



# Three

By LVDT Simulator

*Dedicated to my mother Marilyn Dorothy Casper Copley.*

*May she rest in peace among heavenly music.*

## **Confluence**

The word confluence is often used to describe the merging of two or more rivers or streams. In this case, the ideas I had while composing this piece were a confluence of thoughts, as I was going through a fairly stressful period in both my personal and professional lives. The piece is mostly in a minor key, representing these two stressors, but ends in a major key to represent a positive resolution to a difficult time. Astute listeners will appreciate a hidden message encoded in the coda's melody.

## **Memory of a Bygone Age**

This piece was inspired by a train trip I took with my youngest daughter to visit her sister. As it came together in the studio I thought of my grandfather, who loved train travel, and my father who grew up around trains and worked on the railroad in his youth. The piece is a remembrance of the great era of rail transportation that changed the world.

## **Prelude in C Major & Ave Maria Melody [Bach/Gounod]**

Using JS Bach's C Major Prelude from the "Well-Tempered Clavier" as accompaniment, Gounod added an introduction and a beautiful melody to which the words of the Latin prayer "Ave Maria" are often sung. I played this piece at a Bach Birthday recital held in my home for family and friends. This recording was made during a rehearsal the night before the event, and became the first piece recorded for this album.

## **Panegyric**

This piece evolved from a compositional and sonic experiment. I struggled to find a title until well after it was completed. While searching for a synonym for 'tribute' I came across the term 'panegyric' – a word meaning an eloquent speech given in honor of someone – and felt it fit quite well to the mood of the piece.

As this album is dedicated to my late mother, so is this panegyric.

## **Anthems (for my grandchildren)**

This piece is dedicated to my grandchildren with hope they will find inspiration in the lives of their ancestors as they confront and deal with their life's challenges. They will grow up in very different times and circumstances, but I strongly believe they can find strength in the legacies left by their forebears.

## The Wavicle

Electromagnetic radiation, or light, is sometimes called a wavicle by physicists because it exhibits a dual nature: it has wave-like and particle-like characteristics. The piece is playfully mysterious, much like the wavicle moniker.

## Three Minor Preludes [by Frederic Chopin, with melody for the c minor prelude by D. Copley]

I vividly recall my mother playing these three Chopin preludes when I was young. Once I began to study piano myself it was only natural that I learn these pieces. I wrote the melody for the C minor prelude some twenty years ago. I recorded these pieces just as the pandemic was impacting daily life, so the performances are a bit somber.

## Toccata [by Charles-Marie Widor]

Perhaps one of the most famous organ pieces of all time, Widor's "Toccata" is nothing short of a masterpiece in composition, and a great showpiece for organists. The very first time I heard this piece performed live was at an organ recital I attended with my mother in a church in downtown Seattle. We watched and listened in amazement as an elderly woman played this piece on a magnificent pipe organ with such excitement and virtuosity that inspires me still to this day. When she played the final chord in tutti – literally pulling out all the stops -- the organ seemed to draw so much power that the lights briefly flickered. My mom and I would often reminisce about that performance.

I have never learned to play this piece on the organ to an acceptable degree of proficiency for performance. But through the magic of electronic music, I am able to "perform" it how I've always wanted to. 😊

## Elegy [by Nobuyuki Tsujii, adapted by David C. Copley]

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I love the tenderness of the melody and chords. The piece starts in a minor key as if to convey sadness but changes to major as if to reflect how lost loved ones touched our lives for good.

I play this piece for myself in times of sadness.

## Dance with Me

Compositionally, this piece came together faster than most: just three days. (It took a bit longer to get a good recording and mix.) I'm not a dancer, but if I were, I would dance to this music. I'm not entirely sure why, but it seems to have a little Latin flavor to it.

## LVDT Simulator

### About the band

LVDT Simulator was first formed in 1983 by two high school buddies David C. Copley and Blake Stowell. For a few years the keyboard duo played for school and church events. The two went on to attend university and life became too busy to keep the band together. After graduation, David moved away and eventually re-formed LVDT Simulator as a solo act, strictly as a hobby and retreat from his day job, occasionally making recordings for his friends and family.

For nearly 30 years David has worked as an acoustical engineer for a major heavy equipment manufacturer. His professional credentials include BS & MS in Physics with emphasis in acoustics, INCE Board Certification, numerous journal & professional conference publications, and more than 10 patents (awarded or pending). David has served as a member of several industry and professional advisory boards. Prior to switching his academic interests to physics and engineering, David studied organ performance and at one time considered a career as a musician. He has been a volunteer church organist and pianist for nearly 45 years and enjoys playing for Sunday services.

### LVDT Simulator equipment list used on this album

Alesis SR-18 drum module, Allen ADC 2140 classical (Church) style digital organ, Arturia Keylab Mk II MIDI keyboard controller, Korg DS-8 keyboard synthesizer, Korg Wavestation SR sound module, Korg Z1 keyboard synthesizer, Moog Sub-37 keyboard synthesizer, Roland D-110 sound module, Roland D-50 keyboard synthesizer, Roland JP-08 sound module, Roland Integra 7 sound module, Roland PK-5A pedal controller, Yamaha MOX8 keyboard workstation, Yamaha QX-5 MIDI Sequencer, Yamaha Clavinova digital piano, various effects, compressor/expander, etc. plus a PC with various software tools including Arturia Analog Lab V and Piano V.

### Musical Influences

Classical: Johann Sebastian Bach, Dieterich Buxtehude, Wendy Carlos, Virgil Fox

Modern: The Alan Parsons Project, Boston, Enya, A Flock of Seagulls, Jean-Michel Jarre, Journey, Kitaro, Kansas, Mannheim Steamroller, Rush, Vangelis, Yes

### Origin of the band's name

An LVDT simulator is an electronic device that simulates the function of a "Linear Variable Differential Transformer," which is basically a position sensor. David's father, an electrical engineer, was working on an LVDT simulator at Boeing around the time David and Blake started playing keyboards together, and David's brother Ron thought it would be a great name for the band.

### Production

Written, recorded, engineered, mixed and mastered in the LVDT Simulator basement studio from March 2019 to April 2022.

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"Prelude in C Major" is by Johann Sebastian Bach, and the "Ave Maria" melody by Charles Gounod. The three minor preludes "Prelude in e minor," "Prelude in b minor," and "Prelude in c minor" are by Frederic Chopin. "Toccata" is by Charles-Marie Widor. These pieces are in the public domain.

The melody added to Chopin's c minor prelude and all other pieces are original compositions by David C. Copley. Copyright 2022 David C. Copley, all rights reserved.

Cover art by David C. Copley and Amy Castator (David's daughter).