"SON OF BEATLES": A HISTORICAL AND ANALYTICAL STUDY OF THE MUSIC OF ELECTRIC LIGHT ORCHESTRA

THESIS

Presented to the Graduate Council of Texas State University-San Marcos in Partial Fulfillment of the Requirements

for the Degree

Master of MUSIC

by

Kayla D. Roth, B.M.

San Marcos, TX May 2011

COPYRIGHT

by

Kayla D. Roth

2011

FAIR USE AND AUTHOR'S PERMISSION STATMENT

Fair Use

This work is protected by the Copyright Laws of the United States (Public Law 94-553, section 107). Consistent with fair use as defined in the Copyright Laws, brief quotations from this material are allowed with proper acknowledgment. Use of this material for financial gain without the author's express written permission is not allowed.

Duplication Permission

As the copyright holder of this work I, Kayla Roth, authorize duplication of this work, in whole or in part, for education or scholarly purposes only.

ACKNOWLEDGEMENTS

My appreciation and gratitude is extended to the following:

My thesis chair, Dr. Nico Schuler, and to my committee, Dr. Charles Ditto and Dr. Kevin Mooney, for their support and insightful suggestions, and without whom I could not have found my way through graduate school.

My parents, who love me regardless of my employment status.

My friends, who have made my time in San Marcos one of the best chapters of my life.

The East Texas Society of Theorists.

Atticus, my constant companion.

This manuscript was submitted on April 12, 2011.

TABLE OF CONTENTS

ACKNOWLEDGEMENTS	v
LIST OF FIGURES	v11
ABSTRACT	1x
CHAPTER 1: A BRIEF HISTORY OF THE BAND	1
CHAPTER 2: ANALYSIS OF POPULAR MUSIC	15
CHAPTER 3: ANALYSIS OF SELECTED SONGS	
3.1. An Outline of the Study	17
3.2. Sonic Traits	21
3.2.1. Vocal Layering / Chorale	23
3.2.2. Call-and-Response	
3.2.3. Countermelodies in the Strings	
3.2.4. Scalar and Arpeggiated Chord Passages	
3.2.5. Voice Alteration	
3.2.6. Flanging	
3.2.7. Polyrhythm	
3.3. Harmonic Traits	
3.4. Formal Traits	
CHAPTER 4: FULL ANALYSIS OF A SONG	56
EPILOGUE: SUMMARY OF ANALYTICAL OBSERVATIONS	65
WIODIZC CONCLUTED	/7

LIST OF FIGURES

Figure	Page
3-1: Chart performances of selected singles in the U.S. and the U.K	18
3-2: Methods of notation used in this thesis	20
3-3: Aural traits found in the selected songs	22
3-4: "Don't Bring Me Down," verse one (00:17)	23
3-5: "Don't Bring Me Down," verse two (1:23)	24
3-6: "Shine A Little Love" (00:27)	25
3-7: "Strange Magic" (00:30)	25
3-8: "Sweet Talkin' Woman," verse one (00:18)	26
3-9: "Sweet Talkin' Woman," chorus (00:48)	27
3-10: "Livin' Thing" (1:29)	28
3-11: "Telephone Line" (1:48)	29
3-12: "Turn To Stone" (00:13)	31
3-13: "Turn To Stone" (1:30)	32
3-14: "Turn To Stone" (2:32)	32
3-15: "Evil Woman" (1:05)	33
3-16: "Rockaria!" (1:01)	34
3-17: "Showdown" (1:13)	35
3-18: "The Diary of Horace Wimp" (2:42)	36
3-19: "Xanadu" (1:34)	37

3-20: "Wild West Hero" (3:56)
3-21: "Livin' Thing" (2:47)
3-22: "The Diary of Horace Wimp" (0:06)
3-23: "Showdown" (0:47)
3-24: "Evil Woman" (0:12)
3-25: Doo-wop progressions
3-26: Movement between relative keys
3-27: Chromatic alterations
3-28: Reduction of "Evil Woman" (0:01)
4-1(a): Song sections and their functions in "All Over The World"
4-1(b): Form outline of "All Over The World"
4-2: Reduction of "All Over The World" introduction (0:13)
4-3: Chords of "All Over The World" verse (0:28)
4-4: Second verse of "All Over The World" (1:20)
4-5: Step-wise voice leading
4-6: Double break of "All Over The World" (2:01)
4-7: Third chorus of "All Over The World" (2:33)
4-8: Final verse of "All Over The World" (2:52)

ABSTRACT

"SON OF BEATLES": A HISTORICAL AND ANALYTICAL STUDY OF THE MUSIC OF ELECTRIC LIGHT ORCHESTRA

by

Kayla D. Roth, B.M.

Texas State University-San Marcos

May 2011

SUPERVISING PROFESSOR: NICO SCHÜLER

Electric Light Orchestra (ELO) was a fixture of the popular music scene in the 1970s and early 1980s. Of the eleven studio albums, the band released over forty singles, seven of them reaching the top ten on the Billboard *Hot 100*. Though their contemporaries held them in high esteem – John Lennon went so far as to call them the "son of Beatles" – they are conspicuously absent in some discussions of popular music history, from online Rolling Stone to the roster of Rock and Roll Hall of Fame inductees, and they have been the topic of little, if any, formal study. This thesis will feature examples from the musical output of ELO, which will be subject to both traditional and avant-garde methods of music analysis, as well as examinations of recording techniques. It is an attempt to shed light on the musical accomplishments of this band, and also to provide a model for popular music analysis by identifying the sonic traits that characterize their music and by examining the various formal organizations used within.

CHAPTER 1: A BRIEF HISTORY OF THE BAND

Britain in the 1960s was flourishing with new musical ensembles playing what was known as "beat music." Influenced heavily by popular American bands such as Buddy Holly and the Crickets, these bands usually consisted of a lead guitar, rhythm guitar, bass guitar, and drums (Shepherd 2003, 62) and utilized the vocal harmonies of doo-wop (Shepherd 2003, 78). In Liverpool, the American rock'n'roll influence was seen the strongest; other cities of England, such as Birmingham, were influenced more by American blues and rhythm and blues.

In 1965, Roy Wood and Bev Bevan were among the members of the original lineup of The Move, a Birmingham-based group that would eventually become one of the most successful British bands to not have ever found success in the United States. Throughout the seven years of the band's existence (the 2004 reunion not withstanding), the lineup changed continuously, but Wood and Bevan remained consistent, and in 1969 Wood invited Jeff Lynne to join, who was at the time headlining fellow Birmingham group and Wood's former band The Idle Race (Brum Beat 2010a).

Lynne had joined The Idle Race, then known as The Nightriders, in 1966, after responding to a newspaper advertisement. He was a relatively unknown guitarist, but the band was eager to showcase his skills as well as his penchant for writing Beatlesque pop songs.

Though Wood had moved on to the more successful band The Move, he still remained on good terms with his former bandmates and was responsible for arranging their partnership

with pop producers, eventually leading to their signing on with Liberty Records. Though they were critically respected, their records never had strong sales (Eder 2011).

Lynne and Wood shared a mutual respect and often worked together on demos, and they discussed working together on a project that would merge classical music with rock/pop. Wood had offered Lynne a spot in The Move, but Lynne declined, hoping still to steer The Idle Race to commercial success. In 1970, Lynne finally accepted Wood's offer to join The Move, on the condition that they would eventually focus solely on their classical-meets-rock project. Their intention was to incorporate classical instruments into their guitar and drums setup, something that the Beatles had recently done on their song "I Am The Walrus" (Ankeny 2002, 358).

The Move was receiving attention from both fans and journalists, but most inquiries involved the rumors coming from Birmingham concerning this side project, which had been rumored to be called Electric Light Orchestra, or ELO. Though Wood and Lynne were both aware of the rumors, they refused to confirm or deny the existence of any side project in light of their commitments to The Move. In a 2006 interview, Wood talked about ELO's rough beginnings and their dealings with Harvest Records: "We wanted to get this ELO thing together, [and] knock The Move on the head ... [they] weren't that keen to see the end of the band, as we had a lot of hits." (Roy Wood, quoted in Thompson 2006, 15.) The label

¹ In an interview in 2006, Roy Wood spoke of the original ELO concept: "I'd had the idea... for a long time, since the first Move album. I was a big fan of the Beatles, especially things like 'I Am The Walrus' and 'Strawberry Fields' and things like that, with the George Martin string sound on them... And I thought, 'Wouldn't it be great if you could represent this on stage properly?' With your own band – like instead of having a guitarist, have a cello player or a French horn player and not to use sessionmen. There were a few tracks that need orchestral backing, [and] the day I went in to hear the backing track with the orchestra playing, I thought, 'This is brilliant. Why don't we form a band like this? Instead of advertising for a guitarist, let's get a cellist." (Roy Wood, quoted in Thompson 2006, 15).

² Some sources on Electric Light Orchestra's origins claim their goal was to pick up where The Beatles left off. According to an interview with Lynne in 2001, "That's what Roy [Wood] said to a paper once and it stuck for years afterwards and it was a real drag trying to live that one down! I never said it." (Jeff Lynne, quoted in Silverstein and Acunto 2001).

agreed to let Wood and Lynne release a record as ELO; though much of the creative talent's free time was spent writing and recording mustc for the side project (Brum Beat 2010b), they were still contractually obligated to write for The Move. After their final album *Message From The Country*³ produced two Wood-penned hit singles, "Chinatown" and "Tonight," the side project's release was delayed due The Move's U.S. tour (Rees and Crampton 1991). After the tour concluded, The Move officially retired from live performances, though they would still exist in name through the development of the new band. In December of 1971, ELO released their self-titled debut album.⁴

Sales for the ELO album were slow; The Move, on the other hand, had a #7 hit on the U.K. charts ("California Man") two months later, in June of 1972. Its B-side, the Lynnepenned "Do Ya," was released as an A-side in the United States, resulting in their only U.S. chart entry, reaching #93 (Rees and Crampton 1991, 174).

The first ELO single, "10538 Overture," reached the top ten on British charts, which helped the album to eventually reach #32 in the U.K. (Rees and Crampton 1991). Written by Lynne, it was originally intended to be a B-side for The Move, until Wood added multiple cellos to the mix. As Wood recalled,

I had just bought this cheap Chinese cello, which I'd had for a couple of weeks. We played the track back, and I played these Jimi Hendrix riffs to it on the cello. Jeff said it sounded great, so I went into the studio and put 15

³ Of *Message From The Country*, Wood says it was recorded at the same time as ELO's debut album: "This is why there's quite a lot of ELO influence in the *Message From The Country* album, which we were recording at the same time. The ELO sound was born at this time." (Roy Wood, quoted in Thompson 2006, 15)

⁴ A secretary from United Artists in the U.S. telephoned Arden about the name of the album. Unable to reach him, she left a message that there was "no answer" from him, leading the album to be mistakenly released as *No Answer* in the United States in 1972 (Rees and Crampton 1991, 174).

of them on, and it sounded like some heavy-metal orchestra. It turned into "10538 Overture." (Roy Wood, quoted in Thompson 2006, 16).

Lynne also spoke of the early recording sessions:

Roy was becoming an amazing multi-instrumentalist. If you could blow it, pluck it, strum it or bow it, Roy could play it. That's what [the] album is about, using strange instruments (to us) and getting new ideas. It's a pretty wacky [album], so innocent yet so bold. It goes to some really strange places. (Lynne 2006a).

Drummer Bev Bevan, bassist Richard Tandy, pianist and hornist Bill Hunt, cellists Andy Craig and Hugh McDowell, as well as violinists Steve Woolam and Wilf Gibson completed the lineup, and the end of The Move and the final transition into the new band came when ELO had its first live performance in April of 1972 at the Greyhound pub in Croydon, London. The media deemed the show disastrous, though perhaps Lynne did not notice: "I was probably too drunk. In those days you couldn't hear anything because there was no way of amplifying the cellos and stuff. So we used to have this habit of going down the pub for quite a long time before we went on – it numbed the pain a bit." Wood attributed this to the fact that they "played too many big venues. If we'd done more small clubs at first, we could have got the sound together. But because the halls were big and everyone used to turn up their electric instruments, the string players didn't have a chance. Nobody could hear what they were playing." (Roy Wood, quoted in Thompson 2006, 17).

The music press added more friction to relations within the band. While promoting their album, ELO travelled to Italy where they were disappointed to find the media's attention was focused entirely on Wood. As The Move had had great success in Italy but had rarely visited, the locals were anxious to focus on Wood's work while disregarding both the new music and his new bandmates.

During the recording sessions for the second album, Wood quit the band, taking Hunt and McDowell with him to form the more pop-oriented group Wizzard. As ELO was Wood's concept in the first place, it was surprising that he would leave so soon after the band's inception. It is difficult to pinpoint exactly why Wood left, as both he and Lynne have offered various explanations. Roy Wood said:

I left partly because attention was being focused on me, and not the band as a whole, and partly to save the friendship between Jeff and myself. He and Richard Tandy worked very hard to get the band together, and as soon as we came offstage, the press used to click their cameras at me and ask what I thought about this and that. It just wasn't fair, and it got to the point where Jeff didn't speak to me much, and I couldn't stand that. That's basically why I left. (Roy Wood, quoted in Thompson 2006).

Jeff Lynne explained it differently:

We were both sort of producers, and it got to the point where you'd go to the studio and it'd be who could get to the desk first: 'I'm doing this bit!' And it got to be childish, really. And he'd already formed this other group, Wizzard, without telling us. There was no notice. He said, "I've got this other group now. See ya!" (Jeff Lynne, quoted in Thompson 2006).

Roy Wood stated elsewhere:

Basically, my main reason for leaving was more to do with the behind-thescenes things. There was a lot of political stuff going on that I didn't like, and I left for those reasons. Nothing to do with the music or, the press tried to make a big thing about me and Jeff falling out, and it was nothing to do with that at all, really, it was basically down to a management thing that I wasn't happy with. (Roy Wood, quoted in Kinch 1993).

Another explanation from Wood:

It was decided that I should leave because I had a name and was more likely to succeed at anything else ... When I quit, I was so disappointed that I didn't want to form another group, and then Wizzard came up. (Roy Wood, quoted in Sharp 1994).

In addition to these conflicting stories from the band members, the media put their own spin on Wood's departure, claiming internal friction and animosity fueled his leaving. Wood was adamant to express his benevolent feelings for ELO, claiming there were no hard feelings between him and his former bandmates. After *Melody Maker*, a weekly music newspaper published in the United Kingdom, criticized ELO on a recent London show, Wood wrote a letter to the paper defending ELO and claiming: "It was the best show I'd seen by any group for ages, with plenty of excitement and good humor." (Roy Wood, quoted in Thompson 2006, 17).

Regardless of the reasons, Wood's leaving birthed the assumption from the music press that ELO would be disbanded. Instead, Lynne stepped up as the chief songwriter with

creative control over the direction of the band. Tandy switched from bass to the newly-popular Moog synthesizer, and Mike de Albuquerque stepped in on bass. After the departure of Andy Craig in 1972, the cellos were played by Mike Edwards and Colin Walker and, along with the violin, were now amplified to the same extent as the rest of the instruments, which greatly improved the live performances (Caiger 2006).

The 1970s continued to be fortuitous for ELO. The second album, *ELO 2*, produced the first single to chart in the United States; charting at 6 in the U.K., "Roll Over Beethoven" charted at 42 on the U.S. Billboard (Billboard 2010a). Though not a huge success, it was a precursor to the massive success they would enjoy in the United States in the coming decade.

For the third album, 1973's On The Third Day, more lineup changes were made. McDowell returned from Wizzard and replaced Walker, and Mik Kaminski replaced Gibson on violin. "Showdown," the first single released, was well-received domestically (charting at #12 in the U.K.) and less so abroad, charting at 53 on the U.S. Billboard (Chart Stats 2010; Billboard 2010a). American success eluded them until the release of their fourth album in 1974, Eldorado, A Symphony.

ELO had been forming quite a following in the U.S., with their concert attendance growing so quickly that United Artists released a live album in May of 1974 entitled *The Night The Light Went Out in Long Beach*, specifically for the U.S. market (Thompson 2006, 16). The first single from the *Eldorado*, "Can't Get It Out of My Head," reached the U.S. Billboard top ten (Billboard 2010a), promoting American awareness of ELO, and *Eldorado* became their

first album to be certified gold in the United States (RIAA 2010).⁵ After its release, Walker left the band, and Gibson and Edwards left the band to be replaced by Kelly Groucutt and Melvyn Gale, respectively.

Eldorado was a turning point in the sound of ELO; it marked the first time Lynne hired a choir and orchestra (Lynne 2001b); strings were no longer overdubbed to create depth.⁶ By his own account, Lynne had been "holding back" on the first three albums, reluctant to do things he truly wanted for fear they would not be well-received; with Eldorado, he began to trust his intuition, and ELO's success soon reached unforeseen heights (Thompson 2006, 17).

"Evil Woman," from their 1975 album Face The Music, reached #10 in both the U.S. and U.K. (Chart Stats 2010; Billboard 2010a); the album also produced the hit single "Strange Magic," which reached #14 in the U.S. (Billboard 2010a).

Over the next several years, they continued to have enormous success in the U.S., and with the release of their sixth album, 1976's *A New World Record*, they finally saw mainstream success in the U.K. that they had not seen since their second album. The singles "Telephone Line" and "Livin' Thing" charted both domestically and internationally, and the album itself was certified two-times platinum in the U.S. (RIAA 2010).

Their success culminated with 1977's Out of the Blue, which was four-times platinum in the United States (RIAA 2010). It produced such gems as "Turn To Stone," "Mr. Blue

⁵ The Recording Industry Association of America (RIAA) indicates that to be certified gold, a record must sell 500,000 units. To be certified platinum, it must sell one million. To be certified diamond, it must sell ten million or more (RIAA, 2010). In the United Kingdom, the numbers are slightly different. For a silver certification, the record must sell 60,000 units. For gold, it must sell 100,000 units, and for platinum it must sell 300,000 (BPI 2010).

⁶ Lynne says of the opening track: "This was the first time I'd ever used a big orchestra on a record. Up until then it had been just two cellos and a violin double-tracked a few times. I was thrilled when the 30-piece struck up on the big intro." (Lynne 2001b).

Sky," "Sweet Talkin' Woman," and "Wild West Hero." Out of the Blue almost went on to become Britain's biggest selling double album, but it was surpassed only by the massively successful soundtracks for Saturday Night Fever (1977) and Grease (1978) (Thompson 2006, 18). By this time, ELO's stage shows had become extremely ornate, featuring lasers, fog machines, and more memorably, a giant metal spaceship (Porter 2010a) and even an exploding cello (Thompson 2006, 18).

In 1979, the album *Discovery* showed heavy disco influences, showcasing "four-on-the-floor" drum beats and a syncopated bass line, and the rich orchestral sound that was prominent in disco music was well-suited for ELO. The album was very well-received, going two-times platinum in the U.S. (Billboard 2010a) and platinum in the U.K. (Chart Stats 2010), and producing such hits as "Don't Bring Me Down," "Last Train To London," and "Shine A Little Love." This would be the last time the classic lineup would be together, as the string section – at this point, Kaminski, McDowell, and Gale – was let go shortly after the release.⁷

Lynne describes these years – the years of A New World Record, Out of the Blue, and Discovery – as ELO's peak, both creatively and commercially, and admits that they should have quit then:

There was no way of following [those records]. But there were contracts to fulfill, so I was forced to do things I didn't want to do, just because of signing bits of paper when you don't know what you're doing ... you don't realize what you're getting into. So it turned out I had to do another 93 albums for ELO. (Thompson 2006, 18).

⁷ As Lynne was regularly using a full orchestra in recordings, the official three-piece string section was only used in concert (Lynne 1979). After *Discovery*, ELO only did one more tour to promote *Time* in 1981. As that album did not feature strings very prevalently, for the tour keyboards were used entirely in lieu of strings. Mik Kamanski returned briefly to play on *Secret Messages* in 1983.

In 1980, Lynne agreed to write the soundtrack for the movie *Xanadu*. Starring Olivia Newton-John and aiming to capitalize on her recent success in *Grease*, the movie itself performed poorly at the box office⁸, while the soundtrack enjoyed great success. The title track, performed by both Newton-John and ELO, was a world-wide hit, and the singles "All Over The World" and "I'm Alive" proved to be popular in both the U.S. and the U.K. (Chart Stats 2010; Billboard 2010a).

ELO's tenth studio album, *Time*, was a science fiction-based concept album. Synthesizers, now prevalent on the pop music scene, were used heavily in lieu of a string section. Of the four singles released, "Hold On Tight" was the most successful, reaching #4 in the U.K. (Chart Stats 2010) and #8 in the U.S.; the other three singles were not as well-received in the United States (Billboard 2010).

Though it was originally intended to be a double album, Secret Messages was released in 1983 as a single disc (Mathews 2010). It was immediately a success in the U.K., though it would mark the beginning of the end for the band. Bassist Kelly Groucutt resigned, and Bev Bevan expressed interest in permanently joining rock band Black Sabbath, for whom he had been drumming during breaks from ELO.

In 1985, Balance of Power was released, and it would be ELO's last studio album until 2001's Zoom. Though it was certified silver in the U.K. (BPI 2010), only one single ("Calling America") charted. The group had whittled to a trio of Lynne, Tandy, and Bevan. After vari-

⁸ According to the Internet Movie Database (IMDB), *Xanadu*'s overall gross was \$2.7 million more than its original budget. It has since achieved the status as somewhat of a cult classic; while it has received a 41% rating at RottenTomatoes.com and been described as "a box-office disaster" (Rees and Crampton 1991, 175) and "one word that destroyed Jeff Lynne's reputation forever" (Starostin 2010), its user ratings on IMDB.com show the largest percentage of users gave it the highest score of 10 (though the second-largest percentage gave it a score of 1), and it has received a spot at BadMovies.org, a site with the aim to "glorify the genre" of b-movies (Borntreger 2010).

ous promotional appearances both in Europe and the United States, the group parted ways, and an official declaration of disbandment was made in 1988.

Since the dissolve, there have been two more incarnations of Electric Light Orchestra. In 1988, Bevan approached Lynne to reform; when Lynne declined, he renamed his project ELO Part II. Now known as The Orchestra, they continue to tour and record music (Orchestra 2010). The 2001 rendering of the band will be discussed momentarily.

As the sole constant member of ELO and the main creative force – his creative dominance as producer, songwriter, arranger, lead singer, and guitarist could almost make ELO appear to be a solo effort – it is worth noting Lynne's career outside of the band. In addition to being a prolific songwriter (with the exception of cover songs, he wrote all of ELO's output from the second album on), Lynne was also in high demand as a producer. He produced most of ELO's albums, and after the dissolution of the band he focused almost exclusively on studio production work. He wrote and produced Dave Edmunds' 1983 hit "Slipping Away" and also played on sessions for Edmunds' album *Information* (1983). He then produced six tracks (as well as writing three) for Edmunds' follow-up album, Ruff Raff (1984).

Through Edmunds, Lynne became acquainted with their mutual friend George Harrison, who was working on music for his forthcoming 1987 solo effort *Cloud Nine*. Harrison asked Lynne to produce the album, and Lynne also co-wrote three of the tracks with Harrison ("That's What It Takes," "This Is Love," and "When We Was Fab") and supplied some of the bass, guitars, keyboards, and vocal tracks.

His association with Harrison during this time led to the formation of The Travelling Wilburys, a supergroup comprised of himself, Harrison, Tom Petty, Roy Orbison, and Bob

Dylan. They released two albums that were very well-received, the first of which spent 53 weeks on the U.S. charts, peaking at #3, and won a Grammy for Best Rock Performance by a Duo or Group. Lynne went on to produce Orbison's 1989 record *Mystery Girl*, and he cowrote many of its tracks, including the hit "You Got It." Orbison later said that Lynne was the best producer he'd ever worked with (Amburn 1990, 213).

In 1989, Lynne co-produced and co-wrote Tom Petty's album Full Moon Fever, which included the hit singles "Free Fallin'," "I Won't Back Down," and "Runnin' Down a Dream," the latter of which referenced Del Shannon, whose last album, Rock On! (1991), included tracks co-written by Lynne and was finished by Lynne after Shannon's death. Other Lynne-penned songs include "One Way Love" (1985) for Agnetha Faltskog, three tracks on Duane Eddy's self-titled 1987 album, and "Falling In Love" for Randy Newman's 1988 album Land of Dreams, which Lynne also produced. Former Beach Boy Brian Wilson recruited Lynne to co-produce his 1988 self-titled album for which he also co-wrote a track ("Let It Shine").

In 1990, Lynne rejoined his Travelling Wilburys bandmates to release *Travelling Wilburys Vol. 3*, and he also released his first solo album *Armchair Theatre*, which featured Harrison and Tandy. While it received critical praise, it failed to achieve commercial success, peaking at #83 in the U.S. (Billboard 2010). In 1991, he worked again with Tom Petty, producing and co-writing many tracks for Tom Petty & the Heartbreakers' *Into The Great Wide Open*.

⁹ In a 2001 interview, Lynne explains the formation of the group: "The Wilburys sort of came together at night time in George's studio. We'd talk about it every night after we finished a mix ... during *Cloud Nine*. And we kept saying, 'We can have a group,' and 'Who would you have in it?' I said, 'I'd have Roy Orbison in it.' Just as a... (*A wish list?*) Exactly! I'd say, 'I'll have Bob Dylan in it.' And we both got to know Tom and he seemed like the ideal guy... So we phoned them up and they all want to be in it. It was as simple as that really." (Silverstein and Acunto 2001)

¹⁰ The first verse includes the line "Me and Del were singing Little Runaway..."

The next year, he produced Roy Orbison's posthumous album *King of Hearts*, which featured the htt single "I Drove All Night."

In 1994, Lynne was asked by Harrison to help restore some of John Lennon's original studio material to be used on The Beatles' Anthology album series. Demos for Lennon's songs "Free As A Bird" and "Real Love" were both digitally processed and Harrison, Ringo Starr, and Paul McCartney's parts were overdubbed, resulting in a virtual Beatles reunion (Face The Music Germany 2010). Lynne went on to produce Starr's album Time Takes Time (1992) and McCartney's Flaming Pie (1997), as well as contribute to Juliana Raye's Something Peculiar (1992), Roger McGuinn's Back From Rio (1991), Joe Cocker's Night Calls (1991), Aerosmith's song "Lizard Love" (1993), Tom Jones' song "Lift Me Up" (a song from Lynne's Armchair Theatre and covered by Jones in 1994 on his album The Lead and How To Swing It), Bonnie Tyler's song "Time Mends a Broken Heart" (1995), Hank Marvin and Mark Knopfler's 1993 version of "Wonderful Land," and the Tandy Morgan Band's song "Action" (1986).

In 2001, Lynne reformed Electric Light Orchestra to release *Zoom*, though the only other original returning member was Richard Tandy, who played on one track. The album featured guest artists, including former Beatles Ringo Starr and George Harrison. Album sales were lackluster, and the North American tour was cancelled. That same year, Lynne began working with Harrison on what would be the latter's final album, *Branwashed*. After Harrison's death in November of 2001, Lynne continued to work on the album and was heavily involved in the 2002 memorial Concert For George. The subsequent 2003 DVD release of the concert, produced by Lynne, won a Grammy.

Lynne again reunited with Tom Petty in 2006 to produce his third solo album, *High-way Companion*. In 2009, Lynne was honored with the Golden Note Award from the American Society of Composers, Authors, and Publishers (ASCAP 2009), and revealed in an interview from around the same time that he was working on another solo project as well as a new album with former Eagles member Joe Walsh. He also produced four tracks on antifolk singer-songwriter Regina Spektor's fifth album, *Far* (2009).

Though Bev Bevan published a book of behind-the-scenes photographs and anecdotes from touring days (Bevan 1981), there has not been a definitive published biography of ELO; the information gathered and presented here is from numerous sources, including but certainly not limited to: websites (Porter 2010b; Starostin 2010; Michel 2002), general rock history books (Ankeny 2002, 358; Shepherd 2003, 63; Strong and Peel 2004, 489), magazines (Thompson 2006), and liner notes (Lynne 1979, 2001, 2006a, 2006b, 2006c; Caiger 2006). It is hoped that this collection of information may serve as a future reference for study on the band, and may provide some insight into the social context of the music presented.

CHAPTER 2: ANALYSIS OF POPULAR MUSIC

Perhaps because of the immense variety now available in music, a theory of popular music form has yet to be developed. In Christopher Endrinal's dissertation, Form and Style in the Musw of U2, he asserts that much of the research done in the realm of popular music has been concerned with meaning and interpretation, and the influence it may have had on a particular social situation rather than theoretical analysis of the music itself (Endrinal 2008, 20). Endrinal goes on to discuss current trends in popular music analysis: John Covach, an expert in the field of rock history and analysis (Covach 2006), suggests that analysis would begin with chord progressions, then the harmonic structure of phrasing, which in turn make up sections that altogether make one of the general types of forms. Other elements, such as melody, text, and rhythm, should be analyzed separately and then incorporated into the overall analysis (Covach 2005). Rock historian Walter Everett (1999, 2001) prefers to focus first on harmonic, melodic, rhythmic, and lyrics, and then on instrumentation and production and how it relates to formal structure (see also Endrinal 2008, 21). Ken Stephenson argues that traditional formal structures depend on cues found in cadence patterns and key schemes to delineate sections, but in popular music these cues are found in text, instrumentation, rhythm, and harmony (Stephenson 2002, 122). Both Covach and Stephenson have proposed types of general forms for popular music, such as AABA Form, Verse-Chorus Bridge, Rounded Binary, and others. Conversely, other popular music scholars such as Philip Tagg and Richard Middleton avoid using forms extensively in their analyses, instead focusing on musical specifics in relation to meaning and interpretation (Endrinal 2008, 21).

Another reason for the difficulty in establishing models for popular song analysis is perhaps the relative newness of popular music in the overall timeline of Western music. As a result, music scholars have not been exposed to it as long and might not have as much experience with popular music as they have with art music (Endrinal 2008). One of the main goals of this thesis is to use the music of Electric Light Orchestra as an example while providing such a model.

CHAPTER 3: ANALYSIS OF SELECTED SONGS

3.1. An Outline of the Study

This study will provide a model for analysis of popular music, using examples from the musical output of Electric Light Orchestra. I will identify the sonic or aural traits that characterize ELO's music, i.e. the aural surface details that distinguish ELO's music from the music by other artists. Using those characteristics, I will examine the various formal organizations ELO uses in their songs and how each section relates to the surrounding sections as well as to the overall form of the song. I have been greatly inspired by Christopher Endrinal's dissertation, Form and Style in the Music of U2, which also examines the salient musical traits presented in the subject's music. Though the general ideas and initial approaches of the studies are similar, they differ in the presentation of materials and, as the studies concern two entirely different bands, in the results.

The first task in beginning the study was to establish which songs would be studied. An extensive study of the band's entire catalogue would be ideal, but inappropriate for the size of this study. Instead, the song selections were made on the basis of commercial success in the two biggest English-speaking markets: only the band's most successful original singles – those that were written by ELO and that ranked in the top twenty on the U.S. Billboard Hot 100 or the U.K. Singles Chart – will be considered. With that filter in place, the song selection is narrowed down to the following song list:

Year	Song Title	U.S. Billboard	U.K. Singles
		Chart position	Chart posi-
			tion
1972	10538 Overture	-	9
1973	Showdown	53	12
1974	Can't Get It Out Of My Head	9	-
1975	Evil Woman	10	10
1976	Strange Magic	14	38
1976	Livin' Thing	13	4
1977	Rockaria!	_	9
1977	Telephone Line	7	8
1977	Turn To Stone	13	18
1978	Sweet Talkin' Woman	17	6
1978	Mr. Blue Sky	35	6
1978	Wild West Hero	-	6
1979	The Diary of Horace Wimp	-	8
1979	Last Train To London	39	8
1979	Confusion	37	8
1979	Shine A Little Love	8	6
1979	Don't Bring Me Down	4	3
1980	Xanadu (featuring Olivia Newton John)	8	1
1980	All Over The World	13	11
1980	I'm Alive	16	20
1981	Hold On Tight	10	4
1983	Rock 'n' Roll Is King	19	13

Figure 3-1: Chart performances of selected singles in the U.S. and the U.K.¹¹

11 "-" indicates that the single did not chart (Billboard 2010a, Chart Stats 2010).

As the Figure 3.1 shows, most of these twenty-two songs were popular in both the U.S. and the U.K., though several of them charted higher than 20 in the U.K. and not in the U.S., and two of them in the U.S. and not in the U.K. Further research and analysis of the songs could produce some insight into popular music trends at the time and possibly the reason(s) for disparity between the charts. Their cover of Chuck Berry's "Roll Over Beethoven" charted at number six in the U.K. and 42 in the U.S., but it will not be considered in this study as it was not an original composition.

The next step of the study was to begin analyzing the music. I began my analysis not with score study, but with listening to the music and making notes of aural characteristics. I particularly listened for any characteristics the songs had in common and for any traits that distinguished ELO from other pop/rock bands. For harmonic and formal analysis, I prepared a Roman numeral analysis and formal outline for each song by ear, and then checked my analyses against those presented in the Hal Leonard scores (Lynne 2007). I used the compact disc releases of the songs, particularly the 2006 release of All Over The World: The Very Best of Electric Light Orchestra, a collection of remastered songs that includes almost every song presented in this study. In the All Music Guide To Rock, Stewart Mason calls the remastered ELO catalogue "worlds better" than the somewhat muffled and distant-sounding LPs (Mason 2002, 359). After becoming very familiar aurally with these songs, I supplemented my studies with the Piano, Vocal, and/or Guitar scores published by Hal Leonard (Lynne 2007). While these scores are arrangements of the songs and not direct transcriptions, they did serve as a mostly accurate guide upon which to base my own transcriptions.

When harmonies are discussed in a harmonic or tonal context, they are referred to by an uppercase or lowercase Roman numeral; major and augmented harmonies use uppercase letters, and minor and diminished harmonies use lowercase. Roman numerals will be placed within brackets to separate them from the prose. When referring to a chord out of context, I use pop symbols (letter names). In both cases, qualifiers follow the letter. As there is much variety in the notation of pop symbols, it is prudent to explain how they will be shown. The following table shows how different chords may be notated using C as the example root tone.

Jazz symbol	Name of chord	Chord tones	Roman Numeral
С	major	CEG	I
C ^M 7	major seventh	CEGB	IV ^M 7
C7	dominant seventh	CEGBb	V7
C9	dominant ninth	C E G Bb D	V9
Cm7	minor seventh	C Eb G Bb	vi7
Cdim	diminished	C Eb Gb	ii°
C+	augmented	C E G#	I+
C/G	inverted	C E G with G in the bass	16

Figure 3-2: Methods of notation used in this thesis.

To clarify the points of discussion, I use transcriptions that I based on the Hal Leonard scores as well as reductive sketches. In lieu of measure numbers, approximate minutes and seconds (mm:ss) will be used to identify particular parts of songs. Unless otherwise noted, specific notes will be notated as they sound using the system of pitch designation wherein C4 represents middle C.

3.2. Sonic Traits

In this section, I will identify the salient aural events that define the Electric Light Orchestra's characteristic sound. These are traits that many of ELO's most commercially successful songs have in common; therefore, it may be presumed that these are the traits that many listeners would associate with ELO. The traits discussed in this chapter include use of orchestral strings (violin and cello), chorus, call-and-response, scalar and apeggiated chord passages and countermelodies in the strings, use of voice alteration and flanging, and polyrhythm. Each trait will be defined and shown in examples; when applicable, any sub-traits of a specific trait will be defined and examined.

I identified these traits first and foremost by listening to the songs many times, to the point of being intimately acquainted with each one. Aural examination of music proved to yield much more information than reviewing transcripts; after all, the songs presented here were written to be recorded and experienced audibly. In liner notes of *A New World Record*, Jeff Lynne recalls his fondness of the studio and recording over playing live on tour: "Being in the studio was what I longed for all the while, I just wanted to get back in again, every time I finished an album, I just wanted to start another one because I was totally into writing songs and producing recordings of them." (Lynne 2006b.) Much like a painting is viewed as a cohesive work of art and not simply the end result of brushstrokes upon canvas, songs are unified works that should be experienced initially as whole, audible works of art. Only after becoming familiar with them audibly should one examine the "brushstrokes" of the music — the transcripts of the music as well as the production techniques and effects.

The following table shows the occurrence of the aforementioned traits:

Song title (year released)	Orchestral strings	Vocal Layering / Chorale	Call-and-Response	Countermelodies	Scalar or arpeggiated chord passages in the strings	Voice Alteration	Flanging	Polyrhythm
10538 Overture (1972)	X	X		X				X
Showdown (1973)	X	X		X			X	X
Can't Get It Out Of My Head	X	X	X	X	X			X
(1974)								
Evil Woman (1975)	X	X	X	X	X		X	X
Strange Magic (1976)	X	X		X	X		X	X
Livin' Thing (1976)	X	X	X	X	X		<u> </u>	
Rockaria! (1977)	X	X	X					
Telephone Line (1977)	X	X	X	X	X			
Turn To Stone (1977)	X	X	X	X			X	
Mr. Blue Sky (1978)	X	X	X	X		X		
Wild West Hero (1978)	X	X		X	X			
Sweet Talkın' Woman (1978)	X	X	X			X		X
Shine A Little Love (1979)	X	X	X	X	X		X	
The Diary of Horace Wimp (1979)	X	X	X	X	X	X	X	
Don't Bring Me Down (1979)		X						
Confusion (1979)	X	X			X	X		X
Last Train To London	X	X		X				X
I'm Alive (1980)	X	X	X				X	
Xanadu (1980)	X	X	X		X		X	X
All Over The World (1980)	X	X		X	X	X	X	X
Hold On Tight (1981)		X	X					
Rock 'n' Roll Is King (1983)		X	X					

Figure 3-3: Aural traits found in the selected songs.

3.2.1. Vocal Layering / Chorale

A cursory glance at Figure 3-3 reveals that the use of chorale is the most prevalent trait occurring in these songs: it is the only one of the identified traits that appears in every song. While the function of the chorale differs from song to song, its characteristics remain somewhat consistent. In most instances, the chorale is men's voices 12 stacked in closed-position harmonies. When the melody line itself is layered, the voices usually surround the main melody line; when used as an element in a call-and-response passage (described in more detail in the following section), the voices often appear an octave above the melody. This section will cover the former situation exclusively.

One of the most blatant examples of vocal layering can be seen in "Don't Bring Me Down." With the exception of the first verse, the entirety of the melodic line is layered throughout the song. The first verse begins with a single line starting on G natural, shown in Figure 3-4.

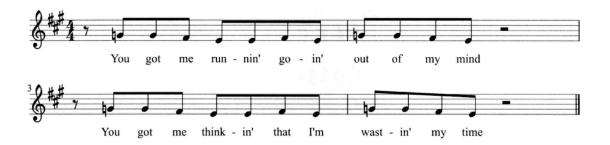


Figure 3-4: "Don't Bring Me Down", verse one (00:17).

¹² The liner notes of each album attribute "vocals" to Jeff Lynne, Kelly Groucutt, Bev Bevan, and Richard Tandy, so it is assumed that sections featuring vocal layering are these men singing in three- or four-part harmony.

At the chorus, the line is embedded within harmonies above and below it. These same harmonies continue through the song, as seen in verse two.

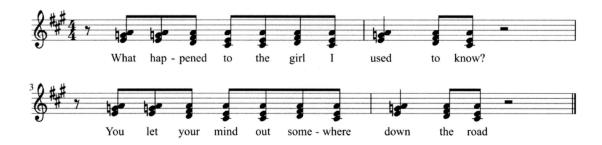


Figure 3-5: 'Don't Bring Me Down', verse two (1:23).

"Don't Bring Me Down" employs vocal layering extensively throughout the song, though most of the other songs use the effect more sparingly, commonly in the refrain or chorus as a way to distinguish the new section from the verse. Examples of this include "Shine A Little Love" (shown), "Mr. Blue Sky," "Evil Woman," "The Diary of Horace Wimp," "Confusion," "Livin' Thing," "Showdown," and "Strange Magic" (shown), the last of which is particularly interesting in that the chorale serves to expand the range of the song an octave and a third above the lowest note of the melody.

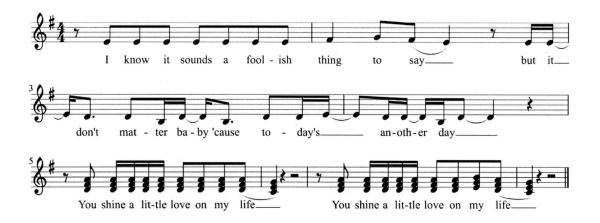


Figure 3-6: "Shine A Little Love" (00:27).



Figure 3-7: "Strange Magic" (00:30).

3.2.2. Call-and-Response

In music, a call-and-response is the succession of two distinct melodic fragments or phrases, usually played by different musicians, in which the second phrase can be heard as a direct commentary or response to the first. ELO uses this technique extensively in the selected songs and in a variety of manners.

The first type of the call-and-response passages is what will be called "ornamental response." In this scenario, the single vocal line of the melody is answered by a chorus of men, usually singing an octave above the melody, although there are some instances in which the response is in the same register as the melody. The responses of the chorus are, textually speaking, superfluous, i.e. they do not add text to the song or continue a thought expressed in the lyrics, but instead repeat the words previously sung. In this way, the chorus is acting as decoration or ornamentation to the melody. These responses may be close-position harmonies such as the choruses seen in section 3.2.1., or they may be sung in unison.

The verses and chorus of "Sweet Talkin' Woman" are comprised of call and ornamental response. In the verse, the response (shown in parenthesis in Figure 3-8) is the repetition of the immediately preceding word and note with added chord tones stacked above it. The highest note in the response, a C5, represents one full octave above the lowest note in the melody, a C4.

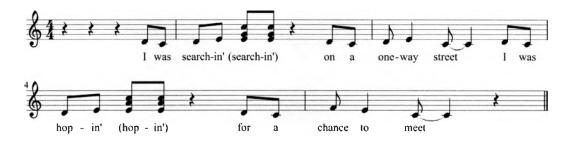


Figure 3-8: "Sweet Talkin' Woman," verse one (00:18).

The chorus of the song features ornamental response, first beginning an octave below the initial "slow down," shown in the second measure of Figure 3-9. The next measure sees the melody lower in pitch as the response raises, leading to the voice crossing heard in the fourth measure of the example. This section of the song also shows how these traits are inherently linked to another, as the response and melody come together in an example of voice layering as discussed in section 3.2.1.

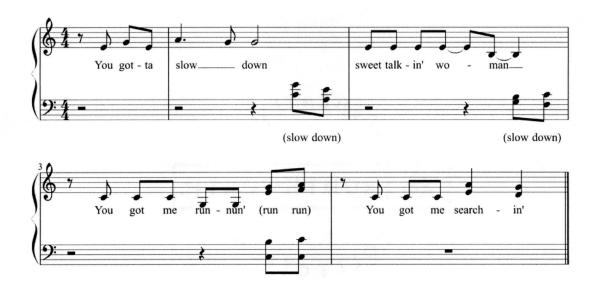


Figure 3-9: "Sweet Talkin' Woman" chorus (00:48).

"Livin' Thing" showcases the ornamental response starting in the second verse. In this example, the words sung by the chorus are not repetitions of words immediately preceding them, but instead are repetitions of words sung earlier in the song. At 1:10, there is a brief interlude in which Lynne simply sings, "I'm takin' a dive," a seeming non sequitur in the context of the song. In the second verse, the response to the melody's call is a repetition of these words (shown in figure 3-10). The same response is seen also in the third verse and

in another interlude, making it a textual motif. This example also shows both an ornamental response an octave above the melody and a response sung in unison in the same register as the melody.

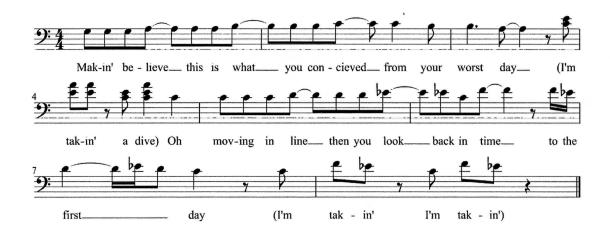


Figure 3-10: "Livin' Thing" (1:29).

The second type of the call-and-response passages differs from the first in regards to text. In this type, which will be referred to as "next-line response," the single vocal line of the melody is immediately followed by a chorus singing what logically appears to be the next line of the text. This is in stark contrast to the ornamental response: instead of simply echoing the text, the chorus provides the next line of the lyrics, which elevates it to equal importance with the main melodic voice. In determining the type of response, perhaps more telling is the ratio of duration between the original call and the response: ornamental responses tend to be shorter than the melodic fragments they follow, whereas next-line responses usually are equal to, or greater than, the melodic fragments in length and often are similar to the fragments rhythmically.

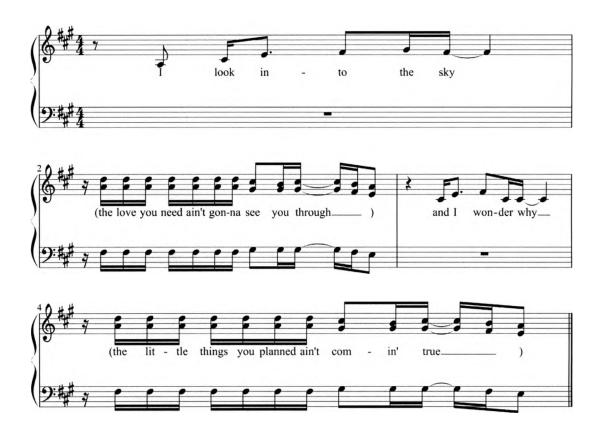


Figure 3-11: "Telephone Line" (01:48).

The bridge of "Telephone Line", shown in Figure 3-11, is unique in that it can be interpreted in different ways and still result in the same conclusion. In the liner notes of *ELO's Greatest Hits*, the lyrics of the bridge read: "I look into the sky / and I wonder why" - which an astute reader will notice as being devoid of the lyrics of the response. The hallmark of a next-line response is its equal standing with the melody, and here the equality can be seen in two different ways. Figure 3-11 can be seen as being composed of four musical fragments that form two phrases, and the interpretation of the section can differ depending upon the grouping of the fragments.

The aforementioned liner notes suggest the following grouping:

Phrase A: I look into the sky, and I wonder why (mm. 1 and 3 of the example)

Phrase B: The love you need ain't gonna see you through, the little things you planned ain't coming true (mm. 2 and 4)

With this grouping, the solo vocal melody is seen as being interrupted by the fragments of the chorale phrase. The Hal Leonard score, however, includes the lyrics of the response, which suggests the following grouping:

Phrase A: I look into the sky, the love you need ain't gonna see you through (mm. 1-2)

Phrase B: And I wonder why, the little things you planned ain't coming true (mm. 3-4)

In either case, the melodic phrase is answered by a responsive phrase.

In many songs, the two types of vocal call-and-response coexist, sometimes within measures of each other, as seen in Figure 3-12, which shows the first verse of "Turn To Stone". The first chorale response shown in the third measure of the example is a next-line response as, textually, it contributes to the thought of the first sentence fragment shown in the first two measures of Figure 3-12, and musically, it is equal in length to the preceding fragment and follows a similar rhythmic structure. In measure 7 and 8, the response is ornamental and serves to prolong the dominant with the repetition of the progression Am to G#m, of which G# is the mediant of the key and the relative chord of the dominant, which here functions as a dominant substitute. ¹³ Measures 11-12 show a return of the next-line re-

¹³ This chord could also be analyzed as a dominant with a substituted sixth.

sponse, marked with the same qualifiers as measures 3-4.

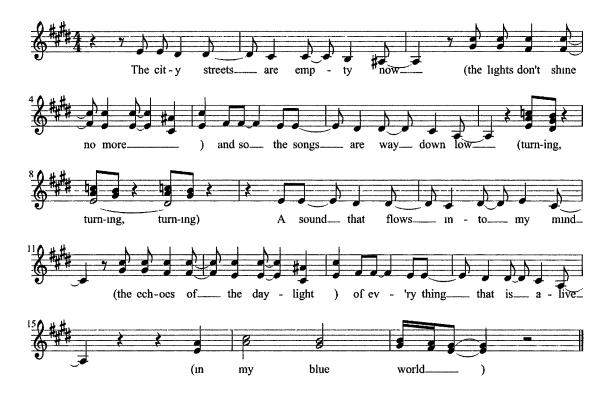


Figure 3-12: "Turn To Stone" (00:13).

Finally, the call-and-response technique is presented between voice and instruments. In these passages, the single melodic line is "answered" by instruments, which are usually orchestral strings or guitar. While "Turn To Stone" memorably echoes the melodic line verbatim in the chorus (seen in Figures 3-13 and 3-14), the majority of presentations of this type have the instrumental response answering with its own melody. This is different from a full-fledged countermelody in that the response is relatively short and does not occur simultaneously as the melody, but between phrases.



Figure 3-13: "Turn To Stone" (1:30).



Figure 3-14: "Turn To Stone" (2:32). The melody is shown with stems pointing up, and the response is shown with stems pointing down.

The chorus of "Evil Woman" contains a more conventional occurrence of the instrumental response in that the response is a different melody than the call. There are three beats of rest between each vocal phrase, each filled with a short guitar riff. In measures 2-3 and 6-7 of Figure 3-15 (the first and third responses), the same riff is played. The second response in measures 4-5 is an inversion of the first and third response. The inversion is seen again in measures 8-9, though here it ends with a definitive tonic (A) instead of a mediant (C).

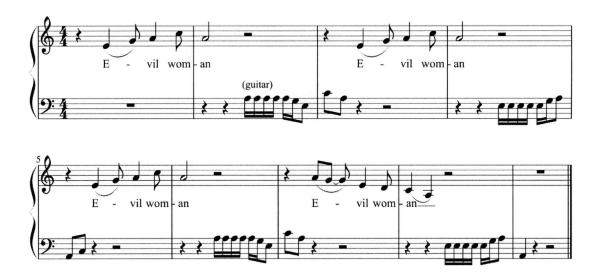


Figure 3-15: "Evil Woman" (1:05).

"Rockaria" features an instrumental response in the bridge. Each vocal fragment is answered by a short riff played on the violins. Like the responses discussed in "Evil Woman", the first and third violin responses (measures 2-3 and 6-7 of Figure 3-16) are identical, and the second response (measures 4-5 of Figure 3-16) is a partial inversion of them. Measure 4 also contains a thinly veiled reference to Beethoven's 5th symphony; after the vocal line sings "I think she'd die for Beethoven...", the iconic G-G-G-Eb of the first movement of the symphony is replicated by a piano striking G-G-G-E in the same rhythmic pattern.



Figure 3-16: "Rockaria!" (1:01).

3.2.3. Countermelodies in the Strings

According to Oxford Music Online, a countermelody is "a melodic line, more extended or expansive than a fugal countersubject, which is subordinate to, and combines contrapuntally with, a principal line." (The Oxford Companion to Music 2010). A common feature among the selected songs is the use of countermelodies played by stringed orchestral instruments.

The third verse of "Showdown" contains a very clear example of a countermelody. During a pause in the vocal melody (measure 2 of Figure 3-17), a second melodic idea is presented in the cellos. As the melody starts back again on the pickup to measure 3, the cellos continue to play a melody distinct from the melody presented by the voice. While the most active parts of the countermelody occur during pauses in the vocal line, its sustained notes

and its ultimate contrapuntal combination with the vocal melody in measure 6 lead to its inclusion here as a countermelody.

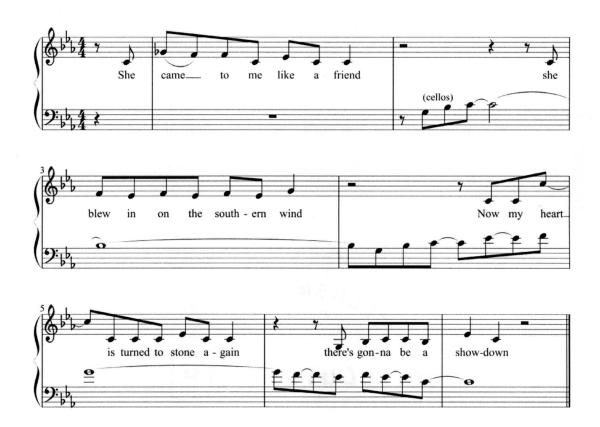


Figure 3-17: "Showdown" (1:13).

"The Diary of Horace Wimp" includes a countermelody in the last verse. Not only do the violins provide a countermelody, but they also provide close-position harmonies that soar above the vocal line.



Figure 3-18: "The Diary of Horace Wimp" (2:42).

3.2.4. Scalar and Arpeggiated Chord Passages

Ascending and descending scales and arpeggiated chords are present in many of the songs studied and have some common attributes. These passages are usually presented in one of two ways: as a fill or as a countermelody. In either case, the passages almost always remain in the background and serve to accent the foreground. ¹⁴

A fill is a short musical passage that helps to sustain the listener's attention during a break between the phrases of a melody. In this way, these fills can also be seen as the third variation of call-and-response, in which the vocal line is answered by instruments. These fills are usually short, perhaps lasting only a beat or two. An example of these fills may be found

1

¹⁴ It should be noted that terms such as "background" and "foreground" are used here generically. While some of the meanings and ideas might be similar to those of Heinrich Schenker, his concepts of foreground, middleground, and background should not associated with the use of the terms here.

in the second verse of "Xanadu", of which the first half may be seen in Figure 3-19. Measure 3 of the example shows a scale, played by violins, descending from tonic (F#), which is the overall harmony of the measure, down a full octave and a sixth to the mediant (A#), which is the harmony of the fourth measure. The violins return four measures later (measure 8 of Figure 3-19) to ascend from the dominant (C#) to the tonic, reinforcing the authentic cadence between the first phrase (mms. 1-8) and the second phrase (starting at measure 9). In this way, the scalar passages can be seen as connective material from one harmonic episode to the next.

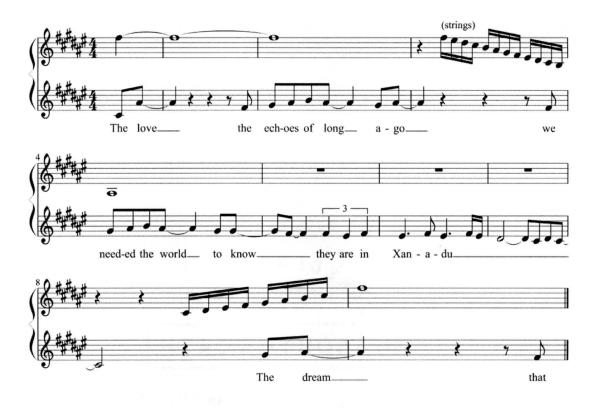


Figure 3-19: "Xanadu" (1:34).

Scalar and arpeggiated passages are more often presented as a countermelody over a larger frame of time, which allows the passage to span a greater range. This lends a sweeping effect

to the songs that might have otherwise had a smaller range. In "Wild West Hero", the chorus is repeated several times throughout the song, each time building upon itself with added harmonies and greater instrumentation to culminate in a grand finale. The final section of the song has the chorus repeat four times; on the third repetition (shown in measures 1-4 of Figure 3-20), the strings play sixteenth notes that arpeggiate the chords that harmonize with the vocals. On the fourth repetition (measures 5-8), the sixteenth notes yield to sixteenth-note triplets, and the arpeggios are filled in to become scales.

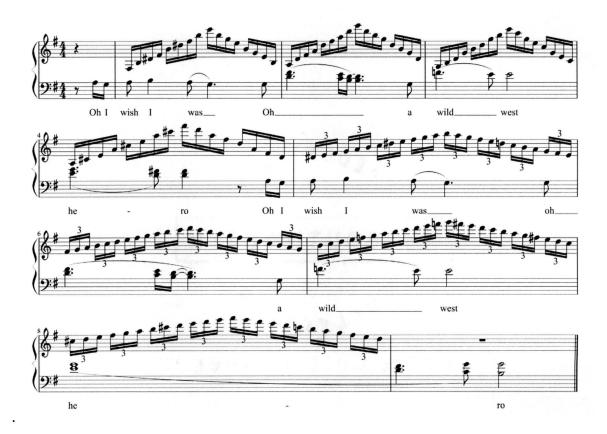


Figure 3-20: "Wild West Hero" (3:56).

The last bridge of "Livin' Thing", shown in Figure 3-21, features scalar and arpeggiated passages played by the violins that widen the range of the song as well as help distinguish the meter. The first two measures of 3-21 show a scale ascending two octaves and a third (G3 to B5) and descending back down again, albeit one note shy of its starting pitch. The same is seen in measures 3-4 with the ascent from F3 to A5 and the descent back to G3. The passages span the length of two full measures each with the implied accent placed on the highest note (the downbeats of measures 2 and 4). This is sharply contrasted by measures 5-7, in which the scalar passages have been replaced by ascending-descending arpeggiated chords, spanning one measure each. This places the highest note and implied emphasis on the third beat of each measure, giving a "double-time" feeling to the measures, which lead to the final measure shown in Figure 3-21 in which the cellos and guitars further quicken the rhythmic pace. A third staff below the voice and violin shows the implied rhythmic emphasis.

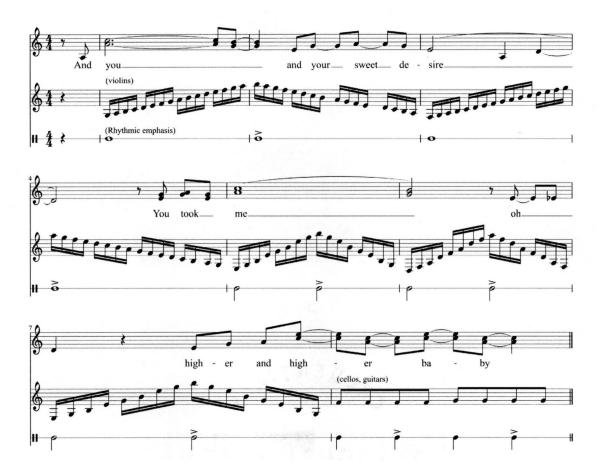


Figure 3-21: "Livin' Thing" (2:47).

3.2.5. Voice Alteration

Perhaps one of the most recognizable qualities of ELO's music is the use of voice alteration affects produced by the Vocoder and the talk box. The Vocoder (a portmanteau of the words "voice" and "encoder") is a system that allows input (the voice) to be passed through a series of filters and modified electronically. A talk box allows input (an instrument such as guitar or keyboard) to be passed through an airtight tube, which is placed in the musician's mouth. This allows the musician to modify the sound by changing the shape of his mouth. Both effects essentially produce the same result: a robotic, other-worldly sounding voice (Goetzman 2009). While the "robot voice" is only featured in five of the songs in this study, in each of those instances it is a very prominent feature of the song. In four of the songs – "Mr. Blue Sky," "Confusion," "All Over The World," and "Sweet Talkin' Woman" - the altered voice sings the title of the song; in "The Diary of Horace Wimp," the altered voice acts as both a rhythmic tool and a part of the melody. In the latter song, alteration is applied to syncopated scat singing, shown on the lower staff of Figure 3-22, which contrasts with the steady quarter notes played on the piano and leads seamlessly to its melodic aspect in measures four and sixteen. The intermingling of rhythmic and melodic aspects of the altered voice continues throughout the song.



Figure 3-22: "The Diary of Horace Wimp" (0:06).

3.2.6. Flanging

Flanging (pronounced "flan-jing") is an audio effect created by mixing two identical signals together, with one signal delayed by a small and gradually changing period. The two signals are usually between 0 and 20 milliseconds apart, making them close enough to be indistinguishable to the ear, yet far enough apart to result in an unusual frequency response. The

direct and delayed signals combine and have phase interference, which puts a series of peaks and dips in the frequency response, also known as a comb-filter effect. The flanging effect varies the delay between 0 and 20 milliseconds, which causes the comb-filter nulls (the "pulse" of two non-simultaneous tones) to sweep up and down the spectrum, producing a "hollow, swishing, and ethereal [sound], as if the music were playing through a pipe" (Bartlett and Bartlett 2008, 219-220).

Alan P. Kefauver describes it as follows:

In the studio, the effect was first produced when a signal was fed to two tape recorders simultaneously, and whose outputs were then combined. The speed of one of the recorders was varied just a little bit by applying a slight pressure to the flange of the supply reel (hence the term 'flanging'). As the machine's speed varied, so did the tape's transit time between the record and playback heads. Compared to the other tape recorder, the very slight time-delay differential produced a series of phase-shift cancellations and reinforcements moved up and down the audio bandwidth, producing the effect that is now known as flanging. (Kefauver 2001, 202).

Kefauver also quite effectively summarizes any explanation of flanging: "For the person who has not heard the effect first hand, descriptive phrases may not contribute much to the understanding of just what phasing and flanging really sound like." (Ibid.)

Flanging is used in nine of the songs in this study. In almost every instance, it is used sparingly as to not oversaturate the listener with the unusual sound, but to draw attention to a particular part of the song. It may be used during the introduction ("Turn To Stone," "Shine A Little Love," "Xanadu"), the ending ("The Diary of Horace Wimp," "Xanadu"), the chorus ("Strange Magic"), or in short, arrhythmic instrumental breaks ("Showdown,"

"Evil Woman"). The exception is "I'm Alive," which uses flanging often throughout the song. This is most likely intended to give the entire song an other-worldly feel, as it was written specifically for the introductory scenes in *Xanadu* in which the Muses spring to life from a painting to incarnate on Earth.

3.2.7. Polyrhythm

Polyrhythm is the simultaneous sounding of two different and independent rhythms, resulting in a cross-beat or cross-rhythm, in which the regular pattern of accents of the prevailing rhythm is contradicted by a conflicting pattern. A common cross-beat is a three-against-two pattern, which is featured in several ELO singles.

In "Showdown," the vocal line of the chorus features a triplet rhythm, which conflicts with the 4/4 rhythms of the song. Figure 3-23 shows the first chorus of the song. The sixth complete measure of the example shows how the polyrhythm is emphasized as the bass guitar, which on beats three and four is accompanied by the kick drum and crash cymbal, accents quarter notes contrary to the triplet rhythm in the voice.



Figure 3-23: "Showdown" (0:47).

In "Evil Woman," a one-measure cross-rhythm played on piano is a recurring motif. As seen in Figure 3-24, the inverted tonic chord, C, pulses on eight eighth notes while a bass arpeggio accents first, fourth, and seventh eighth notes (the downbeat of one, the upbeat of two, and the downbeat of four). This syncopation contrasts with the prevailing rhythm of the rest of the song, which places emphasis on beats two and four. It is first heard after the arrhythmic introductory measures, leading into the Am-Em-Dm chord progression of the verse. Throughout the song, it is heard at the end of verses leading into the chorus, which also uses an Am-Em-Dm chord progression.



Figure 3-24: "Evil Woman" (00:12).

3.3. Harmonic Traits

Perhaps one of the keys to ELO's appeal to listeners is their use of common chord progressions that are easily accessible to listeners. A Roman numeral analysis of the 22 songs in this study found that many of the songs share similar chord progressions with each other and with other well-known popular songs; one example is the doo-wop progression of [I-vi-IV-V] or [I-vi-II-V], named for the style of music in which it prominently featured (Scott 2003, 204). While the basic model of the progression is kept intact, chords may be added or altered either by way of a borrowed chord or chromatic alteration. For example, "Wild West Hero" follows the doo-wop progression, though the dominant (D) is delayed by a secondary dominant (A7). In "I'm Alive," the [vi] is replaced by a [vi'] which adds a Bb to the harmonies and allows the B of the G chord to step down chromatically to the A of the Am chord. In "Livin' Thing," the progression has the beginnings of the doo-wop feel until the third chord (what would normally be [IV] or [ii]) is replaced by a [bVI]. The following table illustrates the doo-wop chord progressions as well their locations within each song.

Song title (key)	Chords Roman Numerals	Location within song
Telephone Line (A)	A F#m D E I vi IV V	1:33 ("Doo wop")
Rockaria! (D)	D Bm F#m A I vi iii V	0:01 (Introduction, bridge)
Wild West Hero (G)	G Em C A7 D I vi IV $V7\rightarrow V$	0:22 (verse)
I'm Alive (G)	G Edim Am D I vi° ii V	0:25 (verse)
Livin' Thing (C)	C Am Ab Fm I vi bVI iv	0:23 (verse)
Confusion (C)	C Am Dm G I vi ii V	0:20 (verse)

Figure 3-25: Doo-wop progressions.

Progressions made up of the three primary (major) chords of a major key – [I], [IV] and [V] – are some of the most basic chord progressions in popular music (Bennett 2008, 60). "Rock 'n' Roll Is King," "Showdown" and the verses of "Hold On Tight" all utilize the three primary chords only. These chords are also the basis for the twelve-bar blues progression, which can be heard throughout "Don't Bring Me Down" and in the verses of "Rockaria!".

Very rarely do chords act non-functionally; most of the music discussed here is quite tonal and allows for functional harmony and consonance. Movement from tonic to its relative minor or major is also common; for example, "Evil Woman" primarily stays in the key

of A minor (supported by the chords Am, Em, and Dm) but at the end of each verse it shifts briefly to the key of C major (supported by the chords C, G, and F) before returning to A minor. This same movement between relative keys can be heard in other songs, as seen in Figure 3-26.

Song title (key)	Key areas
	Roman numerals
Evil Woman (Am)	Verses in Am and C; chorus in Am
	i III i
All O FEL IV. 11 (D)	W ' D 1 ' D
All Over The World (D)	Verses in D; chorus in Bm
	I vi
Livin' Thing (C)	Verses in C; bridge in Am; chorus in C
Livin Timig (C)	
	1 V1 I
Strange Magic (G)	Verses in G; chorus in Em; refrain in G
Strange Wagie (G)	I vi I
	1
Mr. Blue Sky (F)	Verses in F; chorus in Dm
vii. Blue sky (1)	I vi
	* **
Turn To Stone (E)	Verses in E; chorus in C#m
	I vi
	-
Hold On Tight (G)	Verses in G; chorus in Em
8 (1)	I vi
Last Train To London (G)	Verses in Em; chorus in G
• ,	vi I
Shine A Little Love (G)	Introduction/refrain in G; verses and chorus in Em
	<u> </u>

Figure 3-26: Movement between relative keys.

Modal mixture is a recurring element in much of ELO's music. Borrowed chords, such as [bIII], [iv], [bVI], and [bVII], function the same as their parallel counterparts and can be heard in "Don't Bring Me Down," "Xanadu," "The Diary of Horace Wimp," "Confu-

sion," "Shine A Little Love," "Livin' Thing," "Turn To Stone," "10538 Overture," "I'm Alive," "Telephone Line," "All Over The World," and others.

Other non-diatonic chords are the result of chromatic alteration to fulfill a particular melodic line. For example, the bridge of "I'm Alive" includes the chord D#dim. Since the song is in the key of G, this may be analyzed as either a [V7/vi] with a missing root, or as a [vii°/vi]; however, when the surrounding chords of D and Em are taken into consideration, it is clear that the D#dim is simply the product of a passing tone. D moves up to D#, and up again to E. Figure 3-27 illustrates instances of chromatically altered chords in context as well as the melodic lines formed by them.

Song title (key)	Chord progression and placement in song	Melodic line	
Livin' Thing (C)	Dm G+ C (chorus) ii V+ I	D-D#-E	
Strange Magic (G)	G G+ Em (end of verse) I I+ vi	D-D#-E	
Telephone Line (A)	$\begin{array}{cccc} A & A^{M7} & A7 & F\# \text{ (verse)} \\ I & I^{M7} & I7 & vi \end{array}$	A-Ab-G-F#	
Wild West Hero (G)	$\begin{array}{ccc} C & A7 & D \text{ (verse)} \\ IV & V7 \rightarrow & V \end{array}$	C-C#-D	
Confusion (C)	C C7 F Fm (chorus) I V7/IV IV iv	C-Bb-A-Ab	
I'm Alive (G)	D D#dim Em (bridge) V vii°/vi vi V7/vi	D-D#-E	

Figure 3-27: Chromatic alterations.

Tactile considerations may play a role in the composition of the songs; Allan Moore notes that much of pop-rock music is composed "at the fretboard" (guitar) or "at the keyboard." While chord shapes on a keyboard are relatively similar, the same cannot be said of chord shapes on guitar, which "clearly forces a songwriter into a limited repertoire of harmonies," (Moore 1993, 54-55). The roots of the open position chords that are "familiar to all guitarists" - C, D, E, G, A - form a pentatonic scale, and the chords themselves form the harmonic basis of many pop-rock songs. The combination of these chords frequently produces chromatic relations. In keyboard-driven pop-rock music, chromaticism frequently stems from passages characterized by minimal finger movement, common tones, and stepwise motion (Capuzzo 183). ELO's principal songwriter Jeff Lynne is a multi-instrumentalist and wrote songs and passages on both piano¹⁵ and guitar, ¹⁶ which shows in the chord progressions. For example, "Don't Bring Me Down" features the chord progression A, D, A, C, G, D, A., all of which are open position guitar chords. Another example of an instrumentrelated progression can be seen in the chords of the verse of "Mr. Blue Sky" (F, AM, A, Dm, G, Em, A), which, because of the similar chord shapes and minimal note-changing, appears to have possibly been written on a keyboard instrument.

3.4. Formal Traits

Ken Stephenson argues that traditional formal structures depend on cues found in cadence patterns and key schemes to delineate sections, but in popular music these cues are found in text, instrumentation, rhythm, and harmony (Stephenson 2002, 122). Cues in the text may be

¹⁵ "...I said, 'You all go do something and I'll just write this song on the piano in the studio.'" - Jeff Lynne on *Tumothy White's Rock Stars* radio program (Lynne 1990).

¹⁶ "I played [Marc Bolan's] Gibson Firebird on the solo of *Showdown*." – Jeff Lynne in the liner notes of *ELO 2* (Lynne 2006c).

the statement and repetition of a specific word or phrase, which may be linked with other elements such as melodic contour and rhythm, helping the listener to distinguish formal patterns. Other textual cues may be the location of the text; when and where a particular text is used helps to determine both its local relationship to surrounding sections and its place within the overall structure (Endrinal 2008, 62).

Changes in instrumentation often signal the beginning of a new section in popular music. These changes may include the addition or subtraction of instruments as well as the modification of a particular line in one or more instruments, leading to textural differences that can serve as formal markers (Endrinal 2008, 63). Because many popular songs, and certainly the ELO songs studied here, are based on the repetition of rhythmic and harmonic patterns, changes in these patterns can help distinguish sections (Stephenson 2002, 131). For this study, formal sections were delineated by taking into account the section's timbral and textual nature in relation to the song's other sections, the section's text content and repetition, the section's harmonic and melodic content, and the location of the section within the song's overall formal design.

Each song included in this study begins with an introduction. In thirteen of the twenty-two songs (approximately 59%), the introduction is simply a riff or ostinato pattern that incorporates the chords of the upcoming verse. Examples of this type of introduction can be found in "10538 Overture," "Showdown," "Can't Get It Out Of My Head," "Evil Woman," "Turn To Stone," "Mr. Blue Sky," "The Diary of Horace Wimp," "Last Train To London," "Don't Bring Me Down," "I'm Alive," "Xanadu," "Hold On Tight," and "Rock 'n' Roll Is King." Other times, the introduction serves to establish a motif, or hook, which recurs throughout the song, usually after each chorus leading into the next verse. In some songs, such as "Strange Magic," "Telephone Line," "Confusion," "Shine A Little Love," and

"All Over The World," the hook remains relatively unchanged each time it appears. In "Sweet Talkin' Woman," and to a greater extent in "Livin' Thing" and "Rockarial," the hook is slightly modified via added or reduced instrumentation. In the latter two examples, the hook is subdued and sparsely orchestrated the first two times it appears (during the introduction and after the first chorus) and is substantially fleshed out into a new formal section after the second chorus. In these songs, the initial hook can even be seen as foreshadowing a formal structure occurring later in the song. An introduction can also serve as just that: an introduction that stands alone as its own formal section. In "Wild West Hero," the introduction is not heard again until the end of the song, where the same chords, text, and instrumentation are used as a conclusion. Finally, some songs have a double introduction; that is, a unique section begins the song, followed by vamping leading into the first verse. Examples of this include the strings that begin "Showdown" and "The Diary of Horace Wimp," as well as the free-time introduction to "Evil Woman," shown in Figure 3-28. At measure four, the rhythm becomes steady, and the song transitions into the second introduction.



Figure 3-28: Reduction of "Evrl Woman" (0:01).¹⁷

¹⁷ Please note that the first three measures are a reduction of the many voices heard in the introduction; therefore the pitches may not be displayed in their original octave.

In each song, the introduction is followed by the first of several verses. Throughout the rest of the song, the verses will occur between chorus sections. The labeling of a section as "verse" is linked more to the music than to the text, as each verse has a similar melody, rhythm, and harmonic progression accompanying different text, although slight variations in the melody from verse to verse is common.

In eight of the songs, the verses are followed by a brief transitional section before the appearance of the chorus. The transitional sections can be characterized by a shift in the musical material (such as harmonic progression, rhythm, etc.) as well as by its location within the music, which is usually between a verse and chorus. Examples of a typical transition can be found in "Can't Get It Out Of My Head," "Livin' Thing," "Telephone Line," "Sweet Talkin' Woman," "The Diary of Horace Wimp," "Last Train To London," "Shine A Little Love," "T'm Alive," "Xanadu," and "Strange Magic," the latter of which can be seen in Figure 3-7.

The chorus of each song is a section that is comprised of lines of text that are distinct from the verse and transition by way of harmonic, melodic, rhythmic, and instrumentation changes. The lyrics of the chorus usually, but not always, contain the title of the song or some variation of it. In general, the chorus will emphasize the tonic of the song, which serves to resolve any harmonic tension created by the preceding verse or bridge (Endrinal 2008). Two of the songs – "Confusion," and "Last Train To London" – have a post-chorus section that will be referred to here as a refrain. In both examples, the refrain continues to emphasize tonic as set by the chorus and serves as a transitional section from the chorus to the next verse. In "Hold On Tight" and "Rock 'n' Roll Is King," it is difficult to establish a

¹⁸ Though some sources, such as Grove Music Online, use "refrain" and "chorus" as synonyms, here "refrain" will denote a passage immediately following the chorus that, while the same lyrics are repeated each time the passage occurs, is not as climactic musically as the chorus, as it is not the initial arrival on tonic. Also, the chorus typically contains the title of the song or the hook, and the refrain does not.

definite chorus, as the hook of each song – in both cases, the song's title – is repeated at the end of each verse, rendering the following sections refrains instead of choruses.

An interlude is a formal section that features instrumental solos and lacks texted vocals – that is, actual lyrics and not syllables or scat singing. Typically in ELO's music, there is one interlude per song (the exception to this is "I'm Alive"), and it occurs after the second statement of the chorus. In some songs, the interlude is harmonically very similar to other parts of the songs and may be viewed as such. For example, "Evil Woman," "Mr. Blue Sky," "Last Train To London," "I'm Alive" (the first interlude), and "Rock 'n' Roll Is King," include instrumental solos that are based on the chords of the verses, and "Don't Bring Me Down" includes an instrumental solo that is based on the chords of the chorus, which would allow one to theoretically label these as a modified verse or chorus. Still, the harmonic progressions of the interludes in other songs, such as "10538 Overture," "Showdown," "Can't Get It Out Of My Head," "Strange Magic," "Wild West Hero," and "I'm Alive" (the second interlude), include completely new material and may be interpreted as unique formal structures within each song.

In popular music, the term "bridge" is usually used to refer to the penultimate section before the final repeat of any opening materials. The bridge may provide a contrast to the opening section. Though the label "bridge" implies some sort of transitional or connecting material from chorus to verse or vice versa, frequently the bridge does not have any harmonic or melodic associations to the surrounding material. In his study of the music of U2, Christopher Endrinal designates the bridge as an "interverse," functioning the same as an interlude with a unique harmonic progression, the primary difference between the two sections being that the interverse contains texted lyrics while the interlude does not. The bridge or interverse usually provides a formal break in the song as well as to build tension

leading to the final section of the song (Endrinal 2008, 75). Examples of these bridges in the music of ELO can be heard in "Shine A Little Love" and "All Over The World."

In most of the songs, the last bars, or conclusion, consist mainly of the repeated chorus as the volume drops and the song fades to silence. However, two of the songs, "Mr. Blue Sky" and "Xanadu," include completely new material in the conclusion, while another, "Wild West Hero," provides a direct quote from the introduction as a conclusion.

The overall forms of the songs are typically a type of verse-chorus form or thirty-two-bar form. In contrasting verse-chorus form, which is the most prevalent form found in these singles, the chorus is the focus of the song, and is prepared and contrasted by the verse. The chorus and verse have distinct harmonies from each other. Examples of this include "Can't Get It Out Of My Head," "Livin' Thing," "Strange Magic," "Telephone Line," "Turn To Stone," "Sweet Talkin' Woman," "Mr. Blue Sky," "The Diary of Horace Wimp," "Last Train To London," "Confusion," "Shine A Little Love," "I'm Alive," "Xanadu," and "All Over The World." "Evil Woman" is also in verse-chorus form, though it would be considered simple verse-chorus in that the harmonies of the chorus are identical to the harmonies of the verse. In thirty-two-bar form, or AABA form, the verse is the focus of the song, and is prepared and contrasted by a bridge or refrain. Examples of thirty-two-bar form include "Rockarial," "Hold On Tight," and "Rock 'n' Roll Is King." These forms, like many of the chord progressions previously discussed, are not atypical in popular music.

CHAPTER 4: FULL ANALYSIS OF A SONG

Using the terms defined in chapter three, this chapter will present a model for the analysis of a popular song. The song chosen for analysis, "All Over The World," represents what may arguably be the most "ELO-sounding" of the songs: it contains examples of each sonic trait discussed in the previous chapter, and its harmonic and formal developments are in keeping with those of the majority of the songs studied. An overview of the formal sections and stylistic traits found within will show how the aforementioned traits may work together to form a complete song and provide an example of popular music analysis.

The song is composed in a contrasting verse-chorus form, as shown in Figure 4-1(a) and in further detail in Figure 4-1(b). A thorough investigation of each section will follow.

Song section:	I^1	I^2	V^1	C^1	I^2	V^2	C^2	B^1	B^2	C^3	V^3	C ⁴	I^2	C ⁴
Function:	i	h	Α	В	h	\mathbf{A}	В	C	D	В	A'	В	h	B'

Figure 4-1(a): Song sections and their functions in "All Over The World".

Section	Function	Lyrics	Chord Progression (repetitions)	Number of Measures	Time (m:ss)
First introduc- tion	introduction	(none)	D, Dm7	4	0:13 - 0:21
Second intro- duction	hook	(none)	D, Dm7 (2)	4	0:21 – 0:28
First verse (two stanzas)	A section	Everybody all around the world I got a message on the radio	D, D#+, G, Gm, D, Bm, Em, C, F, A (2)	16	0:28 – 0:59
First chorus	B section	All over the world	Em, F#m, Bm (2) Em, F#m, G, A	6	0:59 – 1:11
Second intro- duction	hook	(none)	D, Dm7 (2)	4	1:11 – 1:20
Second verse	A section	Everybody walkin' down the street We're gonna take a trip across the sea	D, D#+, G, Gm, D, Bm, Em, C, F, A (2)	16	1:20 – 1:50
Second chorus	B section	All over the world	Em, F#m, Bm (2) Em, F#m, G, A	6	1:50 – 2:01
First bridge	C section	(none)	D, Bm, G, Em, A (2)	8	2:01 – 2:17
Second bridge	D section	London, Hamburg, Paris, Rome	G, C (4) A, D (3) C, A	8	2:17 – 2:33
Third chorus	B section	All over the world	Em, F#m, Bm (2) Em, F#m, G, A	6	2:33 – 2:44
Second intro- duction	hook	(none)	D, Dm7 (2)	4	2:44 – 2:52
Third verse	A prime section	Everybody all around the world	D, D#+, G, Gm (2) D, Bm (2)	12	2:52 – 3:15
Fourth chorus	B section	All over the world	Em, F#m, Bm (2) Em, F#m, G, A	6	3:15 – 3:27
Second intro- duction	hook	(none)	D, Dm7	2	3:27 – 3:31
Fifth chorus	B prime section	All over the world	Em, F#m, Bm (7)	15	3:31 – 3:58

Figure 4-1(b): Form outline of "All Over The World".

The track begins with the sounds of a murmuring crowd, followed by Lynne's voice counting to four, cueing the beginning of the song, shown as "I¹" in Figure 4-1(a) and as measures 1-4 in Figure 4-2. It is a double introduction: the first four bars are sustained whole notes of the main chords of the hook, D and Dm7; in measure four, the second introduction plays the hook of the song (shown as "I²" in Figure 4-1(a) and functioning as "h" or "hook"), characterized by D and Dm7 harmonies alternating each measure (not shown) and by the "ooh"s in the vocal line. In the upper register, the strings play two two-measure-long sixteenth-note passages (seen in measures 5-6 and 7-8 of Figure 4-2), which are both an example of scalar passages as well as polyrhythm. Starting with the second beat of each passage, the implied accent on the highest note in the group (A) can be heard in a syncopated rhythm; instead of occurring on the downbeat or every fourth sixteenth note, the accent occurs every third sixteenth note. Combined with the straight drum beat and bass line, this lends a hemiola-feel to the introduction.

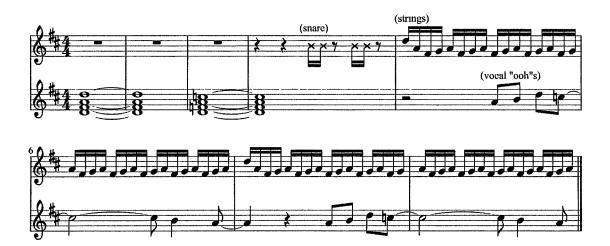


Figure 4-2: Reduction of "All Over The World" introduction (0:13).

Next, the song moves to a verse (shown in Figure 4-1(a) as "V" and functioning as the "A" section) that utilizes a unique harmonic progression, seen in Figure 4-3.

Chord:	D	D#+	G		Gm			
Function:	I	V+/IV	IV	iv				
	Everybody all around the world, gotta tell you what I just heard							
	D	\mathbf{Bm}	Em	С	F	A		
	I	v1	ii	bVII	bIII	V		
There's gonna be a party all over the world								

Figure 4-3: Chords of "All Over The World" verse (0:28).19

The chord progression includes many non-diatonic chords, which are the result of voice-leading. For example, the chord progression seen in the first line of Figure 4-4 (D, D#+, G, Gm) is the consequence of building chords around a singular line, in this case A-A#-B-Bb. The same can be said of the second line of the verse (starting in measure 5 of Figure 4-4); in the chord progression D, Bm, Em, C, F, A, the borrowed chords C and F are the product of the A-B-B-C-C-C# line. This line can be heard in the second verse ("V²" in Figure 4-1(a)) in the ornamental response and is shown in measures 7-8 of Figure 4-4. Figure 4-5 shows a reduction of the same progression, with lines connecting moving notes to show the step-wise voice leading employed.

¹⁹ The Hal Leonard scores indicate that the second chord is an F#+, which is enharmonic to D#+ and makes little sense theoretically.

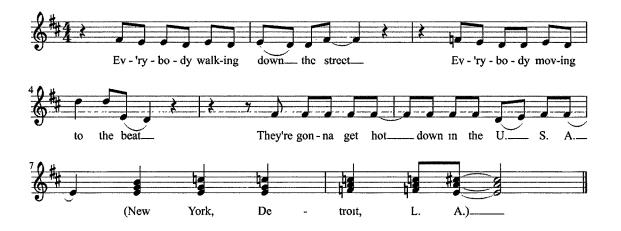


Figure 4-4: Second verse of "All Over The World" (1:20).



Figure 4-5: Step-wise voice leading.

After the second chorus, in which Bevan's drum beat changes from the straight rock rhythm heard in the first chorus to a Mersey beat²⁰, the song segues into a double bridge ("B¹" and "B²" in Figure 4-1(a)). The first part of the bridge (shown in measures 1-8 of Figure 4-7) has multiple instruments playing in unison the notes of a D major scale from D down to E, all while what sounds like hand claps, foot stomps, and snare drum keep a steady quarter beat. Over all of this, upper register strings (not shown) play soft, staccato eighth

²⁰ A Mersey beat is a moderate back-beat oriented pulse which also emphasizes the upbeat of beat two. Example:



notes that outline the overall harmonic progression (D, Bm, G, Em, A, D, Bm, G, Em, A), a highly functional, "down by thirds" sequence.

The down-stemmed notes in the fourth and fifth measures of Figure 4-7 show an example of voice alteration; a "robot voice" sings the title of the song. The first part of the bridge ends with the same sixteenth-note figures in the percussion that were heard earlier (at the end of the first introduction).

The second part of the bridge ("B²" in Figure 4-1(a); shown in reduction in measures 9-16 of Figure 4-6) returns the song from the sparse orchestration of the first bridge to a fuller sound similar to the rest of the song. The chord progression here is simple yet effective: it temporarily moves to the key of G and alternates between [I] and [IV] chords, keeping a pedal tonic in the bass (not shown). At measure 13, the key is shifted to A, but the harmonic progression ([I] and [IV] with pedal tonic) remains the same until the last measure, when it transitions back into the key of D for the third chorus.



Figure 4-6: Double break of "All Over The World" (2:01).

The third chorus, shown in Figure 4-7, reverts back to a straight drum pattern and features an example of a countermelody in the strings. Afterwards, the hook returns briefly before the last verse, at which point the verse material is modified: the chord progression of the first four measures – D, F#+, G, Gm – is repeated, and the second line chord progression – D, Bm, Em, C, F, A – is omitted. This is shown as "V³" in Figure 4-1(a). The D, F#+, G, Gm progression can be heard in the layered voices that contrast Lynne's melodic line, which is shown in Figure 4-8. After a repeated D to Bm figure at approximately 3:08, the chorus returns, again with a Mersey beat. From this point forward, material is reused and

modified until the end (shown as "C⁴" in Figure 4-1(a)), when quarter-note triplets lead to the final chord of D^M9 .

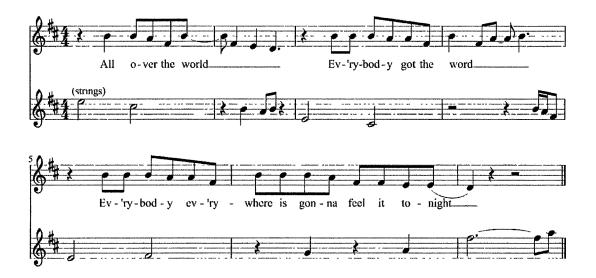


Figure 4-7: Third chorus of "All Over The World" (02:33).



Figure 4-8: Final verse of "All Over The World" (2:52).

EPILOGUE: SUMMARY OF ANALYTICAL OBSERVATIONS

The primary aim of this study is to serve as a model of popular music analysis that incorporates the analytical techniques of harmonic, melodic, and rhythmic analysis while also considering formal, textural, and production/recording techniques. Ultimately, it is hoped that this will allow for a more thorough understanding of the sonic traits, formal processes, and song construction of ELO's music, and popular music in general. Though the focus of this study is theoretical, an additional goal is to highlight a band that, regardless of a succession of commercial hits, has been relegated to "guilty pleasure" status and has until now been the topic of little, if any, formal study. By drawing from numerous sources and writing a brief historical account of the band, I hope to have provided a reference for others wishing to research ELO, as well as to provide some context in which the songs were written and recorded.

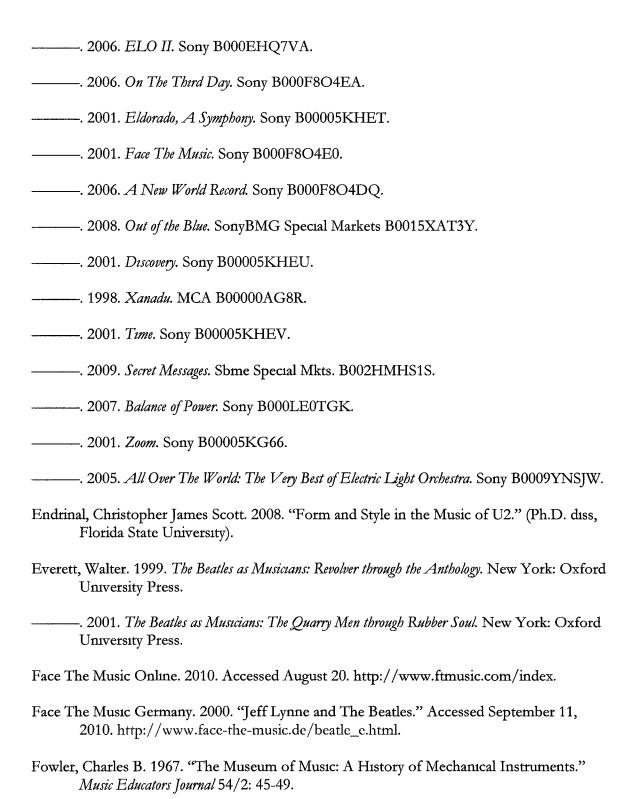
As stated earlier, the inspiration for this study came from Christopher Endrinal's dissertation, Form and Style in the Music of U2, though throughout my work I found our studies to be quite different from one another, most notably in the salient traits chosen for analysis as well as the presentation of materials; for example, while spectrographs were appropriate in the study of what Endrinal calls "dynamic stereo," their inclusion would have been superfluous in this study. A thorough examination of the stylistic traits of a single song as they relate to the formal and harmonic components may show how these traits collaborate to form a coherent work. In some instances, particular passages of music may present as more than one trait; a scalar passage, for instance, may be used as a ornamental response, or a po-

lyrhythm may be evident within a countermelody. Many of the traits discussed in this thesis are not exclusive to ELO, and when they are considered separately, their inclusion in a song does not necessarily render the "ELO sound"; rather, it is the distinctive combination of these traits within familiar harmonic and formal patterns that make the songs unique to ELO.

WORKS CONSULTED

- Amburn, Ellis. 1990. Dark Star: The Roy Orbison Story. Carol Publishing Group.
- Ankeny, Jason. 2002. "Electric Light Orchestra." All Music Guide to Rock: The Definitive Guide to Rock, Pop, and Soul, by Vladimir Bogdanov, Stephen Thomas Erlewine, and Chris Woodstra. San Francisco: Backbeat Books. p. 358.
- Answers.com. 2010. "Electric Light Orchestra." Accessed April 29. http://www.answers.com/topic/electric-light-orchestra.
- American Society of Composers, Authors, and Publishers (ASCAP). 2009. "Jeff Lynne to be Honored and Give Rare Interview at ASCAP 'I Create Music' Expo." Accessed September 11, 2010. http://www.ascap.com/press/2009/0319_lynne_interview.aspx.
- Bartlett, Bruce, and Jenny Bartlett. 2008. Practical Recording Techniques: The Step-by-Step Approach to Professional Audio Recording. Burlington, MA: Focal Press.
- Bennett, Dan. 2008. The Total Rock Bassist: A Fun and Comprehensive Overview of Rock Bass Playing. Van Nuys, California: Alfred Publishing Co.
- Bevan, Bev. 1981. The Electric Light Orchestra Story. Penguin Group (USA) Incorporated.
- Billboard. 2010a. "Electric Light Orchestra Billboard Singles." Accessed September 4. http://www.allmusic.com/cg/amg.dll?p=amg&sql=11:0ifuxqe5ldhe~T51.
- ——. 2010b. "Jeff Lynne Billboard Albums." Accessed September 11. http://www.allmusic.com/cg/amg.dll?p=amg&searchlink=JEFF|LYNNE&sql=11: difqxqe5ldfe~T5.
- Borman, Barry. 2007. "The Guys With Big Fiddles." Fanfare 30/4: 51-54.
- Borntreger, Andrew. 2010. "Xanadu." BadMovies.org. Accessed September 9. http://www.badmovies.org/movies/xanadu/.
- BPI. 2010. "Certified Awards Search." Accessed September 4. http://www.bpi.co.uk/certifiedawards/search.aspx.
- Brum Beat. 2010a. "Idle Race." Accessed September 4. http://www.brumbcat.net/idle.htm.

- Brum Beat. 2010b. "The Move." Accessed September 4. http://www.brumbeat.net/move.htm.
- Burns, Gary. 1987. "A typology of 'hooks' in popular records." Popular Music 6/1.
- Caiger, Robert. 2006. Liner Notes, ELO II. Sony B000EHQ7VA.
- Capuzzo, Guy. 2004. "Neo-Riemannian Theory and the Analysis of Pop-Rock Music." *Music Theory Spectrum* 26/2: 177-199.
- Chart Stats. 2010. "Electric Light Orchestra." Accessed September 4. http://www.chartstats.com/artistinfo.php?id=2340.
- Christensen, Thomas Street. 2001. "Introduction." The Cambridge History of Western Music Theory. Cambridge: Cambridge University Press. pp. 1-26.
- Cohn, Richard. 1998. "An Introduction to Neo-Riemannian Theory: A Survey and Historical Perspective." *Journal of Music Theory* 42/2: 167-180.
- ———. 1997. "Neo-Riemannian Operations, Parsimonious Trichords, and their *Tonnetz* Representations." *Journal of Music Theory* 41/1: 1-66.
- Covach, John. 1997. "We Won't Get Fooled Again: Rock Music and Music Theory." In Theory Only, 13/1-4 (September): 119-141.
- ———. 2005. "Form in Rock: A Primer." Engaging Music: Essays in Musical Analysis, ed. Deborah Stein. New York: Oxford University Press. p. 66.
- ———. 2006. John Covach.com. Accessed September 26, 2010. http://www.ibiblio.org/johncovach/.
- Daylife. 2020. "Jeff Lynne." Accessed April 28. http://www.daylife.com/topic/Jeff_Lynne.
- Delisle, James. 1983. "Learning to a Pop Beat." Music Educators Journal 69/6: 43.
- DiscoMusic.com. 2010. "Unlikely Artists: Electric Light Orchestra." Accessed September 9. http://www.discomusic.com/101-more/3215_0_7_0_C/.
- Eder, Bruce. 2011. "Biography [of the Idle Race]." Allmusic. Accessed March 28. http://www.allmusic.com/artist/p18402/biography.
- Eerola, Tuomas. 2010. "The Rise and Fall of the Experimental Beatles." University of Groningen. Accessed April 23. http://www.icce.rug.nl/~soundscapes/VOLUME03/Rise_and_fall3.shtml.
- Electric Light Orchestra. 2006. No Answer. Sony B000EHQ7VK.



Goetzman, Keith. 2009. "Is it a Vocoder, a Talk Box, or a Cosmic Communicator?" Utne Reader. Accessed October 16, 2010. http://www.utne.com/Arts/Is-It-a-Vocoder-a-Talk-Box-or-a-Cosmic-Communicator.aspx.

- Gollin, Edward. 2005. "Neo-Riemannian Theory." Zeitschrift der Gesellschaft für Musiktheorie 2/2-3: 153-155.
- Goodman, Dean. 2009. "ELO rocker Jeff Lynne working on solo album." Reuters. Accessed September 11, 2010. http://uk.reuters.com/article/idUKTRE53M62R20090423?sp=true.
- Hall of Heaves, The. 2010. "The Worst Songs Ever Recorded." Accessed April 28. http://www.nepanewsletter.com/worst.
- IMDB. 2010. "Xanadu." Internet Movie Database. Accessed September 9. http://www.imdb.com/title/tt0081777/.
- Kefauver, Alan P. 2001. The Audio Recording Handbook. Middleton, WI: A-R Editions, Inc.
- Kernfeld, Barry. 2010. "Call and response." Oxford Music Online. Accessed October 16. http://www.oxfordmusiconline.com/subscriber/article/grove/music/J072500.
- Kernfeld, Barry, and Allan F. Moore. 2011. "Blues Progression." Oxford Music Online. Accessed January 18. http://www.oxfordmusiconline.com/subscriber/article/grove/music/41276.
- Kinch, Martin. 1993. Interview with Roy Wood. Accessed September 19, 2010. Aylesbury, Buckinghamshire. http://cherryblossomclinic.110mb.com/roy.html.
- Lennon, John. 1974. [John Lennon on *The Dennis Elsas Show*. WNEW-FM. 28 Sept. Radio] "Showdown With Intro From John Lennon." Accessed April 29. http://www.youtube.com/watch?v=T2XHOzRJv7A.
- Lewin, David. 1987. Generalized Musical Intervals and Transformations. New Haven: Yale University Press.
- Liverpool Hope University. 2010. "The Beatles, Popular Music and Society [M.A. degree program]." Liverpool Hope University. Accessed April 29. http://www.hope.ac.uk/prospective/postgraduate-courses/the-beatles-popular-music-and-society-ma.
- Lynne, Jeff. 1979. Liner Notes, ELO's Greatest Hits. Jet ZK36310.
- ———. 1990. [Jeff Lynne on "Jeff Lynne's Musical Chairs." *Timothy White's Rock Stars.* 23 June. Radio] Westwood One #90-30.
- ———. 2001. Liner Notes, Eldorado, A Symphony. Sony B00005KHET.
- ———. 2006a. Liner Notes, No Answer. Sony B000EHQ7VK.
- -----. 2006b. Liner Notes, A New World Record. Sony B000F8O4DQ.

- 2006c. Liner Notes, ELO 2. Sony B000EHQ7VA.
 2007. The Very Best of Electric Light Orchestra: All Over The World. Milwaukee: Hal Leonard Corporation.
- Mason, Stewart. 2002. "ELO's Greatest Hits." All Music Guide to Rock: The Definitive Guide to Rock, Pop, and Soul, by Vladimir Bogdanov, Stephen Thomas Erlewine, and Chris Woodstra. San Francisco: Backbeat Books.
- Mathews, Kevin. 2010. "Electric Light Orchestra: Secret Messages." Accessed September 1. http://www.popmatters.com/music/reviews/e/elo-secret.shtml.
- McGee, Alan. 2010. "Why ELO were as good as the Beatles". Guardian. Accessed April 28. http://www.guardian.co.uk/music/musicblog/2008/oct/16/elo-better-than-beatles.
- Michel, Rob. 2002. "Counting Out Time: Electric Light Orchestra." Dutch Progressive Rock Page. Accessed August 20, 2010. http://www.dprp.net/proghistory/index.php?i=1974_03
- Middleton, Richard. 1990. Studying Popular Music. Buckingham: Open University Press.
- Miller, Michael. 2008. The Complete Idiot's Guide to Music History. New York: Penguin Group.
- Moore, Allan. 1993. Rock: The Primary Text. Buckingham: Open University Press.
- Morris, Chris. 2001. "Jeff Lynne 'Zooms' Back to ELO with Epic Disc." *Billboard* 113/24: 18.
- Mumma, Gordon, et al. 2011. "Recording." Oxford Music Online. Accessed February 4. http://www.oxfordmusiconline.com/subscriber/article/grove/music/J371600.
- O'Connor, J. J. and E. F. Robertson. 1999. "Banu Masa Brothers." School of Mathematics and Statistics, University of St. Andrews, Scotland. Accessed September 26, 2010. http://www-history.mcs.st-andrews.ac.uk/Biographics/Banu_Musa.html.
- Orchestra, The. 2010. "The Orchestra Fan." Accessed September 5. http://www.theorchestra.net.
- Oxford Companion to Music, The. 2010. "Countermelody." Oxford Music Online. Accessed October 16. http://www.oxfordmusiconline.com/subscriber/article/opr/t114/e1669.
- Porter, Robert. 2010a. "Electric Light Orchestra Out of the Blue Tour: An In-depth Look at the 1978 Tour." Accessed September 8. http://www.jefflynnesongs.com/ootbtour/.
- ——. 2010b. *Jeff Lynne Song Database*. Accessed September 19. http://www.jefflynnesongs.com/.

- Rees, Dafydd and Luke Crampton. 1991. "Electric Light Orchestra." Rock Movers & Shakers. New York: Billboard Books. p. 174-175.
- RIAA. 2010. "Gold & Platinum." Recording Industry Association of America. Accessed September 4. http://www.riaa.com/goldandplatinumdata.php?table=SEARCH.
- Rock and Roll Hall of Fame. 2010. Accessed September 7. http://www.rockhall.com.
- Rolling Stone. 2010. "Latest Music News, Videos, Photos, Artists, Playlists and More." RollingStone.com. Accessed April 29. http://www.rollingstone.com/music.
- Scott, Richard J. 2003. Chord Progressions for Songwriters. iUniverse.
- Sharp, Ken. 1994. "Roy Wood: The Wizzard of Rock." Goldmine 20/18.
- Shepherd, John. 2003. "Electric Light Orchestra." Continuum Encyclopedia of Popular Music of the World: Performance and Production. New York: Continuum. p. 63.
- Silverstein, Robert and Larry Acunto. 2001a. Interview with Jeff Lynne. April 18. Accessed September 11, 2010. New York, NY. http://www.mwe3.com/archive/pastfeature/jefflynne/index.htm
- Starostin, George. 2010. "Electric Light Orchestra." Only Solitaire. Accessed September 9. http://starling.rinet.ru/music/elo.htm.
- Stephenson, Ken. 2002. What to Listen for in Rock: A Stylistic Analysis. New Haven: Yale University Press.
- Strong, Martin Charles and John Peel. 2004. "Electric Light Orchestra." In *The Great Rock Discography*, 489. New York: Canongate U.S.
- Szinger, John. 1993. "On The Influence of Technology On Free Expressions in Music." Accessed September 25, 2010. http://zingman.com/spew/MusTechExpression.php.
- Tagg, Philip. 1982. "Analysing popular music: theory, method, and practice." *Popular Music*, 2: 37-65.
- Thompson, Dave. 2006. "Electric Light Orchestra." Goldmine 32/9: 14-18.
- Walker, Michael. 1985. "Backward Messages in Commercially Available Recordings." *Popular Music and Society* 10/1: 2-13.
- Wikipedia. 2010. "Electric Light Orchestra." Accessed August 20. http://en.wikipedia.org/wiki/Electric_Light_Orchestra.

VITA

Kayla Roth was born in Lufkin, Texas, in 1986. After completing her work at Lufkin High

School in 2004, she entered Stephen F. Austin State University, where she earned a Bache-

lor's degree in percussion performance. In August of 2009, she entered Texas State Univer-

sity-San Marcos to pursue graduate studies in music theory.

Permanent email: KaylaDRoth@gmail.com

This thesis was typed by Kayla D. Roth.