

# The Impact of Earl Scruggs on the Five String Banjo

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A technical and historical analysis of  
the banjo technique used in the bluegrass genre



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## Abstract

With its distinct sound and virtuoso playing style, the five string banjo is of central importance to bluegrass music, and most banjo playing in bluegrass is based on the style of the central individual Earl Scruggs. In this thesis, a technical insight to the playing techniques used on the banjo in bluegrass music is achieved using transcriptions, and both technical and musical analysis. Historical context for both the banjo as an instrument, bluegrass as a genre and Earl Scruggs as a musician and innovator is given through literature studies. Findings include technical intricacies not previously discussed in an academic context, discoveries about phrasing on the banjo through deconstructions of musical phrases, and dispelling of popular myths in this particular subset of American music history.



# Foreword

I would like to thank the Department of Musicology at the University of Oslo for accommodating me these past years, and enabling me to write this thesis about banjo playing.

My supervisor Kristian Nymoen has played a crucial role for the whole duration of my writing of this thesis, and has supported and inspired me all the way even when my thoughts have been all over the place.

I would also like to thank all the other people who have given me tips and pointers along the way, and enduring more intense banjo talk than usual.



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# Chapter 1

## Introduction

In May 2006, I got my first banjo. The previous summer, being yet another 15 year old amateur guitar player I was bored in the family cabin reading every single line of text in the guitar magazine that my mother had bought for me. I stumbled upon an album review of the latest record “A Hot Piece of Grass” from the band Hayseed Dixie, which was a bluegrass tribute to classic rock and pop music. Having never heard about “bluegrass”, with open ears and great curiosity I downloaded the album when I got online at home after the week in the cabin. I instantly fell in love with the sound of the instruments, and especially the inhumanely fast, twangy sounds of what I later discovered was the banjo.

Starting with the Led Zeppelin, Black Sabbath and Outkast songs on the Hayseed Dixie album, I went back in time to discover the original bluegrass music of Bill Monroe, Lester Flatt, Earl Scruggs, and then forward in time to the progressive jazz/fusion banjo music of Béla Fleck and the Flecktones. After months of diving deep into research of this brand new acoustic soundscape I had discovered, I understood I would never be a guitar player. I tuned my cheap electric guitar to an open G, bought a thumbpick and fingerpicks at the local music store, and tried learning the right hand banjo technique while I was begging my parents for a banjo.

Getting that first banjo at 16 changed my life forever. I played piano as a kid, a little bit of guitar and ukulele in my early teens but never really found any inspiration or any distinct taste of music before I fell completely in love with the banjo. Being from a smaller town in

Northern Norway with no banjo players, I travelled across the country (and eventually out of the country) to take lessons, I started bands playing bluegrass and other types of music, and I started music studies never wanting to do something else in my life than playing the banjo. After some travelling I settled in Oslo and now make my living playing the instrument I love, both touring with bands and teaching private students and holding workshops.

Since there were no teachers around for the first years of my playing, I had to figure out the ins and outs of the instrument by myself, either watching the few instruction videos available online at the time, listening to every piece of banjo music I could find or ordering instructional books online. Also during my music studies, the access to teachers on my instrument and in my genre of choice was very limited, so I focused on the theoretical approach to music I had access to (mostly jazz and classical) and had to figure out for myself how to apply these theories and types of music to the banjo and bluegrass music.

Unlike many of today's American banjo players, especially in the Southern US, who grew up being exposed to bluegrass and similar music from a young age, I grew up listening to the types of music available on Norwegian radio and TV in the 90s and 00s, and as such did not have any relationship to it when I first heard it. In the beginning of my banjo playing, this led me to underestimate the nuances of bluegrass music. After first getting hooked on the banjo by rock and pop cover tunes played by bluegrass instrumentalists, I thought that the early classics of bluegrass were too boring with their uninteresting chord progressions and monotone time and key signatures, and both as a listener and performer I quickly went on to more "interesting" modern music such as the jazz/fusion played by Béla Fleck. I got the Earl Scruggs banjo instruction book but just skimmed through it, saw that most of the tunes were in the same key, learned a couple of picking patterns and thought that it was boring.

I thought: "Why learn something old if I want to make something new?"

After a few years of playing like this I had a small musical identity crisis, and found that there was no depth to my playing, and I barely knew what I was doing on the instrument. At the same time, I was being taught in music college about modern jazz musicians saying they tried to perfect their understanding of earlier and simpler jazz music, moving through the traditions before expanding on it to create a spin on the tonal and rhythmic language they

could call their own. I started seeing parallels to my own banjo playing in these anecdotes and decided to change.

Now, my philosophy about banjo playing was that I needed to learn the craft before I could feel comfortable expanding on it. A relatable discussion, albeit one I will not touch upon in this thesis, is the example of whether an abstract painter trained in the classic, realist painting craft has more depth to his art than an abstract painter without the same training.

This new philosophy led me back in time again to dive deeper into the traditions of my instrument, and I discovered - as with modern jazz musicians - that there were always clear lines in modern banjo players' techniques to be drawn backwards in time towards the technique started by Earl Scruggs in the 40s. This identity crisis led me into researching and learning the traditional banjo music like I had never done before, and I started seeing more value than ever in the genre I before thought was boring. Now I play more bluegrass than anything else.

When playing concerts both with bluegrass bands and ensembles in other genres, for different audiences, I have gotten the impression that the banjo almost always is perceived in a different way than other instruments. Listeners of all ages, and with little or no previous exposure to banjo playing usually have some notion of the banjo being a "funny" instrument, and the other emotion I get the impression from people is that the banjo to them is an instrument connected with virtuosity.

What is so special and recognizable about the banjo, and especially the banjo played in the bluegrass style? And what does all this have to do with the playing of a North Carolinian man who did most his playing in the middle of the 20th century? In this thesis, I will be trying to answer these questions, and finding out what impact Earl Scruggs had on the banjo both as a contemporary musician and innovator towards the future of the instrument.

## Main objectives and limitations

Because of being mostly self-taught, and the small identity crisis that changed my view on music and banjo playing, I have always had an analytical and theoretical approach to the technical aspect of the instrument. Thus, getting the opportunity to write my master's thesis about the instrument I have dedicated the last ten years (and hopefully the rest of my life) to study in-depth was very inspiring. However, with the banjo being institutionalized and academically researched only to a very small degree not only in Norway but in the whole world, I have had to draw from my own experiences in the field, as well as some sources otherwise unconventional in academia. I will be discussing my source material further in chapter two.

The main research question I am going to address in this thesis is:

*What impact did Earl Scruggs have on the five-string banjo?*

My main focus for this thesis is on the banjo technique of Scruggs, discussing how it came to be, documenting and analysing the technique, and looking at how it has inspired modern players. I plan to achieve this by looking at Scruggs' history, comparing him to players before him and contemporaries with similar ideas to him, I will perform technical analyses of the Scruggs style technique and the techniques inspired by his playing.

The third chapter will establish some of the historical context of the banjo, Earl Scruggs and his playing. I will be covering some of the banjo's history leading up to Scruggs and culminating in the standard technique he created with his playing. Of central importance to this thesis is the case of bluegrass music, which started out as a single band's unique sound before it evolved to a musical genre. I will look at the history of traditional and modern bluegrass music, focusing on Scruggs' contribution to this genre starting with his

development of the three-finger picking technique and memberships in the most iconic bluegrass bands. I will show the significance to the banjo of his musical approach in this context, as well as look at what musical aspects and physical properties of the instrument that led to this technique being so widely imitated even today.

After establishing some of the historical aspects of Scruggs and the early bluegrass bands in chapter three, I will explain central parts of the bluegrass genre from a music theoretical approach in chapter four. Chapter five will be a more technical look at the technique, using transcriptions and analysis to delve deeper into Scruggs style, as well as discussing whether the acoustic properties of the banjo can help explain the intricacies of the technique. Chapter six will give us insight in what the Scruggs style of three-finger picking has inspired in more contemporary players and how modern banjo players the last decades are still rooted deeply in the Scruggs approach to the banjo. I will try to assess how Scruggs' technique in the bluegrass context has influenced subsequent generations of banjo players who have in different ways expanded the horizons of the banjo to different genres and musical settings. This chapter will in part consist of analysis of these modern players' technique via transcriptions, comparing them to transcriptions of Scruggs' playing. I will include a comparative analysis of two of the most used extended techniques for playing melodic material outside of the Scruggs repertoire, as well as looking at how these techniques can be used by contemporary players.

This thesis will be focused on the techniques that have evolved on the five-string banjo with the bluegrass genre. As I will mention briefly, there are other techniques used to play other genres, and other types of banjo. Since these have had little interplay with the tradition of Scruggs, they will not be covered at length in this thesis.

There are some very interesting factors with the bluegrass genre in the fields of ethnomusicology and music anthropology, especially concerning traditionalism and conservatism in the genre. These factors might indeed have played their parts in the preservation of the Scruggs technique, but since I will be mostly taking a technical approach to the technique, they will not either be parts of this thesis.



# Chapter 2

## Methods

To answer my questions about the bluegrass banjo technique, I have had to look directly at the source material, which is the playing of Scruggs and other banjo players. As a performing banjo player, I have played the music myself, listened to a very large amount of live and recorded bluegrass banjo music, and read a lot about the genre and technique over many years. To translate this information into something that could be written about in a master's thesis is of course something else.

### Literature studies

I will be using literature studies throughout the thesis. Some work have been done on the African origin of the banjo, such as Cecelia Conway's *African Banjo Echoes in Appalachia*, which features an history of the early years of the banjo and a collection of interviews with old African-Americans who have kept the diminishing African-American banjo tradition alive in the Appalachian region (Conway, 1995). The comparatively modern style of bluegrass banjo, however, has not been subject to much historical research, and perhaps due to its narrow demographics, has not received much academic attention on a contemporary level.

This means that there is little academic material available on the banjo. Consequently, I have had a challenge in using literature studies in a traditional academic way as part of this thesis. Although this has been a challenge, I have been able to use non-academic texts for source

material. Some of the sources I have used on banjo technique have been found in banjo instructional material. These books are typically written by people who are often expert players, but with little to no academic background, such as the book authored by Scruggs himself (Scruggs, 2005). These authors are writing for the general public instead of the academic community. Consequently the research presented in these books is less critical and backed by fewer sources. However, with the authors and transcribers being insiders of the bluegrass and banjo communities, they serve as valuable assets since they offer some insights and perspectives not available in academic texts.

The first instructional book I will use is the book authored by Earl Scruggs himself, aptly named *Earl Scruggs and the 5-String Banjo*. In this book, the base for the Scruggs style of banjo playing is explained thoroughly, both showing the building blocks of the technique, and accurate transcriptions of Scruggs' own playing on several of his most iconic recordings.

Other instructional books I have used include books and texts by renowned banjo players and teachers Tony Trischka, Béla Fleck, Bill Evans, Pete Wernick and Bill Keith. A valuable source has been Trischka and Wernick's 1988 book *Masters of the 5-String Banjo*, which is a data-rich collection from interviews with 70 of the time's most influential banjo players. The data collected in this book is first presented as interviews with each player, followed by a couple of transcriptions of a couple choice tunes as played by each musician. In addition, a consolidated detailed list of data is presented, such as which gear (type of banjo, strings, picks, microphone etc.) used by the players, which influences they had, how much they practiced and such. Again, the data is presented in a way that caters to the banjo student and not the scholar, serving more for as material for inspiration than for research.

## Analysis of banjo playing

In chapters five and six, I will be analysing transcriptions of banjo playing to both analyze the Scruggs technique itself, as well as trying to identify some of Scruggs' influence on later generations of banjo players. When possible, I will be using the transcriptions done by the artists themselves, such as the ones in Scruggs' own instructional book. When necessary, I



will be doing my own transcriptions for analysis. I will also show some examples of technical phenomena found in three finger banjo picking, as I believe some of the intricacies in Scruggs style picking is easier shown visually in addition to explanations.

In banjo instructional material, tablature is very often the preferred transcription method, instead of conventional sheet music. One of the reasons for this might be the perceived formality of sheet music, as opposed to the vernacular fashion of the tablature.

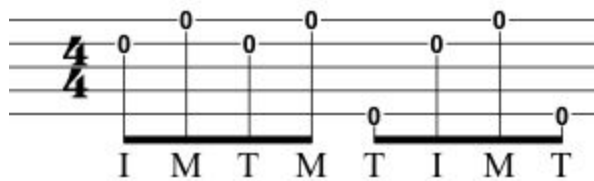
The tradition of bluegrass music has never been part of any institutional traditions such as jazz or classical music, and has always been mostly transmitted orally and aurally between performers. Tablature is easier to read without any music theory background, and it is more instrument-specific. However, I think the main reason for the prevalence of tablature over sheet music when it comes to three finger picking banjo is that factors stemming from the tuning of the instrument and the nature of the technique make it so that the fretting of notes is less logical and more important to specify than on other instruments. On fretless and bowed instruments such as violin, cello and double bass, instructional material talks about left hand positions which are not found in the banjo terminology, so traditional sheet music notation would not be able to specify fretting hand fingering with annotated position changes. Also, in notation for guitar one might find specified which strings parts of a phrase is best played, but since part of the banjo technique is avoiding more than one attack on the same string in a row, such annotations would get messy.

Because of the oral transmission of bluegrass tradition, there are some discrepancies in the use of musical terms, and especially when it comes to rhythm notation regarding the banjo.

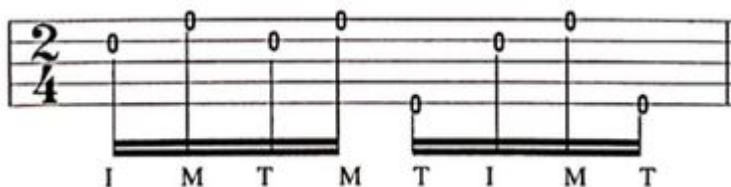
Bluegrass music is very often played in high musical tempi, and the subdivision of the banjo is usually the highest in the ensemble. If someone with a music theory background not versed in the bluegrass style listened to the music, they would probably count out the measures as 4/4, with the alternating bass in the double bass being played each quarter note, and the mandolin's chop playing every other eighth note, alternating with the bass. Since the banjo plays four notes per bass note, this would imply a sixteenth-note subdivision played by the banjo in 4/4 time, but banjo transcribers writing tablature, seem to have looked at this differently.

In most banjo notation and tablature an *alla breve* is implied, without noting it in the time signature. This means that sixteenth notes in 4/4 time are written as eighth notes in either 4/4 time, with double the amount of measures. Therefore, a measure would only feature two of the bass notes and two of the mandolin chops. A very notable exception to this norm is the book authored by Earl Scruggs himself, where the standard subdivision of the banjo is written as sixteenth notes, but the time signature is written as 2/4, so there are still only eight banjo notes per measure. Although I can understand that having eight notes per measure is easier to read, there are no explicit reasons given by the proponents of either way to notate rhythm.

Here is how the tablature will look in this thesis:



The following figure is taken from Scruggs' book, and shows the other way to write tablature, using the 2/4 time signature:



All in all, I have chosen to stick mostly with tablature for the transcriptions and examples in this thesis, at least for the parts specifically played on the banjo, and use sheet music either as an addition to clarify, or sometimes on its own for more general examples. I have also chosen to stick with the norm of writing tablature in 4/4 time with the banjo playing eighth notes. For increased readability I will also transpose the sheet music up one octave to decrease the number of ledger lines in the staff.

A challenge that arises when transcribing to tablature is that without visual documentation, one can only hear which notes are played, and not so much *how* they are played. For example, if the note G corresponding to the open fifth string on the banjo is heard in a recording, the same note could have been played on all of the strings, either on the fifth fret of the first string, the eighth fret of the second string, the twelfth fret of the third string, the seventeenth fret of the fourth string or the unfretted fifth string. Although it is impossible to be a hundred percent certain regarding which string and fret is played for each individual note, the Scruggs style technique is luckily quite transparent in this regard, at least to an experienced player. My own experience as a banjo player has allowed me to be quite certain on the fingerings for the tablature transcriptions, mainly because the technical building blocks of Scruggs style is based around a series of recognizable patterns. This is to a lesser degree the case for the two modern styles of three finger picking we will look at in chapter six, so in the cases I am not sure of the fingering to a satisfactory degree I will present more than one option of how it might have been played.

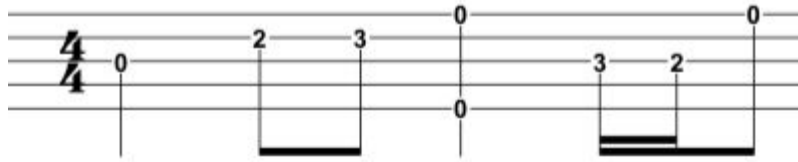
## Reading tablature

Since many of the examples and transcriptions covered in this thesis will be written in banjo tablature, I will present a quick guide on how to read tablature.

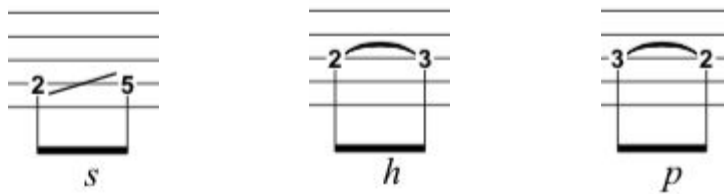
Tablature is sometimes written without rhythmic notation, but all the tablature in this thesis is presented with stems and beams indicating rhythm corresponding to standard notation. Five horizontal lines represent the five strings of the banjo, and numbers are written on the line corresponding to which fret is held down for the appropriate note. The number 0 corresponds to a string attack on the open, unfretted string specified.

The following example indicates a string attack on the open third string, a G note lasting for a whole beat, or fourth note. Next are two eighth notes played on the second string, fretted on the second and third fret in order, resulting in a respective C# and D. The two zeroes in the next beat are a “pinch”, when two strings are played at the same time, in this example the

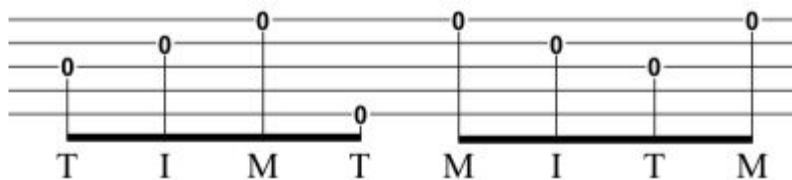
open first and fifth strings. The last beat shows a Bb and A being played as sixteenth notes on the third and second frets on the third string, followed by an open first string.



Other annotations used in the tablature in this thesis are for the embellishments *slide*, *hammer-on* and *pull-off*. These will be covered in chapter five, but for now they are noted under the relevant passages in the tablature with the respective abbreviations *s*, *h* and *p*.



Lastly, there will in some examples be picking hand fingerings specified. These are shown as follows, with the abbreviations *T*, *I* and *M* corresponding to the thumb, index finger and middle finger used to pick each string:



# Chapter 3

## Historical context

In this chapter I will look at three historical factors important to understand the bluegrass banjo. To understand Scruggs' contribution to the instrument, I find it necessary to explain the history of the instrument before Scruggs' time, as well as giving a historical context for both the man Earl Scruggs and the music that came to be known as the bluegrass genre.

### The banjo before Scruggs

The banjo is often thought of as the “American instrument”, since the musical traditions most prominently featuring the banjo such as Appalachian folk music, bluegrass, and early jazz music are perceived to be of mostly American origin. However, the history of the instrument is a bit more convoluted than being invented in the United States.

The concept of a stringed instrument with a drum-like construction for its sound chamber actually has a long tradition in West African countries. West African cultures have long traditions for instruments such as the akonting, mbanza and banjar, which are lute-like instruments with sound chambers fitted with stretched animal skin on top. Although little is known about the specifics on how these instruments made it to America, either the instruments themselves or the knowledge of their construction made it across the Atlantic ocean with the victims of the West African slave trade (Conway, 1995, pp. 160–161).

For many years the banjo was then exclusively an instrument made and played by the slaves, which were mainly situated in the cotton plantations of the Southern United States. At some point during the late 18th century, the cultural phenomenon of *minstrelsy* appeared, which was a form of entertainment shows where white Americans would dress up in costumes with blackface (a crude makeup turning the performers' faces black) and parodize the black slaves. Minstrel shows featured comedic skits, dance and music acts, and the parodic songs would in time often be accompanied by some sort of banjo, adding to the parody by borrowing the black people's own instrument.

One individual that had quite some importance to the development of the modern banjo was Joel Sweeney (b. 1810 - d. 1860), a minstrel performer and banjo player often wrongly identified as the inventor of the five string banjo. According to Conway, this was the narrative for many years:

“The five-string banjo is ‘America’s Only original folk instrument,’ declared John and Alan Lomax in 1947. In the twentieth century, the banjo is an emblem of white mountain folk and echoes in almost every southern hollow. The myth that explains the banjo’s cultural significance begins with Joel Sweeney. The story (probably publicized by banjo maker S. S. Stewart in Philadelphia) goes that the white minstrel invented the five-string banjo before the middle of the nineteenth century. Later, we appreciate the fact that the famous minstrel was raised a southern boy in Virginia, and we think more about which fifth string he added. Obscured behind this myth, now we have learned that the actual history leads far beyond southern folks into the savannah regions of Africa.” (Conway, 1995, p. 160)

When Conway talks about which string was added by Sweeney, the common narrative is that Sweeney added the fifth string to the banjo, taking from drawings of banjos that predate Sweeney where the banjo only has four strings. This narrative has been kept alive by people such as musicologist and instrument maker Roger Siminoff (Siminoff, 1998). However, there are some hard-to-date drawings from approximately the same period where the banjo is drawn with five strings. The question then becomes whether Sweeney’s added string actually might have been the bass (or fourth string). One of Sweeney’s students, Judge Farrar was

quoted as saying “I am confident that Sweeney added the bass string”, i.e. not the shorter drone string (Conway, 1995, p. 187). So, newer research shows that while it might not have been the predominant construction at Sweeney’s time, the tradition of having a fifth, shorter scale string tuned higher next to the lowest tuned fourth string also was a part of the West African tradition. The most convincing evidence for this is the realistic watercolor painting *The Old Plantation* from a plantation that predates even Sweeney’s birth shows a slave playing a banjo-like instrument with an extra short string added to the side of the neck (Conway, 1995, pp. 188–189).

Sweeney was undoubtedly of central importance when it came to popularizing the banjo, as he was seemingly the first to have played the banjo during a stage performance, something he did for years. Sweeney claimed to have learned how to play from African-Americans at local plantations. Around 1845, when becoming successful as a performer, he felt the need for a sturdier construction than the gourd body offered by the available banjos at the time. As such, Sweeney partnered up with the drum manufacturer William Boucher Jr. from Baltimore and made construction plans for a more standardized instrument based on the already standardized western drum format (Conway, 1995, p. 174).

Sweeney also willingly taught his style of banjo playing to students across the country when he traveled for minstrel shows, making him the first banjo teacher as well as the first to appear with a banjo on stage. After Sweeney and his first students’ influence, the banjo became a staple in the minstrel show industry. With the popularity of the minstrel shows in Southern cities people from the Appalachian mountains in rural Southern US stationed in these cities during the US civil war brought back home banjos, and this led to a less parodic use of this instrument which combined with the somewhat lessened stigmatizing of African Americans, resulted in the banjo becoming a part of the Southern vernacular music (Bernard, 2006, pp. 11, 37).

The banjo technique that was mostly played in these rural Appalachian areas was in ways more similar to the African roots of the banjo than the technique that Scruggs developed. The older tradition of banjo playing did not utilize the thumb and finger picks of Scruggs style, but was played with a two-stroke motion using the nails on the picking hand for downstrokes,

complemented by the thumb for playing notes on the shorter-scale, higher-tuned top string (Bailey & Jay, 1972, p. 62).

This tradition has survived in parallel to the Scruggs' bluegrass banjo technique and today is known as clawhammer or frailing style banjo (Bailey & Jay, 1972, p. 62), and is one of the two styles that is usually played on the five-string banjo today. In addition, there are four-string variants of the banjo that are played with normal picks as on the guitar or mandolin. These are often tuned in fifths, and used in dixieland jazz music and Irish and Scottish music.

In addition to the Appalachian "hillbillies" that returned with the frailing style technique to the mountains, some banjo players stayed in the Southern US cities and some migrated to Ireland and Scotland in the mid-1800s. In Ireland and Scotland, the banjo gradually integrated into the local folk music, and in the Southern cities it went on to become part of jazz history, being a natural part of early big bands instead of the guitar because of the greater volume achieved by the banjo's construction. The banjo's utility in standard jazz ensembles later came to an end with the introduction of electric guitars and amplification.

Another small subset of five-string banjo playing that is all but forgotten, was the so-called classical banjo tradition that arose from the minstrel tradition sometime around 1860. This technique had similarities to classical guitar, as it was played with the thumb and two fingers on the picking hand. Although this might sound similar to the Scruggs style to later be discussed at length, no finger picks were used in the tradition of classical banjo. With the classical banjo style, its proponents (such as prominent 19th century banjo maker and player S.S. Stewart) tried to bring the banjo out of its two main contexts, the folk tradition (both black and white) and popular/minstrel tradition, and into the classical world of music (Winans, 1976, p. 428).

As the banjo became more and more popular, the instrument started getting more standardized. The innovation greatly increased during the early 20th century, brought forward by instrument makers such as the Gibson company (Siminoff, 1998) and subsequently peaked (at least for banjos used by bluegrass players) towards the end of the interwar period. The



flathead (a type of pot assembly construction invented by Gibson) prewar (in banjo terminology meaning predating World War II) Gibson banjo played by Scruggs has stood out as a “holy grail” for banjo players. During and after World War II, the production of Gibson banjos changed, and since Scruggs’ popularity arose first after the war, most banjo manufacturers to this day focus their “innovation” towards replicating the sound of the prewar Gibson flathead banjo (McGill, 2008).

## Earl Scruggs

Earl Eugene Scruggs was born in the small town of Flint Hill in North Carolina in 1924. He grew up in a musical family, as the youngest of five children born to farmers Lula Ruppe Scruggs and George Elam Scruggs. Both his parents were musicians, and Earl Scruggs’ father played the fiddle and banjo. It is said that Scruggs started playing the banjo at the age of four when his father died, to “honor his memory and cope with the loss”.

The traditional banjo playing style of the area and time he lived in was mostly a two-finger style (with the thumb and index fingers), but as the common narrative goes, when the young Scruggs after a time was sitting outside experimenting with the tune “Reuben”, he suddenly found himself playing with three fingers (Martin, 2012). He spent the rest of his childhood and teens refining this technique, playing on the strengths of it and compensating for the weaknesses. The result was a unique sound with a distinctive, syncopated drive. What made the Scruggs’ style of three-finger picking so inherently syncopated was the fast, repetitive patterns of three-note groupings in duple meter (subdivisions divisible by two), added to the note-for-note playing of the melody. These patterns are today known as “rolls”, and we will look closer at rolls in the analysis parts of this thesis.

Scruggs worked at a textile mill when attending high school, all the while practicing the banjo and refining his technique. When he graduated in 1942, he started playing in miscellaneous local bands before being approached by band leader Bill Monroe and getting the gig as banjo player for Bill Monroe and his Blue Grass Boys.

## Scruggs' influences

Although it could easily be interpreted from today's common narrative that Scruggs single-handedly created the three-finger picking style, there seems to have been some inspiration from his contemporaries. The exact timeline of the naissance of what came to be known is hard to pinpoint, as the people involved were very local musicians in a very rural area, in a time and culture where documenting banjo practice did not seem important.

A name that comes up often in this discussion is Snuffy Jenkins. Jenkins was born in 1908 in Harris, North Carolina (about 25 kilometers from Scruggs' hometown Flint Hill). Jenkins played a "simple two-finger style" but switched to a three-finger picking style after hearing Rex Brooks and Smith Hammett in 1927. Brooks and Hammett were from Cleveland County, North Carolina (again about 25 kilometers from Flint Hill), and were cited as influences by Scruggs himself. Both Scruggs and Don Reno (which we will look more at in chapter six) came in contact with Jenkins some time in the late thirties and early forties (Trischka & Wernick, 2000, p. 3).

According to Jenkins, Brooks played with two bare fingers and Hammett used finger picks because he was playing so much at a dance that his fingers got sore. Jenkins says that Hammett was the first he ever heard to play with three fingers using picks, but that there is no way to tell who started it. He also says he had heard a rumor that Hammett might have gotten the technique from an African-American, and the only thing that is for sure is that Jenkins himself was the first to play three-finger style on the radio (Winans, 1976, p. 4).

What might be the main difference between Scruggs style and the preceding three-finger pickers from North Carolina such as Jenkins, Hammett and Brooks was Scruggs' weaving of the melody into the syncopated roll figures. This quote from an article in the Banjo Newsletter about the influence of Jenkins, Hammett and Brooks on Scruggs' playing tells what Scruggs did for the three-finger picking:

“So, how did Earl’s picking differ from those that came before him? Before Earl (“B.E.”), the many different banjo stylists fell into two camps. The first used a syncopated roll to play chord changes, backing up rather than playing the melody. The second camp, which was closest to the “classic” players, played melodies using a roll that stopped and started in a very syncopated way. Earl always played melody and back-up with a continuous roll, working the melody into the roll rather than [sic] vice versa. Scruggs took all the divergent ways of up picking that had developed in country music and turned them into one method” (Carlin, 2012).

Although there is little formal knowledge about the previous styles predating Scruggs, they seem to differ from Scruggs’ technique in the fact that they either used the syncopated roll patterns as a constant backup or played the melody without mixing the two.

Even though the technique today is called Scruggs style after Earl Scruggs, and Scruggs undoubtedly was the main popularizer of the technique, there is still some mild controversy about the use of this term. This quote from the 1988 Trischka and Wernick book with a collection of interviews with prominent banjo players titled *Masters of the 5-string Banjo* is telling of the state of this term:

“There is some debate over the accuracy of considering ‘Scruggs style’ synonymous with three-finger-style playing used in bluegrass music. Both Bill Monroe and Don Reno have credited Snuffy Jenkins as the pioneer of the style, while not trying to detract from Earl’s monumental status as a player, stylist and major influence in music. As of this writing, however, forty years after his emergence in the banjo world, there can be no doubt that Earl’s role among banjo players is absolutely unique. Time and again throughout this book, Scruggs is considered the standard by which players judge themselves, the basis they started with and keep coming back to” (Trischka & Wernick, 2000, p. 17).

## History of bluegrass music

In this part we will be taking a look at the historical context of bluegrass music, and how the music of one band came to develop through popularity and imitation into its own genre of music.

### The Father of Bluegrass

Bill Monroe (b. 1911 - d. 1996) (Neal, 2012, p. 128) is known today as the *Father of Bluegrass*. He is an important figure in American country and folk music history, and the style of music he created as a mandolin player, composer, songwriter and, most of all, bandleader is today looked at as an autonomous genre.

The bluegrass genre has its name from Monroe's band *Bill Monroe and his Blue Grass Boys* which was his main project from when the duo Monroe Brothers he had with his older brother Charlie Monroe disbanded in 1938 to the younger Monroe's death in 1996. The Blue Grass Boys had a regular spot on the Grand Ole Opry show, which is a still-ongoing country music stage concert broadcast live from Nashville once a week since 1925.

Bill Monroe grew up in the rural area of Rosine, Kentucky, at first with his parents and siblings, but after the death of his parents when he was still young he went to live with his uncle Pen Vandiver. Monroe was the youngest of his siblings, and his young age combined with the fact that he had poor eyesight made him ineligible for manual labor. Vandiver was a fiddle player, and the young Monroe and his uncle Pen played at barn dances to make money in the tough times between the world wars.

In his late teens, Monroe and two of his brothers moved to Indiana to work in an oil refinery, but Bill and his brother Charlie had more luck playing music and started getting to play on radio stations, and subsequently got a record deal. The Monroe Brothers kept playing until they disbanded in 1938, after which Bill Monroe formed the first version of his Blue Grass Boys band (Neal, 2012, p. 129). Bluegrass in this case referred to the blueish type of grass by the same name native to Monroe's home state Kentucky (Neal, 2012, p. 140).

## The Blue Grass Boys

The Blue Grass Boys' repertoire, lineup and musical arrangements borrowed heavily from two styles of music previously separated by racial and cultural differences. Much of the melodic instrumental repertoire, the fiddle tunes, stemmed from the Southern US fiddle and old time dance music coming from the Southern US inhabitants' British, English and Scottish cultural inheritance. The upbeat-heavy and syncopated rhythms were more inspired by the traditionally Afro-American rhythmic styles of Gospel, Blues and Negro Spirituals. Their lineup was similar to the traditional hillbilly string bands of the 19th and early 20th century.

During its 58 years lifespan, always led by Bill Monroe, The Blue Grass Boys had over 160 different members at different times (according to Stewart Evans, who has made a comprehensive list of past members of the band available online at <http://doodah.net/bgb/>). The lineup always featured Monroe on either lead or tenor vocals as well as mandolin. The early lineups consisted of fiddle and upright bass, and sometimes banjo and/or guitar players.

## The "Golden Era"

In 1945 Monroe hired banjo player Earl Scruggs and guitar player Lester Flatt to join the lineup then consisting of Chubby Wise (fiddle) and Howard "Cedric Rainwater" Watts (bass) in addition to Monroe. This new lineup helped lead to an increased popularity for the band, and the sound of Monroe's band as well as the foundation for the bluegrass genre-to-be were starting to get defined (Neal, 2012, p. 130).

Flatt played guitar and sang lead vocals (with Monroe singing high tenor) in his tenure with the Blue Grass Boys. His simple, yet recognizable style of guitar playing set the standard for the rhythm guitar playing in future bluegrass (Neal, 2012, p. 130). Although *flatpicking* (the bluegrass terminology for playing guitar with a standard plectrum) is revered as the current norm after the introduction of players such as Doc Watson, Norman Blake and Tony Rice to the scene, Flatt, being more of a rhythm guitar player, doubled the root and fifth from the double bass using a thumbpick and strummed the rest of the strings with a single fingerpick

on his index finger. Although the right-hand technique has changed in the standard bluegrass lineup from the Blue Grass Boys to today, the rhythmic figures and main comping role of the guitar still stand as defined by Flatt.

Lester Flatt also firmly established and popularized the use of the iconic guitar lick, known as the *G-run*, or *Flatt Run*. The G-run is a pentatonic guitar lick starting and ending on the root note. The G-run and its later derivatives are played at the end of eight- or sixteen-measure forms, and serve to end musical phrases and keep the time of the band (Neal, 2012, pp. 129–130).

The following figure shows the G-run as played on acoustic guitar:

The image displays the G-run guitar lick in two staves. The top staff is a standard musical staff in 4/4 time with a key signature of one sharp (F#). The melody consists of the following notes: G4 (quarter), A4 (quarter), B4 (quarter), C5 (quarter), B4 (quarter), A4 (quarter), G4 (quarter), and a whole rest. The bottom staff is a guitar tablature staff with fret numbers: 3, 0, 1, 2, 0, 2, 0, and 0. A bracket groups the first three frets (3, 0, 1) under a single bar line, and another bracket groups the next three frets (2, 0, 2) under a single bar line. The final fret (0) is also under a bar line.

Scruggs' banjo playing also set a clear standard for the sound of the Blue Grass Boys, and almost all later iterations of Monroe's band featured a banjo player imitating the technique starting as Scruggs' personal style, which we will be looking at in chapter five.

## Foggy Mountain Boys

In 1948, when not getting the recognition and pay they deserved as lead singer and main soloist of Monroe's band, Flatt and Scruggs left the Blue Grass Boys and started the band *Flatt & Scruggs with the Foggy Mountain Boys*, colloquially known simply either as Flatt & Scruggs or Foggy Mountain Boys (Neal, 2012, pp. 130, 134). The Foggy Mountain Boys went on to surpass the popularity of Monroe's Blue Grass Boys, with best-selling records, regular radio appearances on the Nashville, Tennessee-based radio station WSM, as well as supplying tunes for well-known TV and movie soundtracks such as *The Beverly Hillbillies* and *Bonnie & Clyde*. Flatt & Scruggs kept working as a band with the Foggy Mountain Boys until 1969 when musical and business differences brought them apart (Rosenberg, 2012).

## Imitation

After the success of both Monroe's and Flatt & Scruggs' bands, several other musicians started imitating the style and lineup of the Blue Grass and Foggy Mountain Boys. The first known example of this is the band Stanley Brothers, who in 1946 started covering Monroe's music, although keeping a more old-time feel despite having banjoist Ralph Stanley playing an adapted version of Scruggs' picking (Rosenberg, 2012).

During the 1960s and 70s, several other acts started performing with similar lineups and instrument roles as Monroe's and Flatt & Scruggs' bands. Sometimes including stylistic influences from other genres, but often keeping true to the Monroe soundscape of 1945 - 1949. Examples given by Richard Smith: Jimmy Martin (also a former Blue Grass Boy) and Red Allen (influenced by honky-tonk music) Country Gentlemen and Seldom Scene (influenced by northern folk-pop), The Osborne Brothers and Jim & Jesse (influenced by mainstream country music).

By the late 1950s, radio DJs and music historians began to see the need for a term to distinguish the music these Monroe-influenced bands and performers played from country music, as it became clear it was a distinctly different style of music. Thus the term "bluegrass", a reference to Monroe's original band name, was applied to this music (R. D. Smith, 2012).

## Decline and revivals

The bluegrass genre fell a bit in popularity during the 1950s when rock music and electrified country music dominated the southern music scene, but it has since had several boosts, the first of which happened during the folk revival period in the 1960s. Bluegrass was then, although being in many ways a commercially constructed and only twenty years old genre, embraced as traditional American music by the folk enthusiasts in the northeastern US and later in Europe when the folk revival wave washed across the Atlantic.

Earl Scruggs wanted to join the folk movement, and parted ways with Lester Flatt who was more musically conservative. Scruggs then started a family band with his sons called The Earl Scruggs Revue, performing less traditional bluegrass with folk inspirations, and they played with folk revivalist Bob Dylan on several occasions in the 1970s (R. D. Smith, 2012).

The folk revival's introduction of bluegrass in the 1960s and 70s to a new audience in other parts of the country with different musical influences, such as the New York area with the growing jazz fusion scene, led to the next generation of bluegrass musicians. In the following decades several young and innovative musicians were inspired by the virtuosity and rhythmic drive of bluegrass music, and founded a more progressive movement based on bluegrass. This movement, today known as newgrass, was led in the 70s by musicians such as mandolinist Sam Bush, banjoist Béla Fleck, both members of the band New Grass Revival, who saw great success with playing progressive jazz-inspired bluegrass from the mid-seventies until they disbanded in 1990 (Godbey & Godbey, 2012).

Another important boost in the popularity of bluegrass, especially amongst the younger audience, came with the movie *O Brother, Where Art Thou?* (2000) directed by Joel and Ethan Coen. The movie includes a scene where the main characters perform a bluegrass tune (*Man of Constant Sorrow*), and features a now classic soundtrack with performers such as Ralph Stanley and Dan Tyminski from Alison Krauss and Union Station (R. D. Smith, 2012). The popularity of the soundtrack and music in this movie opened the eyes for bluegrass music for a new generation, and resulted in greater success for many of the artists featured in the soundtrack.

## Bluegrass as a genre

Having discussed the historical context for bluegrass music, and presented the notion that the music of Bill Monroe turned into an individual genre, we will now look at what defines bluegrass as a genre, and what distinguishes it from other genres classifications.



## Defining traits of bluegrass music

In the dated but still highly relevant article *An Introduction to Bluegrass* from 1965, L. Mayne Smith introduces five defining traits of the bluegrass genre:

1. “Bluegrass is hillbilly music: it is played by professional, white, Southern musicians, primarily for a Southern audience. It is stylistically based in Southern musical traditions.
2. In contrast to many other hillbilly styles, bluegrass is not dance music and is seldom used for this purpose.
3. Bluegrass bands are made up of from four to seven male musicians who play non-electrified stringed instruments and who also sing as many as four parts.
4. The integration of these instruments and voices in performance is more formalized and jazz-like than that encountered in earlier string band styles. Instruments function in three well defined roles, and each instrument changes roles according to predictable patterns.
5. Bluegrass is the only full-fledged string band style in which the banjo has a major solo role, emphasizing melodic over rhythmic aspects.”

(L. M. Smith, 1965, p. 245)

## Hillbilly music

The term hillbilly music as used by Smith above requires some elaboration. In the article *An Introduction to the Study of Hillbilly Music*, D. K. Wilgus discusses the term *hillbilly music* in the realm of popular music science. He argues against several myths about hillbilly music, mainly that it is a construction by music merchants trying to sell records playing on race and Southern US stereotypes (Wilgus, 1965, p. 195).

Wilgus claims hillbilly music is more complex than just being constructed for and with white Southerners, being a more complex style formed around the dream of rural America. Although still based on Southern culture, seeing as the first recordings seen as hillbilly music were recorded in the South, and many of the lyrics of hillbilly tunes are about geographical

areas in the South, Wilgus stresses the point that there are just as many songwriters from the Midwestern and Northern US behind these tunes.

Hillbilly music (which had its heyday in the 1920s and 1930s) as well as bluegrass has its deepest roots in the African-American fiddle and banjo tradition. The banjo, with its guitar-like construction but with a drumhead instead of a wooden resonating chamber, is today seen to be the most American instrument, in spite of its origins in West-African instrument building traditions. The instrument, either itself or simply the knowledge of building such stringed instruments with tight animal skin over a hollowed-out gourd or wooden case as a resonance chamber, came first to America with the African slaves during the slave trade.

The African roots of the banjo when matched with the European tradition of the violin, or fiddle, set the stage for Southern US and hillbilly music to come, according to Bernard:

“African-Americans playing the African banjo and the European fiddle formed the first uniquely American ensemble—the root or beginnings of a sound that would eventually shape old time, hillbilly, blues, bluegrass, and eventually country-western music, among other genres” (Bernard, 2006, p. 11).

Bluegrass music fits many of the criteria of the hillbilly style, but differ in some important ways. Whereas hillbilly music more often than not was used as dance music, bluegrass is a more performer-oriented concert style of music (Wilgus, 1965, p. 195).

Hillbilly ensembles were usually small ensembles consisting of a banjo player and a fiddle player, sometimes expanded with mandolin and guitar.

“The string band was an evolutionary extension of the social gatherings and get-togethers of the eighteenth and nineteenth centuries. According to Malone, string bands were direct descendants of (and in many cases were the same as ) the folk entertainers who played for house parties, barn dances, church socials, tent shows, and political rallies in the decades before 1920. String bands often incorporated the guitar

and mandolin alongside the fiddle and banjo. The incorporation of these instruments into a band format was definitely influenced by an “opening-up” of the mountains and rural areas via the railroad. Just like the banjo finding its way into the mountains, the mandolin and guitar were brought in from wars, traveling workers, immigrants, and ultimately mailorder catalogs. The railroad had a major impact on the proliferation and adaptation of the string band.” (Bernard, 2006, p. 37)

## Ensemble integration

The most interesting defining trait that differs bluegrass from the preceding hillbilly and old-time types of music is Smith’s point of “ensemble integration”. Smith describes three distinct roles that each instrument can hold in bluegrass:

“Played in bluegrass style, the instruments of the ensemble combine with each other in three distinct roles: a lead part, produced by an instrument or voice as the central melodic interest; one or several instruments which "back" the lead, contrasting with it melodically and rhythmically but never threatening its domination; and an underlying, unvarying, and sharply accented rhythmic and harmonic base. All of the instruments function at times in all three of these roles, but each tends to emphasize one or two.” (L. M. Smith, 1965, p. 245)

In previous string band music, the norm was that each instrument had only one role, for instance the fiddle would be the main solo instrument. In contrast with jazz and other improvised ensemble music, old-time string band musicians did not trade solos, or play backup behind each others soloing. However, in bluegrass, during a typical performance each band member serves an equally important role in keeping the groove of the music going. Therefore, since each instrumentalist will be playing the virtuoso solos associated with the fast-paced bluegrass music, someone will have to take over the backing role of that instrument. For instance, the previously mentioned “chop” of the mandolin serves as a replacement for the snare drum’s accented upbeat and is therefore essential to the momentum of the song. However, when the mandolin plays a solo (or “takes a break”, as the bluegrass

terminology has it), either the banjo, dobro or fiddle would have to fill the mandolin player's role of playing accents with half-muted attacks on multiple strings instead of the stream of single notes they would play in their solo or backup roles.

Smith goes on to state that to a certain degree, all of the instruments in bluegrass can switch between all three of these roles but the most prominent instruments to take on the solo roles are the banjo, the fiddle and the dobro. Also, in later ensembles the guitar got a more prominent solo role, with the switch from fingerpicked to flatpicked guitar popularized by Doc Watson, Norman Blake and Tony Rice.

A notable exception to the three roles of the instruments is that the mandolin seldom gets to do the backup fill-ins that the other instruments do, because the mandolin's lower volume keeps it from being as prominent in single-note playing as the other three instruments mentioned earlier, and thus often only switches between the backing and solo roles.

# Chapter 4

## Music theory in bluegrass

As explained in the end of chapter three, the set roles of the instrumentalists culminating in an integrated ensemble are central to the bluegrass genre. In this chapter, I will be discussing the rhythm of bluegrass, and explain the rhythmical role of each instrument in the genre. I will also be discussing other theoretical aspects of bluegrass music, such as tonality, choice of musical keys and functional harmony. Traditional bluegrass music, as based on the standards set by Bill Monroe and his Blue Grass Boys and Flatt and Scruggs and The Foggy Mountain Boys, might be said to have a standard repertoire, while still allowing for new music to be written, often featuring the same genre characteristics. Live bluegrass shows usually feature a combination of original tunes and classic standard tunes as written or played by Monroe, Scruggs.

### Rhythm

Although rhythm in bluegrass is dependent on the type of tune, the most used rhythmic variant of bluegrass tunes is the up-tempo variant, as I shortly will discuss.

#### “Alla breve”

As mentioned when discussing banjo notation, the norm for transcribing bluegrass and especially banjo playing is to write the duple meter used as 4/4 time, and the highest subdivision sixteenth notes as eighth notes for readability. Since the tempo is generally high,

and each fourth note beat in this way of counting the measure is played very often, this leads to absurdly high fourth note beats-per-minute counts such as 300-320 bpm. Thus, the metronome marking is usually halved when discussing tempo in bluegrass. To get the most correct notation based on this fact, I have chosen to define the tempi used in duple-meter bluegrass using the half-note denominator, such as  $\text{♩} = 165$  instead of  $\text{♩} = 330$ . For triple meter, however, the  $\text{♩}$  denominator makes more sense.

## Tempo and time signatures

Both original and standard tunes in traditional bluegrass (traditional in the sense as played as both new and old bands, but keeping true to the dogmas of classic bluegrass) usually fall into one of three categories:

- Up-tempo vocal tunes
- Up-tempo instrumental tune
- Medium to lower tempo vocal waltzes and ballads

Up-tempo songs and instrumentals are the main recognizable tunes in the bluegrass genre. These are always in 4/4 time signature, and feature the fast-paced banjo and fiddle playing so iconic for the genre, and are efficient for getting the audience's attention. For some dynamics in a live set or on a recording, slower tunes are usually also featured. These are usually ballads in 4/4 time signature or waltzes in 3/4 time signature. The following table shows the meters and approximate tempi for each song on the legendary Flatt and Scruggs album *Foggy Mountain Jamboree*, as well as whether the track in question is an instrumental or vocal tune:

Track	Tempo	Meter	Vocal/Instrumental
Flint Hill Special	$\text{♩} = 160$	4/4	Instrumental
Some Old Day	$\text{♩} = 75$	4/4	Vocal
Earl's Breakdown	$\text{♩} = 145$	4/4	Instrumental
Jimmie Brown, the Newsboy	$\text{♩} = 115$	4/4	Vocal

Foggy Mountain Special	$\text{♩} = 115$	4/4	Instrumental
It Won't Be Long	$\text{♩} = 115$	4/4	Vocal
Shuckin' the Corn	$\text{♩} = 160$	4/4	Instrumental
Blue Ridge Cabin Home	$\text{♩} = 125$	4/4	Vocal
Randy Lynn Rag	$\text{♩} = 165$	4/4	Instrumental
Your Love is Like a Flower	$\text{♩} = 120$	4/4	Vocal
Foggy Mountain Chimes	$\text{♩} = 150$	4/4	Instrumental
On My Mind	$\text{♩} = 80$	4/4	Vocal
Dear Old Dixie	$\text{♩} = 165$	4/4	Instrumental
Pray for the Boys	$\text{♩} = 100$	3/4	Vocal
Reunion in Heaven	$\text{♩} = 110$	3/4	Vocal

As seen from this table, the tracks are almost exactly evenly split between vocal and instrumental tunes. The instrumental tunes are always up-tempo, and the vocal tunes are again evenly split between medium-to-high tempo and much slower tempo. The slower vocal tunes are again split equally between 4/4 and 3/4 time.

## Instrument roles and subdivision

As mentioned in chapter three, the bluegrass ensemble features an ensemble integration where each instrumentalist switches between roles of playing solos, simple rhythmic backup (the “chop”), and a more rhythmically filling backup role. This integration results in a “rhythmic division of labor” (Rockwell, 2009, p. 150).

In *Banjo Transformations and Bluegrass Rhythm*, Rockwell applies set theory to the roll figures found in Scruggs style banjo (which we will be looking at in chapter five), and analyses the rhythmic division of labour in a standard bluegrass rhythm section. Inspired by Rockwell's table of hierarchically related pulse layer analysis of a four-measure example from Scruggs' recording *Earl's Breakdown*, I have made the following similar table with transcriptions of the four first measures of Scruggs' recording of *Your Love is Like a Flower*:





## Tonality and key signatures

The vast majority of bluegrass music is played in major keys, and usually keys based around the open tuning of the banjo. The Scruggs style banjo is as mentioned earlier almost exclusively tuned to an open G major chord, and this is apparent when looking at the keys used in bluegrass. Early bluegrass recordings predate the standardized tuning frequency of A=440 Hz, and similarly the electronic tuning devices used by musicians today. The bands would sometimes tune after what felt like the right pitch for the singer on that night instead of using tuning forks or pitch pipes. Therefore, in some old recordings, especially early Flatt & Scruggs recordings, all the instruments were tuned a half-step up. This amounted to the banjo being tuned to an open G# major chord, but it was still discussed as being in G, since the whole band was transposed (Scruggs, 2005, p. 79).

Bluegrass tunes are sometimes played in other keys than G to give the singer or soloist a more convenient range, such as vocal tunes being transposed up to A, Bb or B. For this kind of transposing, the guitar, banjo and dobro (which also is tuned to an open G chord) utilizes capos to still play out of the open G positions that are all-important to the relevant techniques on those instruments. Fiddle, mandolin, and bass players never use capos, since the relevant techniques on those instruments are less relying on open strings.

The tonality of bluegrass is definitely affected by the open tunings of the instruments, and most tunes are in major keys. Because of the blues inspiration in bluegrass, sometimes the minor seventh degree of the major scale substitutes the major seventh, leading to a mixolydian feel. This change is mostly utilized by performers as a musical device to signify the change to the next chord, for example in a G major tune, the soloist might include the minor seventh F note the last beats to lead into the next C major chord.

## Musical form

A typical traditional bluegrass tune on most occasions consists of two parts. In a vocal song there is a verse and a chorus, and for instrumental tunes there are A and B parts. Some instrumental tunes might have three parts (A, B and C parts). With vocal tunes the form is usually something similar to this:

- Instrumental intro, often a half or whole verse started off by a “kick-off lick” (see chapter five for explanation)
- Verse sung by lead singer
- Chorus, sung by lead singer and harmonized by backup singers (usually three-part harmony in total)
- Instrumental solo on verse (called a solo break, or simply break)
- (Sometimes solo break on chorus)

The bullet points applicable for the relevant song (disregarding the intro) are repeated until the last chorus, after which the chorus or the last half or quarter of the chorus repeats and the song ends with a one- or two-measure “tag lick”.

The traditional build-up for an instrumental tune is usually A, A, B, B, (C, C in the cases of three parts) repeating throughout the duration of the tune. The instrumentalists take turns playing breaks, mostly playing solo throughout the whole form, with the soloist changing upon return to the first A part. Instrumental tunes also typically end with the one- or two-measure “tag lick” which we will be looking at later in chapter five.

Early bluegrass instrumentals as played in the days of Scruggs and Monroe are usually divided between fiddle tunes and banjo tunes. Banjo tunes are often fast and intense with focus on the syncopated Scruggs style banjo playing licks over distinct chord changes, whereas fiddle tunes often have more distinct melodies.

Fiddle tunes are often inspired tonally by Irish and Scottish music, and have melodies moving incrementally and diatonically, often with modal tone language, typically a mix of ionian major and mixolydian scales. Because of the nature of Scruggs style, fiddle tunes were often melodically approximated on the banjo until the emergence of the single-string and melodic styles appeared as evolutions of the Scruggs style. These two will be the main discussion points in chapter six.



# Chapter 5

## A technical analysis of banjo technique

### Introduction

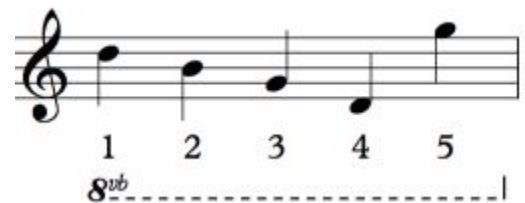
First, I will start with a quick introduction to the basics of banjo playing for the uninitiated. The banjo is held mostly like a guitar, with the drum-like resonating chamber resting between the thighs of the player, or using a strap to hold it at the same relative height to the player's neck when playing standing up. To produce sound, each of the five strings are attacked with the *picking* hand (typically the right). To change the pitch of the strings, they are pushed down to rest on the frets (which are spaced on the fretboard) on the neck with the *fretting* hand (typically the left hand).



Although there are other variations of the instrument, such as the four string tenor and plectrum banjos, and the six-string banjo tuned like a guitar, this thesis will only be looking at the five string banjo. There are typically two variants of the five string banjo, the resonator banjo and the open back.

The open back banjo is today typically the instrument of choice of those that play with the frailing or clawhammer techniques mentioned in chapter three, whereas the resonator banjo is the instrument of choice for bluegrass players. The main difference between the resonator and open back banjos is that the open back version does not have the wooden resonator at the back of the body, but instead, as the name implies, has an open back that gives it less harsh overtones and lower volume.

The banjo is typically tuned in open tunings, and the vast majority of Scruggs style banjo is based around the open G major tuning, meaning that the unfretted strings form a G major chord. Starting from the first string and ending with the shorter-scale, higher-tuned fifth string, the open G major tuning is as shown in the figure to the right.

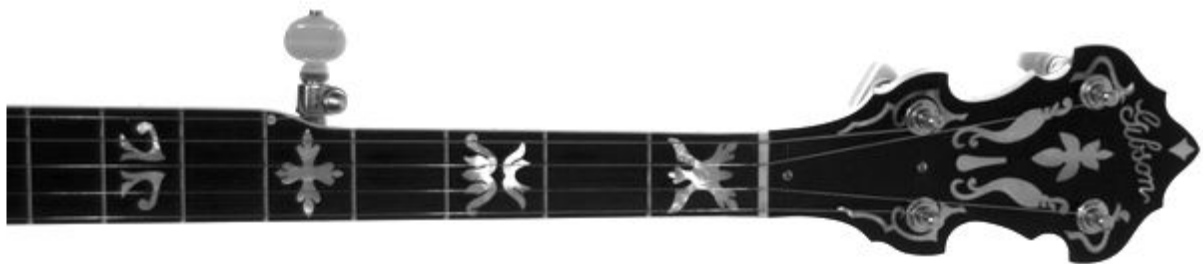


The open G major tuning naturally makes G major the most natural key to play in on the banjo, since most of the bluegrass playing techniques rely heavily on the open strings. Therefore, a big part of bluegrass music is typically played in G major, or key signatures based on G major but using capos, as mentioned in chapter four.

Looking closer at the construction of the resonator banjo, there are some unique factors that separate it from other string instruments. The banjo consists of unusually many removable parts compared to other instruments in the same class, so with the proper knowledge it can be taken completely apart and built together again. The neck is the most similar part to guitar-like instruments, it has a rounded back and a fretboard with metal frets, usually adorned with cosmetic inlays. However, the neck is narrower on the banjo since it only accommodates five strings, and the placement of the fifth string tuning peg on the fifth fret

position of the neck makes for a distinct look that easily separates the banjo from other string instruments. See figure on next page.

As seen in the following photo, the headstock features an array of the four remaining tuners, which on the banjo typically protrude backwards towards the player like on a double bass, as opposed to towards the sides on guitars, mandolins and other bowed instruments. The tuners on the headstock are also geared differently than on the guitar, making it so that smaller turns on the tuning pegs equal more winding of the strings in either direction.



The drum part of the banjo features the drumhead, the resonator and in between those a relatively complex construction called the “pot assembly”. The pot assembly varies between banjos and banjo makers, but at least in banjos of mid-range quality and above the pot assembly features a wooden rim, a metal tone ring that the plastic drumhead rests on, and several other smaller parts holding this construction together, such as the metal hooks and screws that tighten the head to the tone ring. The strings are wound around the four tuning pegs at the headstock plus the fifth string tuning peg at one end of the banjo, and at the other end the loop-ended strings are fastened at a metal part called the tailpiece. The sound is produced by the vibration of the strings transferring through a wooden bridge resting on the plastic drumhead. The bridge is placed around two thirds of the head’s diameter (usually around 28 centimeters) from where the neck meets the pot assembly.



As opposed to instruments like the guitar where the bridge is fixed in a saddle that is either glued or screwed tight in a set position, the bridge on a banjo is only held in place by the tension from the steel strings, and thus has large freedom of vibrational movement.

## Sound of the banjo

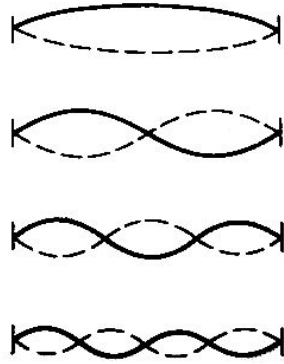
The construction and setup of the banjo makes for some interesting characteristics of its sound quality. Firstly, the banjo has a loud acoustic sound with hard attack and very short natural sustain. The tone of the banjo is also very characteristic, and it has a ringing, metallic, “plunky” sound, for the lack of better words.

In 2015, Nobel prize-winning theoretical physicist David Politzer from the California Institute of Technology published an article titled *Banjo Timbre from String Stretching and Frequency Modulation*. In this article, Politzer claims that the floating bridge on the drumhead membrane makes for “the ring, ping, clang, and plunk common to the family of instruments that share floating-bridge/drumhead construction“ (Politzer, 2015).

Politzer discusses that the metallic sound of the banjo also can be found in other banjo-like instruments from other cultures, such as the African akonting and kora, the Indian sarod, as well as the kora’s other Asian relatives such as the Japanese shamisen, Tibetan dramyin, Tuvan doshpuluur and Chinese sanxian. Common to all of these, as well as the early banjo in the form it existed in the United States until the middle of the 19th century, is that the metallic, ringing sound he describes is present in these instruments regardless of the presence of metal parts in the instruments. Politzer then claims that the most important common factors in these instruments are the bridge that is not held fixed by anything else than the tension of the strings, as well as the membrane nature of the drum acting as the top of the instruments’ resonating chambers.

Politzer claims one potential answer to the sound common to these instruments lies in the geometry of the string. In the simplest theories about resonance in strings, an ideal string is fixed to immovable objects at both ends.





(Rossing, Wheeler, & Richard Moore, 2002, p. 31)

This assumes a certain amount of stretching of the string for its vibrations. Politzer claims that this stretching of the strings has a different behavior in the case of the banjo than on other instruments. Since the bridge is not fixed, and is resting on a very flexible surface, which is the plastic (or in the case of some of the instruments from other cultures, some sort of animal skin), the tension of the string changes as the bridge moves. The important conclusion Politzer makes is that this change in string tension acts as a frequency modulation. When the frequency of this modulation reaches a level around 20-40 Hz it adds a metallic timbre to the “clean” resonance of the string (Politzer, 2015).

The modern banjo’s construction is based on sound production through vibrations, and a factor that makes the banjo special is the fact that its sound production features several of the different vibrating systems thought about when discussing vibration in instruments, as for example by Rossing et al. in *The Science of Sound* - namely the *vibrating string*, *vibrating membrane* and to a certain arguable degree the *vibrating bar* systems (Rossing et al., 2002, p. 31).

In the banjo, the most obvious vibrating system is the harmonic-based *vibrating string* caused by the elasticity and mass of the plucked strings. The *vibrating membrane* system is based on the non-harmonic vibration patterns found in membranes such as the banjo’s plastic drum head. The non-harmonic nature of vibrations in the membrane leads to a quick decay of the sustain in the banjo. The least obvious, but definitely characterizing vibration modes found in

the banjo's construction is caused by the vibrations going through the metal tone ring and wooden rim that the plastic head rests on. The metal tone ring has a vibration pattern similar to the *vibrating bar* pattern of a xylophone, but its resonance is dampened by the plastic drum head and wooden rim. Finally, the vibrations produced by these three components are amplified inside the all-but-closed resonating chamber, reflected by the wooden resonator and sent back out through the holes in the metal flange.

The absence of lower notes than the fifth of the G major scale, as well as the shorter scale G string makes the banjo's whole range more suitable for fast arpeggiated playing than instruments with lower frequency ranges, since the higher range paired with the short sustain of the banjo limits the amount of low-range notes bleeding into each other in a muddy fashion.

Scruggs' technique, as well as the banjo techniques predating it, uses high subdivision of the beat to compensate for the lack of sustain. In Scruggs' playing the banjo more often than not would be playing sixteenth-notes, and on the occasions eighth or quarter notes are played, they seem to be deliberate choices for accentuation purposes. What makes the Scruggs style differ in this fashion, is contrived from the then newly introduced use of three fingers. The clawhammer/frailing style and the two-finger style that Scruggs originally based his style on had two impact points in the picking hand (clawhammer/frailing using the nails of the curled fist as one impact surface and the thumb as another), inclining naturally to a simple meter subdivision where beats are subdivided into groups of two, as opposed to compound meter where beats are subdivided into groups of three. With the three impact points of the three fingers (thumb, index finger, middle finger), the natural inclination would however be towards compound meter subdivision, but since the traditional repertoire of songs and fiddle tunes in Southern US music was mostly comprised of simple meter, the three fingers in sixteenth note subdivisions makes for a lot of the natural picking hand patterns being syncopated.

One could presume that the invention of the three finger picking technique was Scruggs' way of overcoming the shortcomings of the instrument, as well as playing on its advantages.

I will argue that there are two main techniques that gives Scruggs style banjo picking its distinct and easily recognizable sound - the picking hand technique of rolls, and the consistent and regular use of fretting hand embellishments (or legato techniques, to borrow from classical guitar terminology) such as the hammer-on, pull-off and slide techniques. The combination of these two techniques culminate in a series of recognizable musical sequences, or “licks”, that define the sound of Scruggs style. Because of its total reliance on these techniques, the Scruggs style has its own musical language, and on its own is not suitable for playing diatonic phrases and tonal and rhythmic phrases from other genres that fall outside of the bluegrass banjo spectrum.

## Picking hand: Rolls

As explained in Scruggs’ instructional book, the Scruggs style of banjo playing is based on picking hand patterns called *rolls* (Scruggs, 2005, pp. 40–41). There are several rolls described in this book, as well as in other media that explains Scruggs style picking, and I will show examples of some of these in a bit.

Rolls are patterns played by the picking hand, but specific only in the sense that they define which order the picking hand fingers should attack the string. Most of them usually involve both the thumb, index and middle fingers, but note that the rolls do not specify which strings should be played. Which fingers play which strings is something we will look at later in this chapter.

The most basic rolls are sequences of three to four string attacks, but there are longer patterns with up to eight attacks. The roll patterns with odd numbers of string attacks are what makes the Scruggs style inherently syncopated. In a musical setting an odd roll pattern is often repeated a number of times before a shorter variation of the roll is played to make the pattern add up to an even number of subdivided beats in a musical context - typically one or two measures. I will include examples of both odd and even repetitions of the rolls which will be explained later.

In most of the examples to follow I will be using these abbreviations for indicating each finger used on the picking hand:

- **T** (thumb)
- **I** (index finger)
- **M** (middle finger)

Unless otherwise stated, all roll patterns explained here have a steady sixteenth note pulse. However, as explained earlier, in banjo notation and tablature a certain *alla breve* is implied, without noting it in the time signature. This means that sixteenth notes in 4/4 time are written as eighth notes in either 2/4 or 4/4 time, with double the amount of measures.

Part of the foundation of Scruggs style is the constant alternation of digits and never attacking with the same finger two times in a row in the given subdivision. As such, there are three possible building blocks of rolls that follow this rule: the forward roll, the backward roll and an alternating sequence of digits.

### Forward roll

The first example in the Scruggs book is the forward roll sequence. Without specifying which string and fret is played, the forward roll in its most basic form is as follows:

<b>T</b>	<b>I</b>	<b>M</b>
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Again, being three sixteenth notes in a simple meter subdivision, this roll pattern will not add up and start on a down beat until after three whole measures are played.

(Measure 1)

1	-	and	-	2	-	and	-	3	-	and	-	4	-	and	-
<b>T</b>	<b>I</b>	<b>M</b>	<b>T</b>	<b>I</b>	<b>M</b>	<b>T</b>	<b>I</b>	<b>M</b>	<b>T</b>	<b>I</b>	<b>M</b>	<b>T</b>	<b>I</b>	<b>M</b>	<b>T</b>

(Continued, measure 2)

1	-	and	-	2	-	and	-	3	-	and	-	4	-	and	-
<b>I</b>	<b>M</b>	<b>T</b>	<b>I</b>	<b>M</b>	<b>T</b>	<b>I</b>	<b>M</b>	<b>T</b>	<b>I</b>	<b>M</b>	<b>T</b>	<b>I</b>	<b>M</b>	<b>T</b>	<b>I</b>

(Continued, measure 3)

1	-	and	-	2	-	and	-	3	-	and	-	4	-	and	-
<b>M</b>	<b>T</b>	<b>I</b>	<b>M</b>	<b>T</b>	<b>I</b>	<b>M</b>	<b>T</b>	<b>I</b>	<b>M</b>	<b>T</b>	<b>I</b>	<b>M</b>	<b>T</b>	<b>I</b>	<b>M</b>

Therefore, either the first or last forward roll in a passage is either truncated or added upon to have some firmer landing spots to make for passages that add up to half measures, full measures or sometimes two measure contexts. This can be done either by playing one of the sixteenth notes as an eighth note, or skipping one of the attacks in the roll. Here are three examples of ways this is done from the Scruggs Book:

Whole measure add up:

1	-	and	-	2	-	and	-	3	-	and	-	4	-	and	-
<b>T</b>	<b>I</b>	<b>M</b>	<b>T</b>	<b>I</b>	<b>M</b>	<b>T</b>	<b>I</b>	<b>M</b>	<b>T</b>	<b>I</b>	<b>M</b>	<b>T</b>	<b>I</b>	<b>M</b>	<b>I</b>

Half measure add up, all sixteenth notes:

1	-	and	-	2	-	and	-	3	-	and	-	4	-	and	-
<b>T</b>	<b>I</b>	<b>M</b>	<b>T</b>	<b>I</b>	<b>M</b>	<b>T</b>	<b>M</b>	<b>T</b>	<b>I</b>	<b>M</b>	<b>T</b>	<b>I</b>	<b>M</b>	<b>T</b>	<b>M</b>

Half measure add up, added eighth notes:

1	-	and	-	2	-	and	-	3	-	and	-	4	-	and	-
<b>T</b>	rest	<b>T</b>	<b>I</b>	<b>M</b>	<b>T</b>	<b>I</b>	<b>M</b>	<b>T</b>	rest	<b>T</b>	<b>I</b>	<b>M</b>	<b>T</b>	<b>I</b>	<b>M</b>

## Backward roll

The next roll described in the Scruggs book is the backward roll. This is, as the name implies, the opposite pattern of the forward roll. The backward roll in its simplest form is as follows:

<b>M</b>	<b>I</b>	<b>T</b>
----------	----------	----------

Being another roll pattern grouped as an odd number, this roll will not add up to a measure unless modified like the forward roll:

Whole measure add up, added eighth note:

1	-	and	-	2	-	and	-	3	-	and	-	4	-	and	-
<b>M</b>	<b>I</b>	<b>T</b>	<b>M</b>	<b>I</b>	<b>T</b>	<b>M</b>	<b>I</b>	<b>T</b>	<b>M</b>	<b>I</b>	<b>T</b>	<b>M</b>	<b>I</b>	<b>T</b>	rest

Half measure add up, all sixteenth notes:

1	-	and	-	2	-	and	-	3	-	and	-	4	-	and	-
<b>T</b>	<b>M</b>	<b>I</b>	<b>T</b>	<b>M</b>	<b>I</b>	<b>T</b>	<b>M</b>	<b>T</b>	<b>M</b>	<b>I</b>	<b>T</b>	<b>M</b>	<b>I</b>	<b>T</b>	<b>M</b>

## Alternating sequence

A third basic type of roll is the Alternating sequence, discussed by Jack Hatfield in *Exercises for Three-Finger Banjo* (Hatfield, 2015, p. 51) where a certain digit plays every other note. The most common of these alternating rolls is the Alternating Thumb Roll, which in its most basic form is as follows:

<b>T</b>	<b>I</b>	<b>T</b>	<b>M</b>
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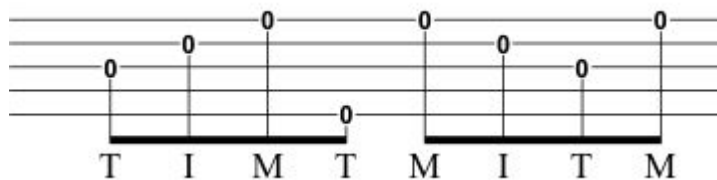
This is a pattern that repeats after an even number of attacks, so it is easily repeatable and adds up naturally in both quarter-measures, half-measures and whole measures:

1	-	and	-	2	-	and	-	3	-	and	-	4	-	and	-
<b>T</b>	<b>I</b>	<b>T</b>	<b>M</b>	<b>T</b>	<b>I</b>	<b>T</b>	<b>M</b>	<b>T</b>	<b>I</b>	<b>T</b>	<b>M</b>	<b>T</b>	<b>I</b>	<b>T</b>	<b>M</b>

The longer roll sequences used in Scruggs style are combinations of these three, either with longer repeated sections of each sequence, or shorter pieces of the sequences broken apart and put together to form measure-sized roll patterns.

### Reverse Roll

The Reverse Roll is a much used roll pattern in Scruggs style, and consists of a four-note forward roll followed by a four-note backward roll.



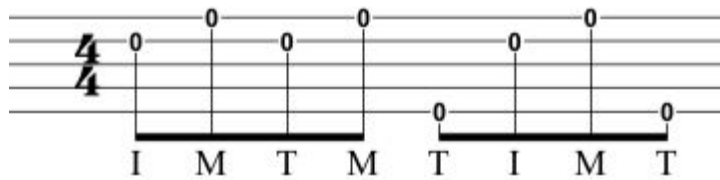
### Foggy Mountain Roll

One of the most iconic and well-known banjo tunes of all time is Scruggs' Foggy Mountain Breakdown, recorded by Flatt and Scruggs and the Foggy Mountain Boys in 1949. The tune and the band got a lot of attention after the track featured as part of the soundtrack for the 1967 movie Bonnie and Clyde, as a fast paced piece mostly used for car chase scenes. It has later been used in similar rural car chase scenes in several other movies and TV shows, such as Monty Python's Flying Circus and The Office.

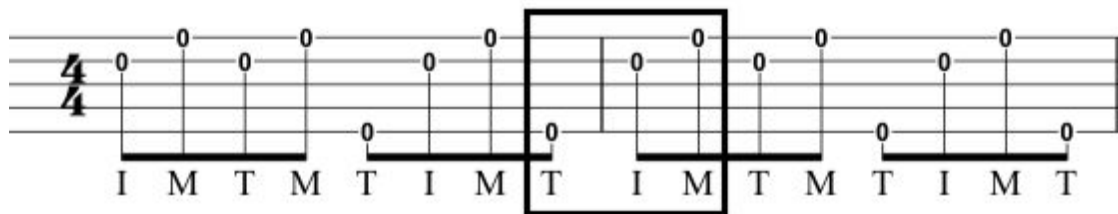
The tune starts with the banjo playing the melody, and the roll sequence it starts with is used frequently in this tune and others, and is also named after the piece.

<b>I</b>	<b>M</b>	<b>T</b>	<b>M</b>	<b>T</b>	<b>I</b>	<b>M</b>	<b>T</b>
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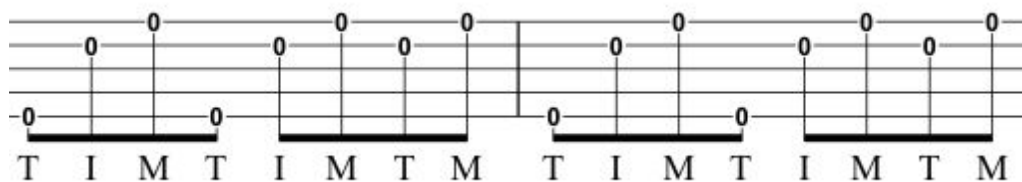
In the context of the tune Foggy Mountain Breakdown, and most other occurrences of this roll sequence, these are the strings that are attacked with this roll:



The first four notes are an Alternating sequence with the middle finger picking every other note, and the last four notes are a Forward roll ending on the thumb, so it is repeatable and adds up in a whole-measure context without attacking the same finger twice at reset. Also note, that if repeated as is, the last note in the sequence and the two first in the next sequence form a complete forward roll repeating the one preceding it:



Thusly, if the bar lines were moved, the Foggy Mountain Roll would become a forward roll starting on the thumb, (with the last roll truncated to add up in a half-measure context) but shifted a beat to the right:



## Picking hand: String attacks

Although the majority of the rolls themselves do not specify which strings are played with each finger, because of the picking hand position above the strings, the three fingers used still have preferred strings that they levitate towards, and this is apparent in Scruggs style. The middle finger is mostly is used to play the first string, and rarely the second. The index finger tends to levitate towards the second and third strings. The thumb, being the strongest and most flexible digit, has the most frequent string attacks. It is used most extensively on the



fifth string, to a large degree on the third and fourth, as well as occasionally on the second string.

I used Scruggs' own transcriptions of two well-known tunes from the 2005 revision of his book *Earl Scruggs and the 5-string banjo* and counted how many times each finger attacked each string.

Earl's Breakdown (first break):

	Thumb	Index	Middle
<b>1st string</b>			39
<b>2nd string</b>	2	16	
<b>3rd string</b>	12	15	
<b>4th string</b>	16		
<b>5th string</b>	24		

Foggy Mountain Breakdown (first break)

	Thumb	Index	Middle
<b>1st string</b>			67
<b>2nd string</b>	8	25	
<b>3rd string</b>	21	33	
<b>4th string</b>	26		
<b>5th string</b>	35		

These two tables of data from the counted attacks on each string with each finger shows that in these two tunes, the middle finger is exclusively used on the first string, and that the thumb jumps around a lot. There are some exceptions where these numbers can change, and reasons for them being so static in these tunes.

Looking back to the build-up of bluegrass tunes discussed in the last chapter, the distribution of picking hand fingers on the strings can vary depending of some factors regarding to the build-up. If the banjo plays more than one solo break on a tune, there would typically be a variation in how it was played. Since bluegrass solo breaks often are very close to the melody of the song, the most normal technique for dynamic and variative purposes is the playing the melody in two different octaves. These different ways to play the melody are called "down-the-neck" and "up-the-neck" variations of the melody.

Both the examples regarding the distribution of fingers from earlier are from instrumental "banjo tunes" written by Scruggs. They are also both taken from the first breaks of the recording they are taken from, which in both cases are the down-the-neck variations of the

melodies. Assuming the key of G major (which is no big assumption, seeing as the vast majority of bluegrass is played in the open key of G major, or variations with capo used on the banjo and guitar), there are several G major positions to base the playing of the melody around. These positions are based on the three major chord inversions in the open G tuning of the banjo:

F formation	D formation	Bar formation

This leads to the following inversions of the G major chord, in addition to the open position with no held frets:

Root inversion (Root is lowest note)	First inversion (Third is lowest note)	Second inversion (Fifth is lowest note)

These three closed chord formations are simply the three inversions of triads, but they are named after the chords they form that typically are the first learned by beginners, and also the ones closest to the nut at the top of the neck. The most frequent voicing for the C chord is the relative formation as the D formation, but it is played with open strings, so the formation is named after the D chord which is the first chord relevant to G major with a closed position.

Up-the-neck and down-the-neck variations are rarely played twelve frets (an octave) apart, they are usually played two inversions away from each other, with the down-the-neck breaks usually focus around the open G and first “F formation” G major position. Up-the-neck breaks are typically focused around the first “D formation” G major position and the bar formation G major on the twelfth fret. Because these formations have the melody notes on different strings, the rolls in the picking hand will differ, and also which strings each finger attacks, depending on whether what played is down-the-neck or up-the-neck.

## Fretting hand techniques

After looking extensively at the techniques used in the picking hand, it is now time to look at the fretting hand. Although the roll patterns in the picking hand are the most defining cue when it comes to Scruggs style, understanding what the fretting hand does and which techniques it utilizes is important to truly understand Scruggs style.

As opposed to for instance guitar, the digits of the fretting hand moves much less than the picking hand. When playing both backup chords and also during breaks, the fretting hand is mostly static, held in positions based around the chord positions we looked at in the last segment.

The three main techniques I will discuss in this part are slides, hammer-ons and pull-offs. These embellishment techniques are well-known from the traditions of guitar and other fretted instruments, but they have specific uses in the context of Scruggs style banjo. In classical guitar terminology these are known as legato techniques, because they are notes played only by the fretting hand without the corresponding string attack in the picking hand. Since the sustain of the banjo is very short, these legato techniques are usually only played quickly and often backed up by playing the note the legato lands on with a string attack on the same note on another string. In Scruggs style, this is often accomplished by performing the legato technique on a string, and landing on the note corresponding to an adjacent open

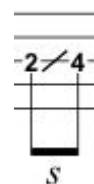
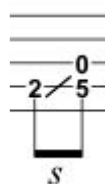
string. At the same time, or shifted by a 32nd note the open string is picked by the picking hand.

As mentioned in chapter 4, the instrumental solo breaks played in bluegrass are often heavily centered around the actual melody of the part it is played over. Earl Scruggs often played the melody of the song as close as possible to how it was sung by the singer, and these fretting hand techniques helped him achieve many of the embellishments and blue-notes in the vocals. For the next part we will be looking at how he played the melodies note-for-note and filled in the rests with his rolls.

## Slides

A slide is, as the name suggests, when the player slides a finger from one fret to another. The most frequent use of the slide is from the second to fifth fret on the fourth string (E to G) and finishing the slide at the same time as the open third (G) string is played. Similarly, slides are often used from the second or third fret on the third string (A or Bb), finishing with the open second string (B). As with the other legato techniques, the nature of the banjo's short sustain means that a slide without the doubling on the next open string would have less impact and the doubling helps both with the rhythmic and tonal stability of the technique.

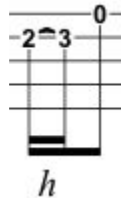
Examples of slides used frequently in Scruggs style:



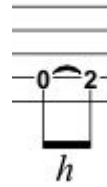
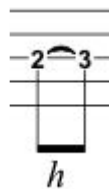
## Hammer-ons

The hammer-on is when a finger on the fretting hand pushes the string down to the fret so fast that the note can be heard without needing a corresponding string attack. Hammer-ons are often used to further subdivide the beat, being played as 32nd notes, while the player is still

keeping a steady 16th note pulse with the rolls in the picking hand. The most frequent use of the hammer-on is from the accidental C# on the second fret on the second string to the D on the third fret on the second string - which is usually followed by the D on the open first string. This variant of the hammer-on is very often paired with the Foggy Mountain Roll discussed earlier.



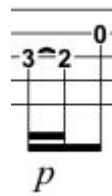
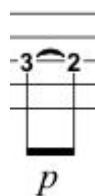
Examples of other hammer-ons used frequently in Scruggs style:



## Pull-offs

The pull-off is a technique where the player pulls his or her finger from the previously held fret, while simultaneously grabbing it and releasing it with sufficient force to let the fret below (or sometimes the open string) ring without needing a string attack. Again, with the limited sustain of the banjo, the pull-off is usually played twice as fast as the picking hand roll pattern, and the note it lands on is rarely held for long. Compared to the other two legato techniques described here, the note after the execution of the pull-off is not as often the same note as the pull-off lands on, but rather one of the other open strings.

Examples of two frequently used pull-offs taken from Scruggs transcriptions:



## Licks

Licks are a central part of Scruggs style banjo playing. Richard Middleton defines a “lick” as a “stock pattern or phrase” in the context of rock music (Middleton, 1990, p. 137). In the context of bluegrass banjo playing, licks are set patterns of notes, consisting of one or more fretting hand techniques and one or more roll figures put together to form a musical building block. In rock music, the term “riff” is used similarly, but what differs the licks of bluegrass banjo playing from rock riffs, is that riffs usually are song-centric, a rock tune might have one or more recognizable riffs. In fact, Middleton claims “most rock musicians use ‘riff’ as a synonym, almost, for ‘musical idea’” (Middleton, 1990, p. 125).

In bluegrass banjo playing, however, these licks are part of the central Scruggs technique as a whole. Compare Middleton’s definition to this definition taken from “Bluegrass Banjo for Dummies” by banjo player Bill Evans (not to be confused with the piano or saxophone players by the same name):

“A lick is a short, standard musical phrase that can be used interchangeably in a variety of songs. Licks are the building blocks of bluegrass banjo playing. They enable you to easily assemble solos using tried-and-true musical formulas.” (Evans, 2015, p. 110)

The following bullet points are used by Evans to explain licks in the context of bluegrass banjo:

- Licks are associated with chords
  - By this, Evans means that in bluegrass banjo, licks are chord-specific, or specific to the relative diatonic function associated with them.
- Licks are often interchangeable

- Evans means that if a lick works well in one tune over a certain chord with a certain length, chances are that the same lick will work over a different tune with the same chord function.
- Licks have different lengths
  - Evans here means that licks can vary in length from just a couple of notes to several measures.
- Licks can be joined together to form longer mega-licks
- Licks are used in lead and backup playing
- Licks sound best when used sparingly
  - With this, Evans tries to explain to the students of his book not to overshadow the singer or instrumental soloist by overdoing licks.

(Evans, 2015, pp. 110–111)

Evans goes on to divide licks into three types:

- Kick-off licks
- Fill-in licks
- Tag and ending licks (used to end a solo or the whole song)

(Evans, 2015, p. 110)

Kick-off licks are short licks played on one or more pickup beats, leading into the first note of the melody, most often followed by an instrumental intro (usually played by the banjo or fiddle). Although there are several variations on these, kick-off licks usually start with a three-and-a-half beat pickup before the melody and typically features one syncopated string attack.

To show more clearly the musical role of the kick-off lick, I have provided some examples on frequently used kick-off licks, mostly taken from various Scruggs recordings available on the CD compilation *The Essential Earl Scruggs*:

Leading to melody starting on high fifth note (open first string) - this lick was not present in these recordings but is used on certain versions of tunes like Foggy Mountain Breakdown:

The image shows a two-staff musical notation for a guitar lick. The top staff is in treble clef with a key signature of one sharp (F#). The bottom staff is in bass clef. The lick consists of two measures. The first measure starts with a rest, followed by a quarter note on the high fifth (open first string), a quarter note on the fifth fret of the first string, a quarter note on the sixth fret of the first string, and a quarter note on the seventh fret of the first string. The second measure contains a whole note on the high fifth (open first string). The bass staff shows the fretting: a rest, then frets 0, 0, 1, 2, and 0 for the first measure, and fret 0 for the second measure.

Leading to melody starting on third note (open second string) - heard on tunes like Earl's Breakdown, Foggy Mountain Chimes:

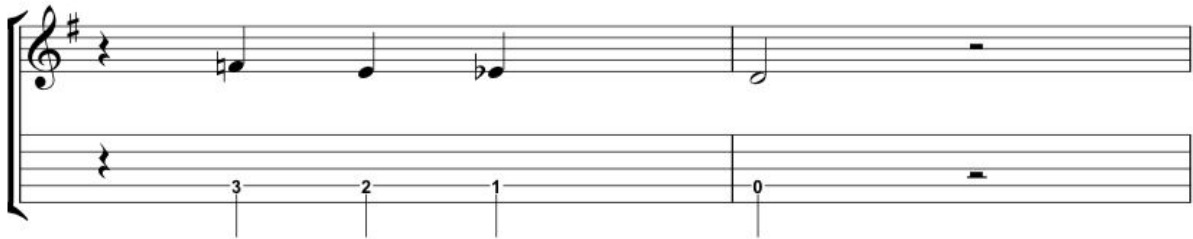
The image shows a two-staff musical notation for a guitar lick. The top staff is in treble clef with a key signature of one sharp (F#). The bottom staff is in bass clef. The lick consists of two measures. The first measure starts with a rest, followed by a quarter note on the third (open second string), a quarter note on the second fret of the second string, a quarter note on the second fret of the second string (with a slur and an accent 'h'), and a quarter note on the second fret of the second string. The second measure contains a whole note on the third (open second string). The bass staff shows the fretting: a rest, then frets 0, 2, 0, 2, 0, and 0 for the first measure, and fret 0 for the second measure.

Leading to melody starting on low root note (open third string) - heard on tunes like Down the Road, Roll in My Sweet Baby's Arms, Pike County Breakdown, Get in Line Brother,:

The image shows a two-staff musical notation for a guitar lick. The top staff is in treble clef with a key signature of one sharp (F#). The bottom staff is in bass clef. The lick consists of two measures. The first measure starts with a rest, followed by a quarter note on the low root (open third string), a quarter note on the second fret of the third string, a quarter note on the second fret of the third string, and a quarter note on the fourth fret of the third string. The second measure contains a whole note on the low root (open third string). The bass staff shows the fretting: a rest, then frets 0, 0, 2, 4, and 0 for the first measure, and fret 0 for the second measure.



Leading to melody starting on low fifth note (open fourth string) - this lick is typically used for tunes like Don't Let Your Deal Go Down, but was not present on *The Essential Earl Scruggs*:



Fill-in licks are played between musical phrases, filling in open spaces in the melody. They are played either in the rests between the phrases sung by the singer, or leading between more content-filled licks in the banjo breaks. Fill-in licks are usually based around the G-run played by the guitar as shown in chapter three. Banjo fill-in licks tend to function as sort of counterpoints to the G-run, or at least fit with the rhythm and tonality of the guitar lick. As G-runs vary between tunes, so do the corresponding banjo licks. A fast tune with modal harmony might exchange the pentatonic sixth E note in the G-run for a more bluesy minor seventh F note. Here are examples of two standard one-measure banjo fill-in licks with the corresponding G-runs in the guitar:



Tag and ending licks are the counterpart of kick-off licks. Tag licks are played in the final measure of almost all breaks as well as sung verses and choruses, and ending licks are played at the end of a tune. These licks usually have the same rhythmic and tonal function, depending on the tune, so they can be played by all instruments at the same time. Where other types of licks vary more and are typically only played by one instrument at a time, tag and ending licks make for uniform devices that tie the tune together.

## Scruggs phrasing and syllables

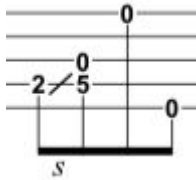
I would like to argue that in addition to the three types of licks defined by Evans, there is a central, lick-based part of banjo playing not covered by Evans' list. In my experience, there is a uniformity and wholeness in the playing of Scruggs and successful imitators of Scruggs that can not be found in the longer, more intricate licks discussed above. After years of my own playing, and several transcriptions and analyses of Scruggs and other bluegrass banjo playing - I would like to bring forth the idea of *lick syllables*. This idea came to me too late in the progress of working on this thesis to be analysed thoroughly enough, but I still have chosen to include my findings on it because I think it can offer a new perspective to understanding Scruggs style.

By the term lick syllables, I mean the licks that form as syllables in the sentences of Scruggs style playing. Although these might not be licks in the strictest sense, they are building blocks of the phrasing in bluegrass banjo, and what gives the Scruggs style its distinct phrasing language. These building blocks are used both when playing a banjo instrumental tune, or when playing the melody as sung by the vocalist in the ensemble, as I will discuss in the next part of this chapter. As a combination of roll patterns and often the earlier discussed fretting hand techniques, they serve as high-subdivision substitutes for longer melody notes.

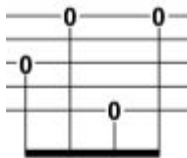
These syllables make up both the classic Scruggs licks used by banjo players to this day, as well as filling in the less content-filled parts of more busy licks. They can correspond to both longer notes in the melody, as well as serving as banjo-specific ways to phrase certain combinations of notes. I will be taking a closer look at the following transcription of Scruggs' solo break on My Cabin in Caroline from the Flatt & Scruggs album Foggy Mountain Breakdown to explain the concept of syllables:

The image shows a musical transcription of a banjo solo break in 4/4 time, consisting of six lines of music. The notation includes various roll patterns and dynamics. The first line starts with a 4/4 time signature and contains measures 1-4. The second line contains measures 5-8. The third line contains measures 9-12. The fourth line contains measures 13-15. The fifth line contains measures 16-18. The sixth line contains measures 19-20. Dynamics are indicated by 's' (soft), 'h' (hard), and 'p' (piano). Roll patterns are indicated by numbers and slanted lines, such as '2/5', '2^3', '3^2', '2/3/4', and '2/5'. The transcription ends with a double bar line.

Note that the solo starts off with a more subtle roll pattern as a pickup, as opposed to a traditional kick-off lick, since Scruggs' solo break is not the one starting the song. This break is after the first sung verse and chorus. In the first measure after the pickup, the first four eighth notes form the first lick syllable:

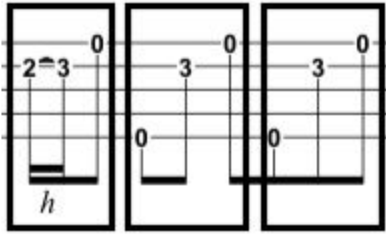


This syllable, played around the open low G string acts as a low root G note, with a slide embellishment from the E below. This embellishment adds a bit more action to the note played. The other notes played are the high D fifth note and the high G octave. Since the roll pattern used in this syllable is a forward roll starting and landing on the thumb, it is not repeatable without variation, since the thumb can not attack two strings in a row. The next four eighth notes in the measure also substitute a low G root note, but since the pattern can not be repeated because of the thumb, the following pattern starting on the index finger is played:



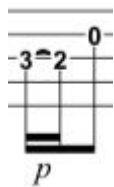
These four notes taken out of context form an alternating sequence with the middle finger playing every other note. The whole measure adds up to an eight note forward roll, with two whole three note forward rolls ending with a truncated two note forward roll. This combination of two syllables is played identically in measures six and ten as well as in measure two.

The next measure features two other syllables used heavily in bluegrass banjo, and is a variation on the Foggy Mountain roll:

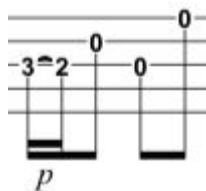


The hammer-on leading to the open high D string, followed by the two forward rolls with the open first D string and fretted D note on the second string acts as a prolonged D note, and differs from the Foggy Mountain Roll, which has two hammer-ons and one three note forward roll. This three-syllable measure is played the same in measures three and eleven.

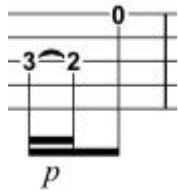
The next measure features the first “blue note” syllable of this tune, with the pull-off from the Bb to A on the second string:



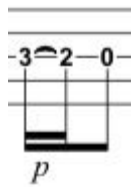
Although the Bb, minor third of G major, note is played only a fraction of a second, the “bouncy” pull-off embellishment used in conjunction with it acts as a simple but powerful device moving from the fifth note back to the root. The two sixteenth notes and eighth note that feature the “content” in this lick are followed by a more “empty” two note open string syllable:



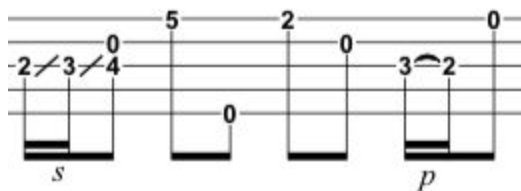
This same pattern is played several times in this break, in measures seven and twelve it is played exactly as above, in measures fourteen and seventeen it is played on the last beat of the measure and with the middle finger on the first string following the pull-off instead of the index finger on the second string:



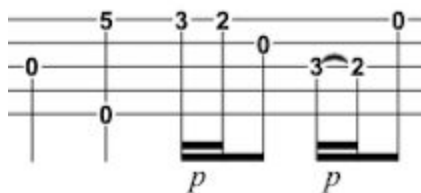
In measures fifteen and sixteen, the same syllable is played but with the index finger hitting the open third string (one of the few exceptions to the dogma of not playing the same string several times in succession):



In measure fourteen, a longer lick based on the reverse roll pattern is played, consisting of syllable with the slide from A to B on the third string, two “empty” syllables in the middle and ending with the previous blue-note pull-off syllable.



The same reverse roll pattern is found in measure seventeen, but there the first four note forward roll pattern is replaced with two quarter notes for a resting effect:



I believe that further analysis and research on syllable-based banjo playing could be beneficial to further survey the Scruggs language of banjo playing.

## Playing the melody

As mentioned in chapter three, one of the factors in Scruggs' playing that distinguished him from the earlier forms of banjo technique was that he mixed the syncopated playing of rolls with the clear playing of the melody. In informal talks with other banjo players about Scruggs, I have been pointed towards the fact that Scruggs' playing on vocal tunes is heavily based on the ornaments of the singers. The vocal style of bluegrass utilizes a fair share of ornaments such as short glissandos on blues notes, and these were copied very exactly by Scruggs in his playing, all the while filling out the rest of the measure using the iconic three-finger rolls.

To show this clearly, I have transcribed Scruggs' banjo intro on the Flatt & Scruggs tune "Your Love is Like a Flower", as well as Flatt's singing on the first and second verses. On the track, taken from the 1957 album *Foggy Mountain Jamboree*, the band is using capos on the third fret to play in the key of Bb major, so for convenience's sake I have transposed both the tablature and sheet music to G major.

G C

1 2 3 4

5 G D

5 6 7 8

9 G

9 10 11

12 C G

12 13 14

15 D G

15 16 17 18



8 It was lo-ong lo-ong a-go - o i - in the mo - on li-ght

5 We were si-tting o - on the ba - anks of the stre - am

9 When yo - u whi - i - spe-red so swe - e - tly, I love you

13 A - as the wa - a - ters mur - mured a tune

17 I re - m - e - mber the ni - ght little dar - lin'

21 We were ta - alk - ing of da - ys go - in' by - e

25 When you to - old me you al - ways would lo - ve me

29 That yo - ur love for me would ne - ver die

Comparing the two first sung verses of *Your Love is Like a Flower*, the singer's melody, phrasing and embellishments are not exactly the same between the two, even though the syllable count in the line is the same, as in measures 5-6 and 21-22. The syncopations are different, and bends and slides in the vocals come at different points. Listening to different verses in this and other recorded versions of this and other bluegrass vocal tunes, as well as my own experience from playing with bluegrass singers, tells me that these embellishments and syncopations are to a certain degree improvised by the singer. Drawing from this, it must have been near impossible for Scruggs to guess which embellishments and syncopations would be sung where by Flatt, but as we will see, the similarly improvised banjo breaks also draw from a very similar vocabulary of embellishments and syncopations.

In the third line of the first verse, the syncopation in the vocals correlate to the hammer-on technique used in the same relative place in the banjo break, and the banjo's slide from second to fourth fret on the third string while attacking the open second second string on the next eighth note are also exactly the same.

The image shows two measures of music. The first measure is for the vocal line 'When yo - u' and the banjo line. The banjo part features a hammer-on (h) on the second string. The second measure is for the vocal line 'whi -' and the banjo line. The banjo part features a slide (s) on the third string. The fretboard diagrams show the specific fretting hand techniques used in each measure.

The first measure after the pick-up beat in the second verse also has a slide from the second to fourth fret on the third string in the banjo perfectly corresponding to the vocal's slide.

The image shows a single measure of music for the second verse. The banjo part features a slide (s) on the third string. The vocal part features the syllable 'm-e -'. The fretboard diagram shows the slide technique used in the banjo part.

Most, if not all, of the licks featuring the other fretting hand techniques discussed earlier in this chapter can be found as vocal embellishments in other tunes, so it is clear that Scruggs was basing his embellishments on imitations of the singer.

# Chapter 6

## Scruggs' influence in modern banjo playing

To understand how three finger picking has evolved on the five string banjo since the time of Earl Scruggs, I find it necessary to explain the two main techniques that has stemmed from the Scruggs Style of picking.

### Single string style

A contemporary of Earl Scruggs, Donald Wesley Reno (1926-1984) (known as Don Reno) from South Carolina is often credited to be the creator of the technique called single string. In 1943, two years before Scruggs joined the Blue Grass Boys, Don Reno was invited by Bill Monroe to join his band, but declined the offer to join the army effort in World War II. Little is known about Reno's technique at this point.

When Reno came back to South Carolina from the war in 1948 he heard that Earl Scruggs had left the Blue Grass Boys, and he joined Bill Monroe's band for the following year. Reno's most successful project came to fruition in 1949 when he met singer and guitar player Red Smiley in the group Tommy Magness and the Tennessee Buddies. Reno and Smiley formed their own group simply called Reno & Smiley that recorded lots of material until

forming the touring band Reno & Smiley & the Tennessee Cut-ups around 1955. They kept touring until Smiley's health declined and he had to leave the band in 1965. The Tennessee Cut-ups existed as a band (having Reno's sons Don Wayne and Dale Reno join in the 1970s, both later members of the previously mentioned Hayseed Dixie group) until Don Reno's death in 1984 (Trischka & Wernick, 2000, p. 81).

Reno's technique certainly had many similarities to the by then standard banjo style of Scruggs and Scruggs imitators, but what set Reno's playing apart from the others was his use of what would be called single string, or sometimes Reno style.

While Scruggs style is based on avoiding hitting the same string several times in succession, the opposite is true for the single string style. Like the flatpicking technique on guitar, mandolin, tenor banjo and other fretted string instruments, single string technique on banjo is used to play melodic phrases on the same string. The picking hand technique is a simulation of the up- and downstrokes used when playing with a normal flatpick - an alternating sequence of the thumb and index finger is used as follows:

1	-	and	-	2	-	and	-	3	-	and	-	4	-	and	-
<b>T</b>	<b>I</b>	<b>T</b>	<b>I</b>	<b>T</b>	<b>I</b>	<b>T</b>	<b>I</b>	<b>T</b>	<b>I</b>	<b>T</b>	<b>I</b>	<b>T</b>	<b>I</b>	<b>T</b>	<b>I</b>

The downward string attack performed with the thumb acts as the downstroke with the flatpick, and the upward attack with the index finger acts as the upstroke flatpicking technique. These two digits are used on the first to fourth strings (as the first string has the same tuning as the fifth string on the frets above its tuning peg there is rarely any reason to fret the fifth string). As on the guitar, the fretting hand changes between strings when it is more convenient than moving the hand, giving the player several positions up the neck.

Reno says the following about how he developed the single-string style:

“I wanted to follow the tune of a lot of breakdowns, you know. I always loved the old breakdowns. I couldn't seem to follow the tune of them rolling, so that's where the single-string stuff really started from.” (Trischka & Wernick, 2000)

To clarify, Reno wanted to be able to play the exact melody as the fiddle did, and felt that the rolls of Scruggs style did not have enough melodic use.

Reno’s application of the single string style was innovative but limited. According to an interview/discussion between interviewer Lewis Porter and Béla Fleck (Porter, 2009, pt. 1:23:50) Reno used only a couple of positions that allowed for blues-like licks to be played in his style. Fleck shows an example of this position based playing from Reno’s tune Follow the Leader that is strongly leaning on one of these positions.

The tune, consisting of an A and B part, as played by Reno on several recordings usually has a Scruggs-type down-the-neck break for the first runthrough of the melody, and on the second break Reno played a single string break using the same single string position moved down when the tune modulates. I have transcribed the A part of this break, and it is as follows:

The musical score is presented in three systems, each with a treble clef staff and a guitar staff. The key signature is one sharp (F#) and the time signature is 4/4. The first system consists of three measures with chords G, F, and E. The second system also consists of three measures with chords G, F, and E. The third system consists of three measures with chords D and G. Fingerings are indicated by numbers 1-4 on the guitar staff. The melody in the treble clef staff includes chromatic approaches and a final quarter rest.

The position that Reno utilized here results in an ascending blues-like lick starting on the second degree of the scale, playing the minor third as a chromatic approach note to the major third. Otherwise relatively straight-forward, the position features the major sixth and seventh

degrees of the scale before landing on the root note. Some rhythmic and tonal variations apply as the lick is played descending on the E chord, and moved to start on the second beat of the measure with the dominant D chord to land back on the root of the G major. These passages are all played using the pattern of alternating thumb and index finger in the picking hand.

This was one of Reno’s standard positions for single string style, and is found in several other tunes. He also had one similar position based on the open strings in G major, mentioned by Fleck in the aforementioned discussion video.

Comparing this early iteration of the single string style to the versatility of guitar and mandolin playing, it seems very limited by locking itself to these few positions. Fleck goes on to explain that he was one of the first to try to expand the range of this technique by finding out what notes were on the fretboard between these positions, and he figured out ways to play whole scales on single strings, still using the thumb-index pattern to play the same string several times in succession. Béla Fleck has later used the newly expanded single string technique to play many different kinds of music on the banjo, such as jazz, classical music and going back to the African roots of the instrument.

After Fleck’s further innovations on the single string technique, the style has been more or less comparable to the flatpicking styles of guitar and mandolin, with the ability to move the fretting hand in small, incremental movements to achieve scale-based playing. Here are four different examples of ways to play G major scale in single string style:



In the first measure, the open strings that fit to the scale are used. In the other measures, the positions start with the root G on the fourth string but have different numbers of notes per

string. These positions are more widely adaptable than Scruggs style positions, since they can easily expand upward or downwards by simply adding one more note to one of the strings. The range of single string passages are only limited by the range of the player's fingers and how fast they can fluently move between positions, whereas the Scruggs fretting hand positions are usually locked to variations on the licks they are based around.

In addition to having a more flexible range than Scruggs style, the single string technique (especially in its more extended form as brought to fruition by Fleck and others) allows for a whole other spectrum of musical phrasing. It allows for the actual melodies of more complex tunes such as instrumental fiddle tunes to be played fully. This is a trait the single string style shares with its sibling melodic style, as we will get into in the next part of this chapter.

The latest innovation when it comes to single string playing has newly been brought forward by the banjo player Ryan Cavanaugh. Cavanaugh is one of the younger generations of banjo players, born in 1980 in New Jersey. When he was young and experimenting with building speed in the single-string style, he found himself limited by only using the two fingers derived from the Reno school of single-string as played by Béla Fleck and other modern players. Cavanaugh started playing with the idea to include his middle finger, and playing single string style with the three-finger rolls from Scruggs style. Cavanaugh's banjo teacher at the time, Rex McGee, who himself was playing the banjo in untraditional ways (amongst other things utilizing different tunings such as all fourths-tunings for greater range and flexibility with the single-string style) told him to keep working on the three-finger single-string style. After years of practice, Cavanaugh got a gig in jazz saxophonist Bill Evans' jazz/fusion band Soulgrass, where he got thrown into a world of music way outside of the banjo's language. Still refining his three-finger single string style, Cavanaugh now is one of the most technically acclaimed banjo players in the modern age.

In my own more-or-less informal discussions with Cavanaugh, he has claimed that there is still much work to be done with the three-finger single string technique, and he does not even think that the future of the technique is limited to the banjo, but could be utilized to improve techniques on other instruments.

## Melodic style

One of Scruggs' successors as a banjo player in Bill Monroe's Blue Grass Boys, Bill Keith, was the first to introduce the technique to be known as melodic style. According to the biography section in Tony Trischka's instructional book titled *Bill Keith*, Keith was born in Boston, Massachusetts on December 20th, 1939 (Keith & Trischka, 1978, p. 5). When he was a child he took piano lessons, but got interested in the banjo after renting a tenor banjo (four-string banjo tuned in fifths, normally used for early jazz music) at a music store in the early fifties. The four-string was the only banjo available and at the time Keith did not know that different banjos existed. He took banjo lessons and learned about jazz chords from his teacher until he discovered the playing of Pete Seeger.

Seeger was a songwriter, musician and social activist who made a great impact on the folk revival scene. His New York-based folk quartet The Weavers in the years around 1950 was one of the first successful bands in the folk genre, and they served as inspiration for many of the bands that arose in the following folk-boom, such as the Kingston Trio, Joan Baez and Peter, Paul and Mary (Dicaire, 2010, pp. 127–128). Pete Seeger, in addition to being a successful songwriter and activist, was a banjo player. His book *How to Play the 5-string Banjo*, which first edition was self-published in 1948, and later mass produced in several editions, is known as the first banjo instructional book. The 1962 edition was expanded with many pages, and featured a chapter on Scruggs style picking. Since Seeger's technique, which was the focal point of the remainder of the book, was based on the frailing/clawhammer technique mentioned earlier, this Scruggs chapter was probably the first mention of three-finger picking in written form (Simmons, 2014).

When a young Bill Keith heard Pete Seeger playing with The Weavers in the 1950s, he understood that the banjo he had been learning was a different instrument than the one used in folk music. He stopped playing the jazz tunes he had learned on the four-string and learned how to play Scruggs style by transcribing Scruggs recordings note-for-note. In an interview with Keith in Trischka's book about him, he said:



“When I became interested in that style there was really no tablature available to learn from. So I started making my own and tabulated most all of the instrumentals that Scruggs had played and some vocal breaks, as well as a bunch of tunes of Don Reno’s and other banjo players that I enjoyed listening to - J.D. Crowe’s ‘Bear Tracks’ and a few other things. For me it was just a question of learning those tunes and learning the elements that built those peoples’ styles.” (Keith & Trischka, 1978, p. 5)

In 1960, when playing instrumental fiddle tunes with fiddler June Hall in West Bridgewater, Massachusetts, Keith was comping Hall using “straight-ahead Scruggs rolls”. After a time, it occurred to him that he should try playing the fiddle tunes’ melodies on the banjo, something that was not usual at the time, since Scruggs style does not allow for note-for-note playing of melodies due to its syncopated, arpeggiated nature. The first tune that got this melodic treatment by Keith was the traditional fiddle tune *Devil’s Dream*.

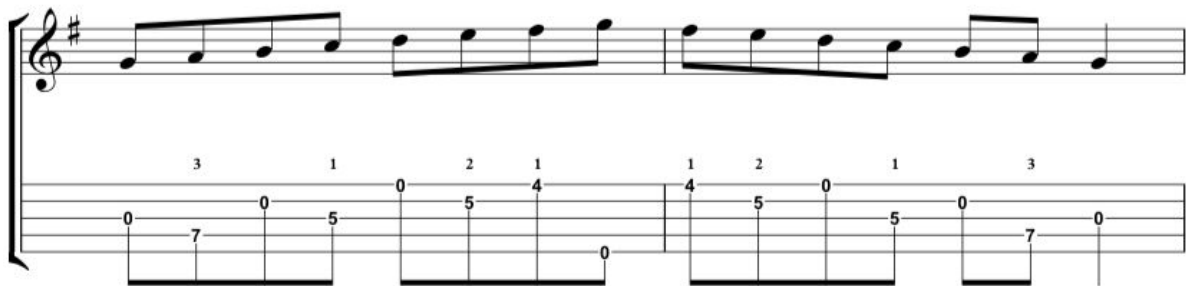
Keith’s approach to melodic playing was strongly based on the Scruggs style, of which he had painstakingly transcribed lots of to master the style. Keith kept the dogma from Scruggs style of avoiding hitting the same string in succession, and was instead utilizing the roll figures known from Scruggs style to play diatonic and chromatic phrases. To achieve this, the fretting hand needs to adapt to new positions that allows for these kind of phrases to be played with rolls. Although Keith probably was not aware of this at the time, since he was no guitar player, in classical guitar terminology there is a technique called “arpa” (harp) technique quite similar in nature to Keith’s approach to playing melodically, which has since simply been dubbed *melodic style*.

The open tuning of the banjo lends itself surprisingly well to this, albeit because of the open strings mostly in the keys and scales around G major (mostly C major, D major and their relative minors). Because of the small intervals between the strings, it is possible to play second intervals on two to three successive strings. When paired with the open strings, there is a whole range of possibilities opening up to this legato-sounding style of melodic playing.

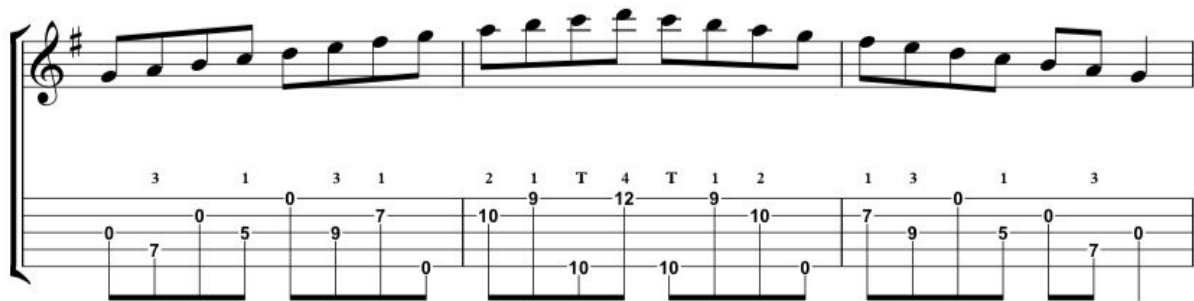
To demonstrate the musical realisation of melodic style, I have provided some examples of scales played in the melodic style. The notations above the tablature indicates which digit on

the fretting hand is used to fret each note (1 for index finger, 2 for middle finger, 3 for ring finger and T for thumb).

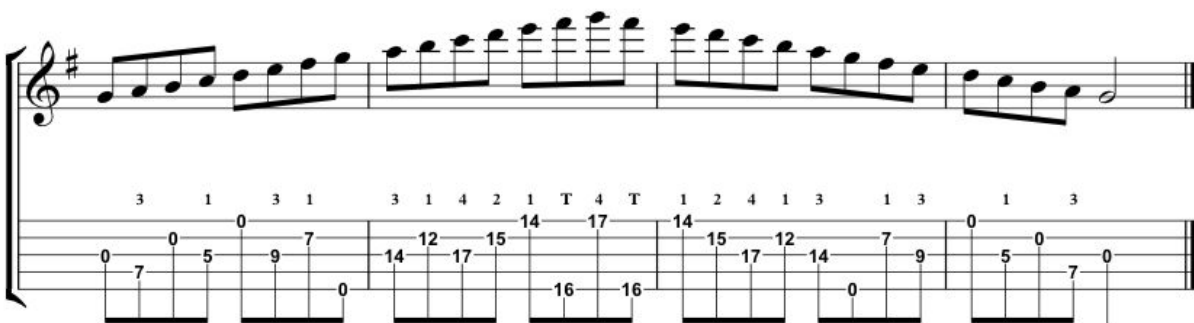
An ascending and descending one-octave G major scale played in the melodic style:



A G major scale from the root to the fifth above the octave could be played like this:



And lastly, the two-octave G major scale:



Note that the scale “runs out” of open strings after the first octave, since the high G string is an octave above the root of the scale. This leads to the subsequent measures of closed position rolls for the higher octaves. The melodic style also, as seen in these examples,

utilizes the fretted fifth string, which is much more unusual in Scruggs or single string style picking.

These closed positions, being independent from the open strings in the G major tuning are useful for playing in other keys without using a capo (which previously mentioned is the norm when playing in other keys), or playing passages over chord changes not lending themselves too well to the open strings.

Because of the spacing between these positions, the fretting hand has to move greater distances, but less often than in single string style, where the fingers usually move for each note. In melodic style, the fretting hand might hold a position for three or four string attacks in the picking hand, and then jump a fourth or fifth to hit the next fret after the previous open string played by the picking hand.

This technique leads to a legato sound where each note rings into the next. On string instruments with longer sustain, such as the electric guitar, this would amount to a muddy sound where the notes overlap too much for normal melodic playing. However, since the sustain of the banjo is fairly short, as previously mentioned, there is a clear separation of notes even though three or four notes might be attacked on different strings in succession without muting them with new fret positions.

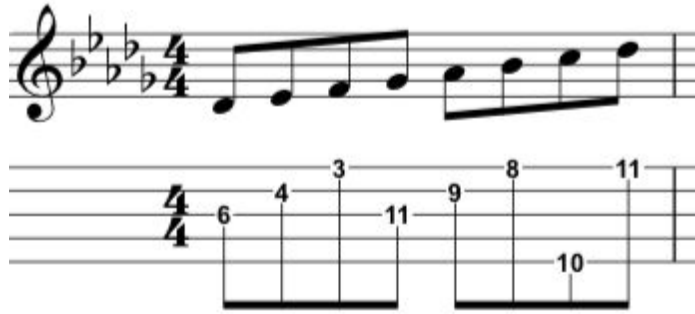
As also can be seen from these figures, neither the fretting hand or picking hand patterns seem to correspond very logically to the movement of the melodic material. Because of the large but rare movements performed by the fretting hand and the avoidance of successional attacks on the same string, very similar pieces of musical material might have to be played in very different ways. This makes the style inherently unintuitive.

## Comparing single string and melodic style

The single string and melodic styles, as we have seen, are two different solutions to the same problem, namely the limited phrasing available to the Scruggs style player. Both Don Reno and Bill Keith who are said to be the innovator of each technique has claimed that they wanted to play things that the standard three-finger technique at their time did not allow them to. But what are the advantages and weaknesses in each style, and how can they work together to complement each other on the path towards making an extended vocabulary available on the banjo?

The melodic style, being the technique used most by modern three-finger players when stepping outside of the Scruggs style-imposed boundaries of the banjo language, has the advantage of keeping in the tradition of the distinct sound one gets from picking several strings in succession, both fretted and unfretted. This legato style still sounds distinctly banjo-like, but allows the player to play phrases otherwise unavailable to him or her. However, the fretting-hand positions involved in it makes the style inherently unintuitive, and usually phrases needs to be worked out in advance, thus making on-the-fly changes, even minute ones, hard without having to plan the whole phrase all over.

The melodic style also is severely limited when utilized for keys with fewer chord or scale notes available as open strings. In for example Db major, where the open strings correspond to no scale or chord notes, the lack of available tonal open strings forces the use of closed position melodic playing, which is very inconvenient. The same key suffers from the fact that the banjo's range is limited by the low fourth string tuned to D. The following figure shows the most logical way to play a Db major scale in the melodic style:



From the third to fourth note in this Db scale, the fretting hand has to do a five-fret jump up the neck, since the fourth note is an Gb. If the fourth had been the note G, one could have played the open G string, which would have given the fretting hand enough time to make the jump up the neck without any problems. Now, it has to move its position five frets up, or eight frets from the last note in the previous position to the first in the next. This, assuming a high or even medium-high tempo, would kill the sustain of the fretted F on the first string since the hand has to move away from it. At this point, one might argue that finding a single string-based solution would be more convenient, since single string-based scale playing does not imply the same large jumps on the neck with the fretting hand.

The single string style comes with its own set of advantages and disadvantages. The constant killing of sustained notes by fretting new notes and continuous attacks on the same string removes some of the legato effect inherent to the banjo caused by the usually opposite approach of letting strings and notes ring into each other at all times. However, the fretting and picking patterns used in the single string style are to a large degree more intuitive and easily modified, especially on-the-fly.

Most modern players today use a combination of the two styles, playing passages melodic if convenient or already learned, and using single string technique if what needs to be played is inconvenient or not planned in detail in advance. My original plan for this thesis was to write about how to utilize a combination of the three-finger banjo techniques to play different types of music on the banjo, and while I changed my research to be more focused around Scruggs, what I found in my original research is that melodic style fits well to play written-out music, such as arranging classical music for the banjo, as have been done by Béla Fleck, John

Bullard, Jayme Stone and others. The single string technique is better suited for playing improvised music such as jazz, as done by Ryan Cavanaugh, also Béla Fleck and others.

## Seeing Scruggs style in modern banjo

We have discussed the two branches of evolution of Scruggs style three-finger picking, but is Scruggs style still relevant after these new techniques have arrived on the scene? How can we see Scruggs' direct influence on modern players who predominantly use single string and melodic style techniques to approach the banjo in new ways? In this part, I will be presenting a transcription of the modern banjo player Béla Fleck and how we can see strong influences of Scruggs' tradition in his playing.

### Eager and Anxious

Eager and Anxious is a modern instrumental tune written by Béla Fleck, first recorded in 1982 on the album named *It's Too Hot For Words* by Fleck's band at the time Spectrum. The transcription for this tune, as shown on the next page, is taken from Fleck's own transcription book *Banjo Picking Styles* (Fleck, 2001).

The first notable factor with Eager and Anxious is that the tuning is not consistent with regular bluegrass banjo tuning. The fifth string is dropped to a F#, which gives the banjo an open G major seventh chord tuning. The reason for this tuning change is that the tune is in the key of B minor, and the frequent use of the open fifth string fits better when tuned to B minor's fifth note F#. If the tune had been composed with the fifth note in the fifth string without tuning, it would have had to be played in C minor, and with that change the open first and second strings D and B would lose their use as chord notes.

Tuning: f#DGBD

Béla Fleck

**A** Bm

D E G F#

Bm

E F#

1. Bm 2.

**B** B<sup>7</sup> Em

A<sup>7</sup> D

B<sup>7</sup> Em

E A F#

Repeat 1st A part

The B part of Eager and Anxious features a modulation to E minor and D major, going via the B seventh chord that replaces the B minor in the first measure of the B part. Throughout the tune, the B tuned open second string acts as a recurring pedal tone, first as the root in the A part, and subsequently root, fifth, ninth and sixth for the different chords in the B part. This use of the second string is unusual in more traditional bluegrass banjo, but seems to have been a dogma when composing the tune in an unconventional key while still using open strings.

What makes Eager and Anxious inherently Scruggs-like then lies not in the harmony, but the techniques utilized in both hands. The fretting hand holds Scruggs-like chord-based positions, with a few small movements such as slides and hammer-ons, and then moves between these positions in jumps of three to five frets. However, the most striking similarity to Scruggs' playing lies in the use of roll patterns in the picking hand.

In the A part, three measures are played using a completely note-by-note perfect Foggy Mountain roll, landing on a index and middle-attacked fourth note in the third measure with two three-note forward rolls. The next three measures are exact replications of Scruggs' reverse roll patterns, landing in the eighth measure with the thumb on a fourth note and two subsequent three-note forward rolls starting on the index finger.

The B part of Eager and Anxious heavily features what could be called a "reverse reverse roll", which is a four-note backward roll followed by a four-note forward roll, compared to the normal reverse roll, which would be a four-note forward roll followed by a four-note backward roll.

This and other examples of modern banjo playing clearly shows the methodology of Scruggs style playing being put to use outside of the tonal, chordal, and in some cases, rhythmical, boundaries imposed on it by the traditional bluegrass genre.



# Chapter 7

## Final words

### Main findings

In this thesis, I have presented both historical and musical contexts for the Scruggs style of banjo playing, and performed a thorough technical analysis of the style. As a performer, my research has given me a much deeper understanding of the intricacies of Scruggs' playing and the banjo's history, and I hope and believe that I have managed to convey some of that to the reader.

The discoveries that have surprised me the most in my research have mostly been centered around the historical background of the bluegrass banjo. Since the common narrative has been centered around Scruggs as the mythical sole inventor of a playing technique, reading about his influences and listening to the scarce recordings that exist of his predecessors such as Snuffy Jenkins, leads me to believe that Scruggs, although obviously an innovative and experimenting banjo player, was more inspired by his peers than I had previously anticipated.

His biggest contribution might actually have been getting so prominently featured in different settings that he brought his refined banjo playing style based on the contemporary styles of North Carolina to a wider audience first in the United States, and subsequently the whole world.

The most interesting discoveries I made while analysing Scruggs-style banjo that are discussed to a large degree were related to the exactness of which Scruggs played the melody like the singer. Normally, Scruggs playing is discussed as non-melodic, and the embellishments and ornaments in banjo playing are simply taught with the reasoning “do it like Scruggs”, and seemingly without regard to why he played the things like he did. The licks he played seem to be so clearly based on ornaments sung by the singer, and especially of Scruggs’ main musical partner Lester Flatt.

Really diving deep into the Scruggs style and breaking up the licks gave me a new overview of the the phrasing used, and of the components that make up the *licks* in bluegrass banjo. This led me to suggest that such licks may be understood as sequences of syllables. Splitting banjo licks and phrases into these syllables made it even clearer how meticulous Scruggs was in his approach to phrasing like a singer.

## Further research

It is of my opinion that the phrasing of Scruggs style banjo playing could be researched to much greater degrees. The discourse in currently available banjo instructional material is to my knowledge heavily based on blindly copying Scruggs and his predecessors, without much regards to any reasoning.

Something I have wanted to do for quite some time is write an instructional book on bluegrass banjo in the Norwegian language, something which does not exist at the time this thesis is written. I think that taking the approach of grounding one’s playing in vocal phrasing could be strongly beneficial, and if I were to write such a book, my work on this thesis has pushed me towards focusing on this.

As mentioned several times in this thesis, there is very little existing academic literature regarding the playing technique used in bluegrass banjo. However, there is a surprising amount of literature available about the acoustic qualities of the instrument. The academic text I found to be most related to the playing was Joti Rockwell’s *Banjo Transformations and*

*Bluegrass Rhythm*, which has a more mathematical and physical approach to the bluegrass banjo technique, and unfortunately seems to lose some of the musical context in its analyses.

To sum up, I would find it interesting to see more technical research being done on the banjo techniques used in bluegrass banjo in a musical context, especially when the subsequent techniques of melodic and single string styles get more traction in both bluegrass and other genres.



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