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The Embodied Folk Guitar of Elizabeth Cotten

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ABSTRACT: This article demonstrates the specific ways that Elizabeth Cotten's music-making relies on active negotiations between her physical capabilities afforded by her guitar technique and abstract musical concerns of rhythm, melody and phrasing. Cotten played a right-handed guitar upside down, picking with her left hand and fretting with her right. Cotten developed a unique style of playing based on the reversed relationship between her hands and the order of the strings on the guitar, which required her to reconfigure her chord fingerings, strumming, and picking patterns. I show that Cotten prioritizes ergonomic principles in her approach to fretting, reconfiguring chord voicings to allow her right wrist to maintain a more neutral wrist position, and transposing hand shapes around the fretboard to facilitate minimal movement for individual fingers. This prioritization of ergonomics directly shapes characteristic melodic figures that are recognizable throughout her work. I further identify examples of novel textural patterns in Cotten's work that result from her inverted picking technique. I conclude by analyzing how her fretting and picking techniques interact to create motives and textures in the song "Washington Blues." By focusing on the embodied experience of composing with an instrument, this project as a whole contributes to the growing corpus of analytic work that emphasizes music as a dynamic, embodied performance.

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Introduction

[0.1] Elizabeth Cotten has only recently begun to achieve the level of acclaim worthy of a guitarist of her stature and influence. In the late 1950s and 1960s, Cotten brought the regional Piedmont style of blues guitar playing to a wider audience, shaping the development of fingerpicking in the North American folk revival. Her songs have been covered by the Grateful Dead; Bob Dylan; Taj Mahal; Joan Baez; and Peter, Paul and Mary, although Cotten was not always publicly credited as the originator. In a 1996 interview, Joni Mitchell identified Cotten as a legendary figure in the development of modern folk guitar technique and discussed Cotten's influence on her own technique:

> When I was learning to play guitar, I got Pete Seeger's *How to Play Folk-Style Guitar*. I went straight to the Cotten picking. Your thumb went from [*imitates alternating-bass sound*] the 6th string, 5th string, 6th string, 5th string. I couldn't do that, so I ended up playing mostly the 6th string but banging it into the 5th string. So Elizabeth Cotten definitely is an influence; it's me not being able to play like her. If I could have, I would have, but good thing I couldn't, because it came out original. (Pepper Rodgers 1996)

[0.2] Mitchell's comments betray a widespread misconception about Cotten's fingerpicking technique, which was later repeated in Pete Seeger's (1955) instructional manual. On the accompanying record and booklet, Cotten's technique is normalized and recast in terms that are intelligible for most guitarists (who are right-handed) with the right-hand thumb picking an alternating bass on the 5th and 6th strings.(1) But crucially, this is not how Cotten herself played. Cotten was left-handed and played a right-handed guitar upside down, picking with her left hand and fretting with her right hand. When playing in the Piedmont style, Cotten picked the characteristic alternating bass line with the index finger of her left hand, rather than the thumb of her right hand as Seeger describes.

[0.3] During her childhood in a Black neighborhood outside Chapel Hill, North Carolina, Cotten taught herself to play with her older brother's banjo (Cotten 1979, 2). She began doing domestic work at the age of twelve and eventually saved up enough money to purchase her own guitar (Ullman 2004, 6). Unfortunately, the economic and social pressures of being a Black woman in the South in the early twentieth century pushed her to stop playing. She married at the age of fifteen and soon had a daughter. Shortly thereafter, she was counseled by a minister to give up her "worldly" guitar music—he believed it would lead her into sin (Cotten 1979, 2). She stopped playing for almost 25 years, performing domestic labor to support her family, as full-time music-making was not a path available to her. Cotten and her husband divorced in 1940, and she relocated to live with her daughter in Washington, DC, where she started working for the Seeger family as a housekeeper (Ullman 2004, 6). She began playing the family's guitars in her spare time, and the Seegers encouraged her to pursue music full time. Mike Seeger recorded her first album, which was released in 1957 by Folkways Records as *Elizabeth Cotten: Negro Folk Songs and Tunes* (Ullman 2004, 8). Cotten toured widely for the next several decades and released two more studio albums and a concert album, the latter of which received a Grammy for Best Traditional Folk Recording in 1984 (Ullman 2004, 10). She performed until the end of her life in 1987.

[0.4] Cotten's musical style is grounded in Piedmont blues, a regional style of guitar playing that originated in the Piedmont plateau region of the southeastern U.S., spanning central Virginia to central Georgia (Hedin 2016; Pearson 2010). The genre uses an intricate two- or three-finger picking style, in which the thumb plays a regular alternating bass on the lower strings while the index and sometimes middle fingers play a syncopated melody on the upper strings (Welker and Lowry 2006, 774). Piedmont blues represents a fusion of various styles, including ragtime piano, Black religious music, and old-time string band music, which are all filtered through the lens of guitar technique.(2)

[0.5] In its diverse range of influences, Piedmont blues represents a more thorough and encompassing blend of Black and White musical traditions than Delta blues.(3) Its blending of different racial musical characteristics made it more difficult to market: sociologist William Roy (2004) has argued that, in the 1920s, American record companies constructed the categories of "race records" and "hillbilly music" to market rural music along racial lines. He contends that these categories arose from the specific marketing decisions of record companies and not as organic genres. As these records achieved commercial success, the categories began to regulate musical behavior: musicians had a greater chance of landing record contracts if their sound fell into an easily marketable category (Roy 2004, 277).(4)

[0.6] Elizabeth Cotten is one of the few Piedmont blues musicians to have achieved any commercial success.(5) She developed a unique style of playing based on the reversed relationship between her hands and the order of the strings on the guitar, which required her to reconfigure her chord fingerings and strumming and picking patterns. Though she was enormously influential and achieved some degree of critical recognition by the end of her life, her music is little known and

rarely studied; no music-analytic studies have yet examined Cotten's work. The present article examines the impact of Cotten's embodied performance techniques on chord voicing, motive, and texture. In Section 1, I contextualize Cotten's innovations within the literature on embodiment, disability, and left-handedness. I argue that Cotten's approach to forming chords constitutes a disability intervention against the affordances and limitations of normative right-handed fretting technique. In Section 2, I discuss my methodology. In Sections 3 and 4, I demonstrate how Cotten subtly alters normative fretting techniques, first by reconfiguring chord voicings to allow her right wrist to maintain a more neutral wrist position, and second by transposing hand shapes around the fretboard to avoid reconfiguring the shape of her fretting hand. This prioritization of ergonomics facilitates characteristic melodic figures that are recognizable throughout her work. In Section 5, I examine the musical effects of Cotten's inverted picking techniques, focusing on examples of novel textural patterns in Cotten's work that are facilitated by her inverted picking technique. In Section 6, I conclude by analyzing how her fretting and picking techniques dynamically interact to create motives and textures in her original song "Washington Blues".

1. Embodiment, Disability, and Instrumentality

[1.1] In her 1994 article "Feminist Theory, Music Theory, and the Mind/Body Problem," Suzanne Cusick notes the lack of music-theoretic or music-analytic work on embodiment, arguing, "as a performer, I act on and with what we ordinarily call music with my body; as a musicologist I have been formed to act on (and with?) what we ordinarily call music with my mind, and only with my mind" (9). Since then, the field of music theory has broadened to consider both the role of listeners' bodies in shaping musical perceptions and discourse and the ways that interactions between performers' bodies and instruments can be co-constitutive in the production of musical structure and knowledge.(6) An important starting point is Jonathan de Souza's claim that musical knowledge is not limited to "tool user(s)," but is contained within musical instruments themselves (2017, 24). For example, he argues that the piano "'knows' a certain pitch-class collection: the notes of the equal-tempered chromatic scale," while at the same time privileging "white-note modes like C Major" (2017, 24–25). He formalizes the idea of the instrumental "sweet spot" as "a place where the object's affordances converge with the agent's abilities in a particularly strong way" (2017, 74). In her music, Cotten drew on existing fretboard "sweet spots," while also discovering and developing new ones that resulted from the reconfigured relationship between her hands and the order of the strings.

[1.2] Recent studies have examined how the physical and tonal affordances of fretted instruments can give rise to musical organization.(7) In his 2011 article "Guitar Voicing in Pop-Rock Music," Timothy Koozin traces how common chord progressions and gestures can be interpreted as sonic consequences of generalized hand position shapes and motions on the fretboard. Similarly, Nicholas Shea (2020) argues that many of the harmonic and formal features of pop-rock music arise from the physical and tonal affordances of the guitar, rather than from more abstract principles.

[1.3] While these studies focus on the impact of instrumental materiality on musical practice and discourse writ large, Cotten's work provides a more specialized case study in how physical difference prompts individual musicians to develop new instrumental affordances as tools for self-expression—an angle explored in depth by critical disability studies. In her book *Activist Affordances: How Disabled People Improvise More Habitable Worlds*, Arseli Dokumaci defines activist affordances as "performative microacts/-arts through which disabled people *enact* and *bring into being* the worlds that are not already available to them, the worlds they need and wish to dwell in" (2023, 5). She expands the idea of affordances to distinguish between affordances that are readily perceivable and intended as properties of objects, and those which "are almost too remote and therefore unlikely to be perceived, and yet are perceived and actualized through great ingenuity and effort to ensure survival" (6). In doing so, she highlights how disabled people creatively labor within the constraints of their environments to create habitable worlds for themselves out of necessity. Stefan Honisch (2009) and Blake Howe (2010) both describe how classical musicians with physical impairments use adaptive devices and techniques to approximate traditional instrumental performance. In contrast to the classical tradition, the more flexible expectations and norms in Western popular music allow musicians to navigate the dichotomy of ability and disability by

shaping the music to their bodies, rather than shaping their bodies to the music. For example, as a result of their physical impairments, Django Reinhardt and Stevie Wonder both developed compositional innovations and instrumental techniques that became a signature part of their musical styles (Straus 2011; Fulton 2015).

[1.4] While few in the present day would consider left-handedness to be a disability in the common usage of the term, the social model that grounds disability studies provides a different perspective. Alison Kafer argues that, according to the social model, disability is not located in the body itself, but rather emerges in the interactions between bodies and "inaccessible buildings, discriminatory attitudes, and ideological systems that attribute normalcy and deviance to particular minds and bodies" (2013, 6). Rosemarie Garland-Thomson explains this conceptual difference using real-world examples of the social construction of disability:

> Stairs, for example, create a functional 'impairment' for wheelchair users that ramps do not. Printed information accommodates the sighted but 'limits' blind persons. Deafness is not a disabling condition in a community that communicates by signing as well as speaking. People who cannot lift three hundred pounds are 'able-bodied,' whereas those who cannot lift fifty pounds are 'disabled.'" (Garland-Thomson 1997, 7)

Under the social model of disability, a person "becomes" disabled when they encounter a non-accommodating feature of the built world. Or, to put it in terms of the case given by Garland-Thomson, disability arises in the interaction between the wheelchair user and the stairs. Similarly, we could argue that a left-handed person "becomes" disabled when they encounter a right-handed pair of scissors, a right-handed vegetable peeler, or a right-handed guitar—any object that is not designed to accommodate use by their body.

[1.5] Another important fact to keep in mind is that the relative acceptance of the left-handed in Western society is a recent historical artifact. Ancient sources such as the Bible document the longevity of right-handed bias, which persists in linguistic traces today: the Latin root for the word "dexterous" means "right," while the Latin root for the word "sinister" means "left" (Costa 1996, 3). Historian Howard Kushner explains how the "father of criminology," Cesare Lombroso (1835–1909), embedded this bias into the language of science at the beginning of the twentieth century, arguing that left-handedness was "connected to insanity and retardation" (Kushner 2013, 419). Kushner connects this ideological bent with the modern scientific preoccupation with "connecting left-handedness with an array of disorders including autoimmune diseases, psychiatric disorders, mental retardation, and learning disabilities" (2013, 422–23). Philosopher Peter Westmoreland goes even further, claiming that Lombroso's conclusions are the natural progenitor to a recent spate of articles linking left-handedness to "social anxiety; depressive symptoms; lifetime experimentation with dangerous drugs; pedophilia; and increased odds of psychiatric diagnosis, severe psychiatric disorders, being prescribed antipsychotic and anxiolytic medication uses, and psychiatric hospitalization" (2023, 201). Westmoreland (2023, 202) argues that this discursive bent constitutes a form of epistemic injustice against left-handers, who must contend with the stigma of association with pathological conditions.

[1.6] Interactions between non-normative bodies and instrumental interfaces can reveal their historically and socially contingent nature. It is not difficult to find examples of the ways that right-handed bias has materially impacted the design and usage of musical instruments throughout history: The valves on trumpets and tubas, and the slide on the trombone, are operated with the right hand, while the left hand mainly supports the weight of the instrument. Prior to the addition of valves to the French horn, the instrument's pitch changes were done by varying the right hand's position inside the bell. Most woodwind instruments seem to require equal dexterity from both hands, while string instruments call for a different set of skills from either hand, as they are typically fingered with the left hand and bowed with the right. While both hands on the piano operate relatively independently, in much Classical piano repertoire until the Romantic period, the right hand is more often given melodically important and technically difficult passages.

[1.7] When a right-handed person plays a right-handed guitar normatively, they pick or strum with their dominant hand and fret the strings with their non-dominant hand. This configuration allows the stronger and more flexible dominant hand to assume the more rhythmically active role, which

may be especially advantageous in styles of music that involve intricate fingerpicking. Many left-handed guitarists, such as David Bowie, learn to play the instrument right-handed, picking or strumming with their non-dominant hand and fretting with their dominant hand. While this is the preferred strategy of left-handed players of many instruments, it is particularly prominent in the Classical tradition, where alternative instrumental configurations are rare, and players are often discouraged from attempting to play their instrument left-handed (Daley 2023). Some guitarists have expressed that they feel their left-handedness in such cases has actually benefited their playing. For beginners, for example, learning to fret the guitar is often a painful and frustrating process that may be easier if they can enlist their stronger and more dexterous dominant hand.(8)

[1.8] At the same time, popular music's tradition of more flexible use of the guitar has uniquely facilitated the proliferation of left-handed adaptations to the instrumental interface. As a result, throughout the twentieth century, left-handed players developed alternative strategies for navigating the fretboard.(9) A common strategy is to mimic the set-up of a left-handed guitar by reversing the strings on a right-handed guitar and playing it upside down, allowing the player to fret with their non-dominant hand and pick or strum with their dominant hand. Paul McCartney played bass this way as a teenager and young adult until he was able to find custom left-handed instruments (Kolgraf 2023). Throughout his career, Kurt Cobain seemed to alternate between playing right-handed and playing left-handed with the guitar flipped and restrung (Kolgraf 2023). Jimi Hendrix also famously flipped and restrung his right-handed Fender Stratocaster, which some have hypothesized contributed to his signature tone on the electric guitar. In an issue of *Popular Mechanics*, Kevin Dupzyk (2015) outlines how the structure of the pickups on Hendrix's Stratocaster interacted with the reversed strings, catching the strings at different locations on the fretboard and altering how prominent they sound in the mix.

[1.9] In contrast, Elizabeth Cotten played a right-handed guitar upside down but without reversing the strings. Cotten's unique style of playing emerged from this reversed relationship between her hands and the order of the guitar strings, which required her to reconfigure both the chord fingerings and the strumming and picking patterns she used. Following Dokumaci 2023, I argue that Cotten's guitar technique constitutes an activist affordance. While the affordances of the normative fretboard interface are readily perceivable to right-handed players, Cotten's flipped technique revealed new affordances that were only available to a guitarist with her specific bodily configuration. In many cases, these new affordances illuminated more efficient and ergonomic ways of playing that might otherwise have gone undiscovered.

2. Methodology

[2.1] Unless otherwise indicated, the transcriptions, tablatures, and fretboard schematics used throughout the article are my own. Where possible, I have adapted materials from guitarist John Miller's 2002 instructional DVD and booklet, *The Guitar of Elizabeth Cotten*.(10) I have deduced her fingerings from online footage of her live performances. Since she often plays variants of her tunes in live performances, I have adapted my transcriptions to reflect the versions of her songs presented on her studio albums. For ease of interpretation, I have maintained the order of the strings in traditional tablature, with pitch represented vertically from highest string at the top of the tablature to lowest string at the bottom. Spatially, this means that the tablature for normative technique is presented from the player's perspective with the instrument rotated 90º upwards to view the fretboard from above. The tablature for Cotten's technique, in contrast, is presented from the perspective of an observer viewing the playing head-on. In contrast, the order of the strings is reversed in the fretboard and picking schematics depicting Cotten's technique, i.e., with the highest string at the bottom of the page. Spatially, this means that the fretboard schematic is presented as if the reader is the player looking down at the fretboard, as in standard tablature, but now with the low strings furthest away (at the top of the diagram). I have elected to make this switch so that the reader might imagine themselves fingering along with Cotten, with their right-hand fretting the strings and their left-hand picking.

[2.2] I use Jonathan de Souza's (2018) fret-string integer notation to refer to specific locations on the fretboard. In de Souza's system, the intersection of the first fret and the first string is represented as

(1, 1); the intersection of the first fret and the second string is (1, 2); and so on. I likewise use de Souza's *int* transformation to represent distance of fretboard movement. Following from his fret-string notation, movement between strings is represented as *int*(0, +/–x), while movement between frets is represented as *int*(+/–x, 0), where positive integers represent pitch ascent and negative integers represent pitch descent. Thus, movement from the first fret and first string (1, 1) to the first fret and second string (1, 2), would be represented as *int*(0, +1). Movement from (2, 1) to (1, 1) would be represented as *int*(–1, 0). The two types of movement can be combined in a single transformation, as (+/–x, +/–y). Movement from (2, 2) to (3, 1) would thus be designated *int*(+1, –1).

3. Affordances and Risks of Right-Handed Fretting Technique

[3.1] In normative right-handed guitar technique, the right hand comes over the top of the guitar's body to meet the strings, with the thumb aligned with the lower strings and subsequent fingers aligned with the higher strings (**Example 1**). The left hand comes around the bottom of the guitar's neck and up to meet the strings, while the left thumb rests on the back of the guitar's neck. The left hand is thus aligned such that the index finger is closest to the nut, while the pinky is farthest from the nut. This physical configuration affords fingerings where the pinky frets notes furthest from the nut, while the index finger plays notes closest to the nut. This physical configuration amounts to a rule for guitar chord fingerings; it is simply not physically possible for any other finger to be closer to the nut than the index finger. We can see this tendency in all the most common guitar chords, a selection of which are shown in **Example 2**.(11)

[3.2] While this normative physical interface between the guitar and the guitarist's body affords certain types of movement and musical expression, it can also unfortunately lead to some of the highest rates of performance-related injury among musicians.(12) A neutral wrist position creates the greatest amount of space in the tendon-and-nerve-containing channels of the wrist, and therefore the least amount of friction on these tendons and nerves (Watson 2009, 88). By contrast, **Example 3** shows positions that result in a higher degree of tension in the tendons of the wrist, either through extending or flexing it, or through radial (thumb-side) or ulnar (pinky-side) deviation (Watson 2009, 88). As shown in **Example 4**, these positions are used in right-handed guitar technique: the left hand comes around the bottom of the guitar, while the wrist flexes up toward the inside of the arm and bends towards the thumb side of the arm to meet the fretboard, creating flexion and radial deviation (Storm 2006, 896). Additionally, the traditional method of holding the body of the guitar parallel to the floor, as in jazz and folk idioms, can lead to higher rates of injury as it results in a more hyper-flexed left wrist position than the Classical practice of holding the guitar at an angle (Brandfonbrener 2009, 185). And, indeed, injuries to the left fingers, wrist, and hand, are most commonly reported among guitarists (Fjellman Wiklund and Chesky 2006, 171).

[3.3] Hand positions that align the index finger with the lower-pitched strings at the top of the instrument and the latter fingers with the higher-pitched strings at the bottom are physically preferable, because they involve a more neutral wrist position than hand positions that align the index finger with the higher-pitched strings. Examples of chords reflecting this preference include A major and D major, among others (**Example 5**). This is a preference and not a rule because many common guitar chords such as G and C major violate it, placing the index finger on higher-pitched strings at the bottom of the instrument (**Example 6**). In the standard C major fingering, the index finger is placed at (1, 2), the middle finger at (2, 4), and the ring finger at (3, 5), requiring a higher degree of flexion in the wrist. The standard G major fingering is less extreme than C major, as the index finger (2, 5) is located on a lower-pitched string than the ring finger (3, 1), but on a higher-pitched string than the middle finger (3, 6).

4. Cotten's Fretting Hand Technique

[4.1] As a result of her left-handedness, Elizabeth Cotten reconfigured the interface between the guitar and her body, reversing the relationship between her hands and the order of the strings. This reconfigured interface yields a different set of affordances and challenges than those typically associated with normative technique. In some cases, these "hidden" or "activist" affordances

constitute more efficient or ergonomic alternatives to common fretboard issues. In this section, I discuss several of these "hidden" affordances and their impact on Cotten's musical language.

[4.2] Cotten's affordances result from the fact that, in her reconfigured hand position, the higher-pitched strings are now at the top of the fretboard, while the lower-pitched strings are at the bottom (**Example 7**). The more neutral wrist position for her still involves her index finger being aligned with the strings at the top of the fretboard, but in this reversed position, these are now the higher-pitched strings (**Example 8**). As a result, some chord shapes that violate the neutral wrist preference in traditional technique are less physically demanding for Cotten to play in her reversed position, as her wrist can assume a more neutral position. For example, Cotten fingers C major almost identically to how the chord is played in normative technique (**Example 9**). As in traditional fingering, her middle finger frets at (2, 4), while her index finger frets at (1, 2). Only Cotten's bass note deviates from normative technique: instead of using her ring finger to fret a low C in the bass at (3, 5), her pinky plays a low G at (3, 6). While this C major position involves a high degree of wrist flexion for a right-handed player, Cotten can maintain the position with a more neutral wrist.

[4.3] In some cases, this reconfigured guitar/body interface allowed Cotten to discover easier physical alternatives for executing common patterns not as readily available to a normative guitarist. She subtly alters many of her chord shapes to allow her right wrist to maintain a less taxing position, over time cementing the neutral wrist preference of normative guitar technique into a personal rule. One example of this practice involves the execution of the G-major chord. There are a few different ways for right-handed players to finger G major on the guitar, but each of the hand shapes violates the neutral wrist preference: the middle finger is on a lower string, higher on the fretboard, than the index finger, resulting in a higher degree of wrist flexion (**Example 10**). As while playing the C major chord, Cotten maintains a more neutral wrist position while playing G major by anchoring her pinky at (3, 6) and playing the high G with her ring finger at (3, 1).

[4.4] In addition to reducing stress on the wrist, this reconfigured G chord shape enables her to execute a common chord transformation, from G major to G7, more easily. **Example 11** shows the most common voicing of this transformation: the lowest five notes of the G major chord remain constant, while the G in the upper voice moves down a whole step to F by means of the *int*(–2, 0) transformation.[(13)] Cotten employs this transformation quite often, both as a harmonic embellishment and a melodic motive in the oft-used key of C major. By anchoring her pinky at (3, 6) to maintain a more neutral wrist position, and by avoiding fretting the 5th string entirely, Cotten leaves her more dexterous upper three fingers free to play melodic figures on the higher strings more easily, including the G-to-F transition that changes the G major chord to a G7. She typically frets the high G at (3, 1) with her ring finger and then uses her index finger to take over and play the F at (1, 1) by means of *int*(–2, 0). In Cotten's fingering, the only element of stretch is between the ring finger and the pinky—the upper three fingers are all closely aligned at the 1st string.

[4.5] Despite its ubiquity in folk music, this transformation requires a high degree of coordination and dexterity from the right-handed guitarist, as both the high G and the chordal seventh that replaces it are played on the 1st string (Example 11). The pinky typically plays the high G at (3, 1) and must be removed from the string when the index finger enters at (1, 1) with the chordal seventh. Fretting the 1st string with the index finger results in an even more extreme wrist position than the typical G major shape, placing stress on the tendons of the wrist; in addition, the index finger and pinky must stretch far from the middle and index fingers, creating stress within the tendons of the finger as well as the wrist. This transformation must be executed with the ring finger at (3, 6) and the middle finger at (2, 5) (Example 11). This is no mean feat, as the ring finger is notorious for its lack of independence from the other fingers; it is extremely difficult to move the ring finger without also moving the middle finger. For this reason, many right-handed guitarists employ a common alteration to simplify the shape, omitting the middle finger at (2, 5) and muting the 5th string instead. While this eliminates the ring-finger independence issue, the index finger is still stretched far from the other fingers, and the wrist inhabits a highly flexed position with the ring finger at (3, 6).

[4.6] In her song "Freight Train" (1958), Cotten's ring-finger-to-index-finger switch supports the song's opening melodic motive, which concludes with a G-to-F transition on the 1st string, changing the chord from G to G7 (**Video Example 1**). In the opening melodic motive, the ring

finger plays the high G at (3, 1), comes off the string to allow the high E to ring, and then moves down to play a D at (3, 2). The index finger then takes over on the 2nd string, playing the melodic C at (1, 2). The ring finger and index finger are able to quickly execute the G-to-F transformation, *int*(–2, 0), in the third and fifth measures.

[4.7] This *int*(–2, 0) G-to-F transformation on the highest string constitutes a frequent melodic motive throughout Cotten's oeuvre. In the opening motive of her song "Washington Blues" (*Shake Sugaree*, 1967), she adds in the intervening F♯ to fully chromaticize the descent (**Video Example 2**). Her ring finger begins the phrase at (3, 1), as in "Freight Train." On the third beat of the first measure, her ring finger slides down to play F♯ at (2, 1). On the pick-up to the next measure, her index finger takes over the melody, playing the F♮ at (1, 1) and leaving her ring finger free to play the G at (3, 1) on the second beat of the next measure.

[4.8] Cotten plays the same descending chromatic lick on the chorus of "Babe, It Ain't No Lie" with a slight harmonic modification (*Freight Train and Other North Carolina Folk Songs and Tunes*, 1958, **Video Example 3**). This phrase begins in the same hand position as "Washington Blues," with her pinky at (3, 6) and her middle finger at (3, 1). But here, on the second measure when her middle finger slides down *int*(–1, 0) to play F♯ at (2, 1), her pinky also moves down *int*(–1, 0), from (3, 6) to (2, 6). This changes the quality of the chord: whereas in "Washington Blues," the melodic F♯ clashed with or added a major seventh to the G major chord underneath, here the parallel movement in the bass suggests a first inversion D chord, with a non-chordal inner voice pedal on G. On the third beat of this measure, when her index finger takes over to play the F♮ at (1, 6), her pinky slides back to the G at (3, 6) via *int*(+1, 0), creating a G7 chord. As in the previous example, her pinky then jumps up to (3, 5) to add the bass note for the C chord.

[4.9] In addition to the G–G7 transformation, Cotten subtly alters many of her other chord shapes, allowing her to maintain a neutral wrist position. As a result, her movement on the fretboard is characterized by a relatively static overall hand shape with minimal finger movement to effect melodic and harmonic change. In some cases, this allows her to assign each finger to a single fret, holding her basic hand shape in an anchored position while moving each of the fingers between the strings.[(14)] For example, in "Freight Train," the hand remains anchored for the first six measures of the song, with the index finger and ring finger both moving only *int*(0, +1) and the middle finger remaining stationary (**Video Example 4**). To maintain melodic or harmonic continuity, she only strays from this anchored position when it is absolutely necessary. This only occurs once in the first verse. On beat one of m. 6, the melody changes from F to E, removing the chordal seventh from the G7 chord (Video Example 4). On the second beat of this measure, she adds the seventh back into the chord with her ring finger at (3, 4). The next melody note, D, is also played at the 3rd fret, presenting something of a finger placement conundrum. In response, she crosses her middle finger over her ring finger to play this D at (3, 5), eliminating the need for her ring finger to toggle between strings at the same fret.

[4.10] In some instances, Cotten creates chord progressions by transporting these relatively static hand shapes around the fretboard with minimal or no finger movement. In "Honey Babe Your Papa Cares for You," she effects a key harmonic transition from G major to D major by shifting the hand shape for the G-major chord down a fret. Her pinky plays a high G at (2, 6), while her ring finger plays a B at (2, 3). She does not pick the 5th string, which would sound a B in its open position, and lets the D on the 4th string ring open. This parallel chord movement is facilitated by a relatively low melodic line at this point in the song (**Video Example 5**). The first four measures of the melody descend from a G4 played on the 1st string (3, 1) to a G3 an octave lower played on the 3rd string (3, 3). The first two phrases of the verse conclude with a melodic figure that plays on a slippage between B—$\hat{3}$ in the home key of G major, played on the open 2nd string—and a blue-note version of this B, played using a hammer-on at (3, 3). When the harmony changes to D major at the start of the third phrase of the verse, this blue note resolves not up to B, as had been hinted at throughout the verse, but down to A, here the fifth of the D major chord. Since this motive is relatively low in pitch and does not involve the higher strings, Cotten is able to avoid fretting the 1st and 2nd strings in her version of the D major chord. She leaves these strings open and uses them to play E and B, respectively, as non-harmonic tones over the D-major harmony. This strategy allows her to transpose the relatively simple G-major shape down a fret for the D-major chord.

[4.11] In normative practice, in contrast with Cotten's, this common transition is accomplished with a wholesale reordering of the relationship between the fingers and the strings. G major is usually played with the index finger at (2, 5), the middle finger at (3, 6), and the ring finger at (3, 1) (**Example 12**). D major is usually played with the index finger at (2, 3), the middle finger at (2, 1), and the ring finger at (3, 2). The ring finger moves only minimally via the transformation *int*(0, +1). The middle and index fingers must enact a much more radical move. The middle finger moves *int*(+1, –5), while the index finger moves *int*(0, –2). To achieve this transformation, the middle finger and the index finger must switch relative positions on the fretboard, as the middle finger moves from the lowest-pitched string to the highest-pitched string. Cotten's flipped relationship to the strings allows her to forgo this reconfiguration, creating a new fingering adaptation.

[4.12] While it is possible to view Elizabeth Cotten's contributions as strictly compositional or performance-related innovations, to do so is to minimize the fact that Cotten's hidden affordances arose as a result of an encounter between a non-normative body and a normative instrument. Rather than training her body to interact normatively with a right-handed guitar, Cotten chose to embrace her left-handedness, creating a new style of playing that, in many cases, yielded more efficient and ergonomic alternatives to standard fretboard techniques. Through this combination of affordances, she created novel chord voicings that both reduce tension on her fretting hand and precipitate characteristic melodic figures that are an essential part of her sound. She brings this same productive tension to bear on her picking techniques, which I discuss in the next section.

5. Cotten's Picking Hand Technique

[5.1] Cotten's picking technique similarly represents a synthesis of traditional styles of playing, filtered through the lens of her left-handedness. She most commonly uses a two-finger picking technique that springs from the Piedmont blues tradition. In this case, though, Cotten's reversal of the guitar necessitates a switch in the picking roles of her thumb and fingers. Where in normative Piedmont style, the thumb (T) plays a regular alternating bass on the lower strings while the index (I) and sometimes middle fingers (M) play a syncopated melody on the upper strings, Cotten more often picks the melody on the higher strings with T while I picks the bass line. Despite this reversal of the fingers' usual picking roles, Cotten holds her left hand in a very similar position to that used by many right-handed Piedmont blues players.(15)

[5.2] A further consequence of Cotten's reversed position relative to the strings is a reversal in up-pick and down-pick patterns relative to the melody and accompaniment. The relationship of T and I to the strings, in both normative technique and Cotten's technique, necessitates down-picked T notes and up-picked I notes. For a normative Piedmont player, this means that the melody is up-picked by I while the bass is down-picked by T. Down-picks are generally stronger and louder than up-picks due to the strength of T relative to I, compounding the fact that the thicker, lower strings on the guitar tend to ring more loudly than the thinner, higher strings. This normative Piedmont style of picking requires that T attenuate its strength while I plays more strongly to accentuate the melody against the thumb-driven accompaniment. In contrast, Cotten down-picks the melody with T and up-picks the accompaniment with I. This aligns much more naturally with the relative prominence of the lines: she does not need to attenuate the strength of T, and can instead let the melody line ring.

[5.3] This reversed thumb/index finger relationship affects Cotten's kinesthetic experience of the music, especially when she performs songs by other artists. One example of this is "Spanish Flang Dang," Cotten's rendition of a nineteenth-century parlor guitar staple, "Spanish Fandango," written by American guitar teacher and composer Henry Worrall in the 1850s (Ferguson 2016, 6).(16) Worrall originally composed "Spanish Fandango" for a three-finger pattern, with the thumb picking the bass line on each downbeat and the index and middle fingers picking the melody and inner voices (**Video Example 6**).(17) Cotten adapts the song to her two-finger picking style, with some slight alterations to fit the $\frac{3}{4}$ meter; she down-picks the melody with T, and up-picks the bass and inner voices with I (**Video Example 7**). In contrast to the parlor version published by Worrall, the melody and accompaniment in Cotten's version are gesturally distinct, as the entire accompaniment pattern—inner voices and bass line—is picked by I, while T only picks the melody.

Although this shift does not create any audible difference in tone, the altered picking pattern leads to a clearer embodied contrapuntal distinction between the two lines for the player.

[5.4] In addition to Piedmont two-finger picking, Cotten plays in a variety of styles that rely on different relationships between the fingers on the picking hand and the order of the strings. One such technique involves accompanying a single-line melody with plucked chords. In the first part of her song "Buck Dance" (1967), T down-picks the melody on strings 1 and 2 while I, M, and R up-pick chords on strings 3, 4, and 5 (**Video Example 8**). The melody and accompaniment sound in homorhythm in this passage, the down-picks and up-picks occurring at the same time in a sort of pinching motion. In the next phrase, the texture changes to comprise a bass line with plucked chords on beats two and four (**Video Example 9**). At this point in the song, Cotten could have begun up-picking the bass line with M or R, leaving the I and T to pluck the intervening chords. Rather than change the position of her hand, she up-picks the bass line with I on beats one and three of each measure; she then moves I up the strings on beats two and four to participate in the plucking of the intervening chords.

[5.5] Cotten's technique for playing a bass line alternating with plucked chords, which requires the left hand to quickly and accurately move between the strings, works relatively well for simple textures such as those in "Buck Dance."[(18)] In passages with a more rhythmically active bass line or with a melody in the lower register, Cotten must choose which musical parameters to prioritize, as she cannot pluck a chord simultaneously with a bass note plucked by I. Her song "Run… Run/Mama Your Son Done Gone" (1958) provides an example of this process. In the liner notes for the album, Mike Seeger describes the song as "a Southern fiddle tune…played here in a banjo style on the guitar" (1989, 6). Seeger's description of the "banjo style on the guitar" seems to refer to Cotten's textural choices for the song: she alternates between a picked melody and strummed chords, with the picked melody in the bass register.[(19)] While ordinarily Cotten would pick the melody on the higher strings using T and strum the lower strings using the fingernail of her left index or middle finger, here the texture presents a complication for the left hand, as the strummed chords are played on the higher strings while the melody is in the lower strings. Cotten's solution impacts the song's metric and rhythmic profile.

[5.6] Cotten's left hand is only able to move up to the higher strings to pluck a chord on offbeats when I does not pick a melody note. In the first half of the first phrase, the melody plays quarter notes on beats 1 and 3, giving I time to jump to the higher strings to join T in plucking a chord on the "and" of these beats (**Video Example 10**). Based on this pattern, we might expect to hear a plucked backbeat chord on the "and" of beat one of measure three. But the melody has two eighth notes on this beat, so she must omit the backbeat, disrupting our expectations. On beats two, three and four of this second measure, the contour of the melody allows her to make room for the backbeats using a melodic technique called a "hammer-on," which allows her to play a second note without using her picking hand. On the second beat, she picks the D on the open 4th string. While that string is still ringing, she brings a finger from her fretting hand down onto the string at the 2nd fret to allow the next note, E, to sound with no intervention from the picking hand. This technique allows her to pluck the backbeat on beats two, three, and four, creating a sense of drive into the next phrase. This pattern continues throughout the song, with Cotten continually deciding how to navigate the flexible placement of these backbeats and the rhythmic profile of the melody.

[5.7] Cotten's inverted picking technique, which refracts aspects of the Piedmont style through the lens of her own unique embodied approach to the instrument, yields subtle, expressive, and novel textural effects. In addition to allowing her to more clearly distinguish between melody and accompaniment, her flipped approach to the fretboard yields new efficient and ergonomic fingerings: thus, we may view this thumb-driven melody as a hidden affordance or a new instrumental sweet spot (de Souza 2017).

[5.8] Cotten's innovations, despite their undeniable creativity and effectiveness, of course did not obviate all technical difficulties of playing a right-handed guitar. In a few cases, in fact, they may have precipitated new ones. Media scholar Arseli Dokumaci offers another perspective on Cotten's youthful encounter with a right-handed guitar through her concept of shrinkage: "the process in which possible affordances are reduced in a given body–environment relation" (2023, 18). For

example, her index finger-led bass line technique requires her to make musical compromises in chordal textures, as we saw in the irregularly placed backbeats in "Run…Run." In the next section, I examine how Cotten navigates this tension between affordance and limitation in the interaction between her picking techniques and her use of minimal fretting in one of her original songs, "Washington Blues" (1967).

6. Analytical Vignette: "Washington Blues"

[6.1] In "Washington Blues," Cotten combines her characteristic parsimonious fretboard movement with a variety of picking and strumming approaches that are uniquely afforded by her playing style, resulting in some of the most inventive textures of her career. As in many of her songs, "Washington Blues" consists of a series of variations over the basic pattern established in the first few phrases. In each of her performances of the song, she combines these sections in a new and seemingly improvisatory way. My discussion of the song's formal layout is based on a performance of the song that she gave for the video recording *Jesse Fuller and Elizabeth Cotten: Masters of the Country Blues* (1992), which is available on YouTube. The formal layout of the song is shown in **Example 13**. In this performance, she plays through the opening theme twice; she then introduces three subsequent variations, each of which preserves thematic and textural elements from the main theme while also introducing new melodic motives and textures. In this section, I examine how the interactions between Cotten's fretting hand and picking hand aid in producing these novel aspects in each variation.

[6.2] The opening theme sets the scene for the melodic and textural variety that will pervade the rest of the song. This theme consists of two motivically linked phrases of eight measures each, which respectively conclude in a half cadence and perfect authentic cadence (**Example 14**). Each phrase opens with a descending chromatic line on the 1st string, which—as covered in the discussion concerning Video Example 2—is facilitated by Cotten's altered G major fretting hand shape. These opening two measures also feature a unique texture facilitated by the position of her picking hand. Since T is aligned with the higher strings and picks the melody, I and M are available to pick the lower strings, allowing her to pluck full chords under the melody rather than simply a bass line; see Example 14, bracket #1). Similarly to "Run…Run," since I also picks the bass line here, she must allow enough time between bass notes and plucked chords for I to jump from the 6th string to the 3rd string.

[6.3] In the third measure of the song, she switches to a different textural profile, as T and I align homorhythmically (Example 14, bracket #2). Her right index finger barres the strings at the 1st fret, providing the bass F on the downbeat of measure 3. Her middle finger frets the A in the melody on the downbeat at (2, 3). The melodic C on beat 2 on the 2nd string is provided by the index finger barre, and she is then able to use her ring finger at (3, 2) to provide the neighbor-note motion between C and D. She uses the low F on the 6th string exclusively to mark the start of hypermetrically important measures (m. 3, m. 5, and m. 7), elsewhere preferring to use her pinky at (3, 5) to play a bass F an octave higher. On the last beat of m. 3, as in Video Example 5, Cotten shifts her basic hand shape *int*(+2, 0), from fret 3 to fret 5. This fret shift, coupled with the homorhythmic picking approach, creates a unique chromatic parallel sixth sound from the D and F in m. 3 through D♯ and F♯ to E and G in m. 4.

[6.4] The first eight-measure phrase of the opening theme ends with a half-cadential motive, while the second eight-measure phrase ends with an authentic cadential motive. Both motives feature yet a new textural profile, as Cotten switches from homorhythmic plucked chords to a more contrapuntal combination of plucking and picking (see Example 14, bracket #3). In the half-cadential motive, Cotten up-picks the bass note with I on the downbeat of each measure on the 5th and 6th strings, respectively, before jumping to the 3rd string to assist T in picking the arpeggiated melody figure that tonicizes the dominant. M, meanwhile, plucks a punctuating D on beats 2, 3, and 4 of the last two measures, creating a texture that combines the fingerpicked melody with a plucked chordal sound and that leads smoothly back into the similar textural figure in the repeat of the phrase. The PAC motive in mm. 15–16 begins with an up-picked chromatic bass line ascent using I on the 6th string (Example 14, bracket #4). This passage is followed by a similar

contrapuntal combination of plucking and picking as in the half-cadential motive, as the harmony outlines a cadential $\frac{6}{4}$-to-V motion before concluding the phrase with plucked chords on I–V–I.

[6.5] In her first variation, Cotten introduces a new motivic figure, a fretboard slide, that she transforms and reinterprets in each of the following variations. The formal layout of the first variation quite closely mirrors that of the opening theme. The music can be divided into two eight-measure phrases: the first of these concludes with the familiar half-cadential motive from the opening theme, while the second concludes with the authentic cadential motive. This variation substitutes a dramatic slide, *int* (+5, 0), on the lowest string for the chromatic descending line of the theme (**Example 15**, #1–2). Cotten then alternates between high-pitched plucked chords fretted high on the guitar neck and plucked bass notes fretted lower on the neck, highlighting the contrast between the registers (Example 15, #3–4). She frets these high chords using the anchored hand position that we saw in "Freight Train" (Video Example 4): here, her right index finger barres the 8th fret, the middle finger frets at (9, 3), and the ring finger and pinky fret at (10, 2) and (10, 4), respectively. The chords are plucked using T, I, and M, as in the opening theme. Since I also picks the bass note G at the 3rd fret on the last beat of m. 2, she must allow enough time between the different figures for her finger to transition up and down the fretboard. As in "Run…Run" (Video Example 10), she always leaves at least a quarter note between a bass note plucked with I and a higher note plucked with the same finger to facilitate this transition.

[6.6] In the second variation, Cotten reinterprets the slide motive she established in the first variation, changing it to a different string, fret location, texture (**Example 16**). Formally, the second variation builds on the template established by the first: only the first two measures of each four-measure unit differ from those of the first variation. Each of these new two-measure units contains the new slide figure, which is now transposed to the 2nd string between the 4th and 5th frets, *int*(+1, 0). This means that, rather than sliding from the $\hat{5}$ to $\hat{1}$ as in the first variation, the slide here allows more expressive exploration of the major and blues third. Moving the slide to the 2nd string means that this figure can now be picked with T while her other fingers are free to pick a sixteenth-note accompaniment figure underneath it. She is able to play these sixteenth-note Gs in rapid succession by alternating between picking the open 3rd string with I and the 4th string, depressed at the 5th fret, by M. The characteristic melodic slide is supported by a simple, static fretting hand shape that is transposed up and down the fretboard: her right middle finger frets the 2nd string while her right ring finger frets the 4th string.

[6.7] In the third variation, Cotten transforms the slide motive yet again. She executes the slide figure with her right-hand ring finger on the 1st string between the 3rd and 5th frets, *int* (+2, 0) (**Example 17**, bracket #1). The textural accompaniment for the slide motive returns to a combination of successive and alternate picking, yielding plucked chords and arpeggiation, respectively (Example 17, bracket #2). As in the second variation, she heavily exploits the open G string to provide a harmonic underpinning for the slide motive, picking a chord tone on this string without fretting it. Also similarly to the second variation, this variation only alters the initial two measures of each four-measure unit—the rest of each phrase remains the same as in the first two variations. After concluding this third variation, Cotten repeats the first two variations before returning to the main theme to conclude the piece.

[6.8] In "Washington Blues," Cotten's inventive approach to the guitar is on full display, as she transforms the slide motive into new and different contexts. In each variation, she transports the motive around the fretboard, across frets and strings, couching it in new textural interpretations along the way. Each of these reinterpretations is facilitated by the unique physical relationship between Cotten's hands and the strings of the guitar. In addition to the flipped relationship between fretting hand and the order of the strings facilitating dexterous melodic figures on the higher strings (Video Examples 1–4), it also allows Cotten to execute wide-ranging slides then quickly switch to a new textural profile. More specifically, the flipped relationship of her picking hand and the strings allow her to pluck full chords under the melody, rather than simply a bass line. The overall effect in her playing is of constant motion and textural heterogeneity, running the gamut from the homorhythm of parallel plucked chords to rapidly oscillating sixteenth notes. At the same time, these performance choices impact the structure of the work, with the motivic and

textural similarities among the variations serving to provide a strong sense of coherence and continuity to listeners.

Conclusion

[7.1] This article has investigated the relationship between Elizabeth Cotten's embodied performance techniques and the chord voicings, motives, and textures that arise from them. One important finding is that many of her characteristic melodic figures stem from her unique approach to fretting and voicing chords. Another is that Cotten's inverted picking technique facilitates unique textural patterns across her output. Cotten's original song, "Washington Blues," provided a case study of how her fretting and picking techniques interact to create a variety of motives and textures within a single song.

[7.2] It should go without saying that it is important to highlight the stories of non-normative musicians whose contributions are so often erased from our histories. But even with pure matters of representation aside, it is critical to remember, first, that mismatches between bodies and objects are not limited to people with disabilities. Cotten's left-handedness provides a case study in the ways that bodily differences can be disabling in some contexts and not others. Extending this point further leads to a second societal insight, which is that attention to increasing accessibility often directly benefits everyone in a population. In her book *What Can a Body Do?*, Sara Hendren (2020) demonstrates the benefits of the principles of universal design that disability activists have been championing for decades. She argues that the experiences of disabled people may provide "clues to suboptimal conditions that may also affect people in the normative middle, though perhaps to a lesser degree" (Hendren 2020, 82). Hendren cites the example of the OXO Good Grips vegetable peeler, developed by an older couple, Sam and Betsey Farber, whose arthritis made it difficult to use a standard peeler. The Good Grips design is now ubiquitous in kitchens, making life easier not just for cooks with arthritis, but for everyone else, too.

[7.3] Rather than allowing her physical difference to limit her, Elizabeth Cotten's left-handedness served as a generative factor in her music-making, along with her shaping of other more abstract parameters like rhythm, meter, harmony, and voice-leading. By adapting the instrument to her physical difference, she was able to create sonic structures that we recognize as a unique part of her sound. In doing so, she has provided a blueprint for ways that the rest of us can navigate the physical aspects of music-making, reject a one-size-fits-all approach to instrumentality, and imagine more accessible futures.

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Footnotes

1. Guitar strings are typically numbered from highest to lowest, with the 1st string the high E string, the 2nd string the B string, etc. I will refer to them this way throughout the article.
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2. Despite the guitar-centricity of the tradition, a considerable thread in the lore surrounding Piedmont blues concerns its similarity to ways of playing other instruments, namely the piano and the banjo. See Edwards 2023, Loss-Eaton 2023, Winans 2018 (289–304), Welker and Lowry 2006, Pearson 2010, and Hedin 2016.
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3. Delta blues originated in Mississippi and is typified by solo guitarists such as Robert Johnson, Charley Patton, and John Lee Hooker. The music tends to be riff-based, rather than melody-based, as in the Piedmont Blues. Delta blues also more often employs a flexible metric structure. For more on the distinction between Delta and Piedmont blues, see Cohen 2008.
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4. For more on the racial segregation of the early record industry, see Waterman 2000 and Bain 2022.
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5. Despite this commercial success, Cotten’s work has been stolen and misattributed many times. Her song “Freight Train” became a top 10 hit in the U.S. and the U.K. in the late 1950s without her ever receiving a songwriting credit or royalty payment; see McCabe 2022 and Ashur 1976 (13:15).
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6. Cox 2016; Kozak 2015; Saslaw 1996; Zbikowski 2002 discuss the former, while de Souza 2017; Duguay 2019; Momii 2019; Rehding 2016; Tresch and Dolan 2013 explore the latter.
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7. Examples include Chiu and Howie 2023, de Souza 2018 and 2021, Gardner and Shea 2022, Kaminksy and Lyons 2020 and 2023, Lewis 2018, Rockwell 2009 and 2011, and Shea 2022 and 2023.
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8. Jack Sheinbaum and David VanderHamm, email message to author, November 2023.
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9. In contrast to other instruments, left-handed guitars are now widely available from major guitar manufacturers, although this is a relatively recent development.
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10. Stefan Grossman's Guitar Workshop, which has been a source of instructional videos, CDs, and books on fingerstyle and flatpicking guitar techniques since the early 1970s, has preserved and documented much of Cotten's work, including performances from her 1969, 1978, and 1980 tours. Guitarist John Miller created transcriptions and tablature for a series of instructional videos for normative guitarists on several of Cotten's songs ("Freight Train," "Mama, Your Papa Loves You," "Spanish Flang Dang," "Oh Babe, It Ain't No Lie," "Vastapol," and "Wilson Rag"), which was published as a DVD with accompanying booklet by Grossman's Guitar Workshop in 2002.
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11. In cases where different strings are depressed at the same fret, as in A major, G major, and E major chords, the order of the fingers at the same fret seems to depend on where the other fingers need to fall on the fretboard.
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12. 81% of guitarists surveyed reported musculoskeletal injuries resulting from playing their instrument (Fjellman Wiklund and Chesky 2006).
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13. Numbers on staff represent fingering—index finger is "1," middle finger is "2," ring finger is "3," fourth finger is "4." Horizontal lines on tablature represent guitar strings arranged vertically from highest to lowest; numbers on tablature represent fretting location on each string (e.g., "1" for 1st fret, "2" for 2nd fret, etc.). On fretboard schematic, as on tablature, pitch is represented vertically from highest string to lowest. Letters represent fretting fingers: "I" for index finger, "M" for middle finger, "R" for ring finger, "P" for fourth finger.
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14. In his discussion of St. Vincent's "Paris is Burning," Nicholas Shea (2020) refers to this technique as "positional space" (171).
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15. Guitarist Andrew Cohen (2008, 153) argues that, while "regional style" is often defined solely by musical attributes, the distinct blues traditions in the Piedmont, Delta, and East Texas regions exhibit different picking techniques that can also be understood as important markers of style. Cohen examined recordings and images of ninety-four twentieth-century guitarists from these three traditions and found that Piedmont blues players overwhelmingly play with their picking thumb in what he calls *extended* position, at a ninety-degree angle to the index finger. This is in contrast to what he refers to as a *stacked* thumb position, where the index finger lies directly below the thumb, or a *lutiform* position, where the index finger extends past the thumb, as if playing a lute (2008, 157). Cohen argues that this extended thumb position facilitates the independent alternating bass that is a stylistic hallmark of the Piedmont blues style (2008, 162). Interestingly, Cohen included Cotten in his study, despite acknowledging that she played the guitar upside down relative to the other players in his sample. He found that she held her left thumb in an extended position very similar to the other Piedmont guitarists in his sample, even though she uses her thumb to pick the melody rather than the alternating bass.
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16. Guitarist Robert Ferguson (2016) describes "Spanish Fandango" and its sister composition, "The Siege of Sevastopol"—which Cotten also played—as "far and away the two most popular guitar solos of latter nineteenth- and early twentieth-century America" (14). He credits Worrall, and the popularity of these two songs, with introducing these open tunings into the American musical vernacular. Blues and rock journalist Jas Obrecht argues that "Sevastopol" and "Spanish Fandango" made their way into the blues tradition via tutorial pamphlets that arrived with mail-order guitars in the late nineteenth and early twentieth centuries. The songs became so ubiquitous in the blues repertoire that the tunings they employed came to be known by the title of the songs: open G is commonly known as "Vastapol" tuning, while open D is frequently called "Spanish" tuning (Obrecht 2003, 89).
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17. While I have not been able to find the original manuscript of Worrall's "Spanish Fandango," published in *Worrall's Guitar School* in the 1850s, a later guitar method book by Worrall corroborates the fingering indicated in James' (2018a, 2018b) article; Worrall notes that "The sixth, fifth, and fourth strings (generally called the bass notes) are usually struck with the *thumb*. The third, second, and first strings are played generally with the *first* and *second* fingers, alternately changing the finger for each successive note. When chords of four notes are struck, the *third* finger is used. The *little* finger is not used except in chords and arpeggios of five and six notes . . . Notes intended to be played with the thumb are written with a double stem, or with the stem turned down . . ." (Worrall 1862, 10).
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18. For another example of this texture in Cotten's work, see "Shake Sugaree" (1967).
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19. Cotten also played the banjo on several songs on her albums. The five-string banjo that Cotten plays is traditionally tuned so that the open strings play a G-major chord. The strings are numbered 1–5, with 1 corresponding to the string that is tuned to D4, and 5 corresponding to the string that is tuned to G4. Notably, unlike the guitar, the banjo strings do not typically progress in order from low to high pitch. Rather, the fifth string, tuned to G4, is the highest. This string is often known as the drone string, and is rarely fretted, instead functioning mainly as a pedal point.
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