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‘PERFECT ENOUGH’ – MUSIC FROM THE 3RD ORIGINAL LCP STUDIO CD

‘BEYOND PERFECT’ – RECORDING TECHNIQUES OF SAM PHILLIPS & LCP

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'PERFECT ENOUGH' - Music from the 3rd Original LCP Studio CD

Synopsis:

Perfect Enough is LCP's 3rd studio CD of original music. Performance presentation features songs from three albums plus new material. Brief discussion about the project, recording & editing techniques, and Q&A augment Performance. Perfect Enough is accompanied by Beyond Perfect - Poster Presentation exploring unique recording and mixing techniques.

'BEYOND PERFECT' - Recording Techniques of Sam Phillips & LCP

Synopsis:

Beyond Perfect is an accompaniment to the Lee C. Payton Performance Presentation entitled Perfect Enough. This Poster Presentation explores the recording techniques used by Sam Phillips in the heyday of Sun Records, and also showcases some of the techniques used in the recording and mixing of the Perfect Enough album.

PERFECT ENOUGH
*Live Performance of Music from
the 3rd Lee C. Payton Studio Album*

BEYOND PERFECT
*A Poster Presentation Accompaniment
to Perfect Enough*

Performance & Poster Presentations for the 2015 HUIC STEAM Conference - June 13-15
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Perfect Enough - Performance Presentation - BRIEF DESCRIPTION

Perfect Enough is LCP's 3rd studio CD of original music. Performance presentation features songs from three albums plus new material. Brief discussion about the project, recording & editing techniques, and Q&A augment Performance. *Perfect Enough* is accompanied by *Beyond Perfect* - Poster Presentation exploring unique recording and mixing techniques.

The *Perfect Enough* STORY

Prior to relocating to Chicago in the fall of 2008, LCP had written and stage-tested several songs from the *Perfect Enough* album. People from diverse background and age range respond enthusiastically when these songs are performed live. In spring of 2009, LCP had the fortunate opportunity to work with Jeff Jacobs¹ (Keyboardist with Foreigner² and Billy Joel³) as his last recording session in Chicago. We recorded 12 songs in two days, six originals and six traditional American folk songs.

Initial inspiration for *Perfect Enough* is the work of legendary Sun Records⁴ producer Sam Phillips⁵. In the 1950's and 1960's recording equipment was all analog⁶, and much more rudimentary than present-day digital recording⁷. If a producer wanted to create a certain amount of reverb⁸ around a recorded sound, the key was microphone placement in proximity to the sound source, within a specifically confined space. The recording room itself was a key player in the final sound mix⁹. With modern digital recording equipment, effects like reverb are generated within the computer.

The early Sun Recordings were all 'live' performances in the recording studio. Musicians were all playing and singing together at the same time. Artists literally recorded take after take, until they had their ideal version of a song. As an example, Elvis Presley¹⁰ was known for doing dozens of takes of a particular song, until he got just the right version that held the 'magic' they were trying to capture^{10a}.

Sam Phillips primarily used five microphones⁹ - the RCA Polydirectional 77dx¹¹, the Shure Unidyne 55s¹² (known as 'The Elvis Mic'¹³), the RCA Velocity Microphone 44bx¹⁴ and a pair of Altec Lansing 21B 'coke bottle' microphones⁹. Phillips planned how the recording room itself was to sound, designing the room to support the number of musicians in each band⁹. In addition to the microphone technology and the sound of the room itself, the actual placement of the microphones in relation to the sound source provided the majority of the overall sound. Phillips says, "The acoustics of the room were good, but miking has an awful lot to do with the finished product... I'm big on (microphone placement and) using the right mic⁹."

A technique that Sam Phillips innovated was recording with two Ampex 350 tape machines. The audio signal would transfer from the microphones into the first Ampex unit, and then be bounced out (re-recorded) to the second tape machine, generating a split-second delay of the music between the two machines⁹. This produced what is called a 'slap-back' reverb effect¹⁵ and became a signature sound for Phillips and Sun Records⁴. "I knew that people had heard records on jukeboxes in live little restaurants and dives, and what I tried to do with that type of echo and the sparse instrumentation was to make the sound not too foreign to the average ear⁹."

Ergo, final sound for each Memphis Recording Service song was an experienced, inspired collaboration between Musician's unique relationship to their instrument and voice, and Producer's instinctive recording and mixing prowess. Equipment capacity and room limitations also shaped the overall sound of each recording.

Analog recording techniques are inspirational. *Perfect Enough* was initially recorded 'live' in the studio, first performing guitar and vocals similar to a live concert, so that the 'skeleton' of each song captures a sense of urgency, community & immediacy that is often observed during live performance. Additional instruments and vocals for *Perfect Enough* were recorded on separate audio tracks, one instrument at a time.

During the HUIC Conference Performance Presentation, I will briefly share with participants some of the recording and mixing techniques explored on *Perfect Enough*. The accompanying Poster Presentation, *Beyond Perfect* shares more detail about the work and techniques pioneered by Sam Phillips, and some of the writing, recording and mixing techniques LCP explored during three studio, and several live albums.

Since the first recording sessions in 2009, I have written enough original material for *Perfect Enough* to release with thirteen songs total, eleven originals and only two of the traditional American folk songs. During recording sessions for this album, I have also had the fortunate opportunity to work with Producer Ron Gresham¹⁶ who Engineered with Gladys Knight & the Pips¹⁷ and was the Mixing Assistant with Albert Collins¹⁸ and Johnny Winter¹⁹. I also had the opportunity to work with good friend and Producer Steve Gamberoni²⁰ who recorded Jerry Lee Lewis²¹ (a Sun Label Artist) on the *Last Man Standing* album²².

In addition to the three albums mentioned, I have written several new songs of sufficient quality to record. Years of song-writing experience has taught me that roughly only one or two out of every dozen or so songs yields something worth recording. To maintain sonic consistency with current material, the new recordings will start with live performances in the studio. The accompaniment Poster Presentation, *Beyond Perfect* gives Conference participants the interactive opportunity to further explore the recording and mixing techniques of Sam Phillips & LCP.



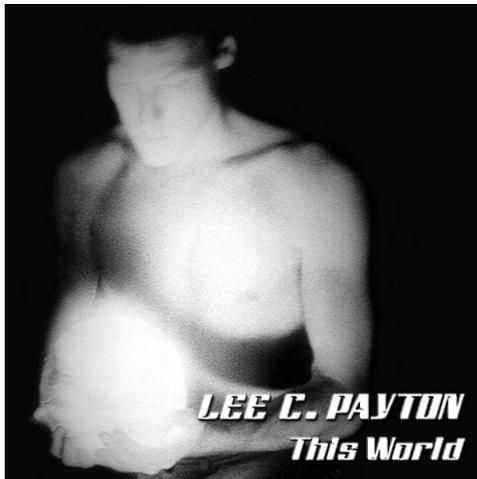
LEE C. PAYTON

- 01 Perfect Enough
- 02 Go Tell Bo Diddley
- 03 Lonesome River Blues
- 04 Shadows in the Storm
- 05 Drinkin' Wine Like H2O
- 06 Something is Keeping Us Alive
- 07 Some Dark Holler
- 08 No Life Blues
- 09 I Like Your Style
- 10 Goin' Down the Road Feelin' Bad
- 11 Once Upon A Time
- 12 Hoedown on the Mountain
- 13 Paradise in Her Eyes

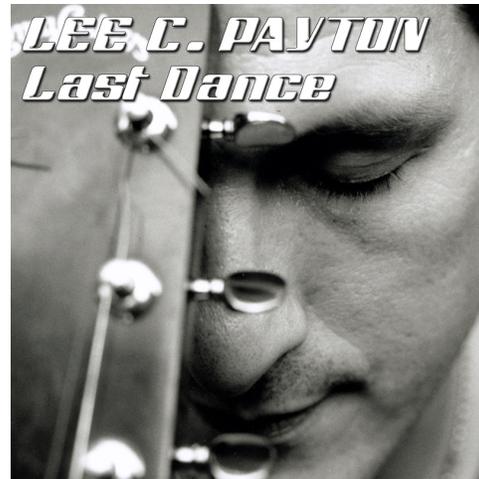
All Songs Written & Composed by
LEE C. PAYTON, except tracks 07 & 10
traditional arranged by LCP



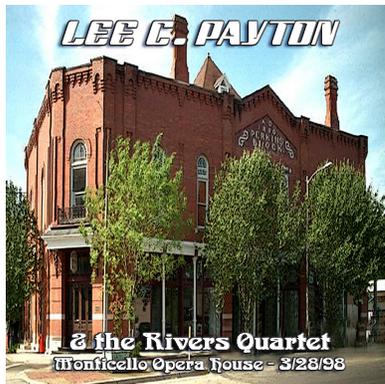
Perfect Enough w/ FPO CD Images - ©LCP2015



This World - ©LCP1993



Last Dance - ©LCP2007



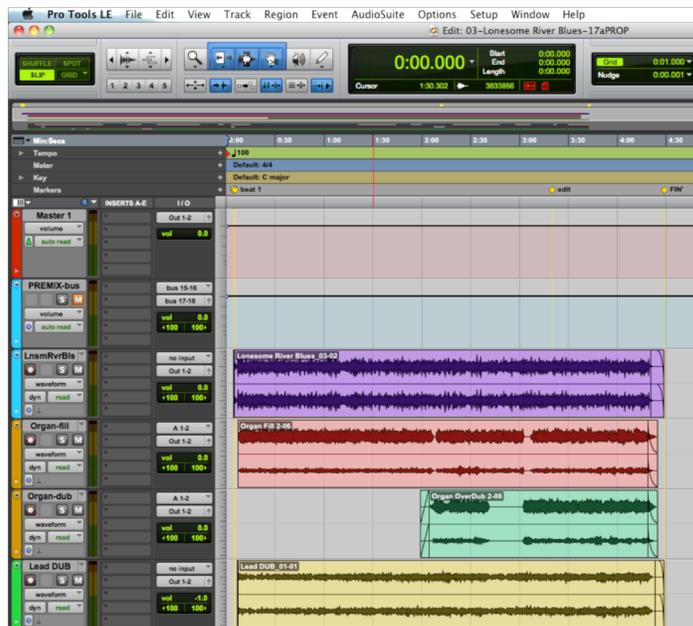
Lee C. Payton & the Rivers Quartet
Live at the Monticello Opera House - ©LCP1998

Beyond Perfect - Accompanying Poster Presentation - BRIEF DESCRIPTION

Beyond Perfect is an accompaniment to the LCP Performance Presentation, *Perfect Enough*. This Poster Presentation explores the recording techniques used by Sam Phillips during the heyday of Sun Records, and also showcases recording and mixing techniques used in the making of the LCP album *Perfect Enough*.



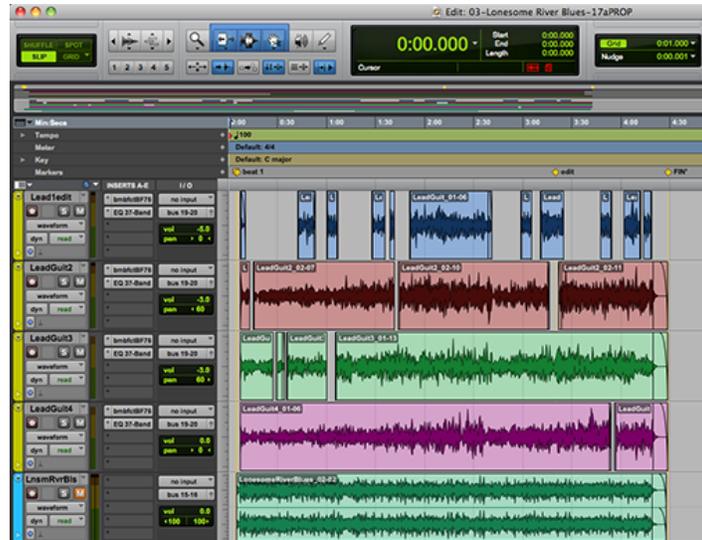
This and the next page show examples of what the Poster Presentation *Beyond Perfect* offers to HUIC Conference participants. First set of slides herein show tracks and instrumentation for *Lonesome River Blues*, the 3rd song on the *Perfect Enough* album.



LEFT & FOLLOWING PAGES: These images represent the different tracks of instruments for the song *Lonesome River Blues*

In descending order, the tracks show recent mixes down to the original live-in-the-studio recording. Slides are from the Audio Editing software ProTools²³

RIGHT: Four different lead guitar tracks recorded in mono. Blank spaces between segments of sound are edits where bad notes or noise was removed from tracks. These four tracks are then balanced for tone and sound quality, and panned to the Left & Right for aural space between the instruments, and then re-recorded in stereo



Slides below show tracks that represent instrumentation - 1) Vocal overdubs, a pre-mix, and three rhythm guitar takes, 2) One rhythm guitar and drum kit tracks, 3) Drum tracks, 4) Bass guitar, the original live-in-the-studio recordings, and metronome. *Beyond Perfect* showcases similar images and leads Conference participants through the process of song creation from inspiration to finished product.



1



2



3



4

The Poster Presentation *Beyond Perfect* will explore song creation, and recording & mixing techniques used in the making of the LCP *Perfect Enough* album, and showcases the work of Sun Records producer Sam Phillips.

Johnny Been Bad © Lee C. Payton
 11/01/2014
 Deep down in Florida
 Cross the railroad tracks
 At long west lead he wait
 Never could break
 Drove his car & pa curvy
 'Til he left home
 Bought a ticket to the city
 Went there all alone
 Gotta secondary new pad & whip set to
 He thought he knew it all but he didn't know
 He started out ~~in the~~ ^{in the} ~~city~~ ^{city}
 Chasin' in all over town
 He met a lotta women
 And he closed the bars down
 He got so drunk he passed
 out in the street
 Woke up in the hospital
 w/ shades on his feet
 The cop said boy you're ^{you're} ~~in~~ ⁱⁿ ~~trouble~~ ^{trouble}
 The Dr. said his ^{his} ~~name~~ ^{name} ~~was~~ ^{was} ~~alive~~ ^{alive}

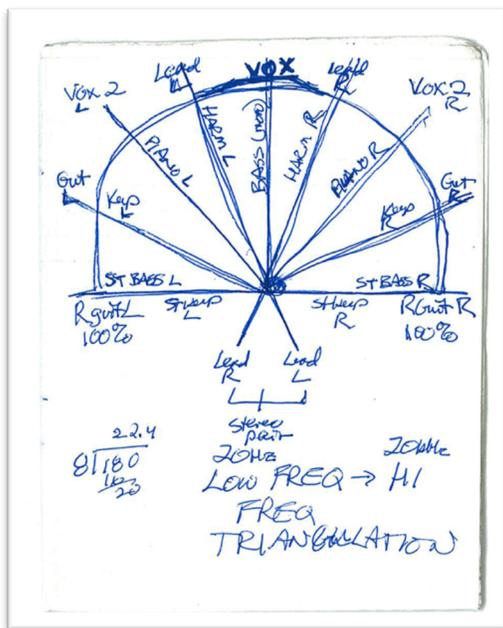
~~The Judge & Cook Courts Gashen~~
~~The cop said to him "John" at 3-5~~
 Johnny Been Bad x 2 3 x 2
 Johnny Ben Bad Again
 Seven years later Johnny on the
 the pen
 The ~~suburban~~ ~~code~~ ~~Wanda~~ ~~so~~ ~~if~~
 I never wanna see you again
 You better get another ticket
~~straight~~ ~~out~~ ~~the~~ ~~town~~
 On the cops are gonna get you
 when the sun goes down
 Johnny ~~flung~~ ~~a~~ ~~pick~~ ~~up~~
 drunk & ~~high~~ ^{high} in the back
 He ~~split~~ ~~out~~ ~~of~~ ~~chicago~~
 & he never looked back
 Last I heard of Johnny he
 was surfin' on a wave
 On the North Shore ~~of~~ ~~the~~ ~~down~~
 Haliwa way
 Johnny ~~says~~ ~~to~~ ~~me~~ ~~2~~
 Johnny says dan
 Johnny's Been Bad

The images above give a 'sneak-peek' into the world of song writing. Rough drafts of songs are sometimes immediately inspired. Songs can also go through several re-writes before becoming worthy to take into the recording studio. This is a new song, *Johnny Been Bad*, written and recorded as a tribute to the great Chuck Berry²⁴ - this song idea basically came from Berry's quintessential rock and roll anthem, *Johnny B. Goode*²⁵.

In order to approach the idea with a unique freshness, I simply wrote down the opposite of Berry's hit and came up with *Johnny Been Bad*. The lyrics are essentially autobiographical, and the story is told in the genre of a Chuck Berry song, that being the ultimate young-adult quest for Americana. This song was recorded live-in-the-studio capturing guitar and vocals within four takes.

RIGHT: *Johnny Been Bad* studio recording using 3 different microphones

- **Neumann TLM 102**²⁶ large-diaphragm condenser mic captures Vocals & Guitar
- **Shure SM58**²⁷ dynamic microphone records the body of the Guitar & some Vocals
- **Rode NT-1**²⁸ large-diaphragm condenser mic records Guitar fret-board & some Vocals
- Line-output from guitar sends a direct audio signal from guitar to recording unit. No vocals 'bleed' over onto this guitar track



LEFT: One of the many schematic sketches made per song - this helps in deciding the degree of panning for instruments that are multi-track recorded. The dot in the center represents where I would be sitting during the mixing session, and the 180° arc represents the placement of sounds in the stereo field. I also use the radial spokes of the graph to help in deciding dynamic volume ranges for different instruments and voices within a particular song

In the above example, three microphones plus line output from the guitar make a four-track original recording. Each microphone was input onto a single track on the 16-track digital console pictured below, and transferred into the computer using a program called Logic²⁹. Editing and mixing will be done using the ProTools software³⁰. Supporting vocals and instruments will be recorded onto separate tracks.



The Performance Presentation of songs from *Perfect Enough* and other Lee C. Payton CDs is designed to entertain, engage and enlighten. There are moments for audience participation in some songs, visual or artistic accompaniment, and a Spirit of Community and Aloha generated for those who attend this performance.

In a vibrant & dynamic way, Poster Presentation *Beyond Perfect* explores work, tools and techniques pioneered by Sam Phillips, and features writing, recording and mixing techniques used on LCP's *Perfect Enough* album.

These two presentations are designed to co-inform, and to provide HUIC Conference participants with a semi-comprehensive, entertaining overview of unique sound and music recording and mixing techniques.

CITATIONS & SOURCES

- 1 <http://www.gibson.com/en-us/Lifestyle/ProductSpotlight/GearAndInstruments/jeff-jacobs-finds-life-after-f/>
- 1 http://blogs.dallasobserver.com/dc9/2011/09/jeff_jacobs_went_from_playing.php
- 2 [http://en.wikipedia.org/wiki/Foreigner_\(band\)](http://en.wikipedia.org/wiki/Foreigner_(band))
- 3 <http://www.billyjoel.com/>
- 4 <http://www.sunrecords.com/>
- 4 http://en.wikipedia.org/wiki/Sun_Records
- 5 http://en.wikipedia.org/wiki/Sam_Phillips
- 6 http://en.wikipedia.org/wiki/Analog_recording
- 7 http://en.wikipedia.org/wiki/Comparison_of_analog_and_digital_recording
- 7 http://en.wikipedia.org/wiki/History_of_sound_recording
- 8 <http://en.wikipedia.org/wiki/Reverberation>
- 9 http://www.scottymoore.net/studio_sun.html
- 9 <http://www.soundonsound.com/sos/oct03/articles/samphillips.htm>
- 10 http://en.wikipedia.org/wiki/Elvis_Presley
- 10a <http://www.amazon.com/Last-Train-Memphis-Elvis-Presley/dp/0316332259>
- 10a <http://www.amazon.com/Careless-Love-Unmaking-Elvis-Presley/dp/0316332976>
- 11 <http://www.coutant.org/rca77dx/>
- 11 <http://www.modestoradiomuseum.org/microphone%20man%207.html>
- 12 <http://www.modestoradiomuseum.org/microphone%20man%2010.html>
- 12 <http://www.musiciansfriend.com/dynamic-microphones/shure-55sh-series-ii-mic>
- 13 <http://scottymoore.net/shure55s.html>
- 14 <http://www.coutant.org/rca44bx/>
- 14 <http://www.modestoradiomuseum.org/avey%20index%20page.html>
- 15 <http://forums.stevehoffman.tv/threads/sun-records-echo-how-did-sam-phillips-achieve-it.81850/>
- 15 http://www.history-of-rock.com/sam_phillips_sun_records.htm
- 16 <http://www.discogs.com/artist/23098-Ron-Gresham>
- 16 <http://www.allmusic.com/artist/ron-gresham-mn0001635717/credits>
- 17 http://en.wikipedia.org/wiki/Gladys_Knight_%26_the_Pips
- 18 http://en.wikipedia.org/wiki/Albert_Collins
- 19 http://en.wikipedia.org/wiki/Johnny_Winter
- 20 <https://www.linkedin.com/pub/steve-gamberoni/3/76a/596>
- 21 <http://jerryleelewis.com/>
- 22 <http://www.allmusic.com/album/last-man-standing-mw0000769820>
- 23 <http://www.avid.com/US/resources/digi-orientation>
- 24 <http://chuckberry.com/>
- 24 http://en.wikipedia.org/wiki/Chuck_Berry
- 25 http://en.wikipedia.org/wiki/Johnny_B._Goode
- 26 <http://www.soundonsound.com/sos/jan10/articles/neumanntlm102.htm>
- 27 http://en.wikipedia.org/wiki/Shure_SM58
- 28 <http://www.soundonsound.com/sos/aug14/articles/rode-nt1.htm>
- 29 <https://www.apple.com/logic-pro/>
- 30 <http://www.avid.com/US/products/pro-tools-software>