speaking directly to Metheny about how he decides whether to use a standard jazz

guitar or the GR-300 on new compositions and whether or not having the GR-300's capabilities available to him has influenced his compositional processes. Further independent research may also include examining differences in Metheny's GR-300 device settings among various recordings and Metheny's improvisations with the G-303 guitar when the GR-300 is not activated.

Appendix A

As It Is

Pat Metheny's Roland GR-300 guitar synthesizer solo
from the record "Speaking of Now"

trans. by Denin Koch

Abm7

♩ = 135

Musical notation for measures 1-4. The key signature is Ab major (three flats). The time signature is 4/4. Measure 1 starts with a slash and a vertical line, indicating a guitar-specific articulation. The melody consists of eighth and quarter notes, with a triplet of eighth notes in measure 4.

Musical notation for measures 5-8. Measure 5 begins with a triplet of eighth notes. The melody continues with eighth and quarter notes, ending with a quarter rest in measure 8.

Musical notation for measures 9-12. Measure 9 starts with a slash and a vertical line. Chord changes are indicated above the staff: Db/F at measure 9, Dmaj7(#11) at measure 10, and Amaj7(#11)/C# at measure 11. The melody features eighth and quarter notes with triplets in measures 11 and 12.

Musical notation for measures 13-16. Measure 13 starts with a slash and a vertical line. Chord change: Bm7(b5) at measure 13. The melody is primarily eighth notes with triplets in measures 13 and 15.

Musical notation for measures 17-20. The melody consists of eighth notes with triplets in measures 18, 19, and 20.

Musical notation for measures 21-22. Measure 21 starts with a slash and a vertical line. Chord change: Ebmaj7/G at measure 21. The melody features eighth notes and quarter notes, ending with a triplet in measure 22.

Musical notation for measures 23-24. Measure 23 starts with a slash and a vertical line. The melody includes eighth notes and quarter notes, with a triplet in measure 24.

Musical notation for measures 25-28. Measure 25 starts with a slash and a vertical line. Chord change: Abm7 at measure 25. The melody is a complex sequence of eighth notes with triplets in measures 26, 27, and 28.

29 *8va*

31 (8)

33 Db/F Dmaj7(#11)

(8)

35 Amaj7(#11)/C#

(8)

37 Bm7(b5)

39

41 Ebmaj7/G

43 G7(b9sus4)

45 Bbmaj7/C

8va

Appendix B

The Gathering Sky

Pat Metheny's guitar solo from the record "Speaking of Now"

trans. by Denin Koch

(3:25)

8 $A\flat m^{11}$

Measures 8 and 9 of the guitar solo. Measure 8 starts with a whole rest, followed by a series of eighth notes: Bb, Ab, Gb, Fb, Eb, Db, Cb, Bb, Ab, Gb, Fb, Eb, Db, Cb, Bb. Measure 9 continues with eighth notes: Ab, Gb, Fb, Eb, Db, Cb, Bb, Ab, Gb, Fb, Eb, Db, Cb, Bb, Ab, Gb, Fb, Eb, Db, Cb, Bb.

3 Fm^{11}

Measures 10 and 11. Measure 10 starts with a whole rest, followed by eighth notes: Bb, Ab, Gb, Fb, Eb, Db, Cb, Bb, Ab, Gb, Fb, Eb, Db, Cb, Bb. Measure 11 continues with eighth notes: Ab, Gb, Fb, Eb, Db, Cb, Bb, Ab, Gb, Fb, Eb, Db, Cb, Bb, Ab, Gb, Fb, Eb, Db, Cb, Bb.

7

Measures 12 and 13. Measure 12 starts with a whole rest, followed by eighth notes: Bb, Ab, Gb, Fb, Eb, Db, Cb, Bb, Ab, Gb, Fb, Eb, Db, Cb, Bb. Measure 13 continues with eighth notes: Ab, Gb, Fb, Eb, Db, Cb, Bb, Ab, Gb, Fb, Eb, Db, Cb, Bb, Ab, Gb, Fb, Eb, Db, Cb, Bb.

$B\flat(\text{add}9)/D$ $Bm\text{aj}7(\#11)/D\#$

Measures 14 and 15. Measure 14 starts with a whole rest, followed by eighth notes: Bb, Ab, Gb, Fb, Eb, Db, Cb, Bb, Ab, Gb, Fb, Eb, Db, Cb, Bb. Measure 15 continues with eighth notes: Ab, Gb, Fb, Eb, Db, Cb, Bb, Ab, Gb, Fb, Eb, Db, Cb, Bb, Ab, Gb, Fb, Eb, Db, Cb, Bb.

Fm^{11}

Measures 16 and 17. Measure 16 starts with a whole rest, followed by eighth notes: Bb, Ab, Gb, Fb, Eb, Db, Cb, Bb, Ab, Gb, Fb, Eb, Db, Cb, Bb. Measure 17 continues with eighth notes: Ab, Gb, Fb, Eb, Db, Cb, Bb, Ab, Gb, Fb, Eb, Db, Cb, Bb, Ab, Gb, Fb, Eb, Db, Cb, Bb.

17

Measures 18 and 19. Measure 18 starts with a whole rest, followed by eighth notes: Bb, Ab, Gb, Fb, Eb, Db, Cb, Bb, Ab, Gb, Fb, Eb, Db, Cb, Bb. Measure 19 continues with eighth notes: Ab, Gb, Fb, Eb, Db, Cb, Bb, Ab, Gb, Fb, Eb, Db, Cb, Bb, Ab, Gb, Fb, Eb, Db, Cb, Bb.

Fm^{11}

Measures 20 and 21. Measure 20 starts with a whole rest, followed by eighth notes: Bb, Ab, Gb, Fb, Eb, Db, Cb, Bb, Ab, Gb, Fb, Eb, Db, Cb, Bb. Measure 21 continues with eighth notes: Ab, Gb, Fb, Eb, Db, Cb, Bb, Ab, Gb, Fb, Eb, Db, Cb, Bb, Ab, Gb, Fb, Eb, Db, Cb, Bb.

23

Measures 22 and 23. Measure 22 starts with a whole rest, followed by eighth notes: Bb, Ab, Gb, Fb, Eb, Db, Cb, Bb, Ab, Gb, Fb, Eb, Db, Cb, Bb. Measure 23 continues with eighth notes: Ab, Gb, Fb, Eb, Db, Cb, Bb, Ab, Gb, Fb, Eb, Db, Cb, Bb, Ab, Gb, Fb, Eb, Db, Cb, Bb.

27 Dbm⁹



29 Bmaj7(#11) Fm¹¹

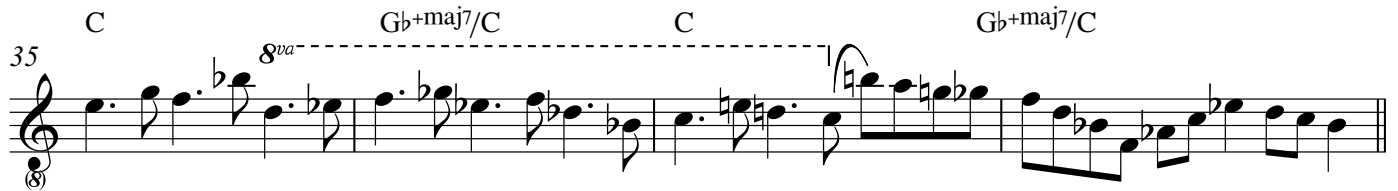


32

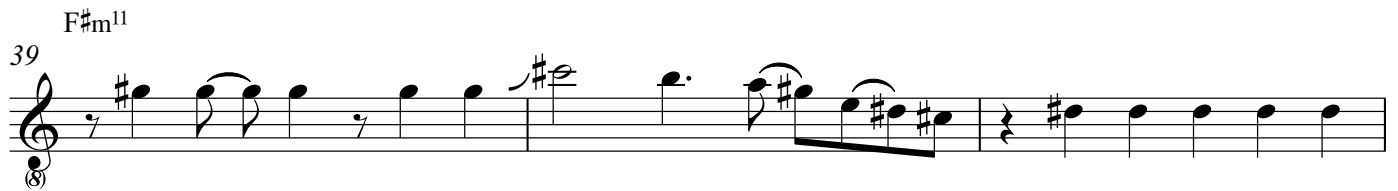


35 C Gb+maj7/C C Gb+maj7/C

8va



39 F#m¹¹



42



45 B⁶/D#



48 Cmaj7(#11)/E



51 $F\#m^{11}$

54 $F\#m^{11}$

57

60

63 Dm^9 $Cmaj7(\#11)$

67 $F\#m^{11}$

70 $C\#$ $G+maj7/C\#$

73 $C\#$ $G+maj7/C$ $C\#$

76 G+maj7/C F#7/C#

102 $A\flat\text{maj}9/C$ $G\flat\text{maj}7(\#\text{11})/F$
8va

106 $G\text{m}^{11}$ $A\flat/G$

109 $A\text{m}/G$ $B\flat/G$ $B\text{m}^{11}/G$

112 $C\text{maj}7/G$ $D\flat/G$

115 $D(\text{sus}4)/G$ $E\flat\text{maj}7/G$

118 E/G $A\text{m}^9/G$ $B\flat\text{m}7/G$
8va

121 $G\flat\text{maj}7/G$ G

Bibliography

- Cooke, Mervin. Pat Metheny: The ECM Years, 1975-1984. Oxford, England: Oxford University Press, Incorporated, 2017. 329 pg.
- DownBeat. "Metheny, Reeves, Barkan, Brackeen Named 2018 NEA Jazz Masters." Downbeat.com. <http://downbeat.com/news/detail/metheny-reeves-barkan-brackeen-named-2018-nea-jazz-masters> (Retrieved April 3, 2019).
- John Coltrane. Giant Steps. Atlantic 1311, 1960, digital album.
- Michael Brecker. Tales From The Hudson. Impulse! Records IMPD 19, 1996, digital album.
- Niles, Richard. The Pat Metheny Interviews. Milwaukee, WI: Hal Leonard Corporation, 2009. 161 pg.
- Pat Metheny. Bright Size Life. ECM Records ECM1073, 1976, digital album.
- Pat Metheny. Question and Answer. Geffen Records 9 24293-2, 1990, digital album.
- Pat Metheny and Brad Mehldau. Metheny Mehldau. Nonesuch Records PRO 301949, 2006, digital album.
- "Pat Metheny Group – Are You Going with Me? – 1989." Published on August 11, 2009. <https://www.youtube.com/watch?v=l4jIbLYE3gQ>. 9:35.
- Pat Metheny Group. Letter From Home. Geffen Records 9 24245-2, 1989, CD.
- Pat Metheny Group. Offramp. ECM Records ECM1216, 1982, digital album.
- Pat Metheny Group. Speaking of Now. Warner Brothers Records 9 48025-2, 2002, digital album.
- Pat Metheny Group. Travels. ECM Records PRO-A-2059, 1983, digital album.
- Pat Metheny Unity Group. The Unity Sessions. Nonesuch Records and Metheny Group Productions 554569-2, 2016, CD.
- Ratliff, Ben. The Jazz Ear: Conversations over Music. London: Macmillan, 2008. 257 pg.
- Roland Corporation. (1980). GR-300 Polyphonic Guitar Synthesizer: Owner's Manual. 20 pg. Retrieved from http://cdn.roland.com/assets/media/pdf/GR-300_OM.pdf.
- The Pat Metheny Songbook. Milwaukee, WI: Hal Leonard Corporation, 2000. 448 pg.
- Webb, Nicolas. "Interview with Roland GR User Pat Metheny." *Guitarist* 12 (1986), 28-31.